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2024 SUSTAINABILITY REPORT

STOCK CODE: 000708

Contents

About This Report	01
Message from the Chairman	03
About Us—Forging Ahead with Great ambition, and Delivering Brilliant Performance	05
Company Overview	05
Corporate Culture	06
Major Milestones	07
2024 Important Corporate Honors	09
2024 ESG Rating Overview	10
ESG Governance	11

Feature Story

Green Manufacturing Manufacturing Green	17
Digital Transformation of Special Steel with AI Showing the Way to the Future	21

01 Compliance First: Build a Solid Foundation for Corporate Resilience

Optimizing the Corporate Governance System	27
Strengthening the Defenses for Compliance and Risk Control	31
A Champion in Business Ethics	35
Building the Great Wall of Information Security	40

02 Innovative Steel Making: Letting Our Excellent Quality Shine

Enhancing Innovation-Driven Development	45
Focusing on Improving Product Quality	49
Focusing on Optimizing the Quality and Efficiency of Service	51
Forging a Collaborative and Win-Win Future	55

03 Aiming for the Dual Carbon Goals: Ongoing Commitment to Deliver Green Manufacturing

Focusing on Actions in Response to Climate Change	63
Staying Committed to the Path of Low-carbon Development	69
Advancing Green Operation Practices	81
Protecting Biodiversity	90

04 Safeguarding the Journey with Care: Setting the Benchmark for a Happy Workplace

Staying True to the People-Oriented Commitments	95
Supporting Our People in Their Self-Actualization	97
Guarding the Defense Lines for Safe Production	102
Shaping a Harmonious Workplace Ecosystem	110

05 United in Purpose: Working Together to Solidify the Foundation of Social Responsibility

Contributing to Rural Revitalization	119
Participating in Voluntary Programs	119

Appendix: ESG Data Indicators	121
Appendix: GRI Standard Content Index	130
Appendix: Self-Regulatory Guidelines No. 17 for Companies Listed on Shenzhen Stock Exchange—Sustainability Report (For Trial Implementation) Topic Index Table	137
Appendix: Readers' Feedback Form	138

About This Report

Report Entities

This report discloses the management and performance on environmental, social, and governance (ESG) issues of CITIC Pacific Special Steel Group Co., Ltd. (hereinafter referred to as "CITIC Pacific Special Steel", "the Company", "we" or "us") and its subsidiaries, including Jiangyin Xingcheng Special Steel Works Co., Ltd. (hereinafter referred to as "Xingcheng Special Steel"), Daye Special Steel Co., Ltd. (hereinafter referred to as "Daye Special Steel"), Qingdao Special Iron and Steel Co., Ltd. (hereinafter referred to as "Qingdao Special Steel"), Tianjin Pipe Co., Ltd. (hereinafter referred to as "Tianjin Pipe"), Jingjiang Special Steel Co., Ltd. (hereinafter referred to as "Jingjiang Special Steel"), Tongling Pacific Special Materials Co., Ltd. (hereinafter referred to as "Tongling Special Materials"), Yangzhou Pacific Special Materials Co., Ltd. (hereinafter referred to as "Yangzhou Special Materials"), Pacific Special Steel Suspension (Jinan) Co., Ltd. (hereinafter referred to as "Pacific Suspension"), and Zhejiang Pacific Seamless Steel Tube Co., Ltd. (hereinafter referred to as "Zhejiang Steel Tube").

Scope of Report

The report covers the period from January 1, 2024 to December 31, 2024, with some of the content beyond the period for the completeness of the report.

Compilation Principles of the Report

This report is primarily prepared in accordance with the *Global Reporting Initiative (GRI) Standards for Sustainability Reporting*, with reference to the *Guidelines for Self-Regulatory Supervision of Listed Companies No. 17 – Sustainability Report (Trial)* issued by the Shenzhen Stock Exchange. And other references include the United Nations Sustainable Development Goals (SDGs), MSCI ESG Ratings, S&P Global Corporate Sustainability Assessment (S&P CSA), Refinitiv ESG Ratings, and Sustainalytics (Morningstar ESG Ratings).

Reporting Language

This report is published in both Chinese and English. In case of any inconsistency between the two versions, the Chinese version shall prevail.

Data in Report

The information and data disclosed in this report are derived from the internal official documents, statistical reports and publicly available information, including the prospectus, annual report, news bulletins and other publicly available documents. The Company undertakes that there is no false record or misleading statement in this report, and is liable for the authenticity, accuracy and completeness of the content herein.

Unless otherwise stated, the financial data in this report are denominated in RMB.

Report Access

This report is released in electronic format. You can access it on our official website at <https://www.citicsteel.com> or Cninfo (<http://www.cninfo.com>).

Statement of Report

This report was approved by the Board on March 19, 2025 upon confirmation by the management.



Message from the Chairman

The year 2024 marked the 75th anniversary of the founding of the People's Republic of China. In addition to its historical significance, it was a crucial year for achieving the goals of the "14th Five-Year Plan", and a pivotal year for CITIC Pacific Special Steel to strengthen its foundation and pursue high-quality development. Amidst global economic slowdown, shrinking market demand, and other external challenges, CITIC Pacific Special Steel, guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, remained undeterred against the headwinds and confronted the risks and challenges head-on. By implementing the strategy of "moving forward under the strong party leadership", we forged ahead under various pressures and by overcoming one difficulty after another. In our relentless pursuit for "Optimal cost and efficiency", and through technological innovation, we continued to accelerate our transformation for high-end, intelligent, and green development, cultivate new and high-quality productivities, and build our resilience to deliver high-quality development. With unwavering resolve, we strive to be a respected world-leading special steel enterprise, and contributing to the China's efforts to build a strong and modernized country and achieve the great rejuvenation of the Chinese nation.

CITIC PACIFIC SPECIAL STEEL

Chairman




Moving Forward under the Strong Party Leadership and Gaining Empowerment through Synergistic Integration

In 2024, CITIC Pacific Special Steel, steadfastly adhering to the guidance of the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and the strengths of "moving forward under the strong party leadership", stepped up efforts in strengthening comprehensive party building and continued promote the synergistic integration between party building and its production and operations. At the same time, we devoted serious resources to rigorously promote community-level governance through Party building, and uphold an upright corporate political environment of integrity. Through iterative and comprehensive refinement of its corporate culture, we continued to build consensus and gain empowerment required for joining the ranks among the world leaders.

Empowering Growth through Innovation

In 2024, with ongoing efforts to deepen its innovation-driven development strategy and closely aligning with national strategic priorities, CITIC Pacific Special Steel quickened its paces in developing new and high-quality growth drivers, and further consolidated its competitive edge in the global special steel industry. In the past year, the Company had achieved numerous technological breakthroughs: Qingdao Special Steel successfully developed 2200MPa-grade steel for bridge cables, filling a global gap in the applications of steel at this strength grade; Daye Special Steel created core materials with a yield strength of 850MPa, providing critical support for the world's largest nuclear power crane. The Company accomplished abundant notable R&D achievements, with Tianjin Pipe winning the "Second Prize of the National Science and Technology Progress Award", and Qingdao Special Steel and Tianjin Pipe, each in their respective field, receiving the "Manufacturing Champion" title from the Ministry of Industry and Information Technology (MIIT). During the year, the Company was granted 476 patents and participated in the formulation/revision of 24 industry standards.

New Journey Enabled by Digital Intelligence Transformation

In 2024, CITIC Pacific Special Steel implemented its "Digital Intelligence Transformation" strategy, accelerating the integration of next-generation information technology with steel manufacturing to build the "Digital Intelligence Special Steel" brand. During the year, Xingcheng Special Steel achieved Level 4 Assessment of Intelligent Manufacturing Capability Maturity; Daye Special Steel was recognized as a "2024 Digital Pilot Enterprise" by the MIIT; Qingdao Special Steel was certified as a National First-Batch Excellence-Class Smart Factory; two cases from Qingdao Special Steel and Yangzhou Special Materials were selected as "Typical Cases of Digital Transformation in Key Scenarios of the Iron and Steel Industry" by the MIIT; and Jingjiang Special Steel and Yangzhou Special Materials were listed among Jiangsu Province's Industrial Internet Platforms.

Low-Carbon Transformation to Facilitate Green Development

In 2024, CITIC Pacific Special Steel adhered to the low-carbon development vision of "Green Manufacturing Manufacturing Green" to pursue sustainable development pathways while continuously reducing carbon emissions across its production processes. The Company integrated ultra-low emission concepts throughout all procedures and workflows. Significant breakthroughs and honors were achieved in green and low-carbon fields: Xingcheng Special Steel was listed among China's industrial carbon peaking "Front-Runners"; Xingcheng Special Steel, Tianjin Pipe, and Yangzhou Special Materials successively achieved Class A environmental performance ratings; Qingdao Special Steel passed Class A environmental performance re-evaluation; Daye Special Steel was recognized as a "Green Benchmark Enterprise" in Hubei Province's environmental credit evaluation; Qingdao Special Steel and Tianjin Pipe Corporation were named national "Water Efficiency Leaders" by the MIIT; and Jingjiang Special Steel was designated as one of the first-batch provincial "carbon peaking and neutrality" pilot program participants.

Multi-party Efforts to Promote Collaborative Development

In 2024, CITIC Pacific Special Steel further strengthened in-depth cooperation with employees, customers, suppliers, communities, and other stakeholders, jointly embarking on a new journey of high-quality development. The Company continued to pursue its strategy to maintaining a leading position for talent cultivation in the new era, including dedicated efforts to fostering a diverse, equitable, and inclusive work environment, optimizing its talent cultivation and promotion systems, and enhancing employee care, to transform human capital advantages into a robust high-quality growth driver. Focusing on customer needs as the core, the Company leveraged market insights and client feedback as innovation sources to build a co-creation, sharing, and mutual benefit ecosystem. Collaboration with suppliers was deepened through optimized procurement processes to create a green, intelligent, and sustainable supply chain. Simultaneously, the Company proactively fulfilled its social responsibilities, supported rural revitalization initiatives, leveraged industrial strengths to promote philanthropic causes, and contributed to global sustainable development.

About Us—Forging Ahead with Great ambition, and Delivering Brilliant Performance

Company Overview

CITIC Pacific Special Steel Group Co., Ltd. (Stock Code: 000708) is a professional special steel manufacturing enterprise group owned by CITIC Group and controlled by CITIC Pacific Co., Ltd. Nowadays, it has become the pioneer, the market leader and the industry standard setter of China's special steel industry. It has been president unit of China Iron and Steel Association and Special Steel Enterprises Association of China.

The Company has possessed "nine major production bases", including five major special steel manufacturing bases - Xingcheng Special Steel, Daye Special Steel, Qingdao Special Steel, Tianjin Pipe and Jingjiang Special Steel; two major raw material supply bases - Tongling Special Materials and Yangzhou Special Materials; and two major extended processing bases - Pacific Suspension and Zhejiang Steel Tube.

The Company has an annual production capacity of more than 20 million tons of special steel and its process technology & equipment have reached the world advanced level. Its comprehensive product portfolio encompasses six major product sectors: special steel bars, special steel wire rods, special plate products, seamless steel tubes, special forged products, and extended products. These products, characterized by complete specifications and superior quality, are widely distributed across China and exported to more than 80 countries and regions including the United States, Japan, the European Union and Southeast Asia, earning recognition from high-end domestic and international clients. Leading products such as high-end bearing steel, high-end automobile steel, and high-end energy steel continuously expand their market share domestically and internationally, maintaining a leading position in segmented markets.

Guided by the mission "Provide green and smart special steel for human civilization", CITIC Pacific Special Steel adheres to the development concept of "Integrity, Innovation, Integration and Excellence" while upholding the corporate spirit of "Diligent & Striving, Pragmatic & Responsible, Enterprising & Pioneering, Perfectionistic & Uncomplacent". The company is fully committed to be a respected world-leading special steel enterprise.

Corporate Culture

<p>Corporate Mission</p> <p>Provide green and smart special steel for human civilization</p>	<p>Corporate Vision</p> <p>To be a respected world-leading special steel enterprise</p>	<p>Core Values</p> <p>Integrity, Innovation, Integration, Excellence</p>
<p>Corporate Spirit</p> <p>Diligent & Striving, Pragmatic & Responsible, Enterprising & Pioneering, Perfectionistic & Uncomplacent</p>	<p>Operation Concept</p> <p>Optimal cost and efficiency</p>	<p>Market Concept</p> <p>Operation follows market, Production follows operation, Others follow production</p>
<p>Quality Concept</p> <p>Quality is our life, Quality today will be market tomorrow, Quality concerns everyone</p>	<p>Innovation Concept</p> <p>Forged in Science and Technology</p>	<p>Human Resource Management Concept</p> <p>Run the enterprise like a school</p>



Major Milestones

China announced the provisions on deepening the reform and development of state-owned enterprises, industry restructuring, and production capacity optimization. Since its establishment, CITIC Pacific Special Steel has always firmly seized the strategic opportunities. With the constant focus on the special steel field, it has deeply cultivated, diligently conducted and carefully planned its main business, and completed the magnificent transformation and upgrading from "General to Excellent, Excellent to Special, Special to Exquisite". With the simultaneous efforts in the restructuring and reform, and seamless integration, it realized the "5+2+2" strategic upgrade of entire industry chain along the rivers and coasts, and drawn a grand blueprint of "Begin Strong - Become Exquisite - Develop with high quality".

1993

The joint venture, Jiangyin Xingcheng Special Steel Works Co., Ltd, which is invested by Hong Kong CITIC Pacific and Jiangyin Steel Works, was established.

2008

Acquired the coking project under construction of Tongling Yaxing Coking Co., Ltd. and established Tongling Pacific Special Materials Co., Ltd.

2018

Acquired VALIN Wuxi Steel, and renamed it to Jingjiang Special Steel Co., Ltd.

2019

Launched an overall listing, and the listed company is renamed to "CITIC Pacific Special Steel Group Co., Ltd."

2023

Won the bid for 60% equity of Shanghai Electric Group Steel Pipe, and obtained the controlling stake of Tianjin Pipe Co., Ltd.

Hong Kong CITIC Pacific acquired Hubei Yegang and established Hubei Xinyegang Steel Co., Ltd. (Currently named as Daye Special Steel).

2004

Acquired Qingdao Special Iron and Steel Co., Ltd. and thus perfected its strategic layout.

2017

Acquired "Zhejiang Gross Seamless Steel Tube Co., Ltd." and renamed it to "Zhejiang Pacific Seamless Steel Tube", which formed the "Major Extended Processing Bases" with Pacific Suspension.

2019

Acquired 20.4% equity of Tianjin Pipe Co., Ltd. and be fully responsible for the production, operation and management.

2021



2024 Important Corporate Honors

The Company was included in the **MSCI China Index**.

Selected as one of the **"Top Ten Excellent Cases"** in the *2024 Blue Book on Social Responsibility of Steel Industry*.

Won the 2024 Responsible Top Bull Award for **"ESG Pioneer Enterprise"**.

Received the 2024 5th Panoramic Investor Relations Gold Award for **"Outstanding ESG Value Communication"**.

Honored with the 2024 Sina Finance China ESG Golden Award for **"Corporate Governance Excellence"** and **"Social Responsibility Excellence"**.

Published an exclusive **column titled *How to Lead Future Sustainable Development with ESG Concepts*** in the "ESG Pathfinder section" of China Metallurgical News.

2024 ESG Rating Overview

42 points
S&P Global ESG: 42 points

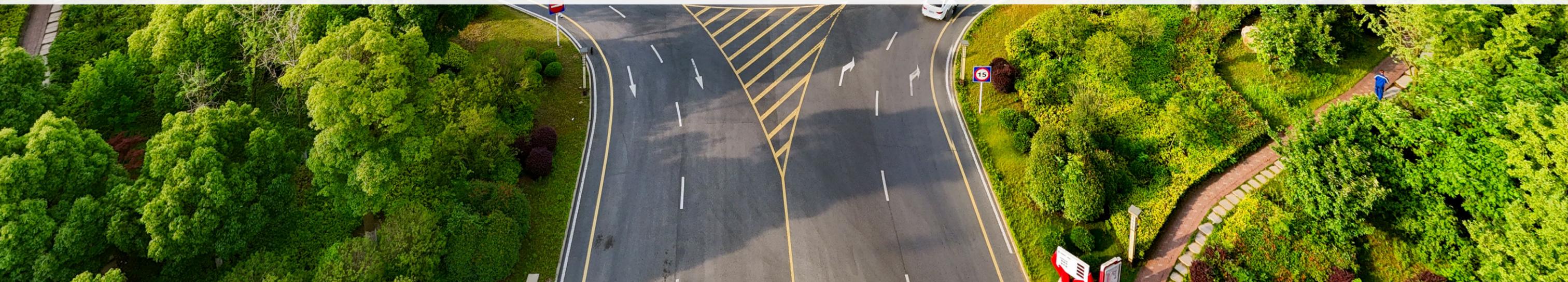
2.9 points
FTSE Russell: 2.9 points

78 points
Refinitiv ESG: 78 points

A
Wind ESG Rating: Grade A

B
CDP Climate Change Questionnaire: Xingcheng Special Steel and Daye Special Steel received a B rating

AAA
Metallurgical Industry Planning and Research Institute (MIPRI) ESG Rating: Awarded the highest rating of AAA



ESG Governance

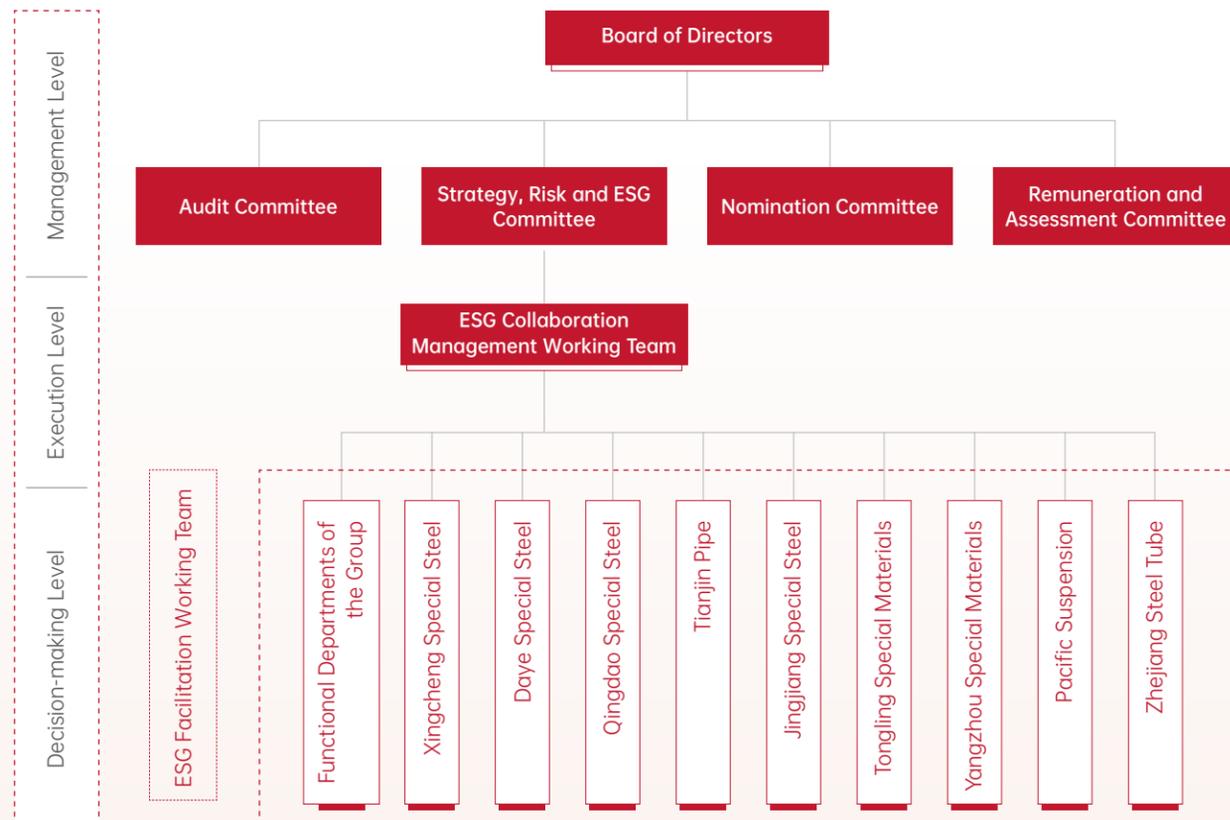
As part of its efforts to build a sustainable governance system, and by establishing a long-term ESG governance mechanism, actively responding to the expectations and demands of various stakeholders, and conducting substantial assessments, CITIC Pacific Special Steel is committed to continuously enhancing management quality and efficiency and laying a solid foundation for its sustainable development.

In 2024, the Company formulated the *Measures for the Management of Environmental, Social, and Governance Work*, and following three principles of "alignment with the Company strategy", "incorporation of governance", and "collaboration", created a "three-tier and four-level" ESG governance structure, to clearly define the roles and responsibilities and performance evaluation mechanisms for every unit at each level in the Company's sustainable development efforts, aiming to effectively promote the integration of sustainable development and ESG principles into the entire process of strategic planning, operational management, and business practices.

ESG Governance Structure

To align with its strategic and sustainable development needs, CITIC Pacific Special Steel has established an ESG governance structure that encompasses the decision-making level, management level and the execution level, with clearly defined roles and responsibilities, aiming to ensure that ESG considerations are deeply embedded into the performance of duties at all levels and comprehensively enhance the Company's overall governance effectiveness.

The Company has constructed a four-level ESG management model, comprising the Board of Directors, the Strategy, Risk, and ESG Committee, the ESG Collaboration Management Working Team, and the ESG Facilitation Working Team. This model clarifies the responsibilities of each unit and establishes a long-term ESG working mechanism, effectively safeguarding the implementation of the Company's medium- and long-term strategic goals and laying a solid foundation for sustainable development.



Board of Directors

- Regularly receive and review reports from the Strategic, Risk, and ESG Committee on ESG performance and related matters;
- Provide oversight and guidance on sustainable development and ESG initiatives in accordance with statutory regulatory requirements and relevant policies;
- Deliberate and approve the Company's ESG public disclosures, ESG-related risk profiles, and other material matters.

Strategy, Risk and ESG Committee

- Based on the Company's ESG performance, organize and coordinate the supervision and inspection of ESG-related matters, and propose improvement recommendations;
- Conduct research, analysis, and risk assessments on the Company's ESG-related matters, and provide decision-making solutions, including climate-related issues, ESG strategies and goals, policies, systems, and work plans;
- Review and submit the Company's ESG public disclosures to the Board of Directors.

ESG Collaboration Management Working Team

- Regularly report to the Strategic, Risk, and ESG Committee on the Company's ESG performance and management progress;
- Be responsible for the overall coordination and evaluation of ESG initiatives, managing matters such as the Company's ESG policies, strategies, and goals;
- Based on work progress and indicator achievement status, provide management recommendations, evaluations, and feedback to each department;
- Implement centralized management of the Company's ESG public disclosures.

ESG Facilitation Working Team

- Be responsible for implementing specific ESG management measures and promoting the practical implementation of ESG-related matters.

Communication with Stakeholders

The Company has established a normalized communication mechanism with stakeholders. Through formats such as questionnaires, surveys, interviews, and other methods, it comprehensively understands the expectations and requirements of various stakeholders regarding the Company's ESG practices. Below is a presentation of each stakeholder group, their primary concerns, and the communication or feedback methods:

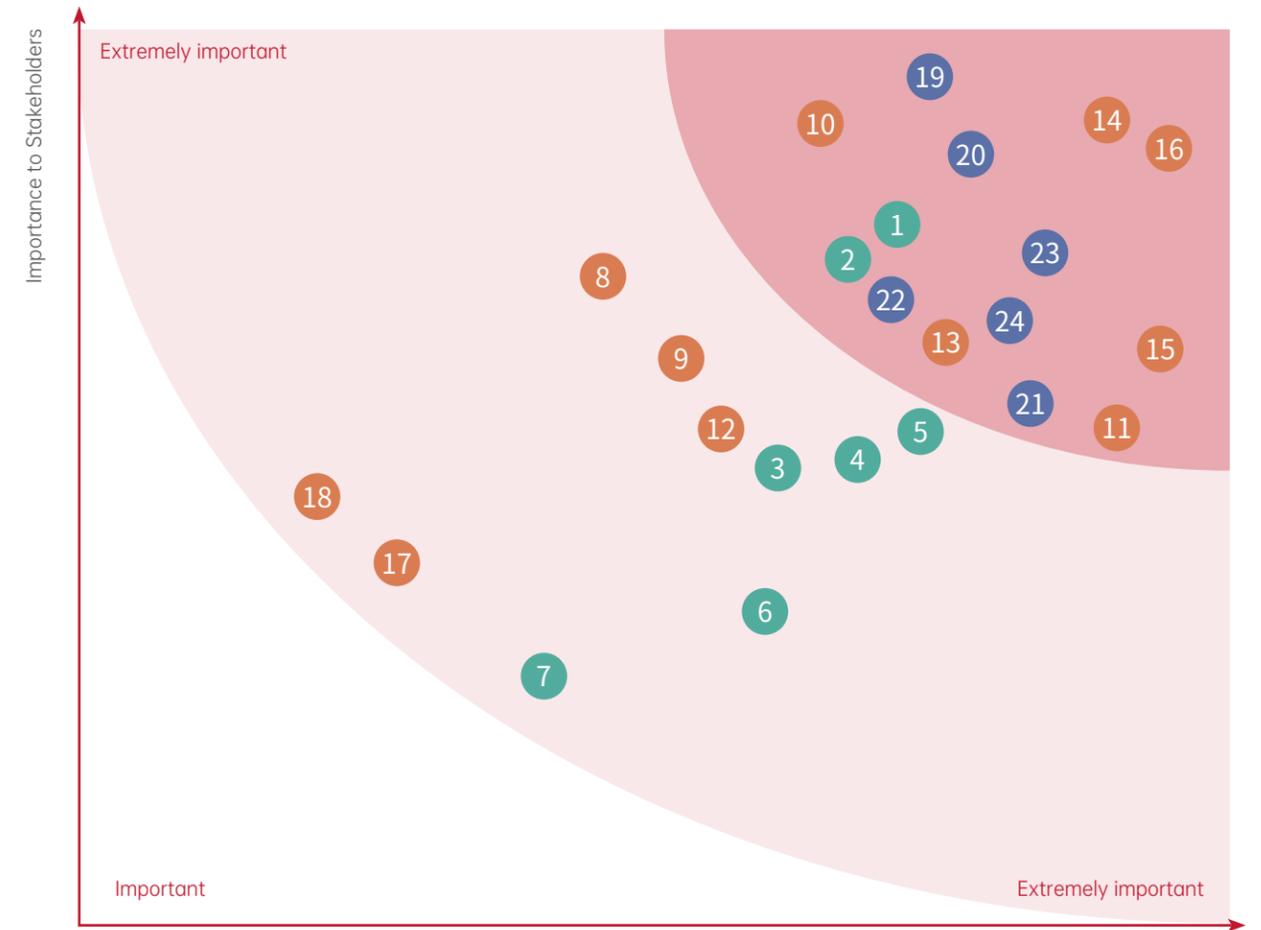
Stakeholder group	Topics of concern	Communication/Feedback methods
 Government and regulatory agencies	<ul style="list-style-type: none"> Compliance and risk control Business ethics Paying taxes according to laws 	<ul style="list-style-type: none"> On-site investigation Government visits Official correspondences Information disclosure
 Shareholders and investors	<ul style="list-style-type: none"> Corporate governance Compliance and risk control Business ethics Investment returns 	<ul style="list-style-type: none"> Shareholder meetings Investor exchanges Performance briefings Press release/Announcement On-site investigations
 Directors	<ul style="list-style-type: none"> Corporate governance Compliance and risk control Business ethics Paying taxes according to laws 	<ul style="list-style-type: none"> Board of directors meeting Investor exchanges Performance briefings Staff meeting
 Senior management	<ul style="list-style-type: none"> Corporate governance Compliance and risk control Ensuring product quality Occupational health and safe production Innovation and intelligent manufacturing 	<ul style="list-style-type: none"> Internal management meetings and reports Training related to corporate governance Platform for internal information communication Internal email communication
 Full-time employees	<ul style="list-style-type: none"> Protection of employees' rights and interests Employee training and development Occupational well-being and care for employees Occupational health and safe production 	<ul style="list-style-type: none"> Various employee activities Internal publications (newspapers and magazines) Employee performance evaluation Multimedia (social platforms including WeChat official account, etc.)

Stakeholder group	Topics of concern	Communication/Feedback methods
 Customers	<ul style="list-style-type: none"> Ensuring product quality Responsible sourcing Customer services Information security 	<ul style="list-style-type: none"> Customer satisfaction surveys Customer special line Official media platform Customer meetings
 Suppliers	<ul style="list-style-type: none"> Responsible sourcing Innovation and intelligent manufacturing Ensuring product quality 	<ul style="list-style-type: none"> Supplier quality review Supplier exchange meetings
 Peers/Industry associations	<ul style="list-style-type: none"> Innovation and intelligent manufacturing Industry co-creation and development Ensuring product quality 	<ul style="list-style-type: none"> Industrial association Communication and exchange visits Information disclosure Exhibitions
 Media	<ul style="list-style-type: none"> Innovation and intelligent manufacturing Public welfare and charity Ensuring product quality 	<ul style="list-style-type: none"> Press conferences Press release/Announcement Official media platform
 Communities	<ul style="list-style-type: none"> Public welfare and charity Rural revitalization Biodiversity 	<ul style="list-style-type: none"> Press release Public welfare projects Community voluntary activities Questionnaires

Materiality Assessment

Based on its business scope and impact on stakeholders, the Company has comprehensively considered internationally recognized sustainable development goals and frameworks (such as the SDGs and GRI), laws and regulations in the countries and regions where it operates, exchange regulatory requirements, ESG rating standards, industry best management practices, and external expert consultations. Through this process, it has identified a total of 24 ESG topics across the three dimensions of environment, society, and governance. This comprehensive identification aims to fully recognize the impact of ESG on the Company's operations. Simultaneously, the Company is actively exploring methodologies for evaluating and analyzing the financial significance of ESG topics to better guide sustainable development and information disclosure efforts.

Analysis process of ESG materiality topics



Importance to CITIC Pacific Special Steel

Sub-Item	NO.	Issue
Environment	1	Responding to Climate Change
	2	Energy Management
	3	Waste Management
	4	Air Pollutant Emissions
	5	Water Management
	6	Resource Utilization
	7	Biodiversity
Society	8	Protection of Employees' Rights and Interests
	9	Employee Training and Development
	10	Occupational Health and Safe Production
	11	Employee Well-being and Care
	12	Responsible Sourcing

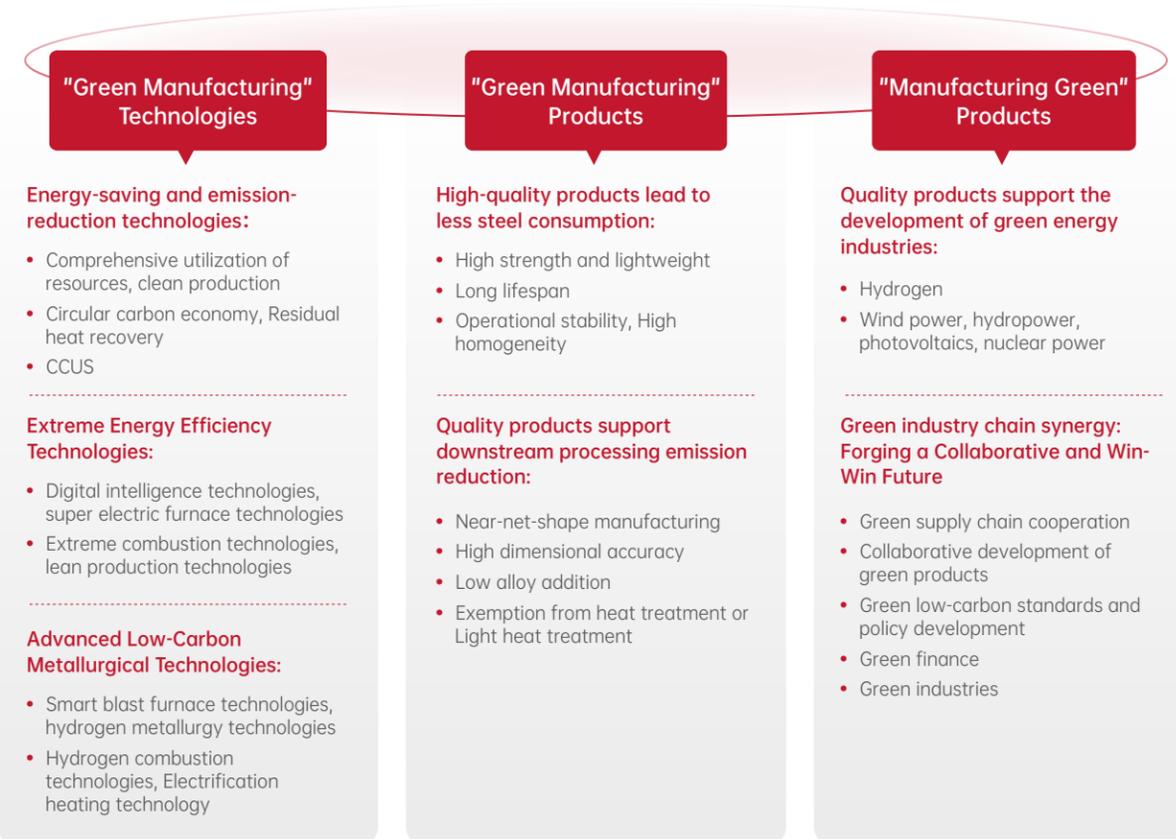
Sub-Item	NO.	Issue
Society	13	Industry Co-creation and Development
	14	Ensuring Product Quality
	15	Customer Service
	16	Innovation and Intelligent Manufacturing
	17	Public Welfare and Charity
	18	Rural Revitalization
Governance	19	Corporate Governance
	20	Business Ethics
	21	Compliance and Risk Control
	22	Intellectual Property Management
	23	Paying Taxes According to Law
	24	Information Security

Feature Story: Green Manufacturing Manufacturing Green

Against the backdrop of global efforts to promote climate protection, "green, low-carbon, and sustainable development" represents the inevitable path for the future development of the manufacturing industry. As a core development strategy of CITIC Pacific Special Steel, as early as March 2022, the Company unveiled its *Green, Low-Carbon, and Sustainable Development Roadmap* to the world, putting forward for the first time the vision of "Green Manufacturing Manufacturing Green" for the green and low-carbon development of the special steel industry.

The Company actively implements the "Green Leadership" strategy, focusing on the dual advantages of "Technological Innovation" and "Collaborative Development" to build a low-carbon, high-quality, and sustainable "Green Manufacturing" enterprise, injecting vitality into "Manufacturing Green" efforts while delivering its accountability and corporate social responsibilities as a special steel leader.

"Green Manufacturing Manufacturing Green" is not only the vision for our green and low-carbon development as a special steel enterprise but also the guideline underpinning the Company's efforts to achieve its climate goals as planned. It mainly encompasses three aspects: "Green Manufacturing" technologies, "Green Manufacturing" products, and "Manufacturing Green" products.



"Green Manufacturing" Technologies

The Company is actively exploring the applications of green manufacturing practices, and driven by innovations in technological solutions that deliver ultimate energy efficiency, digital intelligence technologies, and low-carbon metallurgical technologies, makes all-out efforts to promote aggressive carbon reduction across the entire steel manufacturing process.



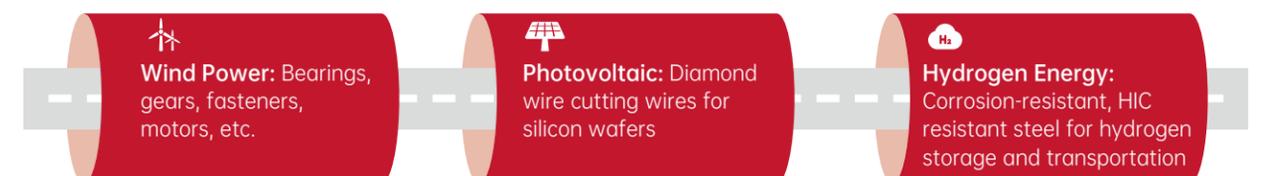
"Green Manufacturing" Products

The Company prioritizes efforts on developing low-carbon special steel materials and products that combines desirable attributes, including high strength and lightweight, long lifespan, high quality and high stability, low alloy addition, and exemption from heat treatment, with significant reduction in steel usage equivalent and energy consumption while enhancing steel usage efficiency and safety.



"Manufacturing Green" Products

The Company is committed to producing high-quality, cost-effective special steel, which will be used for manufacturing of key equipment for clean energy sectors, such as wind power, hydropower, photovoltaic, and hydrogen energy, to drive the rapid development of emerging new energy industries and enable clean energy to boost the "manufacturing Green".



Case

Creating high-quality low-carbon special steel products and initiating a new journey of carbon reduction in the high-end automotive industry chain

In 2024, the successful delivery of the Company's ultra-low-carbon emission, high-end bearing steel products marked a major breakthrough in the "Development and Brand Building of a New Generation Green Low-Carbon Flagship Product" project, a collaborative carbon reduction initiative between the Company and the Schaeffler Group of Germany. Building on the existing electric furnace process, this product has achieved a reduction in carbon intensity of over 50%.

The successful supply of this ultra-low-carbon emission special steel product to a top international automotive manufacturer has made a significant contribution to advancing the low-carbon goals of the Schaeffler Group. As the sole "TRUST" strategic partner of the Schaeffler Group in China, the collaboration between the Company and the Schaeffler Group, two leaders in their respective field, sets a benchmark for carbon reduction in the global high-end automotive industry chains.

Case

Daye Special Steel - Core Material with 850MPa Yield Strength "Supports" the World's Largest Nuclear Power Tower Crane

The key special materials required for the "slewing hydraulic cylinder" in nuclear power tower cranes have high requirements for dimensional accuracy and mechanical properties. Daye Special Steel has successfully overcome technical challenges such as long blank organization process, poor dimensional accuracy of large-diameter thick-walled pipes, and difficulty in hardening ultra-thick-walled pipes, achieving a material yield strength of 850MPa. The relevant products have passed inspections and been successfully delivered to users, shortening the transfer time between nuclear islands and enhancing the safety and economics of nuclear power construction.

Case

Qingdao Special Steel - Leading International Technology for High-End Special Steel Wire Rod with Significant Carbon Reduction Across the Entire Process

The online salt bath isothermal heat treatment technology and equipment, independently developed by Qingdao Special Steel, provide a solution to producing high-end special steel wire rod in a green, low-carbon, and stable manner, and the process proves to be cost-efficient, stable in temperature control, and low in carbon emission. The Company has proprietary intellectual property rights to this technology, has obtained 4 granted invention patents and 17 practical solution patents, has led the formulation of 2 group standards, and participated in the formulation of one international standard, one industry standard, and one railway standard respectively. The achievements represent the best in class at the international level, and the products have been widely used in major projects as well as high-end manufacturing, including long-span bridges and high-speed railways. In 2024, this technology was awarded the "First Prize of Metallurgical Science and Technology" by the China Iron and Steel Association and the Chinese Society for Metals.

Case

Tianjin Pipe - Overcoming Green and Clean Steelmaking Technology, Achieving Deep Integration of Carbon Reduction and Economic Benefits

To overcome the key challenges of high technical complexity and difficult process integration in the "green and clean steelmaking technology based on carbon dioxide resource utilization", Tianjin Pipe collaborated with the University of Science and Technology Beijing to focus on the resource utilization of carbon dioxide. They conducted in-depth research on the high-temperature reaction characteristics of carbon dioxide and applied them to critical steelmaking processes such as source dust reduction, efficient dephosphorization, enhanced denitrification, and oxygen control through dilution. This successful development of a new green and clean steelmaking technology combines carbon reduction effectiveness with economic benefits. The project was awarded the Second Prize of the National Science and Technology Progress Award, marking Tianjin Pipe's leading position in the R&D and application of green and clean steelmaking technologies.

A Pioneer in the Carbon Cause and a Leader in AI-Driven Transformation

As an industry leader, the Company proactively responds to the low-carbon needs of downstream industries, and by leveraging the international carbon reduction requirements as a driver for its innovation and upgrade, comprehensively and accurately quantifying the carbon emissions throughout the entire product lifecycles, and enhancing the low-carbon competitiveness of its products, it leads the efforts in pushing the industry towards a future of low-carbon and sustainable development. The Company stays committed to implementing a global green strategy to demonstrate its leadership in environmental protection and low-carbon development.

The Company closely follows environmental compliance standards and practices transparent data disclosure. To ensure its products meet the low-carbon requirements of the EU market, a comprehensive statistical system has been established to address the declaration needs of the EU Carbon Border Adjustment Mechanism (CBAM). The Company regularly conducts relevant declarations and continuously optimizes the management of statistical records to ensure data accuracy and traceability. To enhance transparency and demonstrate its commitment to green and low-carbon development, the Company proactively evaluates and discloses its greenhouse gas emissions through international carbon disclosure platforms in a comprehensive and accurate manner.

The Company has developed a digitalized carbon management platform, encompassing five core modules: carbon data management, carbon footprint (PCF) management, CBAM management, carbon asset management, and environmental management. Focusing on carbon footprint and carbon data management, the platform performs carbon footprint calculations and analyses across the entire process flow at both organizational and product levels. It provides data analysis services to support downstream industry users in calculating product carbon footprints. The "Carbon Pathfinder" system is the Company's self-developed carbon management digital platform. It is the first digital software in China to obtain CBAM and PCF compliance certifications, marking the Company's international recognition for professionalism and accuracy in CBAM calculations for products, product carbon footprint calculations, analyses, and management. The Company collaborates with downstream industry users to develop low-carbon and green product designs, establish a low-carbon and green product production system, and provide data analysis support services, achieving cross-domain collaborative carbon reduction.



The statement on assessment and verification for international third-party conformity certification

Feature Story: Digital Transformation of Special Steel with AI Showing the Way to the Future

2024 was a critical year for the Company's efforts to deepen its digitized and AI-enabled development. With its "Digital Intelligence Transformation" strategy clearly defined, the Company makes all-out efforts to build its "Digital Intelligence Special Steel" brand, including building four centers, namely a manufacturing center, an operations center, a data-driven decision-making center, and a service center; promoting three transformations in the manufacturing model, management and control model, and service model; and developing two major capabilities, namely empowerment through elite professionals in digitization and AI and empowerment through CPSI&I, its proprietary industrial internet platform, via innovative synergies between the new-generation information technologies and steel manufacturing and the construction of fully digitized and AI-enabled factories.



In accordance with the requirements of the *CITIC Pacific Special Steel Group's 2024 Digital Intelligence Work Promotion Plan*, the Company continues to promote independent research and innovation in digital intelligence while strengthening the implementation of digital transformation efforts. In 2024, the Company has achieved the following goals:

- Application-to-Cloud Migration Rate: **100%**
- Robot density: **182** units per 10,000 workers
- Xingcheng Special Steel's smart manufacturing capability maturity: Level **4**

"Digital Intelligence Transformation" Strategy and Overarching Plan

Adhering to its "Digital Intelligence Transformation" strategy, the Company has clearly defined its unique digital intelligence development path, and is committed to building the "most powerful brain" in the special steel industry.

Focusing on goals such as low-carbon environmental protection, cost reduction and efficiency increase, as well as minimally manned and unmanned operations, the Company has promoted demonstration production line projects, including the special metallurgical forging intelligent manufacturing plant of Daye Special Steel and the smart pelletizing plant of Yangzhou Special Materials. It has completed the expert reviews of the Special Metallurgical Forging Project plan, and the development and launch of a number of smart platforms, including the integrated intelligent management and control platform for smart pelletizing and the digital twin platform.

The Company continuously tracks the deepened application of established demonstration production lines and taps into the value of existing data. Among these efforts, the Xingcheng Special Steel Rolling and Forging Production Line Intelligence Project achieved a 1% increase in steel yield compared to 2023, and the deepened application of Daye Special Steel's Ironmaking Integrated Intelligent Management and Control Platform stabilized gas utilization at 48.7%. The Qingdao Special Steel Engineering Supporting High-Speed Special Steel Wire Rod Intelligent Manufacturing Project reduced process energy consumption by 6.5%, with all deepened application projects showing significant improvements in effectiveness.

Guided by value and driven by information technology, the Company focuses on independent research and development to seek breakthroughs in technological innovation, solving strangled issues in intelligent manufacturing during industry and company development. It has completed a total of 21 intelligent manufacturing technology breakthrough projects, including Xingcheng Special Steel's "Iron Ladle Dispatch", Daye Special Steel's "Intelligent Production Monitoring and Application Based on Machine Vision", Qingdao Special Steel's "Sintering Intelligent Water Control", and Yangzhou Special Materials' "Belt Conveyor Foreign Object Recognition Replication and Promotion".



Comprehensive progress, "AI+" breakthroughs, and deepened smart transformation in production and operations

1

Coordinating and implementing efforts to promote AI adoption in 2024: Given the characteristics of special steel production, including small in volume and large in variety, complex in techniques and processes, and highly sophisticated in technology, the Company has identified 13 core AI projects. At the same time, the Company has established a professional promotion team, mainly comprising special steel technicians, and joined forces with leading technology enterprises, including Baidu and Alibaba, to form a joint AI taskforce to boost technological breakthroughs.

2

Pooling internal and external resources to accelerate AI technology breakthroughs: The Company has fully utilized its internal AI platform model capabilities to independently develop and deploy more than ten AI models, including sintering water distribution, blast furnace temperature trend prediction, and belt conveyor foreign object recognition. At the same time, the Company has actively collaborated with well-known universities, research institutions, and enterprises to jointly explore cutting-edge applications and scenario innovations of AI technology.

3

Jointly exploring large AI models for special steel to lead the way to a digitized and AI-empowered future: The Company organized the "AI+" special steel seminar, focusing on the theme of "Digital Transformation of Special Steel with AI Showing the Way to the Future". In line with its "AI+" initiative, the Company actively explored the innovative integration of AI technologies in key processes and key business areas, partnered with Baidu to conduct large model workshops, and performed large model POC testing of selected scenarios, including the surface inspection of the bar products produced by Xingcheng Special Steel and the predictive analysis of Daye Special Steel.

As part of its AI commitments, the Company will explore vertical AI models for the special steel industry, build a new paradigm for AI applications in special steel, and contribute special steel solutions to boost the high-quality development of the steel industry ecosystem.

Case

Xingcheng Special Steel: "Coal Injection Unmanned Intelligent Crane System" to Promote Smart Operations

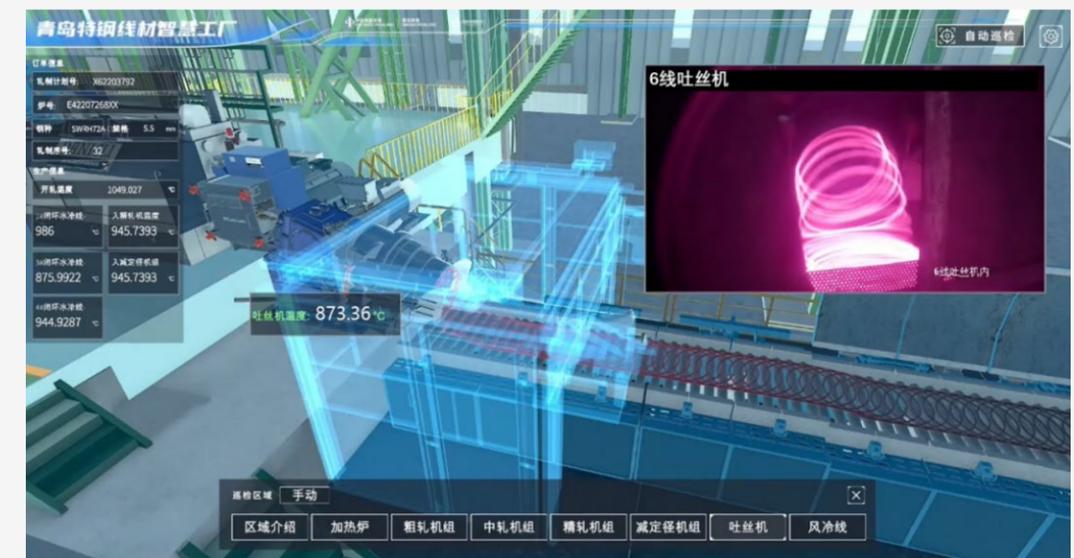
Xingcheng Special Steel's "Coal Injection Unmanned Intelligent Crane System" was officially put into operation in late April 2024. By utilizing ternary control technology, crane precise positioning technology, and 3D scanning technology, the system has innovatively developed a ground intelligent discharging system, achieving functions such as autonomous navigation of the crane, precise position locking, automatic obstacle avoidance, and unmanned operation. It has overcome the problem of grate blockage, reduced the risk of equipment damage, and made the crane's grasping movements smooth and standardized, creating a new mode of intelligent operation. At the same time, the system's unmanned operation mode with one-button start effectively alleviates the labor intensity of employees, increases the overall operation efficiency by more than 20%, and creates an intrinsically safe production environment.

Case

Qingdao Special Steel: Full-Process Digital Intelligence Transformation to Boost Enterprise Efficiency

Qingdao Special Steel has continuously promoted the construction of five intelligent factories: "intelligent coking, intelligent ironmaking, intelligent steelmaking, intelligent section steel, and intelligent high-speed wire rod" by implementing a series of digital intelligence transformation projects. These efforts have realized centralized intelligent control in various production processes, built a company-level data foundation, promoted information and data integration, and accelerated the digital transformation of the enterprise.

In December 2024, the MIIT announced the first batch of outstanding intelligent factories, and Qingdao Special Steel's "High-Speed Special Steel Wire Rod Intelligent Factory" was successfully selected. The construction of this intelligent factory has achieved a high degree of intelligence, informatization, and reduction in manpower across the entire production line. It has resulted in staff reduction, cost reduction, production increase, efficiency improvement, and economic indicator enhancement, providing a referable experience for the digital transformation of the steel industry.



01 Compliance First

Build a Solid Foundation for Corporate Resilience

Adhering to the core values of "Integrity, Innovation, Integration, Excellence", CITIC Pacific Special Steel continues to optimize its modern enterprise system with Chinese characteristics, including solid efforts to promote the modernization of its governance system and capabilities to ensure sound decision-making, adequate checks-and-balances, compliant operations, and effective oversight, while it works to strengthen its competitiveness, innovation capacity, control capability, influence, and risk resilience, and also ongoing endeavors to enhance the effectiveness its governance to drive high-quality and sustainable development, deliver its social responsibilities, and safeguard the rights and interests of all stakeholders.

Highlights and Achievements in 2024

- ◎ 100% coverage of employee risk management training activities
- ◎ 100% coverage of employee anti-corruption training
- ◎ 100% signing rate of "Transparent Cooperation Agreement" by suppliers
- ◎ 100% coverage of employee information security training
- ◎ CITIC Pacific Special Steel secures dual honors at the "2024 Panorama Investor Relations Gold Awards"

Response to SDGs



Optimizing the Corporate Governance System

A well-structured, professional, and efficient corporate governance system serves as the bedrock for enterprises to continuously enhance core competitiveness and achieve sustainable growth. The Company is committed to building modernized and sustainable corporate governance, continuously advancing governance systems, ensuring transparent information disclosure, maintaining robust investor relations, and creating enduring value for society.

Solidifying the Governance Foundation

In accordance with the *Company Law of the People's Republic of China*, the *Securities Law of the People's Republic of China*, the *Code of Corporate Governance for Listed Companies* issued by the China Securities Regulatory Commission (CSRC), the *Rules Governing the Listing of Stocks on Shenzhen Stock Exchange* promulgated by the Shenzhen Stock Exchange, and other relevant regulations, the Company continuously improves its corporate governance structure and promotes the establishment and improvement of its internal system of regulations.



The Company's Corporate Governance Structure

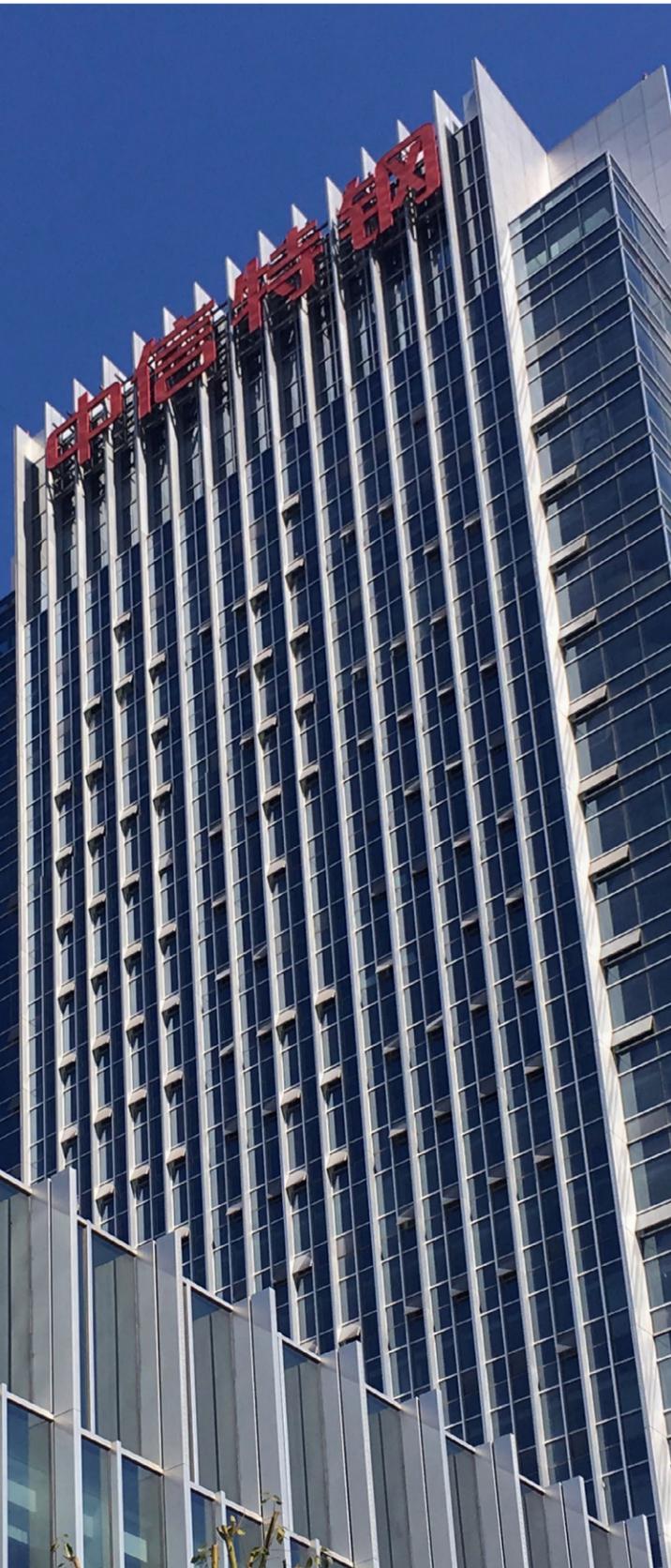
Board Diversity

The Company is committed to advancing board diversity and has developed the "Policy Statement on Board Diversity" to facilitate the achievement of its strategic vision and accelerate sustainability initiatives. The Company incorporates multi-dimensional factors into the selection criteria for board members, including but not limited to gender, age, cultural and educational backgrounds, ethnicity, professional competence, ethical standards, and industry-specific experience. The current Board of Directors comprises 9 members, including 3 independent directors and 1 female director. The current Board members boast professional expertise and extensive experience in diverse fields including steel industry, economic management, securities regulation, capital operations, risk management, and accounting & financial management. This multidisciplinary composition brings diverse perspectives to senior-level decision-making, enhancing the Company's long-term governance capabilities.

Members of the Committee

- 1
- Strategy, Risk and ESG Committee
- 2
- Nomination Committee
- 3
- Audit Committee
- 4
- Remuneration and Assessment Committee

Name	Age	Gender	Experience	Members of the Committee
Qian Gang	59	Male	He has successively served as a dedicated engineer, production technology plant manager, and plant manager of the No. 3 Steelmaking Plant at Xingcheng Special Steel; assistant general manager and plant manager of the Special Smelting Plant, and deputy chief engineer at Xingcheng Special Steel; director and general manager of Daye Special Steel; general manager of Hubei Xinye Steel Co., Ltd.; general manager of Xingcheng Special Steel; vice president and president of CITIC Pacific Special Steel Group; and vice president of CITIC Pacific Limited. He currently holds the positions of chairman of the Company, director and president of CITIC Pacific Limited, vice chairman and general manager of CITIC Pacific Special Steel Investment Co., Ltd., chairman of Hubei Xinye Steel Co., Ltd., executive director of CITIC Mining International Limited, director of Nanjing Iron and Steel Group Co., Ltd., director of Nanjing Nansteel United Co., Ltd., and director of Nanjing Steel United Co., Ltd.	1 2 3 4
Guo Jiahua	52	Male	He has successively held the positions of General Manager of the Business Development Department, Assistant Director, and Director at CITIC Pacific Limited. He currently serves as the Vice Chairman of the Company, Director and Vice President of CITIC Pacific Limited, a member of the Executive Committee and Risk Management Committee of CITIC Pacific Limited, and a member of the Investment Committee and Asset-Liability Management Committee. He also holds the positions of Chairman of CITIC Pacific Special Steel Investment Co., Ltd., Director of Hubei Xinye Steel Co., Ltd., Director of Nanjing Iron and Steel Group Co., Ltd., Director of Nanjing Nansteel United Co., Ltd., Director of Nanjing Steel United Co., Ltd., Director of Nanjing Steel Co., Ltd., Director of CITIC Pacific (China) Investment Co., Ltd., Director of several member companies of CITIC Pacific related to special steel, health, and real estate projects, and Director of Dah Chong Hong Group Limited.	1 2 3 4
Yang Feng	42	Male	He has successively served as Senior Manager of the Finance Department at CITIC Group Co., Ltd., Chief Financial Officer at CITIC Medical and Health Industry Group Co., Ltd., and Chief Financial Officer at CITIC Construction Co., Ltd. He currently holds the positions of Director of the Company, Chief Financial Officer and member of the Risk Management Committee at CITIC Pacific Limited, Deputy General Manager of the Finance Management Department at CITIC Limited, Director of Nanjing Iron and Steel Group Co., Ltd., Director of Nanjing Nansteel United Co., Ltd., Director of Nanjing Steel United Co., Ltd., and Chairman of Yinxin Commercial Factoring Co., Ltd.	1 2 3 4
Li Guozhong	57	Male	He has successively held the positions of technician at the No. 3 Steelmaking Plant, plant manager of the No. 2 Steelmaking Plant, deputy director of the Quality Supervision Center, director of the Quality Department, director of the Development Department, director of the Technology Center, assistant general manager, chief engineer, director of the Research Institute, and deputy general manager at Xingcheng Special Steel; general manager at Hubei Xinye Steel Co., Ltd.; general manager at Xingcheng Special Steel; and president at CITIC Pacific Special Steel Group Co., Ltd. He currently serves as a director of the Company, vice president of CITIC Pacific Limited, director of CITIC Pacific Special Steel Investment Co., Ltd., chairman of CITIC Pacific Energy Co., Ltd., director of Nanjing Iron and Steel Group Co., Ltd., director of Nanjing Steel United Co., Ltd., director of Nanjing Steel United Co., Ltd., and director of Nanjing Steel Co., Ltd.	1 2 3 4
Huang Guoyao	49	Male	He has successively held the positions of Senior Manager, Manager, General Manager, and Assistant Director in the Business Development Department of CITIC Pacific Limited. He currently serves as a director of the Company, director of the Business Development Department of CITIC Pacific Limited, executive director of CITIC Mining International Limited, director of several member companies related to the CITIC Australia Mining Project under CITIC Limited, and director of several member companies related to special steel, energy, infrastructure, and health projects under CITIC Pacific.	1 2 3 4
Luo Yuandong	53	Male	He has successively held the positions of furnace operator at the No. 3 Steelmaking Plant, quality inspector at the Quality Department, salesperson, deputy manager and manager of the Shanghai branch of the Sales Department, and deputy general manager of the Sales Company at Xingcheng Special Steel., deputy general manager and general manager of sales at Groth Seamless Pipe Co., Ltd., assistant general manager, deputy general manager, executive deputy general manager, and general manager of Xingcheng Special Steel, and deputy general manager and general manager of the Sales Corporation of CITIC Pacific Special Steel Group. He currently serves as a director and vice president of the Company, and director of CITIC Pacific Special Steel Investment Co., Ltd.	1 2 3 4
Zhang Xiaogang	70	Male	He has successively served as the General Manager of Anshan Iron and Steel Group, President of the World Steel Association, and President of the International Organization for Standardization. He currently holds the positions of independent director of the Company and chairman of the China Metal Society.	1 2 3 4
Li Jingshe	66	Male	He has successively held the positions of Executive Vice Dean of the Graduate School, Vice Dean of the School of Metallurgical Engineering, and doctoral supervisor at the University of Science and Technology Beijing. He currently serves as an independent director of the Company, a second-tier professor of Metallurgical Engineering at the University of Science and Technology Beijing, and an external director at Hebei Iron and Steel Group Co., Ltd., while also serving as a member of the Electrometallurgy Branch of the China Metal Society.	1 2 3 4
Liu Wei	63	Female	She has successively held the positions of Chief of the Finance Department at Jiangyin Reducer Co., Ltd., Director of the Audit Department at Jiangyin Tianhua Certified Public Accountants Firm, and Manager of the Enterprise Management Department at Jiangyin Mould & Plastic Group. She currently serves as an independent director of the Company, independent director of Jiangsu Sihuan Bioengineering Co., Ltd., General Manager of Compass Enterprise Management Consulting Co., Ltd., Partner-in-Charge of Jiangyin Compass Certified Public Accountants Firm (General Partnership), and Partner-in-Charge of Jiangyin Compass Tax Consulting Firm Co., Ltd.	1 2 3 4



Greater Transparency in Information Disclosure

The Company is committed to building a system of institutional rules centered on information disclosure, rigorously complying with the *Measures for the Administration of Information Disclosure by Listed Companies* of the CSRC, the *No.5 Guidelines for Self-discipline Regulation of Listed Companies - Information Disclosure Management* of the Shenzhen Stock Exchange, and the Company's internal provisions, such as the "Management Measures for Information Disclosure" and the "Measures for Internal Reporting of Material Information". These measures ensure timely and equitable disclosure practices, while guaranteeing the authenticity, accuracy, and completeness of disclosed content. The Company resolutely prohibits any occurrences of false records, misleading statements, or material omissions, while continuously elevating the quality of information disclosure. Through efficient and comprehensive communication of operational management updates and business development progress to investors, we safeguard the legitimate rights and interests of all shareholders, with particular emphasis on protecting public investors.



- The Company has been granted Grade A in information disclosure assessment from the Shenzhen Stock Exchange for **5** consecutive years.

The Company has been awarded the "7th China IR Annual Awards-Best Information Disclosure Award (2023-2024)" from the Cross-border Roadshow Platform for Listed Companies.

The Company has been recognized with the "Outstanding Board Practice Case for Listed Companies" and "Outstanding Sustainable Practice Case for Listed Companies".

- The Company has
- released **45** regular announcements
 - and **58** temporary announcements

Deepening Investor Relations

With investor relations management set as one of its top priorities, the Company adopts innovative methods to improve the quality and effectiveness of its services, and engage investors in ongoing communication through various channels and at different levels to build and maintain a positive and interactive relationship. The Company strictly complies with requirements of the *Guidelines on Investor Relations Management of Listed Companies* of the CSRC and the "Measures for Management of Investor Relation" of the Company, and effectively fulfills the responsibilities of investor relations management of listed companies. The Company actively engages in long-term and stable interactions with domestic and overseas investors through a variety of channels and formats. We promptly collect and respond to investors' feedback and concerns, deepening investors' understanding and recognition of the Company. We endeavor to convey our ESG concepts and core values to investors and are always committed to safeguarding the legitimate rights and interests of investors, particularly those of small- and medium-sized investors. This year, the Company has formulated the "Measures for Management of Market Value" to further standardize market value management practices, enhance corporate investment value, and achieve sustainable development.



- The Company responded to a total of **68** questions from investors through interactive Q&A sessions

- Response rate: **100%**

Case

CITIC Pacific Special Steel secures dual honors at the "2024 Panorama Investor Relations Gold Awards"

In September 2024, the national selection results of the "Panorama Investor Relations Gold Awards" were announced. CITIC Pacific Special Steel was honored with two awards: "Outstanding IR Team" and "Outstanding ESG Value Communication Award".

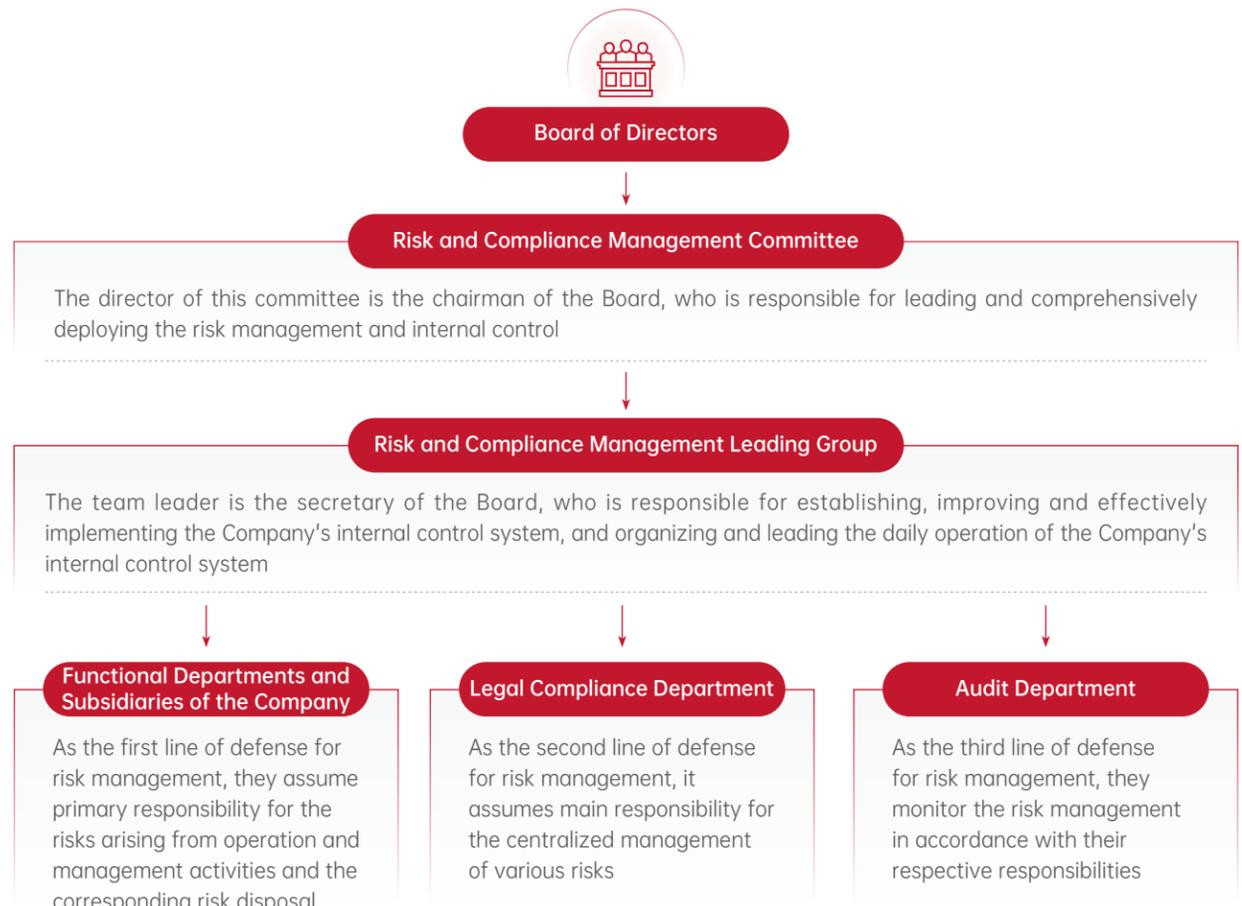


Strengthening the Defenses for Compliance and Risk Control

In compliance with relevant laws and regulations and drawing on international leading practices in risk and compliance management, the Company works to solidify its risk and compliance management foundation by increased efforts in defining and implementing the roles and responsibilities and further optimizing its integrated management mechanism driven by risk preference, upheld by risk management as the bottom line, safeguarded by compliance management as the red line, and underpinned by internal controls, and achieves synergies through organic integration, to deliver the goals to "strengthen internal controls, promote compliance, and prevent and mitigate risks."

Improving the Compliance and Risk Control System

In strict compliance with the *Compliance Management for Central State-owned Enterprises* and the *Basic Standard for Enterprise Internal Control* and its supporting guidelines, and in light of the current status and actual needs of its corporate governance, the Company has formulated internal management rules and procedures, including the *Measures for Comprehensive Risk Management*, *Compliance Management Measures* and *Internal Control Management Measures*, established a four-level and three-line risk management structure, and put in place a three-dimensional risk management model that combines departments which focus on their specific business lines and subsidiaries which take overall charge of their own operations, so as to fundamentally establish the long-term mechanism for risk prevention and mitigation and enable risk management from the very sources and in an integrated manner.



The Company's Organizational Structure of Risk Management



This year, the Company has compiled and released the "Overseas Risk Management Measures", updated and optimized basic and specialized systems in the field of overseas risk management, and regularly monitored overseas risk preference indicators. These measures cover multiple areas, including financial risk, operational risk, liquidity risk, legal and compliance risk, market risk, reputational risk, workplace safety risk, and information security risk. Meanwhile, we have significantly increased our efforts in overseas risk management, promoting the institutionalized operation of the overseas risk and compliance management working group. We have held six working meetings and implemented 15 work arrangements, systematically advancing overseas risk management to a deeper and more practical level.

Cultivating a Risk and Compliance Culture

To raise the risk and compliance awareness of our people and foster a compliance culture, the Company combines different formats, including lectures, competitions, and videos, to conduct risk management training programs at different levels, reaching out to all employees of the Company. Since 2021, we have organized more than 80 different cultural and educational programs on risk and compliance, with over 500,000 participants in online course studies and with full coverage of all our people.

Highlights and effectiveness for 2024

- "Construction and Practice of a Risk and Compliance Culture Ecosystem Based on All-Region and All-Staff Participation" won the first prize for **the 22nd (2024) Innovation Achievements in Modernization of Metallurgical Enterprise Management.**
- In the first "Shangda Cup" essay competition on green transformation and compliance construction held by the Legal Affairs Branch of the China Iron and Steel Association, the Company achieved **one second prize and one third prize.**

The Company has developed its systematic methodology for building its risk and compliance culture ecosystem for an iron and steel enterprise, which approaches the risk and compliance culture ecosystem from five levels, namely the mindset, discipline, awareness, behavior and assurance, focusing on 15 key elements, and combines the five levels into an integral whole to promote the risk and compliance culture, so that the culture is embedded in the mindset, formalized in policies, translated into actions, and converted to tangible benefits.



The Company integrates internal talent resources with external experts to popularize compliance risk points among employees and explains corresponding response strategies in conjunction with judicial practice cases.



▶ High-Level Training Course on Overseas Compliance and Thematic Training Programs in the Overseas Compliance Culture Month

Specialized training on the new company law ◀

Implementing the Digital Transformation of Risk Control

In July 2024, the Company's independently developed "Big Data-Based Enterprise Risk and Internal Control Automated Early Warning System and Method" was granted a patent authorization. As the Company's first management-related invention patent, this achievement marks a significant milestone in the Company's risk management informatization construction.

In the future, the Company will continue to drive the iterative upgrades of the risk management system to further support the implementation of the risk strategy, and by digitalizing our worksheet tools for compliance management, establishing a customized database of laws and regulations, and pooling and analyzing business data, risk warning data and external data, develop a higher level of perception and insights in our risk management.

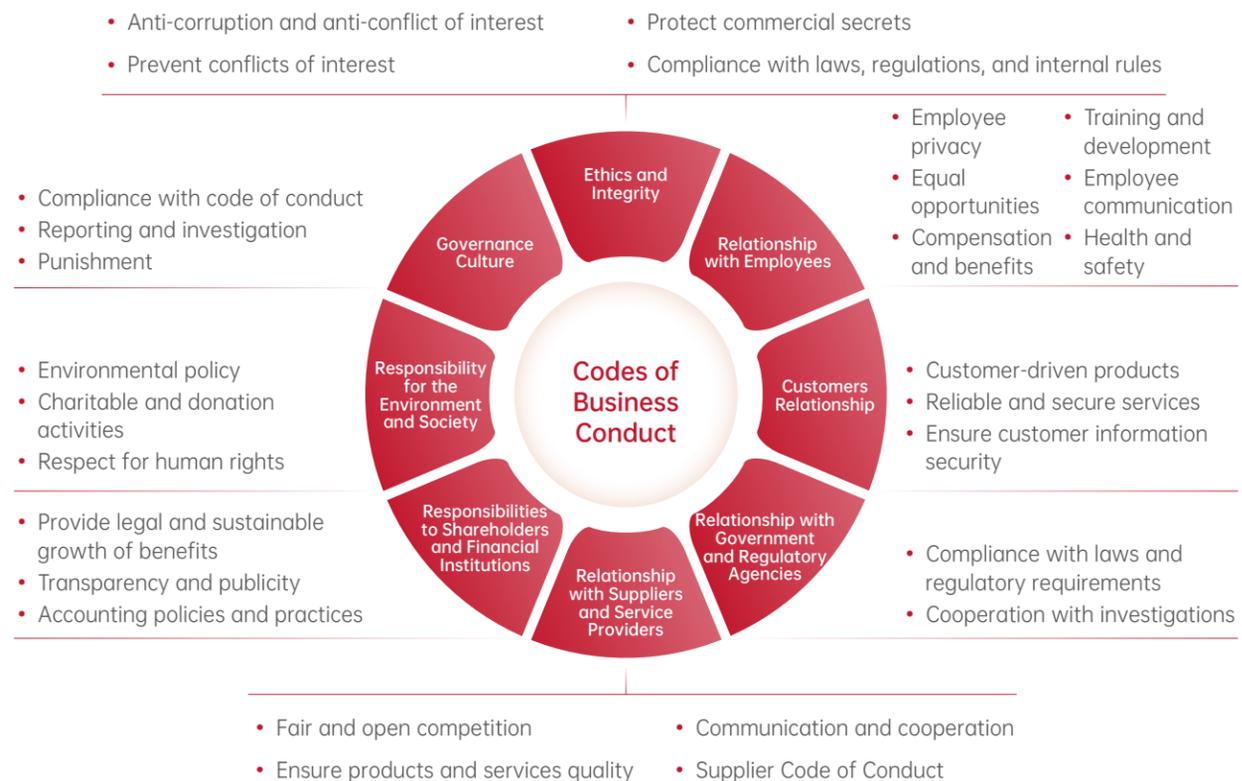


A Champion in Business Ethics

The Company is committed to deepening the construction of business ethics and conduct, innovating supervisory methods, improving the reporting mechanism and strengthening the construction of business ethics culture. We rigorously implement comprehensive strict governance of the Party, integrity building, and anti-corruption efforts, establishing an all-encompassing, multi-level system for the prevention and control of business ethics risks and creating a positive and transparent corporate environment.

Adhering to Business Ethics

The Company strictly complies with various laws and regulations, including the *Oversight Law of the People's Republic of China*, the *Law of the People's Republic of China on Anti-money Laundering*, the *Anti-Unfair Competition Law of the People's Republic of China*, and the *Guidelines for Multinational Enterprises* by the Organization for Economic Co-operation and Development (OECD). This year, the Company has revised relevant management policies, including the *Implementing Rules for the Treatment of Responsible Persons in the Performance of Their Duties and Business Expenses*, *Regulations on Business Hospitality Management*, and *Codes of Business Conduct*. These policies stipulate the Company's principles in anti-bribery, anti-conflict of interest, and anti-unfair competition. By continuously improving the system of business ethics, the Company provides a solid foundation for compliant operations. Meanwhile, the Company has introduced the "Rules for the Use of Legal Opinion Letters, Risk Alert Letters and Recommendation Letters to Strengthen Supervision", and set out clear supervisory requirements on the issue, follow-up, response and revisit of the disciplinary inspection recommendations, supervisory recommendations, and supervisory reminders, to further enhance the effectiveness of supervision and the level of governance.



Codes of Business Conduct

Business ethics audit

The Company conducts internal system audits of business ethics standards covering all operations at least once a year, as well as third-party system audits, including a surveillance audit of the ISO 37301 "Compliance Management System". Additionally, the Company increases the frequency of audits based on specific business needs to identify and correct potential business ethics risks in a timely manner. The Company strictly complies with the *Implementation Opinions on the Implementation of Full Coverage Audit* issued by the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council, conducting annual audits on key departments and critical business processes. The Company conducts at least one audit during the tenure of a leader in a crucial unit or in a critical position, to ensure full coverage of the audits. For units and leaders more troubled by issues or negative reports, the Company will conduct audits more frequently and in greater depth. This year, the Company has conducted and completed a total of 46 specialized audits across various business processes, and has carried out 51 audit-related tasks, including audit investigations, rapid tests, and the issuance of risk alert letters.

For discipline violators, the Company will impose appropriate penalties in accordance with relevant regulations, and will direct serious attention to the implementation of disciplinary measures applied to these violators in respect to their remuneration and benefits, performance evaluation, and promotion and/or reappointment, to be followed up with half-yearly reviews. In 2024, there were no negative incidents involving corruption and bribery, conflict of interest, money laundering, insider trading or harassment.

Business ethics training

The Company fosters a clear and upright culture through various types of training and publicity, working together to create a harmonious and clean business environment. This year, the Company's business ethics training program has covered all employees (including part-time) and contractors. The training content includes compliance management, anti-bribery, whistleblower protection, anti-conflict of interest, and anti-unfair competition.

Building an Integrity-Driven Ecosystem

Any form of bribery and corruption is strictly prohibited. The Company does not allow any employee to offer, extort or accept bribes, including soliciting or providing benefits to customers, suppliers, legislative agencies, enforcement agencies or other personnel related to the Company's business, or act as a third party to offer, extort, or accept any benefits. Anyone, regardless of whether they have obtained permission from their superiors, who uses their authority to extort or accept any form of benefits, will all be considered as violations of the Company's anti-corruption and anti-bribery regulations.

Improving the whistleblowing management mechanism

The Company manages the reporting process and related issues in accordance with the *Rules for the Supervision and Enforcement of Discipline by the Discipline Inspection Organs of the Communist Party of China*, the *Rules for the Handling of Reports and Accusations by Discipline Inspection and Supervision Organs*, the *Regulations on the Work of Petition Reporting (Trial)* and the *Regulations on the Management of Problem Clues* by the Discipline Inspection and Supervision Group stationed at CITIC Group, as well as the "Whistleblowing Management Measures" of the Company.

The Company has established a comprehensive reporting mechanism, featuring a diverse and transparent range of reporting channels, including a reporting hotline, reporting mailboxes, and an online reporting platform, to ensure the accessibility of these channels. The Company has established a confidentiality system for reports and accusations, strictly prohibiting any form of retaliation against whistleblowers and witnesses. Additionally, the Company strictly manages the personal information of whistleblowers, as well as records and documents related to reports. During the information flow, the Company will conceal relevant information of the whistleblower, such as name, phone number, and email address. Moreover, the Company regularly organizes confidentiality and privacy protection training sessions for relevant department personnel, emphasizing the importance of protecting the privacy of whistleblowers.

Whistleblowing channels at CITIC Pacific Special Steel

Tel.: 0510-80676699

E-mail: hr@citicsteel.com

Mail address: The Human Resources Department of CITIC Pacific Special Steel, No. 1, Changshan Avenue, Jiangyin City, Jiangsu Province

Promoting a corruption-free environment

The Company places great emphasis on integrity education and extensively uses a variety of formats and media for such education, including warning and education conferences, integrity warning videos, disciplinary and legal knowledge tests, and the signing of commitment statements, to raise employees' awareness of integrity and strengthen the construction of an integrity culture.

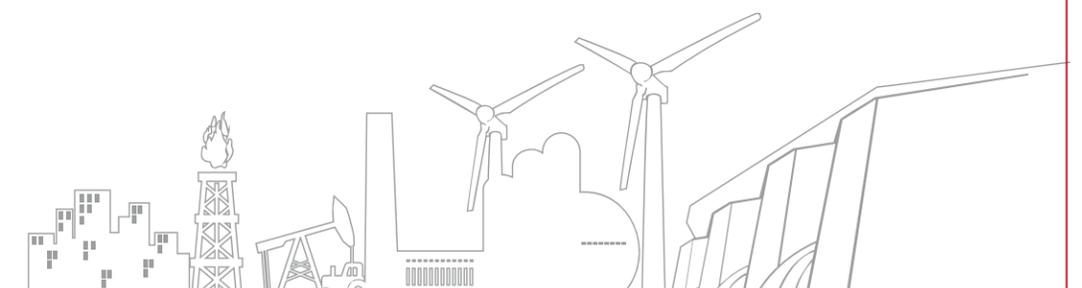


Party Discipline Education

- The "CITIC Pacific Special Steel Cloud Course" mobile platform has established a "Weekly Discipline" learning column within its Party Discipline Education module, which has attracted over **470,000** views.
- Signed the "Commitment to Integrity" with Party-member leading cadres and employees in sensitive positions, achieving a **100%** signing rate.
- Conducted **1,323** tiered and categorized learning sessions on the *Chinese Communist Party Regulations on Disciplinary Sanctions*, with approximately **27,000** participants.

Integrity Education

- Innovatively promoting the "May Day-Clear Wind Action", we have conducted **4,748** integrity risk interviews, formulated **3,808** integrity risk prevention measures, delivered **701** party lectures on disciplinary education, and carried out **1,547** instances of gifting books and sending messages. Additionally, we have conducted **919** integrity cooperation reminders to contractors.
- Hosted **5** thematic symposiums, with nearly 100 employees and representatives participating.
- Signed the "Transparent Cooperation Agreement" with suppliers, achieving a **100%** signing rate.

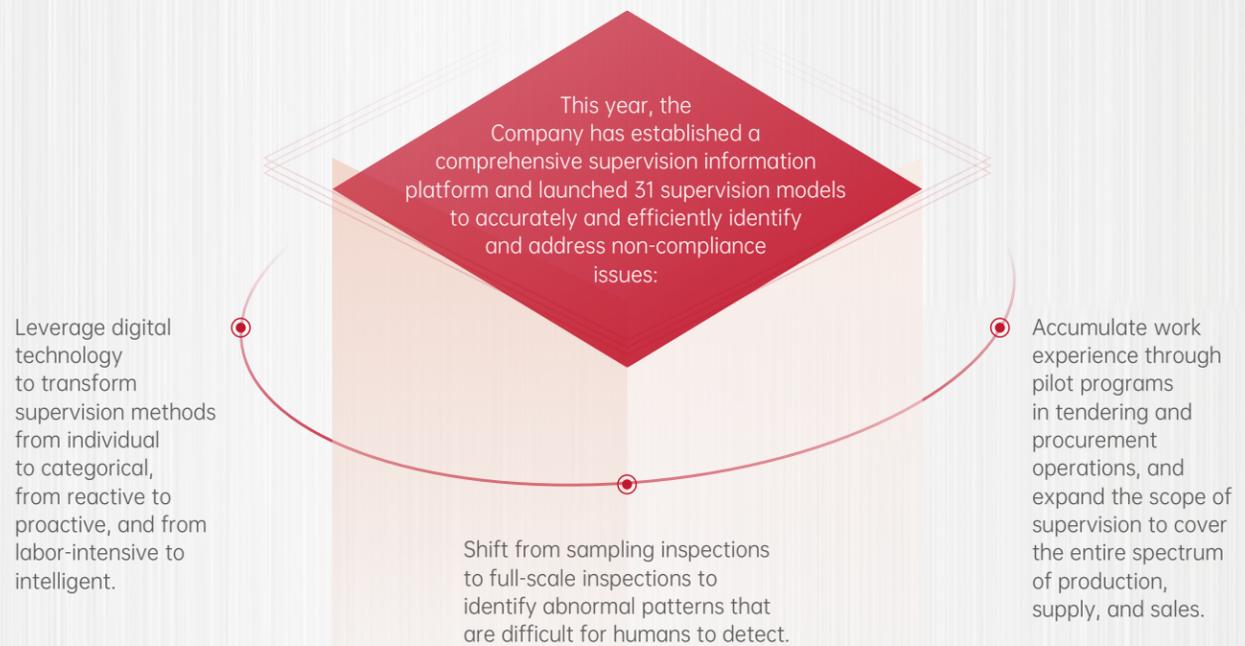




January 2024, the Company held a warning and education conference

Strengthening Intelligent Risk Prevention and Control Capabilities

The Company introduces intelligent means to effectively prevent fraud from occurring in all aspects of production and operation, thereby building a robust defense against integrity risks.



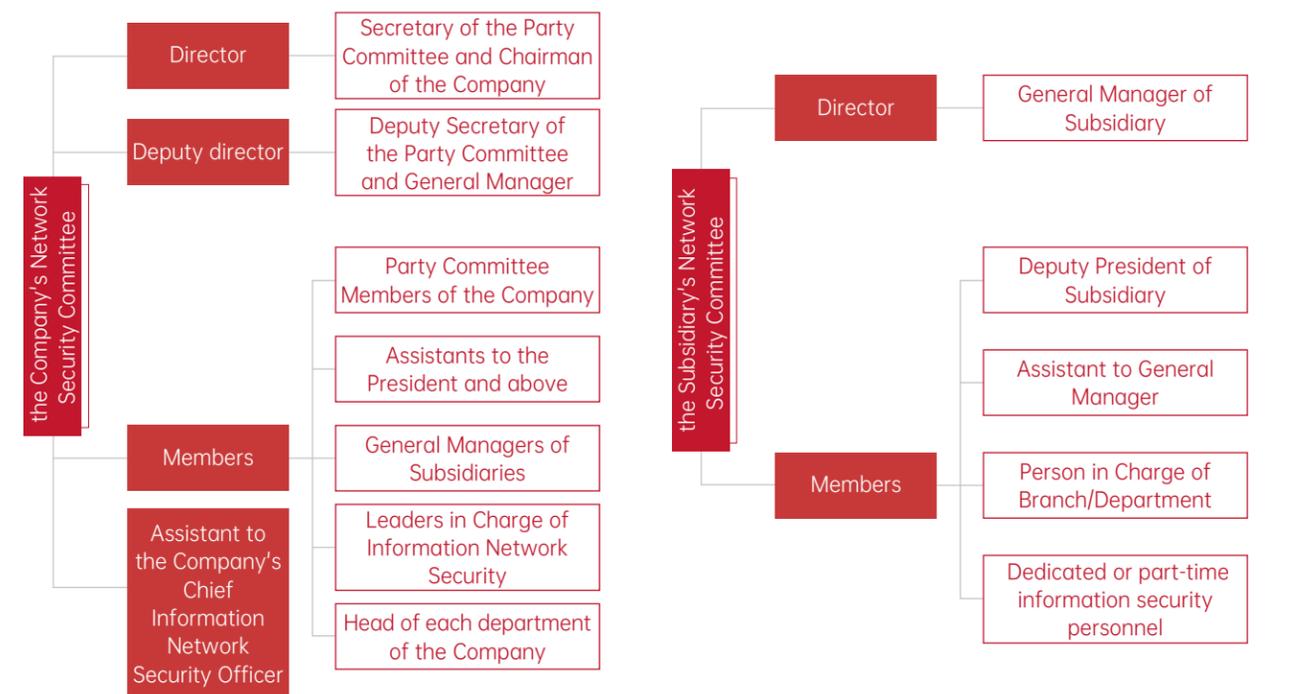
Building the Great Wall of Information Security

In the context of digital transformation and intelligent development, the Company continuously ensures information security and protects business secrets. We constantly iterate and optimize our information security policies, strengthen our information security management framework, deploy security protection measures, and effectively enhance our capabilities in preventing and controlling information security risks.

Information Security Management System

In accordance with the laws and regulations of the *Cybersecurity Law of the People's Republic of China*, the *Personal Information Protection Law of the People's Republic of China*, the *Data Security Law of the People's Republic of China*, the Company has formulated the information security management systems including the "Information Network Security Committee Working Institution and Responsibilities Management System", the "Information Network Security Management System", the "Management System on Commercial Secrets" and the "Information Security Emergency Management System (Applicable to Headquarters)".

The Company has established a two-tier Information Network Security Committee, including the Company's Network Security Committee and the Subsidiary's Network Security Committee. The Company's Network Security Committee is responsible for formulating development plans and work objectives, addressing significant matters, and convening quarterly thematic meetings to assess corporate performance and oversee work implementation. The Subsidiary's Network Security Committee executes the Company's management systems, accomplishes the objectives set by the Company's Network Security Committee, establishes a security management organization, and deploys, summarizes, and inspects the implementation of work.



Organizational structure of the Company's Network Security Committee

Organizational structure of the Subsidiary's Network Security Committee

Information Security Risk Management

The Company conducts information system authority audits, backup recovery tests, information systems vulnerability scanning and information system emergency drills every year to improve information security risk response capabilities and ensure the stable operation of information system.

The Company integrates top-level information security planning with its corporate development strategy. By constructing a security technology system, a security management system, and a security service system, we achieve security in physical and environmental aspects, network and communication aspects, equipment and computing aspects, as well as application and data aspects. This effectively enhances our capabilities in protection, detection, response, and recovery for our network and intelligent digital systems. The Company adopts comprehensive management measures for data security, deploying a document encryption system to prevent the leakage of electronic document information data and to ensure data security. In addition, to effectively manage and oversee information security, each subsidiary of the Company has established dedicated or part-time information security personnel who are responsible for the day-to-day management and supervision of information security. When information security issues are identified, these personnel will notify the information security authorities, which will then handle and report the situation accordingly.



Data Security Management Measures

The Company continuously strengthens employees' awareness of information security, organizes security training covering the whole company through "CITIC Pacific Special Steel Cloud Course", pushes information network security protection skills, protection awareness and other publicity information by using official WeChat account and Feishu, and carries out continuous publicity with the help of videos and roll-up banners to ensure that the awareness of information security is deeply rooted in everyone's mind.

Information Security Management System Certifications

In order to deepen the establishment of the information security management system and continue to support its safe and stable operation, the Company has conducted a number of projects on information security management system certifications. By the end of 2024, CITIC Pacific Special Steel, Xingcheng Special Steel, Daye Special Steel, Qingdao Special Steel and Tianjin Pipe have all passed the ISO 27001 "Information Security Management Systems" certification.



ISO 27001 "Information Security Management Systems" certification

Commercial Secrets Protection

The Company consistently upholds the principle that protecting commercial secrets is tantamount to safeguarding corporate innovation. By continuously refining its management system for protecting commercial secrets, the Company preserves its confidential business information, maintains its core competitive edge, and ensures the high-quality development of the enterprise.

We continuously optimize confidentiality control measures and enhance the management of personnel with access to confidential information. The Company implements appropriate human, physical, and technical security measures in confidential areas to ensure the safety of confidential carriers. For personnel with access to confidential information, the Company enforces a comprehensive management process covering recruitment, employment, and resignation. This includes signing confidentiality agreements, conducting regular confidentiality reminders, and clarifying confidentiality responsibilities.

The Company continuously innovates in confidentiality education methods and consolidates the ideological front of confidentiality. By combining online and offline approaches, the Company organizes a series of confidentiality publicity activities. In conjunction with the "National Security Education Day" on April 15th, the Company launched an online thematic training session on confidentiality to emphasize the importance of confidentiality laws, regulations and discipline requirements. Meanwhile, the Company held its inaugural confidentiality knowledge competition, an offline event focusing on the theme of "promoting learning through competition, strengthening skills through competition, and enhancing capabilities through competition". These activities aimed to improve employees' skills in protecting commercial secrets, cultivate their legal literacy, and reinforce their confidentiality awareness.

02 Innovative Steel Making

Letting Our Excellent Quality Shine

CITIC Pacific Special Steel adheres to the innovative concept that "forged in science and technology", and courageously assumes the mission of "provide green and smart special steel for human civilization". The Company insists on leading with science and technology, deepening independent innovation, continuously improving product quality, optimizing service efficiency, and actively building a future of win-win cooperation.

Highlights and Achievements in 2024

- ◎ The Company ensures that the annual R&D funding accounts for no less than 3% of sales revenue
- ◎ The Company has participated in the formulation and publication of 24 standards, including 1 ISO international standard
- ◎ The Company has obtained 476 authorized patents, among which there are 162 invention patents, comprising 20 international invention patents and 142 domestic invention patents
- ◎ The Company has 28 national-level research projects and 12 provincial- and ministerial-level research projects in its R&D pipeline

Response to SDGs



Enhancing Innovation-Driven Development

Technological innovation is a core element in developing new quality productive forces. The Company takes technological innovation as its lead, focusing on leveraging its core guiding role in promoting industrial upgrading and achieving high-quality development. The Company maintains the steady progress of its R&D projects, continues to deepen its product development, and strives to promote the innovative applications of cutting-edge technologies in the special steel industry.

Staying Committed to the Right Way While Pursuing Innovation

The Company continuously optimizes the top-level design of its innovation system and promotes the commercialization of its innovative technologies, to strengthen the foundation and infuse life force into our efforts to improve our overall innovation efficiency. Adhering to the principle of combining responsibility, authority, and benefit, the Company continuously improves the construction of its technological innovation system. By promulgating the "Management Measures for Incentives in Addition to the Science and Technology Awards", it effectively stimulates employees' vitality for patent innovation.



- The Company ensures that the annual R&D funding accounts for no less than **3%** of sales revenue
- The Company has participated in the formulation and publication of **24** standards, including **1** ISO international standard
- The Company has obtained **476** authorized patents, among which there are **162** invention patents, comprising **20** international invention patents and **142** domestic invention patents
- The Company has undertaken **28** national-level research projects, and **12** provincial and ministerial -level research projects

The Company values the cultivation of R&D talents and conducts training for relevant talents in product R&D, technical research and management. It has established a scientific evaluation mechanism and opened the training and promotion channels for R&D teams and core employees.

In addition, the Company has established an innovation talent incentive mechanism, setting up awards such as the Science and Technology Award and the Patent Award. In 2024, the Company has continued to motivate its R&D teams and enhance their innovative drive by updating the "Rules for Rewards of Outstanding Contributions", this initiative aims to achieve a win-win objective of aligning R&D achievements with the personal career development of employees.

Case

Qingdao Special Steel – Leading the World with the Breakthrough in the 2200MPa-Grade Bridge Cable Steel Technology

In order to tackle the technical challenges of developing steel for bridge cables with the world's highest tensile strength, Qingdao Special Steel has successfully developed 2200MPa-grade steel for bridge cables. The tensile strength of this steel has reached the world's top level, filling the global gap in the application of steel at this grade. Based on the key technology breakthroughs and process optimization, Qingdao Special Steel is now able to deliver stable industrial production of steel at this ultra-high strength. By breaking the long-term technological monopoly of foreign producers, the entry of China's bridge cable steel into the high-end markets at home and abroad marks China's transition from a follower to a leader in this field.



Case

Qingdao Special Steel's: Innovation-Driven Green Transition and Low-Carbon Breakthroughs in the Industrial Chain, with its "High-carbon Wire Rod for Steel Cord" rated a gold medalist in the national listing of manufacturing achievements

High-carbon Wire Rod for Steel Cord is an elite product among high-quality High-carbon Steel Wire Rod. It is a representative product of ultra-clean steel and a benchmark for the wire rod production level of steel enterprises. Owing to the extremely high technological content involved in the production of steel cord, it is acclaimed as the "pinnacle of wire rods" and the "crown jewel of wire rods".

Given the shift to going green and going smart, Qingdao Special Steel has overcome the technological bottleneck of minimizing central segregation in high-carbon steel with its proprietary "one-heating" technology for steel wire cord, which is widely used in the production of passenger car tires, light-duty truck tires, heavy-duty truck tires, engineering machinery tires, aircraft tires, and the skeleton materials for other rubber products. Among them, the 92-grade and 97-grade steel cord steel can meet the requirements of steel cords above 4000MPa, filling the domestic gap and making a significant contribution to the lightweight of automobiles and energy conservation.

The acquisition of the title of the "Eighth Batch of National Manufacturing Single-Item Champions" is not only an affirmation of Qingdao Special Steel's products and comprehensive strength, but also an encouragement and spur for its vigorous development. In the future, Qingdao Special Steel will increase the application of advanced energy-saving process technologies, empower itself with digital intelligence to create a new engine for independent and strong scientific and technological innovation, actively explore and implement cutting-edge green and low-carbon process technologies, continuously promote technological innovation, deepen integration with various industries, and advance brand creation. Together with enterprises in the industry chain, Qingdao Special Steel will jointly outline a bright development blueprint for special steel enterprises.



Certificate for "National Manufacturing Single-Item Champion Enterprise"

Intellectual Property Protection

The Company has elevated intellectual property protection to a strategic level and formulated internal systems such as the "Management System for Scientific and Technological Achievements", "Management Measures for Research and Development Projects", "Patent Management System", and "New Product Development Management System". It has also developed a comprehensive intellectual property protection management process, enhanced the quality and efficiency of patent applications, and achieved holistic management of intellectual property rights, including trademarks, software copyrights, and technical know-how.

The Company has established an information-based management system for the entire life cycle of patents. Through online processes, it has set up key stages such as departmental review, expert evaluation, and leadership approval to strictly control the innovativeness and confidentiality of patent applications. The Company has assigned dedicated personnel to review and monitor the entire process of patent application, ensuring systematic, standardized, and efficient management of patent work. To guard against intellectual property risks, the Company fully utilizes patent database resources and leverages its collaborative R&D advantages to identify and avoid potential infringement risks in advance, thereby safeguarding the Company's innovative development.

Case

Xingcheng Special Steel's Project on "Preparation and Efficient Application of Ultra-Thick Steel Plates for Wind Power Pile Foundations in Extreme Environments" has been honored as one of the "Top 50 Growth Projects" in the Guangdong-Hong Kong-Macao Greater Bay Area High-Value Patent Cultivation and Layout Competition

Xingcheng Special Steel's Project on "Preparation and Efficient Application of Ultra-Thick Steel Plates for Wind Power Pile Foundations in Extreme Environments" stands out in the Guangdong-Hong Kong-Macao Greater Bay Area High-Value Patent Cultivation and Layout Competition, winning the title of "Top 50 Growth Projects". The project focuses on the key production technologies for ultra-thick offshore wind power pile foundations in extreme environments. It covers the entire life cycle of the industry chain, including smelting, billet making, rolling, heat treatment, and welding. This project helps to promote technological upgrades in China's metallurgical, welding, and offshore engineering equipment manufacturing industries.



Leading in the Development of Industry Standards

The Company has continuously deepened the industry-academia-research cooperation mechanism, established an operational system that meets the market-oriented demands of the special steel industry, and successfully explored an integrated development model that combines "new product R&D, scientific and technological innovation, and standard development". Under this framework, the Company has focused on strengthening the research of standards in key technology areas, aiming to continuously enhance the advancement and applicability of standards through technological innovation. By the end of 2024, the Company has led or participated in the publication of 239 national/industrial/group standards, of which 148 were national standards and 82 were issued by the Company as the first drafter, contributing to the new development of China's standardization industry.



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Important standards that the Company led or participated in developing in 2024:

- International Standard ASTM A1125/A1125M-24 "Standard Specification for Wire Rod for Bridge Cable Wire"
- National Standard GB/T 44148.3-2024 "Steel Forgings and Rolled or Forged Bars for Pressure Equipments—Part 3: Nickel Steels with Specified Low Temperature Toughness"
- National Standard GB/T 4340.1-2024 "Metallic materials - Vickers Hardness Test - Part 1: Test Method"
- National Standard GB/T 44148.1-2024 "Steel Forgings and Rolled or Forged Bars for Pressure Equipments—Part 1: General Requirements"
- National Standard GB/T 44148.2-2024 "Steel Forgings and Rolled or Forged Bars for Pressure Equipments—Part 2: Low-Alloy and Alloy (Mo, Cr And Crmo) Steels with Specified Elevated Temperature Properties"
- National Standard GB/T 18876.1-2024 "Standard Practice for Determining the Metallographical Constituent and Inclusion Content of Steels and Other Metals by Automatic Image Analysis—Part 1: Determining the Inclusion or Second-Phase Constituent Content of Steels and Other Metals by Automatic Image Analysis and Stereology"
- National Standard GB/T 18876.2-2024 "Standard Test Methods for Determining Microstructure, Inclusion Content, and Ratings in Steel and Other Metals Using Automated Image Analysis - Part 2: Image Analysis and Stereological Measurement of Inclusion Ratings in Steel"
- National Standard GB/T 44155-2024 "Steel Forgings—Testing Frequency, Sampling Conditions and Test Methods for Mechanical Properties Testing"
- National Standard GB/T 21267-2024 "Petroleum and Natural Gas Industries—Procedures for Testing Casing and Tubing Connections"
- National Standard GB/T 43925-2024 "Test Method for Full-Scale Tensile Stress Corrosion Testing of Casing and Tubing"
- National Standard GB/T 39077-2024 "Test Methods for Detecting Detrimental Phase in Austenitic-Ferritic (Duplex) Stainless Steels"
- National Standard GB/T 17395-2024 "Dimensions, Shapes, Masses and Tolerances of Steel Tubes"
- National Standard GB/T 27692-2024 "Iron Pellets for Blast Furnaces"
- National Standard GB/T 44033-2024 "Calculation Methods for Utilization Rate of Iron Ore Tailings"
- National Standard GB/T 43898-2024 "Seamless Precision Steel Tubes for Engineering Machinery Hydraulic Cylinder"
- National Standard GB/T 28884-2024 "Seamless Steel Tubes for Large Capacity Gas Cylinder"
- Industry Standard YB/T 6288-2024 "Wire Rods for Card Wires"
- Industry Standard YB/T 6253-2024 "Steel Plates for Marine Drilling Risers"
- Industry Standard YB/T 6160-2024 "Annealing-Free Cold Heading Steel Hot-Rolled Wire Rod"
- Industry Standard YB/T 056-2024 "Elastic Card Clothing Steel Wire"
- Industry Standard YB/T 6161-2024 "Ultra-Supercritical High-Pressure Vessel Welding Steel Wire Rod"
- Industry Standard YB/T 6195-2024 "Coking Wastewater - Determination of Thiocyanate Content - Ion Chromatography Method"
- Industry Standard YB/T 6261-2024 "Carburant - Determination of Nitrogen Content - Formaldehyde Method"
- Industry Standard YB/T 6181-2024 "Mineral Compound Corrosion-Resistant High-Strength Steel Plate"

Focusing on Improving Product Quality

Product quality is the cornerstone of enterprise survival and development. The Company promotes quality management from "compliance" to "excellence" through strict quality certification standards and whole-process quality control to build a special steel brand with international competitiveness. In accordance with the national laws and regulations such as the *Product Quality Law of the People's Republic of China*, the *Standardization Law of the People's Republic of China*, the *Regulations of the People's Republic of China on Certification and Accreditation*, the *Regulation of the People's Republic of China on the Administration of Production License for Industrial Products*, the Company has formulated regulations including the "Quality Manual", the "Quality Records Management Procedures", the "Control Procedures for Non-conforming Products", and the "Regulations on Handling and Management of Product Quality Objections" to provide a basis for systematic quality control. This year, the Company revised the "Measures for the Management of Statistics of Scientific and Technological Indicators", focusing on supplementing the content about quality objections and the management rules of one-time pass rate, aiming at standardizing the quality management process and improving the quality control capability of manufacturing process.

Quality standardization certification

The Company continuously optimizes the internal management processes and enhances the product quality, relying on its rigorous quality control system and world-leading R&D capabilities to vigorously advance the construction of "Business Card Projects" and "Benchmark Projects", ensuring that all projects are implemented in accordance with high-quality and high-standard principles. The Company has successfully passed multiple authoritative certifications including the ISO 9001 "Quality Management System", the IATF 16949 "Automotive Industry Quality Management Standard", and the SA8000 "Social Responsibility Management System", which has laid a solid foundation for expanding both domestic and international markets and enhancing brand influence.



Case

Daye Special Steel-Tubes for Drilling Tools Passed NS-1 Standard Certification, Significantly Improving International Competitiveness

In June 2024, Daye Special Steel's oil drilling pipes for petroleum drilling tools successfully passed the Level 2 certification of the NS-1 standard, making it the first special steel enterprise in China to hold production permits for three types of steel pipe products, namely drill pipe joints, heavy-weight drill pipe bodies, and drill collars. The NS-1 Standard is a European petroleum drilling tool standard, also known as the North Sea Oilfield Standard. Due to the complex geological conditions and unstable climate of the North Sea Oilfield, the reliability requirements for petroleum drilling and extraction equipment are far higher than those of conventional land drilling standards. As the highest level of finished drilling tool product specifications in the world, the technical requirements of the NS-1 standard are stricter than those of the API Spec 5DP and 7-1 specifications. The successful completion of this certification marks that Daye Special Steel's drilling tool pipes have obtained the qualifications to enter the European market, thereby enhancing the Company's international competitiveness in the petroleum drilling tool sector.

Case

Qingdao Special Steel - Wire rod for Bridge Cable Steel Wire Awarded AAAAA-Level Certificate of China Steel Products Reliable Brand

Qingdao Special Steel's wire rod for bridge cable steel wire has reached the AAAAA-level stipulated in the "China Steel Products Reliable Brand Evaluation Specification Coil for Bridge Cable Wire (T/SSEA 0426-2024)". The on-site inspection met the certification requirements regarding the factory's quality assurance capabilities, and Qingdao Special Steel has successfully obtained the AAAAA-level certification for wire rod for bridge cable steel wire. Going forward, Qingdao Special Steel will continue to advance technological innovation, product upgrades, and green low-carbon development, support the world-leading position of the bridge industry, and provide security for major national bridge projects.

Building a Quality Culture

The Company continuously deepens the quality culture construction, enhances the quality awareness of all employees through systematic quality education and training, creates a positive atmosphere where everyone pays attention to and pursues excellent quality, and establishes a value orientation that prioritizes quality.

Taking the "Quality Month" campaign as an opportunity, the Company has guided and mobilized all employees to enhance their quality awareness at their respective positions through various forms such as publicity, knowledge lectures, and thematic discussions. It has anchored the goal of high-quality development, committed to optimizing product quality, strengthened the basic quality management system, and laid a solid foundation for the Company's high-quality development while continuously injecting momentum.

Focusing on Optimizing the Quality and Efficiency of Service

Committed to the philosophy of prioritizing customer needs, the Company collaborates with customers to create and share value, achieving mutual benefit and win-win outcomes. The Company is dedicated to enhancing service quality, practicing responsible marketing, and providing high-quality products. The Company refines the customer service system from multiple dimensions, listens to customer demands, meticulously optimizes complaint management, and regularly conducts customer satisfaction surveys to deliver outstanding product experiences and superior service, thereby establishing a solid foundation for customer relationships.

Leading Exceptional Service

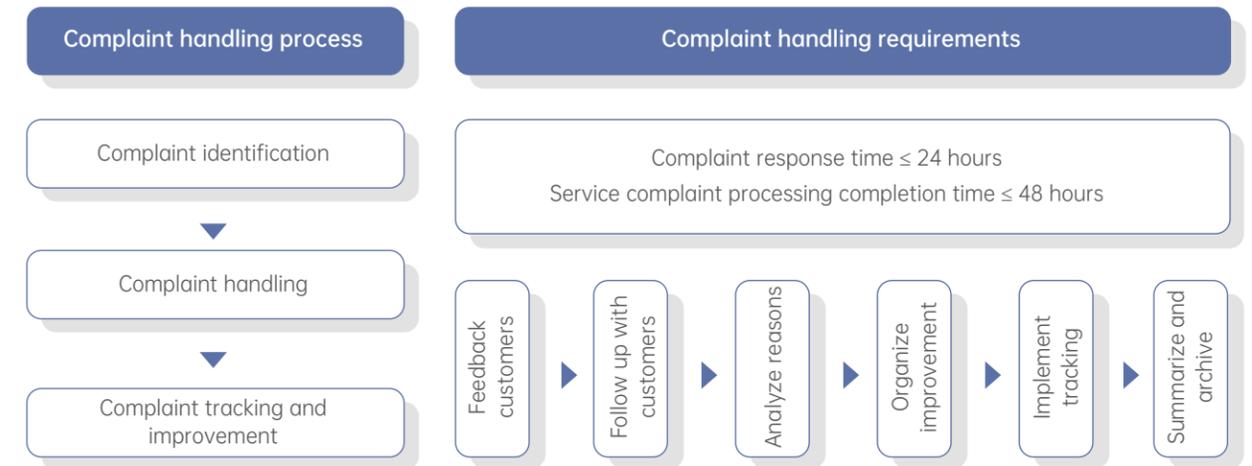
The Company adheres to a customer-centric approach, fulfills its mission of "creating value for customers", establishes customer-driven product and service design, refines organizational structures that rapidly respond to customer needs, standardizes work processes centered on customers, and provides customers with exceptional products, comprehensive solutions, high-quality services, and value creation. The Company has formulated a series of regulations and systems, including the "Process Control Procedures Related to Customers", the "After-sales Service Management Handbook", the "Service Specifications for Complaint Handling", the "Regulations for Satisfaction Appraisal Related to Customers", the "Service Specifications for Training of Service Personnel", and the "Service Specifications for Crisis Event Handling", all aimed at optimizing the customer service system and enhancing service quality and customer satisfaction.

In the process of building the after-sales service system, the Company follows the principle of "accurate information, quick response, efficient processing, and satisfied customers", actively promotes the innovation of service mode, and realizes the three major changes of "from passive to active, from after-sales to pre-sales, and from individual to the whole", which has significantly enhanced the market service capability. The Company has set up a customer service center, opened a customer service hotline, and regularly organizes customer symposiums to strengthen communication and interaction with customers and deepen the cooperative relationships.

The Company has built an innovative full-process complaint management system with "one platform for three specialized responsibilities", which ensures efficient operation and standardized implementation of complaint management according to the three stages of complaint identification, handling and tracking improvement.

<p>Complaint Channels</p> <p>Customers can submit feedback and suggestions through various channels such as the Company's website, service hotline, and email.</p>	<p>Complaint Handling</p> <p>The Company promises to respond quickly within 24 hours of receiving a complaint and to ensure that customer needs are satisfactorily resolved with the help of telephone callbacks and on-site visits.</p>	<p>Tracking Improvement</p> <p>Benefiting from an efficient complaint response and handling mechanism, the Company ranks at the top of the industry in terms of response speed and processing timeliness. The complaint resolution rate has remained at 100% over the past four years.</p>	<p>Performance Assessment</p> <p>Both the Company and its subsidiaries incorporate customer satisfaction into their performance evaluation systems, with a particular focus on key performance indicators such as the efficiency of closed-loop complaint management, the number of dissatisfied cases after complaints, and the proportion of complaints resolved at one time.</p>
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User Complaint Handling Procedure



Focusing on Customer Needs

The Company has made efforts in strengthening the service concept, optimizing the service mode and deepening the service mechanism, with a focus on promoting the normalization, regularization, and long-term effectiveness of the service mechanism. The Company has established a customer relationship management system to statistically analyze customer information, including basic information, quality objections, satisfaction survey results, special needs, and changes in needs. The analysis results are then promptly communicated to the relevant departments to formulate continuous improvement measures and enhance customer satisfaction. Meanwhile, in order to accurately grasp the needs of customers, the Company conducts annual customer satisfaction surveys and issues a "Customer Satisfaction Assessment Report". In 2024, the Company's customer satisfaction score for the year was 92.5, and 85% of the interviewed customers were major customers.

Deepening Connection with Customers

The Company is always committed to building a deep connection with customers. Through the organization of customer symposiums, seminars, and visits for exchanges, it gains an in-depth understanding of customer needs and consolidates cooperative relationships. In 2024, the Company has hosted multiple user strategic seminars and customer visitation and exchange meetings focusing on key industries such as automotive, petroleum, and high-quality wire rods. These events have facilitated in-depth exchanges with industry-leading enterprises, further solidifying strategic cooperative relationships.



Case

CITIC Pacific Special Steel convened the 2024 Strategic User Seminar on Automotive Steel and High-Quality Wire Rods, to jointly explore industry development

In July 2024, the Company successfully hosted the 2024 Strategic User Seminar on Automotive Steel and High-Quality Wire Rods, inviting over 160 strategic users from the fields of automotive steel and high-quality wire rod. The seminar focused on the industry trends and development needs. At the meeting, the Company stated that it would adhere to a market-oriented approach, focus on the new demands of strategic users and partners, meet differentiated needs through specialized services, and continue to tackle key core technologies. This seminar deepened the cooperative relationships with strategic users and provided significant support for the Company's innovative development in the fields of automotive steel and high-quality wire rod.

Case

CITIC Pacific Special Steel: Hosting the 11th Nissan Motor "Xingcheng Day" Event to Deepen Customer Engagement

In November 2024, the 11th Nissan Motor "Xingcheng Day" event was successfully held at the Technology Building of CITIC Pacific Special Steel. Focusing on "Empowering Innovation through Digital and Smart Transformation and Building Dreams through Global Collaboration", the two parties engaged in in-depth discussions and insight sharing on topics exploring the potential empowering synergies of digital and smart transformation and globalization.



Case

CITIC Pacific Special Steel Participates in ADIPEC International Petroleum Exhibition for the Third Consecutive Time

In November 2024, CITIC Pacific Special Steel attended the Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC) for the third consecutive time, which is one of the most influential professional exhibitions in the global oil and gas industry. During the exhibition, the Company's pipe business division's marketing and R&D teams engaged in in-depth strategic communications with several key global clients and upstream and downstream entities within the industry chain, further enhancing the Company's brand influence in the international oil and gas sector.



Practicing Responsible Marketing

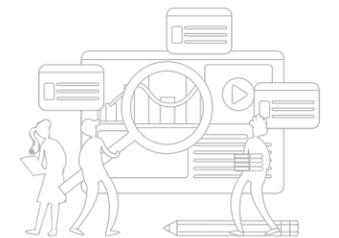
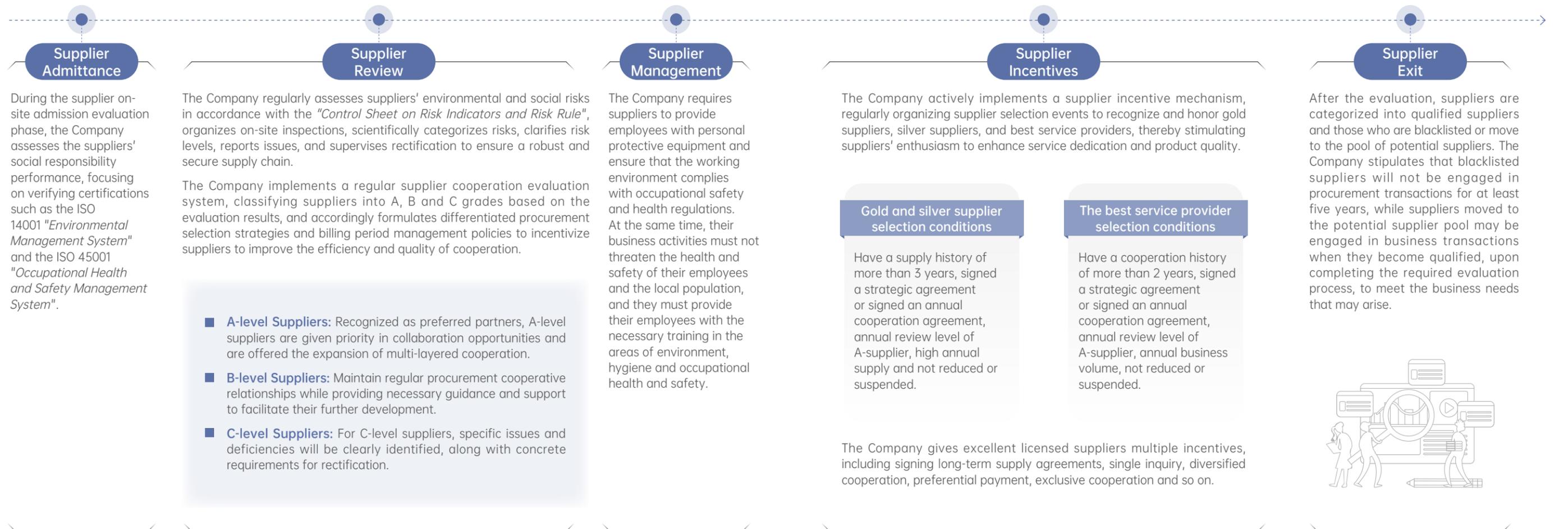
The Company strictly complies with the Anti-Unfair Competition Law of the People's Republic of China, the *Law of the People's Republic of China on Protection of Consumer Rights and Interests*, the *Advertising Law of the People's Republic of China*, and other relevant laws and regulations. In its marketing activities, the Company consistently maintains fair and transparent market principles and resolutely opposes any exaggerated or misleading false advertising practices. To ensure compliant operations, the Company continuously strengthens the internal management system, rigorously implementing established rules and regulations in all business processes such as contract signing, customer service, and brand promotion, eliminating unfair competitive practices, ensuring products comply with health and safety standards, and safeguarding the legitimate rights of customers from infringement.

Forging a Collaborative and Win-Win Future

The Company deepens collaboration with suppliers and continuously strengthens the compliance management of the supply chain. It is committed to building a responsible supply chain system, significantly enhancing the ESG management efficiency of the supply chain through measures such as implementing ESG risk assessments, promoting the construction of a green supply chain, optimizing the operation of an intelligent supply chain, and strengthening the management of conflict minerals.

Winning with Partners

The Company has formulated and implemented stringent procurement and supplier management standards, including the "Measures for Management of Supplier", "Procedure of Procurement and Sales for Unified Purchase Materials", and the "Centralized Procurement Bidding Management Detailed Rules", to ensure the compliance and efficiency of the procurement process. The Company requires all suppliers to sign and implement the "Supplier Code of Conduct", which includes ESG actions as a bonus point in supplier evaluation, and sets clear requirements for suppliers on key issues such as human rights and labor rights, environmental protection, production safety, and privacy protection, with the aim of effectively reducing ESG-related risks in the supply chain.



Building a Responsible Supply Chain

Developing a Low-Carbon Supply Chain

Building a green supply chain is of strategic significance for the special steel industry to realize green transformation and upgrading. Through close collaboration between upstream and downstream enterprises in the supply chain, we will jointly build a new paradigm of green, circular and low-carbon economic development. The Company actively responds to the green and low-carbon strategy, takes the lead in forming a green and low-carbon supply chain promotion group, jointly promotes the overall work plan of the green supply chain, takes multiple measures to effectively reduce the environmental impact of the supply chain as a whole, and sets a model for the green development of the industry.

Practicing Green Procurement

The Company actively responds to the national "carbon peaking and carbon neutrality" strategy goals, committing to promoting the transformation of the supply chain towards energy conservation and low-carbon practices. The Company continuously purchases energy-saving and environment-friendly products that comply with environmental labeling product certification, energy-saving product certification or other nationally recognized certifications, and prohibits the procurement of "highly polluting and environmentally risky" products, thus contributing to the further promotion of an environment-friendly society. In 2024, the Company had a total of 371 qualified suppliers.

Collaborative Efforts to Manage Low-Carbon Initiatives

The Company continues to optimize the supply chain ecology, promote the green development of upstream and downstream enterprises in the industrial chain, actively fulfill the social responsibility of state-owned enterprises, and promote the low-carbon development of the whole industrial chain. During the year, the Company incorporated carbon emission management into the raw material supplier access, annual review and evaluation mechanism in the "Supplier Management Measures of the Procurement Center", which is committed to integrating supply chain management with environmental protection requirements and responding to the Company's green and low-carbon strategy. The Company requires suppliers participating in tenders for alloy products to submit carbon footprint data as a fundamental principle and broadly encourages all suppliers to take measures to reduce carbon emissions and improve energy efficiency.

This year, the Company held the first Green Supply Chain Carbon Accounting Report Delivery and Review Meeting, signed the "Product Carbon Accounting Service Acceptance Form", completed the assessment of 11 bulk commodities suppliers, and issued 14 detailed formal reports. The Company has advanced the collection of 626 product carbon footprint accounting reports from relevant suppliers, aiming at comprehensively assessing the carbon emission level of upstream suppliers, providing reliable data support for the development of carbon reduction strategies and laying a solid foundation for the construction of the Company's green supply chain database.

Promoting Low-Carbon Awareness

The Company has established a good green and low-carbon communication and cooperation mechanism with its suppliers. This year, the Company took active actions in green supply chain management and successfully organized two green supply chain management seminars, which provided in-depth and comprehensive discussions on two core points: improving the management level of suppliers and enhancing the efficiency of green procurement. The Company invited renowned experts to conduct carbon emission awareness training and provide guidance for suppliers, communicating the Company's latest green procurement strategies. Furthermore, a series of targeted recommendations were proposed to address potential environmental risks that suppliers might encounter during the admission and execution phases, aiming to foster win-win cooperation within the upstream and downstream supply chain and promote collaborative green development.

Supplier Integrity Construction

- **Policy and Rules:** The Company requires all domestic suppliers to have anti-corruption policies, clearly defining the principles of integrity-compliant collaboration.
- **Signing of Required Documents:** Suppliers are required to publicly sign documents such as the "Transparent Cooperation Agreement" and the "Supplier Code of Conduct", committing to adhere to the integrity-based cooperation regulations.
- **Due Diligence:** Conducting due diligence on suppliers through compliance mechanisms to ensure they meet the Company's standards for integrity-compliant collaboration.

Supplier Integrity Management

- **Daily compliance:** In day-to-day management, the Company focuses on the suppliers' integrity performance, credit records, legal compliance, delivery quality, production safety, environmental protection, and any violations or disciplinary issues.
- **Prohibitive Measures:** If a supplier meets the Company's prohibitive criteria, immediate measures will be taken to enforce the prohibition to safeguard the Company's integrity-compliant collaborative environment.
- **Integrity Awareness Training:** Through the organization of supplier integrity promotion, integrity symposium and other activities, to enhance the supplier integrity awareness, and build a harmonious and clean business relationship.

Supplier Code of Conduct

- **Internal Regulations:** All procurement personnel within the Company are required to sign the "Commitment to Integrity", which explicitly prohibits bribery, solicitation of bribes, or acceptance of bribes.
- **Scope of Application:** This requirement applies not only to the Company's employees but also extends to other individuals who have business dealings with the Company, including third-party intermediaries.
- **Prohibition of personal gains:** Employees are strictly forbidden from soliciting from or offering to customers, suppliers, legislative bodies, law enforcement agencies, among others, any form of personal gains to ensure the integrity of interactions between procurement personnel and the suppliers.

Integrity Management of Internal and Contractors' Employees



Innovative Digital Supply Chains

The Company is committed to creating a more efficient, transparent, intelligent, and standardized digital supply chain system. Based on the existing system functionalities, it is fully advancing system upgrades, and coordinating the development and optimization of functions such as supplier management, bidding operations, centralized purchasing, smart shopping malls, and compliance supervision, to achieve a comprehensive digital transformation of supply chain management.

Ensuring Supply Chain Stability

The Company is committed to establishing long-term and stable cooperative relationships with its suppliers, and also forging strategic partnerships with key suppliers, to ensure the timely supply of essential materials, mitigate supply shortages, and foster a positive and stable cooperative environment. To effectively address potential production delays and material shortages that may arise from supply chain disruptions, the Company has implemented a strategy to diversify its bulk commodities suppliers, and ensure a diverse geographical distribution of the suppliers. This enables the Company to source required materials from suppliers in other regions in the event of supply chain obstructions in a particular area, and ensure supply continuity. Furthermore, adopting a precise inventory management strategy, the Company conducts scientific forecasts based on customer demand to minimize unnecessary inventory stockpiling and ensure the stability of supply chain management.

Implementing Conflict Minerals Management

The Company attaches great importance to the issue of conflict minerals, strictly adhering to relevant international and domestic regulations, including the *DoDD-Frank Wall Street Reform and Consumer Protection Act* in the United States, the *EU Conflict Minerals Regulation* in Europe, the *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas*, and the *Chinese Due Diligence Guidelines for Mineral Supply Chain*. We have established the "Supplier Management Measures of the Procurement Center", which list conflict minerals as a veto item and require suppliers to sign a "Statement of Non-Use of Conflict Mineral".

The Company pledges not to procure raw materials from conflict-affected and high-risk areas, including products such as 3TG (metallic minerals such as tantalum, tin, tungsten and gold, etc.). The Company has integrated conflict minerals due diligence into its supplier admission review process and will terminate cooperation with any suppliers involved in conflict minerals disputes. Additionally, the Company explicitly requires suppliers to provide certification information regarding responsible minerals, ensuring supply chain transparency while fulfilling ethical responsibilities.

Enhancing industry cooperation

The Company continues to strengthen cooperative relationships with enterprises, governments, industry associations and universities, strengthen the integration of industry-academia-research, optimize the cooperation mechanism, achieve resource sharing, build a full chain of scientific and technological innovation ecology, and explore mutually beneficial, win-win and sustainable strategic partnerships.

The Company actively promotes cooperation and co-construction between enterprises and universities. It has established strategic partnerships with several organizations, including Schaeffler (China) Co., Ltd., SKF (China) Co., Ltd., ZF (China) Co., Ltd., Volvo Car Corporation, Metallurgical Industry Information Standardization Institute, Central Iron & Steel Research Institute, Southeast University, Northeastern University, University of Science and Technology Beijing, Nanjing University of Aeronautics and Astronautics, Shanghai University, and North China University of Technology. These partnerships cover multiple fields such as product research and development, talent cultivation, supply and marketing cooperation, and sustainable development. In addition, as a member of the World Steel Association, the President of the China Iron and Steel Industry Association, the President of the China Special Steel Enterprise Association, and a member of the China Metal Society, the Company actively participates in cutting-edge academic exchanges in the industry and collaborates with the industry for common progress.

The Company is committed to promoting the application and development of green and low-carbon technologies, continuously deepening synergies and cooperation along the industry chain, and working with industry leaders to face market opportunities and challenges, thereby fostering collective business development, creating a win-win situation, and empowering the entire industry chain in its green transformation. This year, the Company was awarded the "Sustainability Award" by the Schaeffler Group in Germany, in recognition of its outstanding performance in new material research and development and carbon reduction technology innovation.



CITIC Pacific Special Steel has been honored with the "Sustainability Award" by the Schaeffler Group

03 Aiming for the Dual Carbon Goals

Ongoing Commitment to Deliver Green Manufacturing

Adhering to the low-carbon development vision of "Green Manufacturing, Manufacturing Green" and staying committed to the path of low-carbon sustainable development, CITIC Pacific Special Steel continues to promote the innovative integration of cutting-edge technologies in the special steel industry, live up to the role of an enterprise as a major contributor to technological innovation, and bring its wisdom and power to bear in driving the industry's green transformation.

Highlights and Achievements in 2024

- Subsidiaries of CITIC Pacific Special Steel have achieved a 100% pass rate in the ISO 50001 "Energy Management System" certification
- Xingcheng Special Steel has been honored with the title of "Pacesetter" enterprise in China's industrial carbon peak
- Xingcheng Special Steel, Daye Special Steel, Qingdao Special Steel, and Yangzhou Special Materials have been included in the Ministry of Industry and Information Technology's list of "Green Factories"
- Xingcheng Special Steel, Daye Special Steel, Qingdao Special Steel, and Tianjin Pipe have passed the EATNS Carbon Management System certification
- Qingdao Special Steel and Tianjin Pipe have been listed on the "2024 Water Efficiency Pacesetter List for Key Water-using Enterprises and Parks"
- Tianjin Pipe's annular furnace pure oxygen retrofit project has been included in the first batch of green and low-carbon technology demonstration projects by the National Development and Reform Commission
- Jingjiang Special Steel's near-zero-carbon-emission electric furnace demonstration project has become the first national-level demonstration project for electric furnace short-process steelmaking

Response to SDGs





The Company attaches great importance to environmental protection and the green and low-carbon fields closely related to its survival and development, and is committed to achieving an organic unity of environmental and social benefits. To accelerate the green transition, the Company has set up a digital & smart and low-carbon fund, with an annual budget of RMB 800 million, to focus on investment in and upgrade of advanced energy-saving technologies as well as R&D and technological applications in support of low-carbon demonstration projects, and support upgrades to save energy and improve efficiency in all steel-making production components to ensure highly efficient utilization, conversion, and recycling of energy. As of the end of 2024, the Company's investments by project types were:



Focusing on Actions in Response to Climate Change

As part of its ongoing efforts to solidify the foundation for its green development and actively embrace the national "dual-carbon" strategic goals, the Company takes the initiative to identify, and analyze the climate-related risks and opportunities that affect the Company and formulates climate risk management methods and response measures, striving to find the way forward that most effectively balances ecological benefits and economic and social benefits.

The Company has clarified its future development direction, focusing on the research and application of green and low-carbon technologies, environmentally-driven product innovation, and continuous optimization of operating models, using these as the core driving force for sustainable development.

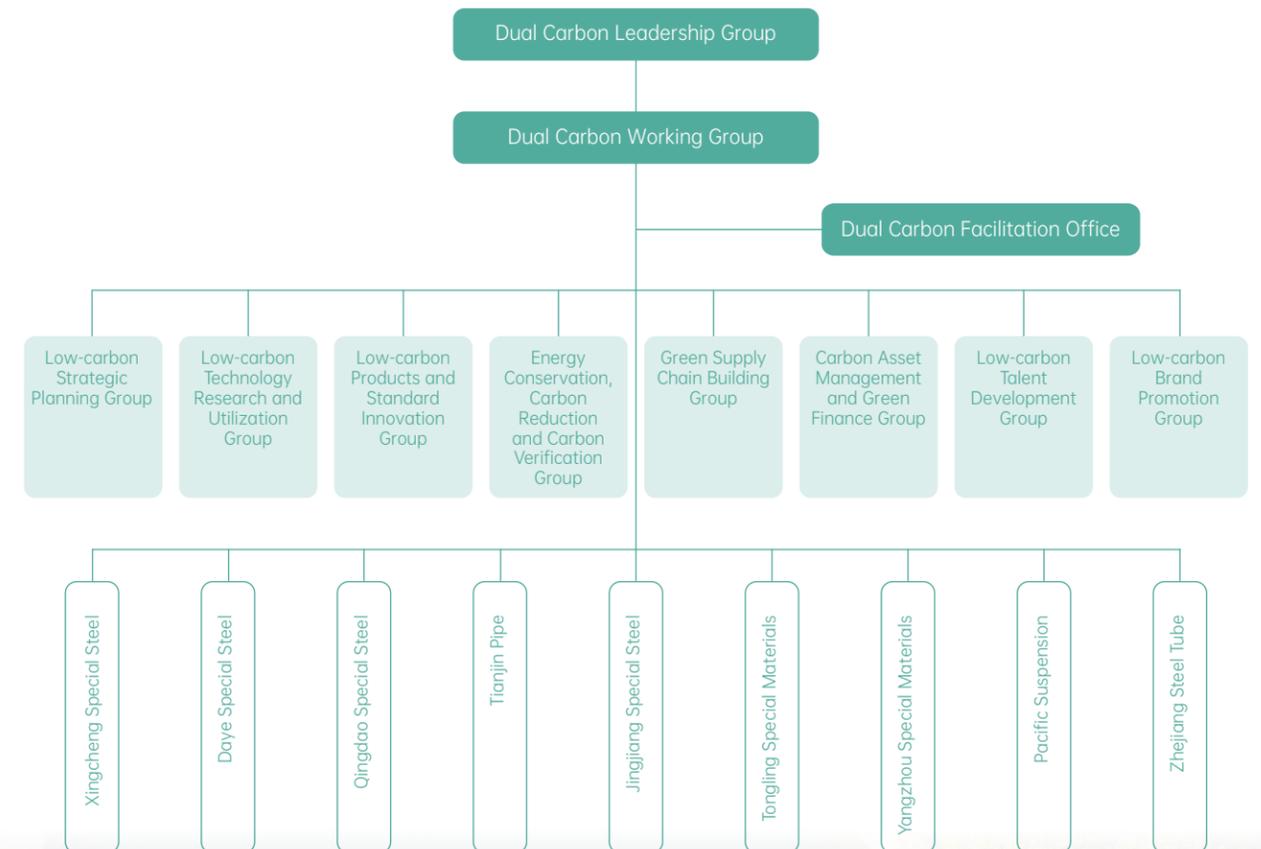
To enhance transparency and standardization, the Company refers to the "Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)" and discloses the Company's core content on climate change, including "governance", "strategy", "risk management", and "metrics and targets".

Climate Change Governance

To effectively address climate-related risks and opportunities, the Company has established a comprehensive climate change management system based on the dual-carbon organizational structure and has implemented the climate-related systems, strategies, and goals set by the board of directors.

Under the dual-carbon management system, there are eight functional working groups, including the Low-Carbon Strategy Planning Group, the Low-carbon Technology Research and Utilization Group, the Low-Carbon Product and Standard Innovation Group, the Energy Conservation, Carbon Reduction and Carbon Inspection Group, the Green Supply Chain Building Group, the Carbon Asset Management and Green Finance Group, the Low-Carbon Talent Development Group, and the Low-Carbon Brand Promotion Group. Under the guidance of the dual-carbon leadership group, each subsidiary actively carries out their local climate-related activities.

Dual carbon organization chart



Climate Change Response

To continuously deepen the development of its climate change response capabilities, the Company has established a robust process to manage its climate change risks, and incorporated climate change risks into the Company's overall risk management framework. On the basis of policy research and peer benchmarking and drawing on recommendations from internal and external experts, the Company has carried out in-depth work to identify and analyze climate-related issues, comprehensively assessed the potential impacts of climate-related risks and opportunities on its business development, and ultimately, developed response measures in light of the insights derived from the analyses to effectively minimize the impact of climate change risks on its business operations.

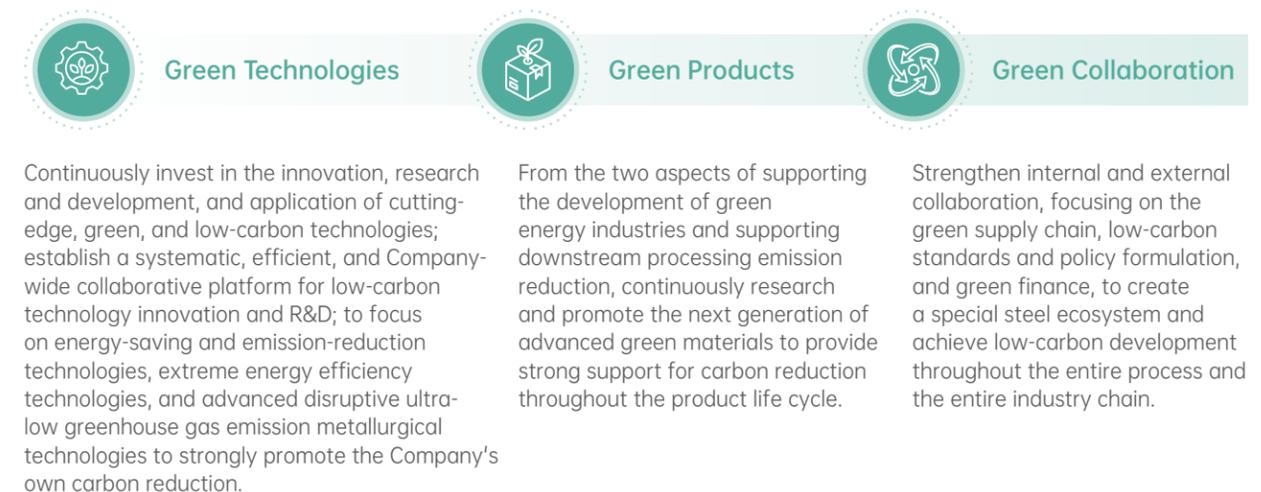
Identification Results of Major Climate-related Risks and Opportunities		Potential Financial Impact	Response Measures	
Risks	Policy and Legal Risks	Pollution reduction and carbon reduction policies and energy consumption dual-control transition require enterprises to take swift action, otherwise they will face legal accountability, production suspension or limitation, and impact on operations. Domestically, to support carbon trading and carbon tax, the government devotes serious resources to reviewing the accuracy of carbon emission data, and non-compliance in disclosures will expose the Company to compliance risks and external pressures. In the EU market, due to the CBAM requirements, products that do not meet the standards will be subject to additional tariffs, which will affect the Company's revenue.	Operating income ↓ Operating costs ↑ Credit risk ↑	Strengthen research on energy consumption and low-carbon policies and respond to policy changes in a timely manner; the Company has formulated a carbon-neutral roadmap and invests in energy-saving and emission reduction projects every year; the Company actively promotes the construction of a digital platform for carbon management and continuously improves the declaration workflow.
	Technical risks	Low-carbon technology has technical barriers, production costs, key components and other constraints, in the current dual-carbon background, if there is no timely breakthrough in the special low-carbon technology, it will bring certain negative risks to the enterprise's operation and business.	Operating income ↓ R&D investment cost ↑	Jointly with domestic and foreign research institutions, increase scientific and technological research and development, and carry out low-carbon technology research in an orderly manner.
	Market risks	If green and low-carbon products are not launched in time, and downstream customers continue to put forward carbon neutral and low-carbon product requirements, the Company's market competitiveness will be affected.	Operating income ↓ Credit risk ↑	Leveraging its advantageous physical locations along the rivers and coasts, the Company explores the potential of photovoltaic and wind power, increase the proportion of green power, and develop and promote low-carbon products.
	Reputational risks	The global demand for sustainable development is increasing, and failure to meet customer requirements as early as possible will have an impact on reputation.	Operating Income ↓ Operating Costs ↑	Actively respond to stakeholder requests related to addressing climate change; regularly disclose ESG reports to respond to the concerns of various stakeholders.
	Acute physical risks	Extreme weather, such as typhoons and extreme precipitation, will affect the normal operation of infrastructure equipment, product transportation, and supplier deliveries, resulting in the Company's possible involvement in breach of contract, compensation, and legal liabilities due to business interruption and other issues.	Operating Income ↓ Operating Costs ↑ Fixed Asset Value ↓	Develop an emergency management program for extreme natural disasters; promote the social responsibility assessment of suppliers to reduce supply chain risks.
	Chronic physical risks	Long-term shifts in natural patterns such as sea level rise and persistent high temperatures may have an impact on the Company's normal production.	Operating Costs ↑ Fixed Asset Value ↓	

Identification Results of Major Climate-related Risks and Opportunities		Potential Financial Impact	Response Measures	
Opportunity	Products and Services	Customers' demand for green and low-carbon steel products is gradually rising, and the Company has carried out product carbon footprint certification, environmental product declaration certification, etc., which can enhance the recognition of customers; the Company's special steel and other green products to support the development of new energy sources will bring opportunities for operation and open up new growth space for the Company.	Operating Income ↑ Credit risk ↓	Carry out special planning for low-carbon transformation, guide subsidiaries to save energy and reduce carbon, and green production; Carry out relevant training and publicity to enhance energy-saving and low-carbon awareness;
	Resource Efficiency	Carry out energy efficiency improvement and resource recycling to realize energy saving and carbon reduction and reduce operation cost.	Operating Costs ↓	Join hands with domestic and foreign research institutions, increase scientific and technological research and development, and carry out research on low-carbon technologies in an orderly manner;
	Energy Sources	Applying renewable energy and purchasing green power to increase the proportion of corporate renewable energy and reduce the Company's energy expenses.	Operating Costs ↓	Utilize the advantageous physical locations along the rivers and the coasts, and dig deep into the potential of photovoltaic and wind power, so as to enhance the proportion of green power.
	Resilience	Conducting climate change-related business research and industry exchanges will help improve the Company's ability to cope with climate risks and seize climate opportunities, as well as enhance the brand image of fulfilling social responsibilities.	Operating Income ↑ Credit Risk ↓	

Low-carbon Planning and Pathway

In order to realize the strategic goal of low-carbon, high-quality and sustainable development and facilitate the industry's green transformation, the Company focuses on the synergistic integration of "technological innovation" and "collaborated development", and leverages "green technologies", "green products" and "green collaboration" to reduce carbon emissions and promote green development.

CITIC Pacific Special Steel Carbon Neutral Pathway



Three-Year Action Plan for Green and Low-Carbon Development (2023-2025)

During the "14th Five-Year Plan" period, the trends of reduction, reorganization, and greening are superimposed. The Company is faced with both opportunities for high-quality development and stringent environmental constraints. To seize opportunities and meet challenges, the Company has formulated a three-year action plan for low-carbon development, focusing on promoting the green and low-carbon transformation from the following six aspects:

Optimizing and Adjusting Industrial Structure	In the short term, the Company will focus on expanding its scrap steel recycling operations, improve the utilization of scrap steel resources and steadily promote electric furnace short-process smelting. In the medium and long term, it will step up the research and development of low-carbon technologies, including hydrogen-enriched blast furnace and hydrogen-based shaft furnace, and promote fossil-fuel-free smelting, to minimize pollution and reduce carbon emission from the source.
Promoting Ultra-Low Emission Retrofit	The Company will steadily advance the work of ultra-low emission retrofit. According to policy guidance, it will further expand the Company's environmental protection competitive advantage.
Valuing Energy-saving and Consumption-reducing Management	The Company will continue to use systematic energy-saving diagnosis and benchmarking to identify shortcomings in energy and resource use and control, formulate feasible improvement plans, and use advanced technologies to improve energy-efficiency management levels.
Planning to Lead Low-carbon Transformation	The Company will deeply integrate the carbon peak and carbon neutrality strategy with the Company's medium-and long-term development. It will regularly conduct planning assessments to promote the coordinated development of various projects and ensure that the implementation of dual-carbon goals is consistent with the Company's development direction.
Actively Promoting Industrial Collaboration	In addressing the by-products and solid metallurgical waste from steel-making, the Company will work with downstream industries to produce high-value-added products, replace raw materials in the cement building materials industry, and develop carbon sequestration industries. It will join forces with the chemical industry to study the innovative co-production platform and the recycling of hydrogen-containing chemical tail gas to ensure hydrogen-energy smelting resources. It will explore carbon sequestration technologies and study carbon dioxide capture and storage technologies to truly achieve zero greenhouse gas emissions.
Making Full Use of Intelligent Management and Control	The Company will use environmental monitoring facilities and intelligent platforms to improve management levels and decision-making efficiency. It will build a carbon emission monitoring and management platform to achieve automatic collection and calculation of energy and material consumption data, help promote the full-life-cycle carbon footprint evaluation, and quantify carbon emissions throughout the steel-making industry chain.

Low-carbon Indicators and Targets

To achieve high-quality balanced development between economic growth and energy resource utilization, the Company has set the goal of achieving "carbon peak" before 2030 and "carbon neutrality" before 2060, and has established phased plans:

The first phase is the carbon peak phase (2021-2030)	The second phase is the stable-with-a-downward-trend phase (peak year-2035)	The third phase is the carbon neutrality phase (2035-2060)
The total carbon emissions will peak before 2030, and the carbon emission intensity per ton of steel will decrease by 5% compared with the base year (2021) before 2030.	After peaking, the total carbon emissions will gradually enter a downward channel, achieving a stable-with-a-downward-trend, and by 2035, the Company will have the technological capability to reduce carbon emissions by 20%.	By transforming technology, processes, and energy mix to be more low-carbon, the Company will achieve deep decarbonization, striving to reduce carbon emissions by about 80% from the peak level. Meanwhile, the Company will deeply integrate with society in carbon reduction to ensure the achievement of the carbon neutrality target before 2060.

The Company actively promotes the green and low-carbon transformation in the industrial field, and takes practical actions to promote the realization of the national industrial carbon peak target. Xingcheng Special Steel innovatively unlocks the potential of energy-saving and carbon-reduction technologies, provides green and low-carbon special steel material solutions, and has been named a "Pacesetter" enterprise in China's industrial carbon peak cause, as it strives to be an active "pacesetter" in the carbon cause and a "guardian" of our ecology.

In 2024, Xingcheng Special Steel achieved through comprehensive green upgrades:

- A **6.5%** decrease in energy consumption per unit product compared to 2021, with a cumulative reduction of **1.1** million tons of carbon dioxide emissions
- An increase in the proportion of recycled social scrap steel from **9%** in 2021 to **20%**

Xingcheng Special Steel has been honored with the title of "Pacesetter" enterprise in China's industrial carbon peak

At the same time, the Company has always deepened the carbon management system through continuous efforts. By using a systematic approach, it helps businesses or organizations effectively manage carbon emissions, improve carbon performance, achieve sustainable development goals, and promote sustainable development throughout the industry value chain. As of the end of 2024, Xingcheng Special Steel, Daye Special Steel, Qingdao Special Steel, and Tianjin Steel Pipe have all passed the EATNS Carbon Management System certification. Among them, Xingcheng Special Steel is the first enterprise in the industry nationwide to pass the carbon management system certification.

Staying Committed to the Path of Low-carbon Development

The Company has embedded green, low-carbon production as a strategic cornerstone of its development, spearheading the transition to sustainable production methodologies while optimizing resource allocation efficiency at source. These initiatives demonstrate the substantive economic value of eco-conscious operations, positioning the organization as a pacesetter in advancing China's eco-civilization development through industry-leading environmental stewardship. In addition, the Company organizes an internal *energy management system* audit once a year and hires a third-party team to conduct an external energy management system audit once a year to continuously improve the Company's energy-efficiency management.

Multidimensional Energy-Saving and Carbon Reduction

The Company actively responds to the national strategic needs and deeply integrates the concepts of greenness and sustainable development into every aspect of its daily production and operation. It continuously increases its investment in environmental protection research and focuses on improving the level of green production processes, committed to continuously contributing to the innovation of national green manufacturing and the high-quality development of industry. In 2024, the Company's carbon emission intensity per ton of steel decreased by 0.33% compared to 2023.

Energy Management Targets

- With 2021 as the base year, by 2025:
 - The comprehensive energy consumption per ton of steel will decrease by **5%** compared to the base year;
 - The energy consumption will be reduced by **35,000** tons of standard coal;
 - The installed capacity of green electricity will reach **350** megawatts.



- Xingcheng Special Steel, Daye Special Steel, Qingdao Special Steel, and Tianjin Pipe have been selected as "Demonstration Plants for Best Dual-Carbon Practices and Energy-efficiency Benchmarks" for further promotion.
- Subsidiaries of CITIC Pacific Special Steel have achieved a **100%** pass rate in the ISO 50001 "Energy Management System" certification.
- The Company organizes an internal energy management system audit once a year and hires a third-party team to conduct an external energy management system audit once a year.

Extreme Energy Efficiency Measures

The Company, based on the "Catalogue for the Promotion of Key National Energy-saving and Low-carbon Technologies", applies a series of highly efficient energy-saving and carbon-reducing technologies in all production processes and links. It achieves efficient use and conservation of energy through energy recovery and system utilization.

Optimizing energy mix

The Company's core strategy is to rely on self-produced gas as the main energy source and build a diversified and balanced energy flow system that combines "residual pressure, residual energy, residual heat, gas, heat, and electricity" to achieve complementary use of various energies, solve the contradiction between energy supply and demand, and reduce dependence on purchased energy.

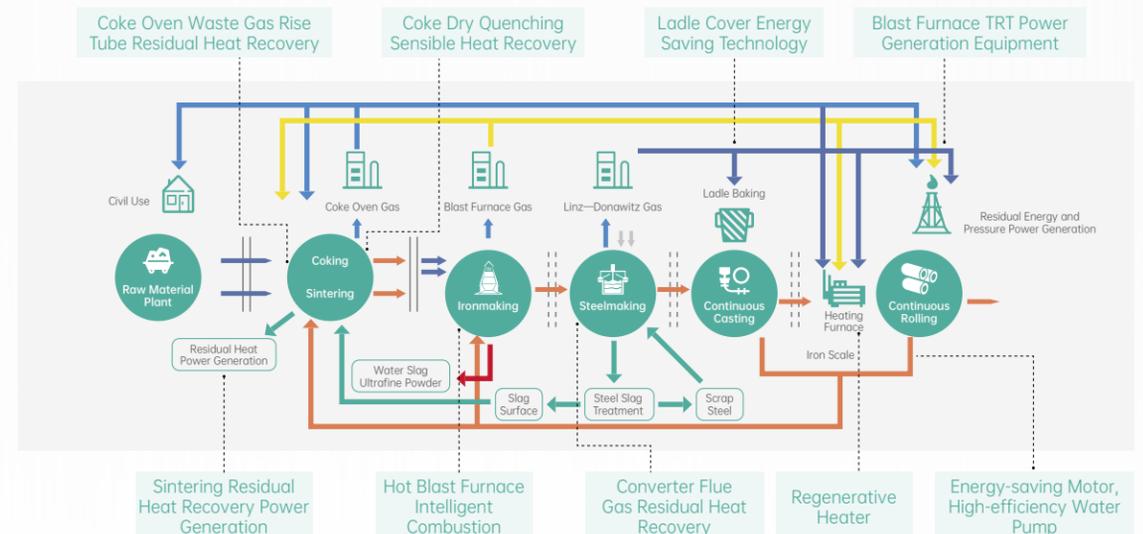
- Residual heat recovery from coke oven raw gas riser**: Recover residual heat from coke oven raw gas risers for power generation.
- Sensible heat recovery from coke dry quenching**: Recover sensible heat during the coke dry quenching process and integrate it into the high-temperature and high-pressure steam network for power generation.
- Power generation from recovered residual heat from sintering**: Recover residual heat from the sintering process for power generation.
- Residual heat recovery from converter flue gas**: Recover residual heat from converter flue gas for use in plant equipment, with surplus concentrated for power generation.
- Blast furnace TRT power generation equipment**: Utilize the pressure difference at the blast furnace top for power generation and recover residual energy and pressure from blast furnace gas.

Energy-saving technological transformation

The Company continuously promotes the green and low-carbon process and technological transformation of key processes and energy-consuming equipment, completing the iterative update of residual heat recovery technology.

- Steel ladle cover energy-saving technology**: Covering the steel ladle to reduce heat loss and improve energy-use efficiency.
- Regenerative heating furnace**: Using regenerative heating furnaces to enhance energy-use efficiency.
- Energy-saving motors and high-efficiency pumps**: Employing energy-saving motors and high-efficiency pumps to reduce energy consumption.

Comprehensive energy consumption Per Ton of Steel (kgce/t)



Production Carbon Reduction Measures Flowchart

Case Integrating regional energy and collaborating on carbon reduction

The Company leverages the energy processing and transformation functions of the steel production process to build an energy industry chain centered around steel production. In 2024, the Company provided heat and coke oven gas to the surrounding areas of its location, achieving regional collaborative carbon reduction of 480,000 tons; it promoted comprehensive utilization of residual heat projects to provide strong support for public services and people's livelihoods; it constructed and operated high-temperature subcritical high-efficiency power generation units. The Company has cumulatively put into operation a total installed capacity of 360 megawatts, increasing the power generation efficiency to 42%. Compared with the original high-temperature and high-pressure gas power generation units, it can generate an additional 400 million kilowatt-hours of electricity annually and can further reduce CO₂ emissions by approximately 240,000 tons per year.

Case Qingdao Special Steel - Creating a Cross-Industry Circular Economy and Demonstration Model for Collaborative Carbon Reduction

In September 2024, Qingdao Special Steel was awarded the EATNS Carbon Management System Certificate by the Shanghai Environment and Energy Exchange, becoming the first steel enterprise in Shandong Province to pass the carbon management system certification.



Qingdao Special Steel places great emphasis on carbon management work, following the requirements of T/CIECCPA 002-2021 "Carbon Management System Requirements and Use Guidelines", and has built a carbon management system covering four dimensions: carbon emissions, carbon assets, carbon trading, and carbon neutrality. At the same time, Qingdao Special Steel has formulated a carbon management policy of "pollution reduction and carbon reduction, collaborative efficiency enhancement, technological innovation, and green development", and has compiled and issued "Carbon Management System Procedure Documents" to standardize and ensure the effective operation of the carbon management system.

In the production process, Qingdao Special Steel carries out ultimate recovery and utilization of residual heat and energy from various processes, and conducts research on low-grade residual heat recovery such as low-temperature flue gas, slag water, and circulating cooling water.

In terms of cross-industry collaboration, Qingdao Special Steel has joined forces with the West Coast Public Utilities Group to invest RMB 200 million in the implementation of a zero-carbon urban heating project using residual heat. This project effectively utilizes the low-grade residual heat and energy from Qingdao Special Steel to provide heat to the society, with the main heat source being the residual heat of power generation condensate water, supplemented by the residual heat of blast furnace slag water, sintering flue gas, and coke oven gas coolers. The design process fully follows the principle of "efficient recovery and cascading utilization", heating the urban heating return water to above 60°C, and sending it to the municipal heating pipeline through the heat exchange station. After the project is put into use, it will provide an annual heat supply of 3 million GJ, accounting for more than 55% of the heating volume in the western urban area of Huangdao, reducing the local heating coal consumption by 117,000 tons per year, reducing carbon dioxide emissions by 270,000 tons, and helping to improve the urban energy mix and reduce air pollution.



Low-carbon Metallurgical Technology

The Company is actively developing low-carbon metallurgical technologies, continuously exploring hydrogen metallurgy technology, intelligent full-oxygen combustion technology, etc., to improve production efficiency while reducing carbon emissions in the steel production process, achieving green and low-carbon steel production.

Case Daye Special Steel - Leveraging the Advantages of Hydrogen Energy Full-oxygen Combustion Technology, Successfully Implementing the First National Low-carbon Heating Furnace Application Practice

In alignment with national decarbonization mandates, Daye Special Steel has continued to innovate in steel heating, creatively proposing to use the advantages of hydrogen energy as a breakthrough in the special steel production process, combining hydrogen energy full-oxygen combustion technology, applying a hydrogen-rich fuel full-oxygen flameless combustion system, and implementing the first national low-carbon heating furnace application practice. This innovation has achieved results such as a single heating furnace reducing CO₂ emissions by 80%, energy consumption by 20%, heat cycle reduction by 15.2%, oxidation loss reduction by 0.15%, and nitrogen oxides emission concentration reduction by 15%.

Case Tianjin Pipe - Annular Furnace Pure Oxygen Retrofit Project, A New Model of Green and Low-carbon Advanced Technology

Tianjin Pipe's 168-unit annular furnace retrofit plan employs intelligent full-oxygen combustion technology, aiming to reduce energy consumption and oxidation loss, and enhance combustion efficiency. The retrofit measures include adding an intelligent combustion control system and a dynamic control system for the furnace atmosphere, replacing conventional air burners with full-oxygen direct flame burners, and updating the oxygen and natural gas supply network system to achieve more efficient combustion and emission control. After the retrofit, the daily emission of nitrogen oxides from the annular furnace was reduced from 220kg to less than 3kg, with a reduction of 98% in nitrogen oxides emission per ton of steel, and a significant decrease in natural gas consumption per ton of steel, enhancing overall energy efficiency.

The application of full-oxygen combustion technology has increased the heating rate and uniformity of furnace temperature, providing assurance for the production of high-quality products. This project received special funding from the central government for atmospheric environmental protection in 2023 and was selected as one of the first batch of green and low-carbon advanced technology demonstration projects by the National Development and Reform Commission in April 2024.



Annular Furnace (After Retrofit)



New Flue Gas System

Case

Jingjiang Special Steel – Near-Zero Carbon Emission Electric Furnace Demonstration Project

In February 2024, the signing ceremony for Jingjiang Special Steel's near-zero carbon emission electric furnace demonstration project was successfully held. The near-zero carbon emission electric furnace demonstration project is a key initiative implemented by the Company in response to the national strategic development requirements for "carbon peak" and "carbon neutrality". It is both a national pilot project for the development of low-carbon metallurgical technology and the first national demonstration project for short-process steelmaking in electric furnaces. After the project is completed and operational, it will provide a model for the low-carbon development of the national special steel industry, comprehensively promote the high-quality development of the special steel industry, add annual sales revenue of RMB 3 billion, add more than RMB 100 million in tax revenue, and promote the improvement of corporate economic benefits.



The Company emphasizes enhancing all employees' understanding and capabilities regarding efficient energy utilization, planning and carrying out a series of training programs aimed at improving energy use efficiency for all staff. These include daily operational process energy-saving and emission-reduction requirements, as well as energy-saving and carbon-reduction software applications at the management level. At the same time, the Company invites industry experts to give lectures, using case studies and practical exercises to help employees deeply understand the importance of energy saving and emission reduction, and to master energy-saving skills in practical applications.

Customized Training System



Renewable Energy Investment

Companies are continuously exploring investments in affordable, reliable, and scalable renewable energy solutions. By deploying photovoltaic and wind power generation, procuring green electricity, and other initiatives, they are consistently optimizing the energy mix within their operational scope.



As of the end of 2024

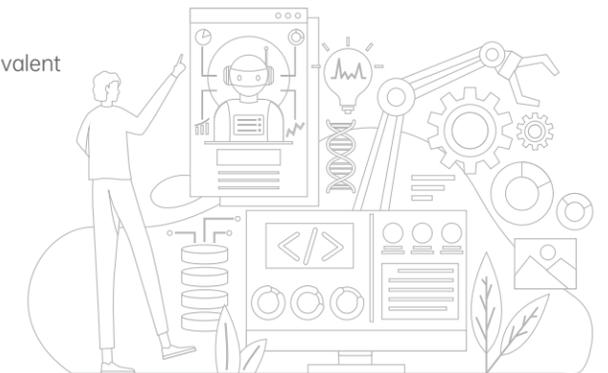
- Operational photovoltaic capacity: **185.24** MW
- wind turbine tower capacity: **12** MW
- Annual green power generation: **230** million kWh

achieving an annual reduction of **130,000** metric tons of CO₂ equivalent

- Corporate green electricity procurement: **302** million kWh

Projects scheduled for completion in 2025

- Photovoltaic under construction: **34.2** MW
- Wind turbine capacity under construction: **97** MW



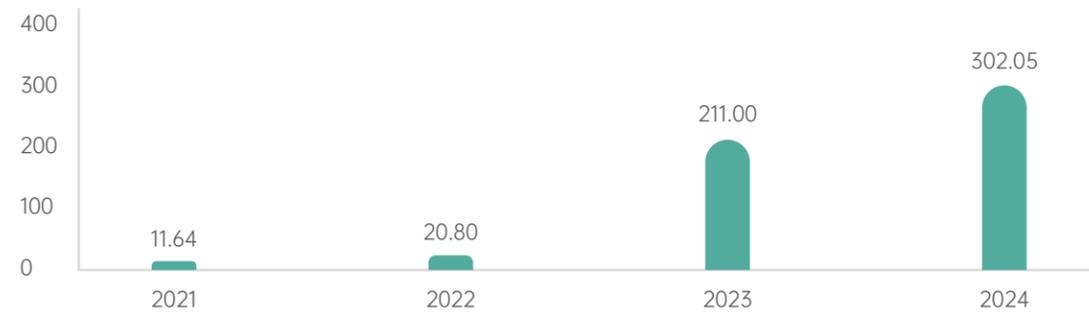
Green Energy Initiatives

The Company actively leverages its extensive high-quality rooftop resources to advance rooftop photovoltaic projects across its facilities, including the addition of solar carports. Installed photovoltaic capacity demonstrates a year-on-year growth trend. Concurrently, wind turbine tower projects are being steadily expanded to further optimize the energy mix and elevate sustainable development standards.

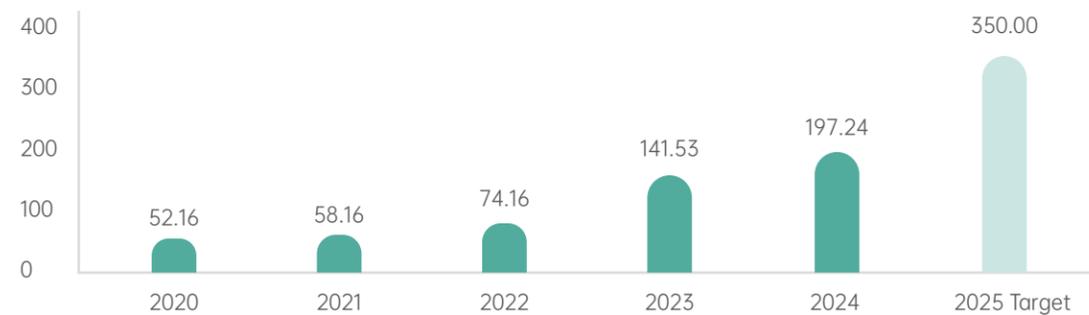
Green Electricity Trading

Through renewable energy trading platforms, the Company has established partnerships with renewable power generators to facilitate green electricity transactions. By securing long-term agreements with premium green electricity suppliers, it ensures stable procurement of renewable energy. Prioritizing green power procurement to meet operational electricity demand, the Company has achieved consistent annual growth in traded volumes.

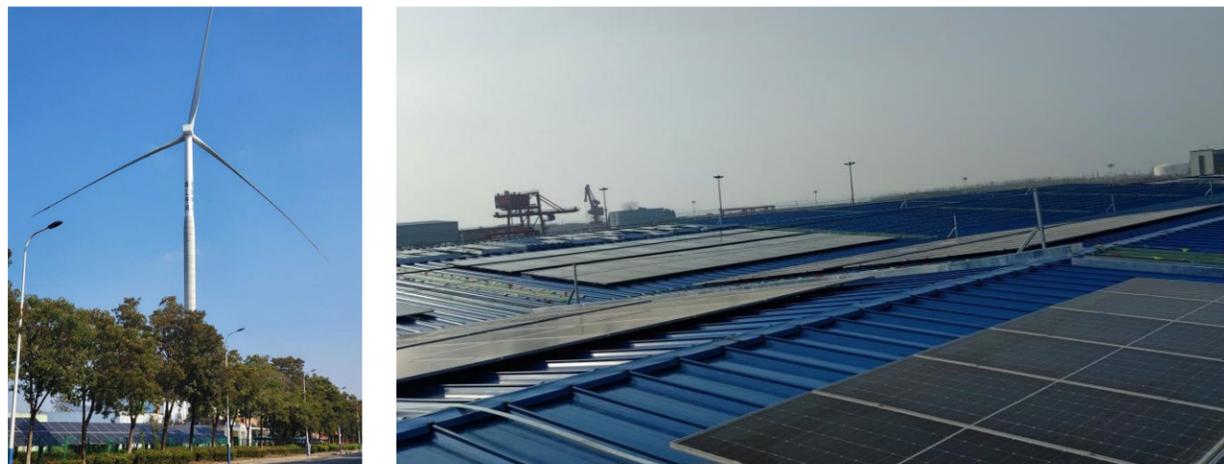
Green Electricity Market Procurement Volume (GWh)



Green Electricity Installed Capacity (MW)



The Company prioritizes the construction of wind-solar-storage renewable energy generation projects to develop green energy, reduce greenhouse gas emissions, and achieve near-zero carbon development. Jingjiang Special Steel capitalizes on its steel manufacturing land resources to build distributed photovoltaic systems and wind power installations aligned with energy demand requirements. These are complemented by electrochemical energy storage solutions to establish green and efficient energy supply across the plant facilities. By the end of 2025, the Company anticipates commissioning photovoltaic installations with 45 MW capacity, wind turbine installations with 25 MW capacity (including some light wind turbines), an electrochemical energy storage station rated at 120MW/240MWh, and a comprehensive wind-solar-storage-carbon energy management platform.



Jingjiang Special Steel Wind-Solar-Storage Renewable Energy Power Generation Project

Case Qingdao Special Steel – 58MW Solar Power Project Completed

Qingdao Special Steel actively promotes green power development to optimize its energy consumption structure and build a new green energy framework. As of December 2024, the Company has completed a 58MW distributed rooftop solar power project, with an annual generation capacity of 64 million kWh. This initiative saves 20,000 tons of standard coal and reduces CO₂ emissions by 53,000 tons annually. Future plans include advancing the construction of a third-phase 20MW solar power project.



Case Tianjin Pipe – Energy Mix Optimization and Carbon Reduction

As a national ecological culture demonstration enterprise, national greening model enterprise, and benchmark for green development in the steel industry, Tianjin Pipe has made active progress in energy conservation and carbon reduction in recent years, continuously optimizing its energy mix and achieving remarkable results. As of the end of December 2024, Tianjin Pipe has successfully completed a series of green energy projects: the Phase I 25.77 MW and Phase II 14 MW photovoltaic power generation projects have been successfully connected to the grid; the waste heat steam power generation project has been officially put into operation; 201 million kWh of green electricity was purchased in 2024; and the energy consumption of electric furnace processes has reached industry benchmark levels.

Core Carbon Neutrality Technologies

The Company actively explores core carbon neutrality technologies, with a focus on developing carbon capture, utilization, and storage (CCUS) solutions. It is accelerating the large-scale application of CCUS technologies and promoting in-depth collaboration across the entire industrial chain for CCUS-related initiatives. By synergistically combining geological sequestration/utilization methodologies with biological carbon conversion technologies, the Company has successfully implemented a series of pilot projects for integrated carbon dioxide capture and utilization, establishing demonstrative applications of these technologies.

Case

Qingdao Special Steel – Breakthrough in Specialty Welding Materials Development to Overcome CCUS Technical Barriers

Qingdao Special Steel actively responds to the national new energy development strategy outlined in the "New Energy Industry Revitalization and Development Plan", dedicating efforts to the R&D and production of high-performance welding materials for the new energy sector. In cutting-edge technological fields such as hydrogen transmission pipelines and CCUS, the Company has successfully developed specialty welding materials, including H08Mn2NiA and FT55-Ni1, filling domestic gaps and meeting the urgent demand for high-performance welding materials in long-distance hydrogen pipelines and carbon capture, utilization, and storage (CCUS) pipelines.

By supplying high-performance welding materials for hydrogen and CCUS pipelines, Qingdao Special Steels innovative products have significantly accelerated the rapid development of the hydrogen energy industry, providing robust support for reducing fossil fuel consumption and lowering greenhouse gas emissions. As a clean and efficient energy source, the widespread adoption of hydrogen energy will markedly decrease carbon emission intensity, contributing to the achievement of national carbon neutrality goals. Meanwhile, CCUS technology, as one of the most effective means to reduce greenhouse gas emissions, will play a critical role in future carbon reduction efforts. Through the development of high-performance welding materials, Qingdao Special Steel has delivered solid technical assurance for the construction and operation of CCUS pipelines, contributing to global carbon emission reduction and climate change mitigation.

Case

Tianjin Pipe – Breakthrough in CCUS Corrosion-Resistant Pipeline Technology, Setting New Standards for Pipe Applications

To meet the global demand for high-quality CCUS pipeline materials, Tianjin Pipe has overcome technical challenges such as low-temperature toughness enhancement, special test compliance, and material structure optimization, and successfully developed high-grade corrosion-resistant pipeline steel with a ductile-to-brittle transition temperature below -50°C . The DWTT (Drop Weight Tear Test) and CTOD (Crack Tip Opening Displacement) test results at low temperatures have reached internationally advanced levels. This achievement strongly supports the supply of critical pipeline materials for global CCUS projects, marking Tianjin Pipe's rise to the forefront in the R&D and application of high-grade corrosion-resistant pipeline steel, establishing it as a global leader in energy engineering pipeline applications.

Leading Carbon Assessment Standards

The Company closely monitors global low-carbon development trends, continuously strengthens industry exchanges and cooperation, and actively participates in the formulation and certification of special steel industry standards, committed to promoting the innovation and development of global low-carbon assessment systems.

From both industry and product dimensions, the Company actively participates in and promotes the establishment of green product standards for the special steel industry. The Company has established a carbon assessment system covering the entire lifecycle of mining-coke-iron-steel-products across the Company and its subsidiaries, and has completed carbon footprint certification for 4 major bearing products in 7 different process routes. By the end of 2024, the Company completed PCF certification for 5 bearing steel products, Xingcheng Special Steel completed EPD certification for continuous casting round blooms, 3500 steel plates, and 4300 steel plates, and Qingdao Special Steel completed EPD certification for flat steel.

Case

CITIC Pacific Special Steel's "(Automotive Use) Special Steel PCR" Wins Industry Honors Again, Establishing a Benchmark for Low-Carbon High-Quality Development

In June 2024, at the Steel Industry EPD Platform Blue Book Release and High-Quality Development Symposium hosted by the China Iron and Steel Association in Shanghai, the conference recognized special contributors and PCR (Product Category Rules) innovation experts in the steel industry EPD platform. Xu Xiaohong, Assistant to the President of the Company, attended the ceremony as the convener of the "(Automotive Use) Special Steel PCR" to receive the award. The "(Automotive Use) Special Steel PCR" is the world's first green low-carbon evaluation standard developed under the leadership of CITIC Pacific Special Steel that highlights the low-carbon contributions of special steel. By establishing a scientific, comparable, comprehensive, and unified China-specific green low-carbon evaluation standard, this PCR demonstrates the green and low-carbon attributes of special steel, including high strength with lightweight properties, extended service life, near-net-shape manufacturing, and operational stability. It establishes a best-practice model for the low-carbon, high-quality development of special steel and its industrial chain.

Case

CITIC Pacific Special Steel Participates in Reviewing China Iron and Steel Association Group Standard "Low Carbon Emission Steel Evaluation Method", Facilitating Low-Carbon Transformation of the Value Chain

The Company actively engages in formulating and reviewing industry-related standards to promote collaborative low-carbon development within the sector. In October 2024, the "Low Carbon Emission Steel Evaluation Method" standard, which the Company participated in reviewing, was officially released and implemented.

The "Low Carbon Emission Steel Evaluation Method" standard is designed to meet the requirements of the national dual-carbon strategy and the goals of the *Paris Agreement*. It adheres to the Life Cycle Assessment (LCA) methodology, recognizes the decarbonization contributions of various carbon reduction processes, and encourages the synergistic development of multiple carbon reduction technologies. Through the establishment of standardized accounting boundaries to ensure data comparability, the standard enables the quantification of greenhouse gas emissions for crude steel or hot-rolled products and the evaluation of greenhouse gas emission levels (carbon efficiency ratings). The release and implementation of the "Low Carbon Emission Steel Evaluation Method" provide a scientific and systematic basis for steel enterprises to establish green brands and develop low-carbon emission products, as well as for downstream users to conduct green procurement. This standard effectively supports the low-carbon transformation of the entire steel industry chain and value chain, from upstream to downstream.



On-Site Release Ceremony of "Low Carbon Emission Steel Evaluation Method"

Case

CITIC Pacific Special Steel Hosts Inaugural "World Steel Association Life Cycle Assessment & Industrial Chain Collaborative Innovation Development Conference", Sharing Low-Carbon Transition Experience

In July 2024, under the theme "Scientific Sustainability - Collaboration and Innovation", the Company hosted the inaugural World Steel Association Life Cycle Assessment & Industrial Chain Collaborative Innovation Development Conference. The event brought together numerous authoritative organizations, academic experts, and industry leaders to participate in this special steel sector gathering. Participants engaged in in-depth knowledge exchange around three core themes related to life cycle assessment, dissecting industry evolution patterns while fostering forward-thinking innovation.



Case

Xingcheng Special Steel - Successful Release of Product EPD Report Injects New Momentum for Green and Low-Carbon Development

The Environmental Product Declaration (EPD) report for Xingcheng Special Steel's continuous casting round billets has been officially released on the China Iron and Steel Association's Steel EPD Platform, proactively disclosing environmental performance information of related products. The Life Cycle Assessment (LCA) project team for Xingcheng Special Steel's continuous casting round billets conducted comprehensive work, including enterprise product research, on-site production data collection, life cycle inventory compilation, and environmental impact assessment. This effort resulted in the compilation of a product LCA report and ultimately the release of the product EPD report. The completion of the life cycle assessment for continuous casting round billets and the release of the EPD report provides strong support for comprehensively carrying out life cycle assessments for various products and establishing an independent LCA platform in the next phase. This further improves the management-operation-research system for green and low-carbon development.

Case

Tianjin Pipe – Actively Responding to National "Dual Carbon" Goals, Awarded "Green Product Certification" Certificate

To successfully complete the green product certification, Tianjin Pipe comprehensively deployed key tasks for the green product certification of casing and tubing, and completed training on YB/T 4954-2021 "Technical Specification for Green Design Product Evaluation – Casing and Tubing for Oil and Gas Extraction" ahead of schedule, ensuring precise mastery of green product evaluation standards. Through internal coordination and collaboration, the "Green Product Certification" achieved outstanding results with "zero non-conformities", unanimously recommended for approval by the review experts, successfully completing the certification. In March 2024, Tianjin Pipe obtained the "Green Product Certification" certificate issued by the Metallurgical Planning and Research Institute, demonstrating its achievements in green and high-quality development.



Green Product Certification

Promoting Green Office Practices

The Company integrates green and sustainable concepts into daily operations and corporate culture, strictly adhering to the fundamental principles of environmentally responsible business practices while implementing eco-friendly measures in every detail of office operations.

Energy Conservation

Optimized energy management at headquarters by strictly controlling operating schedules for all electrical equipment including nighttime lighting, air conditioning, and LED displays, achieving annual electricity savings of nearly 200,000 kWh.

Resource Efficiency

Implemented office supply recycling and reuse programs to reduce procurement costs, and put up "Save More, Waste Less" signage in cafeterias to promote thrifty habits among employees.

Environmental Education

Conducted dual-carbon concept training sessions, advocated for green commuting, and organized professional workshops on environmental protection and low-carbon technologies.

Advancing Green Operation Practices

Adhering to the national environmental protection strategy of "ecological priority and green development", the Company is committed to reducing the impact of its operations on the natural environment. The Company places high importance on the in-depth development of a circular economy, continuously increasing investment in environmental protection, and has implemented scientific planning and optimization upgrades for organized emissions, unorganized emissions, clean transportation, waste management, and water resource management. By proactively exploring innovative approaches to harmonize business operations with ecological conservation, the Company has established itself as a model of green development in China's steel industry, leading the sector toward a more sustainable future.

This year, the Company revised its "Environmental Policy Statement", clearly defining its environmental responsibilities and obligations, including compliance with relevant laws and regulations, strengthening environmental risk management, and enhancing communication and engagement with stakeholders. These measures ensure that while pursuing economic benefits, the Company also fulfills its social responsibilities, demonstrating its determination and commitment.

Xingcheng Special Steel, Daye Special Steel, Qingdao Special Steel, and Yangzhou Special Materials have been included in

the Ministry of Industry and Information Technology's "Green Factory" list

By the end of 2024, Xingcheng Special Steel, Qingdao Special Steel, Tianjin Pipe, and Yangzhou Special Materials were rated as

"Grade A Enterprises" for environmental performance

The Company strictly complies with laws and regulations including the *Environmental Protection Law of the People's Republic of China*, the *Water Pollution Prevention and Control Law of the People's Republic of China*, the *Air Pollution Prevention and Control Law of the People's Republic of China*, the *Solid Waste Pollution Prevention and Control Law of the People's Republic of China*, and the *Ecological Environment Administrative Penalty Measures*. We continuously improve our environmental management system, implement diversified and innovative environmental protection measures, and enhance the effectiveness of ecological environment supervision and management to fully promote environmental protection efforts.

The Company has established internal regulations such as the "Environmental Facility Operation Management System", "Environmental Pollution Prevention and Control Management System", and "Environmental Target Responsibility System". Subsidiaries have formulated corresponding environmental protection regulations applicable to their own operations based on Company policies. The Company continuously strengthens its *environmental management system* construction, with all subsidiaries having obtained ISO 14001 "Environmental Management System" certification. To maintain continuous environmental monitoring and effectively identify and prevent environmental risks, the Company organizes annual internal environmental audits for all subsidiaries and engages third-party teams to conduct external environmental audits. No major environmental incidents occurred this year.



Waste Gas Management

The Company strictly complies with laws, regulations, and industry standards such as the *Air Pollution Prevention and Control Law of the People's Republic of China*, the *Emission Standard of Air Pollutants for Sintering and Pelletizing of Iron and Steel Industry*, and the *Emission Standard of Air Pollutants for Steelmaking Industry*. We attach great importance to waste gas management, strengthen production waste gas control, continuously improve the quality and effectiveness of ultra-low emission transformation projects, and implement air pollution prevention and control measures. By the end of 2024, Xingcheng Special Steel, Qingdao Special Steel, and Tianjin Pipe had completed full-process ultra-low emission transformations and were rated as "Grade A Enterprises" for environmental performance. Daye Special Steel has initiated full-process ultra-low emission transformation and is striving to achieve Grade A performance targets.

Meanwhile, the Company actively pursues innovation and vigorously promotes various pioneering environmental projects, including micro-power dust removal upgrades for coke coal conveying systems, enhanced electrostatic precipitation with precision dust collection for steelmaking processes, dust control system improvements for steelmaking material feeding carts, and sintered plastic plate dust collectors for roughing/finishing mills. Furthermore, to ensure effective data monitoring, the Company coordinates with specialized operation-maintenance teams to maintain stable performance of all environmental protection facilities, rigorously controlling waste gas emissions and pollutant treatment to meet regulatory standards. Through the double drivers of management innovation and technological advancement, the Company has successfully achieved ultra-low emission targets for exhaust gases.

Emission Control Targets

- Sintering machine head: Average NO_x concentration ≤ 42mg/m³, SO₂ ≤ 30mg/m³, particulate matter ≤ 7mg/m³
- Captive power plant: Average NO_x concentration ≤ 40mg/m³, SO₂ ≤ 30mg/m³, particulate matter ≤ 7mg/m³



Ultra-Low Emission Management Measures

Organized Ultra-Low Emission Upgrades

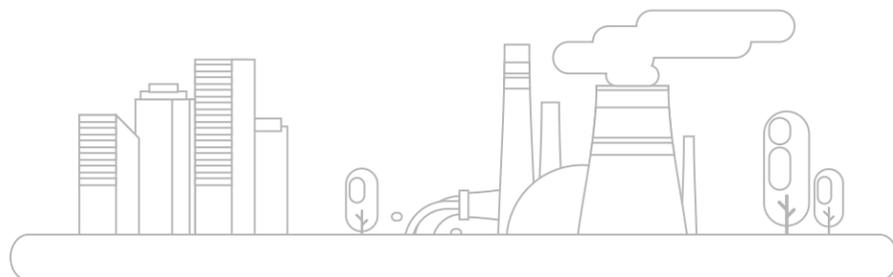
- Equipment Upgrades:**
Advance dust collector performance improvements and construct new desulfurization/denitrification facilities for sintering, pelletizing, and coking processes to ensure pollutants meet ultra-low emission standards.
- Source Control:**
Implement advanced blast furnace gas purification with precision desulfurization technology, converting gas into clean energy while achieving effective pollutant control at the source.

Unorganized Emission Control

- Fugitive Emission Source Management:**
Enclose material stockyards completely and implement targeted dust suppression at transfer points, conveyor corridors, and workshop interiors to systematically resolve unorganized emissions.
- Monitoring Systems Deployment:**
Install HD video surveillance at high-risk areas (e.g., steelmaking rooftops) for real-time monitoring; deploy TSP (Total Suspended Particulate) monitors at stockyards and micro air quality stations at material yards/road junctions to establish an environmental monitoring network.

Clean Transportation Initiatives

- Transport Mode Optimization:**
Increase clean transport (waterway/railway/pipeline/tubular belt conveyors) to >80% of bulk material logistics through context-specific solutions.
- Improve the requirements for transportation equipment within the plant:**
Transportation vehicles within the Company's plant area have been fully upgraded to new energy vehicles or vehicles complying with the China VI vehicle emission standards to reduce tailpipe emission pollution; non-road mobile machinery within the Company's plant area have been driven by new energy sources and have all completed the environmental protection registration and coding work.



Case

Tianjin Pipe – Consolidating Ultra-Low Emission Achievements, Recognized as a Grade A Environmental Performance Enterprise

Building upon the completion of its ultra-low emission initiatives, Tianjin Pipe has implemented a series of measures to solidify these achievements and actively pursued certification as a Grade A environmental performance enterprise. In October 2024, Tianjin Pipe was awarded the title of "Grade A Enterprise for Heavy Pollution Weather Performance" by Tianjin Municipality.

To further enhance waste gas management, Tianjin Pipe established a Distributed Control System (DCS) and a Fugitive Emission Centralized Management System, enabling real-time monitoring and recording of key parameters for environmental protection facilities and production processes. Additionally, the Company upgraded its gate access system with smart technology, achieving automatic identification and barrier-free entry for bulk material transport vehicles, significantly improving the environmental efficiency of logistics management.

In the field of energy conservation and emission reduction, Tianjin Pipe has implemented a series of innovative retrofit projects, including oxy-fuel combustion technology upgrades, photovoltaic power generation, and waste heat steam power generation. Additionally, Tianjin Pipe has actively promoted new energy transportation and railway transport initiatives, successfully replacing a total of 151 vehicles with new energy alternatives.



Tianjin Pipe's New Energy Vehicle Fleet

Case

Qingdao Special Steel – Comprehensive Optimization of Transportation Management to Improve Clean Transportation Coverage

Qingdao Special Steel has constructed a cross-sea belt corridor from Dongjiakou Port to the raw material shed in the plant area. All major raw and auxiliary materials are transported and stored in enclosed systems. Vehicles entering and exiting the plant area fully comply with China VI vehicle emission standards or utilize new energy, meeting the requirements for clean transportation of bulk materials and products.

Waste Management

The Company strictly adheres to laws and regulations such as the *Solid Waste Pollution Prevention and Control Law of the People's Republic of China*, upholding the "3R"¹ principles of the circular economy (Reduce, Reuse, Recycle) and adhering to the guiding philosophy of "minimizing generation, standardizing disposal, and maximizing utilization". We continuously optimize waste management processes, improve resource efficiency, reduce resource consumption, and accelerate the development of a resource-efficient production system.

Solid waste generated during the Company's production and operations includes steel slag, water slag, dust removal ash, iron oxide scale, desulfurization gypsum, scrap steel, and waste refractory materials. The Company has newly introduced the "Solid Waste Management System", which clarifies management requirements for solid waste and enhances supervision and oversight. While ensuring lawful and compliant disposal of solid waste, the Company actively explores recycling potential and implements comprehensive resource utilization projects for solid waste, continuously improving the overall utilization rate and the added value of waste-derived products. Additionally, the Company collaborates with neighboring enterprises and government agencies to jointly promote resource recycling initiatives.

Waste Disposal Targets

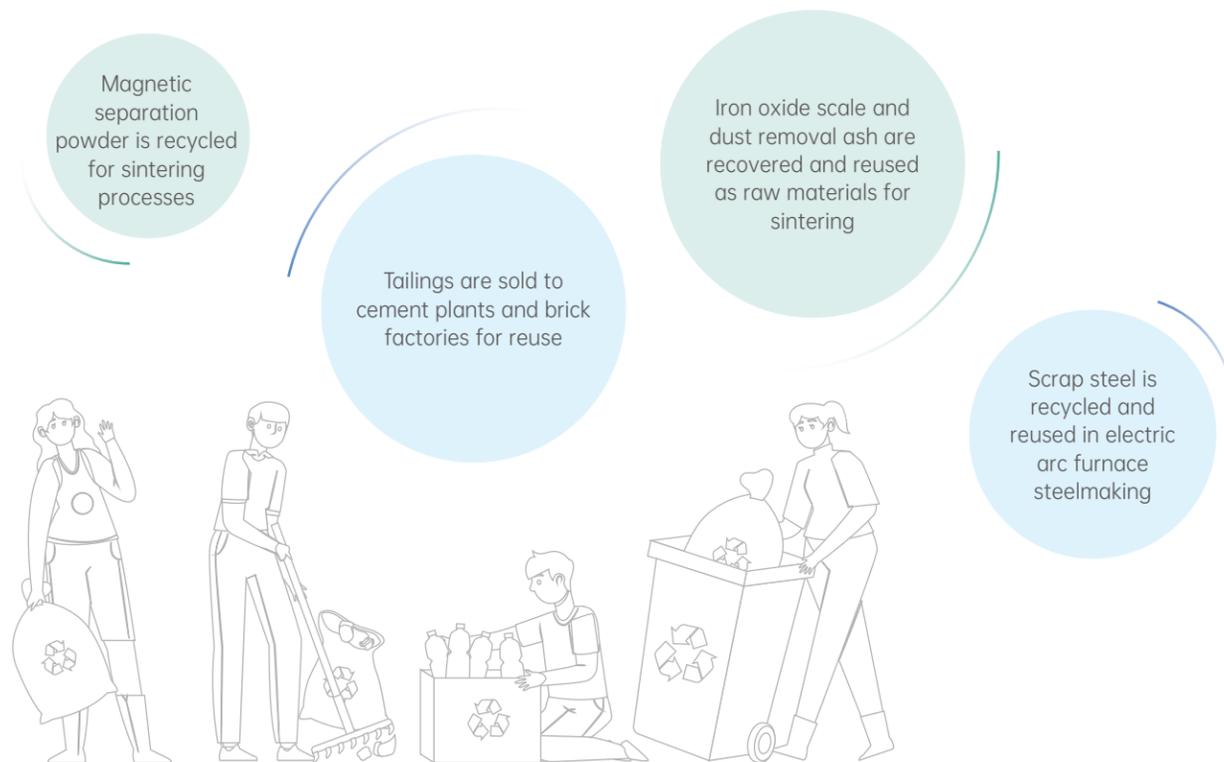
Solid Waste:

100% returned to production plants or entrusted to external agencies for recycling

Hazardous Waste:

100% compliant disposal

The Company conducts in-depth exploration of new solid waste treatment technologies



¹ 3R Principles (the rules of 3R) refers to the abbreviation of three fundamental principles: Reducing, Reusing, and Recycling.

Case

Qingdao Special Steel – Transforming Waste into Resources, Enhancing Solid Waste Value, Recognized as Qingdao's First Batch of "Zero-Waste Factories"

Qingdao Special Steel actively promotes the high-value and efficient utilization of solid waste. Through optimized process technologies and improved management practices, the Company selects premium raw materials and clean energy while adopting advanced production techniques to effectively reduce industrial solid waste generation at the source. It has strengthened lean management to strictly control resource waste during production and established an extended producer responsibility system. In handling solid waste, Qingdao Special Steel follows the principle of "internal reuse first, external recycling second, and short-process circulation" to maximize the added value of solid waste. The Company has also partnered with neighboring stakeholders to jointly establish a Sustainable Solid Waste Treatment Center, further improving resource utilization efficiency.

In 2024, Qingdao Special Steel achieved a 100% comprehensive utilization rate for general solid waste and was honored as one of Qingdao's first batch of "Zero-Waste Factories".



Qingdao Special Steel Recognized as One of Qingdao's First "Zero-Waste Factories"

The hazardous waste generated during the Company's production and operational activities primarily includes: waste oil, used oil drums, waste paint cans, spent lead-acid batteries, paint sludge, surface treatment sludge, and emulsions. In strict compliance with relevant laws and regulations, the Company entrusts qualified third-party agencies to ensure proper disposal of all hazardous waste.

In order to properly store hazardous waste, the Company has specially established hazardous waste warehouses that meet a series of strict storage requirements such as anti-seepage, leakage prevention, rainproofing, and sun protection, so as to avoid negative environmental impacts caused by improper disposal of hazardous waste in hardware facilities. The relevant staff responsible for the processing procedures strictly implement standardized procedures, package, weigh, and label the generated hazardous waste, and carry out timely classification and treatment. In addition, in accordance with the "Emergency Plan for Sudden Environmental Events", the Company organizes emergency drills every year to improve hazardous waste management capabilities and risk prevention levels.

Water Resource Management

The Company strictly complies with relevant laws and regulations on water resource management, including *Water Law of the People's Republic of China*, *Water Pollution Prevention and Control Law of the People's Republic of China*, and *State Council's Opinions on Implementing the Strictest Water Resource Management System*. We continuously improve water resource utilization efficiency and are committed to establishing a model water-saving enterprise.

To achieve water management objectives, the Strategy, Risk & ESG Committee, under the guidance of the Board of Directors, is responsible for formulating the "Water Resource Management Strategy". The CEO is responsible for the systematic monitoring and management of all water-related performance indicators, and regularly reviews water performance and progress. The Company has established a Water Conservation Leadership Group to oversee and manage water usage across workshops and departments, implementing strict assessment mechanisms. The group standardizes corporate water management processes to ensure effective implementation of all water resource management measures, thereby achieving continuous optimization of water resource management.

Water Resource Targets

By 2025, reduce freshwater consumption per ton of steel from the 2020 baseline of 2.35m³/ton crude steel to 2m³/ton crude steel.

Water Conservation

The Company adheres to water-saving principles and actively implements comprehensive measures for efficient water resource management. Through the construction of smart water systems, equipment upgrades and technical renovations, as well as the adoption of graded water supply and cascade utilization strategies, we achieve multi-dimensional water resource conservation. In 2024, the Company's circulating water reuse rate reached 97%.

Simultaneously, the Company actively explores and applies advanced alternative water source technologies, including seawater desalination, reclaimed water reuse, and rainwater harvesting, achieving sustainable water resource utilization. In 2024, the Company utilized 5,446,181 tons of desalinated seawater.

Types of Water Conservation Measures and Specific Measures Descriptions

 Smart Water System	<p>Established a 5G+Industrial Internet smart water system, creating an intelligent control system covering the entire water process from source abstraction and purification to pipeline distribution, point-of-use delivery, and wastewater reclamation.</p> <ul style="list-style-type: none"> <li style="border: 1px dashed #00a651; border-radius: 15px; padding: 5px; margin-bottom: 5px; display: inline-block;">Achieves automatic control and adjustment of water supply <li style="border: 1px dashed #00a651; border-radius: 15px; padding: 5px; margin-bottom: 5px; display: inline-block;">Automatically balances pressure and flow at water usage points <li style="border: 1px dashed #00a651; border-radius: 15px; padding: 5px; display: inline-block;">Optimizes cooling distribution in circulating water systems automatically
 Equipment Upgrades & Technical Renovations	<p><i>Equipment Upgrades:</i></p> <ul style="list-style-type: none"> <li style="border: 1px dashed #00a651; border-radius: 15px; padding: 5px; margin-bottom: 5px; display: inline-block;">Updated water-intensive facilities <li style="border: 1px dashed #00a651; border-radius: 15px; padding: 5px; margin-bottom: 5px; display: inline-block;">Adopted water-saving equipment and processes <li style="border: 1px dashed #00a651; border-radius: 15px; padding: 5px; display: inline-block;">Implemented efficient cooling, washing, water recycling, and wastewater reuse <p><i>Technical Renovations:</i></p> <ul style="list-style-type: none"> <li style="border: 1px dashed #00a651; border-radius: 15px; padding: 5px; margin-bottom: 5px; display: inline-block;">Replaced high water-consumption production processes with water-saving alternatives <li style="border: 1px dashed #00a651; border-radius: 15px; padding: 5px; display: inline-block;">Upgraded water metering systems including pipeline replacements and meter updates


Steam Condensate Recovery

Established partnerships with heating system users to recover and reuse steam condensate generated during heating processes

All subsidiaries actively implement the Company's water resource management philosophy, formulating and executing tailored water management measures based on their specific operational contexts. Through innovations in water-use technologies and optimization of management models, they strive to synchronize with the Company's green development trajectory, jointly advancing the efficient utilization and protection of water resources.



Qingdao Special Steel and Tianjin Pipe were jointly recognized on the "2024 List of Water Efficiency Leaders Among Key Water-Using Enterprises and Industrial Parks" released by the Ministry of Industry and Information Technology and three other government agencies.

Qingdao Special Steel

The Company has implemented robust water resource management through strict process controls and increased investment in technical upgrades, achieving steady improvements in water utilization efficiency. Over the past three years, freshwater consumption per ton of steel has shown annual declines, with non-conventional water source utilization exceeding 65% and water recycling rate reaching 98.4%. In 2024, Qingdao Special Steel received multiple honors including Qingdao's "Water Conservation Benchmark Enterprise", Shandong Province's "Water-Saving Enterprise" and "Water Conservation Benchmark Unit", as well as the national "Water Efficiency Leader" designation for key water-using enterprises.

Tianjin Pipe

Focused on water conservation targets, the Company strengthened source water management and made industrial wastewater treatment/recycling a key channel for water saving. In 2024, its graded water supply project achieved remarkable results - saving over 2 million tons of freshwater annually while generating more than RMB 8 million in economic benefits. The condensate water recovery project reclaims nearly 80,000 tons annually. These efforts earned Tianjin Pipe the national "Water Efficiency Leader" title.

Case

Zhejiang Steel Tube – Multi-Dimensional Water Conservation Controls Reduce Freshwater Consumption

Zhejiang Steel Tube has implemented multiple measures across water-intensive processes to reduce freshwater usage and improve utilization efficiency. Key initiatives include: optimization of cooling bed spray systems, steam condensate recovery systems, rainwater collection and utilization, and retrofitting of flaw detector water valves. These measures have collectively reduced the Company's freshwater consumption.

Wastewater Management

The Company systematically deploys wastewater reclamation infrastructure, adopting a "rainwater-sewage separation and clean-contaminated water diversion" drainage layout. Through staged utilization of industrial wastewater and final effluent treatment at wastewater treatment stations for production reuse, we enhance water recycling rates while reducing wastewater generation, striving to achieve zero industrial wastewater discharge.

Case

Qingdao Special Steel – Implements Coking Phenol-Cyanide Wastewater Treatment Project to Achieve Zero Wastewater Discharge

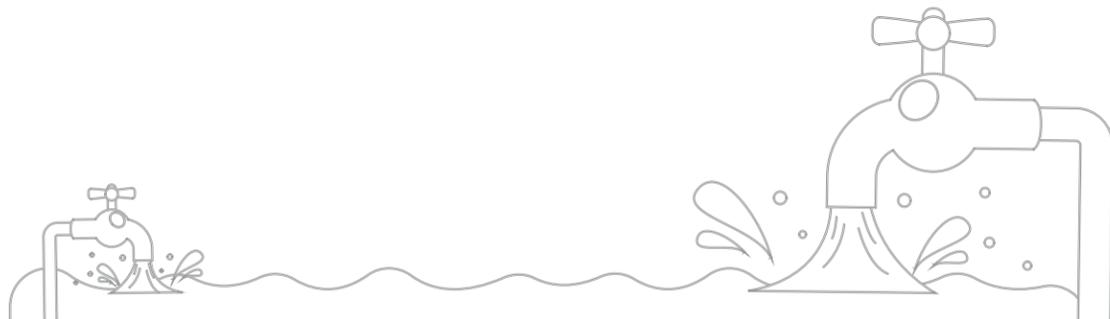
Qingdao Special Steel focuses on the recycling of water resources and continuously strengthens the recovery and utilization of wastewater, implementing water-saving projects such as coking phenol cyanide wastewater treatment and the reuse of treated wastewater for further processing. The coking phenolic-cyanide wastewater treatment uses the domestically leading "AAO + deep treatment" process, with the recycled water used for makeup water in the coking plant's recirculation system and the concentrated brine used for blast furnace slag flushing. Except for the coking process, the production drainage from all other processes, after preliminary treatment, is made into treated wastewater, which is then reused in the centralized water treatment center for further deep treatment to produce demineralized and high-purity water. The main process adopts the "full membrane method" to achieve zero wastewater discharge.

Water Risk Management

In terms of water resource risk management, the Company adheres to the principles of scientific rigor and sustainable development, and is committed to building a comprehensive and professional water resource protection system. The Company continuously monitors the current status of water resources in the factory operation areas, and uses external tools such as the World Wildlife Fund's Water Risk Database (WWF Water Risk Filter) to conduct a preliminary assessment of the water resource risks faced by each operation site, classifying the risk levels into low, medium, and high.

Based on the risk assessment results, the Company's subsidiaries face water risks at low, medium, and high levels. The Company has formulated targeted water resource management strategies, aiming to effectively anticipate and mitigate potential future water resource shortages through technological innovation, implementation of efficient water-saving measures, and promotion of water resource recycling and other diversified means.

The Company deepens the application level of risk assessment results, and through detailed analysis of the water risk situation of surrounding communities and all stakeholders, strives to minimize potential internal and external negative impacts, promoting harmonious integration and joint development between the enterprise and society. The Company strictly complies with water resource management laws and regulations, has not had any incidents of illegal sewage discharge or other water resource-related risk accidents, and has not received any penalties for water resource management issues.



Protecting Biodiversity

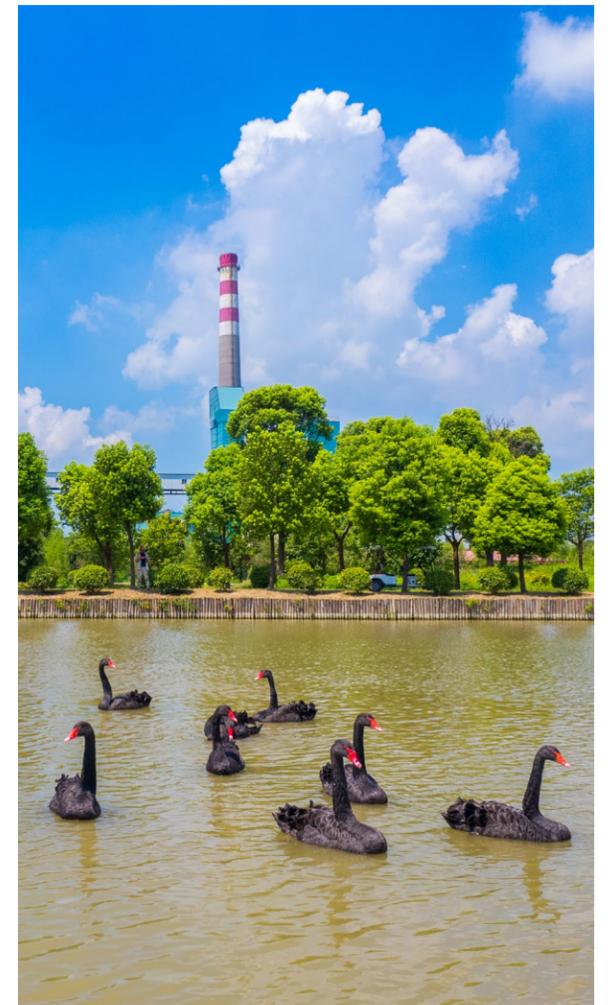
The Company strictly complies with the *Environmental Impact Assessment Law of the People's Republic of China* and other relevant laws and regulations. In accordance with the *Convention on Biological Diversity*, *Opinions on Further Strengthening Biodiversity Conservation*, and the "Kunming Declaration", the Company has formulated and published the "Biodiversity Policy Statement", committing to ensuring that its production and business operations do not damage the ecology or harm biodiversity, and is dedicated to building a harmonious coexistence between humans and nature on Earth.

Risk Identification and Assessment

The Company continuously strengthens the identification of biodiversity-related risks, improves the assessment and prevention mechanisms for biodiversity risks, and correctly assesses the potential environmental pollution and possible natural disasters associated with production and business activities' impact on biodiversity.

The Company has performed quantitative biodiversity risk assessments employing the World Wildlife Fund's Biodiversity Risk Filter. The assessment framework incorporates dual analytical dimensions: operational dependence on ecosystems and potential environmental impacts. This methodology enables systematic evaluation of critical risk parameters, such as regional biodiversity importance, basin-level physical risks, and ecosystem dependency metrics, across all Company-operated locations. Based on authoritative data, the Company has conducted a preliminary multi-dimensional assessment of biodiversity risks in the current operating areas and surrounding environments, as well as upstream and downstream watersheds. The assessment results show that the Company's operating locations face medium and high levels of biodiversity risks.

According to the conclusions of the biodiversity risk assessment, the Company has formulated short-term and long-term management plans aimed at minimizing the impact of business operations on biodiversity. The Company has specially developed biodiversity risk mitigation action plans for high-risk areas and has widely implemented ecological protection and compensation measures to ensure that business activities do not have any negative impact on biodiversity. In addition, the Company is optimizing its operations and supply chain layout to ensure that operating locations are away from biodiversity-sensitive areas and is promoting suppliers to follow the same principles. At the same time, the Company is actively seeking external cooperation to more deeply engage in biodiversity protection and ecological restoration work.



Operational Area Initiatives

The Company, in accordance with policies guiding the ecological protection red line, strengthens the concept of ecological protection and conducts strict research and deliberations to justify the location and layout of factories, to keep away from ecologically sensitive areas.

New Projects

Throughout the entire process of construction and operation of new projects, biodiversity protection and land use assessments must be conducted in accordance with relevant requirements. This ensures that project development and operational sites are far from ecological protection red lines and ecologically fragile areas, protecting natural habitats, wetlands, forests, wildlife corridors, and agricultural land, and minimizing adverse impacts on the surrounding environment and communities.

Existing Plant Areas

Some of the Company's plant areas include animal sanctuaries with animals such as sika deer, peacocks, and swans. The air quality, water quality, and noise levels in these plant areas meet the environmental requirements for the survival of wild animals. The Company regularly monitors the water quality of breeding waters, ensuring that the water used for animal breeding is production water that has been treated to meet quality standards.

In line with the concept of "shifting from primarily creating corporate economic benefits to a dual improvement of social and economic benefits through green manufacturing", and in accordance with requirements such as creating provincial industrial tourism and cultural scenic spots, the Company carries out activities for the "Yangtze River Protection", conducts routine monitoring of soil and groundwater, and constructs a harmonious ecological circle.

Case

Tianjin Pipe - Conducting routine monitoring of soil and groundwater to effectively strengthen soil pollution prevention and control

After being included in the key supervision units for soil and groundwater in Tianjin, Tianjin Pipe has carried out a comprehensive inspection of soil hazards and conducted the first self-monitoring of soil and groundwater. This year, Tianjin Pipe inspected key locations or facilities during normal production and operation to prevent the seepage, loss, and dispersion of toxic and harmful substances that could cause soil pollution. The Company is effectively strengthening the prevention and control of soil pollution, gradually improving soil environmental quality, and implementing the main responsibility for pollution prevention and control.

Collaboration and Awareness Building

The Company actively seeks external cooperation opportunities to make more profound and substantive contributions to biodiversity conservation and ecological environment restoration.

Through multi-channel communication and publicity, the Company strengthens interaction with social organizations and media to enhance biodiversity awareness among the Company, suppliers, partners, and the public. Biodiversity-themed education and training are conducted for employees and stakeholders to raise awareness and professionalism in biodiversity protection.

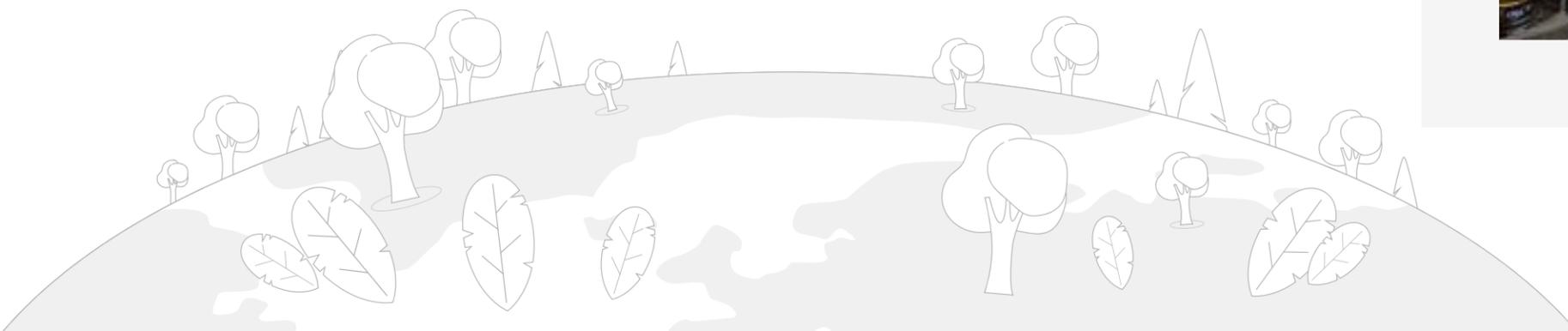
Case

Jingjiang Special Steel – Organizes Ecological Reserve Volunteer Activity to Create Comfortable Living Space for Animals

Jingjiang Special Steel held a wall-painting volunteer activity in the deer enclosure of its ecological reserve. Volunteers showcased their creativity and talent by using the deer enclosure walls as canvases to paint vivid murals, further raising public environmental awareness and promoting biodiversity conservation.



Volunteers painting murals on the deer enclosure walls in the ecological reserve



04 Safeguarding the Journey with Care

Setting the Benchmark for a Happy Workplace

Talent is the core driving force for the sustainable and stable development of an enterprise and the key factor in promoting and realizing the creation of corporate value. CITIC Pacific Special Steel is committed to building a workplace that is equal, fair, and transparent. We focus on the occupational health and safety of our employees, enhance their well-being, meet their aspirations for a better life, and achieve win-win cooperation between the enterprise and its employees.

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Highlights and Achievements in 2024

- Xingcheng Special Steel has successfully passed the SA8000 Social Accountability certification
- All subsidiaries have achieved a **100%** pass-rate in the ISO 45001 "Occupational Health and Safety Management System" certification
- Training sessions had a total of **72,029** participants, with a training expenditure of **8.6513** million yuan

Response to SDGs



Staying True to the People-Oriented Commitments

The Company respects and protects the legitimate rights and interests of employees, continuously improves the talent management model, provides a wide range of training and promotion opportunities, constantly refines the remuneration and welfare system, and shares the fruits of development with employees.

Safeguarding the Rights and Interests of the Our People

The Company strictly complies with the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, and the *Regulations of the People's Republic of China on the Implementation of the Labor Contract Law*, and in accordance with international standards such as the *Universal Declaration of Human Rights*, the *Declaration on the Protection of All Persons from Enforced Disappearance*, and the *ILO Declaration on Fundamental Principles and Rights at Work*, has formulated documents including the "Management System on Labor Employment", the "Employee Recruitment Management Measures", and the "Human Rights Policy Statement" to implement human rights protection measures. The Company continuously carries out surveys and assessments on human rights-related issues and conducts Responsible Business Alliance (RBA) Audits. Based on the assessment results, it continuously improves its internal human rights management mechanisms to ensure that contractors, suppliers, and business partners adhere to the same employee rights and interest standards. In 2024, no nonconformities were found, meeting the requirements of customers for suppliers' social responsibility and human rights management.

“CITIC Pacific Special Steel and its subsidiaries respect and comply with the standards and laws on employee rights and interests in their business undertakings, and follow the same employee rights and interest standards adopted by their contractors, suppliers, and business partners.”



The Company signs collective agreements with trade union representatives or employee representatives, specifying the rights and obligations of both parties in terms of remuneration, working hours, and welfare protection. This year, the signing rate of employee collective agreements reached 100%.

Case Xingcheng Special Steel — Consolidating the Foundation of Human Rights Governance and Successfully Passing the SA8000 Social Accountability Certification

Xingcheng Special Steel has successfully passed the SA8000 Social Accountability certification by the International Certification Alliance (IQNET). The certification process involved a comprehensive audit of standard elements such as the establishment of the system, the working environment, remuneration and benefits, and employee interviews. The Company has obtained certification in aspects such as system operation, occupational health, employee rights, and labor protection. In terms of human rights, Xingcheng Special Steel strictly adheres to international labor standards, ensuring that employees have equal employment opportunities, fair remuneration, and a safe and healthy working environment. Meanwhile, the Company actively safeguards the legitimate rights and interests of employees by establishing and improving communication mechanisms to address employee concerns in a timely manner. The successful passing of the SA8000 certification marks a solid step for Xingcheng Special Steel on the path of social responsibility practice.



Upholding Equality and Inclusion

The Company adheres to the principles of equality and inclusion, clarifying the basic principles in aspects such as employee management, workplace, and remuneration and benefits. It prohibits any discriminatory acts based on personal characteristics such as race, nationality, ethnicity, belief, religion, social status, age, and gender (strictly prohibiting any form of discrimination against female workers, especially pregnant women). The Company also strictly forbids the recruitment of child labor, forced labor, physical punishment of employees, and mental coercion and verbal abuse. Through diversified communication channels, regular reviews, and a comprehensive training system, the Company continuously builds a workplace environment that respects differences, safeguards dignity, and ensures fair development, and is committed to providing a safe and equal development platform for all employees.

- Total number of employees: **30,960**
- Labor contract signing rate: **100%**
- In 2024, a total of **820** college students were recruited through campus recruitment, a year-on-year increase of **77.5%**
- Number of people with disabilities employed: **140**

Supporting Our People in Their Self-Actualization

The Company attaches great importance to talent development and training, provides employees with a variety of career development channels, and builds a comprehensive training system to support the long-term development of every employee.

Development of Our People as a Top Priority

The Company values the development and growth of employees, formulates and continuously optimizes the "Employee Remuneration and Career Path Management Measures", aiming to provide employees with fair and transparent career development paths and solid institutional support for their growth.

The Company offers two career development options for its employees – managerial and technical – as part of its commitment to broadening their career options and development paths and promoting the synergistic integration of personal and Company development. Each subsidiary, in view of the type, nature, and direction of work and in light of their strategy and the employees' specific career development needs, formulates its customized employee career development measures, to provide employees with varied and systematic career development planning and promote their rule-based and standardized people building in compliance with best practices.

In addition, the Company actively implements an internal recruitment system, encouraging employees to participate in cross-departmental and cross-sequence position competitions in line with their career plans to stimulate organizational vitality and expand the horizons of talent. Meanwhile, the Company strengthens talent exchange and job rotation mechanisms, promoting employee mobility and learning across different positions through cross-enterprise exchanges or special task forms, deepening employees' comprehensive understanding of the Company's business, and building a high-quality talent team.

Enhancing Employee Training

As part of its efforts to vigorously push forward with its "driven by talent" initiative and adhere to the philosophy of "running a business like running a school" in its human resources management, the Company has established a talent cultivation mechanism that spans across all levels, and each year, devote serious resources to prepare its people development plans, build organizational systems to promote training, and design internal training courses and learning roadmaps tailored to the different career development paths of the people. This year, the Company developed the "2024 Annual Training Program Plan", which included five modules: expert lectures, Party School cadre education, professional talent training, business capability enhancement, and external training. This training plan was designed for all employees, covering all age groups and job levels, and ensured 100% employee participation. Through various specialized training courses, action plans, and online learning, the Company empowers employees' career growth, continuously improves their professional skills and overall quality, and lays a solid talent foundation for the Company's long-term development.



In terms of cadre education and training

- the focus is on the theoretical education of the Party, the education of Party nature, and the training of job performance capabilities, with an emphasis on knowledge training. The study of intra-party regulations and national laws and regulations by leading cadres is incorporated into the cadre education system to comprehensively improve the quality and capabilities of cadres.



In terms of cultivating versatile talents

- a professional talent pool that meets the requirements of the new situation and has the ability to create first-class work is cultivated to support the implementation of the creation of world-class enterprises.



In terms of business and technical research

- the proportion of internal experience sharing and skill inheritance is increased, and the "passing on knowledge, helping, and guiding" role of leading cadres and expert consultants is fully utilized. Through training and learning key points, specific and implementable solutions are formed to further enhance the practicality of training.



In terms of improving operational skills

- the training application and iterative updating of the compiled training courseware and extracted operation methods/cases are strengthened, with a focus on skill improvement training for new employees, transferred employees, and employees whose skills do not meet the standards, to consolidate the foundation of training.



In terms of college student training

- in combination with the Company's "Star Plan", college students are organized to undergo rotational training in batches to help outstanding college students grow and develop.

The Company continues to deepen its teaching and learning system to promote innovation and change, shifting the focus from talent cultivation to strategic support. In 2024, the Company completed its preliminary design of its training quantification matrix for "delivering corporate performance through training", which extends from the quantification of the people's "learning capabilities" to the quantification of the "impact" on corporate performance. In two to three years, the quantification is expected to demonstrate the effect of translating training and knowledge acquisition into corporate performance. The quantification of the "impact" matrix, through horizontal indicators that quantify the training's contributions to performance and empowerment and through vertical indicators that quantify the training's contributions to the delivery of the "major targets", will prove the value and effect of our training programs in tangible terms.



The Company independently carried out

- Training programs: **253**
- Courses: **1,364**
- Total training participants: **72,029**
- Training satisfaction rate: **92.76%**
- Total training hours: **9,783.75**
- Training expenditure: **8.6513** million yuan

- External training programs attended at the request of higher authorities: **61**, with a total of **118** attendees
- Online courses across CITIC Pacific Special Steel's business segments, system-wide online courses, and self-study courses on the CITIC Pacific Special Steel People APP: **47** courses, with **44,600** participants
- Self-study course launch rate on "CITIC Special Steel Cloud Classroom": **99.3%**, active rate: **84.1%**, course completion rate: **95.9%**
- Organized, sorted, and integrated training materials: **6,912**



Target Group	Training Program	2024 Training
New College Graduates	Phase III "Star" Recruit Training Camp	Recent college graduates participated in several courses, including "Company's Development History and Corporate Culture" and "Company's Scientific and Technological Innovation Achievements", and completed the study of five modules: "Three Loves and One Strength", English proficiency, team-building activities, humanistic care, and a meeting with senior management. This training program helps new employees understand the Company's development overview, corporate culture, management model, and organizational structure, ensuring that each new member can quickly integrate into the Company. A total of 388 new employees from various subsidiaries participated in this training.
Management Talents	Mount Tai Assembly 2024 of the Climbing Action	New cadres participated in the 10th phase of the Company's Youth Cadre Capability Enhancement Training, which included five modules: "Cadre Quality, Management Awareness, Business Operations, Innovation and Change, and Outdoor Team-building". This training is committed to cultivating leaders with "three strengths" (self-confidence, innovation, and execution) and innovative thinking and comprehensive abilities. The training lasted for one month, with 78 new cadres participating.
Operational Talents	"Elite Blue-Collar" Program	Focusing on key process positions, the "Elite Blue-Collar" skill talent training project has sorted out standardized operating methods, cumulatively improved 96 key control indicators of on-site production at key process positions, promoted more than 2,000 people to achieve skill level upgrades, and more than 300 people to obtain skill honorary titles. Relying on master studios and innovation studios, skill breakthroughs and apprentice training have been carried out, cultivating top craftsmen such as national model workers and China Skills Grand Prize winners, injecting strong momentum into the front line of production.
Technical Talents	Safety Management Talents Phase IV Group Reserve Safety Expert Training Class	Technical talent training mainly focuses on specialized technical training in equipment, safety management, etc. Among them, the backup safety expert training organized relevant technical personnel to conduct on-site practice at various subsidiaries, with a total of 76 people participating and lasting for 18 days. They completed the compilation of new safety risk identification and control templates for four majors: ironmaking, steelmaking, rolling, and coking.
	Digital Talents Digital Talent Enhancement Training	For digital talents, a total of six training programs were organized, including artificial intelligence platforms and advanced database applications, with a total of 166 people participating. This training has prepared backup safety experts and increased the proportion of technical talents.

Case

Starlight Adds Radiance, the 2024 New College Graduate Rotational Training and High-level Meeting Concludes Successfully

In September 2024, the Company held the Phase III "Star" Recruit Training Camp and the High-level Meeting for the 2024 New College Graduate Rotational Training. The Phase III "Star" Recruit Training Camp achieved integration and innovation. While retaining the traditional collective teaching format, it also specially added interactive teaching formats, such as climbing Huangshan Mountain and the Know&Know Exchange Meeting. These activities were designed to encourage new employees to break through geographical barriers, build a platform for communication and exchange, gain a deep understanding of the corporate culture and industry trends, and clarify their career development paths.



Case

Implementing "Point-to-Area" Knowledge Sedimentation and Focusing on Professional Technical Talent Development

The Company actively organizes employees to extract and summarize personal experience, and fully leverages the role of internal trainers to build a professional course system. Taking ironmaking, steel tube, and electric as pilot majors, the Company has organized more than 60 internal trainers to complete the compilation of internal training standard textbooks with 15 chapters and 77 sections. The textbooks developed by the Company are closely integrated with actual production, incorporating on-site production processes, equipment parameters, and typical cases into the textbooks to gradually improve the course system and implement the development concept of "knowledge sedimentation organizer".

Case

Daye Special Steel - "Star Plan" College Student Mentorship and Tracking System Development

Daye Special Steel has established a "one person, one file" development plan and a dual-mentor mechanism (middle management mentor and on-the-job mentor) to systematically carry out a 3-year tracking development plan divided into 4 main stages (onboarding training, rotational internship, targeted development, and growth) for newly hired college students, providing targeted guidance.

Daye Special Steel has independently developed and launched a college student tracking development system, and has also compiled a system operation manual to provide training for system administrators and college students in various units. The system, which uses a Web platform architecture, digitally designs 9 online forms for each student's 3-year tracking period, covering all stages and links of the development period, enabling the training journey and professional growth of college students to be visually displayed. The successful deployment of the college student tracking development system marks a solid step for Daye Special Steel in the informatization construction of talent development management.

Guarding the Defense Lines for Safe Production

Safety is the lifeline for the stable, healthy, and sustainable development of an enterprise. Safeguarding the health and safety of employees is the Company's top priority in production and business activities, and has established the concept that "work safety is the red line, the bottom line, as well as the lifeline." It strengthens the responsibility for work safety and eliminates the occurrence of safety accidents.

The Company has set the long-term goal of "building a long-term safety management mechanism and creating an intrinsically safe special steel group." This year, the Company has formulated the following safety work objectives:

Indicator Name	Unit	Target Value for 2024	Actual Value for 2024
Work-related Injury Frequency (including contractors)	Number of injuries per million total working hours	< 0.2	0.03
Work-related Injury Severity Rate (including contractors)	Total lost working hours per million total working hours	< 170	17

Safety Management System

In compliance with laws and regulations such as the *Law of the People's Republic of China on Work Safety*, the *Law of the People's Republic of China on Prevention and Control of Occupational Diseases*, and the *Fire Control Law of the People's Republic of China*, the Company has formulated a series of safety management systems, including the "Regulations on the Organization, Responsibilities", and "Working Procedures of the Work Safety Committee", the "Work Safety Responsibility System for All Employees", the "System for the Investigation and Management of Work Safety Accident Hidden Dangers", the "Emergency Management System for Work Safety Accidents", the "Implementation Measures for Safety Performance Appraisal", the "Occupational Health Management System", and the "Safety Management System for Contractors". This year, the Company revised the "Work Safety Responsibility System for All Employees" to establish and improve a work safety system where "every level assumes responsibilities, everyone has responsibilities, and everyone fulfills their own responsibilities", to prevent and reduce work safety accidents.

The Company and all its subsidiaries have established Work Safety Committees, which are responsible for implementing the national laws, regulations, and policies on work safety, ensuring safety investment, and organizing the completion of the work safety targets set by the board of directors. In addition, the Company continues to strengthen the supervision and inspection of work safety performance to build a responsibility mechanism where "everyone is responsible for safety".

100% of the Company's subsidiaries have passed the ISO 45001 "Occupational Health and Safety Management System" certification. The Company organizes an internal audit of the occupational health and safety management system once a year and hires a third-party team to conduct an external audit of the occupational health and safety management system once a year.



100% of the Company's subsidiaries have passed the ISO 45001 "Occupational Health and Safety Management System" certification

Work Safety Management

The Company actively improves and implements a variety of safety management measures, systematically standardizes the Company's safety production management, and comprehensively improves production safety.

Work Safety Performance

The Company, in combination with actual production and business operations, breaks down health and safety-related work and effectively links it with the performance of the Company and its subsidiaries, establishing a comprehensive safety performance evaluation system to promote the orderly development of the Company's health and safety work.

CITIC Pacific Special Steel Safety Performance Evaluation System

Strong Linkage with the Performance of the Safety and Environmental Protection Department

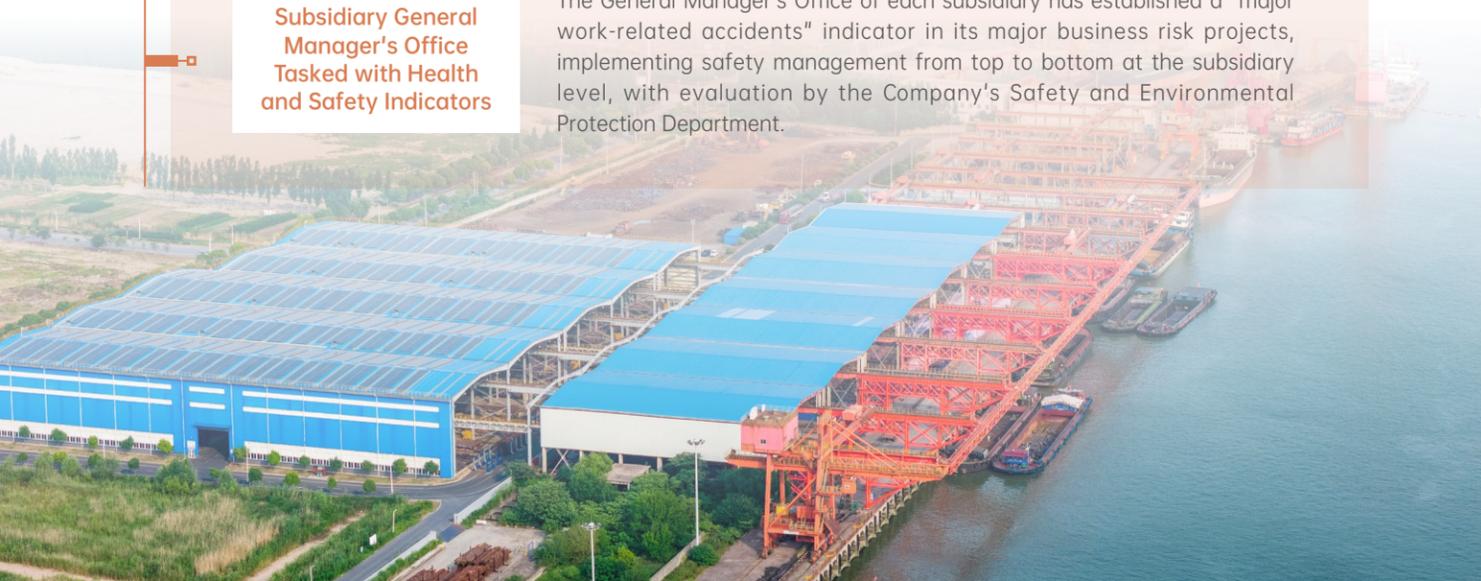
The Safety and Environmental Protection Department oversees the Company's safety production work. In the organizational performance indicators of the Safety and Environmental Protection Department, key indicators are quantified, with targets set for "zero serious and above work-related accidents per month" and "100% timely handling rate of work-related accidents", steadily advancing the management of occupational health and safety.

Development Department Tasked with Key Project Safety

The Development Department is involved in the process management of the Company's engineering and technical transformation projects. In the organizational performance indicators of the Development Department, a "key project management" assessment indicator is established, with the goal of "0 safety and quality accidents in projects", specifically implementing safety control for the Company's engineering and technical transformation projects.

Subsidiary General Manager's Office Tasked with Health and Safety Indicators

The General Manager's Office of each subsidiary has established a "major work-related accidents" indicator in its major business risk projects, implementing safety management from top to bottom at the subsidiary level, with evaluation by the Company's Safety and Environmental Protection Department.



Safety Risk Management and Control

The Company closely organizes various work safety activities around the dual prevention mechanism of risk grading control and hidden danger investigation and management. It establishes a responsibility system for risk control and a working mechanism of "leading cadres assume an area-based division of work" to comprehensively manage risks and ensure production safety.

Risk Control

Each year, the Company carries out risk identification and evaluation of work activities and the site, formulates risk control measures, draws a four-color map of safety risks, and establishes a list of job safety risk control and job abnormality handling cards. This truly implements risk control and enhances the ability of all employees to identify risks and handle abnormalities.

Hidden Danger Investigation and Management

A comprehensive hidden danger investigation system is established. From top to bottom, the Company carries out hidden danger investigation and management work at various levels, including comprehensive, professional, seasonal, holiday, and job levels. At the same time, through themed publicity activities, the Company organizes various hidden danger investigation activities such as "snapshots" and "everyone finds faults" to increase employees' enthusiasm and participation in hidden danger investigation. Gradually, a good atmosphere of everyone is responsible for safety" is formed. The Company earnestly implements the work deployment of national ministries and commissions, deeply studies and effectively applies the criteria for identifying major accident hidden dangers, and continuously carries out special investigation and management of major accident hidden dangers to ensure dynamic zeroing of major accident hidden dangers.

Emergency Response and Drills

In compliance with legal requirements such as the *Law of the People's Republic of China on Emergency Response to Sudden Incidents*, the *Regulations on Emergency Response to Production Safety Accidents*, and the *Measures for the Administration of Emergency Response Plans for Production Safety Accidents*, and in combination with the results of safety risk identification and evaluation, the Company has established a comprehensive emergency management organization for safety accidents, an emergency management system for safety accidents, and an emergency rescue plan for safety accidents.

The Company has established an emergency rescue team, staffed with full-time and part-time emergency rescue personnel, and equipped with emergency rescue equipment and supplies. Meanwhile, the Company actively carries out emergency capability training for employees and skill training for full-time and part-time emergency rescue personnel, continuously improving the level of emergency management and the ability to respond to emergencies. The Company regularly organizes emergency drills and, through activities such as skills contests and emergency rescue knowledge competitions, effectively enhances employees' emergency response skills and capabilities, safeguarding the Company's safe development.

Safety Management of Contractors

The Company has formulated the *Safety Management System for Contractors* to set out the safety management requirements for its contractors. Each subsidiary has developed its own safety management system and framework for contractors based on this system, refining management throughout the entire process and continuously promoting the improvement of the contractors' safety management performance levels.

The Company pays serious attention to the safety management of its contractors and has established an evaluation system for the safety-related performance of the contractors. Its dedicated efforts to improve the safety awareness and safety management capabilities include regular assessment of the safety-related performance of contractors, disciplinary measures against those in violation of safety-related prohibitions, and requiring 100% participation of all employees of the contractors in safety-related meetings and training programs.

Safety Management Initiatives of Major Subsidiaries for Contractors

Xingcheng Special Steel	<p>Xingcheng Special Steel manages contractors in accordance with the principles that "work can be outsourced, but safety and labor supervision cannot be outsourced", "whoever employs the labor is responsible", and "whoever is in charge is responsible". In addition, the Company fully implements the "five-level management model", and specifically carries out the following work:</p> <ul style="list-style-type: none"> Management system The Company's internal systems, management mechanisms, and organizational structure have all been optimized. By adding safety supervision, formulating duty performance lists, establishing long-term mechanisms, and setting up professional committees, the Company has comprehensively strengthened and improved the safety management and self-management capabilities of contractors; Behavioral norms Contractor units are required to configure safety management organizations and personnel as required, hold regular safety meetings, strengthen labor management, and establish a guardian database and small-class management mechanism to comprehensively improve on-site operation safety management levels; Inspection and training The Company compiles safety training materials and question banks to enhance project safety training. Business management departments regularly conduct special inspections, discuss management challenges, and carry out duty performance spot checks to reinforce the safety management capabilities of contractor units.
Daye Special Steel	<ul style="list-style-type: none"> Management mechanism A mechanism for dividing areas of responsibility and providing assistance from the local level to departments has been established to ensure the implementation of the "three managements and three musts" requirements. For the first time, an "area-based division of work" mechanism² for members of the General Manager's Office has been created. Behavioral norms Regularly organize and hold promotion meetings for "contractor safety management improvement" to continuously enhance the contractors' ability for independent safety management. Safety assessment Conduct annual comprehensive safety management reviews for long-term contractor units, with the evaluation results serving as an important basis for the annual assessment of contractors.
Qingdao Special Steel	<ul style="list-style-type: none"> Safety Audit Before bidding, an inspection is conducted to review the safety management and emergency response capabilities of contractors. Project managers and safety management personnel are required to take exams, and only those who pass are permitted to enter the factory premises. Successful bidders must submit and have twelve safety-related documents reviewed and approved by relevant departments before commencing work.

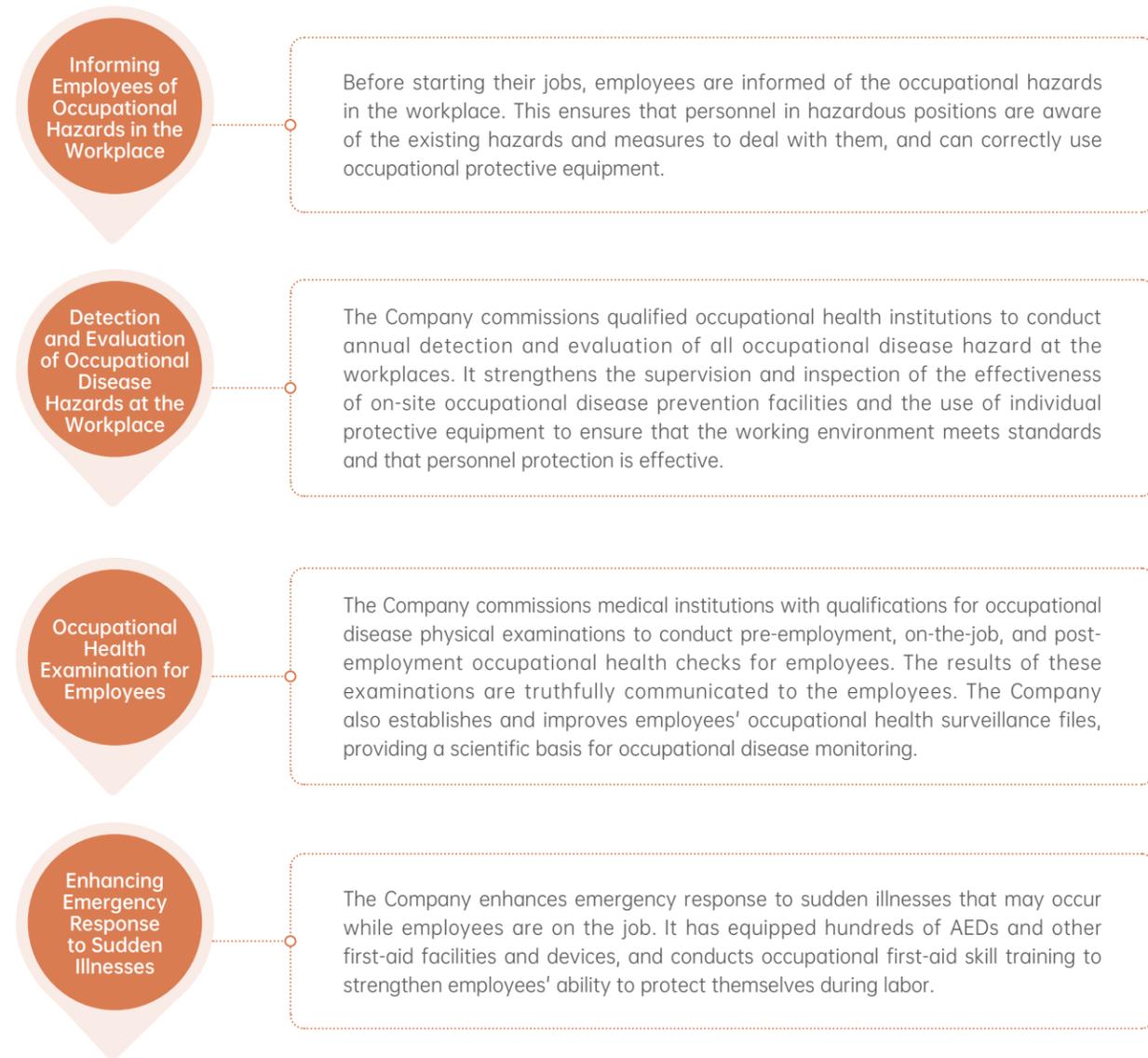
² Through research, inquiries, and on-site inspections, a comprehensive understanding of the following aspects within the safeguarded units is achieved: the fulfillment of safety responsibilities by middle-level cadres, the implementation of major risk control measures, the establishment and execution of regulations at the plant level, the conduct of safety training and emergency drills, the implementation of important safety directives and requirements from the Company and Daye Special Steel, as well as the status of on-site 5S management.



Tianjin Pipe	<ul style="list-style-type: none"> Management Mechanism The "Twelve Safety Audits" have been formulated, requiring contractors to establish regulations, ensure safety investment, appoint full-time safety officers and certified workers, regularly provide safety production education and training for employees, prohibit the use of overage workers and child labor, and implement occupational disease prevention measures.
Jingjiang Special Steel	<ul style="list-style-type: none"> Management Mechanism The "six-in-one" management model is implemented, covering six dimensions of responsibility implementation, hidden danger investigation, safety training, emergency drills, risk control, and evaluation and renewal. A unified management model with integrated arrangements, requirements, standards, management, and assessment is established. Safety Audit Clarify the management requirements for contractors in all links, including bidding and tendering, factory entry review, and process control.

Protection Against Occupational Hazards

The Company and its subsidiaries have identified occupational hazards in the production process (such as high temperature, dust, noise, carbon monoxide, benzene, coke oven emissions, etc.) and have implemented various measures to effectively protect employees' occupational health and continuously improve the management level of occupational health and safety.



Case

Daye Special Steel - Science Education on the Prevention and Treatment of Sudden and Frequent Diseases at Work, and Creating a Good Health Management Atmosphere

Daye Special Steel has organized a series of popular science activities, covering the prevention of sudden cardiovascular and cerebrovascular diseases, healthy eating habits, scientific fitness methods, emergency drills for heatstroke, and special training on the use of medicines and drugs. Volunteers have been organized to go deep into various teams to inspect and guide the actual operation of cardiopulmonary resuscitation emergency rescue, and to dynamically track and manage the blood pressure monitoring and drug intake of employees with high blood pressure, committed to creating a good health management atmosphere where "everyone is the first responsible person for their own health."

Case

Qingdao Special Steel - Establishing Care Records and Improving Control Measures

Qingdao Special Steel has organized health check-ups for all employees and conducted special occupational health check-ups for positions with occupational hazards to help employees promptly understand their own health conditions. Care records have been established for key groups, and a joint protection and mutual protection mechanism has been built. Pre-shift meetings are used to conduct blood pressure tests, balance beam tests, and other detection activities to ensure work safety. Special training on the use of emergency AEDs has been organized in major production sites and office areas to ensure that everyone can use and respond in emergencies. Emergency drills for heatstroke prevention have been conducted, and heatstroke prevention medicines and quick-acting heart-saving pills have been distributed. A health station has been set up in the factory area, equipped with professional personnel to guide employees in the use of medicines, emergency rescue, and handling of emergencies, to consolidate the foundation of good health management.



Pre-shift Blood Pressure Measurement



Medicine Storage

Enhancing Safety Culture

The Company has formulated the "Safety Culture Charter", and its subsidiaries have established and improved their own safety cultures based on this document. Through various means such as publicity, education and training, and themed activities, the Company continuously enhances the atmosphere of safety culture. By leading with culture, the Company continuously standardizes employees' work behaviors and improves safety management performance.

Case

Daye Special Steel - Emphasizing Red Cross Training and Certification to Enhance Employees' First Aid Skills

Daye Special Steel places great emphasis on the Red Cross training and certification for its employees. Since 2022, the Company has successively arranged for employees to participate in Red Cross-related training to learn first aid skills. By the end of 2024, a total of 1,158 employees had obtained Red Cross first aid certificates.



Employee Participation in First Aid Training

Case

Jingjiang Special Steel - Conducting Daily Safety Training Activities Such as "Safety Fun Sports Meeting" and "Firefighting Skills Competition"

In 2024, Jingjiang Special Steel comprehensively strengthened safety management and organized a variety of rich and colorful safety training activities. Throughout the year, a total of 207 daily safety training sessions were held, covering 1,789 employee participants. At the same time, Jingjiang Special Steel made full use of online teaching platform resources to successfully hold 24 sessions of registered safety engineer training courses, laying a solid foundation for cultivating professional safety talents. To test the learning outcomes of employees, Jingjiang Special Steel established a safety professional examination question bank and organized 12 exams within the year, effectively promoting the consolidation and application of employees' safety knowledge.

Actively responding to the national "Work Safety Month" and "Fire Safety Publicity Month", a series of characteristic activities such as "Finding Hidden Dangers Around Us", "Fun Safety Sports Meeting", "Positive Pressure Air Respirator Wearing Competition", and "Firefighting Skills Competition" were organized to enhance employees' practical operation ability and safety awareness.



"Safety Month" Event Scene

Shaping a Harmonious Workplace Ecosystem

The Company is committed to creating a harmonious and friendly corporate atmosphere, valuing employee feedback and opinions, providing a variety of communication methods, offering diverse benefits, and organizing a wide range of cultural and sports activities. It focuses on the physical and mental health and career development of every employee, striving to build a warm, harmonious, and vibrant workplace environment.

Promoting Democratic Communication

The Company is dedicated to ensuring smooth communication channels for employees. Each subsidiary has established trade union homes and employee homes to facilitate feedback from employees. In addition, the Company regularly holds democratic symposiums and college graduate symposiums to build harmonious labor relations with employees. The Company conducts satisfaction surveys covering all employees, categorizing them by age group, gender, position level, and ethnicity to understand their satisfaction with the work environment, job content, and benefits. This helps establish good communication channels with employees and enables the Company to promptly adjust and improve management strategies. In 2024, the Company's employee satisfaction reached 95%.



In 2024, the Company's employee satisfaction reached

95%

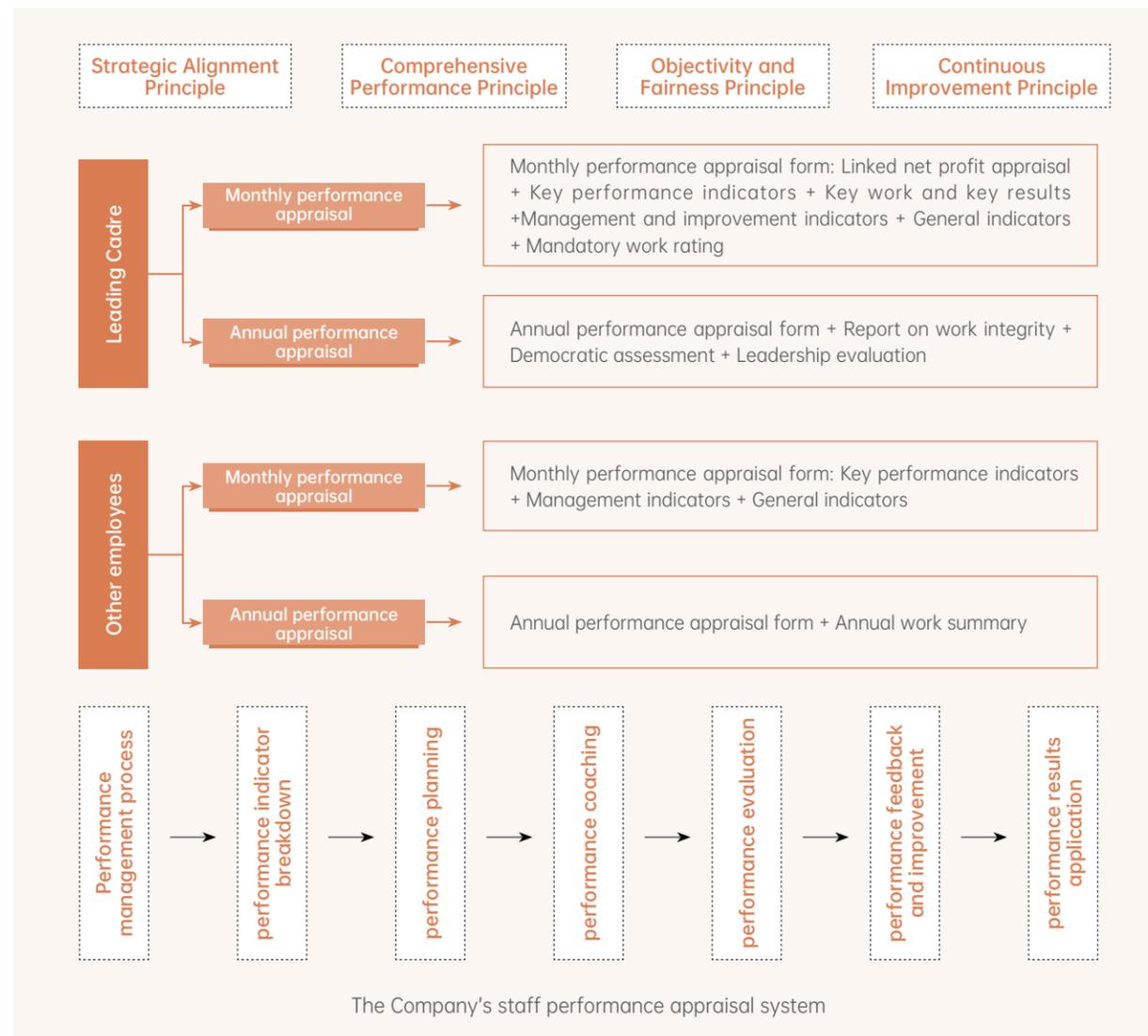
Case

Qingdao Special Steel - Innovating the Hearing System to Fully Protect Employees' Rights and Interests

Qingdao Special Steel is committed to building harmonious corporate relationships and continuously strengthening democratic management. By optimizing the Staff Assembly System and conducting in-depth online and offline opinion collection and discussion on important regulations such as the "Employee Code of Conduct" and "Attendance Management Regulations", the Company ensures that employees' voices are fully heard and responded to. The Company has established a hearing system and mechanism, allowing employees to apply for hearings on work-related issues, which are then coordinated by the trade union with professional departments to conduct fair hearings. It has organized 11 staff representative workshops to address the people's concerns face to face, and widely collects staff feedback and recommendations through multiple channels, including the QR code of the workers union and emails, to fully safeguard the employees' right to be informed, right to participate, and right to oversight.

Improving Remuneration and Benefits

The Company adheres to the principle of equal pay for equal work, thoroughly analyzes and eliminates any gender-based pay gaps, ensuring that each employee's compensation matches their contributions without being affected by gender, with an equal pay rate of 100%. The Company clarifies the business objectives of each department and subsidiary through strategic decoding, breaks down these objectives layer by layer to leaders and employees, specifies measurement indicators and assessment methods, and evaluates regularly. The Company has established a comprehensive remuneration assessment mechanism, including a performance-based pay structure that combines monthly performance assessments with annual comprehensive evaluations. The monthly assessments focus on key performance indicators, while the annual evaluations consider multiple dimensions. The Company dynamically adjusts employees' salary and benefit packages based on performance appraisal results. The Company has formulated systems such as the "Employee Performance Management System", the "Management Measures for Employee Remuneration and Career Paths", and the "Employee Allowances, Subsidies, and Benefits Management Regulations" to standardize the employee performance management process, shift the focus of performance management from performance evaluation to performance coaching and improvement, and improve the employee performance appeal mechanism. At the same time, the Company continues to refine the employee performance appeal process to ensure consistency and recognition of performance results between superiors and subordinates.



Executive Remuneration and Sustainability-Related Performance

In light of the Company's actual position and needs, we have made adjustments to the remuneration arrangements for the president and other senior executives, including the assessment of their financial performance and the performance assessment of their key management activities (their sustainability-related performance in relation to carbon emission management, water resource management, and health and safety, among others) in the current fiscal year.

In addition, the Company has linked ESG-related performance with the remuneration of senior management, establishing detailed quantitative and qualitative assessment criteria. Depending on their responsibilities, different performance assessment weights ranging from 5% to 40% are set, covering aspects such as environmental protection, carbon emission management, energy conservation and emission reduction, water resource management, health and safety, talent echelon building, information security, intellectual property rights, customer service, integrity building, ESG information disclosure, and ESG rating. The Company takes reward and punishment measures against senior management personnel based on the assessment results to ensure the effective implementation of the Company's ESG core goals and measures and to comprehensively improve the Company's sustainable management level.

Remuneration Clawback Mechanism

The Company has formulated the "Rules for the Implementation of Remuneration Clawback", establishing and continuously improving the performance remuneration clawback mechanism for senior executives and key position personnel. It continuously refines internal systems related to performance remuneration clawback and, depending on the severity of the situation, claws back part or all of the performance remuneration for a corresponding period. At the same time, the Company has established short-, medium-, and long-term incentive mechanisms for management, including cash rewards and equity incentives.

The Company has established a non-compensation benefit system that covers all employees, providing a variety of benefits to care for all employees in an all-round way, continuously enhancing employees' sense of belonging, and striving to create a happy workplace.

● Employee insurance and supplementary medical care

The Company strictly complies with national requirements and has formulated relevant management systems such as the "Employee Supplementary Medical Insurance Management Measures", the "Enterprise Annuity Plan Implementation Details", the "Employee Long - service Award Implementation Details", and the "Employee Allowances, Subsidies, and Benefits Management Regulations". It pays basic old-age insurance, basic medical insurance, unemployment insurance, work-related injury insurance, maternity insurance, and housing provident fund for all employees and purchases group supplementary medical insurance for employees.

● Employee health care

The Company provides employees with summer heat - stroke prevention and cooling allowances and winter heating subsidies and offers commuting shuttle services.

● Employee rest and vacation

The Company has formulated the "Employee Work and Rest and Vacation Management Regulations" to set out standardized practices for various types of leave benefits for employees, including annual leave, sick leave, and family visit leave.

● Care for female employees

The Company actively implements the *China Women's Development Outline (2021 - 2030)* to fully uphold the legal rights and special interests of its female employees. It offers a range of welfare benefits for female employees, including regular yoga classes; maternity and baby-care rooms (mommy rooms) and female employee care rooms in the workplace; personal hygiene allowances and free gynecological examinations for female employees; and special lectures on women's reproductive health topics.

● Assistance for employees in difficulty

The Company has established a health fund and a hardship assistance fund, aiming to help employees and their families solve the economic difficulties brought about by major illnesses, disasters, accidents, and other unexpected events through trade union care and consolation and hardship relief.

Case

Qingdao Special Steel - Organizing a Series of Activities for Family Members of the Employees

In 2024, Qingdao Special Steel launched a series of activities, including A Heart-Warming Golden Autumn, Pursuit of Dreams through Scholarships, and Family Visit at the Workshop, as part of its commitments to creating a platform for communication between the employees' family members and the Company, aiming to deepen the bond between the Company as a "big family" and the "small families" of its people, creating opportunities for family members to see and feel where and how their people work, experience the care of the Company, and join efforts to inject new vitality to fuel the Company's high-quality development.

During these activities, Qingdao Special Steel organized employees' family members to experience in person the smart factory for high-speed special steel wire rod, gain an immersive understanding of the significant changes that smart control, smart maintenance, and smart equipment have brought to the steel industry. They also visited the Qinggang Town living quarters to experience the livable and convenient environment provided by the Company for employees and their families.

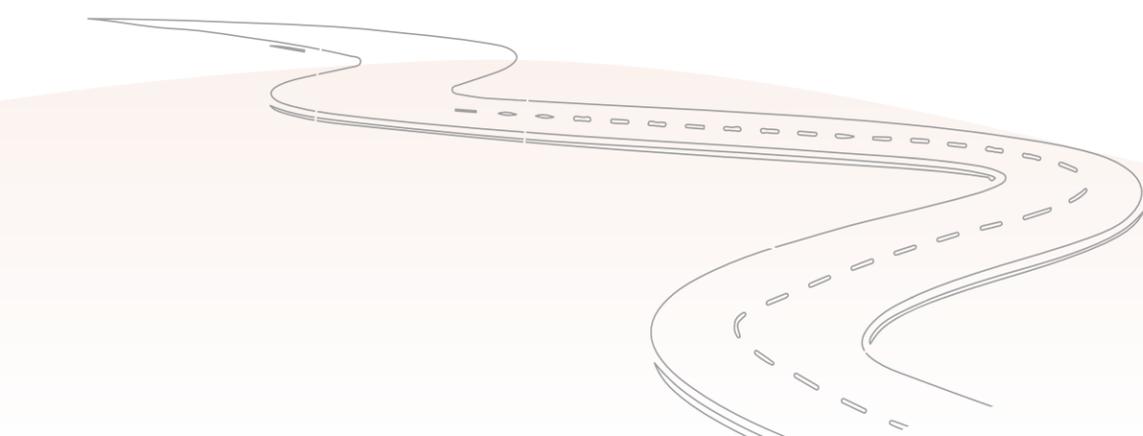


Organizing Employees' Families to Visit the Factory

Enriching Cultural and Sports Activities

The Company enhances team cohesion and promotes employees' physical and mental health by organizing a variety of rich and colorful cultural and sports activities. It successfully held the third "Innovation Cup" Table Tennis and Badminton Tournament and a themed photography exhibition, showcasing employees' talents and vitality. Subsidiaries also organized a series of wonderful activities, including parent-child marathons, youth social events, the "Excellence Cup" basketball tournament, public welfare tree planting, and employee weddings, further enriching employees' cultural lives.

In addition, the Company actively participated in the employee choral competition and employee sports conference organized by CITIC Group, achieving excellent results and demonstrating a spirit of unity and striving. These activities provided a platform for employees to showcase themselves and enhanced the Company's cohesion and centripetal force, creating a positive and upward cultural atmosphere.



Case

The CITIC Pacific Special Steel team actively participated in the CITIC Group Employee Sports Conference and achieved outstanding results

To celebrate the 75th anniversary of the founding of the People's Republic of China and the 45th anniversary of CITIC Group, CITIC Group held the 2024 employee sports conference. The Company's team won the runner-up in the football competition, achieving the best performance in CITIC Group's football matches; in the badminton competition, they won the fourth place in the badminton team event. Guided by the Olympic spirit of "Higher, Faster, Stronger, Together", the Company continues to inspire employees' enthusiasm for sports and encourages them to maintain and promote the spirit of hard work and striving for excellence.



Scenes of Employee Sports Conference Matches

Case

Xingcheng Special Steel - Hosting the "Celebrating Reunion at the Mid-Autumn Festival, and Pursuing the Special Steel Dream Together" Art Performance

To celebrate the 75th anniversary of the founding of the People's Republic of China, Xingcheng Special Steel held the "Celebrating Reunion at the Mid-Autumn Festival, and Pursuing the Special Steel Dream Together" art performance. Members of Xingcheng electric band, choir, brass band, and dance troupe prepared dazzling programs in their spare time, and delivered them to applause.

In addition, to celebrate the dedication to work, the spirit of model workers, and the endeavor to strive for excellence, and to encourage our people to follow the examples of those distinguished individuals, the Company conferred plaques and certificates to 100 winners of the third "Gold Medal Worker Award" to commend their outstanding contributions and excellent performance in their work.



Scene of the Art Performance Night

Case

Qingdao Special Steel - the "Parent-Child Hand in Hand, Running Towards the Future" Marathon Event

Before the arrival of the Children's Day on June 1st, Qingdao Special Steel staged a marathon event focusing on the theme "Chinese Dream & Beauty of Labor - Parent-Child Hand in Hand, Running Towards the Future." The event consisted of four exciting segments, including a staff health run, a parent-child family run, a characteristic formation lead-up run, and the marathon. This event aimed to create a platform to enhance the parent-child relationship among employees and communication between the Company and its staff. It not only enriched the cultural and sports life of the employees but also boosted vitality and cohesion in the Company.



Employee Marathon Activity

Case

Daye Special Steel - Soaring Dreams in the Sky, Celebrating with the Nation in Joyful Gardens

To celebrate the 75th anniversary of the founding of the People's Republic of China and the 20th anniversary of the establishment of the Company as a joint venture, Daye Special Steel successfully held a series of National Day celebration activities, including the Soaring Dreams drone performance and the National Day garden party. These events, fully showcasing the Company's corporate culture features, attracted the participation of tens of thousands of the employees and their families.



Scene of the Garden Party Activity

Supplementary Examples of Cultural and Sports Activities

CITIC Pacific Special Steel's Third "Innovation Cup" Table Tennis and Badminton Tournament



Qingdao Special Steel's "Excellence Cup" Basketball Tournament



05 United in Purpose

Working Together to Solidify the Foundation of Social Responsibility

CITIC Pacific Special Steel, with a strong sense of social responsibility, actively engages in public welfare undertakings, interpreting corporate commitment through concrete actions. The Company actively responds to the national rural revitalization strategy, pays attention to social development hotspots, and carries out charitable public welfare activities using its industrial and resource advantages. It strengthens targeted assistance and is committed to building a harmonious and fulfilling social picture, striving towards the brilliant vision of common prosperity.

Highlights and Achievements in 2024

- Over 4.04 million yuan's worth of consumption support was provided for agricultural aid products
- Provided employment opportunities for 140 people with disabilities

Response to SDGs



Contributing to Rural Revitalization

The Company actively responds to the call of the CPC Central Committee to "comprehensively promote rural revitalization work" and has long been committed to rural assistance, rural construction, and rural development. Focusing on directions such as consumer assistance and agricultural donations, the Company consolidates the achievements of poverty alleviation, supports rural revitalization work, and promotes common prosperity. This year, the Company has invested more than 4.04 million yuan in consumption support for agricultural products and donated 750,000 yuan externally.

The Company actively responds to the government's call, pays attention to the employment needs of special groups, and solves employment difficulties for groups such as people with disabilities and veterans. In 2024, the Company provided employment opportunities for 140 people with disabilities.

Case

Zhejiang Steel Tube - New Measures to Promote Employment Benefiting Underprivileged Individuals in the Region

In order to promote local employment, Zhejiang Steel Tube, judiciously relaxing the employment requirements for applicants from Xiaoyue Subdistrict where it is located, arranged jobs for more than 100 village and community residents. At the same time, Zhejiang Steel Tube actively implemented the government's requirements for taking care of the employment of underprivileged groups to create employment opportunities for people with disabilities and military veterans.

Participating in Voluntary Programs

The Company works diligently to build and maintain a strong and friendly relationship with the local communities where it operates, encourages its employees to actively participate in community building programs and voluntary public welfare activities, and strives to maintain ongoing communication with the communities through multiple channels, all a part of its efforts to form an open and harmonious partnership with the local communities, share the benefits of its development with the local communities, create a strong driving force to empower the diversified development of the local economy and help improve the quality of life of the local people, and promote the sustainable development of the local communities. This year, the Company organized employees to participate in various community volunteer activities such as community service, visits and condolences, and voluntary blood donation, with 1,514 employee participants.

Case

Every little helps: A Resounding Success for the "Warm Winter Action"

In December 2024, the Company's fourth "Warm Winter Action" achieved a huge success. After the Company's call for action, it received more than a thousand pieces of clothing in a short time. After washing, disinfecting and packing the clothing, the packages were sent by express delivery to Yunnan, Qinghai, Tibet and other places in need. In addition, the Company also donated nearly 200 sets of school bags and stationery to Yucai Primary School in Qianjiang, Chongqing.

Case

Enthusiastic Blood Donation, Inspiring Employees to Build Social Love Together

The Company actively responded to the national call for voluntary blood donation and mobilized all employees to participate in public welfare activities. In 2024, a total of 1,404 enthusiastic employees of the Company donated blood, with a total blood donation volume of more than 420,000 milliliters. It is worth mentioning that Xingcheng Special Steel was awarded the "99 Public Welfare" outstanding contribution unit by the Jiangyin Women's Federation; Qingdao Special Steel received a thank-you letter from the Qingdao Blood Center, highlighting the active fulfillment of social responsibility by each subsidiary.



Case

Jingjiang Special Steel - Helping Underprivileged Students, Conveying Warmth and Hope

In January 2024, Jingjiang Special Steel went to Nieyun Community in Gushan Town and jointly carried out the "6+6" precise pairing assistance activity for underprivileged students, bringing winter warmth to children in six families in difficult situations, and donating tuition fees, learning supplies and living necessities.

Case

Yangzhou Special Materials - Carrying out Community Co-construction, Respecting and Caring for the Elderly

In June 2024, Yangzhou Special Materials carried out activities to respect, love and help the elderly. Young volunteers visited the elderly in the surrounding nursing homes and brought them necessities of life, conveying the warmth and care of the enterprise.

Appendix: ESG Data Indicators

Indicator	Unit	2023	2024
Energy			
Total energy consumption	MWh	83,222,983	86,280,115
Installed renewable energy capacity			
Photovoltaic	MW	123	185
Wind power	MW	0	12
Renewable energy consumption			
Self-generated green power (rooftop PV, wind power)	MWh	115,000	105,387
Purchased green electricity	MWh	53,000	302,054
Non-Renewable energy consumption	MWh	83,206,183	85,872,674
Waste heat power generation			
Installed capacity of waste heat power generation systems	MW	610	700
Consumption of own waste heat for power generation	MWh	5,800,000	5,686,404
Electricity consumption			
North China	kWh	2,076,875,422	1,775,369,152
East China	kWh	2,287,549,502	2,195,387,733
Central China	kWh	1,887,707,146	1,983,904,488
Direct energy consumption			
Diesel	Tonnes	5,424	4,918
Gasoline	Tonnes	851	646
Natural gas	m ³	315,103,601	261,199,931
Liquefied petroleum gas	kg	17,188,880	8,659,810
Anthracite consumption	10,000 tonnes	156	160
Bituminous coal consumption	10,000 tonnes	156	208
Washed and refined coal consumption	10,000 tonnes	798	708
Coke consumption	10,000 tonnes	119	196

Indicator	Unit	2023	2024
Energy consumption intensity	kg coal equivalent /tonnes of crude steel	538.70	535.47
Greenhouse Gas Emissions³			
Total GHG emissions (Scope 1)	tCO ₂ e	35,633,457.10	32,589,133.38
Total GHG emissions (Scope 2)	tCO ₂ e	3,076,899.98	3,022,921.73
Total GHG emissions (Scope 1 & 2)	tCO ₂ e	38,710,357.08	35,612,055.11
GHG emissions intensity (Scope 1 & 2)	tCO ₂ e / RMB 1 million in revenue	382.64	326.11
Water			
Total water consumption	m ³	49,760,661	50,146,778
Freshwater consumption			
Municipal water supply volume	m ³	4,804,778	5,046,865
Other types of water supply volume	m ³	44,955,883	45,099,913
Desalinated seawater consumption	m ³	5,385,844	5,446,181
Water reuse rate	%	97	98
Water consumption intensity⁴	m ³ /tonnes of crude steel	2.51	2.49
Air Pollutants			
Nitrogen oxides (NO _x) emissions	Tonnes	6,103.38	6,182.66
Sulphur dioxide (SO ₂) emissions	Tonnes	2,663.59	2,504.66
Particulate matter (PM) emissions	Tonnes	5,962.46	5,922.97
Water Pollutants			
Total Discharge of Harmless Wastewater	m ³	4,108,719	3,224,992
Chemical oxygen demand (COD) emissions	Tonnes	155.99	112.72
Suspended solids (SS) emissions	Tonnes	58.66	27.71
Ammonia nitrogen (NH ₃ -N) emissions	Tonnes	26.07	3.55
Total phosphorus emissions	Tonnes	0.14	0.30

³ The Company's greenhouse gas emission data is based on the relevant emissions provided in the "Guidelines for Accounting Methods and Reporting on Greenhouse Gas Emissions of China's Steel Production Enterprises (Trial)" issued by the National Development and Reform Commission of the People's Republic of China Coefficients and conversion factors were calculated.

⁴ During the year under review, the Company made a scientific study to adjust the caliber of water intensity statistics and made retrospective adjustments to the data for 2023.

Indicator	Unit	2023	2024
Waste			
Total waste	Tonnes	11,079,030	10,787,669
Total hazardous waste	Tonnes	204,018	97,753
Total general industrial solid waste	Tonnes	10,875,012	10,689,916
Recycling waste	Tonnes	2,933,947	10,373,991
Recycling waste rate	%	NA	96.17
Other waste entering disposal			
Total weight	Tonnes	8,105,853	413,678
Waste Incineration for Energy Recovery (Power Generation, Heat Supply, etc.)	Tonnes	NA	1,836
Waste Incineration without Energy Recovery	Tonnes	2,353	154
Landfilled	Tonnes	252	533
Disposed in other ways	Tonnes	8,103,248	411,155
Raw Material Use			
Iron ore consumption	kg/tonnes of crude steel	1,676.96	1,686.25
Blast Furnace Fuel Ratio	kg/tonnes of iron	512.20	514.68
Steelmaking material consumption	kg/tonnes of crude steel	1,068.40	1,069.52
Employee Information			
Total number of employees	Person	30,336	30,960
Rate of signing of labor contracts	%	100	100
Number of ethnic minority employees	Person	405	361
Number of disabled persons supported	Person	302	140
Social insurance coverage rate	%	100	100
Proportion of employees covered by collective bargaining agreements	%	100	100
Coverage rate of occupational health check-ups	%	100	100
By gender			
Male	Person	27,847	28,534
Female	Person	2,489	2,426
By region			

Indicator	Unit	2023	2024
Mainland, China	Person	30,334	30,921
Hong Kong, Macao and Taiwan, China	Person	0	1
Overseas	Person	2	38
By age			
30 and under 30 years old	Person	5,711	5,939
31-35 years old	Person	5,819	5,274
36-40 years old	Person	6,670	7,016
41-45 years old	Person	4,186	4,625
46-50 years old	Person	3,190	3,171
51-55 years old	Person	3,530	3,601
56 and over 56 years old	Person	1,230	1,334
By job level			
High-level management	Person	119	119
Mid-level management	Person	967	1,014
Other office workers (refers to employees below senior and middle management, other than production workers)	Person	12,088	11,310
Ordinary workers, skilled workers	Person	17,162	18,517
Number of new employees	Person	1,095	1,942
Number of Fresh graduates	Person	462	820
Number of new employees by gender			
Male	Person	965	1,830
Female	Person	130	112
Number of new employees by region			
Mainland, China	Person	1,094	1,903
Hong Kong, Macao and Taiwan, China	Person	0	0
Overseas	Person	1	39
Number of new employees by age			
Over 50 years old	Person	12	14
30-50 years old	Person	233	467

Indicator	Unit	2023	2024
Under 30 years old	Person	850	1,461
Number of new employees by ethnicity			
Number of new ethnic minority employees	Person	38	49
Number of new Han Chinese employees	Person	1,057	1,893
Number of voluntary employee turnover			
Total employee turnover rate	%	2.10	2.26
Employee turnover rate by gender			
Male	%	2.07	2.29
Female	%	2.39	1.94
Employee turnover rate by age			
30 and under 30 years old	%	5.42	7.04
31-40 years old	%	1.65	1.51
41-50 years old	%	1.10	0.71
51-59 years old	%	0.67	0.44
60 and over 60 years old	%	0.00	0.00
Employee turnover rate by region			
Mainland, China	%	2.10	2.26
Hong Kong, Macao and Taiwan, China	%	0	0
Overseas	%	0	0
Return rate of female employees on parental leave	%	100	100
Retention rate of female employees on parental leave	%	100	100
Employee Training			
Number of Employee Training Programs	Number	184	253
Number of Employee Training Participants	Person-time	110,344	72,029
Total number of trainees	Person	30,336	30,960
Total training costs	RMB 10,000	1,602	865.13
Number of employees trained by job-level			
High-level management	Person	119	119

Indicator	Unit	2023	2024
Mid-level management	Person	967	1,014
Other office workers (refers to employees below senior and middle management, other than production workers)	Person	12,088	11,310
Ordinary workers, skilled workers	Person	17,162	18,517
Number of employees trained by gender			
Male	Person	27,847	28,534
Female	Person	2,489	2,426
Percentage of employee trained by gender			
Male	%	100	100
Female	%	100	100
Percentage of employee trained by job-level			
Management level	%	100	100
Non-Management level	%	100	100
Average number of hours of training received	Hour/person	23.30	35.21
Average number of hours of training received by job level			
High-level management	Hour/person	82.40	95.05
Mid-level management	Hour/person	24.60	70.01
Other office workers (refers to below High-level management and Mid-level management, other than production workers)	Hour/person	16.10	37.03
Ordinary workers, skilled workers	Hour/person	23.80	31.81
Average number of hours of training received by gender			
Male	Hour/person	24	35.07
Female	Hour/person	16.60	36.91
Production Safety and Occupational Health			
Number of work-related fatalities	Case	0	0
Number of work-related deaths	Person	0	0
Number of Employees Deceased Due to Work-Related Causes	Person	0	0
Fatality Rate Due to Work-Related Causes	%	0	0
Number of work-related injuries	Person	0	2

Indicator	Unit	2023	2024
Number of employees at risk of occupational diseases	Person	11,800	11,985
Number of occupational diseases	Person	0	0
Proportion of employees who died due to work-related injuries	%	0	0
Number of workdays lost due to work-related injuries	Hour	0	1,184
Employee Lost Time Injury Frequency Rate	Per Million hours	0	0.03
Employee Lost Time Injury Frequency Rate (per million man-hours) Data Coverage	%	100	100
Occurrence rate of workplace accidents	Times per RMB 1 million of revenue	0	0.000018
Total investment in work safety	RMB 10,000	28,173.62	25,851
Work Safety Training⁵			
Number of Work Safety Training	Session	3,058	3,211
Number of participants in work safety training	Person-time	316,254	356,731
Total duration of work safety training	Hour	114,770	121,721
Safety training coverage rate	%	100	100
Products and Customer Service			
Product Inspection Pass Rate	%	100	100
Number of complaints received about products and services	Case	771	716
Complaint Handling Rate	%	100	100
Customer Satisfaction	%	91.89	92.50
Number of recalls due to product quality issues	Pieces	0	0
Total number of incidents of health and safety and labelling violations for products and services provided	Case	0	0
Amount of products sold or shipped that were recalled for safety and health reasons	RMB 10,000	0	0
Percentage of the total number of products sold or shipped that were subject to recall for safety and health reasons	%	0	0
Total number of breaches of customer privacy law	Case	0	0

⁵ During the year, the Company optimized and adjusted the statistical caliber of work safety training data, comprehensively sorted out the work safety training carried out, and retroactively adjusted the data for 2023.

Indicator	Unit	2023	2024
Suppliers⁶			
Total number of suppliers	Number	365	371
Annual new suppliers	Number	90	82
Number of suppliers by region			
Mainland China	Number	341	339
Overseas, Hong Kong, Macao and Taiwan	Number	24	32
Number of suppliers by level			
A-suppliers	Number	69	63
B-suppliers	Number	137	162
C-suppliers	Number	110	96
Other (Unrated Suppliers)	Number	49	50
Rejected potential suppliers	Number	45	76
Supplier assessment			
Proportion of suppliers certified to ISO 9001 certification	%	46	48
Proportion of suppliers certified to ISO 14001 certification	%	22	30
Proportion of suppliers certified to ISO 45001 certification	%	20	27
Supplier Training			
Number of suppliers conducting ESG training	Number	15	90
Number of suppliers ESG trainings conducted	Session	2	2
Supplier termination/rejection			
Number of suppliers suspended for non-compliance	Number	0	0
Number of potential suppliers rejected for non-compliance	Number	0	0
Innovation and Intellectual Property			
Total number of new patents granted in the year	Pieces	472	476
Accumulated patents	Pieces	2,454	2,934
R&D expenditure	RMB 10,000	445,161.46	460,234.09

⁶ During the year, the Company made a scientific judgment to adjust the statistical caliber of suppliers and retrospectively adjusted the data for 2023. In 2024, the suppliers were adjusted from ABCD four-level division to ABC three-level division.

Indicator	Unit	2023	2024
Number of R&D personnel	Person	4,867	5,590
Ratio of R&D personnel	%	16.04	18.06
Public charity and Community Engagement			
Charitable donations	RMB 10,000	75	75
Number of volunteer activity programs	Number	36	51
Hours spent on annual voluntary activities	Hour	626.50	1,955
Number of participants in voluntary activities	Person-time	695	1,514
Business Ethics			
Number of corruption-related legal proceedings concluded by the Company or its employees	Times	0	0
Total number of confirmed incidents of corruption	Case	0	0
Total incidents resulting in employee dismissal or discipline due to corruption	Case	0	0
Total number of confirmed incidents where contracts with business partners were terminated or not renewed due to corruption-related offences	Case	0	0
Number of Anti-Corruption Training Sessions	Number	27	41
Coverage of Anti-Corruption Training	%	100	100
Anti-Corruption Training for Directors			
Number of board members participating in anticorruption training	Person	9	9
Participation in anti-corruption training	Times	27	41
Coverage of board members participating in anticorruption training	%	100	100
Employee anti-corruption training			
Number of employees participating in anticorruption training	Person	30,336	30,960
Participation in anti-corruption training	Times	27	41
Coverage of employees participating in anticorruption training	%	100	100

Appendix: GRI Standard Content Index

Instructions for use	CITIC Pacific Special Steel has prepared the report for the period January 1, 2024 to December 31, 2024 according to the GRI Standard
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Industry Standard	No applicable industry standard

	Disclosure Project Contents	Disclosure Location
General Disclosures		
GRI 2: General Disclosures 2021	2-1 Organizational details	Company Overview
	2-2 Entities included in the organization's sustainability reporting	About This Report
	2-3 Reporting period, frequency and contact point	About This Report
	2-4 Restatements of information	About This Report
	2-5 External assurance	Not Applicable
	2-6 Activities, value chain and other business relationships	Company Overview Focusing on Optimizing the Quality and Efficiency of Service Forging a Collaborative and Win-Win Future
	2-7 Employees	Staying True to the People-Oriented Commitments Appendix: ESG Data Indicators
	2-8 Workers who are not employees	Guarding the Defense Lines for Safe Production Forging a Collaborative and Win-Win Future
	2-9 Governance structure and composition	Optimizing the Corporate Governance System
	2-10 Nomination and selection of the highest governance body	Please refer to the Company's 2024 Annual Report for further information
	2-11 Chair of the highest governance body	Please refer to the Company's 2024 Annual Report for further information
	2-12 Role of the highest governance body in overseeing the management of impacts	Please refer to the Company's 2024 Annual Report for further information
	2-13 Delegation of responsibility for managing impacts	Please refer to the Company's 2024 Annual Report for further information

Disclosure Project Contents		Disclosure Location
GRI 2: General Disclosures 2021	2-14 Role of the highest governance body in sustainability reporting	ESG Governance
	2-15 Conflicts of interest	A Champion in Business Ethics
	2-16 Communication of critical concerns	Optimizing the Corporate Governance System
	2-17 Collective knowledge of the highest governance body	ESG Governance
	2-18 Evaluation of the performance of the highest governance body	Due to information confidentiality requirements, no public disclosure is made at this time
	2-19 Remuneration policies	Staying True to the People-Oriented Commitments
	2-20 Process to determine remuneration	Staying True to the People-Oriented Commitments
	2-21 Annual total compensation ratio	Due to information confidentiality requirements, no public disclosure is made at this time
	2-22 Statement on sustainable development strategy	Message from the Chairman
	2-23 Policy commitments	Staying True to the People-Oriented Commitments
	2-24 Embedding policy commitments	Strengthening the Defenses for Compliance and Risk Control Forging a Collaborative and Win-Win Future
	2-25 Processes to remediate negative impacts	A Champion in Business Ethics Focusing on Optimizing the Quality and Efficiency of Service
	2-26 Mechanisms for seeking advice and raising concerns	Communication with Stakeholders Shaping a Harmonious Workplace Ecosystem
	2-27 Compliance with laws and regulations	See individual sections of the report for details
	2-28 Membership associations	Company Overview Enhancing Innovation-Driven Development
	2-29 Approach to stakeholder engagement	Communication with Stakeholders
2-30 Collective bargaining agreements	Staying True to the People-Oriented Commitments	
Material Topics		
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Materiality Assessment
	3-2 List of material topics	Materiality Assessment
	3-3 Management of material topics	Materiality Assessment
Economic Performance		
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	Appendix: ESG Data Indicators
	201-2 Financial implications and other risks and opportunities due to climate change	Focusing on Actions in Response to Climate Change
	201-3 Mandatory defined benefit plan and other retirement plans	Shaping a Harmonious Workplace Ecosystem
	201-4 Financial assistance received from government	Please refer to the Company's 2024 Annual Report for further information

Disclosure Project Contents		Disclosure Location
Market Presence		
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	Due to information confidentiality requirements, no public disclosure is made at this time
	202-2 Proportion of senior management hired from the local community	Due to information confidentiality requirements, no public disclosure is made at this time
Indirect Economic Impacts		
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Contributing to Rural Revitalization Participating in Voluntary Programs
	203-2 Significant indirect economic impacts	Contributing to Rural Revitalization Participating in Voluntary Programs
Procurement Practices		
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Due to information confidentiality requirements, no public disclosure is made at this time
Anti-corruption		
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	A Champion in Business Ethics
	205-2 Communication and training about anti-corruption policies and procedures	A Champion in Business Ethics
	205-3 Confirmed incidents of corruption and actions taken	A Champion in Business Ethics Appendix: ESG Data Indicators
Inappropriate Competitive Behavior		
GRI 206: Inappropriate Competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	The Company has not been involved in any related legal proceedings
GRI 207: Taxation 2019	207-1 Tax administration methods	Please refer to the Company's 2024 Annual Report for further information
	207-2 Tax governance, control and risk management	Please refer to the Company's 2024 Annual Report for further information
	207-3 Stakeholder engagement and management of tax implications	Please refer to the Company's 2024 Annual Report for further information
	207-4 CbC reporting	Please refer to the Company's 2024 Annual Report for further information
Materials		
GRI 301: Materials 2016	301-1 Materials used by weight or volume	Appendix: ESG Data Indicators
	301-2 Recycled input materials used	Advancing Green Operation Practices
	301-3 Reclaimed products and their packaging materials	Advancing Green Operation Practices
Energy		
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Appendix: ESG Data Indicators

Disclosure Project Contents		Disclosure Location
GRI 302: Energy 2016	302-2 Energy consumption outside of the organization	Due to information confidentiality requirements, no public disclosure is made at this time
	302-3 Energy intensity	Appendix: ESG Data Indicators
	302-4 Reduction of energy consumption	Staying Committed to the Path of Low-carbon Development
	302-5 Reductions in energy requirements of products and services	Staying Committed to the Path of Low-carbon Development
Water Resources and Sewage		
GRI 303: Water Resources and Effluents 2018	303-1 Interaction Between Organizations and Water as A Shared Resource	Advancing Green Operation Practices
	303-2 Management of Drainage-related Impacts	Advancing Green Operation Practices
	303-3 Water Abstraction	Appendix: ESG Data Indicators
	303-4 Drainage	Appendix: ESG Data Indicators
	303-5 Water Consumption	Appendix: ESG Data Indicators
Biodiversity		
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Protecting Biodiversity
	304-2 Significant impacts of activities, products and services on biodiversity	Protecting Biodiversity
	304-3 Habitats protected or restored	Protecting Biodiversity
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	The Company's core business has less relevance or significance to this information and is therefore not disclosed
Emissions		
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Appendix: ESG Data Indicators
	305-2 Energy indirect (Scope 2) GHG emissions	Appendix: ESG Data Indicators
	305-3 Other indirect (Scope 3) GHG emissions	Due to information confidentiality requirements, no public disclosure is made at this time
	305-4 GHG emissions intensity	Appendix: ESG Data Indicators
	305-5 Reduction of GHG emissions	Staying Committed to the Path of Low-carbon Development
	305-6 Emissions of ozone-depleting substances (ODS)	The Company does not generate ODS from its production and operation activities and therefore does not disclose it.
	305-7 Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	Appendix: ESG Data Indicators
Waste		
GRI 306: Waste 2020	306-1 Waste generation and waste-related significant impacts	Advancing Green Operation Practices
	306-2 Management of significant impacts related to waste	Advancing Green Operation Practices
	306-3 Waste Generated	Appendix: ESG Data Indicators

Disclosure Project Contents		Disclosure Location
GRI 306: Waste 2020	306-4 Waste Transferred from Disposal	Appendix: ESG Data Indicators
	306-5 Waste Entering Disposal	Appendix: ESG Data Indicators
Supplier Environmental Assessment		
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	Forging a Collaborative and Win-Win Future
	308-2 Negative environmental impacts in the supply chain and actions taken	Forging a Collaborative and Win-Win Future Appendix: ESG Data Indicators
Employment		
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Appendix: ESG Data Indicators
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Shaping a Harmonious Workplace Ecosystem
	401-3 Parental leave	Appendix: ESG Data Indicators
Labor/Management Relations		
GRI 402: Labor/Management Relations 2016	402-1 Minimum notice periods regarding operational changes	The Company has no significant operational changes for the time being
Occupational Health and Safety		
GRI 403: Occupational Health and Safety 2018	403-1 Occupational Health and Safety Management System	Guarding the Defense Lines for Safe Production
	403-2 Hazard identification, risk assessment and accident investigation.	Guarding the Defense Lines for Safe Production
	403-3 Occupational health services	Guarding the Defense Lines for Safe Production
	403-4 Occupational health and safety matters: worker participation, consultation and communication	Guarding the Defense Lines for Safe Production
	403-5 Occupational health and safety training for workers	Guarding the Defense Lines for Safe Production
	403-6 Promoting the health of workers	Guarding the Defense Lines for Safe Production
	403-7 Prevention and mitigation of OHS impacts directly related to business relationships	Guarding the Defense Lines for Safe Production
	403-8 Workers covered by the OHS management system	Guarding the Defense Lines for Safe Production
	403-9 Work injuries	Appendix: ESG Data Indicators
	403-10 Work-related health problems	Appendix: ESG Data Indicators
Training and Education		
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Appendix: ESG Data Indicators
	404-2 Programs for upgrading employee skills and transition assistance programs	Supporting Our People in Their Self-Actualization
	404-3 Percentage of employees receiving regular performance and career development reviews	Staying True to the People-Oriented Commitments

Disclosure Project Contents		Disclosure Location
Diversity and Equal Opportunity		
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Optimizing the Corporate Governance System Staying True to the People-Oriented Commitments Appendix: ESG Data Indicators
	405-2 Ratio of basic salary and remuneration of women to men	Due to information confidentiality requirements, no public disclosure is made at this time
Non-discrimination		
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Staying True to the People-Oriented Commitments
Freedom of Association and Collective Bargaining		
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Staying True to the People-Oriented Commitments Forging a Collaborative and Win-Win Future
Child Labor		
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	Staying True to the People-Oriented Commitments Forging a Collaborative and Win-Win Future
Forced or Compulsory Labor		
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Staying True to the People-Oriented Commitments Forging a Collaborative and Win-Win Future
Security Practices		
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	The Company will gradually integrate ESG management in the future
Rights of Indigenous Peoples		
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	The Company's core business has less relevance or significance to this information and is therefore not disclosed
Local Communities		
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Contributing to Rural Revitalization
	413-2 Operations with significant actual and potential negative impacts on local communities	The Company has not identified any operating sites that have actual or potential significant negative impacts on local communities
Supplier Social Assessment		
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Forging a Collaborative and Win-Win Future
	414-2 Negative social impacts in the supply chain and actions taken	Forging a Collaborative and Win-Win Future Appendix: ESG Data Indicators
Public Policy		
GRI 415: Public Policy 2016	415-1 Political contributions	The Company's core business has less relevance or significance to this information and is therefore not disclosed

Disclosure Project Contents		Disclosure Location
Customer Health and Safety		
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Focusing on Improving Product Quality
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Appendix: ESG Data Indicators
Marketing and Labeling		
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	Focusing on Optimizing the Quality and Efficiency of Service
	417-2 Incidents of non-compliance concerning product and service information and labeling	Appendix: ESG Data Indicators
	417-3 Incidents of non-compliance concerning marketing	Appendix: ESG Data Indicators
Customer Privacy		
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Appendix: ESG Data Indicators
Socioeconomic Compliance		
GRI 419: Socioeconomic Compliance 2016	419-1 Violations of laws and regulations in the social and economic fields	The Company has not violated laws and regulations in the social and economic sphere.

Appendix: Self-Regulatory Guidelines No. 17 for Companies Listed on Shenzhen Stock Exchange—Sustainability Report (For Trial Implementation) Topic Index Table

Dimension	Item No.	Disclosure Topic	Applicable Article	Report Chapter
Environmental	1	Responding to Climate Change	Articles 21 to 28	Focusing on Actions in Response to Climate Change
	2	Pollutant Emissions	Article 30	Advancing Green Operation Practices
	3	Waste Disposal	Article 31	Advancing Green Operation Practices
	4	Ecosystem and Biodiversity Protection	Article 32	Protecting Biodiversity
	5	Environmental Compliance Management	Article 33	Advancing Green Operation Practices
	6	Energy Utilization	Article 35	Staying Committed to the Path of Low-carbon Development
	7	Water Utilization	Article 36	Advancing Green Operation Practices
	8	Circular Economy	Article 37	Advancing Green Operation Practices
Social	9	Rural Revitalization	Article 39	Contributing to Rural Revitalization
	10	Social Contribution	Article 40	Participating in Voluntary Programs
	11	Innovation Drive	Article 42	Enhancing Innovation-Driven Development
	12	Ethics of Science and Technology	Article 43	Not Applicable
	13	Supply Chain Security	Article 45	Forging a Collaborative and Win-Win Future
	14	Equal Treatment of Small and Medium-sized Enterprises	Article 46	Not Applicable
	15	Product and Service Safety and Quality	Article 47	Focusing on Improving Product Quality Focusing on Optimizing the Quality and Efficiency of Service
	16	Data Security and Customer Privacy Protection	Article 48	Building the Great Wall of Information Security
	17	Employees	Article 50	Safeguarding the Journey with Care: Setting the Benchmark for a Happy Workplace
Governance related to sustainable development	18	Due Diligence	Article 52	Forging a Collaborative and Win-Win Future
	19	Stakeholder Engagement	Article 53	ESG Governance
	20	Anti-Commercial Bribery and Anti-Corruption	Article 55	A Champion in Business Ethics
	21	Anti-Unfair Competition	Article 56	A Champion in Business Ethics

Appendix: Readers' Feedback Form

Dear readers,

We sincerely appreciate your time!

Thank you for reading the 2024 Sustainability Report of CITIC Pacific Special Steel Group Co., Ltd. We sincerely welcome your comments and suggestions in order to provide you and other stakeholders with more valuable information and effectively promote the Company's ability and level to perform its social responsibility.

Choice question (please give a ✓ in the appropriate position)

1. Which of the following stakeholders do you belong to?

- Government Officials Regulators Shareholders and Investors Employees Customers Suppliers and Partners
 Community Residents ESG Practitioners Peer Enterprises Others

2. What is your overall evaluation for this report?

- Excellent Good Average Below average Poor

3. What do you think of the reply and disclosure related to issues of the stakeholders' interests?

- Excellent Good Average Below average Poor

4. What do you think of the quality of ESG information disclosed in this report?

- Excellent Good Average Below average Poor

5. What do you think of the structure of this report?

- Excellent Good Average Below average Poor

6. Open-ended question

What are your comments or suggestions to CITIC Pacific Special Steel Group Co., Ltd. on its practice of ESG or this report?

Feedback Email: zxtgdm@citicsteel.com



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Scan to learn more!

