



# Sustainability Report 2025

Beijing Shougang Company Limited

**Embrace the mission  
Lead the future**



## About This Report

1

### Introduction

Chairman's Message	2
About Us	4
Major ESG Performance in 2025	7
2025 Sustainability Recognitions	9
Focus 1: Green Low-Carbon Panorama	10
Focus 2: Flagship Products Panorama	12

## Sustainable Development Management

ESG Governance	14
Stakeholder Engagement	16
Materiality Assessment	17

## Contents

# E

## Environment

Anchoring the Dual Carbon Goals,  
Blueprinting a Green Future

Climate Response	20
Environmental Management	28
Resource Utilization	34
Circular Economy	40
Biodiversity Protection	43

# S

## Social

Gathering Innovative Momentum,  
Building a Happy Ecosystem Together

Innovation	46
Intelligent Manufacturing	57
Product Quality and Customer Service	63
Supply Chain Security	69
Employee Development	74
Occupational Health and Safety	82
Social Contributions	89

# G

## Governance

Solidifying the Governance Foundation,  
Safeguarding Sustainable Development

Corporate Governance	92
Information Disclosure	95
Investor Relations Management	96
Shareholder Value Creation	97
Integrity Ecology	97
Risk Management	100
Data Security	104

## Appendix

Key Performance Indicators Form	106
Content Index	110
Interpretation	114

# About This Report

Dear Readers,

The *Shougang Co. Sustainability Report 2025* adheres to the principles of objectivity, standardization, transparency, and comprehensiveness. It systematically discloses the commitments, management approaches, initiatives, and achievements of Beijing Shougang Co., Ltd. in social responsibility, environmental protection, and corporate governance in 2025.

Beijing Shougang Co., Ltd.  
April 2026

## Report Scope

This report covers Beijing Shougang Co., Ltd. and affiliated branches and subsidiaries, consistent with the consolidation scope of the 2025 Annual Report. Hereinafter "Beijing Shougang Co., Ltd." in the report is also referred to as "Shougang Co.", "the company" or "we" for ease of expression and reading.

The main products manufacturers of Shougang Co. : Shougang Qian'an Iron & Steel Co., Ltd. (*Qiangang Co.*), Shougang Jingtang United Iron & Steel Co., Ltd. (*Jingtang Co.*), Beijing Shougang Cold Rolling Co., Ltd. (*Cold-R Co.*), and Shougang Zhixin Electromagnetic Materials (Qian'an) Co., Ltd. (*Shougang Zhixin*).

Note: The Qianshun Base refers to the integrated production organization with research and development system formed by Qiangang Co., located in Qian-an, Hebei Province, and Cold-R Co., located in Shunyi District, Beijing.

## Reporting Period

The report covers the period from January 1, 2025 to December 31, 2025 (referred to as the "Reporting Period"), with some of the information retrospective to previous years and including the first quarter of 2026.

## Data Sources and Reliability Assurance

The information and data disclosed in this report originate from the company's documents and statistical data. The company guarantees that the contents of this report are free from any false records or misleading statements and takes responsibility for the authenticity, accuracy, and completeness of the contents.

## Preparation Basis

This report is primarily prepared with reference to the *Self-Regulatory Guidelines No. 17 for Companies Listed on Shenzhen Stock Exchange-Sustainability Report [For Trial Implementation]*,

*Self-Regulatory Guidelines No. 3 for Companies Listed on Shenzhen Stock Exchange-Preparation of Sustainability Report*, the *Global Reporting Initiative (GRI) Standards*, the *Guidelines for Environmental, Social and Governance (ESG) Special Report of Iron and Steel Enterprises* issued by China Iron and Steel Association (CISA), and the *China Corporate Sustainability Report Guidelines (CASS-ESG 6.0)*. It also incorporates the United Nations 2030 Sustainable Development Goals (SDGs), FTSE Russell ESG Ratings, and S&P Global Corporate Sustainability Assessment (S&P CSA) requirements.

## Report Preparation Process

This report has been compiled through the following processes: working group establishment, data collection, stakeholder interviews, stakeholder questionnaire surveys, framework formulation, report drafting, report design, deliberation at special meetings of the company's leadership, review by the Strategy, Risk, ESG and Compliance Management Committee of the Board, and approval by the Board of Directors.

Report Compilation Working Group

Team Leader: Zhu Guosen; Deputy Team Leaders: Wang Lifeng, Sun Maolin, Qiao Yufei; Members: Hao Chengzhu, Zhang Zhiwei, Sang Juanxi, and ESG coordinators from various departments

## Report Acquisition

The electronic version of this report can be downloaded from the official website of Shougang Co. (<http://www.sggf.com.cn/>).



## Text Language

This report is available in both Chinese and English. If there is any discrepancy between the two languages, please refer to the Chinese version.

If you have any questions about this report, please contact us by phone or email. Our contact information is as follows:

Board Secretary Office of Beijing Shougang Co., Ltd.

Contact Add: Building 3, No. 6 Courtyard, South Qunminghu Road, Shougang Park, Shijingshan District, Beijing

Tel: +86-010-88293727

E-mail: [sggf@sgqg.com](mailto:sggf@sgqg.com)

Postcode: 100043

Fax: +86-010-88292055

## Chairman's Message



*Zhu Guosen*

2025 marks the concluding year of the *14th Five-Year Plan* and a pivotal year for laying a solid foundation for a successful start to the *15th Five-Year Plan*. Acting as a bridge between the past and future, this year holds extraordinary significance. Shougang Co. persists in deeply integrating ESG concepts into the entire process of corporate strategy and business management. Centered around the development of new quality productive forces, we remain committed to advancing with innovation, pursuing green development, and striving toward excellence. We are building a solid foundation for technological leadership, green and low-carbon development, corporate governance, and a talent-driven enterprise strategy to achieve high-quality sustainable development.

### Forging a Foundation of Technology Leadership

Technological innovation is the most active element in driving the development of productive forces and has become a new engine for industrial growth. The company always insists on promoting innovation as its primary competitiveness, driving transformation in quality, efficiency, and momentum of business development through technological breakthroughs. The company's proportion of R&D investment to operating revenue remains above 4% annually, focusing on key areas such as new materials, new processes, green and low-carbon development, and smart manufacturing to lead the industrial chain toward high-end, intelligent, green, and integrated development. We actively engage in both independent and collaborative research, participating in national key R&D projects to provide domestic material supply and technical protection for major national engineering projects.

### Deepening the Foundation for Green and Low-Carbon Development

Actively taking climate response actions and implementing green manufacturing and low-carbon routes are the top priorities for the sustainable development of an enterprise. In 2025, the company implemented the *Low-carbon Action Plan* and advanced the near-zero carbon emission EAF high-quality steel production line project. Our typical product categories have achieved full coverage of Environmental Product Declarations (EPD). We pioneered the launch of enterprise standards and a pricing system for low-carbon steel products. We promoted the construction of a "Zero-Waste Group," significantly improving the resource utilization levels of general industrial solid waste and hazardous waste. The company was honored as a Level-A Leader Enterprise in Environmental Performance within the steel industry of Hebei Province.

## Fortifying the Foundation for Corporate Governance

Continuously improving and optimizing the management and control system, and comprehensively promoting the modernization of the corporate governance system and governance capability are the cornerstones of high-quality development. In 2025, the company further improved corporate governance system, revised the *Articles of Association*, and completed the reform of the Supervisory Committee. We performed information disclosure in accordance with laws and regulations, obtaining an "A" rating in the Shenzhen Stock Exchange 2024-2025 Listed Company Information Disclosure Assessment. The company took multiple measures to enhance its market value by organizing market value management seminars, releasing the *Valuation Enhancement Plan and the Shareholder Return Plan for the Next Three Years (2026-2028)*, conducting share buybacks, and engaging in high-frequency investor communications through multiple channels.

## Strengthening the Foundation for a Talent-driven Enterprise

"Success is built on talent, and business thrives through talent." Talent is a vital force for the sustainable development of an enterprise. Adhering to the philosophy that talent is the primary resource, we have strengthened our talent supply chain management system to build a talent highland for Shougang Co. based on respecting, focusing on, and developing talent. We advanced the cultivation of "Voyage" high-potential talents and reinforced key training programs such as the Technological Innovation Youth Training Camp, Leadership Grand Lectures, and Professor Forums. We improved long-term incentive mechanisms and implemented stock option and restricted stock incentive plans, with 501 core technical and management personnel participating, providing strong support for the talent-driven enterprise strategy and promoting the company's long-term steady development.

## Consolidating the Foundation of Intrinsic Safety

Safety is the red line and bottom line of enterprise development. The company insists on the integrated management of production safety and occupational health, fully implementing the all-employees production safety responsibility system, improving

systems and procedures, and strengthening risk control to safeguard the life and health of employees. We have obtained certifications for the Occupational Health and Safety Management System and the HSE Management System. In 2025, the company maintained zero production safety accidents of general grade or higher, achieved all safety targets, and saw significant achievements in the innovation and transformation of safety management practices.

## Solidifying the Foundation of a Stable and Robust Industrial Chain

The security and stability of the industrial chain are essential guarantees for sustainable development. The company attaches great importance to industrial chain management and actively promotes collaborative construction with suppliers and customers to create a green ecosystem. We advanced carbon emission reduction efforts among key suppliers, driving 38 suppliers to conduct carbon footprint certification for key materials, and established a primary data factor database for upstream materials. We built a "production-consumption-regeneration" closed-loop system with Zhongshan Green Guard and released a 40% traceable recycled material low-carbon project. We signed a "Green Steel" strategic cooperation memorandum with FAW-Volkswagen and strategic cooperation agreements with Geely Group, TBEA, and Inovance to carry out deep cooperation in green and low-carbon transformation, smart supply chain construction, new product development, humanoid robots, and the low-altitude economy.

No dream is too far to reach, and though the road ahead is long, we stride forward with confidence. The company will always firmly grasp the requirements for developing new quality productive forces. With courage, vitality, and unremitting drive, we will persist in governance modernization, green and low-carbon development, strengthening the enterprise through technology and talent, ensuring intrinsic safety, and fostering upstream and downstream synergy. On this new journey of a new era, we shall write a new chapter of high-quality sustainable development for Shougang Co.

# About Us

Beijing Shougang Co., Ltd. was listed on Shenzhen Stock Exchange in December 1999 (Stock Code: 000959), controlled by Shougang Group.

The company firmly upholds its strategic commitment to "Green Manufacturing, Smart Manufacturing, Premium Manufacturing, Lean Manufacturing, and Precision Services". Driven by innovation, we prioritize technological innovation as our primary competitive advantage, striving to build a steel listed company with world-class competitiveness and influence. Adhering to the "Manufacturing + Services" competitive edge, we persistently optimize our product mix, production line structure, and customer portfolio, and advance the R&D and production of high-end products, particularly automotive sheets, electrical steel, tinplates (chrome-plates) and plates, to ensure the independent material supply and technical security of major national projects.

## Development Strategy

Focusing on the overall goal of "Making the steel industry better and stronger", Shougang Co. adheres to the development directions of "High-end, High-efficiency, Intelligent, and Green" and positions as a "World-class high-end materials service provider". With the strategic focus of promoting and implementing the development goals of the iron and steel industry with strong profitability, strong innovation ability, excellent asset quality, excellent operation efficiency, excellent energy conservation and environmental protection, we firmly promote the strategy of "green manufacturing, intelligent manufacturing, high-quality manufacturing, lean manufacturing, and precise service", adhere to the two-wheel drive of "capital+operation", and promote the high-quality development of the company. The company continues to promote the development of high-end products focusing on automotive sheets, electrical steel, tinplates (chrome-plates) and plates. Efforts are consistently made to strengthen the five core advantages of product, quality, cost, service, and technology. The company aims to continuously improve the manufacturing and service level and operational efficiency, building a batch portfolio of strategic products and a high-quality customer matrix with international competitive advantages, and strives to build a steel listed company with world-class competitiveness and influence.



## Company History

**1999.12**

Successfully listed on Shenzhen Stock Exchange, becoming the first listed company in China to introduce strategic investors, the first listed company to issue shares through a combination of online and offline distribution, and the first listed company to conduct public roadshows.

**2005.11**

Completed the split-share structure reform.

**2014.04**

The mainstream process facilities were transferred to Qiangang Co., increasing the total share capital to 5.289 billion shares.

**2018.03**

Shougang Zhixin Qian'an Electromagnetic Materials Co., Ltd. was established.

**2020.06**

Acquired 51% equity of Beijing Shougang Steel Trading Investment Management Co. Ltd. (Steel Trading) from Shougang Group.

**2022.06**

Achieved 100% equity ownership in both Steel Trading and Jingtang Co.

**2003.12**

Issued RMB 2 billion convertible corporate bonds for the construction of the Shunyi cold-rolled steel sheet production line.

**2008.08**

Beijing Shougang Cold Rolling Co., Ltd. was established.

**2016.04**

Acquired 51% equity of Jingtang Co.

**2019.11**

Baowu Group became the company's strategic shareholder.

**2021.04**

Beijing Jingtou Investment Holding Co., Ltd. and Beijing Jinguorui State-owned Enterprise Reform and Development Fund (Limited Partnership) became strategic shareholders of the company through restructuring.

**2021.07**

Acquired 19.1823% equity of Jingtang Co.

**2024.03**

Shougang Zhixin Electromagnetic Materials (Qian'an) Co., Ltd. was established, completing its joint-stock restructuring.



# Product Portfolio

Shougang Co. is leading the development of a high-end product portfolio through focusing on 8 key product categories: automotive sheets, electrical steels, tinplates (chrome-plates), plates, pickled sheets, hot-rolled sheets, household appliance steels and specialty steels, and galvanized sheets.



**Automotive Sheets**

Structural parts and outer panels for passenger vehicles and commercial vehicles



**Electrical steels**

Transformer, motor and generator, and compressor cores, etc.



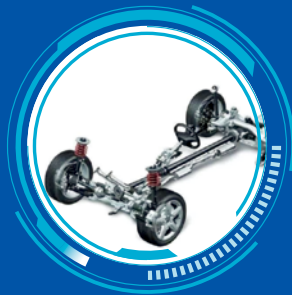
**Tinplates (Chrome-plates)**

Beverage cans, powdered milk cans, and food cans, etc.



**Plates**

Shipbuilding and offshore engineering, construction & bridges, energy equipment, etc.



**Pickled Sheets**

Automotive parts, home appliance compressors, etc.



**Hot-rolled Sheets**

Automotive structure, engineering machinery, long-distance pipeline, container, etc.



**Household Appliance Steels and Specialty Steels**

Refrigerator, air conditioner, and washing machine manufacturing



**Galvanized Sheets**

Solar racking system, highway barrier



## Major ESG Performance in 2025

### Environmental pollution incidents (Item)

2025	0
2024	0
2023	0

### Proportion of operations certified by the energy management system (%)

2025	100
2024	100
2023	100

### Waste recycled (Million tonnes)

2025	13.26
2024	13.44
2023	13.05

### Environmental protection performance evaluation

2025	A
2024	A
2023	A

### Clean energy consumption (Tonne of standard coal)

2025	251,095
2024	159,551
2023	114,459

### Comprehensive utilization rate of solid waste(%)

2025	100
2024	100
2023	100

### Proportion of operations certified by the environmental management system (%)

2025	100
2024	100
2023	100

### Annual generation of self-provided clean energy (photovoltaic power generation) (MWh)

2025	44,828
2024	18,220
2023	15,320

### Annual fresh water consumption (1,000 tonnes)

2025	57,033
2024	64,922
2023	68,787

## Major ESG Performance in 2025

### Water recycled rate (%)

2025	98.80
2024	98.79
2023	98.73

### Total investment in work safety (RMB million)

2025	152
2024	155
2023	167

### Proportion of R&D investment to operating revenue (%)

2025	4.66
2024	4.51
2023	4.41

### Total number of employees (Person)

2025	18,293
2024	17,762
2023	18,226

### Number of work safety accidents of general grade or higher (NOS)

2025	0
2024	0
2023	0

### Number of valid patents (PCS)

2025	4,261
2024	3,924
2023	3,570

### Training coverage (%)

2025	100
2024	100
2023	100

### Safety training hours (Hour)

2025	1,169,451
2024	1,129,329
2023	928,362

### Proportion of female directors (%)

2025	44.44
2024	12.5
2023	0

# 2025 Sustainability Recognitions

## ESG Recognitions



The 3rd Guoxin Cup-ESG Golden Bull Award Top 100



Selected in the 2025 China Corporate ESG 100 Index List



Selected in the 2025 Listed Companies Sustainable Development Best Practice Cases by the China Association for Public Companies



Selected in the "2025 Excellent Cases of Enterprise Green and Low-Carbon Development"



The Best Social Responsibility Award in the 2025 Corporate ESG "Golden Responsibility Award"



The 19th China Listed Companies ESG Top 100 Award



2025 TOP 20 ESG Performance in Raw Material Industry among A-share Listed Companies



2025 Top 100 ESG Rating Progress Awards among A-share Listed Companies

The *Innovation-Driven Leading High-Quality Development — Social Responsibility of State-owned Steel Listed Companies in Developing New Quality Productive Forces* was awarded the 2025 Beijing Corporate Social Responsibility Excellent Case

The *Building a Full-Chain Labor Protection System and Cultivating a Development Ecosystem for New-Era Industrial Workers* was recognized as an "Excellent ESG Case" in the Blue Book of ESG for Beijing Municipal State-owned Enterprises (2025)

The *ESG Governance Practices for Win-Win Harmony* was selected for inclusion in the Blue Book on Social Responsibility of the Steel Industry (2025)

## ESG Ratings

In 2025, the S&P Global CSA (Corporate Sustainability Assessment) scores, ESG scores, FTSE Russell ESG ratings, and Refinitiv rating results have been released successively. Shougang Co.'s ESG ratings from international rating agencies achieved a significant leap: the S&P Global ESG Score rose to 45, the FTSE Russell ESG Rating improved to 3, and the Refinitiv ESG Rating was upgraded to an A-grade. Through systematic promotion, enhancement, and long-term practice in the fields of environmental, social, and governance (ESG), the company has garnered extensive recognition from mainstream global institutions.



FTSE Russell ESG  
3



Refinitiv ESG  
A-

## S&P Global

S&P Global ESG  
45



Sino-Securities Index ESG  
AAA (The Highest)



Wind ESG  
AA



China Steel Economic Development Research Institute (CSDRI) Steel Enterprise ESG Rating  
AAA (The Highest)



China Metallurgical Industry Planning and Research Institute Domestic Steel Enterprise ESG Rating  
AAA (The Highest)

## Jingtang Co. Received Grade B in CDP Rating



In 2025, Jingtang Co. continued to deepen low-carbon operation management and actively responded to challenges related to global climate change. It has achieved remarkable results in promoting low-carbon transition, strengthening climate governance, and continuously improving the transparency of environmental information disclosure. For its first participation in the CDP (Carbon Disclosure Project), an environmental information disclosure system, it was awarded a B rating, ranking among the leading positions in major domestic steel enterprises.

## Green Low-Carbon Panorama

Upholding the development philosophy that "lucid waters and lush mountains are invaluable assets," Shougang Co. deeply integrates green and low-carbon principles into its core strategy and the entire operational process. The company has constructed a panoramic low-carbon development system covering strategic planning, technological innovation, product application, and smart management. Shougang Co. is dedicated to becoming a technological pioneer and a benchmark model for the global steel industry's green and low-carbon transition, providing the 'Shougang Paradigm' for the high-quality development of the steel industry.



### Strategic Guidance, Governance Foundation

In 2023, the company released the *Shougang Co. Low-Carbon Action Plan*, explicitly defining the overall goals of "Carbon Peaking by 2025 and Carbon Neutrality between 2050 and 2060." It systematically planned four basic decarbonization routes: carbon emission reduction from source, carbon emission reduction by improving energy efficiency, collaborative carbon emission reduction, and social carbon emission reduction. To ensure efficient implementation of the strategy, the company established a governance structure consisting of the Green Manufacturing Committee (overall planning and decision-making), the Green Manufacturing Committee (decomposition and promotion), the Low-Carbon Management Center (supervision and inspection), and various subsidiaries (concrete execution). Through the *Climate Governance Management System* and other regulations, a low-carbon management system with clear rights, responsibilities, and closed-loop management has been formed.

### Technological Breakthroughs, Extreme Energy Efficiency

Driven by technological innovation to achieve deep decarbonization, the company has achieved key technical breakthroughs in both blast furnace-basic oxygen furnace (BF-BOF) and electric arc furnace (EAF) route steelmaking. We continue to tackle processes such as high-proportion pellet ironmaking in blast furnace, hydrogen-rich injection in blast furnace, high oxygen-rich smelting in large blast furnace, and high scrap ratio steelmaking in converter. In 2025, Jingtang Co. successfully conducted an industrial trial of 70% high-proportion pellet in blast furnace, the proportion of pellet ore charged into the blast furnace is stabilized at over 50%. Simultaneously, the company has made forward-looking layouts by launching the construction of the world's first near-zero carbon emission EAF high-quality steel production line deeply coupled with long and short processes. It is expected that a carbon reduction of more than 60% per tonne of steel can be achieved after the project is put into production in 2026, setting a new benchmark for low-carbon smelting in the steel industry.



## Products as the Link, Green Ecology

Dedicated to integrating low-carbon value into our products, the company has built a green product matrix centered on automotive sheets, electrical steel, tinplates (chrome-plates) and plates. Automotive sheets achieved over 30% carbon reduction through innovative processes; electrical steel empowers new energy and ultra-high voltage (UHV) transmission/distribution; tinplates reduce carbon emissions by over 30% through the use of green electricity; and plates support lightweighting of the equipment manufacturing industry and the utilization of green energy. In 2025, the company pioneered the release of the *Green Low-Carbon Cold Rolled and Hot-Dip Galvanized Steel Sheet and Strip* enterprise standard series and the "SOGREECO" green and low-carbon product trademark, providing standardized support for downstream green procurement.

## Digital Empowerment, System Certification

The company has independently developed and launched a Smart Carbon Management Platform centered on Life Cycle Assessment (LCA). This platform enables precise accounting and holistic management of both organizational carbon footprint and product carbon emissions. The LCA module has successfully obtained a Verification Statement issued by DNV, a globally recognized third-party certification body. In 2025, the company achieved full coverage of Environmental Product Declarations (EPD) for typical product categories. Our hot-rolled products received low-carbon emission steel certificates, and 23 products completed carbon footprint certifications, elevating carbon asset management capabilities to a new level.

## Flagship Products Panorama

Persisting in innovation-driven development, Shougang Co. delves deeply in the field of high-end steel manufacturing, successfully forging four strategic flagship products: automotive sheets, electrical steel, tinplates (chrome-plates) and plates. With leading technology, excellent quality, and significant green benefits, many of these products have not only filled domestic gaps and joined the ranks of the international advanced tier, but are also widely applied in major national projects and high-end manufacturing, deeply empowering the green upgrade of downstream industrial chains.

### Automotive Sheets




#### Technology Driving Automotive Lightweighting and Greening

The company's automotive steel products are committed to providing high-end material solutions for vehicle manufacturing. Relying on the complete set of technologies for high-strength outer panel products represented by UF340 to DP(DH)500, the production technologies for ultra-high-strength cold-forming steels ranging from TBF980 to 1.5 GPa, the integrated door ring solution for hot-stamping high-strength steels from 500 MPa to 2.4 GPa, as well as pickled and coated products at the 800 MPa grade, we have established a full-range product supply capability covering outer panels, inner panels, structural parts and chassis components. We help achieve vehicle lightweighting with ultra-high-strength body materials, enhance vehicle service performance through excellent corrosion resistance (zinc-magnesium coated sheets, hot-stamping pure zinc products, etc.), and support industry-wide emission reduction via large-scale carbon reduction processes. This drives the transformation of automotive steel applications from following to leading, providing advanced material support for the high-end development and green, low-carbon transition of the automotive industry.



### Electrical Steel

#### The "High-End Core" Empowering Energy Transformation and Intelligent Manufacturing

The electrical steel portfolio includes a matrix of over 160 high-end products covering strategic emerging fields such as new energy, intelligent manufacturing, and UHV transmission/distribution, boasting 16 distinct global debut products.

-  Electrical steel for traction motor of new energy vehicle now supplies all leading domestic and international new energy vehicle manufacturers; domestically, one in every three new energy vehicles is equipped with a "Shougang Core."
-  Grain-oriented electrical steel is successfully applied in major national projects like the Baihetan and Wudongde Hydropower Stations, ranking among global leaders in transformer material supply. +++
-  Non-oriented electrical steel maintains a technological edge in the high-efficiency variable frequency field. +++

In 2025, the company launched two global debut high-performance non-oriented electrical steel products, providing key material empowerment for high-quality main drive motors and humanoid robots, continuing to define industry heights through material innovation.

-  The ultra-high-efficiency, special-purpose ultra-thin gauge non-oriented electrical steel features extremely low high-frequency iron loss. It meets future demands for eVTOLs (electric vertical take-off and landing aircraft), drones, and ultra-high-speed micro-motors. It has been batch-applied in major national projects like the Fourth Generation Synchrotron Radiation Source<sup>1</sup> and the Spallation Neutron Source<sup>2</sup>.
-  The global debut of electrical steel exclusively for humanoid robots features a 0.1mm ultra-thin gauge and advanced self-bonding technology. This significantly improves space utilization and energy efficiency, increasing joint motor output torque by approximately 1.6% and reducing iron loss by 27%. +++

<sup>1</sup> The Fourth Generation Synchrotron Radiation Source has the lowest emittance and highest brightness in the world.

<sup>2</sup> The Spallation Neutron Source is hailed as a "super microscope" for exploring the microscopic structure of materials.

## Tinplates (Chrome-plates)



### A Technological Benchmark for Ultra-Thinning and Green Canning

As the only domestic enterprise with long-process capabilities covering both continuous annealing and batch annealing for full varieties of tinplate / chrome-plated plate, the company takes the leading position in ultra-thin rolling technology for tinplate, with secondary cold rolling reaching a minimum thickness of 0.07mm. Its ultra-thin "Cicada Wing Steel" is innovatively applied in high-end cultural and creative products. The low-carbon emission tinplate products achieve a carbon reduction of over 30%, with 26 low-carbon grades now capable of mass supply. In 2025, our food-grade tinplate was selected as one of the "Top 10 Flagship Products" in the Hebei steel industry.

## Deep Empowerment, Linking the Future



The four flagship products are not only the crystallization of hardcore technical strength, but also the bond for collaborative development of the industrial chain. Deeply anchored in national development strategies, our product portfolio spans across traditional high-end manufacturing as well as strategic emerging and future industries, including new energy vehicles, civil aviation, and humanoid robotics. The company actively builds industry exchange platforms—hosting events such as the "Automotive Steel & Green Low-Carbon Technology Forum" and the "Plate Energy Steel Seminar"—and actively participates in formulating standards. By continuously outputting technologies, standards, and concepts, Shougang Co. leads the upstream and downstream industries collaboration towards a high-end, green future.

## Plates



### The "Steel Backbone" Supporting Major Projects and High-End Equipment

The company's plate products integrate core key technologies such as clean steel steelmaking, new-generation TMCP control, and high-strength and toughness welding. They serve the construction of "national key projects" and the import substitution of "high-end equipment", and are the core material for projects such as the West-to-East Gas Pipeline, Sichuan-to-East Gas Transmission, Beihai LNG Terminal, as well as the Blue Whale No.1 ultra-deepwater drilling platform and 400,000-tonne ultra-large ore carrier. In the field of green energy, we provide high-performance, fatigue-resistant and easy-to-weld plate products for large-scale hydropower and wind power projects, strongly supporting the construction of the national green energy system.



# Sustainable Development Management

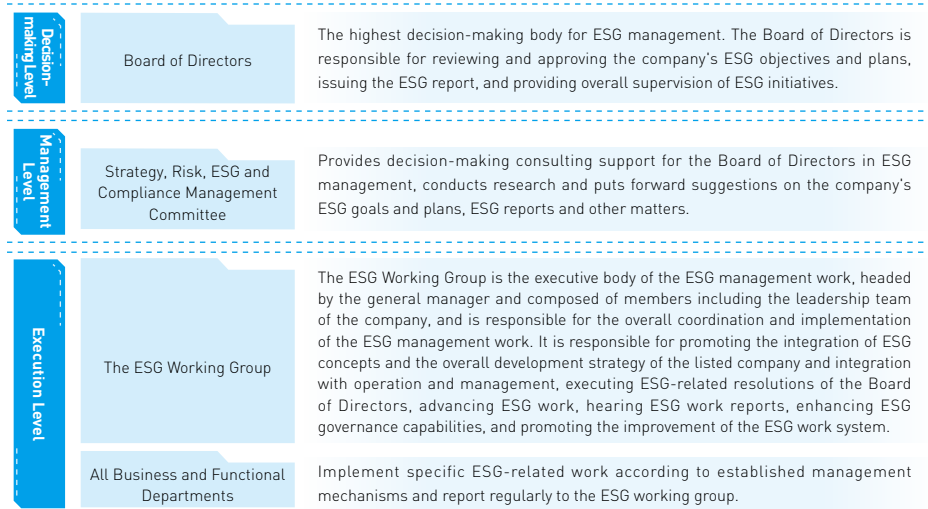
Shougang Co. deeply integrates ESG concepts into the company's development strategy, continuously enhances the effectiveness of sustainability development governance, and promotes collaborative participation by stakeholders. By closely following policy guidance and industry development trends, the company comprehensively advances green, low-carbon, and high-quality development, contributing to the construction of a "Beautiful China" and laying a solid foundation for building a listed steel company with world-class competitiveness and influence.

## ESG Governance

Shougang Co. always upholds its corporate mission, combined with the characteristics of the industry, proactively undertakes public responsibilities, standardizes corporate ethical behavior, and actively engages in social welfare activities to effectively fulfill its social responsibilities. The company is fully committed to becoming a technological pioneer in green and low-carbon development of the global steel industry, and serving as a demonstrator of ultra-low emissions, a leader of low carbon development, a promoter of industrial collaboration, a pioneer of ecological civilization construction, and a builder of a better society.

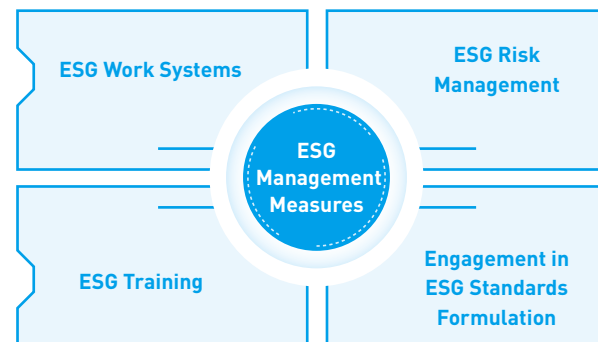
### ESG Governance Structure

The company has systematically planned its ESG management work and established a robust ESG governance structure, which includes the Board of Directors, Strategy, Risk, ESG and Compliance Management Committee of the Board, and ESG Working Group.



## ESG Management Measures

Shougang Co. effectively manages ESG risks and continuously enhances its ESG management level through measures such as formulating ESG-related policies and conducting ESG training.



### ESG Work Systems

The company has formulated the *ESG Work Promotion Program*, the *ESG Work Management System*, and the *Work Regulations of the Strategy, Risk, ESG and Compliance Management Committee of the Board of Directors*, clarifying the ESG management responsibilities of the specialized committee and various departments. A regular work reporting mechanism has been established to report periodically to the company's ESG Working Group on ESG phased work and management enhancement plans in the form of *Special Report on ESG Work*.

### ESG Risk Management

The company integrates ESG-related risks, including climate change, into its comprehensive risk management system, conducts regular risk identification and assessment, and formulates corresponding risk response measures to ensure accurate identification, scientific evaluation, and effective response to potential risks and negative impacts related to sustainability in business activities. ESG risk management is coordinated by the Strategy, Risk, ESG and Compliance Management Committee of the Board, covering core sustainability areas such as environmental compliance, climate change, product quality, employee rights, and business ethics. Through supplier due diligence, risk assessments, and internal compliance audits, the company identifies ESG risks in business activities and formulates targeted response measures to ensure the effectiveness of the company's sustainability. For details on climate change, environment, and energy risk management, please refer to the "Climate Response", "Environmental Management", and "Energy Utilization" sections in the Environment chapter of this report. For details on technological innovation, employee development, and safety risk management, please refer to the "Innovation", "Employee Development", and "Occupational Health and Safety" sections in the Social chapter of this report.

## ESG Training

The company actively participates in ESG management training and seminars organized by industry associations and ESG professional institutions, covering ESG management, responsible business conduct, human rights, and carbon management. In addition, we have organized multiple training sessions—both online and offline—for our employees and suppliers, focusing on compliance management, green and low-carbon practices, safety management, and other ESG-related topics. In 2025, the company organized 4 internal ESG training sessions to strengthen the importance attached to ESG by all employees, simultaneously enhance the performance capabilities of relevant positions, and consolidate the foundation for ESG management practices.

### Leadership Grand Lecture: Cutting-Edge ESG Training Session

In December 2025, Shougang Co. held a Leadership Grand Lecture, inviting experts to lecture on "Global ESG Progress and Corporate Response." The training combined a global perspective with China's reality, systematically interpreting global and Chinese ESG policies, ESG investment and information disclosure, global ESG standardization, ESG and high-quality corporate development, and corporate ESG risks and compliance. It aimed to help leaders at all levels of the company seize opportunities brought by the ESG transformation and build an ESG management system with Chinese characteristics. This training covered Shougang Co. and its subsidiaries via "on-site + video" format.



### Special ESG Training for Marketing Personnel

In March 2025, to enhance the marketing team's understanding of sustainability development trends and their ability to translate ESG value into advantages in market communication, the company organized special ESG training for marketing personnel. The training systematically interpreted core ESG concepts, domestic and international development trends, and information disclosure requirements. Combined with the characteristics of the steel industry, it focused on how ESG affects downstream customer choices and shapes green brands. Through the training, marketing personnel deepened their understanding of the company's green and low-carbon products and responsible supply chain management practices, laying a foundation for effectively conveying ESG value in customer service and market promotion.

## Engagement in ESG Standards Formulation

As the lead drafting unit, the company engaged in the formulation of two group standards of the CISA: *Guidelines for Environmental, Social, and Governance (ESG) Special Reports of Iron and Steel Enterprises (T/CISA 522-2025)* and *Guidelines for Environmental, Social, and Governance (ESG) Assessment of Iron and Steel Enterprises (T/CISA 521-2025)*, providing support for the standardized construction of ESG in the industry.

## ESG Performance Evaluation and Management









The annual performance evaluation of the General Manager and other senior executives comprises three parts: indicator assessment, key task assessment, and general assessment. The General Manager is evaluated on all indicators to ensure a comprehensive assessment of performance, while the remaining senior executives are assessed on indicators aligned with their respective responsibilities to ensure targeted and effective evaluations. Moreover, executive evaluation metrics are closely linked to economic benefits, safety production, environmental protection, corporate governance, technological innovation, supply chain management and other ESG performance indicators.



## Stakeholder Engagement

Effective stakeholder communication serves as an important basis for Shougang Co. in conducting goal management and creating shared value. Upholding the principles of integrity, interaction, equality and transparency, the company has established various channels for routine exchanges and targeted communications with its stakeholders. By comprehensively collecting stakeholders' demands and expectations, employing scientific analysis and research methods, implementing efficient execution and monitoring mechanisms, and continuously adopting improvement and collaborative measures, the company has formed a closed-loop management system for stakeholder communication. This ensures that all stakeholders can continuously obtain timely and accurate information, achieving regularized and transparent communication. At the same time, the company integrates stakeholder expectations and demands into strategic planning and daily operations and reviews the importance of various topics in the company's operations and development.

In 2025, the company actively engaged in communication with its stakeholders, promptly refined its communication mechanisms, and continuously enhanced the effectiveness and timeliness of stakeholder interactions.

Stakeholders	Main Focus Areas	Communication and Response	Stakeholders	Main Focus Areas	Communication and Response
 Shareholders and Investors	Shareholder Value Creation Corporate Governance ESG Management Anti-Commercial Bribery and Anti-Corruption Risk Management Information Disclosure	Shareholders' General Meeting Performance Briefings On-Site Investigation Investor Communications (Interactive Easy etc.) Information Disclosure	 Suppliers	Equal Treatment of SMEs Supply Chain Security Anti-Commercial Bribery and Anti-Corruption Fair Competition Due Diligence	Supplier Conferences On-site Investigation Industry Benchmarking Exchange and Visit Conflict Minerals Claim Issuance of Integrity Notices
 Employees	Employee-Friendly Workplace Democratic Management Employee Compensation and Benefits Occupational Health and Safety Employee Career Development and Training Anti-Commercial Bribery and Anti-Corruption	Employee Representative Congress and Symposiums Various Employee Activities Meetings and Training Employee Performance Assessment Employee Mailbox Shougang Sincere Friend APP, Shougang Tong APP Internal Publications, Notice Boards Assistance for Employees in Difficulties, On-Site Visits and Condolences Employee Satisfaction Survey	 Government and Regulatory Agencies	Ethics of Science and Technology Climate Response Pollutant Discharge Waste Disposal Environmental Compliance Management Ecosystem and Biodiversity Protection Energy Utilization Water Resources Utilization Circular Economy	Daily Communication and Reporting On-Site Surveys Information Disclosure Environmental Data Networked with Government Departments for Real-Time Transmission Environmental Responsibility Reports Compliance with Laws, Regulations, and Policy Learning Acceptance of Regulatory Inspections
 Customers	Anti-Commercial Bribery and Anti-Corruption Fair Competition Data Security and Customer Privacy Product and Service Safety and Quality Customer Service Intelligent Manufacturing Innovation Climate Response	Customer Satisfaction Survey Three-Tier Service System Customer Meetings and On-Site Exchanges Technical Forums "Shougang Day" Events Joint Laboratories and Innovation Studio Alliances Smart Marketing Platform	 Communities	Rural Revitalization and Social Contributions	Community Activities Public Welfare Activities Volunteer Services Information Disclosure Open Day
 Media / Public	Information Disclosure	Strengthen Communication and Exchanges with the Media Timely Disclose Important Information and News Acceptance of Media Interviews	 Industry Partners, Industry Associations, and Research Institutions	Innovation	Industry Exchange Holding Seminars and Forums Joint Laboratories, Expert Workstation

## Materiality Assessment

Implementing regularized management of material issues is the basis and core for identifying and assessing ESG risks, impacts, and opportunities and advancing sustainability work. To review goal commitments, policies and systems, management strategies, actions, and performance in sustainability, and to respond to stakeholder concerns regarding the company's sustainability matters, the company conducts an annual combination of questionnaire surveys and on-site interviews to identify and update material ESG issues. These are fully integrated into the company's operation management to continuously strengthen sustainability management and practice.

In 2025, in accordance with the *Self-Regulatory Guidelines No. 17 for Companies Listed on Shenzhen Stock Exchange—Sustainability Report (For Trial Implementation)* and the *Self-Regulatory Guidelines No. 3 for Companies Listed on Shenzhen Stock Exchange—Preparation of Sustainability Report*, the company continued to conduct double materiality assessments. It solicited opinions extensively from multiple departments and stakeholders, comprehensively analyzed the impact of ESG issues on business operations, finance, the economy, the environment, and society, and provided focused responses to material issues in this report.

Background Analysis and Issue Identification

During the process of reviewing and updating this year's ESG issue list, the company strictly followed the provisions of the *Self-Regulatory Guidelines No. 17 for Companies Listed on Shenzhen Stock Exchange—Sustainability Report (For Trial Implementation)*. It comprehensively considered factors such as the policy environment, ESG information disclosure standards, international sustainability initiatives, capital market ESG rating requirements, outstanding industry ESG practices, and the company's development strategy. On this basis, the company optimized the 30 ESG issues identified in 2024 by merging two issues, subdividing one, and refining existing ESG issues, ultimately forming a list of 30 ESG issues to provide clear guidance and direction for the company's sustainability.

Specifically, the "Wastewater Discharge" and "Exhaust Gas Emission" issues were merged into "Pollutant Discharge," and the "Product Quality and Customer Service" issue was subdivided into "Product and Service Safety and Quality" and "Customer Service."

Materiality Assessment

The company constructed an assessment process for identifying, analyzing, and evaluating the potential impacts, risks, and opportunities of sustainability issues as the basis for the assessment of material issues.

In the impact materiality assessment, the importance of each issue's impact on the economy, environment, and society was evaluated through stakeholder questionnaires and interviews from two aspects: the possibility of the impact occurring and the degree of the impact.

In the financial materiality assessment, experts from the company's finance and business departments evaluated the degree of short-, medium-, and long-term financial impact based on the continuity of resource use and the dependence on continuous production and operation. Combined with the possibility of risks and opportunities occurring, the financial materiality of each issue was quantitatively analyzed.

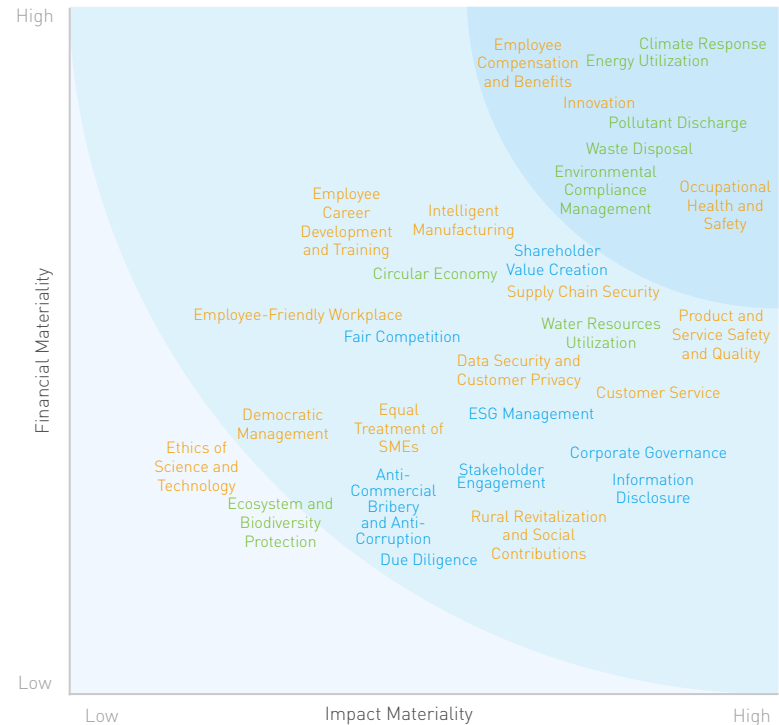
Issue Prioritization

Based on the results of the materiality assessment, a double materiality analysis was conducted to determine the priority ranking of material issues for 2025, and a materiality issue matrix was drawn.

Issue Review and Reporting

The results of the double materiality analysis were reviewed and confirmed by the ESG working group and others. For issues with double materiality, including Climate Response, environmental management (Pollutant Discharge, Waste disposal, Environmental Compliance Management), Energy Utilization, Innovation, Employee Development (Employee Compensation and Benefits), and Occupational Health and Safety, disclosure is provided according to four dimensions: governance, strategy, risk and opportunity management, and metrics and targets. For other high and medium importance issues, disclosure is centered on related management and actions.

At the practical level, the company strengthens the overall management of all issues, relies on the risk management and internal control systems to strictly control related risks, and simultaneously actively seizes opportunities to promote the company's realization of sustainability.



## Impacts, Risks and Opportunities of Issues with Double Materiality

Issue	Value Chain	Affected Stakeholders	Impact	Risk	Opportunity	Time Dimension <sup>3</sup>	Response Measures
Climate Response	Upstream of Value Chain Corporate Operation Downstream of Value Chain	Suppliers Customers Communities Public	Through our own carbon emission reduction actions, we help mitigate climate change, achieve the "dual carbon" goals and reduce the impact of extreme weather; green and low-carbon products reduce the whole life cycle carbon emissions of downstream industries.	Facing the risks of compliance costs and market access brought by increasingly stringent carbon constraint policies at home and abroad (such as carbon market, CBAM mechanism).	By R&D and production of low-carbon and green steel products, the company can meet the green supply chain needs of high-end downstream customers, thus obtaining market premium and consolidating customer relationships.	Long-term	Climate Response Innovation
Environmental Management	Corporate Operation	Suppliers Customers Communities	The discharge of waste gas, wastewater and solid waste and resource consumption in the company's production process pose potential impacts on the local ecological environment quality and biodiversity.	Environmental violations or accidents may lead to financial and operational risks such as administrative penalties, operational interruptions, reputational damage and legal lawsuits.	By achieving excellent environmental performance and ecological protection, the company can enhance brand image and credibility, and help obtain more favorable green finance support.	Medium & Long-term	Environmental Compliance Management Pollutant Discharge Waste Disposal
Energy Utilization	Corporate Operation	Suppliers Customers Public	The company helps the energy structure transformation by promoting clean energy and improving energy efficiency, and provides a model of energy conservation practice for the industry.	Fluctuations in energy prices and the requirements of energy structure transformation under the "dual carbon" goals bring challenges to cost control.	The company's continuous improvement of energy efficiency and increase in the use of renewable energy can effectively reduce long-term operating costs and build an industry benchmark for leading energy efficiency.	Medium & Long-term	Energy Utilization
Innovation	Corporate Operation Downstream of Value Chain	Customers Employees	The company's R&D investment and technological breakthroughs in high-end products, green and low-carbon, intelligent manufacturing and other fields provide a practical path for the technological progress and sustainable development of the entire industry.	High investment in innovative technology R&D may aggravate short-term financial pressure, and the uncertainty of R&D cycle may increase operational risks; technological iteration accelerates the differentiation of the industry ecosystem; if a technological moat cannot be formed or R&D results fail to support the improvement of business capabilities, it will directly affect the company's market competitiveness and long-term development.	Through continuous innovation in key processes and products, the company can build technological barriers and develop high value-added products to gain market competitive advantages.	Medium & Long-term	Innovation Intelligent Manufacturing
Employee Development	Upstream of Value Chain Corporate Operation Downstream of Value Chain	Employees	The company provides employees with stable employment positions, competitive compensation and benefits and skill training, which directly affects the quality of life and development prospects of employees and their families.	If the compensation and benefits are not competitive or the development channels are not smooth, it will lead to the loss of key talents and affect production stability and innovation capacity.	By providing comprehensive and attractive employment conditions and growth platforms, the company can attract and retain core talents, providing guarantee for the company's continuous transformation and development.	Long-term	Employee-Friendly Workplace Democratic Management Employee Compensation and Benefits Employee Career Development and Training
Occupational Health and Safety	Upstream of Value Chain Corporate Operation	Employees Suppliers	The complex environment of iron and steel production makes the company's safety management level directly related to the life and health of every practitioner.	Safety accidents may cause irreparable loss of life, operational interruptions, huge compensation and devastating damage to corporate reputation.	By establishing an excellent safety guarantee system, the company can directly reduce the cost of operational interruption caused by accidents	Long-term	Occupational Health and Safety

<sup>3</sup> Based on the characteristics of our own operations and the upstream and downstream value chains, the company identifies the risks and opportunities of issues from the time dimensions of short-term (within 1 year), medium-term (1 to 5 years) and long-term (more than 5 years).

# Environment

## Anchoring the Dual Carbon Goals, Blueprinting a Green Future

### Material Issues for Response

Climate Response, Pollutant Discharge, Waste Disposal, Ecosystem and Biodiversity Protection, Environmental Compliance Management, Energy Utilization, Water Resources Utilization, Circular Economy

### Key SDGs Addressed



Shougang Co. deeply implements the national "dual carbon" goals (carbon peaking and carbon neutrality), constructing a full-chain Climate Response system to promote low-carbon transition through short-, medium-, and long-term strategic layouts. We have established an environmental management system with clear rights and responsibilities, deepening multi-dimensional and precise pollution control to continuously consolidate its industry-leading position in environmental performance. Centering on energy efficiency improvement to optimize the energy structure, the company strengthens the utilization of waste heat and energy alongside clean energy substitution to build a clean and efficient energy utilization model. We continuously promote the resource-based and high-value utilization of solid waste, forming a new circular economy development model characterized by regional industrial collaboration and the integration of the city and the enterprise. Upholding the concept of biodiversity protection, the company creates forest-style Green Factories, comprehensively shaping a new paradigm for green development in the iron and steel industry.



### 2025 Highlights and Achievements

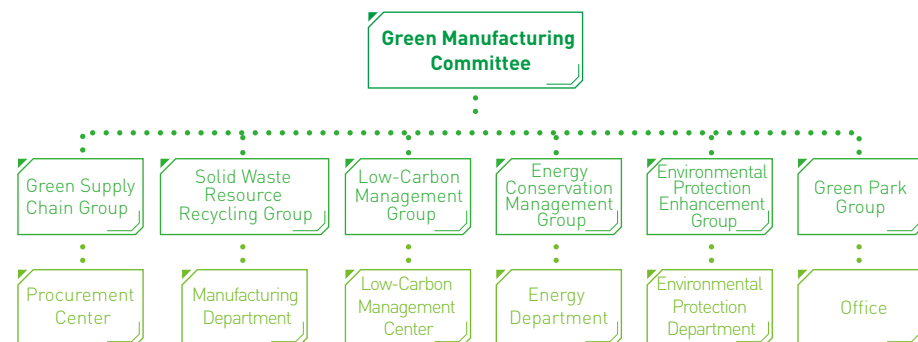
- Qiangang Co.'s Ultra-Low Emission Renovation Project awarded as the "14th Five-Year Plan" Innovation Project in China's steel industry
- Qiangang Co. and Jingtang Co. rated as level-A Enterprises in Environmental Performance of Hebei Province for consecutive years
- Qiangang Co. and Jingtang Co. rated as one of the First Batch of Level-A Leader Enterprises in Environmental Performance of Hebei Province in Key Industries
- Jingtang Co.'s pelletizing process awarded the title of Energy Efficiency Leader by the MIIT
- Launched the "SOGREECO" green low-carbon product trademark and the *Green Low-Carbon Cold Rolled and Hot-Dip Galvanized Steel Sheet and Strip* enterprise standard series
- Achieved full Environmental Product Declaration (EPD) coverage of typical product categories, 23 products completed carbon footprint certification
- Smart Carbon Management Platform's LCA module has obtained a Verification Statement issued by DNV

# Climate Response

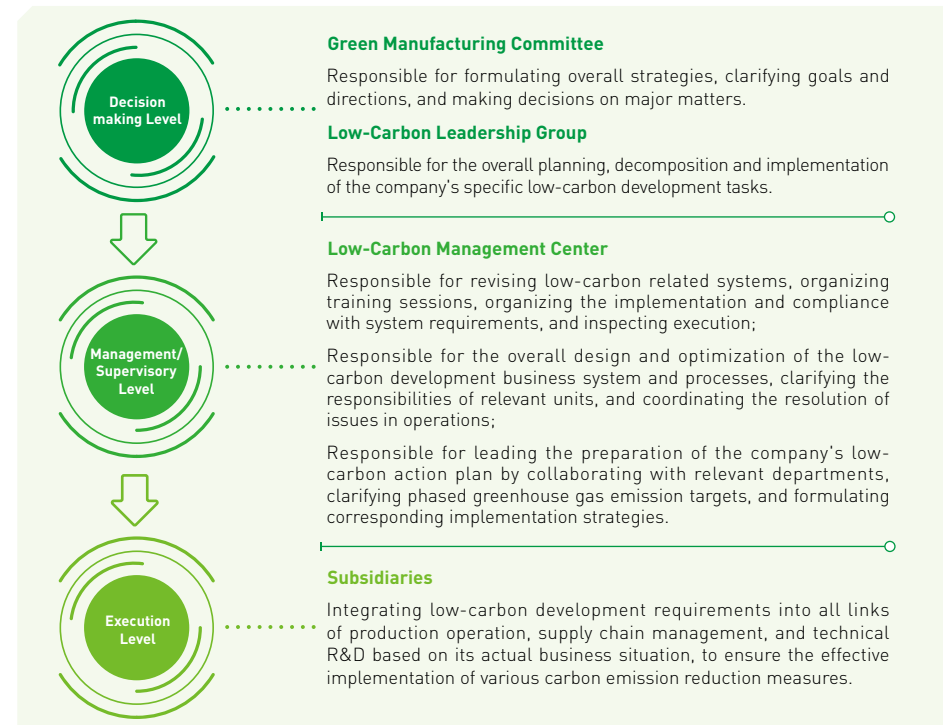
Shougang Co. consistently regards green and low-carbon development as its core strategic direction, deeply implementing the national "dual carbon" goals. Based on its own industrial foundation and technical advantages, the company has constructed a full-chain system for addressing climate change. Through process improvement, production equipment upgrades, energy structure optimization, and the R&D and provision of green products, the company steadily promotes low-carbon transformation through systemic actions, striving to create a benchmark for green development in the steel industry.

## Governance

Shougang Co. attaches great importance to green development and has established a scientific and sound governance structure to ensure the systemic promotion and efficient implementation of relevant strategies and actions. The company has established the Green Manufacturing Committee as the decision-making and coordinating body for green development, composed of members of the company's management level, responsible for formulating overall strategies, clarifying goals and directions, and making decisions on major matters. Six specialized working groups have been established under it: the Low-Carbon Management Group, the Energy Conservation Management Group, the Solid Waste Resource Recycling Group, the Green Supply Chain Group, the Environmental Protection Enhancement Group, and the Green Park Group. Each group focuses on different fields—from low-carbon strategic planning, energy structure optimization, and efficient resource circulation to green supply chain synergy, environmental quality improvement, and park ecological construction—forming a multi-dimensional and professional work advancement system. At the execution level, the Procurement Center, Manufacturing Department, Low-Carbon Management Center, Energy Department, Environmental Protection Department, and Office work in deep linkage to specifically implement tasks such as energy conservation, emission reduction, and resource recycling and reuse, building a closed-loop management mechanism of decision-making leadership, professional promotion, and execution landing.



Focusing on the field of addressing climate change, under the coordination of the Green Manufacturing Committee, the Low-Carbon Leadership Group is responsible for the decomposition and promotion of specific work, transforming strategic goals into executable tasks to ensure accurate implementation. The Low-Carbon Management Center is the management department for climate governance, undertaking responsibilities such as system construction, system optimization, and supervision and inspection. Each subsidiary is a specific execution unit, integrating low-carbon development requirements into all links of production operation, supply chain management, and technical R&D based on the actual situation of its own business, ensuring that various carbon emission reduction measures are effective and forming a management mechanism with vertical synergy, clear division of powers and responsibilities, and efficient execution.



In accordance with regulations and requirements outlined in documents such as the *Responding to Climate Change: China's Policies and Actions*, the *National Climate Change Adaptation Strategy 2035*, and the *Interim Regulations on Administration of Carbon Emissions Trading*, and in close alignment with its actual conditions, the company has formulated the *Climate Governance Management System* and the *Carbon Emission Reporting and Verification Management System*. These systems standardize the full process of carbon emission accounting, verification, compliance, and the implementation of low-carbon measures.

## Strategy

In 2023, Shougang Co. released the *Shougang Co., Ltd. Low-Carbon Action Plan*, establishing the overall goal of "reaching carbon peak by 2025 and achieving carbon neutrality between 2050 and 2060." Centering on extreme carbon emission reduction in integrated steelmaking process and exploration of EAF steelmaking technologies, the company has constructed four basic carbon emission reduction routes: carbon emission reduction from source, carbon emission reduction by improving energy efficiency, collaborative carbon emission reduction, and social carbon emission reduction. By optimizing production structure, process structure, energy structure, and logistics structure, we deeply build a green and low-carbon development pattern.

## Short-Term Strategy: Establishing a "Low-Carbon Product Dedicated Line" for Integrated Iron and Steel Plant

Focusing on extreme carbon emission reduction in integrated steelmaking process as the core, the company concentrates on smelting process optimization and low-carbon technology application. We continuously improve the pellet ratio in blast furnace, explore hydrogen-enrichment injection, optimize high oxygen-enrichment smelting, and promote high scrap ratio steelmaking in converter, while simultaneously completing annual carbon emission accounting and obligation performance work.

**High-Proportion Pellet Ironmaking in Blast Furnace**

Continuously promote the R&D and application of high-proportion pellet ironmaking in blast furnace technology. In 2025, Qiangang Co.'s blast furnaces averaged a 43% pellet ratio, reducing carbon emissions by approximately 80,000 tonnes year-on-year; Jingtang Co.'s pellet ratio remained stable at over 50%, reducing carbon emissions per tonne of iron by more than 10%, and successfully conducted industrial trials for 70% high-proportion pellet ironmaking.

**Hydrogen-enrichment Injection in Blast Furnace Smelting**

Focusing on breakthroughs in hydrogen-enrichment injection, Qiangang Co. used numerical simulation combined with industrial trials to study the impact of coke oven gas injection on the internal state of the blast furnace, accumulating key data and practical experience for subsequent technology optimization.

**High Oxygen-enrichment Smelting in Large Blast Furnace**

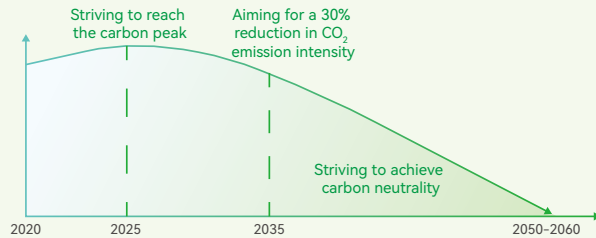
Through the technical route of intensified smelting with high top pressure, high oxygen-enrichment, and high blast temperature in blast furnaces, the company continuously reduces the fuel ratio and total coke consumption, significantly decreasing energy consumption and carbon emission intensity.

**High Scrap Ratio Steelmaking in Converter**

The company has successfully developed high scrap ratio steelmaking in converter technology, achieving stable and continuous production with a 50% scrap ratio for entire casting heat. This advancement enables a carbon footprint reduction of over 40% for products including automotive sheets, tinplates, household appliance sheets, and hot-rolled plates, effectively driving carbon emission reduction across the entire product life cycle.



### Dual-Carbon Goals and Routes



#### Route 1: Carbon Emission Reduction from Source

- Develop low-carbon smelting furnace burden
- Develop efficient utilization technologies for recycled steel materials
- Develop efficient recycling technologies for secondary resources
- Promote low-carbon metallurgical technology innovation orderly

#### Route 2: Carbon Emission Reduction by Improving Energy Efficiency

- Construct the ultimate energy efficiency operation system
- Promote electrification of energy utilization
- Develop and apply clean energy
- Construct a smart energy management and control system

#### Route 3: Collaborative Carbon Emission Reduction

- Industry chains synergize to reduce carbon emissions
- Develop waste resourceization and production technologies
- Research and development of CO<sub>2</sub> capture and resource utilization technology
- R&D and application steel and chemical co-generation technologies

#### Route 4: Social Carbon Emission Reduction

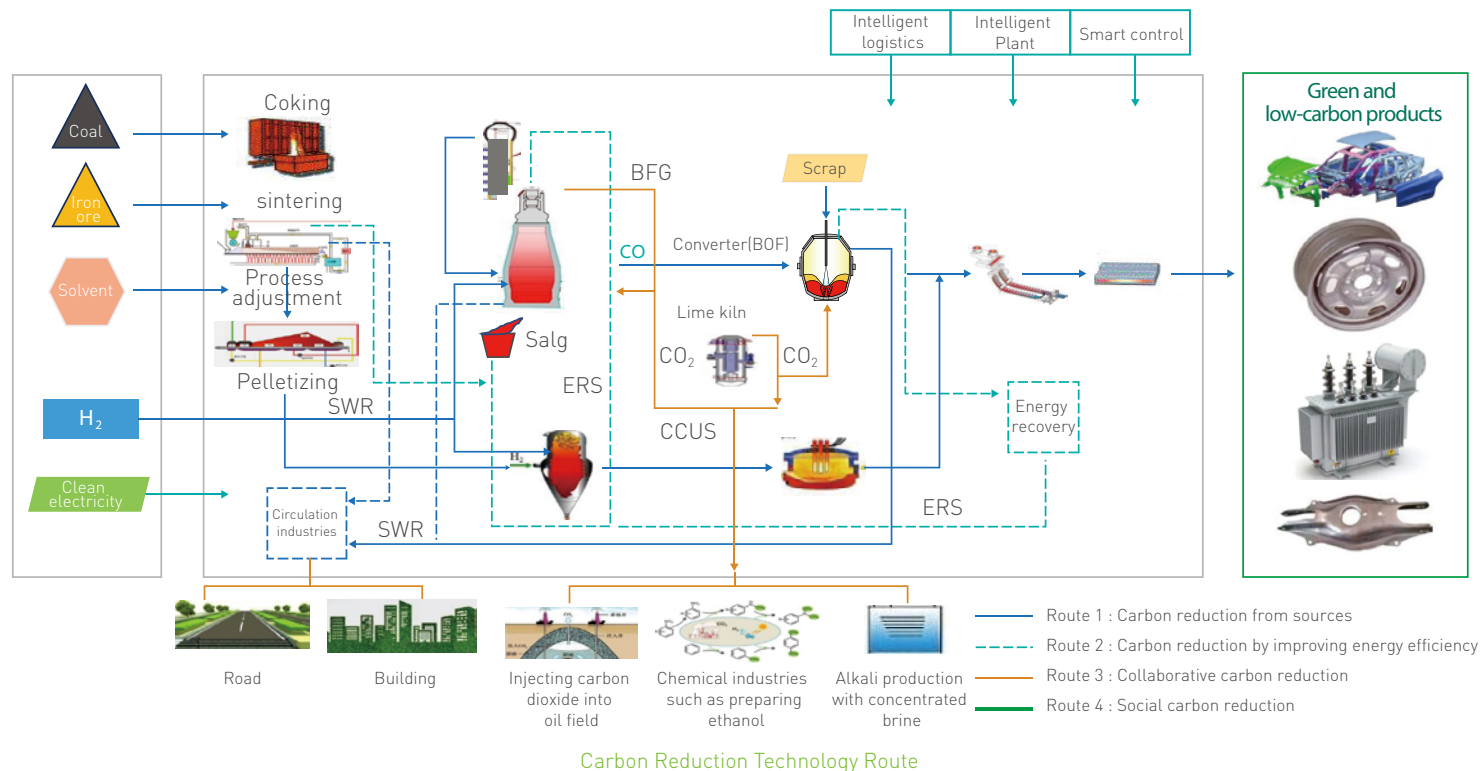
- Establish product life cycle control system
- Develop high-performance and long-service performance low-carbon products
- Promote synergistic carbon reduction in downstream industries
- Construct green and low-carbon development concepts and models

## Mid-term Strategy: Constructing a Near-Zero Carbon Emission EAF High-Quality Steel Production Line

The company focuses on the construction of breakthrough technology production lines. In March 2025, we launched the near-zero carbon emission EAF high-quality steel production line project, expected to be completed in 2026. Once completed, it will be the world's first production line with deep coupling of long and short steelmaking processes, and the first to use EAF technology for high-quality automotive sheets and high-grade non-oriented electrical steel. Upon completion of the project, it is expected to reduce carbon emissions by more than 60% per tonne of steel on average, with an annual average emission reduction of approximately 1.43 million tonnes, supporting the development of the company's low-carbon product portfolio and the achievement of its medium- and long-term carbon neutrality goals.

## Long-Term Strategy: Promoting Decarbonization through the Large-Scale Utilization of Green Hydrogen and Green Electricity

Anchoring deep decarbonization goals, the company takes the large-scale application of green hydrogen and green electricity as carriers to layout the R&D and innovative application of cutting-edge low-carbon metallurgical technologies. We have independently designed and developed biomass coke co-injection device, which successfully completed an industrial trial of continuous injection of hydrogen-enrichment biomass micropowder at a scale of hundreds of tonnes, marking the first breakthrough in the utilization of biomass energy in steel metallurgy in China. We continuously track the development trend of the hydrogen energy industry, pay close attention to the layout of hydrogen resources in surrounding areas, actively explore new technology routes such as electrolytic seawater hydrogen production, hydrogen production through metal cracking, and solid oxide electrolytic hydrogen production. We also deepen external exchanges and cooperation to build a technical reserve and resource guarantee system for the large-scale application of green hydrogen and deep carbon emission reduction in the whole process in the future.



## Risks and Opportunities Management

Shougang Co. has established a regular mechanism for identifying, assessing and responding to climate change-related risks and opportunities. We regularly carry out climate change risk and opportunity investigations. Combined with industry policy orientation, market environment changes, and our own business characteristics, and referring to the opinions of internal and external experts, the company comprehensively sorts out potential risks and development opportunities, conducts risk assessments, and formulates targeted response measures. We integrate risk control into the entire process of strategy implementation, promote the transformation of opportunities into development drivers, effectively prevent various climate change-related operational risks, ensure the steady progress of low-carbon transformation, and enhance the resilience of corporate sustainable development.

Risk Category	Risk Parameter	Business and Financial Impact	Time Horizon	Degree of Impact	Response Measures	
Physical Risk	Acute Risk	The severity and frequency of extreme weather events (such as typhoons, floods, etc.) increase	Jingtang Co. is located on the coast of Bohai Sea and experiences 1–2 severe typhoons and extreme weather events each year. Especially in recent years, there has been a sudden increase in global extreme weather events, which may lead to impairment or loss of physical assets, as well as other potential economic losses.	Short-term	Low	Formulate emergency disposal plans, strengthen departmental coordination, and enhance risk resilience.
	Policy, Laws and Regulations	Policy constraints, carbon pricing mechanism and costs	With the implementation of energy-conservation and emission reduction policies in the steel industry, as well as the implementation of environmental and carbon-related laws and regulations, the company will face rising carbon prices and carbon compliance costs, restrictions on coal use, and other energy transition policies, which will lead to corresponding increases in investment and operating costs.	Medium & Long-term	Medium	Promote high-proportion pellet ironmaking in blast furnace, high scrap ratio steelmaking in converter, and build near-zero carbon emission EAF high-quality steel production line; strengthen low-carbon technology R&D; build a Smart Carbon Management Platform, optimize carbon asset management, and ensure compliant performance.
Transformation Risk		Carbon tariff	The EU Carbon Border Adjustment Mechanism (CBAM) has officially entered its implementation phase, imposing carbon tariffs on imported products, including steel and cement, which will restrain the company's exports of certain products.	Medium & Long-term	Medium	Actively pay attention to changes in industry policies and respond to possible policy updates in a timely manner; promote the application of low-carbon technologies and product carbon footprint certification to reduce product carbon emissions.
	Technology and Cost	Low-carbon technology transformation	To achieve the company's "dual carbon" goals, significant investments will be required in the future for the research and development or application of low-carbon steelmaking technologies. The research and development process involves uncertainties.	Medium & Long-term	Medium	Increase investment in low-carbon technology R&D; layout the R&D and innovative application of cutting-edge low-carbon metallurgy technologies; deepen external exchanges and cooperation to build a technical reserve system.
		Transformation cost	During the low-carbon transformation process, the company will increase the use of renewable energy, new energy, and other energy conservation and environmental protection technologies. The application and investment in low-carbon steelmaking technologies will lead to an increase in the company's research and development costs and the risk of value loss of existing fixed assets.	Medium & Long-term	Medium	Issue green science and technology innovation corporate bonds to raise funds specifically; optimize the energy structure, increase the proportion of clean energy use, and reduce long-term energy costs; build a smart energy management and control system to improve resource utilization efficiency to offset transition costs.
	Market	Increasing demand for green and low-carbon products	With the deep adjustment period of domestic steel markets and the promotion of the green and low-carbon development trend throughout the industry chain, the market demand for green and low-carbon steel products will significantly increase. The industry competition will become more intense, and if the greenization progress is too slow, it may lead to a decrease in the company's market share.	Medium & Long-term	Medium	Build a green supply chain, strengthen green brand communication and achievement disclosure; develop green products such as high-strength and lightweight products to build a green product system; promote product carbon footprint certification and EPD release.
		Rising costs of raw materials	Prices of energy and other resources will increase due to the impact of climate change, which will in turn affect the procurement costs of fuel and raw materials, resulting in increased costs and other risks.	Medium & Long-term	Medium	Gradually increase the use of clean energy, improve photovoltaic power generation capacity and the proportion of purchased green power; build a smart energy management and control system to improve resource utilization efficiency.
Reputation	Concerns of stakeholders regarding climate change measures	Investors and other stakeholders, as well as the public, will pay more attention to the company's response to climate change measures, and may even consider it a key factor in evaluating the company's performance. This could potentially pose reputation risks to the company, and resources need to be invested to strengthen carbon management in order to meet their expectations.	Medium & Long-term	Low	Strengthen the construction of carbon management system and regularly disclose green and low-carbon development achievements; participate in the formulation of green and low-carbon standards to play a leading role in the industry; promote low-carbon product certification and brand building, and release the "SOGREECO" green and low-carbon product trademark.	

Climate change not only drives and changes socio-economic development models but also brings multiple opportunities for the sustainable development of enterprises. The company actively responds to climate governance requirements, follows the low-carbon transition trend of the steel industry, and seizes new opportunities brought by climate change.

Opportunity Category	Business and Financial Impact	Time Horizon	Degree of Impact	Response Measures
Product and Service	Meet the market demand for low-carbon steel products, expand high-end market share, and increase product added value.	Medium & Long-term	Medium	The company will continuously research and develop green products with characteristics such as high strength, lightweight, long service life, and high corrosion resistance, such as high-performance non-oriented electrical steel, high-performance oriented electrical steel, automotive high-strength steel, and ultra-thin tinplate (chrome-plate). These efforts aim to build a low-carbon product portfolio while actively pursuing LCA and low-carbon product certifications to meet market and customer demand for products and services with low carbon emissions.
Energy Efficiency	Reduce energy consumption and operating costs, improve resource utilization efficiency, and enhance the core competitiveness of the enterprise.	Medium & Long-term	Medium	By continuously refining our process technologies, fully leveraging waste heat and energy, researching and applying cutting-edge energy conservation technologies, and employing big data and intelligent systems, we aim to construct an efficient smart energy management and control system. This will enhance our resource utilization, advance our efforts in energy conservation and carbon emission reduction, and minimize operational costs.
Energy Sources	Reduce dependence on traditional high-carbon energy, reduce energy expenditure and carbon performance costs, and help achieve low-carbon goals.	Medium-term	Medium	We are committed to increasing the utilization of clean energy sources gradually to replace traditional high-carbon energy sources. We will enhance photovoltaic power generation capacity and increase the proportion of green electricity purchased from external sources. Additionally, we will further research and apply low-carbon technologies to reduce the company's energy expenditures and compliance costs, thereby supporting the achievement of low-carbon development goals.
Carbon Management and Trading	Obtain additional benefits through carbon emission rights trading and improve carbon asset management capabilities.	Short & Medium-term	Low	Build a Smart Carbon Management Platform, improve the carbon management system, actively participate in carbon emission rights trading, and continuously strengthen carbon management.

### Promoting Green Upgrading of Processes

The company continues to promote the R&D and integrated application of carbon emission reduction technologies such as high-proportion pellet ironmaking in blast furnace, hydrogen-

enrichment injection in blast furnace smelting, and high scrap ratio smelting in converter to achieve green upgrading of processes. In 2025, the company's blast furnace fuel ratio decreased by 1.2% year-on-year, reducing carbon emissions by 137,000 tonnes. Furthermore, we achieved stable and continuous production with a 50% scrap ratio for entire casting heat, enabling a product carbon footprint reduction of more than 40% per tonne of steel. The energy efficiency levels of key processes continue to maintain an industry benchmark position.



### Conducting Cutting-edge Research on Low-Carbon Technologies

The company focuses on innovation in low-carbon ironmaking process, increases R&D investment in cutting-edge low-carbon technologies, and actively promotes the R&D and integrated application of various carbon emission reduction technologies such as carbon dioxide capture and utilization, steel slag carbonation technology, and hydrogen-enrichment biomass micropowder.

#### Research on Steel Slag Carbonation Technology



In 2025, Qiangang Co. carried out systematic research on steel slag carbonation technology, established a pilot device for steel slag and desulfurization ash to absorb carbon dioxide, completed laboratory research on semi-dry steel slag carbonation, and utilized the on-site 1,000 m<sup>3</sup> steel slag carbonation device to carry out trials on preparing high-flow backfill materials from steel slag tail slag cementitious materials. It deeply explored the influence of factors such as fineness and dosage, slurry concentration, and curing process on the performance of high-flow backfill materials, providing technical support for the resource utilization of steel slag and the industrialization of carbonation technology.

### Building a Low-carbon Product System

The company focuses on the production of low-carbon emission steel and has gradually built a low-carbon product system with four major series—automotive sheets, electrical steel, tinplates (chrome-plates) and plates—as the core, collaborating with downstream users to achieve full-chain energy conservation and carbon emission reduction. Products such as oriented electrical steel, pipeline steel, non-oriented electrical steel for new energy vehicles, and hot-rolled high-strength steel sheets and strips for automobiles produced by the company have been rated as “Green Design Products” by MIIT.

▶ **Automotive Sheets**

Cold-rolled automotive sheets have formed a series of advantageous products such as high-strength outer panels, high-corrosion-resistant coated steel, lightweight ultra-high-strength steel, and hot-forming steel. The production control technology for low-carbon emission automotive sheets with a high proportion of pellets and over 50% scrap ratio has reached a comprehensive carbon emission reduction ratio of more than 30%. Ultra-high-strength steel helps with vehicle lightweighting, directly reducing fuel consumption and costs; high-formability steel has excellent forming performance, improving material utilization; zinc-aluminum-magnesium coated products have high anti-corrosion performance, increasing the service life of the vehicle; diversified low-carbon emission control technologies effectively reduce carbon emissions. In 2025, the company developed the Uni-FISH series high-strength steel for automotive outer panels (UF steel) characterized by fine-grained structure and precipitates in the precipitate-free zone. This series of outer panels features high dent resistance, high isotropy, high surface quality, high aging resistance, low waviness, and low ductile-to-brittle transition temperature, achieving a domestic debut and providing high-end material support for the lightweight and low-carbon development of the automotive industry.

▶ **Electrical Steel**

The company adheres to the product positioning centered on high-end, high-efficiency, green and eco-friendly. In 2025, the company debuted two grain-oriented electrical steel products for high-efficiency transformers. These products successfully resolve the long-standing industry dilemma of balancing low core loss with low noise, providing critical material support for the construction of energy-saving and eco-friendly modern power grids.

▶ **Tinplates (Chrome-Plates)**

The company developed high-proportion pellet ironmaking in blast furnace and 50% high scrap ratio steelmaking in converter. Combined with the use of green power, the carbon emission reduction exceeds 30%. Low-carbon emission steel products for tinplate have completed testing for 26 grades and 15 types of cans, with stable quality meeting standards and the capacity for mass supply.

▶ **Plates**

The company launched the first environment-friendly 500 MPa grade low-carbon wind power steel, achieving a full-process carbon emission of less than 1.4 tonnes of carbon dioxide per tonne of steel; successfully developed 1000 MPa grade hydropower steel, 1300 MPa grade ultra-high-strength steel, and H<sub>2</sub>/CO<sub>2</sub> corrosion-resistant pipeline steel, providing high-end material support for the ultra-high head and large-scale development of the hydropower industry, the lightweight of construction machinery, and the transmission of clean energy.

**Building Green Brand and Standard Systems**

To effectively respond to the upgrading market demand for low-carbon products, the company has built green brand and standard systems to seize the first opportunity for low-carbon development through proactive layout. In September 2025, the "SOGREECO" green and low-carbon product trademark was officially released, and the enterprise standard series *Green Low-Carbon Cold Rolled and Hot-Dip Galvanized Steel Sheet and Strip* and the price system for low-carbon automotive sheet products were launched for the first time.

**Green Low-carbon Product Trademark and Enterprise Standards** ☆

In September 2025, Shougang Co. hosted the "Joining Hands to Create, Leading the Future with Carbon" 2025 Shougang Automotive Steel and Green Low-carbon Technology Forum in Guiyang. More than 400 customer representatives from automotive enterprises attended. The forum deepened industry cooperation through technical innovation and practiced the green and low-carbon development strategy.

The forum presented Shougang's innovative technologies and green low-carbon practice results in automotive steel through 15 reports and 8 exhibition areas. Simultaneously, the "SOGREECO" green and low-carbon product trademark was released, and the enterprise standard series *Green Low-Carbon Cold Rolled and Hot-Dip Galvanized Steel Sheet and Strip* and the low-carbon automotive sheet product price system were launched. From agenda design to conference execution, the forum consistently implemented the low-carbon concept and achieved full-process carbon neutrality through quantitative evaluation and offsetting by authoritative institutions.

The "SOGREECO" trademark, as the core identifier of the company's green brand, embodies green, low-carbon, and ecological environmental attributes. Its carbon emission reduction labels cover -30% to -80% (LCA basis), up to near-zero carbon levels, meeting promotion scenarios for green products with different carbon emission reduction capabilities. This effectively addresses the competitive risks brought by the lack of low-carbon standards and product homogenization, and reflects the systematic, differentiated, and high-end development characteristics of the company's green brand.



The enterprise standard series *Green Low-Carbon Cold Rolled and Hot-Dip Galvanized Steel Sheet and Strip* released by the company is the first green and low-carbon product standard in the steel industry that integrates product performance



and carbon emission reduction attributes, directly serving green procurement in the automotive industry chain. The standards cover 5 major automotive sheet varieties, including low-alloy high-strength steel and hot-stamping steel, with strength levels covering 300-2000 MPa. With the carbon emission reduction ratio as the core indicator, it clarifies evaluation methods complying with current industry LCA carbon emission evaluation general specifications, product technical requirements under different carbon emission reduction ratios, and residual element control standards. It provides standardized and systematic support for the application and procurement of green and low-carbon materials in downstream industries, playing a leading role in promoting a healthy and sustainable green steel market.

## Participating in the Formulation of Green Production Standards

The company actively plays an industry-leading role, deeply participating in the formulation of green and low-carbon related standards to empower industry collaborative carbon emission reduction through standardization.

- Participated in the formulation of the national standard *GB/T 46412-2025 Asset management—Application guidance of carbon asset management system*.
- The group standard *T/CISA 103-2017 Technical specification for green-design product assessment—Non-oriented electrical steel for new energy vehicle*, led by the company, has been released and implemented. It has strongly promoted technical innovation, quality improvement, and green manufacturing upgrades in the electrical steel industry, supporting the healthy development of the new energy vehicle industry.
- Led the formulation of 13 management evaluation standards, such as the *Evaluation Criteria of Green Production Management in Iron and Steel Industry* (group standard), integrating advanced technical indicators and green manufacturing concepts into industry standards to provide followable standard guidelines for the industry's green and low-carbon transition.

## Strengthening Low-carbon Product Certification

The company continues to promote low-carbon product certification. In 2025, it released 8 domestic Environmental Product Declarations (EPDs), such as for hot-rolled sheets and strips and cold-rolled galvanized steel sheets and strips, as well as 2 international EPDs for heavy plates and heat-treated heavy plates, achieving



full EPD coverage of typical product categories. Hot-rolled coils obtained the low-carbon emission steel certificate; 23 products, including galvanized high-strength automotive sheets, completed carbon footprint certification; low-carbon special steels 55MnB and S75YYJ successfully passed the Kingfisher certification (SCS); the company was awarded the "Low-Carbon Supplier" Grade Certificate by the Automotive Industry Energy Saving and Green Development Evaluation Center.

Additionally, the company actively promoted supply chain carbon emission reduction, signing low-carbon emission steel cooperation agreements with 6 car companies including FAW-Volkswagen, Volvo, and NIO. Toyota certified the company's products with a carbon emission reduction of over 40%; carbon footprint certification was completed for 60 products from 38 suppliers, building a low-carbon collaborative system for the entire industrial chain.

## Enhancing Carbon Management Capabilities

The company attaches great importance to the construction of carbon management capabilities. Through organizing carbon knowledge popularization training, inviting external experts and third-party consulting companies to conduct special lectures, and participating in industry low-carbon training and exchanges, it continuously improves employees' carbon management awareness and professional ability. The Smart Carbon Management Platform, with the product carbon LCA system as its core, has been improved to achieve full coverage of organizational and product carbon accounting. It can provide all-round intelligent solutions and services for enterprise "carbon neutrality" goal management, green design of low-carbon products for downstream industry users, and carbon asset management.

### Smart Carbon Management Platform



The Smart Carbon Management Platform built by Shougang Co. takes the product carbon LCA system as the core. Based on the "one headquarters, multiple bases" model, it integrates four major modules: compliance in the National Carbon Market, carbon asset management, carbon tariff, and the product carbon LCA system. Localized development is carried out around the "Five Unifications" principles: unified interface, unified data interface, unified accounting method, unified accounting model, and unified application of commercial databases. It provides a series of intelligent solutions and service schemes for enterprises to implement "carbon neutrality" goal management, conduct green design of low-carbon products for downstream industry users, and manage carbon assets.

The platform has established a three-level carbon emission data archiving and verification system of "process-enterprise-low carbon center," effectively solving the problem of data dispersion. The platform's LCA module has successfully obtained a Verification Statement issued by DNV, a globally recognized third-party certification body. Related projects won the first prize of the 6th Metallurgical Youth Innovation and Creativity Competition and the third prize of the 5th Intelligent Manufacturing Innovation Competition.



### Green Science and Technology Innovation Corporate Bond



In July 2025, the company successfully issued 500 million yuan of Green Science and Technology Innovation Corporate Bond. This bond issuance is an important measure for the company to actively respond to the national "dual carbon" goals, practice the concept of sustainable development, and optimize its debt structure. The raised funds are specifically used for projects such as low-carbon transition, environmental protection transformation, and project upgrading, injecting strong impetus into the company's development of green productivity.

## Metrics and Targets

Centering on the overall goal of "reaching carbon peak by 2025 and achieving carbon neutrality between 2050 and 2060," Shougang Co. has formulated a detailed phased and quantifiable implementation plan.

The company attaches great importance to carbon emission indicator management and has established a normalized tracking and monitoring mechanism to strictly control direct and indirect greenhouse gas emissions and emission intensity. Meanwhile, in strict accordance with

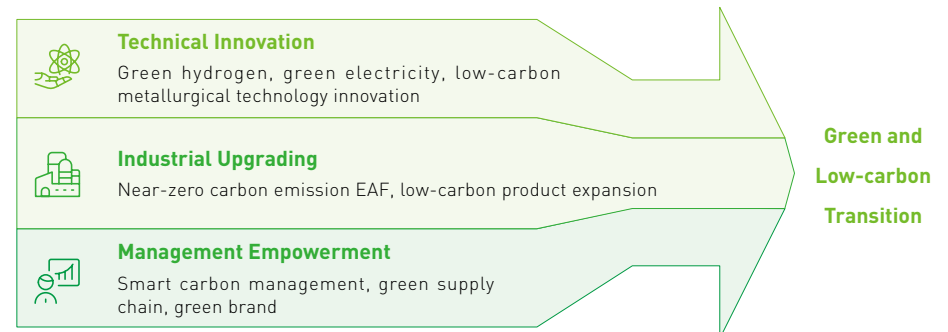


the *Guideline for Greenhouse Gas Emission Accounting and Reporting for the Iron and Steel Industry (CETS-AG-03.01-V01-2024)* and other accounting standards, the company conducts accounting and verification of direct and indirect greenhouse gases within its operational control every year. In 2025, in strict accordance with the requirements of the *Notice on Work Related to the National Carbon Emission Trading Market in 2025*, the company successfully completed the 2024 quota surrender and compliance work, achieving compliant fulfillment in the carbon market.

In 2025, the company's GHG Emissions (Scope 1 & 2) totaled 44,420,648 tCO<sub>2</sub> e.

Indicator	Unit	2025
GHG Emissions (Scope 1)	tCO <sub>2</sub> e	41,831,526
GHG Emissions (Scope 2)	tCO <sub>2</sub> e	2,589,122
GHG Emissions (Scope 1 & 2)	tCO <sub>2</sub> e	44,420,648

In the future, Shougang Co. will anchor its long-term goal of "achieving carbon neutrality between 2050 and 2060," taking green and low-carbon transition as the main thread and continuing to deepen the landing of low-carbon strategies. In the aspect of technical innovation, we will increase the scale of application of green hydrogen and green electricity, promote the R&D and innovative application of cutting-edge low-carbon metallurgical technologies, and build a full-process deep decarbonization technology system. In terms of product upgrading, we will accelerate the production and effectiveness of the near-zero carbon emission EAF high-quality steel production line, continue to expand the coverage of the low-carbon product matrix, and focus on expanding applications in high-end fields such as new energy vehicles, humanoid robots, and hydrogen transportation to drive collaborative carbon emission reduction across the upstream and downstream of the industry chain. In terms of management empowerment, we will iterate and upgrade the Smart Carbon Management Platform, strengthen its ability to respond to carbon tariffs, deepen the construction of the green supply chain and low-carbon product certification, and improve the "SOGREECO" green brand system. At the same time, we will actively participate in the formulation of green and low-carbon standards, continuously improve carbon asset management and trading capabilities, and create a benchmark for low-carbon transition in the steel industry through the multi-dimensional synergy of technical innovation, industrial upgrading, and management optimization, contributing Shougang's solutions and strength to the green and sustainable development of the steel industry.

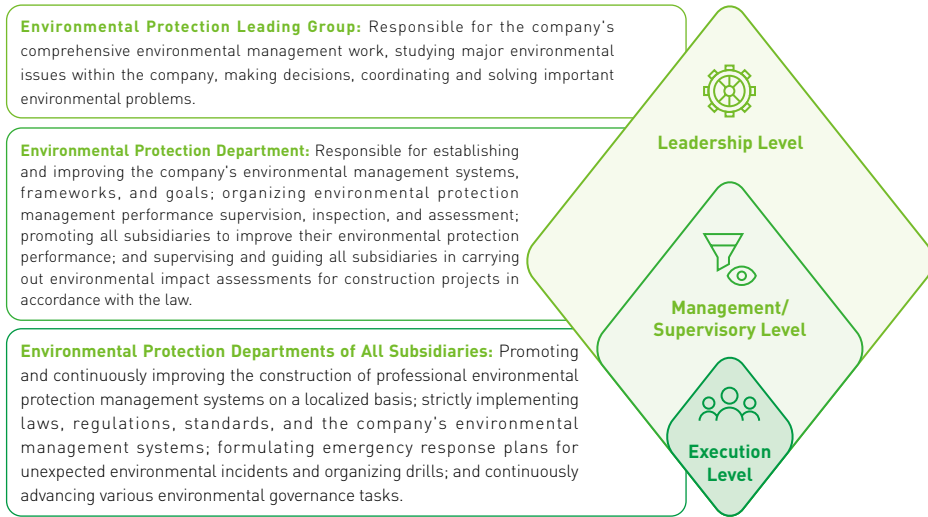


# Environmental Management

Shougang Co. upholds the development philosophy of "Green Transformation and Ecological Shougang Co.," focusing on systematic governance, precise control, and regular advancement to carry out environmental governance. By improving the environmental management system, deepening multi-dimensional precise pollution control, and strengthening environmental risk prevention and control, the company continuously enhances environmental governance efficiency.

## Governance

Shougang Co. has constructed a rigorous, efficient environmental management organizational structure and working mechanism with clear powers and responsibilities. The Environmental Protection Leading Group, composed of members of the management level, has been established to be responsible for the company's environmental management work, research key matters of the company's environmental protection efforts, and make decisions on and coordinate the resolution of important environmental issues. The Environmental Protection Department is the management and supervision department for environmental management work, responsible for formulating environmental protection-related systems, establishing and improving the company's environmental management system, and organizing environmental protection management performance supervision and assessment. Subsidiaries, following the principle of localized management, are responsible for advancing the construction of professional environmental management systems and continuously enhancing their environmental practices to ensure that various environmental protection requirements are effectively implemented. Relevant personnel possess backgrounds and skills in energy and environmental management.



The company has formulated basic business systems and specific operating specifications, such as the *Environmental Protection Responsibility System*, the *Air and Water Pollution Prevention and Control Management System*, the *Solid Waste Pollution Prevention and Control Management System*, the *Noise Pollution Prevention and Control Management System*, the *Soil Pollution Prevention and Control Management System*, the *Environmental Protection Management Measures*, and the *Management System for Environmental Monitoring*. These form an environmental management system covering fields such as atmosphere, water, and solid waste, standardizing the entire process of environmental management. In accordance with *Environmental Management Systems—Requirements with Guidance for Use* (GB/T 24001-2016), the company has fully advanced the construction of its environmental management system and passed the ISO 14001 Environmental Management System certification, with a certification rate of 100%. Every year, third-party institutions are commissioned to conduct supervision audits of the environmental management system to promptly discover and rectify problems, continuously enhancing the operational efficiency of the system and ensuring continuous compliance and effective operation of the environmental management system.



## Strategy

Shougang Co. adheres to the environmental management policy of "complying with regulations, preventing pollution, continuous improvement, and environmental friendliness." Following the development philosophy of "Green Transformation and Ecological Shougang Co.," we unwaveringly follow the path of innovation-driven, lean environmental protection, and green development, striving to build a "circular economy-based, energy-conservation and environmentally friendly, clean and efficient" next-generation metallurgical demonstration plant. By upholding the advancement and foresight of technology selection and management models, as well as the near-zero pollution emissions and lean environmental management, the company ensures that major pollutants stably reach ultra-low emission standards, and the emission performance per tonne of steel reaches advanced levels of cleaner production, with overall environmental performance ranking among the world's first-class.

## Risks and Opportunities Management

Shougang Co. has incorporated the management of environmental-related risks and opportunities into the company's comprehensive risk management system. Combined with industry environmental policy orientation, changes in market demand for green products, and its own production and operation characteristics, the company focuses on all links of pollutant generation, treatment, and utilization. Through multi-dimensional measures such as strict compliance with environmental protection laws and regulations, upgrading monitoring and pollution treatment technologies, promoting circular resource utilization, improving emergency drill mechanisms, and strengthening environmental protection training for all employees, the company accurately judges and resolves various potential risks such as environmental compliance and unexpected environmental incidents, building a bottom line for compliant operations and ecological safety. We actively explore development opportunities such as policy orientation, technology transfer, and comprehensive resource utilization to promote the optimal allocation of environmental protection resources and efficiency enhancement, achieving controllable risks and well-utilized opportunities, and helping the enterprise continuously improve its sustainability resilience in an industry landscape with tightening environmental constraints.

Potential Risk / Opportunity Description	Type	Business and Financial Impact	Time Horizon	Response Measures
Regulatory and Non-compliance Risk	Risk	Excessive discharge of pollutants may lead to fines from regulatory authorities or even production suspension for rectification.	Short-term	Establish a regular environmental protection supervision mechanism; standardize discharge declaration, monitoring, and information disclosure, and actively accept supervision; continuously invest in advanced environmental protection production equipment and technologies to improve environmental performance.
Unexpected Environmental Incidents	Risk	Unexpected environmental incidents may attract public attention and damage the corporate image; waste gas, wastewater, waste residue, dust, radioactive substances, and noise cause pollution and harm to the environment, increasing governance costs.	Medium & Long-term	Improve environmental protection monitoring and supervision to achieve real-time monitoring and abnormal warnings; establish an emergency system for unexpected environmental incidents, formulate environmental risk emergency response plans, and regularly conduct emergency drills for unexpected environmental incidents to enhance response capabilities and prevention levels; continuously reduce pollutant discharge and mitigate environmental impacts through multi-pronged measures such as refined management and application of advanced technologies; carry out environmental protection training and publicity activities.
Green Technology Innovation	Opportunity	Promote the R&D and application of more efficient pollution control technologies and resource recovery technologies, etc., to reduce costs of pollutant treatment and improve resource utilization efficiency.	Medium & Long-term	Increase R&D investment in environmental protection technologies, deepen industry-university-research institution collaborative innovation, promote the landing and transformation of green technology achievements and industry standardization, and transfer technical solutions such as ultra-low emissions.
Circular Economy and Comprehensive Resource Utilization	Opportunity	Through the development of circular economy, achieve the resource utilization of waste and reduce waste disposal costs.	Medium & Long-term	Strengthen cooperation with downstream enterprises to build a steel circular economy and closed-loop recycling value system; promote the reduction and comprehensive utilization of solid waste, and create a cross-regional, cross-industry, and cross-medium solid waste circulation network; promote the construction of "Zero-Waste Group."

## Environmental Compliance Management

The company strictly adheres to environmental laws and regulations, fulfilling local regulatory requirements and the discharge permit system. We standardize our practices in emission declarations, monitoring, and information disclosure, actively accepting oversight from ecological departments and the public to ensure all discharges are legal and permitted. In 2025, our environmental facilities operated reliably, with all major pollutant discharges meeting the requirements of pollutant discharge permits and ultra-low emission standards for pollutants. The comprehensive compliance rate for pollutant discharge reached 100%, with zero environmental pollution incidents recorded.

## Pollutant Discharge

### Exhaust Gas Treatment

The company consistently maintains the Environmental Performance Level-A standards. By formulating and implementing the *2025 Green Action Plan*, we continue to enhance the level of atmospheric pollution control through upgrading monitoring level, pollution control, management efficiency enhancement, and digital empowerment. These efforts comprehensively solidify our leading position in green development within the industry.

Has been rated as an Level-A enterprise in environmental performance of Hebei Province for consecutive years since 2019

### Qiangang Co.

++++

The world's first enterprise to achieve ultra-low emissions for the entire steel production process.

The ultra-low emission renovation project was rated as a "14th Five-Year Plan" Innovation Project in China's steel industry.

One of the first batch of Level-A leader enterprises in environmental performance of Hebei Province in key industries.



### Jingtang Co.

++++

One of the first batch of Level-A leader enterprises in environmental performance of Hebei Province in key industries.

### Improving Environmental Protection Monitoring and Supervision

The company continuously optimizes the unorganized emission control and management system, establishing a real-time linkage model between production equipment and monitoring data.

#### Qiangang Co.

By upgrading regulatory measures, the company has installed high-definition environmental video surveillance in ash unloading rooms and sludge discharge points of key processes such as sintering, and replaced abnormal data sensors in TSP and air quality micro-stations, achieving real-time emission monitoring and abnormal early warning.

#### Jingtang Co.

The company completed the installation of monitoring equipment for CO, particulate matter, SO<sub>2</sub>, and NO<sub>x</sub>, and the networking acceptance of some points.



Installation and Networking of Monitoring Equipment

#### Cold-R Co.

The company has updated online exhaust gas monitoring equipment to further improve monitoring accuracy and control efficiency, ensuring that emission data is traceable and verifiable.

### Continuously Deepening Pollution Governance

The company has successively implemented environmental protection projects such as optimization and transformation of sintering feed systems, pulverizing systems, and acid mist purification systems for pickling and rolling processes, as well as treatment of carbon monoxide emissions, and denitrification treatment to continuously improve the ecological environment of the plant area and surrounding areas.



Optimization and renovation of the No.1 pulverizing system of the No.1 blast furnace

## Qiangang Co. and Jingtang Co. Rated as One of the First Batch of Level-A Leader Enterprises in Environmental Performance of Hebei Province in Key Industries



In 2025, the company interfaced with the provincial dynamic evaluation mechanism of Hebei to accurately grasp environmental policy orientation, ensuring the company's regulatory and control strategy remains synchronized with the Hebei provincial "leader" standard. Internally, it constructed a "source prevention - process control - end-of-pipe treatment" full-chain management system. Emission concentrations of particulate matter, SO<sub>2</sub>, and NO<sub>x</sub> strictly followed the *Environmental Performance Level-A Standard for Key Industries in Hebei Province (Trial)*. By focusing on precise pollution control of pollution sources and stable compliant discharge of pollutants, Qiangang Co. and Jingtang Co. maintained its leading environmental performance Level-A, fully playing the role of a demonstration benchmark.



### Providing Ultra-low Emission Renovation Schemes to External Parties

Qiangang Co. and Jingtang Co. organized other steel companies to establish an ultra-low emission special working group and advance ultra-low emission renovation, establish a system of monthly special promotion meetings, and implement measures including supervision by listing and reverse schedule of construction period. In 2025, Shougang scientists and professional backbones were organized to conduct 7 rounds of on-site guidance at relevant units, providing over 90 targeted suggestions and assisting them in successfully completing ultra-low emission renovation.



**Wastewater Discharge Management**

**Qiangang Co.** Achieves efficient water saving and wastewater resource utilization through technologies such as condensate recovery and utilization, comprehensive sewage treatment and deep treatment technologies, coking wastewater deep treatment, zero wastewater discharge technology for cold rolling, and online monitoring of process production wastewater discharge.

**Jingtang Co.** Jingtang Co. has built complete wastewater treatment facilities to realize the preliminary treatment of special process wastewater in the region before being incorporated into the comprehensive sewage treatment station for unified treatment and reuse. In 2025, it introduced standalone sets of domestic sewage treatment technology and built an integrated decentralized domestic sewage treatment system to achieve on-site treatment and reuse of domestic sewage from office areas and canteens. It optimized seawater desalination treatment facilities, using reclaimed sewage to replace seawater for preparing desalted water, achieving water quality improvement at 30% of the operating cost of traditional sewage reuse treatment.

**Cold-R Co.** Cold-R Co. has formulated internal control indicators stricter than national standards, raising the standard for discharging wastewater into urban sewage treatment plants to levels related to surface water discharge. For example, while the national COD discharge standard is 200 mg/L, Cold-R Co.'s internal control standard is 30 mg/L.

**Jingtang Co.'s Sewage Desalination Reduction, Underground Pipe Network Renovation and Integrated Domestic Sewage Treatment Project**

In 2025, Jingtang Co. completed the innovative transformation project of sewage desalination reduction, using thermal seawater desalination equipment to evaporate and concentrate sewage to realize wastewater reduction. At the same time, the produced demineralized water is reused in production processes to realize the effective recycling of wastewater resources. It also completed the underground pipe network renovation and integrated domestic sewage treatment project, reducing seawater leakage, adding domestic sewage treatment facilities in the hot rolling and feeding canteens, and reducing the concentrations of chemical oxygen demand and ammonia nitrogen in wastewater.

**Solid Waste Disposal**

The company strictly complies with the Solid Waste Pollution Environment Prevention Law and relevant laws and regulations. In 2025, it revised systems such as the *Solid Secondary Resource Management System* and the *Solid Waste Pollution Prevention and Control Management System* to ensure that solid waste disposal is in accordance with laws and regulations. Following the basic principles of "reduction, reuse, industry collaboration, and productization," we focus on source control, supervision of the processing procedure, end-treatment, and comprehensive utilization to achieve "zero solid waste disposal from the factory" and promote the construction of "Zero-Waste Group."

**Hazardous Waste Management**

In accordance with the national hazardous waste catalog, identification methods, and standards, the company identifies generated solid waste and strictly implements requirements for classified storage, dedicated personnel control, and compliant disposal. For hazardous wastes such as oily sludge, waste emulsion, waste oil, contaminated waste, and waste batteries, standardized storage management is strengthened in accordance with the *Pollution Control Standards for Hazardous Waste Storage* (GB 18597-2023), to ensure 100% compliant disposal. In 2025, no environmental risk incidents such as hazardous waste leakage or illegal transfer occurred.

**Qiangang Co.** Utilized a total of 10,000 tonnes of 2 types of general industrial solid waste and 20,000 tonnes of 7 types of hazardous waste. The volume of outsourced disposal of hazardous waste at pilot units decreased by 1,500 tonnes year-on-year.

**Jingtang Co.** Implemented the emulsion sludge reduction treatment project, achieving a 60% reduction of waste emulsion at the source.

**Cold-R Co.** The generation of hazardous waste is controlled with the goal of reducing by 1% every year, decreasing by 1.78% year-on-year in 2025. Among them, circular utilization equipment was added in the link of rolling oil sludge generation, reducing the generation of hazardous waste by 30%.

**Jingtang Co.'s Emulsified Liquid Sludge Reduction Treatment Project**

The emulsified liquid oil sludge generated from the cold rolling line is an ointment-like solid-liquid mixture. To reduce the output and treatment cost of hazardous waste, reduce the work content and intensity of receiving, storing and discharging emulsified liquid sludge, and purify the environment, in 2025, Jingtang Co. renovated the cold rolling line, adopting the process of "cold rolling emulsified liquid tank → magnetic filter → oil sludge treatment equipment → emulsified liquid tank (separated emulsified liquid) → collection bucket (separated oil residue)", completed the equipment installation, and reduced the source of waste emulsified liquid by 60%.



## Cleaner Production

The company continuously promotes cleaner production, with the overall cleaner production level reaching Level I standards in the Cleaner Production Evaluation Index System.

### Qiangang Co.

• + + + +

Cleaner Production and Environment-friendly Enterprise in China's Iron and Steel Industry  
Benchmark Enterprise for Clean Production in the Iron and Steel Industry of Hebei Province

### Jingtang Co.

• + + + +

Cleaner Production and Environment-friendly Enterprise in China's Iron and Steel Industry

### Jingtang Co.

Actively strives to become an industry benchmark for cleaner production, and organizes clean production audits in accordance with the requirements of Hebei Province's cleaner production audit management to promote pollution reduction and carbon emission reduction in production links.

### Cold-R Co.

All raw materials are transported by railway; 17 new electric vehicles and 5 hydrogen energy vehicles are added for product outward transportation.



Clean Transportation

## Environmental Protection Supervision

The company has established a regular environmental protection supervision mechanism, scientifically formulating work plans covering 6 key areas, including post-permit management of pollutant discharge permits and dust governance. In 2025, the company organized 1,995 environmental protection supervision inspections of various types. Regarding the issues found during the inspection, measures such as tracking re-examinations and supervised handling were taken to ensure all problems were rectified within the specified time; successfully passed 253 environmental inspections at all levels, and the inspection results all met environmental protection requirements.



Special inspection of carbon monoxide



Full-process pollutant discharge inspection of coking and iron and steel industries

## Emergency Plans and Drills

In accordance with the requirements of laws and regulations and combined with its own actual situation, the company has established and continuously improved the emergency management system for sudden environmental incidents to strengthen the prevention of sudden environmental incidents, improve emergency response capabilities, and effectively control and reduce environmental hazards. We have established emergency command headquarters for sudden environmental incidents, responsible for organizing and implementing emergency response work for sudden environmental incidents, formulating comprehensive emergency plans for sudden environmental incidents, and organizing drills as planned to improve the organizational command, rapid response and emergency disposal capabilities for sudden environmental incidents. Projects such as straight-line traveling grate roasters, lime kilns, railway transportation capacity improvement, and resource utilization of general industrial solid waste are included in the emergency plan to strengthen the comprehensiveness and pertinence of emergency management. In 2025, the company organized a total of 42 various environmental protection emergency drills.

## Cold-R Co. Conducted an Emergency Drill for Lye Leakage



In March 2025, Cold-R Co. carried out an emergency drill for lye leakage caused by a fault in the lye valve of the cleaning section. After the activation of the emergency plan for sudden accidents, relevant personnel in the operation area rushed to the scene quickly, performed their respective duties, and controlled the scene in an orderly manner. The drill achieved good results, improving the safety and environmental protection awareness and on-site organization and disposal capabilities of the participants.



## Environmental Protection Training and Publicity

The company actively carries out special environmental protection training and publicity and education activities, advocates green office, and continuously improves the environmental protection awareness of all employees. In 2025, it carried out 6 various large-scale environmental protection training sessions, with a 100% coverage rate of environmental protection training. The training forms are diverse, including participating in industry environmental protection conferences and exchanges, carrying out special training on new pollution control technologies and development trends, and organizing special training on environmental protection laws and regulations. During June 5th World Environment Day, it extensively publicizes energy conservation and environmental protection concepts through various forms such as playing promotional videos, carrying out environmental protection essays, and commending advanced models, enhancing the environmental protection awareness and enthusiasm of all employees.



Qiangang Co. jointly held a World Environment Day environmental protection legal popularization activity with the Qian'an Municipal Bureau of Ecology and Environment

## Metrics and Targets

In accordance with the Environmental Protection Plan, Indicators and Statistical Management System, Shougang Co. formulates long-term environmental protection goals every five years, and formulates annual environmental goals and implementation lists of management goals every year to ensure the orderly progress and steady implementation of environmental protection work. The goal is that by 2035, we will continue to reduce air pollutant emissions, maintain Level-A environmental performance, and keep the pollution emission indicators of all processes and the level of unorganized emissions control and treatment at the leading level. In addition, the company has formulated normalized environmental management goals such as resource conservation, eliminating environmental pollution incidents, 100% compliance rate of pollutant emissions, 100% compliance disposal rate of hazardous waste, 100% synchronous operation rate of environmental protection facilities and primary production equipment, and 100% completion rate of emergency response drill plans.

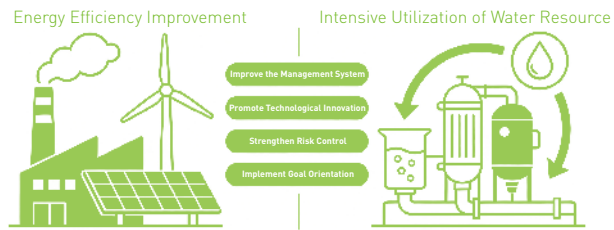
The company has established a regular tracking mechanism for the progress of goal completion to ensure the steady implementation of various indicators. In 2025, the company achieved 100% compliance rate of pollutant emissions, 100% compliance disposal rate of hazardous waste, 100% synchronous operation rate of environmental protection facilities and primary production equipment, and 100% completion rate of emergency response drill plans. The rate of environmental accidents and incidents was 0, and emissions of smoke, dust, sulfur dioxide, and nitrogen oxides all met the annual targets.

Indicator	2025 Goals	2025 Results
Pollutant Emission Compliance Rate	100%	100%
Hazardous Waste Compliance Disposal Rate	100%	100%
Synchronous Environmental Operational Protection Rate Facilities for and Primary Production Equipment	100%	100%
Emergency Response Drill Plans Completion Rate	100%	100%
Environmental Accident and Incident Rate	0	0
Compliance Emission of Smoke Dust, SO <sub>2</sub> , and NO <sub>x</sub>	Compliance with: Steel Industry Air Pollutant Ultra-Low Emission Standards: DB13/2169-2018 Coking Chemical Industry Air Pollutant Ultra-Low Emission Standards: DB13/2863-2018	Meeting Emission Standards

Indicator	Unit	Permitted Emissions	Actual Emissions
Particulate Matter (PM) Emissions	Tonne	6,032.1	4,888.92
Sulfur Dioxides (SO <sub>2</sub> ) Emissions	Tonne	3,717.29	1,761.83
Nitrogen Oxides (NO <sub>x</sub> ) Emissions	Tonne	7,460.57	4,021.65
Chemical Oxygen Demand (COD) in Wastewater Discharge	Tonne	648.99	1.1176
Ammonia Nitrogen(NH <sub>3</sub> -N) in Wastewater Discharge	Tonne	64.90	0.0490

# Resource Utilization

Resource utilization is a key link for enterprises to achieve green and low-carbon transformation and improve sustainable development capabilities. Shougang Co. actively responds to the national "dual carbon" goals, incorporates energy efficiency improvement and intensive water resource utilization into the core agenda of the company's development, and systematically promotes the efficient, clean and circular utilization of energy and water resources through improving the management system, promoting technological innovation, strengthening risk control and goal orientation.

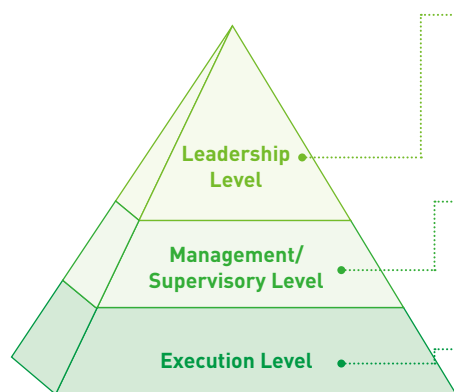


Efficient, Clean and Circular Utilization of Energy and Water Resources

## Energy Utilization

### Governance

Shougang Co. has built a well-structured and highly efficient energy management framework, covering three levels: the Energy Conservation Management Group of the Green Manufacturing Committee, the Energy Department, and the Energy Departments of subsidiaries. It implements a "flat and centralized consistency" management model to construct an Energy Management System characterized by a "flat structure, streamlined concentration, efficient operation, and clean environment."



**The Energy Conservation Management Group of the Green Manufacturing Committee.** Responsible for energy management, researching significant energy issues, making decisions, and coordinating solutions to major energy conservation issues.

**The Energy Department.** Responsible for establishing and improving energy management systems, frameworks, and goals; organizing energy management performance supervision, inspection, and assessment; driving subsidiaries to improve energy performance; and supervising subsidiaries in carrying out energy-saving technical transformations in accordance with the law to achieve energy-related indicators and goals.

**Energy Departments of All Subsidiaries.** Responsible for the localized construction of energy management systems and executing energy management and related energy indicators at the subsidiary level.

In accordance with laws and regulations such as the *Energy Conservation Law*, the company has formulated and continuously improved systems such as the *Energy Management System* and the *Electricity Supply and Usage Management System*. It has established an energy management system that complies with the national standard *Energy Management Systems—Requirements with Guidance for Use* (GB/T 23331), with a certification ratio of 100%, and actively conducts audits to ensure the effectiveness of the system.



Energy Management System Certification

## Strategy

Energy efficiency improvement is one of the core measures for the steel industry to achieve green, low-carbon, and high-quality development. Shougang Co. firmly and unwaveringly taps the potential of energy efficiency, optimizes energy structure, carries out energy conservation technological innovation, and integrates green production into the entire process of production and operation.

The company strives to become an energy efficiency benchmark. The energy consumption of each process has continuously decreased, and energy consumption indicators for key processes have stably reached benchmark levels. They were among the first batch of enterprises in the steel industry to be publicly listed as "Energy Efficiency Benchmark Demonstration Factory for Dual Carbon Best Practice" by the CISA. In 2025, key processes energy consumption continued to maintain benchmark levels. Jingtang Co.'s pelletizing process was awarded the title of Energy Efficiency "Leader" by MIIT, making it the first enterprise in the steel industry to receive this title for the pelletizing process.

## Risks and Opportunities Management

Energy consumption intensity, utilization efficiency, and compliance are directly related to operating cost control, green brand image building, and sustainable development capabilities. Based on the green and low-carbon transition trend of the steel industry, Shougang Co. takes laws and regulations as its compliance basis, system construction as its safeguard, and technological innovation as its driver. We systematically coordinate and oversee the potential risks and development opportunities of energy management. Through diverse measures such as ultimate energy efficiency promotion, waste heat and energy utilization, clean energy substitution, emergency management, and energy-saving publicity, we minimize the impact of risks.

Potential Risk / Opportunity Description	Type	Business and Financial Impact	Time Horizon	Response Measures
Regulatory and violation Risks	Risk	Energy consumption higher than relevant standards will face fines from regulatory authorities.	Short-term	Reduce energy consumption and improve energy utilization efficiency by selecting high-energy-efficiency equipment, using advanced energy conservation technologies, and cascaded energy utilization.
Energy Substitution	Risk	Energy substitution (such as purchasing more green electricity) or R&D of new low-carbon energy (such as hydrogen energy) will lead to increased company costs or R&D investment.	Medium & Long-term	Increase the proportion of clean/renewable energy use, lock in green electricity resources through the "long-term agreement" model, increase the proportion of green electricity procurement, and optimize the energy structure.
Environmental Impact and Reputation Damage	Risk	Energy pollution incidents will attract public attention, damage the corporate image, and thus affect revenue.	Medium & Long-term	Improve energy management systems and emergency systems, and carry out energy conservation publicity.
Energy Efficiency Improvement	Opportunity	Reduce energy consumption and costs, and improve financial benefits.	Continuous	Actively promote the Ultimate Energy Efficiency Project, stimulate the enthusiasm of all employees through management energy conservation, and consolidate the energy efficiency benchmark position.

### Ultimate Energy Efficiency

The company actively promotes the Ultimate Energy Efficiency Project, formulating the *Ultimate Energy Efficiency Work Promotion Plan and the Integrated Energy Cost Reduction and Ultimate Energy Efficiency Promotion Plan* to advance systematic consumption reduction and quality improvement. Qiangang Co. and Jingtang Co. were among the first batch of "Energy Efficiency Benchmark Demonstration Factory for Dual Carbon Best Practice" and were rated as "Advanced Enterprise in Organizing and Promoting the Steel Industry Ultimate Energy Efficiency Project Three-Year Benchmark Action in 2024."



#### Qiangang Co.

With 22 key tasks as the main line, 160 indicators as support, and the "Energy Efficiency Benchmark Advanced Enterprise" as guidance, Qiangang Co. formulated annual energy work plans and specified energy conservation and consumption reduction in all processes. In 2025, it implemented energy efficiency improvement and carbon emission reduction transformations in the ironmaking area, including projects like the sintering machine waste heat power generation system and hot blast stove burner optimization. These resulted in an annual energy conservation of 17,800 tonnes of standard coal and a reduction of 46,300 tonnes of CO<sub>2</sub> emissions.

#### Jingtang Co.

Jingtang Co. developed an Ultimate Energy Efficiency promotion plan focused on extremely low costs and extreme energy efficiency. Guided by the List of Ultimate Energy Efficiency Technologies (T80), it actively promoted the application of energy conservation technologies and implemented energy conservation actions in key processes. In 2025, it advanced transformations for production processes, including low-temperature waste heat steam recovery for converters and energy efficiency improvement of circular cooler waste heat recovery facilities, achieving an annual energy conservation of 83,300 tonnes of standard coal.

In the 2025 "National Energy Conservation and Consumption Reduction Benchmarking Competition for Key Large-scale Iron and Steel Production Equipment"



- Qiangang Co.'s No.2 Blast Furnace and No.8 Sintering Machine won the title of "Champion Furnace", No.3 Blast Furnace won the title of "Outstanding Furnace", and No. 4 Converter won the title of "Pioneering Furnace".
- Jingtang Co.'s No.2 Sintering Machine won the title of "Champion Furnace" for three consecutive years, No. 2 Blast Furnace and No. 7 Converter won the title of "Outstanding Furnace".

### Energy Conservation through Technology

The company actively promotes mature and advanced energy conservation technologies from the List of Ultimate Energy Efficiency Technologies (T80) list. The blast furnace process reduced solid fuel and gas consumption through hot blast stove efficiency upgrading and high-proportion pellet smelting. The converter process achieved significant efficiency gains by increasing gas recovery and reducing gas and electricity consumption.



Energy Conservation Renovation

### Energy Conservation through Management

The company established a sound Energy Management System using "three rulers" for energy efficiency indicators and building a Smart Energy Control Platform to promote intelligent management.

## Qiangang Co. Explores a New Path for Efficient and Low-Consumption Iron and Steel Smelting

In 2025, Qiangang Co. practiced the multi-dimensional energy conservation and consumption reduction concept of "awareness leadership, technology empowerment and management efficiency improvement", integrated lean management into the entire production process, and explored a new path for efficient and low-consumption iron and steel smelting.

**Equipment Upgrade** The Qiangang Co. applied high-efficiency fans and frequency conversion speed regulation technology to upgrade blast furnace dust removal fans, with power consumption decreased by 18.6% year-on-year, achieving significant power saving effects; pioneered the application of pneumatic backblowing devices in water slag granulating filters instead of electric backwashing, significantly reducing the power consumption of the water slag granulating process.

**System Optimization** The Qiangang Co. scientifically adjusted the control indicators of the hot blast stove denitrification system, and by optimizing the load, reducing the fan frequency, and balancing the pressure of the flue gas main pipe and the flue gas temperature, the power consumption of the hot blast stove flue gas treatment system decreased by 34.1% year-on-year, achieving a win-win situation of environmental protection compliance and in-depth consumption reduction.

**Process Optimization** Promoted the "zero emission" renovation of the No. 2 sintering circular cooler, innovatively adopted the circulating air utilization technology, replacing three blowers with a single circulating fan, reducing the total power consumption of equipment operation by 10.75 million kWh.

## Jingtang Co.'s Pelletizing Process Was Awarded the Title of Energy Efficiency "Leader" by MIIT



Jingtang Co.'s pelletizing process was successfully selected into the list of Energy Efficiency "Leader" Enterprises in key industries in 2025 by MIIT, becoming the first enterprise in the iron and steel industry to win the title of Energy Efficiency "Leader" in the pelletizing process. The process is characterized large single-machine capacity and high automation. It has achieved energy efficiency improvement through three major technological innovations, providing replicable successful experience for the green transformation of the industry.

### Thick Bed Low-Temperature Roasting Technology

By revealing the heat storage mechanism of the material bed, Jingtang Co. proposed a consolidation method that "prolonging high-temperature duration is more efficient than raising the temperature". Based on the research on the coupled reaction between iron ore and flux, the configuration of the preheating section was optimized. The thick bed low-temperature slow-heating process was adopted, increasing the bed thickness by 50 mm, which significantly reduced gas consumption and improved pellet consolidation quality.

### High-Efficiency Hot Air Circulation System

A high-efficiency hot air circulation system for straight-line traveling grate roasters was developed. The thermal system was optimized through flow field simulation and heat redistribution, realizing cascaded utilization of hot air. The power consumption of process fans was reduced by 25%, and the energy utilization rate reached 88%, laying an important technical foundation for energy conservation and consumption reduction in similar processes.

### Research on Comprehensive Technology for Reducing Resistance Loss

To address the problem of high air flow resistance loss in thick beds, Jingtang Co. increased the proportion of pellet raw materials with particle size of  $\pm 2$  mm to 86% through intelligent pelletizing; the distribution and screening system was optimized, reducing machine speed fluctuation by 69%; a new type of air distribution plate and anti-adhesion grate were developed, solving the clogging problem.



## Jingtang Co.'s Sintering Machine Won the Title of "Champion Furnace" for Three Consecutive Years

In the "National Energy Conservation and Consumption Reduction Benchmarking Competition for Key Large-scale Iron and Steel Production Equipment", Jingtang Co.'s No.2 Sintering Machine won the title of "Champion Furnace" again.

In recent years, the sintering process of Jingtang Co. has successively implemented energy conservation and emission-reduction technologies such as comprehensive injection on the material surface, waste heat utilization, and internal and external flue gas circulation. It has optimized the system's energy conservation control methods and production organization models, and pursued excellence in links such as reducing solid fuel consumption and improving waste heat recovery. The solid fuel consumption of No.2 Sintering Machine decreased by 2.99 kg/tonne year-on-year, the process energy consumption decreased by 2.83 kg of standard coal/tonne year-on-year, and the waste heat steam output increased by 4.41 kg/tonne year-on-year, realizing the coordinated development of efficient production, green development and low-carbon development.



## Utilization of Waste Heat and Energy

Following the principle of "Recycle More, Reduce Loss, Generate More Power," the company continuously strengthens the recovery of waste heat and energy from blast furnace gas and converter gas to achieve "total recovery and efficient utilization" of gas resources and improving the level of waste heat and energy utilization. In 2025, the company integrated "Gas-Steam-Electricity-Environmental Protection" to achieve zero discharge of blast furnace gas and zero under-recovery of converter gas, generating 7.98 billion kWh of secondary energy power, hitting a record high.

### Extreme Gas Recovery

The steelmaking process of Qiangang Co. increased the recovery of converter gas by reducing the proportion of slag formation and slag removal operations, optimizing the converter steelmaking process and delaying the stop time of gas recovery, realizing zero venting of converter gas. Jingtang Co. comprehensively solved the problems in all links of converter gas recovery, transportation and use, and implemented measures such as operation optimization and thermal system fuel consumption research, realizing full recovery of gas.

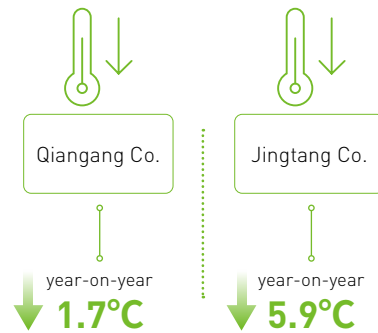
### Secondary Energy Power Generation

The new 100 MW generating unit of Qiangang Co. was put into operation, and orderly eliminated inefficient generating units. Jingtang Co. is equipped with 2 sets of 300 MW coal-gas mixed combustion generating units and 1 set of 100 MW ultra-high temperature subcritical gas generating unit, forming a "fuel-heat-electricity-water-salt" five-effect integrated recycling system, with the comprehensive thermal efficiency increased from 30% to 81.5%.

## Controlling Energy Losses

The company strengthens the collaborative management of the hot metal ladle operation process, promotes the compact blast furnace tapping and hot metal ladle alignment, carries out the prediction and dynamic control of hot metal in transit, accelerates the turnover of hot metal ladles, and reduces the temperature drop of hot metal.

In 2025, Qiangang Co. achieved a 1.7°C year-on-year reduction in hot metal temperature drop, while Jingtang Co. achieved a 5.9°C year-on-year decrease.



## Jingtang Co.'s 100 MW Generating Unit

Through technological and management innovation, Jingtang Co.'s 100 MW generating unit improves power generation efficiency and self-power supply rate, and reduces system carbon emissions.



**Technically:** It implements automatic combustion power generation with variable flow and high-proportion blending of converter gas into blast furnace gas, improving the flexibility of gas use by the unit, increasing the recovery of converter gas and reducing the energy consumption of the converter process.

**Management:** In accordance with the development requirements of centralized monitoring, remote control and unmanned on-site for the energy system, following the principle of centralized control with similar professions and close interface connection, it realizes the centralized monitoring of power generation and seawater desalination, improving management efficiency. The annual energy conservation is 61,000 tonnes of standard coal, and the annual carbon emission reduction reaches 437,000 tonnes.

**Clean Energy**

The company actively responds to the "dual carbon" goals by expanding the application proportion of renewable energy. The installed capacity of solar photovoltaic power reached 38.9 MW. In 2025, solar photovoltaic power generation was 45 million kWh, up 147.25% year-on-year, raising the share of clean energy to 2%. Green power procurement reached 1.998 billion kWh, accounting for 41.16% of purchased electricity.

The company explores the "long-term agreement" model for green electricity procurement, comprehensively considering national industrial policies, green electricity resources, electricity price economy and carbon market and other factors to lock in green electricity resources. Shougang Group signed a strategic cooperation framework agreement with Jingneng. The contracted green electricity volume of Qiangang Co. and Cold-R Co. totals 945 million kWh and 160 million kWh, respectively.

Indicator	Unit	2023	2024	2025
Solar Photovoltaic Installed Capacity	MW	13.70	38.90	38.90
Solar Photovoltaic Power Generation	MWh	15,320	18,220	44,828
Green Electricity Procurement Volume	Million kWh	916	1,280	1,998

**Energy Emergency Management**

The company attaches great importance to energy safety management, formulating annual energy emergency plans and organizing drills. In 2025, multiple special drills were conducted for scenarios such as energy medium leakage and extreme weather to strengthen response capabilities. We also carried out supporting energy security training, covering emergency disposal processes, personal protection skills, risk identification points, etc., to improve the energy security awareness and emergency operation capabilities of all employees, and build a professional team that "understands safety, can respond to emergencies and handle them".

**Comprehensive Emergency Drill for Energy Medium Leakage Accidents**



The company has built an emergency management system characterized by "centralized leadership, unified command, complete organization, comprehensive functions, sensitive response and efficient operation". In June 2025, Jingtang Co. carried out an energy medium leakage emergency drill caused by a fuel station leakage. All functional departments and operation areas performed their respective duties and cooperated with each other to complete the emergency disposal process. The drill tested the practicality and operability of the emergency rescue plan, verified the preparation of emergency rescue teams, materials, equipment and technologies, and improved the emergency disposal capabilities for sudden incidents.



**Energy-Conservation Publicity**

Taking the National Energy Conservation Publicity Week, "World Water Day", "China Water Week" and other nodes, the company carries out energy conservation publicity activities, publicizes energy conservation concepts and knowledge through special lectures, knowledge popularization, online answering and lucky draws, etc., guides all employees to participate in energy conservation actions such as water and electricity saving, and enhances energy conservation awareness.



**Metrics and Targets**

Taking energy conservation and carbon emission reduction as the main thread of ecological civilization construction, Shougang Co. formulates short-term, medium-term and long-term goals with the direction of improving energy utilization efficiency and reducing energy consumption.

The company formulated a medium-term goal in 2021: by 2025, the comprehensive energy consumption per tonne of steel will be reduced by 2% compared with 2020, and the proportion of green electricity will reach more than 5% of the total electricity consumption; the long-term goal is to continue to promote energy conservation and carbon emission reduction work, continuously improve energy utilization efficiency, and strive to reduce the comprehensive energy consumption per tonne of steel by 1.69% by 2030 as compared with 2025.

The company has established a regular tracking mechanism for the progress of goal completion to ensure the steady implementation of various indicators. As of the end of the reporting period, the company's comprehensive energy consumption per tonne of steel decreased by 1.70% year-on-year, completing the annual energy conservation goal; the comprehensive energy consumption per tonne of steel decreased by 6.24% compared with 2020, and the proportion of green electricity reached 12.74% of the total electricity consumption, all completing the goals.

Indicator	2025 Goals	2025 Results
Comprehensive Energy Consumption per Tonne of Steel	Reduce by 2% compared to 2020	Reduce by 6.24% compared to 2020
Proportion of Green Electricity	Achieve over 5% of total electricity consumption	12.74% of total electricity consumption

## Water Resources Utilization

Shougang Co. continuously improves its organizational structure for water resources management. The Energy Conservation Management Group is responsible for coordinating the company's water resources work. The Energy Department is responsible for water resources management, supervising and implementing the company's water use and conservation efforts. Each production base and department is equipped with dedicated water resources management personnel to execute the company's water use and conservation arrangements.

In accordance with laws and regulations such as the *Water Law* and the *Water Pollution Prevention and Control Law*, and combined with the actual situation of the enterprise, the company has formulated systems such as the *Water Source Protection System*, the *Water Supply and Consumption Management Measures*, and the *Cooling Water System Management Regulations*. We have established a water resources management statistics and accounting system to standardize the management of water sources and ensure the safety of water supply for production and living in the company and surrounding areas.

The company adheres to scientific management, rational planning, efficient utilization, and comprehensive governance of water resources. We reasonably select water sources, strictly take and use water according to plans, and integrate indicators such as water use and water conservation into performance assessments to continuously improve water resources utilization efficiency. The company has been repeatedly awarded titles such as "National Water Efficiency Leading Enterprise in Key Water Use Industries," "Beijing Water-Saving Benchmark Enterprise," "Hebei Provincial Water-Saving Model Enterprise," and "Water-Saving Enterprise in Tangshan City."



### Qiangang Co.

Qiangang Co. adopts "three-dry" processes and cascading water use models to reduce the intake of fresh water from the source. It completed 5 water-saving projects, implementing strict water quality indicator management for processes with high fresh water consumption such as power generation and oxygen production. By using partial desalted water to replace fresh water, it optimized water quality, increased recycled water output, and reduced industrial water consumption. It continues to promote the application of electrochemical scale removal technology, increasing the cycles of concentration from 2.5 to 4.0-5.0, reducing industrial water consumption by 20% to 25%.

### Jingtang Co.

Relying on its coastal advantage, Jingtang Co. strengthens the synergistic management of "quantity" and "quality" in the water system, carrying out work such as seawater leakage control, seawater desalination production enhancement, and wastewater resource utilization. It organized the annual maintenance and cleaning of seawater desalination unit U5 and increased sintering steam heat supplementation for U5 to improve desalinated water output.

### Cold-R Co.

Cold-R Co. established a strict three-level water-saving management network and built a digital water efficiency management system covering the entire process to achieve real-time, intelligent, and refined management of the entire plant's water system. It actively explores water-saving technologies, introducing the MBR+OSA process to simultaneously purify wastewater and associated sludge, achieving the reuse of high-quality reclaimed water.

In terms of water resources utilization, the company's target is to reduce fresh water consumption per tonne of steel by 1% by 2025 compared with 2020, and strive to reduce it by 3.44% by 2030 compared with 2025. In 2025, the company's total water consumption was 4,988.33 million m<sup>3</sup>, and the fresh water consumption per tonne of steel decreased by 6.71% compared to 2020.

Indicator	Unit	2025
Annual Water Consumption	Million m <sup>3</sup>	4,988.33
Surface Water Consumption	Million m <sup>3</sup>	17.90
Groundwater Consumption	Million m <sup>3</sup>	24.70
Desalinated Seawater Consumption	Million m <sup>3</sup>	22.62
Recycled Rainwater Consumption	Million m <sup>3</sup>	0
Reclaimed Water Consumption	Million m <sup>3</sup>	6.69
Tap Water Consumption	Million m <sup>3</sup>	2.35
Recycled Water Consumption	Million m <sup>3</sup>	4,914.07
Water Recycled rate	%	98.80

# Circular Economy

Shougang Co. practices the concept of circular economy, adheres to the principles of reduction, reuse, and resource utilization, and establishes a scientific and effective circular economy system. Starting from the full life cycle of product manufacturing, the company continuously promotes the efficient circular utilization of scrap steel and solid waste, forming a new circular economy development model that features internal circulation within the enterprise, regional industrial collaboration, and the integration of the city and the enterprise.

## Scrap Recycling

Shougang Co. utilizes scrap steel resources with high quality, stability, and rationality. We are committed to promoting the sustainable development of the industrial chain from a full life cycle perspective. In collaboration with downstream customers such as Geely Group, Volvo, Haier, and Zhongshan Green Guard, the company has built a steel circular economy and closed-loop recycling value system to jointly optimize the entire chain of steel production, use, and recycling, achieving efficient circular utilization of resources and promoting harmonious progress, integrated development, and collaborative carbon emission reduction of upstream and downstream industries. In 2025, the company's scrap steel recovery rate was 100%.

### Shougang Co. · Zhongshan Green Guard 40% Traceable Recycled Material Low-Carbon Project

By constructing a "production-consumption-regeneration" closed-loop system with Zhongshan Green Guard, Shougang Co. successfully developed a pickled low-carbon product for garden tools. This product achieves 100% recycling and utilization of scrap steel resources, increasing the scrap steel ratio in the steelmaking process to 40%, with a comprehensive carbon emission reduction of over 30%. It combines high hardness with high toughness, extending the service life of terminal products such as gardening shears, achieving "high performance and low carbon emissions," and filling a domestic gap for high-quality low-carbon emission steel. The carbon footprint of this product has been certified by DNV, marking international authoritative recognition of its carbon emission reduction performance.



## Solid Waste Recycling

Centered on the management concept of "disposal, value enhancement, and leadership," Shougang Co. promotes reduction and resource utilization, uses advanced technologies to deepen the recycling and utilization of solid waste, and advances the construction of "Zero-Waste Group." In 2025, the company's solid waste recycled and utilized rate has reached 100%. Jingtang Co. obtained the product evaluation certification for comprehensive resource utilization and successfully passed the final inspection and acceptance of the National Circular Economy Standardization Pilot Program.

### Construction of "Zero-Waste Group"

In July 2025, the Ministry of Ecology and Environment approved seven units, including Shougang Group, as "Zero-Waste Group" pilots. With Shougang Co. as the main body, Shougang Group became the first enterprise in the Beijing-Tianjin-Hebei region to pilot the construction of a "Zero-Waste Group." Driven by policy guidance and institutional innovation, the company built a full-chain governance system of "source reduction - process circulation - end-of-pipe value-adding." Through the triple synergy of policy, industry, and technology, it promotes the minimization of general solid waste and hazardous waste generation, full resource utilization, and standardized final disposal for the group-level enterprise.



The company achieved "point-to-point" transfer and disposal of solid and hazardous waste, with Qiangang Co. and Jingtang Co. as the main disposal units. It built a cross-regional, cross-industry, and cross-medium solid waste circulation network with other enterprises under Shougang Group. In 2025, Qiangang Co. received hazardous waste from units such as Shougang Zhixin, realizing the "point-to-point" directional utilization exemption management of hazardous waste like cold-rolled sludge from Shougang Zhixin in its sintering process, becoming a pioneer in the steel industry to implement this model.

### Qiangang Co.

Qiangang Co. continuously promotes solid waste reduction and comprehensive utilization. Through measures such as zero discharge of iron-containing resources from the plant, high-proportion pellet smelting technology in blast furnaces, and reducing metal material blowing loss in steelmaking converters, the output of granulated slag and steel slag has decreased. It optimized the flow of deep-processed products and improved product quality to enhance the solid waste digestion capacity of sintering, blast furnace, and steelmaking processes, promoting the return of slag steel powder and ball-milled iron powder to production for reuse, and producing solid waste-based steelmaking cooling slag agents. In 2025, the comprehensive utilization rate of solid waste was 100%.

### Qiangang Co.'s Sintering Homogenization Production Line Put into Operation



In October 2025, the company's sintering homogenization production line commenced operations, with an estimated processing capacity of 165,900 tonnes of secondary resources in 2026. The line is capable of processing multiple types of materials—including cold-rolled sludge, slag steel powder, power plant sludge, hot-rolled water treatment sludge, and emulsion residue—achieving full-scale utilization of secondary resources.

### Qiangang Co.'s Power Sludge and Sleeve Ash Mixed Material Return to Sintering for Utilization



Addressing the issues of power sludge filter cakes having no storage space and requiring paid outsourcing, as well as dust issues in steelmaking sleeve dust removal ash digestion, Qiangang Co. innovated technical ideas to carry out mixed material trials and industrial experiments of power sludge and limestone slag. After mixing and screening in proportion, the components met the sintering requirements and the sintering process operated stably. This model verified the feasibility of returning power sludge to the sintering process, achieving a "0 to 1" breakthrough in the solid waste digestion model.

#### Qiangang Co.

Jingtang Co. continuously promotes the circular utilization of solid waste in the steel process and collaborative utilization with industries such as building materials and chemicals. Major solid waste resources such as water slag, steel slag, and iron-containing dust and sludge achieve full comprehensive utilization. The seawater desalination project produces 95,000 tonnes of fresh water daily, and its byproduct, concentrated brine (13 million tonnes per year), is supplied to downstream enterprises in Caofeidian for reuse, achieving linked development.

#### Circular Utilization in Sintering Process

Digested over 1 million tonnes of solid waste annually, with 100% digestion of iron-containing solid waste. The proportion of steel slag added reached 6%, leading the industry.

#### High-Efficiency Utilization of Purified Steel Slag

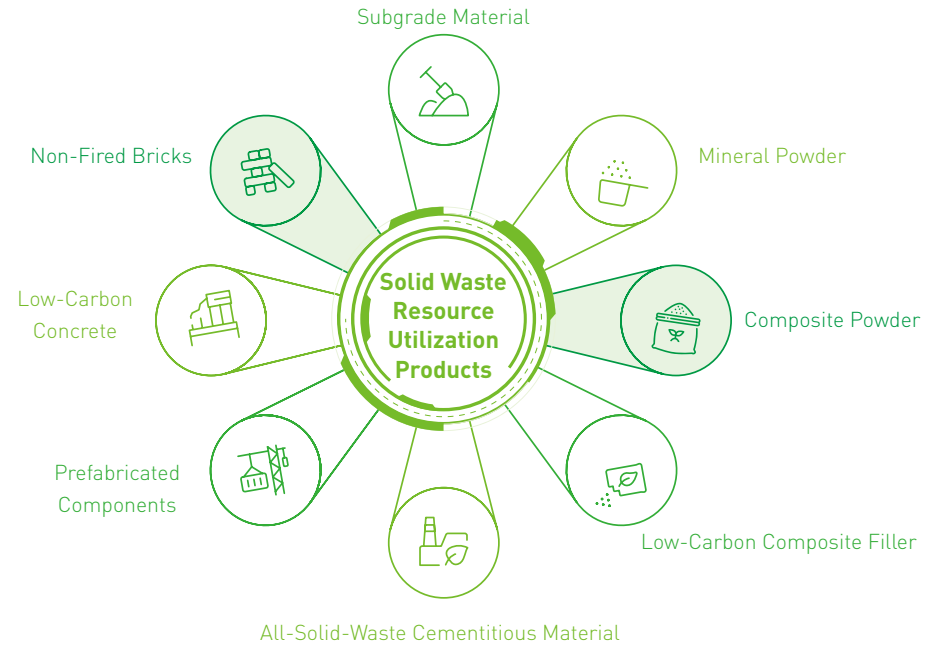
Purified steel slag through rod milling, ball milling, and water washing, then returned to steelmaking for reuse via briquetting.

#### Rotary Hearth Furnace Zinc Resource Recycling Technology

Treated iron- and zinc-containing dust with carbon reductants in flue gas to recover zinc and other valuable elements, achieving cascading utilization of metallurgical dust with an annual capacity of 300,000 tonnes.

#### Development of All-Solid-Waste Cementitious Materials

Used solid waste materials such as slag, steel slag, and desulfurized gypsum to produce cementitious materials with a designed annual capacity of 1 million tonnes, which can partially replace traditional kiln cement, reducing CO<sub>2</sub> emissions by 0.5 tonnes per tonne of product.



### Jingtang Co.'s Application of Slag Micro-powder



In cooperation with Jinyu Group, Jingtang Co. built a 6×600,000-tonne granulated slag fine grinding production line to produce slag micro-powder. As the main treatment method for granulated slag, it is widely used in cement, building materials, and other fields, and has been applied in major national engineering projects such as the Hong Kong-Zhuhai-Macao Bridge.

## Innovation in Solid Waste Circular Utilization Technology

Shougang Co. continuously promotes technological innovation in solid waste circular utilization. Qiangang Co. advanced research on integrated technology for selective reduction and resource utilization of copper slag and steel slag carbonation technology. Jingtang Co. actively carried out product evaluation certification for comprehensive resource utilization, and multiple solid waste resource utilization technologies won national and provincial metallurgical science and technology awards.

### Qiangang Co.

In cooperation with University of Science and Technology Beijing, it promoted research on integrated technology for selective reduction and resource utilization of copper slag, developing full-component resource recovery technology for copper slag based on oxidative roasting dearsenization, carbon thermal reduction and magnetic separation for iron extraction, and high-value utilization of tailings, providing high-quality iron-containing raw materials for the enterprise.

### Jingtang Co.

Jingtang Co. organized the formulation and revision of 4 national, industry, and group standards such as *Technical Specification for Recovery and Utilization of Iron-containing Dust and Sludge in the Iron and Steel Industry and Low-Carbon Composite Filler*; and completed 2 product evaluation certifications for comprehensive resource utilization (cementitious materials and low-carbon composite fillers), enhancing brand image and product credibility.



### In 2025:

- *Research and Application of Steel Slag Source Modification, Reduction, and Full Resource Utilization Technology* won the First Prize of the 2025 Metallurgical Science and Technology Award.
- *High-Efficiency Circular Reconstruction and Utilization Technology and Demonstration of Iron-containing Solid Waste in Integrated Steel Enterprises* won the Third Prize of the 2025 Hebei Provincial Metallurgical Science and Technology Award.
- *Shortening the Initial Setting Time of Solid Waste-based Cementitious Materials* won the First Prize for Excellent Management Results in the Hebei Metallurgical Industry.
- "Technology and Application of Collaborative Development of Low-Carbon Multi-component Cementitious Materials from Metallurgical Slag" was selected for the *Catalog of National Advanced and Applicable Process Technology and Equipment for Comprehensive Industrial Resource Utilization (2025 Edition)*.

## Reducing Packaging Material Consumption

In accordance with the business needs of packaging quality and packaging material management, the company has formulated systems such as the *Packaging Quality and Material Management Regulations* and the *Steel Product Quality Marking Management Regulations* to conduct unified management of Qiangang Co., Jingtang Co. and Cold-R Co. Each base has refined and formulated special management requirements, such as the *Relevant Provisions on Packaging Materials*, the *Technical Requirements for Packaging and Identification of Hot-rolled Products*, the *Procurement Standards for Auxiliary Packaging Materials*, the *Product Packaging Quality Inspection Specifications*, etc.

Adhering to the principle of maximizing reduction, the company promotes the greenization, reduction and recyclability of packaging materials. On the premise of ensuring packaging safety and protection quality, it reduces the amount of packaging materials and environmental impact by optimizing packaging methods, packaging materials and coil weight structure. We adhere to the use of green and eco-friendly materials for product packaging. All non-metallic materials used in packaging meet requirements such as RoHS, and suppliers of various materials provide at least one environmental protection test report such as RoHS every year.

### Material Selection

It is clarified that on the premise of ensuring product packaging quality and reducing material usage, a detachable packaging structure is designed to facilitate recycling and reuse.

### Packaging Classification and Grading

According to the protection level of different packaging methods, the company launches "general packaging recommendation" and "fine packaging recommendation" packaging methods, guiding customers to choose lower-level packaging methods under the premise of meeting quality requirements to reduce material consumption.

### Thickness and Width Reduction

We have implemented thickness and width reductions for packaging materials, such as galvanized outer protective sheets, plastic end protectors, and both inner and outer steel corner guards, to enhance resource efficiency.

### Packaging Material Substitution

We use high-strength plastic plates instead of fiberboards and galvanized plates in the inner circumference of steel coils to optimize customer packaging methods.

### Recycling and Reuse

We recycle packaging materials such as rubber strips and have established dedicated steel strapping recovery points at the entrances of major processes to collect and reuse strapping bands removed during the uncoiling stage.

# Biodiversity Protection

Shougang Co. fully recognizes the importance of biodiversity, strictly abides by relevant laws and regulations, and continuously pays attention to the harmonious development of the ecological environment within and around the plant areas. During the project design stage, the company conducts biodiversity protection and land use assessments in accordance with relevant requirements. During the project operation stage, it continuously monitors the surrounding ecological environment and actively carries out biodiversity protection work to reduce the impact of production and operations on the ecological environment, avoiding disturbance to wildlife habitats, soil erosion, and deforestation.

The company always regards green development as the lifeline of its survival and development, attaches great importance to the greening construction and green space maintenance of the plant areas, and aims to "build a forest-style factory" to create a green ecological park. Based on soil and climate conditions, the company selects appropriate plant species and emphasizes plant diversity, planting tree species such as French plane, Chinese juniper, Chinese scholar tree, and goldenrain tree. 100% of available green space has been greened, creating a dense shade atmosphere where every road has trees, every step offers a view, and people and the factory are immersed in the scenery. The company has also strengthened the protection of wildlife inhabiting the plant areas, including species such as magpies, sparrows, pheasants, white wagtails, Siberian weasels, kestrels, and butterflies.



<p><b>Qiangang Co.</b></p> <ul style="list-style-type: none"> <li>National Green Factory</li> <li>National Greening Model Unit</li> <li>National Metallurgical Greening Advanced Unit</li> </ul>	<p><b>Jingtang Co.</b></p> <ul style="list-style-type: none"> <li>National Green Factory</li> <li>National Greening Model Unit</li> <li>National Metallurgical Greening Advanced Unit</li> <li>Hebei Province Garden-style Advanced Unit</li> </ul>
<p><b>Cold-R Co.</b></p> <ul style="list-style-type: none"> <li>Outstanding Supporter of Nature Conservation</li> </ul>	



### Voluntary Tree Planting Activities

In April 2025, Qiangang Co. organized the 21st Voluntary Tree Planting Day and Environment Week activity with the theme "Full Responsibility, Scientific Maintenance, and Jointly Building a Beautiful Shougang Co." More than 80 people, including company leaders and employee representatives, participated and planted over 170 green plants such as golden ash and purple-leaf plum. In 2025, 26,200 m<sup>2</sup> of green space planting was completed, further advancing the construction of the forest-style factory.



In April 2025, Jingtang Co. organized a voluntary tree planting activity with the theme "Jointly Building Jingtang's Green Home and Sharing a Beautiful Ecological Environment." More than 660 people, including company leaders and employees, participated and planted 1,389 landscape arbor trees such as Chinese scholar trees and cherry blossoms, adding green vitality to the plant area.



# Social

## Gathering Innovative Momentum, Building a Happy Ecosystem Together

### Material Issues for Response

Innovation, Ethics of Science and Technology, Product and Service Safety and Quality, Equal Treatment of SMEs, Due Diligence, Data Security and Customer Privacy, Employees, Rural Revitalization, Social Contributions

### Key SDGs Addressed



Shougang Co. Cultivates new quality productive forces through innovation, continuously perfecting an open collaborative innovation system and strengthening key core technology breakthroughs and the transformation of scientific achievements. We deeply advance digital and intelligent transformation, accelerating the realization of intelligent equipment, digitalized management, and smart decision-making. Adhering to the concept of strengthening the enterprise through quality, we build a quality management and customer service system covering the entire product life cycle, forging comprehensive "Manufacturing + Service" competitiveness. We seek to improve the supply chain ESG management mechanism to build a safe, robust, green, and smart sustainable supply chain. Upholding a people-centric philosophy, we construct a friendly workplace, and fortify the line of defense for occupational health and safety. We actively practice social responsibility, promoting the integrated development of the enterprise, the city, and the community.



### 2025 Highlights and Achievements

- Awarded the "4th Beijing Municipal Government Quality Management Award"
- Recognized as a "National Quality Benchmark" by the China Association for Quality
- Received 54 customer awards, recognition for "Manufacturing + Service" continues rising
- Shougang Zhixin selected into the "2025 Global Unicorn Enterprise List"
- Jingtang Co. and Cold-R Co. recognized as "Excellence Level Intelligent Factories" by the MIIT (the First Batch)
- 100% coverage rate of ISO 45001 Occupational Health and Safety Management System certification
- Awarded "Excellent Unit for Innovative Practice in 'Caring for Employee Happiness'"
- Youth Volunteer Service Team awarded as "Capital's Best Volunteer Service Organization"

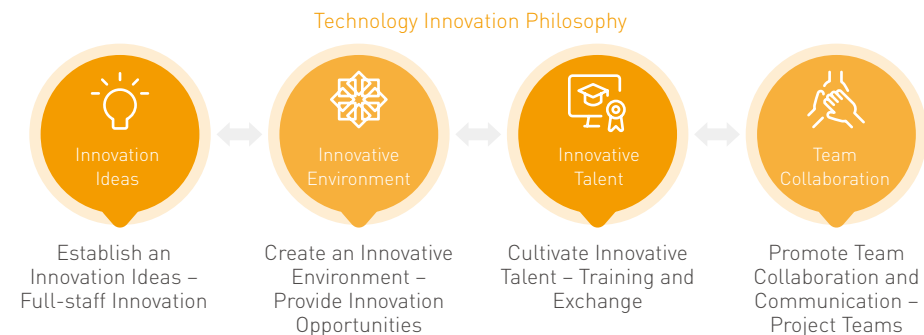
# Innovation

Technological innovation is the core engine and primary competitiveness for the high-quality development of Shougang Co. The company consistently anchors its direction toward high-end, high-efficiency, intelligent, and green development. Aiming to build an innovation ecosystem characterized by open synergy, standardized management, and fruitful results, the company continuously breaks through key core technologies, leads the upgrade of industry standards, and empowers the high-end leap of the industrial and value chains. This is achieved through comprehensive measures such as improving the governance system, clarifying strategic paths, strengthening R&D breakthroughs, cultivating innovative talents, and deepening industry-university-research synergy. We provide solid material support for national major projects, new energy, intelligent manufacturing, and other fields, fulfilling our corporate mission by practicing the national "dual carbon" goals and fostering new quality productive forces.

## Governance

### Technological Innovation Management System

Shougang Co. has established an open, multi-level, and high-efficiency scientific research and innovation system. It has set up a well-structured technological innovation organizational system with clear responsibilities and scientific rationality, building an innovation ecosystem chain that covers basic research, key technological breakthroughs, and platform construction. Vertically, a multi-level R&D framework of "one research institute with multiple R&D centers" has been established, comprising the Shougang Research Institute of Technology, Qianshun/Jingtang Technology Center, the Manufacturing Department, and the Operation Departments. The General Manager's Office is responsible for reviewing the company's R&D and innovation strategies, goals, and risks. The Research Institute of Technology is dedicated to exploring and practicing innovation systems and is responsible for the research and development of new products, technologies, processes, and materials; the Qianshun/Jingtang Technical Center focuses on the R&D of cutting-edge products, major processes, and key equipment; the Manufacturing Department and Operation Departments are responsible for on-site technical support and implementing trial projects, respectively. Horizontally, innovation platforms such as joint laboratories, EVI user technology laboratories, expert workstations, and the Innovation Studio Alliance have been established, forming an open innovation management system that deeply integrates industry, university, research, and application.



<p><b>Shougang Co.</b></p> <p>High-tech Enterprise Beijing-level Enterprise Technology Center</p>	<p><b>Jingtang Co.</b></p> <p>High-tech Enterprise Hebei Provincial Enterprise Technology Center Single Champion Enterprise in Manufacturing Industry of Hebei Province Advanced Unit for Scientific and Technological Work in the China Steel Industry during the 14th Five-Year Plan Period</p>
<p><b>Cold-R Co.</b></p> <p>High-tech Enterprise Beijing's "Specialized, Sophisticated, Distinctive, and Innovative" SMEs Selected into the List of National Advanced Manufacturing Enterprises for Three Consecutive Years</p>	<p><b>Shougang Zhixin</b></p> <p>High-tech Enterprise Selected into the "2025 Global Unicorn Enterprise List" Science and Technology Reform Action Demonstration Enterprise" by the SASAC National Manufacturing Champion Demonstration Enterprise in Electrical Steel Technology Innovation Demonstration Enterprise of Hebei Province Technological Leading Enterprise of Hebei Province Hebei Provincial Enterprise Technology Center "Leading Enterprise" in Hebei's Characteristic Industrial Cluster</p>

## Science and Technology Innovation Institutional Framework

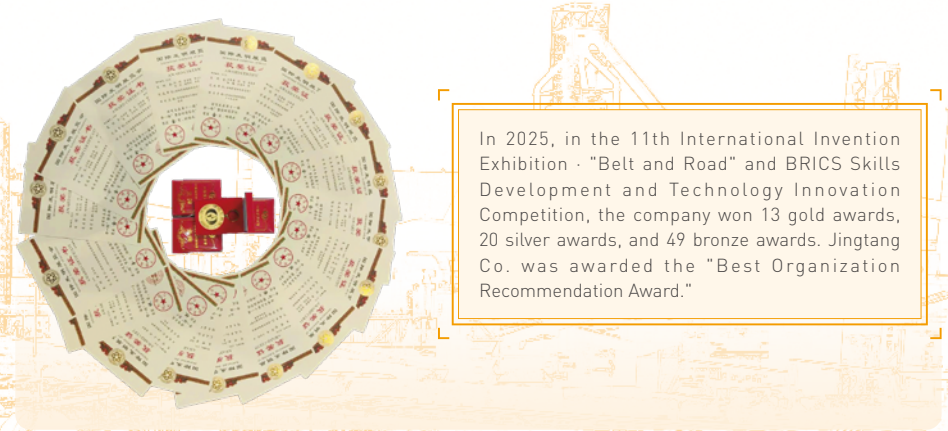
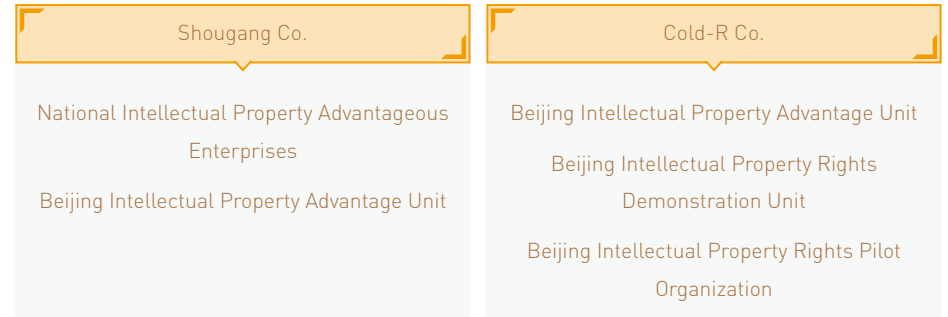
To ensure that technological innovation activities proceed in an orderly and efficient manner, the company has developed a series of management systems covering aspects such as technology project management and protection of technological achievements. These include the *Technology Project Management System*, the *Technology Confidentiality Management System*, the *Technology Achievement Management System*, and the *Patent Management System*. This forms a full-process standardized management covering the whole chain from R&D project initiation, R&D implementation, mid-term review, and achievement acceptance, to intellectual property protection, achievement transformation, and incentive fulfillment.

The company's *Technology Project Management System* clearly stipulates that all technology projects must adhere to recognized principles and standards of scientific ethics. Both project initiation demonstrations and concluding evaluations must undergo ethical reviews. Furthermore, the company emphasizes on enhancing the ethical and moral qualities of its technical personnel by strengthening training, supervision, and establishing violation handling mechanisms, thereby ensuring that all research activities meet legal, regulatory, and ethical requirements.

## Intellectual Property Rights Management

The company attaches great importance to the management and protection of intellectual property and respects the achievements of others' intellectual property rights. We have established a vertical intellectual property rights management system, forming an independent intellectual property rights management pattern that reserves core technologies in the form of patents and technological secrets. The company's Intellectual Property Rights Management Leading Group serves as the primary leadership body for intellectual property rights management, while the Qianshun Technical Center handles patent management and the Manufacturing Department oversees the management of technological achievements. Together, these bodies are responsible for the entire process of intellectual property rights creation, utilization, protection, and operation.

The company complies with the *Patent Law*, the *Trademark Law*, and the *Copyright Law*, among other relevant regulations, and continuously improves the intellectual property management system and institutional construction. We have built a list-based management mechanism with clear rights, responsibilities, and formulated management systems such as the *Patent Management System*, the *Technology Confidentiality Management System*, and the *Standardization Management System*. These systems systematically standardize the full-process management of patent excavation, application, maintenance, and utilization, as well as matters such as technical secret identification, transfer, and supervision and inspection, ensuring the orderly progress of intellectual property compliance work. In 2025, the company further revised the *Patent Management System* to continuously consolidate the management foundation. Additionally, the company regularly conducts training on intellectual property rights standards and comprehensive capability enhancement, and actively participates in advanced intellectual property rights training organized by regulatory authorities. This commitment has helped to raise overall awareness of intellectual property rights protection, foster a strong culture of respect for intellectual property rights, and improve management standards.



## Strategy

Shougang Co. adheres to innovation-driven development, taking high-end, high-efficiency, intelligent, and green development as its direction. We focus on the development of cutting-edge technologies and processes worldwide, strengthen the development of independent innovation capabilities, accelerate the transformation and application of scientific and technological achievements, drive comprehensive innovation with technological innovation, and promote high-quality development with high-level technological innovation. The company fosters new quality productive forces, leads the industrial and value chains toward the high end, and assists in the optimization and upgrading of the industrial structure during the process of Chinese-style modernization.

## Risks and Opportunities Management

Shougang Co. has integrated the R&D and innovation risk management process into its daily risk management process. To precisely prevent and control technological innovation-related risks such as uncertain R&D results, technology iteration, and talent retention, and to efficiently seize market opportunities such as the growing demand for green, low-carbon, and high-end products, the company focuses on four major areas: efficient manufacturing, high-quality manufacturing, intelligent manufacturing, and green manufacturing. We continue to strengthen our "Technological Innovation + R&D" capability. By strengthening full-cycle control of science and technology projects, leading industry development with standards, cultivating high-end innovative talents, improving R&D infrastructure, deepening industry-university-research-application synergy, and building industry exchange platforms, the company not only builds a firewall against innovation risks but also activates new momentum for technical breakthroughs, providing solid material support for national major projects and industrial chain upgrades.

Potential Risk / Opportunity Description	Type	Business and Financial Impact	Time Dimension	Response Measures
Uncertainty in R&D Achievements	Risk	R&D project failure or product iteration delay, leading to the precipitation of pre-invested funds, failure to realize returns, loss of market opportunities and drag on profit margins.	Long-term	Strictly control the whole life cycle management of science and technology projects. Create an innovative environment, and intensify the cultivation of leading talents in technology and skills. Actively promote collaborative innovation among industry, university, research and application.
Leakage of Technological Achievements	Risk	Loss of core technological advantages, erosion of market share due to rapid imitation by competitors, depreciation of pre-R&D investment value, and potential intellectual property litigation and increased related costs.	Short & medium-term	Strengthen the promotion of technological confidentiality. Sign confidentiality agreements with technical personnel. Identify confidentiality matters, and reward project team members accordingly.
Loss of Technological Talent	Risk	Stagnation of R&D progress and gaps in key technologies will not only require bearing high talent recruitment and training costs, but also lead to a decline in enterprise value due to the loss of core technologies, affecting financing and cooperation.	Long-term	Establish an information management system for technological innovation to platformize R&D data, ensuring continuity in the R&D process and mitigating the impact of unexpected events, such as the loss of key R&D personnel.
Rapid Pace of Technological Upgrading and Replacement	Risk	Depreciation of existing technologies and products, decline in market share due to customer loss, accelerating depreciation of fixed assets, impairment of inventory backlogs, and the need for continuous capital investment in technological upgrades to maintain competitiveness.	Long-term	Lead steel industry technology development by continuously increasing R&D investment. Actively host or participate in steel industry exchanges to stay informed on strategic, holistic, and forward-looking major issues.
Rapid Growth in Downstream Demand for Green Steel	Opportunity	Can seize market share by expanding green steel production capacity, bind high-quality downstream customers to enhance brand influence, and the premium capacity of green steel products will drive revenue and profit growth.	Medium & long-term	Focus on the downstream user and the full industry chain trends toward lightweight, high-end, and green products, and actively develop specialized green steel products.
Increased Demand for High Value-added and Differentiated Steel Products	Opportunity	Promote product structure upgrading to get rid of homogeneous competition, establish technical barriers, and the high profit margin of high-value-added products will optimize the income structure, enhance the enterprise's anti-cyclical capacity, and improve the overall profitability.	Long-term	Boost original innovation efforts to cultivate debut products, debut processes, and debut equipment. Enhance employees' technological innovation capabilities and R&D levels through expert training sessions, a series of activities, and increased R&D incentives.



## Key R&D Breakthroughs

Shougang Co. has established an innovation risk prevention and control mechanism, conducting pre-assessment, mid-term monitoring, and post-review of the technical feasibility, market prospects, and financial risks of R&D projects to ensure the orderly conduct of innovation activities. In 2025, more than 200 research and development projects were carried out, covering multiple fields such as new materials, new processes, green and low-carbon, and intelligent manufacturing technologies, driving the industrial chain toward intelligent, green, and integrated directions. Shougang Zhixin focused on the field of humanoid robots and achieved the global debut of ultra-high magnetic induction non-oriented soft magnetic material. Compared with conventional products, the torque is increased by 1.6% and iron loss is reduced by 27%, effectively meeting the demand for high torque density and high power density in frameless torque motors for humanoid robots, filling the domestic gap for ultra-high magnetic induction non-oriented soft magnetic materials.

Addressing key challenges that constrain national development and security, the company actively carries out independent and collaborative breakthroughs, participates in national key R&D programs, and provides independent material supply and technical protection for national major projects.

### Multiple Breakthroughs

- Built the world's first specialized production line for electrical steel for new energy vehicles.
- Built the world's first specialized production line for 100% ultra-thin specifications and high magnetic induction oriented electrical steel.
- Built the world's first multi-mode fully continuous casting and rolling line (MCCR).
- Built the world's first set of independently developed and integrated six-stand cold continuous rolling mill.
- Built the nation's first independently integrated new-generation localized annular furnace with 100% independent intellectual property rights.
- High-proportion pellet smelting technology achieved high-efficiency and low-consumption blast furnace smelting.
- Developed third-generation ultra-high-strength automotive sheet manufacturing technology.
- Developed high-efficiency preparation technology for tinplate wide and ultra-thin low-carbon steel strips.

In 2025, participated in 9 national key R&D programs.

Took the lead in the Beijing-Tianjin-Hebei comprehensive environmental governance project "Multi-medium Collaborative Pollution Control Technology System and Application Demonstration for Metallurgical Industry" in 2025

Participated in projects such as the "Demonstration Project for Flexible Interaction between Power Grid and Low-Carbon Energy-Using Steel Industry Cluster"

2

national major science and technology projects

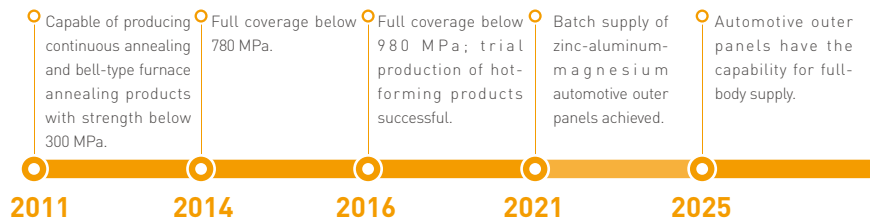
7

national vertical projects (Various programs and fund projects approved and established by national science and technology authorities or institutions)

## Automotive Sheets



The company's automotive sheets possess the capability to provide complete vehicle supply and technical services, forming a product series characterized by outer panels, high strength, and zinc-aluminum-magnesium coatings. It has launched products such as DH steel, UF steel, dual-phase high-strength steel (DP), and high yield-to-tensile ratio high-hole-expansion complex-phase steel as domestic debuts. The company presided over the drafting of 6 national standards for automotive steel. Two products, including the new generation of easy-stamping and corrosion-resistant zinc-aluminum-magnesium coating, lead the development of automotive steel and promote common progress in the industry.



## Electrical Steel



The company's electrical steel consistently adheres to a product positioning of high-end, high-efficiency, and green environmental protection. Through continuous technological innovation, it has built a high-end product matrix of over 160 items covering strategic emerging fields such as new energy, intelligent manufacturing, and UHV power transmission and distribution, with 16 being global debuts.

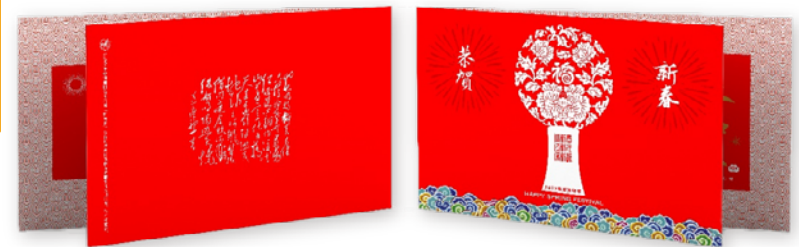
- Electrical steel products for new energy vehicle drive motors can meet the needs of different types of new energy vehicles, such as commercial and passenger vehicles. Product applications cover all global and domestic leading new energy vehicle enterprises; one in every three new energy vehicles in China is equipped with a "Shougang Core."
- Oriented electrical steel products cover all UHV DC and AC transmission fields, firmly ranking in the first tier of global transformer material suppliers. Products are applied in national major projects such as the Baihetan Hydropower Station and Wudongde Hydropower Station.
- Non-oriented electrical steel has continuously consolidated its leading advantage in the field of variable-frequency home appliances, becoming a strategic partner for well-known domestic and foreign home appliance enterprises.

In 2025, Shougang Zhixin electrical steel was selected as one of the "Top 10 Flagship Products" in the steel field of Hebei Province by the Department of Industry and Information Technology of Hebei Province; non-oriented electrical steel for new energy was rated as one of the top ten leading products of the "14th Five-Year Plan" in the Chinese steel industry.

## Tinplate Series Products



The company's tinplate series products adopt the world's first high-efficiency preparation process for wide and ultra-thin low-carbon steel strips. The thinnest thickness for single cold rolling is 0.09 mm, and for double cold rolling is 0.07 mm, filling gaps at home and abroad. Products are applied in various fields such as food cans, beverage cans, and electronic components, and were successfully made into cultural and creative products such as the "Cicada Wing Steel" postcards for the Beijing Winter Olympics and postcards for the 20th National Congress of the CPC. In 2025, Jingtang Co.'s food-grade tinplate was selected as one of the "Top 10 Flagship Products" in the steel field of Hebei Province.



## 0.1 mm Ultra-low Iron Loss Electrical Steel Helps New Energy Vehicle Enterprises Break the Global Electric Vehicle Speed Record



The world's first 30,000-rpm high-performance motor equipped in the BYD Yangwang U9 engineering test vehicle selected Shougang's 0.1 mm ultra-low iron loss electrical steel as the core material, breaking the limitations of traditional electrical steel on motor energy consumption. Compared with the 0.2 mm electrical steel widely used in the industry, the iron loss of this product at a frequency of 1,000 Hz can be reduced by 39%. It combines excellent characteristics of low iron loss, high magnetic induction, and high strength, providing powerful material empowerment for high-quality and high-performance main drive motors. The test vehicle successfully achieved a top speed of 472.41 km/h at the ATP testing ground in Germany, breaking the global electric vehicle speed record.



, 472.41 km/h

Iron loss reduced by 39% ↓



## High-Performance Non-Coated Oriented Electrical Steel



In 2025, to promote the localized replacement of key materials and respond to the development needs of the new motor industry, the company successfully developed 0.27 mm high-performance non-coated oriented electrical steel with balanced surface quality, magnetic properties, and structural performance, achieved stable batch supply. The performance of this ultra-thin strip reached the international advanced level and can be used for the manufacturing of UHV anode saturated reactors. The new energy drive motors made from it rank among the world's leaders, providing new material support for the R&D of the next generation of new energy drive motors in downstream industries.

## Standards Leadership

Shougang Co. always insists on leading with standards. Focusing on areas such as product production technology, green and low-carbon, energy saving and environmental protection, and intelligent manufacturing, we lead or participate in the formulation and revision of standards, guiding the development direction of steel product production technology and green environmental protection technology.

In 2025, the company participated in the formulation and publication of 46 standards at various levels, serving as the lead developer for 8 of them.



10 Items  
National Standards



1 Item  
Local Standards



4 Items  
Industry Standards



31 Items  
Group Standards

## Participating in the Formulation and Revision of National Standards



We participated in the formulation of national standard *Technical specifications for the thermal steaming of molten steel* (GB/T 45964-2025), as well as the revision of national standards *Slag agglomerate of LF refining furnace for steelmaking* (GB/T 30900-2025) and *Scrap steel from slag for steelmaking* (GB/T 30898-2025). These three national standards focus on the resource utilization of bulk industrial solid waste like steel slag. Through systematic research and standardized compilation, they established unified technical requirements and specifications, promoting the closed-loop circulation and efficient reuse of steel slag within the steel production process. This assists in the large-scale and standardized "turning waste into treasure" of industrial solid waste, continuously improving resource utilization efficiency and green development levels, and providing solid standard support for the industry's low-carbon transition and circular economy development.

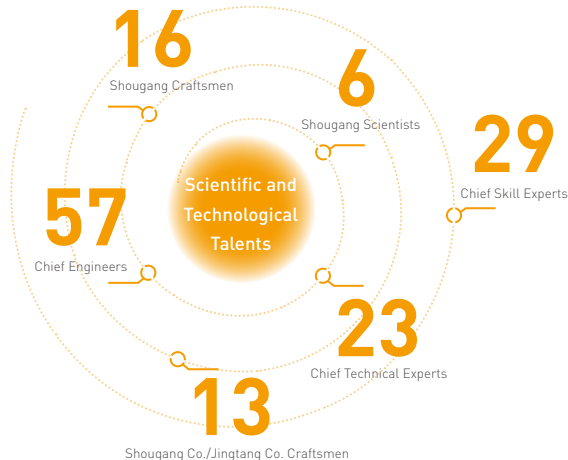


### Scientific and Technological Talent Cultivation

To reduce the uncertainty of R&D results and the risk of technological talent loss, Shougang Co. continuously creates an innovative atmosphere, provides innovative conditions, and optimizes innovation mechanisms. It has established evaluation, fault-tolerance, incentive, and cultivation mechanisms that match technological innovation, forming a vibrant technological innovation atmosphere.

- Create an innovative atmosphere and enhance employees' innovation awareness by organizing university professor forums, Innovation Festivals, and employee invention contests;
- Leverage innovation platforms such as expert workstations, employee innovation studios, and youth innovation workstations to carry out innovation breakthrough projects and cultivate high-end R&D teams;
- Deeply discuss technical problems, promote the transformation and application of innovative results, and accelerate the replication and promotion of excellent innovative results through continuous series of activities such as Qianshun/Jingtang Technical Center product and process technology exchange meetings, "Technical Salons," and technological innovation forums;
- Enhance employees' technological innovation capabilities and cultivate learning-oriented, knowledge-oriented, skill-oriented, and innovation-oriented employees by organizing projects such as the "Technological Innovation Youth Training Camp," "Great Craftsman Lecture Series," "Innovation Grand Lecture Series," training classes for backbones of employee innovation studios, and innovation backbone training camps;
- Stimulate innovation vitality through an innovative differentiated salary incentive mechanism, setting up special innovation awards such as Shougang Scientist Awards, Shougang Craftsman Awards, R&D Project Awards, Technology Achievement Awards, and Small-Scale Competition Awards.

The company places great importance on cultivating leading talents in technology and skills, and boasts an industry-leading R&D team with over 100 leading technical experts. Among these are 6



Shougang Scientists, 23 Chief Technical Experts, 57 Chief Engineers, 16 Shougang Craftsmen, 13 Shougang Co./Jingtang Co. Craftsmen, and 29 Chief Skill Experts, all of whom provide first-class talent support for technological innovation.

By the end of the reporting period, the company had built 132 Employee Innovation Studios, of which 23 are recognized as Beijing municipal-level and demonstration innovation studios, 7 are recognized as industrial-level innovation studios, and 10 are recognized as demonstration innovation studios in the national machinery, metallurgy, and building materials industry. In 2025, a total of 25 "Five-Star" Innovation Studios, 48 "Four-Star" Innovation Studios, 53 "Three-Star" Innovation Studios, and 10 Excellent Innovation Studios were evaluated.



2025 Shougang Co. Technological Innovation Youth Training Camp



Jingtang Co. Technological Innovation Forum



Jingtang Co. Innovation Backbone Training Camp



In 2025

1

employee won the title of "China's Master Artisan"

4

employees won the title of "Craftsman in the National Machinery, Metallurgy, and Building Materials Industry"

### Abundant Employee Innovation Achievements

In 2025

Innovation Achievements in the National Machinery, Metallurgy, and Building Materials Industry

5

Special Prizes

8

First Prizes

16

Second Prizes

81

Third Prizes

The First National Employee "Cultural Creativity, Position Innovation, and Management Efficiency" Competition

9

First Prizes

13

Second Prizes

6

Third Prizes

The 6th Metallurgical Youth Innovation and Creativity Competition

2

Special Prizes

3

First Prizes

3

Second Prizes

2

Third Prizes



15

invention patents received the 2025 Employee Innovation Invention Patent Promotion from the Beijing Municipal Federation of Trade Unions

1

Item First Prize in the Beijing Innovation Method Competition and 2025 China Innovation Method Competition

1

Item Second Prize for Independent Innovation Achievement of Capital Employees

2

Items Second Prizes for Excellent Innovation Achievements of "Craftsmen Shining in Beijing" Employees

### Jing Xiaoxing Innovation Studio



Since its establishment in 2010, the Jing Xiaoxing Innovation Studio, led by "Shougang Model Worker" Jing Xiaoxing, has led 24 backbones in continuously carrying out water treatment indicator construction, quality improvement, technical breakthroughs, and skill talent cultivation for energy systems. It has accumulated 62 national patents, completed 56 projects, and published 43 papers. It has successively won the titles of Shougang Group Excellent Innovation Studio and Tangshan Model Worker and Craftsman Innovation Studio, and was rated as a Beijing industrial-level innovation studio and a Beijing municipal-level innovation studio.



The Jing Xiaoxing Innovation Studio team won the First Prize in the final of the 2025 Beijing Innovation Method Competition and 2025 China Innovation Method Competition (Beijing Division) with the project "Improving Slag Grabbing Efficiency of Swirl Pit Grab Based on TRIZ Theory."

### Scientific Research Infrastructure

Shougang Co. attaches great importance to the construction of technological R&D hardware facilities. The company has purchased R&D instruments and equipment such as ultrasonic flaw detectors and scanning electron microscopes, and established a fully automated analysis center to robustly support the development of new products and processes. In addition, to further standardize the process management of R&D projects, the company has created an information management system for technological innovation, characterized by its efficiency, speed, and traceability, which enables the efficient management of the entire R&D process and data sharing. Qiangang Co., Jingtang Co., Cold-R Co. and Shougang Zhixin have all been certified by national laboratories (CNAS).

## Industry-University-Research-Application Cooperation

Shougang Co. actively deepens industry-university-research-application collaborative innovation, continuously strengthens research on overall, fundamental, and forward-looking process technologies, gives full play to the collaborative innovation role of joint R&D platforms, and promotes technological progress and industrial upgrading in the steel industry.

### Cooperation with Universities

The company actively deepens its cooperation with universities such as Tsinghua University, Beijing University of Science and Technology, and Northeastern University, jointly establishing research centers, laboratories, and expert workstations to achieve resource sharing and complementary advantages. Through project collaborations, technical exchanges, academic interactions, and specialized competitions such as "Leading by Example" challenges, the company harnesses collaborative innovation, cultivates an innovative talent pool, accelerates the transformation of research outcomes into practical productive force, and promotes the deep integration of the education, innovation, and industrial chains.

### Collaboration with Downstream Users

The company, along with its partners, has jointly established cross-industry, cross-regional, and cross-enterprise laboratories and Innovation Studio Alliances, and organized events such as product technology forums, "Shougang Day", and technology exchange days. We have set up joint projects to continuously deepen technical cooperation, promote collaborative technical breakthroughs and advance key projects. Leveraging technological innovation, collaborative breakthroughs, and process innovations, the company achieves comprehensive and multi-angle early involvement and efficient communication, jointly overcoming key strategic challenges in new steel materials that restrict the development of the industry chain, and thereby supporting the upgrade of the entire industry chain.

## Hydrogen Pipeline Steel



Jingtang Co. successfully developed a full series of hydrogen pipeline steel (B/X42/X52/X60/X65MH), breaking through 6 key technical bottlenecks such as hydrogen embrittlement damage and low-temperature toughness, and building a complete product matrix covering multiple steel grades and application scenarios.

During the R&D process, it innovatively adopted the "internal synergy + external linkage" model, linking units such as the Research Institute of Technology and the Marketing Center, and uniting upstream and downstream forces of the industrial chain such as pipe manufacturing enterprises, hydrogen energy users, and scientific research institutes to form an integrated industry-university-research-application breakthrough force. The product possesses excellent resistance to hydrogen embrittlement, high strength and toughness, and welding performance, suitable for high-pressure pure hydrogen/hydrogen-blended transmission scenarios, providing solid material support for the key "cross-regional transmission" link of China's hydrogen energy industry.

## Industry-University-Research-Application Platforms

### Joint Laboratories

In collaboration with universities, research institutions, and downstream users, the company has established 30 joint laboratories. These laboratories carry out research on global, basic, and forward-looking process technologies, and strengthen technological breakthroughs in fields such as new materials, high-end equipment manufacturing, metallurgical building materials, and low-carbon environmental protection. In 2025, Shougang Co. established a joint laboratory with Geely Auto, focusing on advanced materials, cutting-edge technologies, and processes, promoting the promotion and application of cold-rolled ultra-high-strength steel, hot-forming steel, and corrosion-resistant materials for chassis, and jointly tackling technical problems. Jingtang Co. co-built a metal packaging material joint laboratory with Jianyang Jiamei Metal Printing Can Making Co., Ltd, focusing on key areas such as new material development and corrosion resistance improvement for food and beverage cans.

### EVI User Technology Laboratories

These laboratories are designed to offer comprehensive service capabilities along the entire value chain - from material selection and customer product design to iron core processing and motor testing. Shougang Zhixin's New Energy Vehicle Motor Laboratory has obtained CNAS certification, making it the only enterprise in the China steel industry equipped with both performance testing and inspection qualifications for new energy vehicle motors.

### Expert Workstations

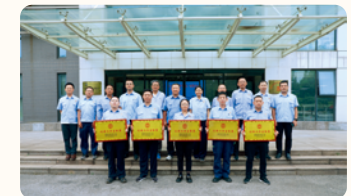
The company has established expert workstations and scientist workstations, including those of Wu Shengli, Wang Xinhua, and Kang Yonglin, focusing on technologies such as ironmaking, steelmaking, rolling, material development, low-carbon initiatives, and environmental protection. These stations carry out scientific research breakthroughs, reserve cutting-edge product and process technologies, strengthen high-level talent cultivation, and optimize scientific research and technical organization management systems. In 2025, the Guo Liwei Expert Workstation was established.



Expert Workstation

### Innovation Studio Alliances

The company has 12 innovation studio alliances. Jingtang Co. has formed 7 cross-industry and cross-regional innovation alliances and 18 internal innovation alliances. Through collaborative innovation across fields and enterprises, technical, talent, and industrial resources are effectively integrated, further strengthening user technical services, promoting professional crossover, knowledge complementarity, and collaborative innovation in the industrial chain, and improving the overall competitiveness of the supply chain. In 2025, the company formed the Wang Guiyu/Gao He · Qiusuo Innovation Studio Alliance and the Guo Yuming · Wen Anyi Innovation Studio Alliance with Shougang Shuigang.



Innovation Studio Alliance

## Industry Communication

As a leading enterprise in industry technological innovation, the company is an important member unit of organizations such as the China Iron and Steel Association, the Chinese Society for Metals, the Beijing Society of Metals, and the China Green Chain Initiative Alliance. We actively participate in or host various industry association meetings and professional forums to build communication and exchange platforms, understand the latest industry dynamics and development trends, provide service support and communication/collaboration opportunities for industrial chain enterprises, and contribute to the transformation, upgrading, and sustainable development of the industry.

### Plate Energy Steel Product Symposium



In July 2025, the Shougang Plate Energy Steel Product Development Symposium was held in Qingdao, focusing on industry-leading technologies, market trends, and development directions. Four new energy steel products were released: high-grade acid-resistant pipeline steel, ultra-high-strength hydropower steel, high-strength low-carbon wind power steel, and steel for mobile pressure vessels.

At the meeting, Jingtang Co. delivered a keynote report titled "Inheriting the Shougang Spirit and Continuing the Sheet and Strip Culture." The company adheres to the concepts of innovation-driven development and premium manufacturing to create five major advantages: "product, quality, cost, service, and technology." It provides "more efficient, more durable, and greener" products and integrated application scenario services for national energy construction, striving to build plates into Shougang's fourth major strategic product.



### Shougang Zhixin Hosted the IEC/TC68 Working Group Annual Meeting



In October 2025, Shougang Zhixin hosted the annual meeting of the IEC/TC68 (International Electrotechnical Commission Technical Committee on Magnetic Alloys and Steels) working groups. Industry experts from more than ten countries participated in "online + offline" formats. The meeting focused on discussions regarding multiple international standards for magnetic materials. Simultaneously, Shougang Zhixin proposed adding standards for ultra-thin oriented electrical steel series products of 0.18 mm and 0.20 mm, and adding certain new energy steel grades and mechanical property standards for non-oriented electrical steel.

Hosting this meeting is recognition from the international organization of Shougang Zhixin's technical strength, and it marks a role change from "follower" to "setter" in the field of high-end magnetic material standards, enhancing technical voice and global industrial influence.

In the future, Shougang Zhixin will continue to promote the connection and mutual recognition of domestic technology with international standards, assist in industrial chain upgrading, and contribute Shougang's wisdom and responsibility to global manufacturing and green, low-carbon development.



## Metrics and Targets

In terms of technological innovation, Shougang Co.'s overall development goal is to make technological innovation its primary competitive advantage, gradually improve the technological innovation system, and steadily enhance management capabilities. To achieve this goal, the company sets specific annual targets and continuously tracks results through monthly business analysis meetings, monthly management meetings, weekly quality meetings, and benchmarking analyses, thereby ensuring the completion of its annual objectives. In 2025, the company completed all technological innovation targets.

Target	Unit	2025 Goals	2025 Results	
Actively respond to national new energy policies and promote high-end product development	Output of High-End Leading Products	10,000 tonnes	900	1,551
Shorten the R&D cycle and reduce R&D costs	Proportion of EVI Output	%	20	23.8
Maintain a certain ratio and continuous R&D investment	Newly Launched Debut Products	Item	3	5
	Proportion of R&D investment to operating revenue	%	3	4.66
Strengthen the promotion and application of R&D achievements to drive overall technological progress in the steel industry	Number of Patents Granted	PCS	350	469
	Number of Invention Patents Granted	PCS	100	206

**Scientific Research Results**

The company has achieved numerous scientific research results. In 2025, 5 products were global and domestic debuts, and 2 processes were first-of-their-kind. By the end of the reporting period, the company had a cumulative total of more than 410 key core technologies and 61 debut products, 9 of which were global debuts; 11 first-of-their-kind processes, 10 of which were global firsts; and 4 sets of first-of-their-kind equipment, 1 of which was a global first.

**Patents**

The company's patent quantity and quality have achieved a dual leap. In 2025, 1,015 patents were applied for, including 674 invention patents; 469 patents were granted, including 206 invention patents. By the end of the reporting period, the company had 4,261 valid patents.

**Awards**

The company has won multiple national, provincial, and industry awards. In 2025, we won 7 Metallurgical Science and Technology Awards, including 2 First Prizes, 3 Second Prizes, and 2 Third Prizes; won 3 Hebei Provincial Science and Technology Progress Awards, including 1 First Prize, 1 Second Prize, and 1 Third Prize; and won 1 Second Prize of the Beijing Science and Technology Award.



In the future, Shougang Co. will keep in mind the mission of strengthening the enterprise to serve the country. Guided by new quality productive forces, we will focus on the cutting-edge needs of industrial chain development, collaborate with upstream and downstream enterprises to carry out joint breakthroughs, and work together with the upstream and downstream enterprises to build a new industrial ecosystem, contributing more power to the realization of the "dual carbon" goals and the creation of the "Shougang Brand."

# Intelligent Manufacturing

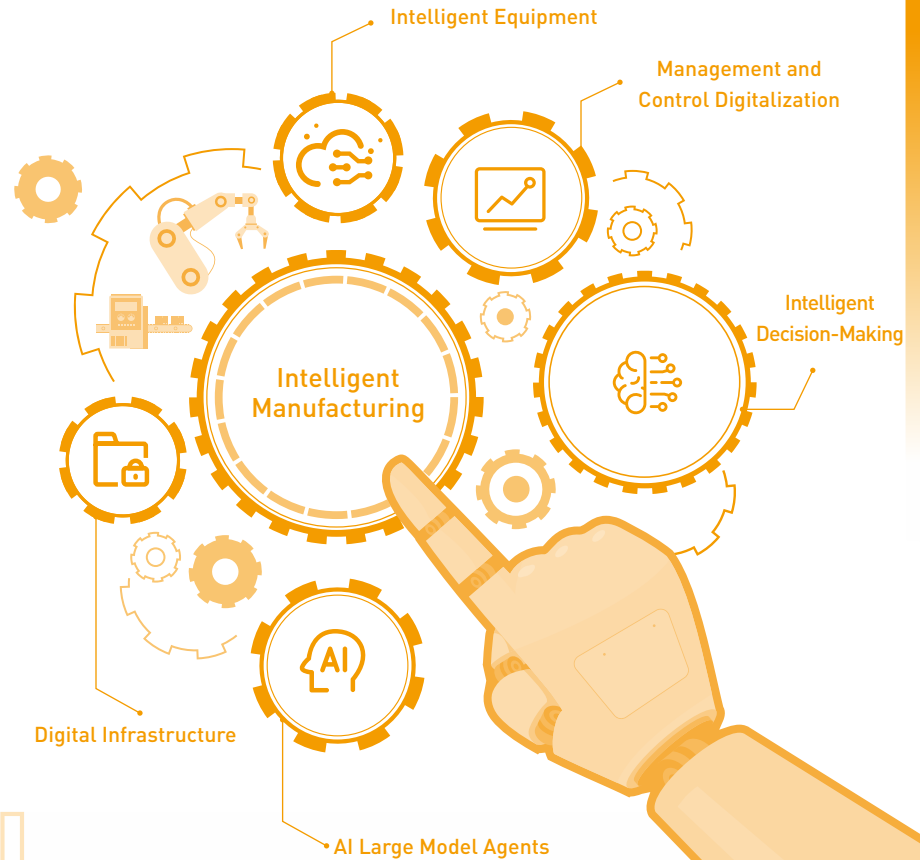


Shougang Co. takes digitalization and intelligentization as its engine, actively applying information and intelligent technologies such as big data, cloud computing, artificial intelligence (AI), and 5G. These technologies are fully integrated into steel smelting, corporate operations, product services, and supply chain collaboration. By promoting automation, digitalization, networking, and intelligence of key business processes, the company creates new quality productive forces and shapes new momentum and advantages for its development.

## Digital and Intelligent Transformation

In 2025, Shougang Co. continued to advance the *2024-2026 Shougang Co. Digital Transformation Action Plan*, focusing on enhancing basic technical capabilities, manufacturing coordination capabilities, operation management and control capabilities, and management service capabilities. This helps achieve higher-end quality, more efficient production, optimized costs, better services, and a more flexible supply chain.

Currently, the company has achieved its phased goals as planned and made significant progress in multiple dimensions. It has realized intelligent quality management, intelligent production planning, automated production processes, digital equipment maintenance, and unmanned hazardous positions, implementing projects such as intelligent integrated control, intelligent warehousing, and digital factories.



### Intelligent Equipment



The company focuses on 3D positions to promote the construction of intelligent robots, automatic stacking and reclaim machines, and unmanned overhead cranes. Through innovations such as automatic belt inspection, automatic etching of coil identification numbers, automatic dressing in steelmaking (KR), and automated stacking and reclaim machines and overhead cranes, production efficiency and operational stability have been significantly enhanced. Our digitalization rate for production equipment has exceeded 91%, with 51 processes now featuring 'one-button control.' Furthermore, we have deployed 242 sets of industrial robots, established 27 unmanned intelligent storage areas, and deployed 26 digital employees. In addition, by integrating smart equipment and scenarios on the production line, the company has effectively addressed core issues in production processes, product quality, production efficiency, and production costs, thereby systematically advancing the construction of smart production lines and further improving production stability and product quality.

### Management and Control Digitalization



Adhering to a "full-domain and full-volume data" mindset, the company deeply integrates new-generation information technologies such as big data and intelligent algorithms into production and operation management, building a precise management and control center based on intelligent systems. By optimizing multi-process synergistic dynamic scheduling for medium and heavy plate production lines and building a smart logistics management and control platform, the company has comprehensively improved its intelligent manufacturing capabilities and overall production and operation levels. The digital performance platform built by the company has achieved multi-level management, root cause positioning, problem analysis, and closed-loop management of performance indicators, making production and operation data "visible, accurate, and manageable," providing strong support for fine management of the enterprise.

### Intelligent Decision-Making



To advance a data-driven business management system, the company has systematically constructed business decision-making models. Through standardized data aggregation and processing, we have consolidated the foundation for data application and driven a profound transformation of the management model from "experience-driven" to "data-driven". In 2025, focusing on pain points in core businesses, the company successfully developed and launched 38 intelligent decision-making models, covering key scenarios such as sales logistics, production and operation, and process control. Among them, the automatic analysis model for spot availability of pickled products has achieved cost reduction and efficiency improvement through precise control and dynamic early warning; the sales logistics cost differential analysis model has effectively optimized resource allocation and significantly enhanced operational efficiency. By the end of the reporting period, the company has completed a total of 110 business decision-making models, which comprehensively improved the foresight and accuracy of business decision-making and injected digital momentum into the high-quality development of the enterprise.

### Digital Infrastructure

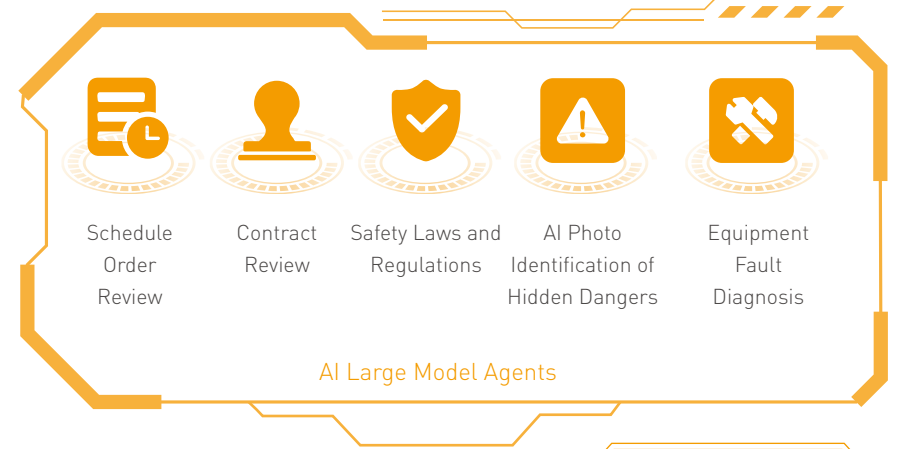


Jingtang Co. achieved 5G private network coverage across the entire plant area, with 100% 5G coverage in open-air plant areas. Meanwhile, the company introduced technical means such as data encryption, masking, and leak prevention to continuously improve network security protection capabilities for 5G and virtualization, providing a solid network foundation and security guarantee for digital transformation.

### AI Large Model Agents



The company has actively promoted the in-depth integration of artificial intelligence technology with its business operations and established a four-layer architecture of "computing power + models + platform + scenarios". By the end of the reporting period, more than 20 large model agents had been successfully launched, covering multiple typical application scenarios including regulatory expert consultation, contract review, safety law and regulation identification, AI image hazard detection, intelligent supply chain coordinated replenishment, schedule order review, intelligent production document generation, and equipment fault diagnosis. These have been widely applied in production control, regulatory management, contract review, safety operation, equipment maintenance and other fields. Large model agents have enabled more reliable production decision-making, more accurate real-time analysis of production links, more efficient retrieval of corporate regulations, more robust contract compliance review, and "early detection and early rectification" of potential safety hazards, comprehensively improving operational safety and management efficiency.

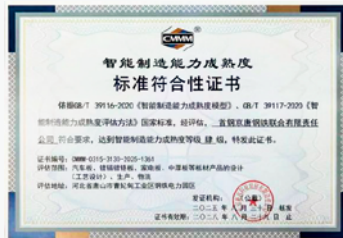


Shougang Co.

Advanced Level Intelligent Factory in Beijing (First Batch)

Jingtang Co.

Excellence Level Intelligent Factory of the MIIT (First Batch)  
National Intelligent Manufacturing Benchmark Enterprise (Tenth Batch)  
Passed Maturity Level 4 Assessment of Intelligent Manufacturing Capability



Cold-R Co.

World Economic Forum "Lighthouse Factory"  
Excellence Level Intelligent Factory of the MIIT (First Batch)  
Advanced Level Intelligent Factory in Beijing (First Batch)  
Top Ten Application Scenario Demonstration Projects for State-owned Enterprises



Shougang Zhixin

National-level Smart Manufacturing Benchmark Enterprise of the SASAC

Award Recipients	Project	Awarding Authority	Awards
Jingtang Co.	Data-driven "One Core, Four Levels, and Multiple Elements" Intelligent Factory	MIIT	Practice Case of Digital Navigation Enterprise
Shougang Co.	Application of Digital Product Carbon Footprint Management and Control Platform	Beijing Municipal SASAC	Industry Demonstration Level [Typical Application of Digital Management and Control]
Shougang Co.	Full-Process Intelligent Scheduling and Sequencing Based on Advanced Algorithms	Beijing Municipal SASAC	Industry Leading Level [Typical Application of Integrated Innovation]
Shougang Co.	Full-Process Intelligent Management and Control of Steel Quality Driven by Artificial Intelligence	Beijing Municipal Government, National Data Bureau, etc.	Top Ten Benchmark Application Enterprises for Digital Economy at Global Digital Economy Conference
Jingtang Co.	Comprehensive Intelligent Management and Control of Safety for All Links in the Steel Industry	Hebei Provincial Department of Industry and Information Technology	Excellent Application Scenario for Digital Transformation in the Steel Industry of Hebei Province
Jingtang Co.	Intelligent Monitoring of Furnace Conditions	Hebei Provincial Department of Industry and Information Technology	Pilot for Digital Transformation of Scenarios in the Steel Industry of Hebei Province
Shougang Co.	Innovation and Application of Digital and Intelligent Management for Electrical Steel Production and Sales	CISA	Third Prize of Modernization Innovation Achievement in Metallurgical Enterprise Management
Shougang Co.	Research and Application of Key Technologies for Hot Rolled Strip Control Model Driven by Data	CISA	Third Prize of Metallurgical Science and Technology Awards
Shougang Co.	Intelligent Control System for Hot-dip Galvanized Zinc Layer Thickness Unmanned Steel Coil Warehouse System	CISA	List of Typical Scenarios for Digital Transformation in the Steel Industry
Jingtang Co.	Key Technology and Application of Process Control for Plates Empowered by Digitalization Intelligent Platform for Ladle Hot Repair Based on Multi-robot Collaboration Converter Intelligent Steelmaking System Based on Image Recognition Technology	CISA	List of Typical Scenarios for Digital Transformation in the Steel Industry
Jingtang Co.	Intelligent Temperature Control System for Finishing Rolling Based on Electromagnetic Induction Heating	CISA	Third Prize of the 5th Intelligent Manufacturing Innovation Competition - Raw Materials (Steel) Industry
Shougang Co.	Development and Application of Smart Carbon Management Platform for Steel Enterprises	The Chinese Society for Metals	First Prize of the 6th Metallurgical Youth Innovation and Creativity Competition (Enterprise Group)



## Integrated Production and Operation Intelligent Factory

Shougang Co. has actively adopted cutting-edge technologies such as 5G and big data to build a data-driven intelligent ecosystem covering four levels: intelligent equipment, intelligent production lines, intelligent operation, and intelligent decision-making. More than 90 intelligent scenarios have been established, including the intelligent pre-ironmaking control center, intelligent converter steelmaking, intelligent storage areas, intelligent safety management, and intelligent robots, exploring an integrated intelligent factory model for production and operation.

### Intelligent Equipment

Sensors, machine vision and other sensing devices have been deployed on key equipment. Leveraging the high bandwidth and low latency of 5G technology, real-time monitoring, fault early warning and predictive maintenance of equipment status have been realized. Combined with AI algorithms to continuously optimize operating parameters, the company has effectively improved equipment efficiency and service life, reduced failure rates and maintenance costs, laying a solid hardware foundation for stable production.

### Intelligent Production Lines

Supported by a solid automation foundation and a complete information network, AI technologies have been deeply integrated into key production processes including steelmaking, continuous casting, hot rolling and cold rolling.

The intelligent pre-ironmaking control center has been built to realize remote intelligent control of seven production lines. Based on AI large models, an innovative visualized and intelligent dispatching system for the whole process of hot metal transportation has been developed, reducing the single operation time of torpedo cars to within 15 minutes.

The intelligent steelmaking project applies modern information technologies to create a new intelligent steelmaking model through visualization. With an integrated intelligent control system, push-button operation throughout the steelmaking process is realized, enabling precise control and optimization of all converter steelmaking links. This improves production efficiency, reduces energy consumption and ensures stable product quality.

The plate production line applies advanced technologies including intelligent function development, hyper-converged platforms and digital twins, realizing centralized control, centralized business management and centralized operation & maintenance for the entire line, with an automation rate of over 90%.

The hot rolling process has adopted multi-link intelligent identification, inspection and control systems to realize automated operation and reduce manual intervention. The self-developed grinding robot achieves surface defect identification and grinding accuracy within 2 mm.

A self-learning algorithm model for rolling force has been deployed in cold rolling, improving the control accuracy of the first coil rolling force by approximately 2% after coil specification changes, effectively ensuring stable rolling quality.

### Intelligent Operation

Using big data analysis and multi-objective optimization intelligent algorithms, an intelligent management system integrating demand forecasting, procurement planning, production scheduling and logistics scheduling has been constructed. By integrating full-process data from raw materials through pre-ironmaking, ironmaking, steelmaking, continuous casting, hot rolling and cold rolling, a centralized production model driven by the dual core of "AI + mechanism" has been created, promoting refined whole-process management and efficient resource utilization.

### Intelligent Decision-Making

Relying on value mining of full-process data and the application of intelligent models, precise decision support is provided for production, quality, equipment, safety and other professional fields, empowering the efficient operation of an integrated intelligent factory for production and operation.



### Steelmaking Steam Intelligent Management and Control Platform



Addressing the pain points of large fluctuations and reliance on manual adjustment in the steam systems of the steel industry, Jingtang Co. developed a steelmaking steam intelligent management and control platform, achieving an upgrade from "experience-driven" to "data-intelligence-driven." With "data perception - analysis and decision - autonomous execution - learning and evolution" as its core technical route, the platform builds a multi-source data fusion system. Through steam prediction and industrial optimization models, it realizes full-process synergistic optimization of "production-storage-allocation-use." An autonomous execution and model self-learning mechanism has been established to ensure stable system operation and continuous evolution of regulation capabilities. After implementation, the stability of the steam system increased by 29%, saving 14,900 tonnes of medium-pressure steam annually, effectively reducing carbon emissions and providing a replicable solution for the intelligent upgrade of energy systems in the steel industry.



### Smart Logistics Management and Control Platform



Shougang Co. built a logistics management and control platform relying on technologies such as GPS, IoT, 5G, and electronic maps. Following the principles of "ensuring efficiency, reducing costs, and centralized management and control," and focusing on the internal supply chain, the platform achieves integrated and unified management of material transportation inside and outside the plant. The platform builds an intra-plant logistics management and control system, closing the data loop from planning to execution. With the help of software and hardware such as electronic fences and vehicle terminals, it integrates real-time data such as warehouse inventory, vehicle status, and transportation plans to achieve intelligent scheduling, full-process visualization tracking, and multi-dimensional comparative analysis of intra-plant logistics. This effectively standardizes logistics processes, reduces logistics costs, improves logistics operation efficiency and management levels, and empowers the green and efficient operation of the corporate supply chain.



### Cultivation of Digital and Intelligent Talents

Shougang Co. attaches great importance to the construction of a digital and intelligent talent team, creating an open and shared data culture, and establishing promotion channels, incentive mechanisms, and multi-level, multi-form training mechanisms for digital and intelligent talents to build a strong talent team for digital and intelligent transformation.



Selection and Certification of Digital and Intelligent Technical Talents

In 2025, the company opened a special development channel for digital and intelligent technical talents and formulated the *Construction Plan for Digital and Intelligent Technical Talent Team*. Focusing on the cultivation of composite talents who "understand processes and master digital and intelligent technologies," the company built a full-process certification mechanism combining examination, evaluation, and appointment. Through the first batch of selection and review, 525 people applied and 425 were included in the talent pool. Ultimately, 128 people received level qualification certificates and 34 were appointed. This not only meets the current urgent need for transformation talents but also forms a replicable and promotable talent cultivation and selection model, laying a solid talent foundation for the company's digital and intelligent transformation.

By building exchange platforms, the company encourages employees to deeply extract data value and use data visualization analysis tools for multi-dimensional, perspective, and exploratory autonomous data analysis, creating an atmosphere of "everyone using data and everyone understanding data." Through years of activities such as data analysis/application competitions, digital and intelligent engineer vocational skills competitions, benchmarking exchanges, and special digital training, the company cultivates digital and intelligent talents and forms a series of replicable and promotable data analysis application cases. In 2025, the company organized 5 digital and intelligent training sessions and related activities, such as the "FineBI Data Analysis Check-in Training Camp," covering 1372 people.

#### 6th National Intelligent Manufacturing Application Technology Skills Competition in 2025

Third Prize in Instrument and Meter Repairer category

1 Item

Third Prize in Intelligent Manufacturing System O&M category

1 Item

## Digital and Intelligent Engineer Vocational Skills Competition ★

From June to September 2025, Shougang Co. held the Digital and Intelligent Engineer Vocational Skills Competition. The competition innovatively set two major categories of Digital Empowerment and Optimization Leadership, alongside a leadership track. Adopting the competition format of theoretical examination + case review + case defense, it focused on pain points and difficulties in production and operation for skill contests. The event attracted more than 450 participants, with a total of 315 entries submitted. Finally, 60 contestants advanced to the final defense, and 25 outstanding winners were awarded honors at various levels.

Participants developed multi-dimensional visual reports covering production tracking, quality inspection and other scenarios on the FineBI platform. By promoting learning and practical training through competition, the event effectively stimulated employees' enthusiasm for data analysis and application. We fostered a sound atmosphere of "everyone using data and everyone understanding data," continuously improved staff digital literacy, and provided innovative solutions to break through operational bottlenecks. Meanwhile, we consolidated the talent pool and technical foundation for digital transformation, advanced the intelligent and refined upgrading of production and operation, and empowered the company's digital transformation as well as high-quality and sustainable development.



## FineBI Data Analysis Check-in Training Camp ★

Shougang Co. organized special training sessions on FineBI data analysis. Combining online check-ins, group interaction, theoretical learning and practical exercises, the training systematically explained core FineBI functions, data import and cleaning, and visual report production, forming a complete training closed loop of learning, practicing, questioning and answering. The activity covered 936 employees from multiple departments. The excellent completion rate reached 99%, with participants obtaining the FCA-FineBI certification. A number of team and individual awards were also presented. The training effectively improved all employees' capabilities in data analysis and visual application, strengthened the concept of data-driven decision-making, deepened consensus on digital and intelligent transformation, and consolidated talent support for the Company's digital transformation and high-quality sustainable development.



Looking ahead to 2026, Shougang Co. will continue to advance the implementation of the digital and intelligent transformation action plan, comprehensively enhancing basic technical capabilities, manufacturing coordination capabilities, operation management and control capabilities, and management service capabilities to promote digital and intelligent transformation across all processes and business areas. The company will accelerate the expansion of digital and intelligent transformation to all processes and procedures, improve the data application capabilities of all employees, and continue to deepen the application of large model technology in core business scenarios such as R&D innovation, production manufacturing, and supply chain collaboration. The company aims to create "AI+" application scenarios with Shougang characteristics, build an industrial benchmark for the deep integration of AI and the real economy, and construct a "Pilot Level Intelligent Factory," injecting a stronger intelligent engine into the company's high-quality development.

# Product Quality and Customer Service

Product quality and safety are the foundation for an enterprise to fulfill its environmental and social responsibilities, while high-quality customer service is a key bond for achieving value co-creation between the enterprise and its stakeholders. Shougang Co. strengthens the product safety red line with high-standard quality management and improves the full-chain service system with a customer-centric approach. Through systematic management and control, digital and intelligent empowerment, and ecological synergy, the company integrates quality control and service optimization throughout the entire production and operation process. This not only provides customers with safe, high-quality steel products and customized services but also promotes industry transformation and upgrading through supply chain synergy, realizing the resonance of enterprise development, customer interests, and industrial progress.

## Product and Service Safety and Quality

Shougang Co. adheres to "strengthening the enterprise through quality." Guided by the market, centered on customers, and supported by production-sales-research synergy, the company follows the quality policy of "committing to product excellence and pursuing customer satisfaction." We strengthen quality management system construction, strive to improve product quality and service levels, and build "manufacturing + service" integrated competitiveness. Through strict quality control processes and advanced production technologies, the company provides customers with safe, high-quality steel products, assisting in the construction of major national equipment, empowering green and low-carbon transformation, and serving people's better lives, winning extensive trust and praise.

## Quality Management System

Shougang Co. attaches great importance to product quality and safety, establishing a systematic, rigorous, and efficient quality standardization management system and creating a quality management framework covering the entire product life cycle. In strict compliance with the *Product Quality Law* and other relevant laws and regulations, the company has established systems such as the *Quality System Management System*, the *Product Quality Incident Management Measures*, and the *Product Quality Assessment Management Measures*, covering aspects such as the quality management system, product consistency management, quality incident management, and usage safety management, thereby comprehensively enhancing its product quality control capabilities. In 2025, the company did not experience any major incidents involving product-related safety and quality liabilities.

<b>General Manager</b>	The primary person responsible for product and service quality safety, coordinating the formulation of quality management strategies and top-level planning for quality system construction.
<b>Manufacturing Department</b>	Responsible for quality management, in charge of the daily operation, maintenance, and optimization of the quality management system, and organizing internal and external system audits.
<b>Quality Inspection Department</b>	Responsible for carrying out product quality testing and inspection, implementing quality process monitoring, and controlling quality risks throughout the product process.

The company has established a quality management system that complies with ISO 9001 and IATF 16949 standards. We ensure product quality through early-stage product quality planning, production approval procedure, control plans, and standardized operations. In addition, regular supervision, internal audits, and external audits are conducted to maintain the integrity and effectiveness of the quality management system. The company has obtained certifications for the ISO 9001 Quality Management System and the IATF 16949 Automotive Quality Management Standard.

In 2025,  
Won the "4th Beijing Municipal Government Quality Management Award"  
Rated as "National Quality Benchmark" by the China Association for Quality



### Shougang Zhixin

++++  
Nomination Award of the 5th China Quality Award  
Quality Benchmark for Industrial Enterprises in Hebei Province



### Jingtang Co.

++++  
Rated as "Excellent Quality Management Enterprise in Hebei Metallurgical Industry" for ten consecutive years

### Qiangang Co.

++++  
3rd Beijing Municipal Government Quality Management Nomination Award

## Quality Risk Management and Control

Shougang Co. manages quality risks throughout the entire process - from product quality planning, quality control, and quality assurance to quality improvement.



### Quality Planning

The company built an industrial big data platform to digitize quality control rules. Using advanced technologies such as online detection, machine learning, and image recognition, it replaces manual decision-making with 100% machine decision-making to realize integrated quality management throughout the process. With the help of big data analysis and customer feedback, it continuously optimizes standards for product size, curves, profile, appearance, and performance. For product residual hazardous substances and packaging materials, free chromium control indicators have been established, sampling inspection by batch and regular third-party testing to ensure product quality and safety.

### Quality Control

Built a "one-button" system for quality process management, integrating process parameters for steelmaking, hot rolling, and other processes to achieve full-process tracking and data analysis. Quality monitoring and warning functions were developed to monitor real-time information such as temperature, size, and profile during production, providing timely alerts and improving process monitoring and warning capabilities. A cloud-edge-end data architecture was established to build a full-process quality management and control platform.

### Quality Assurance

Conducted third-party certification audits for strategic products, formulated process performance indicator supervision, and ensured continuous improvement through internal reviews to enhance quality management system performance. A three-level process inspection mechanism was established to check the execution of process control plans and regulations weekly and publish weekly inspection reports to ensure accurate operation. The Quality Inspection Department was established independently of production departments; its laboratory has obtained CNAS certification and continues to promote testing technology upgrades and intelligent equipment transformation while accepting internal and external supervision.

### Product Quality Self-inspection and Self-control

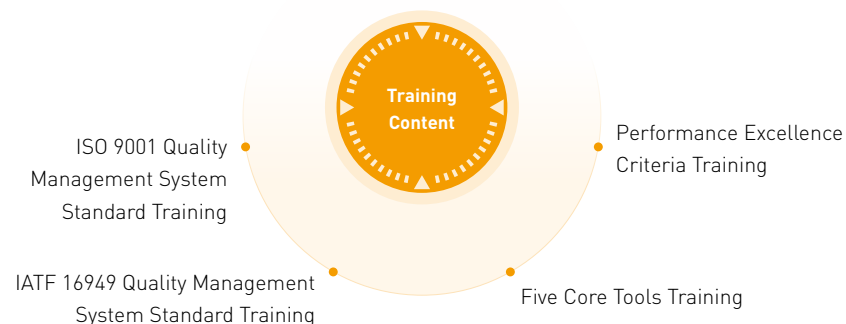
Based on product characteristics and customer requirements for environmental hazardous substance control such as RoHS/REACH, the company implements process supervision and outsourced testing from raw materials, processes, and packaging in accordance with the *Measures for the Administration of Hazardous Substances*. Requirements from customers and stakeholders are cascaded to upstream suppliers level by level; all delivered products are tested by qualified third parties with reports issued. Meanwhile, third-party testing is updated based on high-risk substance lists to ensure product safety.

### Quality Improvement

The company continues to focus on "Double Ten" (the top ten internal quality problems and the top ten customer feedback problems) key projects. For internal quality bottlenecks and key concerns of customers, we set challenging goals and select key business personnel to form the project teams. Indicators are monitored through weekly dashboard meetings, and project progress is reported in monthly quality meetings. Using lean methods such as Six Sigma, QC management groups, and Amoeba, the company builds a continuous improvement and innovation platform and creates an all-employee quality improvement culture.

## Quality Culture

Shougang Co. regularly holds quality expert lectures, lean quality special open classes, and special quality training covering quality management systems, tools, and excellence performance to strengthen employees' quality risk responsibility awareness. "Quality Month" activities are held consecutively to create a quality culture corridor and reinforce quality awareness. In 2025, the company planned a series of activities to gather quality consensus and promote the solution of focal problems through training, atmosphere building, customer visits, and story sharing.





Quality Monitoring Equipment Training

### "Quality and Fun Together" Quality Story Sharing Session



During the "Quality Month", the company held the "Quality and Fun Together" Quality Story Sharing Session, exploring vivid practices of adhering to quality and practicing craftsmanship in front-line positions, listening to the responsibility and commitment in ordinary positions, perceiving the value pursuit of "taking quality as beauty and craftsmanship as honor", promoting the deep rooting of quality concepts among employees, and facilitating the continuous inheritance of craftsmanship culture.

In "Quality and Fun Together," "Quality" represents persistence in original intention and responsibility, while "Fun" reflects the love for quality work and the value achievement when persistence is recognized.



## Customer Service

Shougang Co. is user-centric and demand-driven. By leveraging the promotion of its intelligent marketing platform and focusing on enhancing the user experience, the company continuously improves its customer service system to provide one-stop services and differentiated, precise "one user, one strategy" solutions, thereby enhancing the quality of customer service.

### Protection of Customer Rights and Interests

The company strictly adheres to legal and regulatory requirements and has established management systems, including the *Customer Service Management Measures*, the *Steel Product User Satisfaction Management System*, the *Product Quality Dispute Management*, and the *Online Trading Platform Customer Complaint Management System*, among others. The company continuously optimizes service processes, improves the customer service management evaluation mechanism, and standardizes the customer complaint and handling processes to enhance both customer service capabilities and service quality.

**Customer Service System.** Integrating production, sales, research, and technical service resources, the Marketing Center established the Customer and Product Service Department to improve a three-tier service system based on classification, regional segmentation, and hierarchical service levels. For automotive sheets, we provide dedicated services through a key account manager team, offering 24/7 on-site support.

- Technical Service** Conducts EVI (Early Vendor Involvement) services, co-building laboratories and innovation alliance studios to provide customized products, so as to realize co-design, co-development and collaborative production.
- Delivery Guarantee** Improves the production-research-transportation linkage mechanism and establishes a supply guarantee mechanism for emergency orders.
- Sales Service** Regularly conducts channel analysis, establishes flexible pricing mechanisms, and promotes information system construction.
- Logistics Service** Jingtang Co. is equipped with its own terminal, ensuring convenient logistics services.
- Processing Service** Promotes the construction of a processing center network.

**Smart Marketing Platform.** The company continuously optimizes the platform interface to provide convenient order tracking, quality certificate verification, and request submission. We have built an efficient “Shougang-Customer” interconnected EDI platform to satisfy personalized interactive needs for sales contracts, quality, and logistics data.

### Intelligent Customer Service

Centering on the dual goals of improving customer service efficiency and experience, the company has built a “one-stop” intelligent question-and-answer system - Shougang Intelligent Customer Service. Shougang Intelligent Customer Service covers the entire customer service scenario, realizing real-time response from inventory inquiry, order tracking, quality guarantee certificate verification, to invoicing consultation, signature processing, and then to order information and product information inquiry. By replacing the “waiting - transfer - feedback” link of traditional manual consultation, it responds to customer needs in real time, significantly improving the response speed and satisfaction of customer service, and injecting intelligent momentum into customer relationship maintenance.



**Responsible Marketing.** Shougang Co. consistently adheres to responsible marketing and strict advertising content control, fully complying with the *Advertising Law* and the *Consumer Rights Protection Law*. The company reinforces responsible marketing practices by strengthening compliance management in key business areas such as pricing policies, carrier admission and quality dispute risks, and ensures transparent and accurate sales information. In 2025, the company conducted ESG-related training for marketers, and no violations related to product or service information, labeling, or marketing activities occurred.

In 2025, the company won the “Market Development Award” from the CISA.

Looking ahead, the company will continue to enhance its three-tier service system, improve the “Problem List-Supervised Resolution-Internal Task Force” collaborative mechanism, further improving service standards and quality, and enhancing customer satisfaction.

### Customer Communication and Feedback

Shougang Co. adheres to the principle of “coming from users and serving for users”, establishes a user feedback mechanism, a closed-loop feedback process and a three-tier rapid response system

for technical services, continuously optimizes the process of obtaining, handling and feedback customer demands, ensures that user feedback is handled in a timely manner, and converts user-concerned matters into internal evaluation indicators. The company advances the path of obtaining demands, improves the channels for collecting demands, uses platforms such as weekly customer service meetings, base quality meetings, base production-sales-R&D sports meetings, monthly customer service meetings and product promotion meetings to timely collect customer-side problems and needs, and conducts hierarchical management of user complaints to ensure that problems can be found quickly. The company has established a user representative dispatch mechanism and a collaborative mechanism of “Problem List-Supervised Resolution-Internal Task Force”, effectively solving customers’ actual needs and realizing 100% closed-loop management of customer demands.

In terms of handling quality objections, the company has also established a rapid response mechanism. Once receiving quality objections and quality feedback from users, the service team rushes to the scene to find product problems at the first time, and takes the lead in organizing timely handling to ensure the timeliness of quality objection handling. In addition, it analyzes and summarizes the causes of quality objections and feeds them back to relevant units of the company in a timely manner to avoid the recurrence of the same quality objections.



In 2025, addressing customer pain points, the company leveraged technological innovation to deepen differentiated services across R&D, product performance, application scenarios, and quality assurance. We provided customers with more competitive material solutions tailored to diverse applications. By integrating green manufacturing, premium production, and high-end product promotion, we have strengthened a mutually beneficial cooperation model, earning widespread recognition and trust from our clients.

In accordance with the company’s *Steel Product User Satisfaction Management System*, satisfaction management modules have been developed within both the production-sales system and the intelligent marketing system. A combination of online and offline methods is used to conduct regular customer satisfaction surveys. The survey covers multiple dimensions, including overall impression, product quality, supply capabilities, service quality, and pricing, and is conducted with a differentiated evaluation approach. Additionally, the company collects customer opinions and suggestions extensively through various channels, such as phone calls, faxes, emails, trade fairs, and on-site visits. For concerns raised in satisfaction surveys, each issue is verified in detail, and

the production, sales, and R&D teams collaborate to ensure a rapid response, guaranteeing effective problem resolution. After corrective actions are completed, a multi-dimensional follow-up mechanism is implemented, forming a closed-loop satisfaction survey management process to continuously enhance the customer experience. In 2025, the company conducted a comprehensive user satisfaction survey, collecting 957 valid responses with an overall satisfaction score of 98.98. Furthermore, 118 improvement actions based on user feedback were successfully implemented.

Customer Satisfaction

98.98

## Synergistic Development and Value Co-creation

Shougang Co. conducts all-round and multi-dimensional customer exchanges and interactions, providing comprehensive, in-depth, personalized and effective customized services. We work with users to solve product application and industry technical problems, promoting collaborative innovation and progress of the industrial chain. Through video conferences, face-to-face meetings and other methods, the company carries out "Closer to Customers" activities to deeply understand the problems encountered by customers in product use, accurately perceive user needs, and serve users wholeheartedly. By holding activities such as Shougang Day, joint exhibitions and technical exchange days at the customer site, the company strengthens technical cooperation in new materials, new technologies, green and low-carbon and other fields.

In 2025, the company conducted more than 5,300 customer visits and exchanges, including over 2,200 technical exchanges and 164 special user technical exchanges on low-carbon products. We held high-end technical forums on automotive steel, low-carbon technical forums on automotive sheets, seminars on the development of medium and heavy plate energy steel, and the launch conference of Zhongshan Green Guard low-carbon project. We organized technical exchange summary meetings with 5 users including NIO, and Hongqi, and carried out "Shougang Day" activities in enterprises such as Dongfeng Nissan and Geely.

### Chery · Shougang Technical Exchange Day Activity



In January 2025, Shougang Co. and Chery Automobile held a Technical Exchange Day activity in Wuhu, Anhui Province. The two parties focused on deepening cooperation in cutting-edge fields such as the R&D of low-carbon green steel materials, overseas market development and whole-vehicle material solutions. With "Shougang Wisdom" and "Shougang Solutions", we help Chery achieve high-quality development and jointly create a model of collaborative innovation between the iron and steel and automotive industries.



### Tinplates and Chrome-plates Product User Seminar



In November 2025, Jingtang Co. held a Tinplates and Chrome-plates Product User Seminar with the theme of "Coating Excellence, Leading the Future with Tin" in Hangzhou, gathering more than 110 representatives from 56 units including leading enterprises in the food packaging industry, benchmark enterprises in segmented markets and well-known domestic and foreign traders. In the future, the company will continue to adhere to its original aspiration with craftsmanship, meet challenges and share opportunities with global partners, empower the upgrading of the global industrial chain through technological innovation, transform user needs into innovative momentum, create greater value for users, and achieve win-win development.



## The 9th Nissan "Shougang Day"



In October 2025, Shougang Co. and Nissan Motor held the 9th "Shougang Day" annual strategic dialogue. The two parties conducted in-depth exchanges around automotive material innovation, electrical steel solutions for new energy vehicles and global cooperation. Nissan highly recognizes Shougang's continuous improvement in commercial services, technical support and new material development, and the level of cooperation between the two parties has improved year by year. In the future, Shougang Co. will continue to be customer demand-oriented, deepen product, technology and service innovation, and promote win-win development between the two parties in broader fields and deeper levels.



- "Green and Low-Carbon Excellent Supplier Award" from GAC Honda (the only steel enterprise)
- "Joint Logistics Support Award" from China Construction Science and Industry Corporation (the only steel enterprise)
- "Global Partner Golden Cube Award" from Haier Smart Home
- "Outstanding Contribution Award for Technical Cooperation" from Great Wall Motors
- "Outstanding Supplier" award from multiple users including Chery, Geely, Seres, CIMC and Hisense
- "Best Business Cooperation Supplier Award" from Benteler



Recognition Continues to Increase for Our "Manufacturing + Service":

54

Customer Awards

36

Thank-You Letters for Efficient Services

4

Pennants

## Customer Privacy Protection

Shougang Co. attaches great importance to customer privacy protection. We have built a complete privacy protection compliance management system, and focus on strengthening the whole-life cycle protection mechanism of customer information. Detailed privacy protection clauses are clearly stipulated in the *Customer Information Management System of Steel Products*. Special customer representatives are assigned to be responsible for customer information management. By strengthening internal management and conducting employee training, the company enhances the privacy protection awareness of all employees to ensure comprehensive and effective protection of customer privacy. Through a combination of technical means and management measures such as strengthening data encryption, restricting data access rights and regularly reviewing privacy data, it ensures the security and compliance of customer privacy data during transmission, storage and processing.

# Supply Chain Security

Shougang Co. aims to build a "safe, stable, green, and smart" sustainable supply chain, integrating the "Four-Integration-One-Body"<sup>4</sup> procurement management system. Through precise management and control of the entire process, it improves efficiency, reduces costs, and strengthens compliance management. Adhering to the green and low-carbon concept, the company fully integrates ESG requirements into all links of the supply chain, prefers suppliers that meet ESG standards, and promotes green and low-carbon supply chain management. Meanwhile, upholding the concept of "green, smart, and transparent procurement," we achieve process transparency and traceability through digitalization and establish stable and transparent cooperation with partners. The company will continue to promote supply chain security construction and drive the sustainable development of the steel ecosystem.



The proportion of domestic suppliers

## Full-Life Cycle Supplier Management

The company has formulated the *Procurement Supplier Management Measures* to implement closed-loop full life cycle management for suppliers, from access, audit, and evaluation to graded management. We also conduct on-site audits and ESG risk exclusion to ensure supply chain security and sustainability. The Procurement Center is the department responsible for supplier management. In 2025, 76 new suppliers were admitted, and all ESG project research and assessments were qualified. The company continued to conduct low-carbon performance evaluations for suppliers to strengthen the low-carbon management orientation for suppliers.

### Basic Conditions for Supplier Access

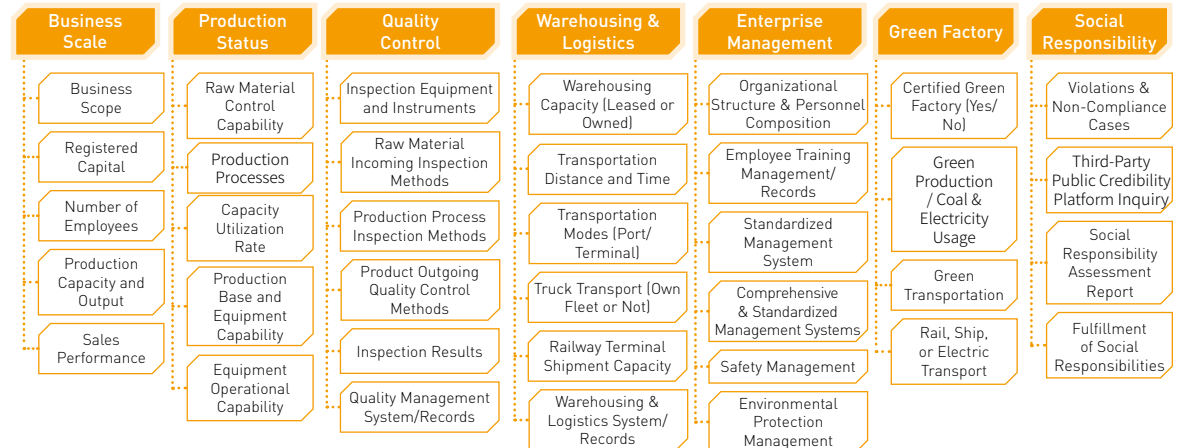


## Supplier Access Management

The company has established research and review groups and formulated a research list of 36 items in 7 categories to conduct comprehensive research and review of suppliers. Scoring standards and evidence material requirements are set differentially based on business characteristics to ensure that suppliers meet business characteristics and compliance standards. A supplier status management mechanism has been established, defining trigger conditions for backup, freezing, recovery, and other statuses. A three-month trial period is required for newly admitted suppliers to strengthen the effectiveness of supply channel construction. Pre-compliance operational screening is conducted, and a "one-vote veto" and dismissal policy is implemented for suppliers involved in dishonesty, serious violations of the law, use of child labor, or conflict minerals.

As of the end of the reporting period, the company had 3,553 registered suppliers, all of which were from Mainland China.

### Supplier Audit Content



<sup>4</sup> Four-Integration-One-Body: a multi-site integrated procurement management system featuring standardization, normalization, digitalization and institutionalization.

## Supplier Evaluation Management

To continuously optimize the sustainable development level of the supply chain, the company implements evaluation management consisting of monthly scoring and annual comprehensive evaluation for formal suppliers. By integrating data from the procurement system, we adopt a multi-dimensional evaluation method combining automatic system calculation with manual assessment. For quantifiable indicators such as quality, delivery, price, and response rate, scores are automatically calculated by the system through preset logic to ensure objectivity and precision. For qualitative indicators such as service satisfaction, fulfillment of social responsibility, and major impacts, manual assessment is conducted through a multi-departmental collaborative online process to ensure openness, fairness, and justice. Based on the annual evaluation results, suppliers are classified into four levels: A, B, C, and D. Differentiated cooperation strategies are implemented, and dismissal processes are executed for unqualified suppliers, thereby building a supply chain ecosystem of "survival of the fittest" and virtuous cycles.

In 2025, the company evaluated a total of 1,795 suppliers, with A and B-level suppliers accounting for 64.84%, C-level suppliers accounting for 35.15%, and D-level suppliers accounting for 0.01%.

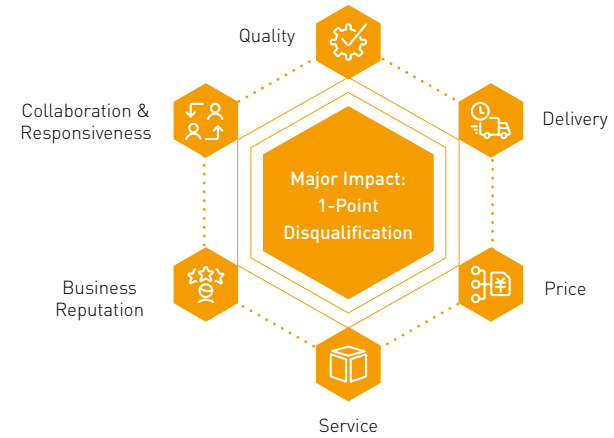
### Evaluation Criteria Based on Procurement Material Characteristics



To resolve compliance risks caused by non-standard procurement operations, the company has formulated the *Procurement Method Management System*.

- Established the Procurement Standardization Promotion Committee, forming a "top-down" and "cross-departmental coordination" management structure.
- Coordinated planning, clarified the division of departmental responsibilities, and refined group implementation.
- Formulated a procurement full-process compliance management system, integrating standardization, normalization, digitalization, and institutionalization as its core principles.
- Created a work progress timeline and held regular promotion work meetings to lay a solid foundation for the promotion and implementation of procurement standard work.

### Supplier Evaluation Criteria and Assessment Rules



## Supplier Audit Management

To improve supplier performance and enhance supply chain resilience, professional departments are organized annually to jointly conduct second-party supplier audits, and an annual audit plan is formulated. In 2025, a total of 12 suppliers were audited, and 86 rectification and optimization items were proposed, driving suppliers to improve product quality and providing support for supply chain security.

## Procurement Method Management

In accordance with the *Specifications for Procurement Operations of State-owned Enterprises* and the *Specifications for Procurement Management of State-owned Enterprises*, procurement methods are divided into four categories and eight items, with clear applicable conditions. Through three major procurement platforms—Shougang Bidding Platform, Shougang Selection Platform, and Shougang Mall—business processes are solidified and embedded in the system. Information-based management and control are implemented, ensuring that data does not leave the system throughout the process, and the review and approval processes are traceable, building a solid foundation for compliant procurement.

## Supply Chain Risk Management

Shougang Co. adheres to the supply chain risk management principles of "prevention first, graded management and control, full-process traceability, and continuous improvement." It formulates annual risk identification and response plans, focusing on areas such as supply interruption, compliance dishonesty, and environmental and social risks. Through the institutionalization of processes and the digitalization of processes, we achieve early discovery, early warning, and early disposal of risks.

### Dynamic Warning Mechanism

By connecting with information pushed by "Tianyancha" (a corporate credit intelligence platform based on national public data that helps users quickly understand corporate operating conditions, etc.), a procurement supplier warning module has been built. Risk warnings are divided into three levels: general warning, important warning, and major warning. Among them, changes in legal representatives, equity changes, and public opinion reports are general warnings; administrative penalties, lawsuits, tax ratings, and equity pledges are important warnings; and being listed as a major violator or a dishonest person subject to enforcement is a major warning.

### Dynamic Withdrawal Mechanism

Suppliers with major warnings will be included in the supplier blacklist; for behaviors such as being listed as a dishonest person subject to enforcement, serious violations of the law (including use of child labor, non-compliant operations, etc.), or involvement in conflict minerals, as well as suppliers whose annual evaluation results are unqualified, business dealings will be terminated and dismissal processes executed. For suppliers whose ESG performance fails to meet standards or who fail the assessment, management measures such as time-limited rectification, suspension of cooperation, or permanent exit are implemented. In 2025, 18 suppliers assessed as having major actual/potential negative impacts were included in the blacklist.

### Emergency and Business Continuity Management

A list of backup suppliers for key materials and emergency procurement processes has been established. No major production or operation impacts caused by supply chain interruption occurred during the reporting period.

## Supply Chain ESG Management

Shougang Co. deepens supply chain ESG risk management, fully integrates ESG considerations into the supplier access and assessment system, strengthens supply chain ESG management, and builds a sustainable supply chain ecosystem of shared responsibility. The company signed the *Business Partner Code of Conduct Commitment Letter* with suppliers, clearly specifying ESG

performance standards and optimizing supplier performance evaluation methods. Strict ESG management and risk assessment are implemented throughout the supplier management process. In the access stage, indicators such as business ethics, conflict minerals, human rights, safety and environmental protection, and sustainable development are comprehensively examined. During the reporting period, a 100% signing rate of the *Business Partner Code of Conduct Commitment Letter* was achieved. To ensure the effective implementation of supplier ESG management, the company has established a clear three-level governance and supervision system:



### Responsibility and Decision-making Level

The company's General Manager's Office is the highest decision-making body for supply chain ESG strategies and policies, responsible for approving relevant policies, goals, and major matters.

### Management, Implementation and Oversight Body

The Procurement Center, as the company's designated core implementation and daily supervision body, is fully responsible for integrating ESG requirements into supplier full life cycle management. Its responsibilities include system execution, risk assessment, performance evaluation, and driving continuous improvement.

### Execution and Collaborative Department

The business and management departments of the Procurement Center, in collaboration with professional departments such as quality and safety and environment, are jointly responsible for implementing ESG standards in supplier access, performance assessment, and on-site audits.

In 2025

**100%**

The proportion of key suppliers evaluated

**100%**

The proportion of suppliers with significant actual/potential negative impacts but having reached consistent corrective measures/improvement plans

**258**

Suppliers that passed desk evaluation/on-site evaluation

**28**

Suppliers supported when implementing corrective action plans

The company has publicized the *Business Partner Code of Conduct Commitment Letter*, aiming to comprehensively standardize its business behavior, uphold the concept of sustainable development, promote the harmonious coexistence of the company with society and the environment, and lay a solid foundation for its long-term development.

<b>Respect and Uphold Human Rights</b>	Prohibit discrimination and harassment, respect basic labor rights, prohibit child labor and forced labor, and protect women's rights.
<b>Business Ethics</b>	Conduct business cooperation with a professional, honest, and upright attitude, abide by market competition principles, and create an integrity-based corporate culture.
<b>Environmental Protection</b>	Take green development as a core strategy, promote innovation in energy conservation and carbon emission reduction technologies, reduce impact on the environment, use natural resources moderately, handle chemicals safely, strictly abide by laws and regulations related to biodiversity protection, and actively promote the harmonious development of the ecological environment.

**Supplier Selection and Qualification Audit**

ESG factors such as business ethics, labor requirements, human rights protection, health and safety, and environmental protection are incorporated into supplier access assessment. Basic ESG requirements that suppliers must comply with have been formulated. For example, the products provided by suppliers must comply with national industrial policies to ensure the legality and compliance of product production and manufacturing; ensure that products meet national or industry safety standards to eliminate safety accidents caused by product quality; suppliers should hold valid certificates of compliance with environmental emission standards or environmental system certifications (such as ISO 14001), and their environmental management must comply with relevant standards.

**Prioritization of the Selection of Suppliers with Good ESG Performance**

When selecting suppliers and signing contracts, priority is given to suppliers with better ESG performance, such as those that have obtained national green factory certification or adopt green transportation methods.

**Due Diligence**

To systematically manage environmental, social, and governance risks in the supply chain, the company incorporates suppliers into a unified sustainable development management system. In 2025, the company conducted a special questionnaire survey to identify and assess performance in business ethics, compliant operations, and responsible procurement.

The survey focuses on the following core aspects:

- Business ethics and compliance: Including the strict prohibition of unethical or illegal businesses.
- Fair operation: Relevant policies and commitments to maintain a fair competitive environment.
- Responsible supply chain: Especially the management of conflict minerals, etc.

A total of 1,202 valid questionnaires were collected. Based on this, the company can more accurately identify risks, conduct targeted communication, and promote continuous improvement of cooperative suppliers, jointly building a more resilient and responsible value chain.

**Procurement Process Supervision**

Ensure consistency with the suppliers' code of conduct and avoid potential conflicts with ESG requirements. Contract terms require suppliers to comply with the ESG requirements in the *Procurement Supplier Management Measures*.

**ESG Continuous Review and Improvement**

During the monthly scoring and annual comprehensive evaluation of suppliers, the company continuously reviews whether supplier behavior is consistent with the Business Partner Code of Conduct Commitment Letter and does not cooperate with suppliers that fail to meet the minimum ESG requirements. For suppliers with poor ESG performance, improvement requirements are put forward and supervision is conducted to ensure their rectification and implementation.

**Internal Training and Communication**

Relevant training and communication are conducted for procurement personnel, including basic understanding of sustainable procurement and compliance requirements, identification of social risks in the supply chain and supplier due diligence, environmental performance requirements of the supply chain and green procurement practices, sustainable capability building of suppliers and communication and collaboration, clarifying their roles and responsibilities in supplier ESG management.

**Supplier Empowerment and Support**

The company provides ESG-related training, including business ethics, labor rights and interests, environmental protection, occupational health and safety, to improve suppliers' awareness and performance of sustainable development. We also guide suppliers to carry out carbon footprint accounting and certification, and promote green procurement and low-carbon production. In 2025, the total duration of ESG communication and training with suppliers was 474 hours.

## Conflict Minerals Management

The company has publicly released the *Conflict Minerals Claim*, requiring all suppliers to sign the *Business Partner Code of Conduct Commitment Letter*, which clearly stipulates that the tantalum, tin, tungsten, gold, cobalt, mica, and other minerals contained in their products must not directly or indirectly originate from conflict-affected areas in the Democratic Republic of the Congo or its surrounding countries, and that suppliers must not directly or indirectly contribute to human rights violations in these areas. Suppliers must commit to conducting due diligence on their mineral sources and supply chains, and providing relevant certificates when required. The company clearly stipulates in the procurement contract terms that both parties must strictly abide by the above commitments. If a supplier violates the conflict mineral terms, Shougang Co. has the right to unilaterally terminate the contract.

## Green Supply Chain

To systematically promote the low-carbon transition of the supply chain, the company has formulated a clear low-carbon procurement strategy and systematically advanced green supply chain construction. In 2025, around key links such as supplier access, performance evaluation, second-party audits, and procurement model optimization, the company compiled and implemented the *Low-Carbon Procurement Strategy Guidance Document*, innovatively incorporating carbon footprint indicators into the procurement decision-making system. At this stage, mainly through the incentive bonus mechanism in performance evaluation, suppliers are guided to actively calculate carbon footprints and implement emission reductions.

- **Strengthen Industrial Synergy.** The company takes the lead in building an industrial collaboration platform, and joins hands with domestic leading enterprises and industry associations to build an industrial chain collaborative carbon reduction ecosystem.
- **Consolidate basic capabilities.** We iteratively optimize procurement strategies to stimulate suppliers' motivation for low-carbon transformation; develop low-carbon intelligent management modules to improve the digital governance level of procurement links.
- **Deepen carbon footprint management.** We promote the implementation of the accounting system by layers and categories, and carry out concept promotion and knowledge empowerment through supplier conferences, and promote more than 30 suppliers to formulate special carbon emission reduction plans.
- **Promote technological innovation.** We deepen exchanges with more than 10 professional institutions to broaden technical paths; focus on key categories such as quicklime and refractory materials to carry out independent carbon reduction research.
- **Build a cooperation community.** We organize supplier conferences for key categories such as refractory materials and scrap steel to build a deeply bonded green cooperation network.

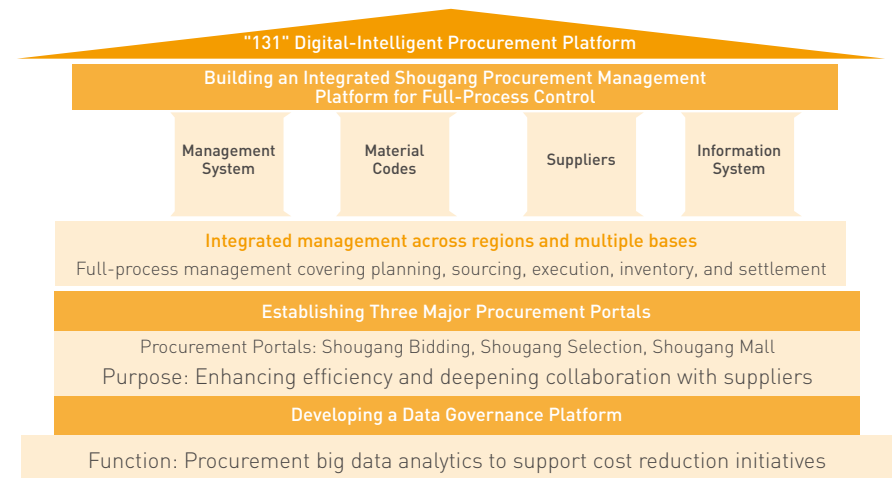
During the reporting period, the company organized 38 core suppliers in batches to complete carbon footprint accounting and certification, accumulating 60 product carbon footprint reports.

## Intelligent Supply Chain

The company takes intelligent procurement as the core, fully implementing the Sunshine Procurement Principle while continuously exploring and innovating new procurement management

models. The *Shougang Procurement Risk Control Compliance Guidelines* have been developed, defining key risk control points and management standards. This initiative breaks away from traditional procurement constraints and enhances procurement risk compliance management capabilities.

On this basis, the company has developed a "131" Digital-Intelligent Procurement Platform, with a centralized procurement management platform as its core. The system establishes three external procurement portals and a data governance platform, enabling full-process digital and intelligent management of procurement operations. By leveraging cloud computing, big data, and other advanced technologies, this platform enhances procurement data analysis and creates a procurement digital brain ecosystem, leading to comprehensive procurement management improvements.



The company's bidding and procurement platform has obtained three-star and Level-3 cybersecurity certification, signifying that the platform has achieved higher efficiency, standardization, and authority in system functionality, data interaction, process management, and technical security, providing strong support for the advancement of smart procurement.

In terms of material management, the company has established a systematic, standardized, regulated, procedural, digitalized, replicable, and scalable material management system, enabling seamless integration of information and resource sharing across the supply chain, production, suppliers, and after-sales services.

## Equal Treatment of SMEs

During the procurement process, the company adheres to the principle of integrity, treating all suppliers fairly and ensuring equal opportunities for SMEs. The company ensures timely and full payment to SMEs, safeguarding their legitimate rights and interests. Actively responding to and strictly implementing the relevant requirements of the *Regulations on Ensuring Timely Payment to SMEs*, the company continuously optimizes the business environment to support the healthy development of SMEs. During the reporting period, there were no overdue payments to SMEs.

# Employee Development

Shougang Co. consistently adheres to the "people-oriented, harmonious, and win-win" philosophy, placing employee development at a strategic height. With the protection of employees' rights and interests as the baseline, empowering growth as the core, and sharing results as the goal, the company has built a management system covering the entire chain of talent attraction, cultivation, utilization, and retention. From compliant and sound governance mechanisms and diversified welfare protection to comprehensive workplace care, systematic growth support, and differentiated incentive mechanisms, the company is always committed to achieving the resonance between individual value and corporate development. We aim to create an equal, inclusive, healthy, harmonious, and vibrant workplace ecology, ensuring that employees gain a sense of belonging, happiness, and achievement through the company's development.

## Governance

The Human Resources Department is responsible for formulating the human resource strategy and leading various initiatives related to talent introduction, development, evaluation, utilization, motivation, and retention. The Union plays a key role in democratic management, labor rights protection, and employee care, ensuring that employee rights and interests are effectively safeguarded.



To accelerate the establishment of an agile talent supply chain, the company has developed a talent management organizational structure comprising a Talent Leadership Group, Talent Work Committee, and Talent Work Office, forming a multi-level, interactive talent management system. The Talent Leadership Group, led by the company Party Secretary as the Group Leader and the General Manager as the Deputy Leader, oversees the company's talent strategy, sets direction, allocates resources, and guides and supervises talent-related initiatives. The Talent Work Committee is responsible for formulating talent development plans, improving talent management systems, and monitoring talent initiatives. The Talent Work Office, based in the Human Resources Department, is in charge of implementing talent development programs.

The company strictly complies with the *Labor Law*, the *Labor Contract Law*, and other relevant laws and regulations. We have formulated management measures such as the *Labor Contract Management System* and continuously improved the human resource management system. We strive to build a talent selection and employment system centered on value creation and sharing achievements with value creators, creating an equal, inclusive, and diverse workplace environment to ensure that the legitimate rights and interests of employees are not infringed upon.



Shougang Co. respects human rights and actively opposes any violations. The company respects employees' rights to freedom of association, union membership, and collective bargaining, maintaining an effective grievance and complaint mechanism. In 2025, 100% of employees were covered by collective bargaining agreements. The company strictly prohibits forced labor, child labor, and workplace harassment. Recruitment, employment, and promotion processes are strictly monitored, and an employee grievance channel to senior management has been established to prevent child labor, forced labor, harassment, bullying, and intimidation. In 2025, no labor law violations or non-compliant employment incidents occurred.

**100%**  
of employees were trade union members

The signing rate of labor contracts reached **100%**

Shougang Co. is committed to providing equal opportunities for all employees and treats individuals of different nationalities, ethnicities, races, religions, and cultural backgrounds equally. The company respects the customs of ethnic minorities and strictly protects employee privacy. Hiring, compensation, professional education, technical training, promotion, and participation in company decision-making are based solely on objective criteria. Employees are not subject to discrimination based on gender, physical characteristics, marital status, or other personal attributes. The company conducts anti-discrimination and anti-harassment training for all employees through policy dissemination and workplace education programs. Through employee demand management, satisfaction surveys, and well-being assessments, the company conducts human rights impact evaluations to understand and mitigate potential risks in the workplace.

## Strategy

Shougang Co. adheres to the "people-oriented, harmonious, and win-win" philosophy. Based on the trend of transformation and upgrading in the steel industry, we build a full-lifecycle talent development system featuring precise talent introduction, systematic cultivation, diversified retention, and differentiated motivation. We continuously improve the scientific and systematic nature of human resource management, maximize employee well-being, meet employees' aspirations for a better life, and promote the collaborative development of individual value and corporate sustainability. Our goal is to build a talent team with cohesion, combat effectiveness, and innovation, solidifying the talent foundation for the sustainable development of the enterprise. During the implementation of the talent development strategy, Shougang Co. faces certain risks and opportunities.

## Risks and Opportunities Management

To effectively prevent and control risks related to recruitment and retention and fully grasp opportunities for talent cultivation and activation, Shougang Co. builds a full-cycle employee

management system by standardizing recruitment processes, improving welfare protection, optimizing incentive mechanisms, strengthening democratic management, building friendly workplaces, and empowering employee growth. This not only solidifies the foundation for talent retention and mitigates talent-related operational risks but also activates talent innovation and transforms talent opportunities into drivers for corporate development.

Potential Risk / Opportunity Description	Type	Business and Financial Impact	Time Horizon	Response Measures
Breach of Employment Commitment by Double First-Class Graduates	Risk	Need to restart the recruitment process, leading to repeated recruitment costs; job vacancies indirectly affect operating income.	Medium-term	Adopt a dual approach of recommendations from already signed graduates and recommendations from key university professors to quickly lock the candidates; establish practical education bases in collaboration with universities to reserve talents.
Loss of Key Talent	Risk	Delay or interruption of R&D projects, decline in technical innovation capability, affecting new product development and market competitiveness; high cost of re-recruiting and training core talent.	Medium & long-term	Improve talent development channels and mechanisms; enhance supplementary incentive mechanisms for core talent and increase non-monetary incentives; implement the "Wave Program" for new employees, providing a salary protection period; utilize the Risk Management Cockpit platform to establish an early warning system for key talent turnover rates, strengthening monitoring and oversight of workforce attrition.
Need to Strengthen Interdisciplinary Talent in Digitalization and Green Low-Carbon Development	Opportunity	Rapidly forming and cultivating such talent teams can accelerate R&D and market expansion, enhance product premium capabilities, and improve profitability.	Medium & long-term	Continuously strengthen the development of digitalization and green low-carbon management talent by focusing on digitalization, intelligent manufacturing, and green low-carbon initiatives, and systematically enhancing targeted, tiered training programs for employees across different roles.
Employee development and organizational vitality enhancement	Opportunity	High satisfaction helps reduce employee turnover, improve production efficiency and quality stability, and reduce recruitment and training costs; a good organizational atmosphere can stimulate innovation vitality, promote knowledge sharing and collaboration, and provide cultural support for the company's continuous improvement and reform.	Medium & long-term	Continuously optimize the "Employee-Friendly Workplace" construction, strengthening multidimensional support such as psychological care, health management, and cultural/sports activities; promote "Democratic Management" and "Requirement Response" mechanisms to enhance employees' sense of participation; strengthen internal publicity and case promotion to shape the influence of "Employer Brand."

## Employee Recruitment

Shougang Co. adheres to the principles of compliance, fairness, and transparency, conducting campus and social recruitment in strict accordance with prescribed procedures to attract and select talent. We continuously broaden recruitment channels and strengthen cooperation with universities and institutes to enrich our talent reserve. In 2025, the company actively absorbed employment and created flexible employment positions, recruiting a total of 113 new employees.

## Diversified Welfare

Shougang Co. provides diversified welfare plans, giving personalized support to different groups from three aspects: career care, family care, and holiday care. We have formed a comprehensive welfare support system of "Statutory Welfare + Supplementary Welfare" to enhance employees' sense of happiness and belonging and improve talent retention.

Shougang Co. strictly complies with regulations by contributing to pension, unemployment, work injury, medical, and maternity insurance, as well as housing provident funds. Additionally, the company provides supplementary benefits such as holiday and birthday allowances, corporate annuities, supplementary medical insurance for employees and their children, group accident insurance, supplementary pension plans, and commercial inclusive medical insurance. The company has also established diverse leave policies, including paid annual leave, home visit leave, parental leave, recuperation leave, childcare leave for parents of an only child, and paternity leave. We provide comprehensive recreational facilities, including employee sports centers, and reading rooms. We build talent apartments with complete living facilities and organize group housing purchases to ensure housing security for employees.

### Allowance & Subsidy

Academic Qualification Allowance, Position Allowance, Housing Allowance, Transportation Allowance, Communication Allowance, Patent Allowance, Relocation Work Allowance, Settling-in Allowance, Working Meal Subsidy, High-Temperature Subsidy, Hardship Post Allowance, High-Skilled Talents Allowance, etc.

### Working Hours Policy

Arrange working hours according to national laws and regulations, strictly prohibiting forced overtime;

**Standard Working Hour System** » Employees work no more than 40 hours per week;

**Comprehensive Working Hour System** » The average working hours for employees do not exceed 40 hours per week.



Staff Children's Winter / Summer Vacation Care Class

## Remuneration and Incentives

Shougang Co. adheres to a "pay philosophy based on market salary levels, job value, skills and capabilities, and performance evaluation" and has established a comprehensive, diversified, and differentiated compensation incentive mechanism. The company designs different salary structures and compensation models for various employee categories, ensuring that salary distribution is not influenced by gender, age, or ethnicity. Compensation is structured to cover incentive, compensatory, welfare, and compliance-based allowances and subsidies, with salary incentives differentiated across short-term, annual, and long-term dimensions. Additionally, targeted individual rewards are provided to ensure employees receive fair remuneration aligned with their roles and the value they create. For mid-to-senior level management, the company has established a long-term incentive mechanism, offering tenure-based incentives and equity incentives. The tenure-based incentives follow a three-year cycle, while the restricted stock incentive program is designed for senior executives, core technical personnel, and key management staff. Additionally, Shougang Zhixin has implemented an employee stock ownership plan.

In September 2025, the Board of Directors reviewed and approved the *2025 Stock Option and Restricted Stock Incentive Plan (Draft)*, which was approved by the Beijing Municipal SASAC in January 2026. This incentive plan focuses on building a scientific and balanced value-sharing and

distribution system, covering senior management, middle management, and core technical (business) personnel. It sets clear and quantified performance appraisal targets to ensure the fairness, transparency, and executability of the incentive mechanism. For details, please refer to the announcement released by the company on September 30, 2025.

### Salary

- Post Salary System, Annual Salary System, Position-Performance Salary System
- Post Salary, Performance Salary, Off-Site Salary, Seniority Wage, Rank-based Salary, Year-end Double Salary, Equity Incentives
- Lean Project Award, Management Innovation Award, Key Task Award, Business Contribution Award, Shougang Scientist Award, Shougang Craftsman Award, Research Project Award, Scientific and Technological Achievement Award, Small Indicator Competition Award, Shougang "Three-Star" Award, etc.

The company continues to optimize the performance management system, formulating and strictly implementing the Performance Assessment Management System. We have built a closed-loop performance management system covering performance goals, coaching, evaluation, feedback, and result application. This multi-dimensional assessment provides clear directions for improvement and helps employees progress continuously. For managers, the company comprehensively adopts Key Performance Indicators (KPI) and 360-degree feedback annually and monthly, linking performance results with compensation, training, and career development to enhance leadership.



Diversified management tools are used for goal setting, including but not limited to KPIs and Objectives and Key Results (OKR), with different tools applied to different ranks and sequences.



An annual Performance Evaluation Committee is established to conduct closed-door performance reviews based on objective and fair principles, considering annual performance and capability.



A smooth feedback and appeal mechanism is built, with a 3-working-day publicity period, one-week appeal window, and 2-working-day review process. Employees can appeal to the appraisal department or department head regarding appraisal, transfer, training, or benefits.



Based on performance reports, coaching and interviews are conducted within 10 working days to help employees improve performance and comprehensive quality. Results are directly linked to employee post adjustment, promotion, and salary.

## Democratic Management

Shougang Co. continues to improve the grassroots democratic management system with the Employee Representative Congress as the basic form, promoting the standardization of democratic management. We listen to employee opinions beforehand and accept supervision afterward, maximizing employees' rights to know and participate. The labor union serves as the main communication platform, complemented by online and offline channels. Online, through the Shougang WeChat public account, the company shares updates on corporate strategy and industry trends, helping employees gain a deeper understanding of business development. Offline, the company has implemented the *Factory Affairs Disclosure Management System*, making key decisions that affect employees' interests publicly available. An Employee Representative Congress is held annually, allowing employees to participate in corporate management.



In 2025, the company was selected as a cultivation unit for typical experiences in democratic management of enterprises and institutions in Beijing.

## Employee-Friendly Workplace

Shougang Co. always insists on doing good things, doing practical things and solving difficult problems for employees. We consistently organize activities such as "Spring Care Visits, Summer Cooling Relief, Golden Autumn Education Assistance, and Winter Warmth Initiatives" to support employees' physical and mental well-being and personal growth, and build a friendly workplace.

### Employee Requirement Response

The company strengthens "Requirement Management" to be a "close friend" to employees. To ensure that the most concerning and urgent problems are resolved, we established a closed-loop mechanism of "Acceptance - Classification - Handling - Feedback - Evaluation." Platforms like the "Labor Union Integrated Platform" and "Employee Service Hotline" allow employees to submit requirements online. We respond instantly and handle reasonable requests within a time limit. Additionally, the company conducts an annual employee satisfaction survey, holds quarterly employee needs meetings, and organizes employee forums, open-door days, and informal discussions to provide face-to-face solutions to employee concerns.

In 2025, we focused on resolving issues such as employees' children's schooling and insufficient temporary parking spaces, while promoting practical projects like adding charging piles, optimizing shuttle bus routes and increasing commuting trips. Employee request response rates, resolution rates, and satisfaction rates all reached 100%.



Employee needs meeting

### Employee Satisfaction Survey

Each year, the Union and Human Resources Department identify satisfaction factors for different personnel categories and special groups through employee interviews, questionnaires, staff meetings, and the Employee Representative Congress. We conduct all-staff satisfaction surveys focusing on key factors such as work environment, learning and development, compensation and benefits, work experience, sense of achievement, job security, self-fulfillment, work collaboration and corporate culture. In 2025, employee satisfaction at Qiangang Co., Cold-R Co., and Shougang Zhixin remained at a satisfactory level, while Jingtang Co. achieved a very satisfactory level, all achieving annual targets.

### Assistance for Employees in Need

The company solves practical difficulties for employees through a precise and diversified assistance system. Various initiatives, including home visits, fundraising campaigns, employee mutual aid insurance, and the Shougang Assistance Fund, are employed to provide multi-channel assistance and effectively address the actual needs of employees. In 2025, the company provided aid to 315 employees in need, distributed condolence money RMB 2.1865 million. Additionally, 405 employees received special charitable relief, totaling RMB 585,500.

### Caring for Female Employees

The company protects the legitimate rights and special interests of female employees, ensuring equal pay for equal work.

- Organize activities such as outstanding female employee recognition, "Women's Innovation in the Workplace" programs, and female employee discussion forums to empower female employees with a stronger sense of value;
- Organize various activities such as yoga classes, mental health workshops, traditional culture and etiquette training, nail art sessions, floral arrangement, book clubs, and movie viewing activities to enhance the physical and mental well-being of female employees;
- Establish dedicated facilities like female employee activity rooms, mother-and-baby care rooms, and nursing shuttle services to create a more comfortable working environment;
- Raise the standards for distributing female hygiene products, purchase specialized health insurance for female employees, and offer gynecological health check-ups to prioritize female employees' health.

In 2025, the company organized and planned a series of featured activities, including movie viewing, essay competitions, legal education on women's rights protection, yoga training, and reading clubs. We also conducted selections of advanced role models and held discussion forums for outstanding female employees.



Mother-and-baby Care Room



Outstanding Female Employee Discussion Forum

### Caring for Youth

The company actively engages with young employees through opinion collection, discussion and exchange, questionnaire surveys and "Young Employee Tea Parties," to understand their needs in work, life, skill enhancement, and personal interests. Based on these insights, we organize various activities tailored to young employees, continuously exploring the characteristic activities suitable for young employees to support talent retention.



Youth Theme Discussion Forum



Young Employee Tea Parties

### Physical Health Management

The company comprehensively promotes employee health management.

- Through measures such as the health point incentive plan, physical fitness tests twice a year, and health lectures delivered by medical experts, the company improves employees' health management awareness and promotes the physical fitness of all employees;
- We advance the employee health care and physical fitness enhancement promotion plan, and guide employees in scientific exercise and healthy eating based on individual physical fitness reports, making health a lifestyle concept and promoting the construction of a healthy Shougang Co.;
- Relying on the Employee Health Stations, we carry out activities such as online consultation, offline medical check-ups, health education, and employee health record management, and conduct activities such as "Winter Diseases Treated in Summer" Sanfu medicinal patches and winter herbal paste to provide comprehensive health management services for employees;
- We organize scenario-based simulation drills for emergency first-aid skills and carry out emergency rescue training to improve employees' emergency rescue capabilities;
- Through collaborating with Shougang Hospital to set up the Wang Hongyu Expert Workstation, we carry out mobile health check-ups, medical lectures, and green access to healthcare services to alleviate employees' difficulties in seeking medical treatment and obtaining medicine. Additionally, Jingtang Co. provides real-time medical consultations and medication guidance, establishing fast-track channels for medical treatment, prescription purchases, and precise diagnosis services;
- Based on the existing emergency medicine supplies in "Employee Homes," we equip them with blood pressure monitors and glucose monitors, post instructions for use, and conduct operational training to achieve full coverage of health monitoring facilities.



Health Knowledge Training of Jingtang Co.



Health Clinic Activity of Jingtang Co.

### Mental Health Care

The company continuously promotes the "5+N" Psychological Care Action Plan and the Employee Psychological Care "211 Project," constantly improving the construction of the employee mental health service system. Using the Employee Mental Wellness Center as a platform, the company extensively carries out employee mental health service activities, strengthens humanistic care and psychological care services for employees, and builds an all-round and full-cycle service for employee health.

In 2025, the company upgraded the Employee Mental Wellness Center, organized high-level psychological internal trainer cultivation and professional training for Employee Mental Wellness Center lecturers, and held activities such as the "Psychological Care for Harmony" special seminar, exchange meetings, the "Happiness Grand Lecture," and practical psychological counseling. We provided one-on-one psychological consultation and published the Case Collection of the "Harmonious Team" Training System—Starting from the Heart and Walking with Love, comprehensively enhancing psychological service capabilities and ensuring that psychological services accurately reach every employee. The company carries out "Employee Happiness" assessments and mental health assessments on a normalized basis, with employees' mental health status and overall happiness index showing a steady upward trend year by year. Diversified services are customized in layers to cover different groups and key scenarios, organizing activities such as workplace psychology courses, yoga training, emotional painting, and sleep management.



High-level Psychological Internal Trainer Course Training



Psychological Sand Tray

In 2025

- Awarded the title of "Excellent Unit for Innovative Practice in 'Caring for Employee Happiness'" by the National Employee Health Promotion Project Office
- The "5+N" Psychological Care Model, Boosting High-quality Development of Enterprises was selected as a key recommended case for national enterprise mental health typical cases, and won the First Prize of Excellent Results in Promoting Enterprise Development through Mental Health
- Shougang Co.'s "Harmonious Team" Training System High-level Internal Trainer Cultivation and Jingtang Co.'s Implementing EAP to Create a Shared Happy Enterprise Ecological Scenario were honored with the 2025 Excellent Employee Psychological Service Project Support from the Beijing Municipal Federation of Trade Unions



### Colorful Cultural and Sports Activities

The company attaches importance to the employees' spiritual and cultural needs and actively organizes various activities to provide diverse, high-quality, and targeted services, enhancing employee engagement and well-being.

In 2025, centering on the theme of "Health Empowering a New Journey, Striving Together for the Future" and the 20th anniversary of the founding of Jingtang Co., a series of activities for the Employee Culture Festival were held. A total of more than 750 well-designed, diverse, and popular cultural and sports activities were organized, with over 64,000 participants, achieving the goal of "competitions every month, participation for everyone, and highlights everywhere." The company held sports activities such as basketball, football, 100-day fitness check-in, badminton, billiards, table tennis, fishing, and swimming; cultural activities such as hosting competitions, singing competitions, talent shows, reading sharing, theatrical performances, and debate competitions; and creative activities such as DIY handmade leather crafts, home appliance and food carnivals, garden parties, and cooking competitions. Additionally, multiple interest groups and training classes for table tennis, badminton, swimming, and yoga were organized to enrich employees' cultural activities.



Staff Cultural and Sports Activities

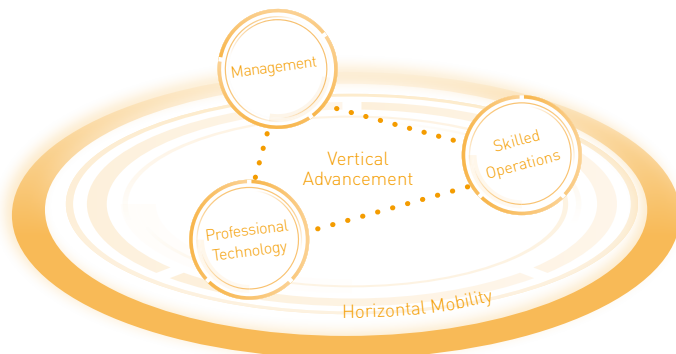
**In2025**

- Won the title of "Excellent Organizing Unit" in the National Employee Health Sports Show, and the runner-up in Tai Chi and Yoga fitness projects
- The original song *Strong Country Dream, Shougang Affection* won the Special Prize and the Best Performance Award at the Beijing Employee Culture and Art Festival, and the Second Prize in the Cultural Creativity track of the first National Employee "Cultural Creativity, Position Innovation, and Management Efficiency" Competition
- The original essay *A Long and Arduous Journey* won the Second Prize in the essay competition of the Beijing Employee Culture and Art Festival
- The original poem *We Are Coming* won the Third Prize in the National Employee Poetry Creation Competition

## Growth and Support

Shougang Co. attaches great importance to the growth and development of employees. Through a series of measures such as building systems, creating platforms, and optimizing carriers, the company helps employees grow and develop together with the enterprise, achieving the goals of cultivating, uniting, leading, and empowering talents.

The company has established a talent cultivation system that combines all-staff coverage with key empowerment and spans the entire career lifecycle. Supported by capability technology, evaluation technology, and development technology, and through the development paths of building the three-tier talent career channel system, the "Voyage" high-potential talent empowerment and development system, and the all-staff training management system for the three teams, the company has formed a development management system featuring "Three Teams, Three Series, and Three Channels" and "vertical promotion and horizontal transition." This creates an ecosystem conducive to talent growth and development, laying a solid foundation for the sustainable development of the enterprise. The *2025 Talent Work Promotion Plan* was formulated to further promote the talent team building of Shougang Co. and accelerate the construction of an agile talent supply chain management system.



## Career Development Paths

The company has established three career sequences: management, professional technology and skilled operations. Each sequence is designed to provide diverse career opportunities and clear promotion pathways, allowing employees to pursue both vertical advancement within their specialties and horizontal mobility across different functional areas. Relying on "Voyage" full-lifecycle career development management, the company continuously provides diverse and precise support for the career development of all employees. Through the "Wave Program," Individual Development Plans (IDP), talent cultivation plans, and post practice cultivation plans are systematically formulated for new employees, and a "On-the-Job Practice+Targeted Training+Three-Mentor System" mechanism has been established.

## All-staff Training

Focusing on the competency development of its three-tier talent teams, the company has established a comprehensive training management system covering business management, professional technology, and skilled operations, as well as training programs for relevant stakeholders. The training content includes qualification programs, specialized skills enhancement, and career development training. Additionally, the company establishes an Internal Trainer Club and nurtures internal trainers in various professional fields, facilitating knowledge sharing, development, and promotion. A pilot employee knowledge management platform has also been introduced to foster a culture of continuous learning and mutual empowerment. In 2025, the company pioneered the "Famous Teachers and Excellent Courses" competition brand and successfully held the first Internal Lecturer Competition. It formulated the Internal Trainer Management System, developed 415 internal courses, and evaluated and certified 254 boutique courses to be included in the knowledge base.

## Holding the "Famous Teachers and Excellent Courses" Competition

In September 2025, the company successfully held the first "Famous Teachers and Excellent Courses" Competition. With the core mission of "extracting implicit knowledge, polishing boutique courses, empowering employee growth, and promoting talent development," nearly 160 employees participated, covering six major job families. The course content was closely related to actual production and operations. Through systematic training and competition, the "Top Ten Lecturers," "Top Ten Courses," and Excellent Organizing Units were finally selected. This competition not only selected internal trainer resources and accumulated boutique courses but also built a knowledge-sharing platform. It further improved the company's talent cultivation and incentive mechanisms, strengthened the organizational learning system and talent echelon construction, and laid a solid talent foundation for continuously promoting the high-quality development of the company.



For Business Management Personnel

The training courses focus on leadership enhancement, with customized course designs incorporating business simulation exercises, case-based teaching, and interactive instruction. Training programs such as the "Cyan" Training Camp, Deep Blue Training Camp, Blue Star Youth Training Camp, and Leadership Grand Lectures are conducted to improve the professional quality and comprehensive management capabilities of leaders. In 2025, precisely aligning with the company's strategic priorities and core annual objectives, we developed a customized curriculum and launched the Leadership Grand Lecture series. This initiative effectively strengthened the strategic oversight and operational management capabilities of our senior leadership team.

For Technical Management Personnel

The goal is to develop highly skilled professionals with broad vision, exceptional capabilities, and a strong drive for innovation, as well as to cultivate technical managers who lead professional advancements and master cutting-edge industry technologies. The company has organized advanced interdisciplinary technical training programs, Technological Innovation Youth Training Camps, and professor forums. We facilitated regular benchmarking exchanges, and provided courses and discussions on steel industry frontiers and advanced technologies. Key personnel are encouraged to participate in high-end forums and specialized business exchanges, systematically enhancing their professional knowledge and technical expertise.

For Skilled Operators

Focusing on improving professional ethics and vocational skills, a tiered cultivation mechanism for reserve, on-the-job, and gold-level talents was constructed. The company continuously conducts hands-on technical training, vocational skill competitions, and organizes events such as the Craftsman Lecture Hall to strengthen employees' problem identification, analysis, resolution, and job proficiency.

For New Employees

To help new employees quickly integrate into the enterprise, solidify their post foundation, clarify career development paths, and enhance post adaptation capabilities, systematic training courses are designed and carried out around five major modules: basic training, expansion training, career planning, self-study, and training assessment. Through forms such as centralized induction lectures, mentor-mentee coaching & guidance program, post practical exercises, career planning guidance, online and offline independent learning, and assessment, the company helps new employees quickly complete the role transition from campus to workplace, solidifies their vocational skills and quality foundation, and deeply integrates them into the corporate culture and post work, injecting fresh vitality into the enterprise's talent echelon construction.



### Metrics and Targets

Shougang Co. tracks and monitors human resource-related targets and ensures the achievement of annual goals through regular evaluations, supervision, and follow-up actions.

Indicator	Unit	2025 Goals	2025 Results	
Establish a Strategic Human Resource Structure	Employee Satisfaction	/	Satisfactory-Level	Satisfactory-/Very Satisfactory-Level
Preserve and Enhance Human Capital Value	Training Plan Fulfillment Rate	%	90	94
	Training Coverage Rate of On-Duty Employees	%	100	100

In the future, Shougang Co. will comprehensively enhance the foresight, systematicness, and effectiveness of its talent work, accelerate the implementation of the "Talent-driven Enterprise" strategy, and build a strategic human resource management system. We aim at steady and continuous improvements in the total volume, quality, and efficiency of talent, as well as in talent work, creating a favorable situation for the common development of employees and the enterprise. These efforts will foster a vibrant and capable talent team to support the goal of building a world-competitive and influential listed steel company.

# Occupational Health and Safety

Shougang Co. remains committed to the principle of "People First, Life First," anchoring its goals on zero production safety accidents and zero occupational health injuries. Aiming to become a world-class demonstration enterprise for production safety, we have constructed a "Five-in-One" occupational health and safety management system. By leveraging technological empowerment, innovation, and data-driven strategies, we strive to create a safe and stable operating environment, ensuring high-quality development through high-standard safety management.

The company strictly complies with laws, regulations, and relevant requirements such as the *Production Safety Law* and the *Law on the Prevention and Control of Occupational Diseases*. We adhere to the integrated management of production safety and occupational health, fully implement the all-staff production safety responsibility system, improve systems and procedures, strengthen risk control, and strictly guard the red line of safety and health to effectively protect the life safety and physical health of employees. During the reporting period, the investment in production safety amounted to RMB 152 million. No production safety accidents of general grade or higher occurred, and a steady trend of production safety was continuously maintained.

## Governance

In accordance with the requirements of the *Production Safety Law* and other laws and regulations, Shougang Co. has established a Work Safety Committee to strictly implement national production safety laws and policies and comprehensively coordinate the company's safety management work. The specific responsibilities of the Work Safety Committee, its office, each production unit, and operation department in the field of occupational health and safety are clarified to ensure that the primary responsibility for safety is implemented level by level.

<p><b>Leadership Level</b></p>	<p>The Work Safety Committee, chaired by the General Manager, with the deputy general manager in charge of safety and the Chief Safety Officer serving as Deputy Chairs. Responsible for leading the implementation of national safety laws and policies, formulating and overseeing the company's safety management strategy, and making guiding and strategic decisions for workplace safety.</p>
<p><b>Supervisory and Management Level</b></p>	<p>The Work Safety Committee Office (located in the Safety Department) and relevant functional departments. Responsible for supervising all units at all levels in implementing the decisions of the Work Safety Committee, coordinating and guiding the safety work of relevant departments, and ensuring that various safety management measures are effectively executed.</p>
<p><b>Execution Level</b></p>	<p>Production units and operational departments. Responsible for implementing the decisions and measures of the Work Safety Committee into daily work and ensuring the safety of production and operations by strictly complying with safety operating procedures.</p>

Shougang Co. has established and improved an all-staff production safety responsibility system and formulated 56 systems, including the *Safety Risk Classification Control and Hazard Investigation and Management System*, the *Occupational Disease Hazard Monitoring and Evaluation Management System*, the *Stakeholder Safety Management System*, the *Emergency Rescue Management System for Production Safety Accidents*, the *Safety Production Reporting and Reward Management System*, the *Production Safety Accident Management System*, and the *Safety Education and Training Management System*. These cover safety education and training, hierarchical risk control, hazard troubleshooting and treatment, occupational disease prevention, and emergency rescue, applicable to employees and related parties (including suppliers and contractors). We comprehensively standardize safety operation processes in all links, strengthen source prevention, process control, and comprehensive treatment of occupational disease hazard factors, and ensure the effective implementation of occupational health and safety management. In 2025, the company revised systems such as the *Safety Management System for Operations in Limited Spaces* and *Management Measures for Production Safety Dual Prevention and Control System* to ensure the compliance and advancement of the systems.

The company has established and improved a safety standardization management system and founded the Safety Standardization Management Committee. We promote systematic safety management, standardized post operations, essential safety of equipment and facilities, and customized operation environments. 12 units, including ironmaking and steel rolling, have obtained the Level 1 Enterprise Certification for Production Safety Standardization. The company and its bases have respectively passed certifications for the Occupational Health and Safety Management System and the HSE Management System. The certificate-holding rate for special operation personnel and the safety qualification certification coverage rate for key positions have both reached 100%, maintaining the compliant and steady operation of the safety management system.



ISO 45001:2018 Occupational Health and Safety Management System Certification Certificate



HSE Management System Evaluation Certificate



Jingtang Co. Occupational Health and Safety Management System Certification Certificate

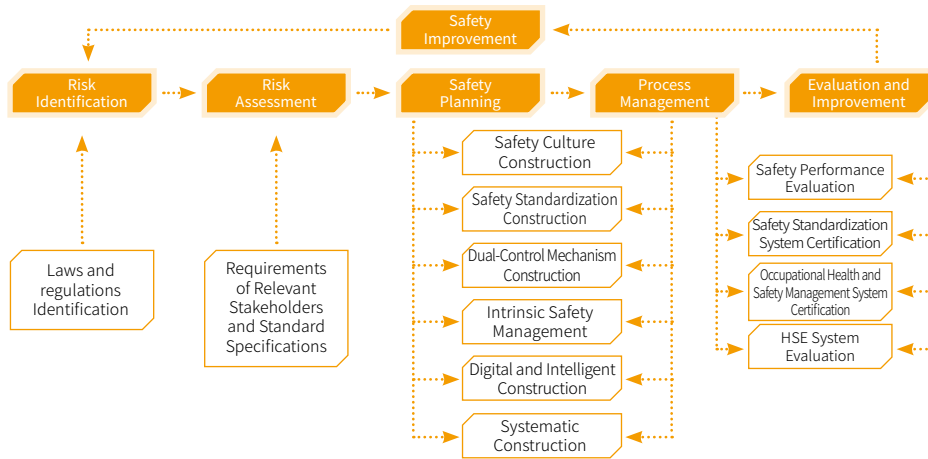
## Strategy

Shougang Co. always regards occupational health and safety as the cornerstone of enterprise development. Adhering to the policy of "Safety First, Prevention-Oriented, and Comprehensive Management," we have built a safety management approach led by safety culture, with safety standardization construction as the main line, "dual-control" mechanism construction as the core, intrinsic safety management as the focus, digital and intelligent construction as the means, and system-based construction as the support. The company comprehensively promotes the modernization of the production safety governance system and governance capability, continuously improving production safety capability and employee occupational health levels. In occupational health and safety management, the company adheres to the guidance of system thinking, data thinking, and innovative thinking to systematically identify and respond to relevant risks and opportunities. We continuously improve the occupational health and safety management system, strengthen control in key areas such as major hazard sources and occupational disease hazards, and deepen risk prevention and control capabilities relying on data integration and analysis to break information barriers and improve the level of refined management. Through the deep integration of technological and management innovation, it effectively prevents various risks and coordinates the promotion of safety development and governance efficiency, ensuring that risks are under control overall.

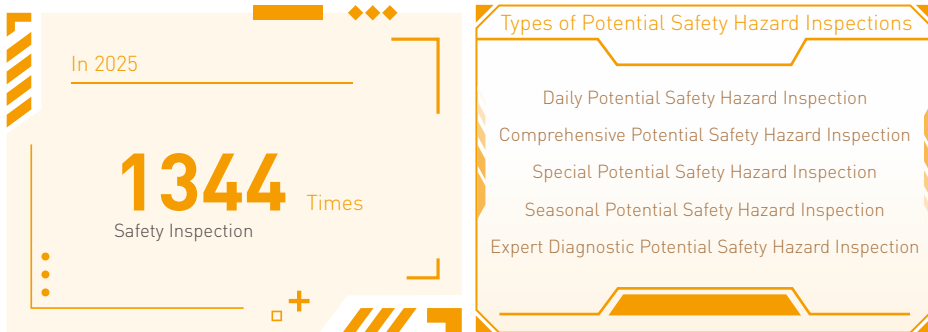
## Risks and Opportunities Management

Shougang Co. has established a full closed-loop safety risk management process covering risk identification, risk assessment, safety planning, process control, and evaluation improvement to eliminate or prevent safety risks and hazards in the production process from the source. We carry out dangerous source identification and risk evaluation throughout the process on a normalized basis to achieve effective hierarchical risk control. Relying on the hierarchical risk control list, it realizes comprehensive troubleshooting and treatment of production safety risks, promoting the dynamic clearing of hazards. Through systematic construction, intrinsic safety management, data-driven analysis, and innovation, the company continuously enhances its ability to prevent and resolve major risks.

Potential Risk / Opportunity Description	Type	Business and Financial Impact	Time Horizon	Response Measures
Production safety accidents	Risk	Causes employee casualties, triggers interruptions in key production line processes, leads to damage of core equipment and facilities, resulting in production loss, equipment maintenance costs, and work injury compensation; faces fines from regulatory authorities and potential breach of contract costs due to delayed delivery.	Short & Medium Term	Build a "Five-in-One" occupational health and safety management system; rely on digital and intelligent platforms for real-time monitoring of dangerous scenarios and automatic alerts; innovate the creation of "hazard-free units" in high-risk areas; implement an analogy-based accident reverse troubleshooting mechanism; carry out source treatment of major accident hazards; improve the emergency rescue system, increase rescue equipment, carry out collaborative and practical drills, and optimize emergency response processes; strictly execute certificate-holding for special operation personnel and safety qualification certification for key positions, and implement the all-staff production safety responsibility system; deepen safety culture construction and conduct multi-level training to strengthen safety awareness and standardized operation capabilities.
Inadequate control of occupational disease hazards	Risk	Causes health damage to employees in hazard-exposed positions, leading to decreased labor efficiency, increased occupational health medical and rehabilitation expenditures; may be ordered by regulatory authorities to rectify production lines, incurring investment in work environment renovation and protective equipment upgrades.	Medium & Long Term	100% detection of occupational disease hazard factors and 100% occupational health examination for exposed personnel; build a digital gas monitoring platform, install fixed alarms, equip portable detectors, and promote protective devices such as sealing covers to curb dust spillover; use "four-new" technologies (new technologies, new processes, new materials, and new equipment) for special research on noise reduction, dust reduction, and toxic hazard reduction, promoting automated and intelligent operations to shorten hazard exposure time; carry out occupational health protection knowledge training on a normalized basis to ensure a 100% pass rate in employee assessments, enhancing all-staff protection awareness and practical literacy.
Inadequate safety management of related party maintenance operations	Risk	Production interruptions and delays directly threaten operational continuity and business delivery, while leading to multiple financial losses such as equipment repair and capacity stagnation.	Medium & Long Term	Construct a unified stakeholder coordination management system and promote the "Four-in-One" management model; implement comprehensive hierarchical control and early intervention for related parties, carry out safety risk identification with dynamic updates, and execute a "double verification and double confirmation" mechanism for high-risk projects; incorporate key personnel of related parties into the company's internal training system; establish a safety evaluation mechanism for related parties, linking evaluation results with rewards, punishments, and business cooperation; promote "one code per person" information management and "one policy per enterprise" precise assistance, and advance the construction of a reward mechanism for hazard reporting by related parties.
Digital and intelligent safety management upgrade	Opportunity	Improves the efficiency of safety risk identification and response, which can both reduce direct losses from safety accidents and optimize manpower allocation for safety inspections, saving management costs.	Medium & Long Term	Deepen the application of the "Shougang Safety Wisdom Hub" to achieve real-time integration and intelligent analysis of full-link data; independently develop a digital and intelligent platform for Lockout-Tagout (LOTO) to achieve intelligent control of energy isolation; apply "IoT molded case circuit breakers" at key points to ensure no injury from electric shock and no fire from short circuits; expand the application scenarios of video AI identification models to cover more typical risk scenarios, achieving automatic identification of dangerous behaviors and potential hazards; promote the transformation of "mechanization replacing humans, and intelligence enabling unmanned operations."



Safety Risk Management Process



**Building a Standardized Operation System**

Following the "121<sup>5</sup>" safety production standardization management model, the company enhances the in-depth analysis and resolution of hidden hazards and establishes a regulatory compliance verification mechanism.

**Building a "Three-in-Charge, Three-in-Must" Management System**

Anchored in the responsibilities of professional departments, the company has implemented a structured responsibility list management system to clarify key safety obligations, eliminate bottlenecks in professional system compliance, and ensure a deep and practical approach to accountability, covering awareness of responsibilities, clear role definitions, duty fulfillment, diligence, accountability enforcement, and responsibility tracing.

**Building a Safety Management System for Change Projects**

Centered on changes in process technology, energy media, personnel organization, and facilities, the company has developed a comprehensive control mechanism through top-level design. This system defines hierarchical management standards, control principles, and evaluation systems, while enhancing professional collaboration.

**Building a Unified Stakeholder Coordination Management System**

With a risk management-focused approach, the company implements the "Four-in-One" management model, which includes identifying risks together, formulating measures together, training personnel together, and evaluating performance together. This system ensures early intervention in hazardous operations, tiered review of control measures, hands-on training for critical positions, and joint evaluation of safety performance.

**Building an Emergency Rescue System**

Focusing on shortcomings and weaknesses, the company continuously improves emergency response plans, deepens job coordination and joint drill mechanisms, and upgrades emergency rescue equipment. We focus on resolving critical rescue challenges and conducting practical drills in different time periods and extreme weather conditions.

Additionally, the company has built a closed-loop accident reporting, investigation, and handling mechanism covering accident occurrence, information reporting, rescue investigation, report formation, rectification and aftermath, and summary education. Through full-process control, we accurately identify the root causes of accidents, deeply learn from lessons, and promote the implementation of rectification measures to achieve continuous optimization of safety management.

<sup>5</sup> 121: 1-- Participate in a national work safety standardization review once every three years, 2-- Two internal audits every year, 1-- An external institution is engaged annually to conduct one external audit every year.

## Digital and Intelligent Safety Management

The company upholds the philosophy of "Technology for Safety, Data and Intelligence for Security", actively embracing intelligent and digital transformation. Driven by innovation and guided by technology, we continuously promote the digital and intelligent upgrade of safety management. Through information and digital means, the company promotes essential safety management by implementing initiatives such as: enhancing maintenance safety to improve efficiency and reduce risks, developing auxiliary work equipment for operations, replacing manual work with mechanization, and advancing unmanned intelligent operations. These efforts have significantly improved both safety and operational efficiency.

In 2025, the company's independently developed "Shougang Safety Wisdom Hub" integrated 4 major platforms and 16 sectors, achieving real-time integration and intelligent analysis of full-link data such as safety risks, hazard inspection, and operation control. We launched the industry's first digital and intelligent platform for LOTO and applied IoT circuit breakers at 40 points to enhance electricity safety. Five video AI identification models were specifically developed, covering typical risk scenarios such as water accumulation in molten metal impact areas and personnel falling, enabling real-time automatic identification of dangerous behaviors and potential hazards, effectively improving the intelligence level and response timeliness of safety monitoring. 586 key process parameters realized automatic warning.

### Upgrading of Production Safety Information Platform and Intelligent Control



To deepen occupational health and safety management, the company steadily promotes the upgrade of the production safety information platform. A comprehensive platform framework covering safety, occupational health, harmful gases, and smart fire protection has been initially established.

In terms of functional module construction, several core modules have been developed and put into trial operation, covering key areas such as production safety investment and occupational health management. By breaking down data silos across multiple internal systems, an intelligent safety control system with data linkage and collaborative response has been initially constructed, achieving precise inspection and intelligent analysis of dangerous operations. Centering on key scenarios such as major hazard source evaluation and safety early warning, a series of data analysis models have been developed to enhance safety management evaluation capabilities for key areas and related parties. In addition, the company actively deploys video and AI models for real-time monitoring and hazard identification in high-risk links. Some AI models have identified safety hazards hundreds of times since their launch, effectively supporting the early discovery and early warning of site safety risks.

The company's platform construction has further strengthened the risk prevention capability driven by data, laying a solid foundation for the company's safety management transformation towards digitalization and intelligence.

## Occupational Health Management

The company implements full-chain occupational health control measures, strictly complies with the *Law on the Prevention and Control of Occupational Diseases* and other regulations, and formulates the *Occupational Disease Prevention and Control Plan and Implementation Scheme*, clarifying management goals, implementation paths, and responsibility division. Through carrying out occupational disease hazard status evaluation, daily monitoring, and high-toxicity evaluation, it achieves 100% coverage of occupational disease hazard factor detection. It organizes occupational health examinations for all personnel exposed to occupational disease hazard factors, with a 100% examination rate, and takes timely intervention measures for abnormal conditions. It carries out occupational health protection knowledge training on a normalized basis, with a 100% pass rate in employee assessments, continuously improving all-staff awareness and practical literacy.

### Occupational Hazard Protection Management

The work site is equipped with fixed alarms and portable detectors for toxic and harmful gases. A digital gas monitoring platform has been built, and AI identification for helmet wearing has been independently developed to improve supervision levels. Regular supervision and inspections are carried out to ensure the integrity and effectiveness of occupational hazard protection facilities such as dust prevention, toxic prevention, and heatstroke prevention and cooling.

### Occupational Hazard Research and Treatment

For high-risk points of occupational hazards, the company combs through operation content, decomposes operation steps, and focuses on points with high personnel density and frequent/long-term exposure. By promoting mechanized, automated, and intelligent operation systems, it shortens employee exposure time and frequency. Using protective devices such as sealing covers, it effectively curbs dust spillover and continuously optimizes the operation environment. In 2025, the company carried out 32 special research and treatment projects for noise, dust, and toxic hazard reduction to reduce hazard risks from the source.

In 2025

100%

The coverage rate of occupational disease prevention knowledge training

100%

The coverage rate of occupational health examinations

100%

The detection rate of occupational disease hazard factors

## Stakeholder Safety Management

The company fully implements the requirements of the *Criteria for Identifying Major Accident Hazards in Industrial and Trading Enterprises* and other regulations for related party safety management. We elevate the unified coordination and management of related party production safety to a strategic height and are committed to building a systematic "Unified Stakeholder Coordination Management System." With risk pre-control as the core, and through in-depth on-site investigation and diagnosis, it accurately identifies common difficulties and underlying laws in related party safety management. On this basis, it has innovatively launched and implemented the "Four-in-One" management model, effectively realizing systematic integration and full-process supervision of related party safety operations. At present, the system has entered a stage of normalized and orderly operation, significantly enhancing the overall risk resistance capability of the supply chain and cooperation network, and solidifying the safety foundation for the sustainable development of the enterprise.

### Joint Risk Identification

The company classifies and manages related parties based on their business attributes and workforce size, defining management principles, inspection standards, and inspection frequency. Specialized departments, project owners, safety management personnel, and related parties jointly conduct on-site safety risk identification, ensuring comprehensive, all-encompassing risk assessments with continuous dynamic updates.

In 2025, the company optimized related party classification standards, dividing related parties into Grade A, Grade B, and Grade C entities based on operation scale, risk maintenance, and safety performance, implementing differentiated management. Meanwhile, through the pilot installation of 52 "IoT molded case circuit breakers," it achieved essential safety improvement of "leakage without electric shock."

### Joint Measure Implementation

For high-risk projects, the company organizes specialized departments, project owners, supervisors, and other relevant units to collaboratively develop targeted control measures for related parties, ensuring effective risk mitigation.

In 2025, for high-risk maintenance projects, a "double verification and double confirmation" mechanism was executed, control measures were solidified, and maintenance tooling was developed and promoted.

### Joint Personnel Training

A comprehensive, tiered training plan has been established, integrating high-risk workers, construction team leaders, and safety management personnel from related parties into the company's internal training system. Through standardized training, their safety awareness and professional skills are significantly enhanced.

In 2025, several types of physical experience training projects, such as forklift blind spots and dust/gas explosions, were added, and backbone personnel of related parties were organized for training.

### Joint Performance Evaluation

The company has formulated assessment criteria and evaluation cycles for related parties, conducting regular safety performance evaluations. Assessment results are directly linked to meetings, workload reduction, or termination of cooperation, ensuring that related parties continuously improve their safety management standards.

In 2025, the company promoted related parties to establish and improve internal safety reward and punishment mechanisms, clearly including 11 types of violations in "blacklist" management, identifying 453 safety hazards of related parties, implementing assessments, and imposing entry restrictions on violators.

In 2025, the company continued to optimize the unified stakeholder coordination management system, deepening full-process safety control effectiveness. We piloted the reward mechanism for hazard reporting, explored the application of "AI identification for hazard pictures + regulation index," and completed "one code per person" information management for related party personnel. Targeted assistance with "one policy for one enterprise" was implemented for key related parties to solve various safety management difficulties, driving an 85% decrease in the incidence of similar hazards.

## Hazardous Chemicals Management

The company strictly executes safety management norms for hazardous chemicals. Through measures such as full-process risk verification, double confirmation during loading and unloading, graded and categorized storage control, special safety measures for storage tank accessories, targeted end-use control, precise traceability of waste disposal, and strengthened management of toxic and hazardous areas, the company ensures effective control throughout the entire lifecycle of hazardous chemicals.

In 2025, the company carried out systematic work around full-lifecycle control: comprehensively inspecting 10 types of key hazardous chemicals such as hydrogen, sulfuric acid, and LNG; investigating 408 sets of main equipment; collecting and organizing 170 regulations and standards; newly identifying 18 risks; inspecting 64 storage tanks; identifying and rectifying 30 hazard issues; and verifying 44 manual operation projects, further strengthening the precision and effectiveness of hazardous chemical safety management.

## Fire Safety Management

The company attaches great importance to fire safety management and has built a comprehensive management system covering prevention, emergency, and innovation, promoting the comprehensive improvement of fire protection safety capabilities through standardization, intelligence, and innovation.



### Standardization and Smart Construction

Six core fire safety systems were revised, and two professional standards containing 815 detailed rules were innovatively compiled. Big data was used to analyze fire facilities and alarm data to optimize the functional connection of the smart fire protection platform. The digitalization path of the fire protection system was systematically planned, effectively reducing the risk of high-frequency alarms.

### Responsibility and Control System Optimization

An "order-based" performance responsibility list and inspection standards covering key areas were innovatively formulated. A full-chain management and verification mechanism for fire protection in construction projects was established. Precise training and publicity activities were carried out, and excellent management experiences were promoted with special assistance provided.

### Hazard Troubleshooting and Treatment

Fire hazard inspection and rectification are carried out on a normalized basis. Key facilities such as fire alarm controllers and fire hydrants are comprehensively inspected, and a long-term control mechanism is established. Joint fire inspections for projects under construction are strengthened, key fire renovation projects are promoted, and the creation of "no potential safety hazards units" is actively pursued.

### Enhancing Practical Firefighting Capability

The emergency plan system is improved, linkage disposal schemes are formulated, and practical drills are carried out monthly. Emergency disposal QR code cards are produced. The emergency response process for unattended points is optimized, emergency equipment is increased, and new technologies such as fiber optic temperature sensing detection are piloted. We compiled professional training materials, conducted systematic training for relevant personnel, and organized a fire protection innovation competition and promoted outstanding achievements.

### Technological Innovation Empowerment

The company independently developed and applied fire-specific equipment and tools such as the outdoor fire hydrant rapid positioning system and new-type fire hoses. Multiple management innovation achievements were formed and relevant patents obtained, effectively enhancing the comprehensive effectiveness of fire warning, firefighting rescue, and emergency evacuation.

## Emergency Safety Management

To strengthen and improve the emergency rescue system, the company has implemented a series of institutional safeguard measures to clarify the responsibilities of all levels of personnel. An emergency management organization has been established, headed by the General Manager, responsible for coordinating and overseeing all emergency rescue operations. The company has developed 2 emergency response plans, including the *Comprehensive Emergency Plan for Production Safety Accidents* and the *Comprehensive Firefighting and Emergency Evacuation Plan*, which have been reviewed and filed by the government, ensuring their legality and effectiveness. To enable quick onsite response, the company has developed emergency response cards, outlining the processes and key steps for emergency handling.

The company has innovatively implemented a collaborative emergency rescue model, organizing cross-position and cross-regional drills, establishing a collaborative network, and improving the information communication mechanisms. For areas with high emergency rescue difficulty, such as limited spaces, and heights, the company starts from equipment, skills and plans to overcome difficulties. Information technology is used to enhance the overall efficiency of emergency rescue to ensure accurate and efficient rescue operations.

In 2025, the company continued to improve the emergency management system and systematically carried out multi-level and multi-form emergency drills. 153 collaborative drills for cross-departmental process misoperation and equipment failure were organized; 18 interview-style desktop walkthroughs and "double random" practical drills were conducted; and 1,040 hierarchical emergency drill evaluations were completed. Through drill practices, 965 emergency disposal measures were accumulated and improved, 651 emergency disposal cards were revised, and 30 problems were discovered and rectified. Meanwhile, 418 difficult points for emergency rescue were systematically researched and treated, effectively enhancing the overall emergency response and disposal capability.

## Safety Culture Construction

The company has formulated the *Safety Culture Construction Implementation Plan* and established a Safety Culture Construction Management Organization led by the General Manager. The plan outlines clear objectives and implementation measures. Leveraging Safety Committee at all levels and operational department safety committees, we plan and implement safety culture initiatives. Employee representatives are invited to supervise the implementation of safety culture responsibilities, ensuring public supervision.

In 2025, the company systematically carried out multi-level and multi-form safety training. Among them, "Leaders and Professionals on the Podium + Team Junior Instructors" training was conducted 6,714 times, covering 76,334 person-times; "Experience + Perception" training was conducted 277 times, with 6,920 person-times participating; "Typical Hazard + Post Characterization" training was conducted 792 times, with 5,455 person-times participating.

- The "Production Safety Month" activities were fully carried out, focusing on 4 major categories and 31 work arrangements. Safety theme publicity and training on safety laws and regulations were conducted in various forms. Special activities such as the "Hazard Hunter" promotion competition, special training, and emergency drills were organized simultaneously.
- Taking the Leadership Grand Lectures and safety warning education as carriers, the company promoted the integration of annual key tasks and safety culture, forming a three-level safety goal system containing 1 Type I veto indicator, 20 Type II key and culture indicators, and 5 Type III innovation and efficiency indicators.
- The "Safety Home Culture" evaluation system was optimized and improved, adding innovation evaluation content such as safety improvement research and patent papers. A standardized safety home culture evaluation mechanism with 3 categories of assessment, 18 clauses, and 35 detailed rules was established.

## Building a Closed-loop Safety Training System from Awareness to Behavior



Focusing on job-related risks and actual on-site needs, the company has built a layered and categorized safety training system to enhance all-staff safety literacy and practical ability:

- Strengthening Practical Experience for High-risk Operations**  
 For high-risk positions such as gas operations, limited space, and high-altitude operations, the company built a hierarchical and classified safety training system to let employees personally experience operation risks. Over 15,000 person-times have been trained, effectively enhancing risk perception and safety operation capability.
- Solidifying Grassroots Management Capability**  
 The company organized special training for team leaders, focusing on emergency management, risk control, behavioral safety, and intrinsic safety management to promote the company's safety management requirements throughout the grassroots. In 2025, we conducted training for 1,516 person-times of team leaders.
- Promoting "Safety Talk by People Around You"**  
 Over 450 team junior instructors were cultivated, and over 3,400 "5-minute field classrooms" were conducted, covering over 38,000 person-times, pushing training close to the on-site and providing precise empowerment. Through evaluation incentives and video tours, experience sharing and effectiveness enhancement are promoted.
- Carrying out Systematic Special Training**  
 Relying on internal and external expert resources, 12 special training sessions were carried out around themes such as major hazard determination, emergency rescue, and occupational health, training over 5,600 people and continuously strengthening professional cognition and compliance capability.
- Deepening Normalized Warning Education**  
 Combining industry cases and policy requirements, the company carried out more than 720 warning education sessions through regular safety meeting learning, platform self-study, and centralized warning during maintenance, covering over 7,500 person-times, urging all staff to take cases as a mirror and learn by analogy.

## Safety Publicity and Consultation Day Activities



To deepen safety culture construction, the company organized a special Safety Publicity and Consultation Day activity during Safety Month. The activity innovatively adopted a multi-dimensional mode of "Experience + Science + Interaction," setting up more than ten theme exhibition areas such as VR safety experience, technology-assisted safety display, and prize-winning knowledge Q&A. Cutting-edge safety technology applications such as drone acoustic imaging inspection and intelligent fire identification systems were presented. Over 3,000 copies of publicity materials were distributed on-site, attracting over 1,000 person-times from grassroots units, functional departments, and related collaborative units.

This activity not only enhanced employees' safety awareness and emergency skills through immersive experience and interactive science popularization sessions, but also vividly demonstrated the strong support of technological innovation for safety management, further creating a strong atmosphere of "Everyone talks about safety, and all staff participate in governance," playing an active role in continuously consolidating the foundation of the company's safe development.



## Metrics and Targets

To strengthen the effectiveness of safety production management, the company has developed medium- and long-term safety production goals and plans tailored to its operational realities. These plans ensure that all safety production measures comply with legal and regulatory requirements and, through detailed planning, ensure that the implementation process remains legal and compliant. The company's goal is to achieve dynamic elimination of major accident hazards, strictly control the injury frequency rate per million hours worked within 0.65, decisively curb serious and major production safety accidents, and strictly prevent general production safety accidents. In 2025, the company achieved zero production safety accidents of general grade or higher, and all safety goals were successfully met.

Goals	Target Completion in 2025
0 major or severe production safety accidents (including fire accidents) occurred	Achieved
0 occupational disease-related accidents, 0 newly added occupational diseases	Achieved
Injury frequency rate per million hours worked controlled within 0.65	Achieved
100% completion rate of safety education training and emergency drill plans	Achieved
100% completion rate of annual hazard rectification within deadline	Achieved
30% reduction in the risk value of key project challenges	Achieved

In 2025, in addition to achieving various goals, the company achieved significant achievements in innovative practice and achievement transformation in the field of safety management. 3 papers related to safety management were published, 26 patents were applied for, 3 software copyrights were registered, and 1 management innovation achievement was formed. The company participated in formulating 1 industry standard and 1 group standard, and took the lead in the formulation of 2 local standards. It won 2 Third Prizes of the Metallurgical Science and Technology Award, 1 First Prize of the Beijing Enterprise Management Modernization Innovation Achievement Award, and 4 patents won Bronze Awards at the National Exhibition of Inventions. The professional and innovative level of the company's safety management has been further improved.



Patents Applied



Take the Lead in the Formulation of Local Standards



Bronze Awards at the National Exhibition of Inventions

In the future, Shougang Co. will always adhere to the safety management work approach of "casting roots and souls guided by safety culture; providing standardized guidance with safety standardization construction as the main line; taking the construction of the 'dual-control' mechanism as the core and moving the front line of prevention forward; focusing on intrinsic safety management to improve efficiency and reduce risks; taking digital and intelligent construction as the means to empower safety development; and supported by systematic construction, we consolidate the foundation and strengthen the fundamentals." Anchoring the core goal of "Zero Accidents in Production and Zero Injuries in Occupational Health," the company will deepen the "Five-in-One" occupational health and safety management system construction, expand application scenarios for AI risk identification and smart emergency response, and promote the upgrade of intrinsic safety management levels. We will continuously optimize the full-chain control of occupational health and the unified stakeholder coordination management system, deepen precise "one policy for one enterprise" assistance and joint risk prevention, and build a strong supply chain safety barrier. Meanwhile, we will enrich the carriers of safety culture construction, strengthen all-staff safety literacy cultivation, and create an industry-leading safety production demonstration benchmark with standardized, innovative, and normalized safety management practices, providing more solid safety protection for the high-quality and sustainable development of the enterprise.

# Social Contributions

Shougang Co. actively supports the development of public welfare causes, aligning with the company's mission and strategic goals. Key areas of focus on public welfare support include rural revitalization, disaster relief, volunteer services, environmental protection, educational assistance, and industry development. Each year, the company develops a public welfare support plan that defines public welfare projects and budgets, which are coordinated and promoted by the Union and the Communist Youth League Committee.

## Rural Revitalization

The company expands the achievements of poverty alleviation and implements consumption-based assistance to help comprehensively promote rural revitalization. In 2025, the company purchased agricultural products worth RMB 2.7195 million from designated assistance areas, including Xinjiang jujubes, Xinjiang grapes, Yangyuan potatoes, Fuping millet, Yanqing miscellaneous grains, and Chifeng netted melons.

## Community Engagement

The company strives to improve the quality of life and development level of local communities through charitable donations, assisting in the construction of kindergartens, conducting "Learning from Lei Feng" series activities, actively organizing employees to participate in volunteer activities, and the "Yi Gang Xing" Charity Association. For 12 consecutive years, the company has organized "Learning from Lei Feng" activities in communities, providing services such as free health consultations, haircuts, knife sharpening, and small appliance repairs to neighboring residents, contributing Shougang Co.'s strength to building a better community. We also participate in volunteer services for events such as the CIFTIS and WTT China Smash on a normalized basis. In 2025, the company organized the "Donate 1 RMB, Walk Together" step donation activity, donating public welfare funds to the "Distressed Children Care" project through the Youth Fitness Association, and organized "Showing Love" donations totaling RMB 889,200.

## "Yi Gang Xing" Charity Association

The "Yi Gang Xing" Charity Association of Jingtang Co. is a public welfare organization founded spontaneously by employees in 2022. With a core focus on public welfare education assistance, elderly care, and volunteer services, it provides long-term financial aid to underprivileged students in the Caofeidian area. It also offers donations and material support to families in need and organizes various volunteer activities. The association continues to elevate our public welfare initiatives, demonstrating the social responsibility and compassion of state-owned enterprise employees while giving back to society through practical actions and contributing to harmonious social development.



In 2025, the company's youth volunteer service team was honored as the "Capital's Best Volunteer Service Organization."



## Caring for the Elderly

In March 2025, the company organized youth volunteers to conduct a series of volunteer services for the elderly. They visited the Xinyuan Nursing Home in Qian'an City, bringing condolences and providing thoughtful services such as haircuts, environmental cleaning, and companionship. Focusing on the anti-fraud needs of the elderly, they carried out the "Not Falling Behind in the Digital Age, Protecting the Elderly Against Fraud" activity in communities. They explained fraud cases and prevention techniques and assisted over 40 elderly people in installing the National Anti-Fraud Center APP, building a solid defense line for property safety. These activities brought warmth and protection to the elderly while enabling youth volunteers to grow and demonstrating the company's social responsibility.



## "Caring for Children with Autism" Public Welfare Activity

In April 2025, Jingtang Co., in collaboration with nine partner enterprises and charitable organizations, launched the "Lighting Up the Stars: Caring for Autism" initiative. Held at the Caofeidian Wetlands, the event provided a supportive and interactive environment for over 100 autistic children and their families. Through talent showcases, interactive games, and gift exchanges, the initiative offered a platform for children with autism to express themselves and connect with society, fostering a spirit of community care and understanding.



## Conducting Volunteer Service Activities

The company carries out volunteer service activities through an "internal + external" linkage mode, demonstrating the responsibility of a state-owned enterprise and the spirit of its youth. We organized youth volunteers to go to "Free Love Porridge Houses" in the city to provide warm breakfast for sanitation workers and solitary elderly people, and regulated shared bikes and cleared litter around key business districts and residential areas in Qian'an City. Combined with the "Lei Feng Month" activities, the company organized youth employees to clean sanitary dead corners in the factory, pick up trash, and standardize vehicle parking, contributing to urban civilization construction and factory environment beautification through these volunteer services.



## Education-Oriented

The company deepens cooperation with universities such as Beijing University of Science and Technology and China University of Mining and Technology to jointly build practical education bases. This innovates new mechanisms for school-enterprise collaborative talent cultivation, working together to create a comprehensive educational platform integrating professional construction, practical education, teacher capability enhancement, talent training, educational reform, industry-university-research cooperation, scientific achievement transformation, and social services. Through resource sharing and complementary advantages, the company provides a stage for university students to practice and grow, achieving a positive cycle of educational empowerment and sustainable development.

## Environmental Responsibility

The company actively promotes green development concepts and fulfills environmental responsibilities by organizing voluntary tree planting and Environment Day theme activities. We conduct environmental volunteer services such as sanitation cleaning, tree planting, and waste sorting. In 2025, Jingtang Co. held four "Sea Blue" theme environmental public welfare activities in Caofeidian and Beijing. Through interactive and engaging activities such as environmental classrooms and games, it promoted Jingtang Co.'s green development philosophy, led participants in learning environmental knowledge, and provided an immersive environmental protection experience, which received widespread participation and high recognition from residents in both locations.

## Urban Integration

The company is committed to integrating with the city by providing heating services, advancing solid waste resource comprehensive utilization projects, and promoting harmonious progress with the community. Starting from the product manufacturing lifecycle, the company continues to promote the efficient recycling of resources, creating a new development model of internal enterprise circulation, regional industrial cooperation, and integration between the city and the enterprise. For example, the company collaborates with Jinyu Group, Beijing University of Science and Technology, and the government of Qian'an City to promote the solid waste resource utilization project, helping Qian'an and Tangshan achieve zero solid waste emissions, contributing to the creation of "waste-free cities" and "clean cities".

## Contributing to the Coordinated Growth of the Beijing-Tianjin-Hebei Region

We have actively integrated into the Beijing-Tianjin-Hebei coordinated development strategy, playing a leading and exemplary role. We have promoted synergistic industrial chains, with R&D in Beijing and manufacturing in Hebei. As the first large enterprise to settle in Caofeidian, Hebei, Jingtang Co. has driven the transfer of Beijing's productive service industry to Caofeidian, forming an industrial chain with the upstream and downstream of the steel industry, greatly promoting the construction of Caofeidian port cluster, including iron ore port, crude oil port, coal port, etc., and becoming a pioneer in the coordinated development of the Beijing-Tianjin-Hebei region. Jingtang Co. led the formation of the "Hebei High-Quality Automotive Steel Innovation Consortium" in partnership with six other organizations, including Great Wall Motors, Yanshan University, University of Science and Technology Beijing, and Lingyun Industrial Co., Ltd. The consortium promotes the sharing and optimal allocation of regional scientific and technological innovation resources, contributing Shougang's wisdom to the coordinated growth of the Beijing-Tianjin-Hebei region.

# Governance

## Solidifying the Governance Foundation, Safeguarding Sustainable Development

### Material Issues for Response

Anti-Commercial Bribery and Anti-Corruption, Fair Competition, Stakeholder Engagement, Data Security and Customer Privacy

### Key SDGs Addressed



Shougang Co. continuously deepens the guidance of Party building, promoting the organic integration of Party leadership with corporate governance. We constantly improve a modern corporate governance system featuring statutory rights and responsibilities, transparent authority, coordinated operations, and effective balances. We steadily advance the optimization of governance mechanisms, strengthening the independence and diversity of the Board of Directors to enhance scientific decision-making and transparency. We perfect the coordination mechanism for compliance management, risk prevention, and ESG, fortifying the line of defense for integrity and deepening clean co-construction within the supply chain to create a fair and honest business environment. We attach great importance to investor relations management and improve the quality of information disclosure, supporting the high-quality, sustainable development of the enterprise with standardized, robust, and efficient governance practices.



### 2025 Highlights and Achievements

- "Golden Round Table Award" for Special Contribution to Corporate Governance at the 20th Chinese Listed Company Board of Directors Awards
- Rated Grade A in the Shenzhen Stock Exchange 2024-2025 Listed Company Information Disclosure Assessment
- Graded as an EDIS-AAA-level enterprise

# Corporate Governance

Shougang Co. strictly complies with the requirements of relevant laws, regulations, and normative documents, including the *Company Law*, the *Securities Law*, the *Code of Corporate Governance for Listed Companies*, and the *Listing Rules*. The company continuously improves its governance structure, standardizes the operating mechanisms of the Shareholders' General Meeting and the Board of Directors, and constructs a modern corporate governance system characterized by statutory powers and responsibilities, transparency, coordinated operation, and effective checks and balances. Emphasis is placed on the diversity and independence of the Board of Directors, optimizing its member structure to ensure scientific and impartial decision-making.

## Governance Structure

The company has established a sound corporate governance structure where the Shareholders' General Meeting, the Board of Directors, and the management level perform their respective duties with high synergy, achieving a positive coordination of guiding the direction, decision-making, conducting supervision, and promoting implementation.



## Shareholders' General Meeting

The Shareholders' General Meeting is the company's highest authority. The company strictly acts in accordance with the *Articles of Association*, the *Rules of Procedure for the Shareholders' General Meeting*, and relevant regulations to convene and hold meetings, effectively protecting the legitimate rights and interests of the company and all shareholders. The company treats all shareholders equally to ensure they can fully exercise their rights. In 2025, the company organized 4 Shareholders' General Meetings and deliberated and approved 20 proposals.

## Board of Directors

The Board of Directors is the company's decision-making body, under which four specialized committees are established: the Strategy, Risk, ESG and Compliance Management Committee, the Audit Committee, the Remuneration and Assessment Committee, and the Nomination Committee. The company focuses on enhancing the independence of the Board's decision-making and governance. The nomination and election of independent directors comply with relevant laws, regulations, and the *Articles of Association*, and there is no relationship with the company that affects their independence. Independent directors earnestly fulfill their duties and obligations, leverage their professional advantages, strictly maintain independence, and actively participate in corporate governance and major decision-making. They express independent opinions on matters such as periodic reports, profit distribution, director replacement, and related party transactions to ensure scientific and effective decision-making. Among them, both the Audit Committee and the Remuneration and Assessment Committee are composed of independent directors.

In 2025, the company convened 12 meetings of the Board of Directors, at which 56 proposals were reviewed and approved; and 13 meetings of the specialized committees of the Board of Directors were held, including:

- 1** Meeting of the Strategy, Risk, ESG and Compliance Management Committee
- 7** Meetings of the Audit Committee
- 2** Meetings of the Remuneration and Assessment Committee
- 3** Meetings of the Nomination Committee

With an attitude of high responsibility toward shareholders, the specialized committees of the Board leverage their respective professional advantages in strategic development, major investment, financial audit, executive remuneration, and performance appraisal, providing strong support for the Board's scientific decision-making.

## Senior Management

The company's senior management consists of the General Manager, Deputy General Managers, Chief Accountant, Secretary to the Board, etc., forming the company's core management team. Members possess extensive professional technology and corporate management experience, providing solid management and professional support for the company's high-quality and sustainable development.

## Board Diversity

The company attaches great importance to the diversity and independence of the Board of Directors, and regards it as one of the key measures to enhance governance. Adhering to the concepts of openness and inclusiveness, the company actively promotes the policy of Board diversity. We comprehensively consider multiple factors, including gender, age, educational background, professional experience, professional skills, and knowledge structure, to continuously improve the Board's composition and build a diverse, independent, and efficient Board. Board members have diverse professional backgrounds, covering senior management experience in steel enterprises as well as expertise in finance, law, risk control, investment, and sustainability. This enables them to provide comprehensive professional judgment for decision-making, ensuring the Board effectively responds to the rapidly changing business environment and supports the company's long-term sustainable development. As of the end of the reporting period, the Board consisted of 9 members, including 4 female directors.

# 4

Female Directors

## Board Effectiveness

In the ESG system, the assessment of Board effectiveness is particularly critical. The Board provides effective oversight of relevant risks, ensuring compliant operations, and enhancing the transparency of ESG information disclosure to foster robust communication between the company and stakeholders.


In accordance with the *Company Law*, the *Securities Law*, and relevant provisions of the *Articles of Association*, the company formulated the *Working Regulations for Specialized Meeting of Independent Directors*. Simultaneously, it strictly standardizes the selection and appointment process of independent directors to ensure they possess sufficient professional knowledge and experience to fulfill their duties independently without influence from major shareholders, actual controllers, or other interested parties. According to the *Management Measures for Independent Directors of Listed Companies* of the CSRC and other relevant regulations, independent directors conduct annual self-inspections of their independence. The company evaluates the independence of active independent directors and issues the *Special Report on the Independence of Independent Directors*, which is submitted to the Board for deliberation and disclosed alongside the annual report. Through on-site research and other means, independent directors have provided effective suggestions on shareholder returns, market value management, and cost reduction and efficiency enhancement. As of the end of the reporting period, there were 3 independent directors on the Board.



In 2025, the company was awarded the "Golden Round Table Award" for Special Contribution to Corporate Governance at the 20th Chinese Listed Company Board of Directors Awards.


No.	Position	Name	Gender	Educational Background	Committee Position	Professional Experience Background						
						Enterprise Management	Technical Management	Finance	Law	Investment	Risk Control	Sustainable Development
1	Chairman of the Board, Legal Representative	Zhu Guosen	Male	Doctoral Degree	Chairman of the Strategy, Risk, ESG and Compliance Management Committee of the Board of Directors	✓	✓			✓	✓	✓
2	Director	Wang Lifeng	Male	Doctoral Degree	Member of the Strategy, Risk, ESG and Compliance Management Committee of the Board of Directors	✓	✓			✓	✓	✓
3	Director	Li Ming	Male	Doctoral Degree	Member of the Nomination Committee of the Board of Directors	✓	✓			✓	✓	✓
4	Employee Representative Director	Chen Xiaowei	Female	Master's Degree	Member of the Strategy, Risk, ESG and Compliance Management Committee of the Board of Directors	✓	✓		✓	✓	✓	✓
5	Independent Director	Yu Xingxi	Male	Master's Degree	Chairman of the Audit Committee of the Board of Directors, Member of the Remuneration and Assessment Committee of the Board of Directors, Member of the Nomination Committee of the Board of Directors	✓		✓			✓	✓
6	Independent Director	Peng Feng	Male	Master's Degree	Chairman of the Remuneration and Assessment Committee of the Board of Directors, Member of the Audit Committee of the Board of Directors	✓	✓			✓	✓	✓
7	Independent Director	Wang Cuimin	Female	Master's Degree	Chairman of the Nomination Committee of the Board of Directors, Member of the Audit Committee of the Board of Directors, Member of the Remuneration and Assessment Committee of the Board of Directors	✓		✓		✓	✓	✓
8	Director	Liu Jun	Female	Master's Degree	Member of the Strategy, Risk, ESG and Compliance Management Committee of the Board of Directors	✓		✓		✓	✓	✓
9	Director	Jin Xi	Female	Master's Degree	Member of the Strategy, Risk, ESG and Compliance Management Committee of the Board of Directors	✓		✓		✓	✓	✓

Factors considered in strengthening the independence of the Board of Directors




Professional Knowledge and Experience

Independent directors should have extensive professional knowledge and industry experience to provide valuable advice and insights to the company.



Independence

Independent directors should remain independent from the company's major shareholders, actual controllers, or other stakeholders, and must not have any conflict of interest with the company, ensuring objective review and decision-making.



Diversity

When selecting independent directors, the company takes multiple factors into consideration, including professional background, industry experience, gender, and age to ensure that the Board's decision-making reflects diverse interests comprehensively.

The company has formulated the *Rules of Procedure for the Board of Directors*, which clearly requires that more than half of the directors must be present for a Board meeting to be held. In 2025, the average attendance rate of the company's directors at Board meetings was 100%.

### Reform of the Supervisory Committee

In 2025, in accordance with the Company Law and other relevant regulations, and in light of the company's actual status, the company amended the *Articles of Association* to abolish the Supervisory Committee and decided not to appoint supervisors. The *Working Regulations of the Audit Committee of the Board of Directors* were revised, with the Audit Committee exercising the functions and powers of the Supervisory Committee as prescribed by the *Company Law* and regulatory rules. The reform of the Supervisory Committee/supervisors of subsidiaries was completed, and the amendment of their respective articles of association was finished simultaneously, further strengthening the control over subsidiaries.

### Institutional System

In accordance with the requirements of the *Company Law*, the *Securities Law*, the *Code of Corporate Governance for Listed Companies*, the *Listing Rules*, and the *Self-Regulatory Guidelines No. 1 for Companies Listed on Shenzhen Stock Exchange—Standard Operations of Main Board Listed Companies*, the company has established a sound internal control system, continuously deepening standardized operations and improving the level and quality of corporate governance.

The company closely monitors the standardization and legalization process of the securities market and improves its corporate governance system in a timely manner. In 2025, the company formulated the *Management System for the Resignation of Directors and Senior Management* and revised 25 systems, including the *Articles of Association*, the *Working Regulations of the Strategy, Risk, ESG and Compliance Management Committee of the Board of Directors*, and the *Detailed Working Rules for the General Manager*, continuously consolidating the institutional foundation of corporate governance.

## Information Disclosure

Shougang Co. strictly implements the relevant regulatory requirements of the China Securities Regulatory Commission and the Shenzhen Stock Exchange (SZSE). The company has established and improved a series of systems, including the *Information Disclosure Management System*, the *Insider Information Registration and Management System*, the *Subsidiary Management System*, and the *Information Classification and Management Measures*, constructing a sound internal information transmission and confidentiality management mechanism to ensure the timeliness and fairness of information disclosure, as well as the authenticity, accuracy, and completeness of the disclosed content. The company resolutely eliminates false records, misleading statements, or major omissions, continuously improves the quality of information disclosure, broadens information acquisition channels for investors, efficiently communicates business management status and development information, and protects the legitimate rights and interests of the company and all shareholders.

In 2025, in line with the requirements of the *Regulatory Guidelines No. 10 for Listed Companies—Market Value Management* of the China Securities Regulatory Commission, the company prepared the *Valuation Enhancement Plan* and the *Shareholder Return Plan for the Next Three Years (2026-2028)*. These focused on improving profitability, emphasizing on investor returns, strengthening investor communication, enhancing information disclosure quality, implementing ESG management concepts, exploring diversified incentive forms, and encouraging major shareholders to increase their holdings. The company closely tracked regulatory trends and adhered to the latest policy requirements and operational realities to disclose information to investors and the public in a comprehensive, transparent, and timely manner. A total of 30 information disclosures were completed, with 299 documents submitted to the SZSE, including 153 publicly disclosed documents and 146 filed documents. Specific measures include:

- Strictly following regulatory rules and focusing on investor hot spots, the company prepared and disclosed four periodic reports (including the English and Chinese versions of the annual report), truly and accurately reflecting the company's operational status, performance highlights, key products, and future development plans during the reporting period.
- Closely combining the company's operational reality, the company timely and accurately disclosed major matters and their progress, ensuring that investors could obtain important company information as soon as possible.
- Centering on the company's market value management work arrangements, the company proactively disclosed the bilingual version of the annual Sustainability Report, cooperation announcements with key customers, and shareholder return plans, further improving the initiative and transparency of the company's information disclosure.

Information Disclosure Accuracy Rate

# 100%

Shenzhen Stock Exchange 2024-2025 Listed Company Information Disclosure Assessment

# A

# Investor Relations Management

In 2025, the company actively and deeply promoted investor relations management in accordance with the *Investor Relations Management System*, proactively responding to investor concerns regarding corporate governance, market value management, dividend policies, and future development plans.

In terms of promoting investor exchanges, the company took multiple measures to deepen two-way communication. We organized on-site research and telephone interviews with securities firms and investment institutions, timely compiled exchange content, and released investor activity records. Through multiple channels, we released annual reports, sustainability reports, and materials such as "one picture to understand" to comprehensively display the company's business status and sustainability practices. The company also ensured smooth communication channels with small and medium investors, actively responding to investor questions on the SZSE Interactive Easy and recording investor demands through the investor consultation hotline to be reported to management for research and organized responses.

Regarding performance briefings, the company organized high-quality meetings using video live streaming and online remote interaction to introduce business conditions and answer investor questions. Activity records were released on the designated platform of the SZSE and disseminated through media channels, further enhancing the breadth, depth, and effectiveness of investor communication.

## Research and Communication by Institutional Investors

In May 2025, Shougang Co. organized 14 fund and securities firm analysts from Fullgoal Fund, ICBC Credit Suisse Asset Management, and others to conduct an on-site research at Qiangang Co. The company's senior management team engaged in detailed communication on issues of concern to investors, such as performance, core product competitiveness, future capital expenditures, and the impact of carbon emission policies.

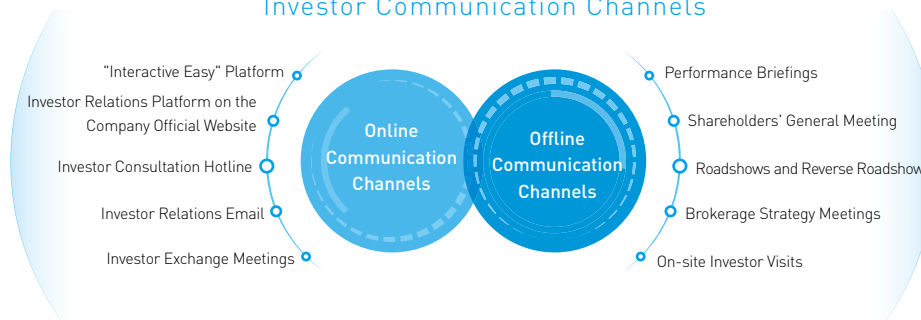
This research activity built an efficient communication bridge between the company and professional institutions in the capital market. It not only comprehensively communicated the company's business development achievements and strategic plans but also further enhanced investor recognition and confidence in the company's long-term development potential by directly addressing market concerns and accurately interpreting core values.



Organized **10** Investor Communication Sessions

Responded to **199** Investor Inquiries on the SZSE Interactive Easy

### Investor Communication Channels



## Performance Briefings

In 2025, the company continued to deepen investor relations management, centering on enhancing information transparency and strengthening value delivery. We orderly held multiple performance briefings to build a regularized and high-quality investor communication mechanism. On April 18, August 25, and October 31, respectively, the company held performance briefings for the 2024 annual and 2025 first-quarter results, 2025 semi-annual results, and 2025 third-quarter results, comprehensively covering key operational nodes.



Specifically, the 2024 annual and 2025 first-quarter performance briefing adopted the "Panorama Network Live Streaming + Remote Interaction" mode, breaking the constraints of time and space to broaden investor participation channels. The Chairman, directors, General Manager, Chief Accountant, and Secretary to the Board attended, directly addressing market concerns. They provided professional interpretations and precise responses to topics of widespread concern, such as business conditions, development strategies, financial performance, and business layout, answering 6 inquiries on-site and 23 questions online.

The company's performance briefings not only won wide recognition from investors through comprehensive and transparent information disclosure but also strengthened market perception of the company's value through efficient interaction.

## Shareholder Value Creation

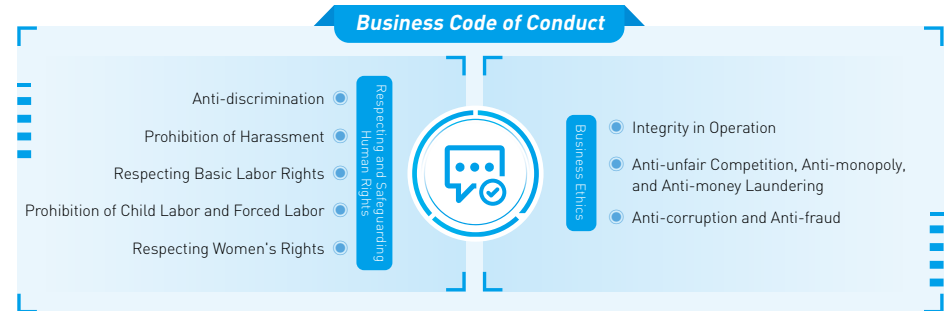
Shougang Co. has thoroughly implemented the national decision-making and arrangements on improving the quality of listed companies and strengthening market value management. We implement the *State Council's Opinions on Further Improving the Quality of Listed Companies* and respond to the relevant requirements of the *Regulatory Guidelines No. 10 for Listed Companies—Market Value Management*. The company is committed to consolidating its value foundation through substantive improvements in company quality and operational performance. We systematically promote the "Quality and Returns Enhancement" Initiative and actively practice the *Valuation Enhancement Plan*, focusing on value creation and firmly adhering to strategies for green, intelligent, high-end, and lean manufacturing. The company continues to optimize product and customer structures to promote high-quality development. Adhering to the orientation of prioritizing shareholder return, the *Articles of Association* clearly define profit distribution principles, deliberation procedures, and distribution ratios. The company carries out profit distribution in accordance with laws and regulations and formulates and executes stable and sustainable cash dividend policies to share development achievements with investors.

In 2025, the company established a continuous, stable, and scientific return plan and mechanism for investors, preparing and releasing the *Shareholder Return Plan for the Next Three Years (2026-2028)*. It clearly stipulates that, in principle, the profit distributed by the company shall not be less than 30% of the net profit attributable to shareholders of the listed company realized in that year.

In 2025, the company proposed a cash dividend of RMB 0.40 (tax-inclusive) per 10 shares to all shareholders, with a total cash dividend of RMB 310 million. As of the end of the reporting period, the aggregate amount of RMB 117 million paid for share repurchases and cash dividends reached RMB 427 million, accounting for 268.57% of the distributable profit realized by the parent company in 2025, 43.65% of the distributable profit in the consolidated financial statements, and 42.87% of the net profit attributable to the parent company in the consolidated financial statements.

## Integrity Ecology

Shougang Co. always regards compliance and integrity as its business criteria, strictly abiding by the requirements of laws, regulations, rules, and normative documents such as the *Criminal Law*, the *Anti-Unfair Competition Law*, and the *Interim Provisions on Prohibiting Commercial Bribery*. The company continuously improves its system and has formulated the *Business Code of Conduct*, the *Compliance Management Measures for Procurement Business Partners of Beijing Shougang Co., Ltd.*, the *Integrity Co-Development Notification Letter*, and the *Business Partner Code of Conduct Commitment Letter*, requiring all employees, suppliers, and contractors to adhere to the corporate business ethics policies and standards to ensure that all business activities are conducted in a standardized, honest, and orderly manner throughout the process. The company has constructed a business ethics management structure with the Board of Directors being responsible, the specialized committees of the Board supervising, and the discipline inspection, audit, risk control, and compliance departments executing specifically, achieving closed-loop management of execution, process control, and supervision. During the reporting period, no business ethics-related issues occurred in the company.



The company upholds a professional, honest, and upright attitude in business cooperation, strictly constrains business with the highest business ethics standards, and guarantees integrity in operation. We respect the principles of market competition, actively promote and maintain a fair and free market competition environment, resolutely oppose any unfair competition, monopoly, and money laundering behaviors, and carry out comprehensive management in anti-monopoly and anti-money laundering. The company attaches great importance to and continues to create a clean and upright corporate culture, maintains a zero-tolerance attitude toward non-compliant behaviors such as corruption and fraud, and promotes the integration of integrity and compliance concepts into all aspects of operation and development.

## Anti-Corruption and Anti-Bribery

The company firmly establishes the integrity concept of "combining work with cleanliness, and diligent administration with clean governance," continuously strengthens integrity construction, and builds and improves an integrity risk prevention system of "manual defense, technical defense, mechanism + culture" to fortify the line of defense for honest operation.

Based on whole-process integrity control, the company formulates and strictly implements rules and regulations for anti-corruption and advocating integrity, such as the *Regulations on Anti-Corruption and Integrity Education and Training*, the *Cross-Position Management System for Personnel with Business Disposal Authority*, the *Measures for Testing the Knowledge of Integrity Law and Regulations Before Leaders Take Office*, the *Disciplinary Accountability Management System for Party Members*, and the *Employee Misconduct Handling Regulations*. This forms a full-chain institutional guarantee system covering integrity education, position control, appointment assessment, and accountability for discipline violations, ensuring that integrity requirements run through all aspects of daily operation and management.

In 2025, the company comprehensively summarized the effectiveness of its integrated promotion of the "Three No-Corruption Principles"<sup>6</sup> work. The resulting innovation and practice report won the second prize for National Enterprise Party Building Innovation and Practice Technical Achievements in 2025 from the China Corporate Culture Institute and the first prize for papers at the 21st Annual Meeting of Discipline Inspection and Supervision for Iron and Steel Enterprises.

<sup>6</sup> Three No-Corruption Principles: No daring to be corrupt, no desire to be corrupt, incapable of corruption.

## Anti-Commercial Bribery

The company builds a supply chain integrity ecosystem characterized by institutional constraints, two-way supervision, and co-construction and sharing, promoting collaborative compliance and honest cooperation among all participants in the supply chain. The company has systematically established a full-cycle management mechanism covering supplier access, process supervision, and supplier exit, and formulated a series of systems such as the *Procurement Suppliers Management Measures* and the *Compliance Management Measures for Procurement Business Partners of Beijing Shougang Co., Ltd.* to standardize business behavior and strengthen supply chain integrity governance.



In the cooperation and access stage, the company strictly conducts due diligence and compliance screening on applicants to prevent integrity risks from the source. In the cooperation execution stage, contracts signed by the company and its subsidiaries with suppliers and contractors contain integrity clauses, clarifying compliance obligations and accountability mechanisms to create a transparent supply chain. In addition, the company formulated the *Promotion Plan for Building a Transparent Procurement and Integrity Evaluation System* to build an integrity evaluation system for transparent procurement through a three-dimensional evaluation mechanism involving suppliers, procurement personnel, and users, achieving management goals of fairness, impartiality, openness, transparency, integrity, and efficiency.

### Innovatively Building an "Online + Offline + Enterprise-Family" Integrity Co-construction System

Online	Suppliers sign the <i>Integrity Co-construction Agreement</i> .
Offline	Regularly organize internal units and stakeholders to carry out "integrity co-construction" exchange symposiums and supplier integrity business conferences to jointly study relevant laws, regulations, and policies, as well as the <i>Integrity Co-Development Notification Letter</i> , the <i>Compliance Management Measures for Procurement Business Partners of Beijing Shougang Co., Ltd.</i> , the <i>Business Partner Code of Conduct Commitment Letter</i> , and other institutional documents, and provide reporting and feedback channels.
Family-Enterprise	Hold "Family Integrity Support" symposiums in three factory locations to form good family traditions and family education.

## Carrying out Joint Supervision to Promote "Substantive Compliance" in Management

Aiming at business ethics risk points such as corruption and bribery, the company organizes whole-process "penetrating" joint supervision and inspections on the execution of workflows such as supplier access, procurement pricing, and contract signing. This breaks through information asymmetry and complex structural shielding, effectively implements compliance control requirements, and fortifies the integrity line of defense in the procurement stage.

## Integrity Risk Prevention and Control

The company continues to strengthen risk judgment, systematically promotes the construction of integrity risk prevention and control mechanisms, and improves the integrity risk prevention and control system. We promote the *Implementation Plan for Cross-Department and Cross-Position Rotation of Personnel with Business Disposal Authority* to further fortify the integrity risk prevention and control management system. In 2025, the company conducted an in-depth investigation of its business processes, identified integrity risk points, and formulated detailed prevention and control measures to ensure that integrity risks are effectively controlled. During the reporting period, the proportion of operation sites that have undergone corruption risk assessments was 100%.

The company strictly complies with laws and regulations such as the Audit Law and has formulated relevant systems such as the *Internal Audit Management System* and the *Construction Project Audit Management Measures*. Through audit, discipline inspection, and Internal Control procedures, the company identifies high-risk business activities to ensure operational compliance. Internal business ethics-related audits covering all business and operation departments are conducted, and the audit frequency is increased according to specific business needs. During the reporting period, the internal audit coverage rate was 100%. In addition, the company actively accepted third-party system audits and obtained the ISO 37301:2021 Compliance Management System Certificate and the ISO/IEC 27001:2022 Information Security Management System Certificate.

## Integrity Culture Development

The company deepens integrity culture education, builds a comprehensive and multi-level integrity education system, and creates an atmosphere of upholding integrity. In 2025, the company formulated the *2025 Anti-corruption and Integrity Education and Training Plan*, systematically planning 20 specific training sessions to achieve systematic and normalized advancement of integrity education. Through activities such as "using cases to explain discipline" warning education, "Clean Breeze" preaching, and law popularization training for personnel in key positions, the company builds an integrated integrity line of defense combining education, warning, and prevention.



Warning Education Learning



Special Warning Education Training Class

During the reporting period, centering on the theme of "Strengthening Style with Eight Rules, Moistening Original Heart with Integrity Culture," the company used the three major projects of "Theoretical Soul-casting, Brand Empowerment, and Practical Gathering" as a starting point. By combining unified activities with grassroots characteristic activities, we innovatively set up "6+N" activity carriers and held the 6th Integrity Culture Month. The activities integrated "online + offline," "theory + practice," and "education + interaction" in diverse forms, making integrity education more effective and infectious. Each unit created characteristic integrity brands based on its business characteristics, promoting integrity concepts to the heart and further fortifying the ideological defense line for employees' integrity.

## Jingtang Co. Activates Family Integrity Support Forces

Aiming at the difficulty of supervising personnel in key positions outside working hours, Jingtang Co. innovated a three-dimensional family integrity support mode of "listening, speaking, reading, and writing" to extend the integrity defense line to families.

### Learning Good Family Traditions

Launching the column "Famous Family Tradition" and distributing books such as *Clean Breeze Handed Down in the Family* to guide employees to value virtue and manage their families with integrity through self-study and reading clubs.

### Involving Family Members in Advocating Integrity

Inviting family members to record holiday integrity advocacy videos, write family integrity support essays, and create family tradition works to enhance the sense of experience in integrity culture construction and make family members advocates for integrity culture.

### Promoting Family Integrity Support

Holding family integrity support symposiums through forms such as attending warning education classes together, writing integrity support letters together, and making integrity commitments together, using "family micro-cells" to build the enterprise's "great defense line" for integrity.



## Fair Competition

Adhering to the principles of free and fair competition, the company strictly complies with relevant laws and regulations such as the *Anti-Unfair Competition Law* and the *Civil Code*. We establish and improve an honest mechanism for fair competition, resolutely oppose any form of monopoly and unfair interest extraction, and make clear statements in the *Business Code of Conduct*.

The company has formulated systems such as the *Confidentiality Management System* and the *Technology Confidentiality Management System*, clarifying commercial secret protection requirements, effectively maintaining the security of commercial secrets of the company and related parties, and preventing commercial secret infringement. We have also formulated systems such as the *External Communications Work System* and the *Portal Website Management System*. Adhering to the principle of authenticity and accuracy, the company has established a review mechanism for publicity content, strictly prohibited false publicity, and accepted public supervision to effectively maintain a fair competition market environment and the legitimate rights and interests of consumers.

The company has established an anti-unfair competition risk assessment and response mechanism covering the entire process of risk identification, assessment and judgment, hierarchical response, and supervision and optimization. We regularly review business processes and investigate risk points, embedding review nodes in key links. At the same time, regular reviews are conducted to prevent unfair competition risks. During the reporting period, the company was not involved in any litigation cases related to monopoly or unfair competition.

In 2025, the company organized training for employees and suppliers on relevant laws and regulations such as the *Criminal Law*, the *Anti-Unfair Competition Law*, and the *Anti-Money Laundering Law* to strictly prohibit behaviors such as implementing monopolies and infringing on commercial secrets, enhancing awareness of anti-unfair competition.

## Reporting Channels

The company has established and improved a reporting mechanism and continuously broadened reporting channels, implementing a "four-in-one" reporting mode of letter, visit, internet, and telephone, encouraging all stakeholders to report various business ethics violations in real-name or anonymous ways. To ensure smooth reporting channels, the effectiveness of the channels is regularly evaluated, and supervision paths are dynamically optimized. Confidentiality management for reports is strictly implemented through specialized personnel for acceptance, specialized venues for filing, and exclusive contact channels to comprehensively safeguard the information security and rights of whistleblowers. After receiving a report, the company collects and organizes relevant information and judges its authenticity immediately. Reporting matters involving professional fields are handed over to the corresponding business management departments for special investigation, verification, and feedback, ensuring that the demands of stakeholders are responded to in a timely manner. If a reporting matter is suspected of violating discipline or law, it is strictly handed over to relevant departments or institutions such as discipline inspection and supervision in accordance with regulations to ensure the compliance and seriousness of the investigation and disposal.



Reporting Hotline: 0315-7708606



Reporting E-mai: lzxx@sogg.com



# Risk Management

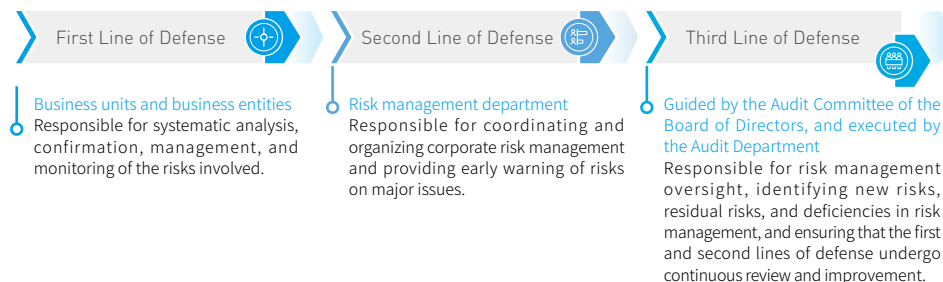
Shougang Co. has established its comprehensive risk management system based on the *Guidelines for Comprehensive Risk Management of Central Enterprises*, with reference to the ISO 31000 risk management standard. The company comprehensively sorts out business processes, accurately identifies potential risks, and effectively integrates risk assessment results into various links such as key risk control, business process evaluation, and system formulation. At the same time, the company strengthens risk monitoring and management of key control activities, continuously improving risk governance efficiency and risk mitigation capabilities.

## Risk Management Framework

The company has constructed a sound risk management framework. The Strategy, Risk, ESG and Compliance Management Committee is the company's highest management body for risk management, responsible for researching risk and compliance management systems, and implementing all-round guidance, supervision, and evaluation of compliance management work. It urges the company to establish and improve the risk and compliance management system and ensure its effective implementation, takes timely corrective measures for violations, and conducts professional assessments and reports on major risk matters deliberated by the Board. The Investment and Risk Assessment Group, a sub-committee under the Strategy, Risk, ESG and Compliance Management Committee is responsible for the construction of the company's risk management system, the control of key risks, the management of risks in professional fields, and the formulation and execution of risk management work plans.

According to the company's *Working Regulations of the Audit Committee of the Board of Directors*, the Audit Committee undertakes the responsibility of supervising and auditing risk management during the company's operation. The Board Secretary Office is responsible for coordinating the company's audit, finance, and other departments to organize the implementation of the preliminary preparation work for the Audit Committee's decisions. The Audit Department is responsible for supervising and evaluating the establishment and operation of the risk control system in various departments. In addition, the Audit Committee is composed of 3 independent directors, with the chairman served by an accounting professional to ensure the professionalism and independence of the Audit Committee.

### Three Lines of Defense for Risk Management



## Risk Management System

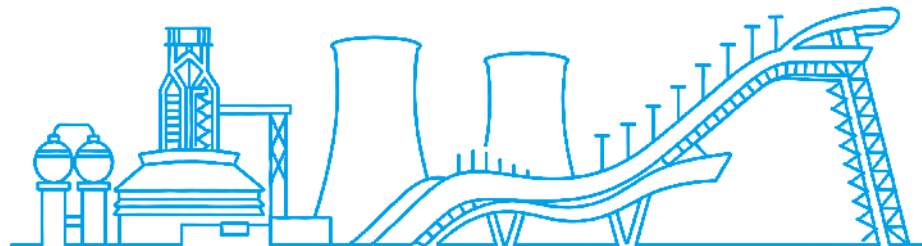
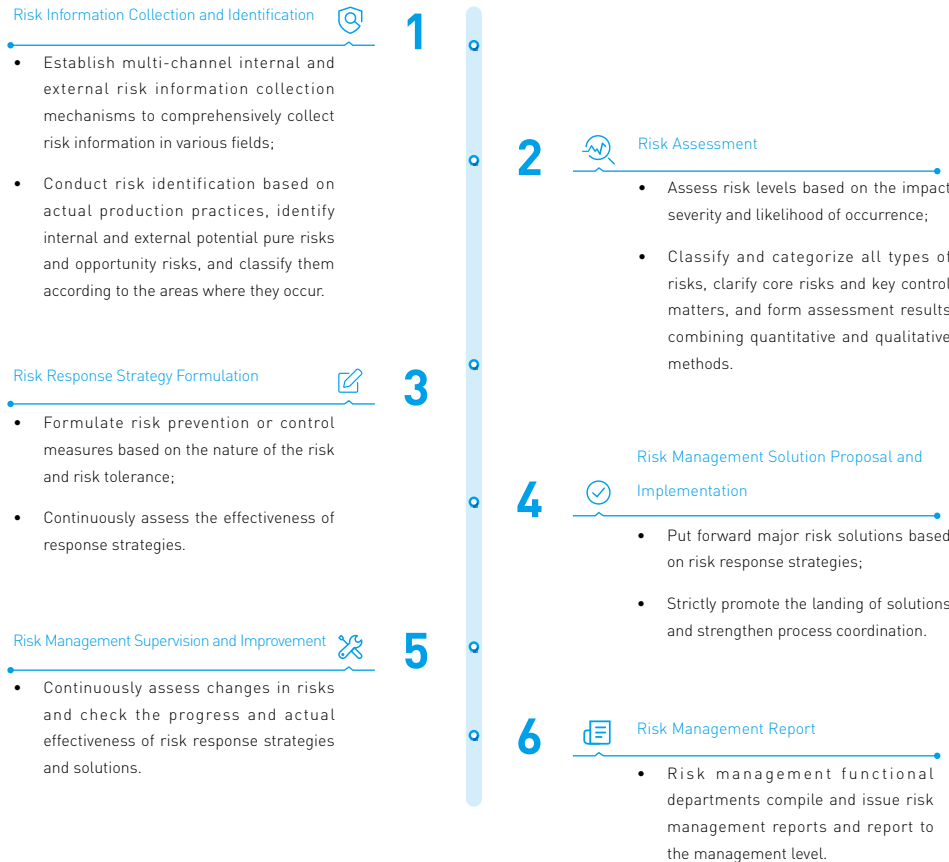
The company has formulated general and specialized risk management systems such as the Risk Management System, the Compliance Risk Identification, Assessment, and Control Measures, the Major Decision-Making Social Stability Risk Assessment Management System, the Information Risk Assessment Management System, the Information Security Risk Assessment Measures, the Safety Risk Classification Control and Hazard Investigation Management System, and the Safety Production Risk Monitoring and Early Warning System Management Measures. We have optimized and upgraded the assessment standards for compliance risks and business risks, building a standardized risk control system covering multiple dimensions. ESG-related risks are incorporated into the risk management system to ensure that while pursuing economic development, various factors of sustainable development are fully considered.

Risks are divided into five categories according to the area of occurrence: strategic risk, financial risk, market risk, operational risk, and legal risk, covering ESG-related risks. The company's *Risk Control Manual* comprises 29 primary processes such as safety management, procurement management, legal management, risk control management, environmental protection management, technical quality management, technology management, energy management, tax management, and stakeholder management, as well as 107 secondary processes, 382 tertiary processes, and 480 key control points.



In 2025, the company revised and strictly implemented the *Risk Management System* and the *Guiding Norms for the Basic Risk Management Process* to conduct risk assessment work. The company systematically and standardly promotes risk management work according to the basic process of risk information collection and identification, risk assessment, risk management strategy formulation and response, risk management supervision and improvement, and risk management reporting. Centering on business objectives, the company analyzes key elements of various links in the industry, identifies and assesses risks from the perspective of risk impact degree and occurrence possibility, and determines 10 major risk areas that significantly affect the company's operation, such as product structure adjustment, cost control, and environmental protection policy adjustment, incorporating them into special risk control management. By formulating targeted prevention and control measures and dynamically tracking and supervising them, the company strengthens the role of the second line of defense of risk management functional departments, effectively reduces risk impact, and ensures the smooth realization of business objectives.

### Risk Management Process



### Part of Risk Response Measures of Shougang Co. in 2025

Risk	Risk Analysis	Control Measures
Data Leakage Risk	In intelligent application scenarios such as residual large model training data and robot dialogue leaking internal knowledge, if data is not encrypted and protected, it may lead to the leakage of important company information and cause varying degrees of information security incidents.	<ul style="list-style-type: none"> <li>Strengthen control over leakage prevention, tampering prevention, and damage prevention of training data;</li> <li>Establish AI data security compliance baselines and complaint and reporting mechanisms;</li> <li>Improve data security management systems, supplement AI application management rules, and convert compliance requirements into technical control points.</li> </ul>
Production Safety Accident Risk	If safety systems are imperfect, responsibilities are not in place, education and training are formalized, hidden danger investigation and rectification are not timely, or emergency plans are unsound or insufficiently practiced, there are potential safety hazards for people, objects, and the environment, which may lead to production safety accidents and face negative impacts such as fines and regulatory circulars.	<ul style="list-style-type: none"> <li>Improve safety management systems based on laws and regulations to ensure basic management compliance;</li> <li>Refine the safety production responsibility list and supervise its implementation;</li> <li>Implement safety education and training to ensure a 100% plan fulfillment rate;</li> <li>Regularly carry out risk identification and hidden danger investigation to ensure a 100% rectification rate of hidden dangers within a time limit;</li> <li>Improve emergency rescue plans and conduct regular drills to ensure a 100% drill plan fulfillment rate.</li> </ul>
Raw Material Supply Risk	Shrinking market channels, insufficient supplier capacity, and blocked logistics may lead to raw material shortages or supply interruptions.	<ul style="list-style-type: none"> <li>Formulate annual/monthly procurement plans and strengthen process control; multiple departments collaborate to adjust procurement strategies, such as variety substitution, transport optimization, and new channel expansion, to ensure stable supply.</li> </ul>
Risk of Incomplete Identification of Environmental Protection and Low-carbon Laws, Regulations, and Systems	Incomplete identification of environmental protection and carbon management-related laws, regulations, and industry norms may lead to the company's environmental protection system documents not meeting regulatory requirements, resulting in compliance penalties or loss of customers.	<ul style="list-style-type: none"> <li>Obtain and update environmental protection laws, regulations and standards in accordance with the <i>Procedure for Identification, Evaluation and Control of Environmental Protection Laws, Regulations and Other Requirements</i>, and compile a list to ensure comprehensive identification;</li> <li>Track policy trends, formulate carbon management systems, and coordinate carbon asset and carbon emission trading management.</li> </ul>

## Risk Review and Supervision

The Audit Department of the company undertakes the responsibilities of risk review and supervision, responsible for comprehensively implementing the audit plan, conducting in-depth audits on economic responsibilities, engineering projects, etc., and effectively preventing and responding to various risks in enterprise operations. At the same time, the company carries out strict compliance reviews, focuses on rectification and implementation, and ensures that rectification responsibilities are in place through "rectification look-back" special inspections to improve compliance levels. We actively innovate the application of compliance management and audit results, integrate the concepts of risk audit and supervision, break through the barriers of audit result application, integrate audit thinking into information models, and advance audit results into business early warnings to promote audit management innovation. The company conducts audit case preaching in combination with audit projects to enhance the professional quality and practical ability of auditors.

In 2025, the company actively promoted audit management innovation and audit result application, and the relevant research findings were awarded "Outstanding Paper" at the 2025 Internal Audit Theory Symposium organized by the Beijing Institute of Internal Audit.

In terms of internal control evaluation, the company formulated the *Implementation Plan for Internal Control Inspection and Evaluation in 2025*. We conducted full-coverage inspections on the company and its 5 subsidiaries, namely Jingtang Co., Cold-R Co., Shougang Zhixin, Steel Trading, and Qian'an Shougang Metallurgical Technology Co., Ltd., effectively enhancing the soundness and execution of the internal control system.

Number of Organized and Implemented Audit Projects

**73** Items

Internal Audit Coverage Rate

**100%**

**3**  
Fundamental Management Systems

Compliance Management System Manual  
Compliance Management Regulations  
Compliance Management Handbook

Legal and Regulatory Identification List Database

**4**  
Specialized Compliance Systems in Key Areas

Safety Production Compliance Audit Management Measures  
Environmental Protection Compliance Management Guidelines  
Compliance Management Measures for Procurement Business Partners  
Asset Compliance Management Guidelines

Compliance Obligations List Database

**6**  
Supporting Management Systems

Compliance Objectives and Policies Management Measures  
Compliance Risk Identification, Assessment and Control Measures  
Compliance Internal Audit Management Measures  
Compliance Monitoring and Reporting Management Measures  
Compliance Management Review Measures  
Compliance Reporting and Investigation Management Measures

Compliance Risk Measures List Database

## Compliance Management

Shougang Co. regards operating in full compliance with the law as fundamental to its survival and development. The company has strengthened the top-level design of its compliance management system and established a framework centered on basic management systems, supported by specialized management measures and guidelines for key areas. It has also developed a "Legal and Regulatory Identification List Database", a "Compliance Obligations List Database", and a "Compliance Risk Measures List Database" to provide basic principles for all company units, employees, and stakeholders through a combination of positive guidance and a negative checklist. This approach drives all employees to work in a compliant, trustworthy, and disciplined manner. The company has obtained the GB/T 35770-2022/ISO 37301:2021 compliance management system certification. In 2025, Shougang Zhixin obtained the China Customs AEO Advanced Certification<sup>7</sup>.

The company deeply benchmarks against compliance management system standards and continuously improves the compliance system. We earnestly fortify the "Three Lines of Defense," consolidate the main responsibility for compliance management, and incorporate compliance management into overall work, achieving "managing business must manage compliance" to prevent compliance risks. The company improves compliance mechanisms, focuses on key fields and critical links, and decomposes and implements compliance requirements to each position to

achieve the integration of compliance management and business operation.

In 2025, the company continued to improve the compliance management system, systematically identified external laws, regulations, and compliance obligations, and formed a risk list containing 1,270 items, based on which 37 clear compliance management goals were set and achieved.

### Optimization of Contract Management

In 2025, the company systematically optimized the entire process of contract management and strictly fortified the audit and control gateway. We clarified that business departments can complete the credit review of contract counterparties before business startup to consolidate the pre-foundation of risk prevention and control; contract drafts must initiate the review process through the legal system, and can only be signed externally after joint review, management level approval, and simultaneous completion of authorization filing to ensure consistent closed-loop of powers and responsibilities. To strengthen double protection, a normalized contract random inspection mechanism was established, and special inspections and management optimization were carried out for key links such as drafting, approval, and signing to effectively improve risk control capabilities throughout the contract life cycle.

<sup>7</sup> AEO Advanced Certification (Authorized Economic Operator) is the highest level in the China Customs enterprise credit rating system.

## Risk and Compliance Culture

The company attaches great importance to the construction of a risk and compliance culture and is committed to deeply integrating risk management and compliant operation concepts into enterprise operation and employees' daily behavior. Every year, we organize directors to participate in director duty performance training, independent director special training, and follow-up education organized by regulatory authorities. The courses cover directors' legal responsibilities, internal control of listed companies, and the latest regulatory policy interpretation to continuously improve directors' risk awareness and identification ability. At the same time, risk management functional departments timely study laws and policies, and carry out risk management-related training and system interpretation for all employees to ensure business compliance and control risks within an acceptable range.

### "Civil Code Publicity Month" Activities



During the fifth "Civil Code Publicity Month" in 2025, Shougang Co. organized a series of law popularization activities centering on the theme of "Beautiful Life · Accompanied by the Civil Code." Through multiple channels such as websites, office areas, WeChat official accounts, the intranet, and WeChat groups, we posted posters, played promotional videos, and forwarded promotional content. We organized 2,578 employees to participate in the Civil Code knowledge competition on the "Shougang Friend" APP, and carried out on-site preaching and training, special training and seminars, and distributed Civil Code publicity materials. This effectively enhanced the legal awareness and legal risk prevention ability of all employees, thickened the compliance culture atmosphere, and fortified the legal line of defense for the company's compliant operation. In the future, the company will continue to deepen law publicity and education to help high-quality development.



## Tax Management

The company strictly abides by national tax laws, regulations, and relevant policy requirements, and comprehensively fulfills its tax obligations in accordance with the law. The company has established a comprehensive and sound tax management system. By strengthening internal control management and standardizing accounting processes, it ensures the authenticity and accuracy of tax data and ensures that various taxes and fees are paid in full and on time. In cross-border tax-related business, the company complies with international tax laws and regulations, following principles such as tax jurisdiction, avoidance of double taxation, exchange of tax information, international tax adjustment, anti-tax avoidance and anti-tax evasion measures, single taxation principle, benefit principle, and international tax neutrality to ensure tax compliance.

The company completes the entire process of tax filing and payment in accordance with the law, and its tax credit rating has maintained Grade A for many consecutive years.

### Our Commitment:

- Abide by the tax and relevant laws and regulations of the country/region where we operate, and only carry out transactions based on real commercial substance.
- Reject tax structures without commercial substance, actively connect with tax policy orientation, focus on business areas encouraged by the state, and enjoy tax preferential policies in compliance with regulations.
- Abide by tax law provisions, earnestly fulfill the legal obligation of tax reporting, and carry out various tasks adhering to the principle of transparent cooperation with relevant government departments.
- Transfer pricing is established based on the arm's length principle, do not use differences in tax laws, loopholes in the international tax system, or tax havens to engage in tax evasion, and eliminate the transfer of value to low-tax jurisdictions.
- Disclose tax policies based on the principle of transparency, and fully disclose information such as deferred tax assets and liabilities, applicable tax items, and tax rates in financial statements and audit reports.



## Tax Management System

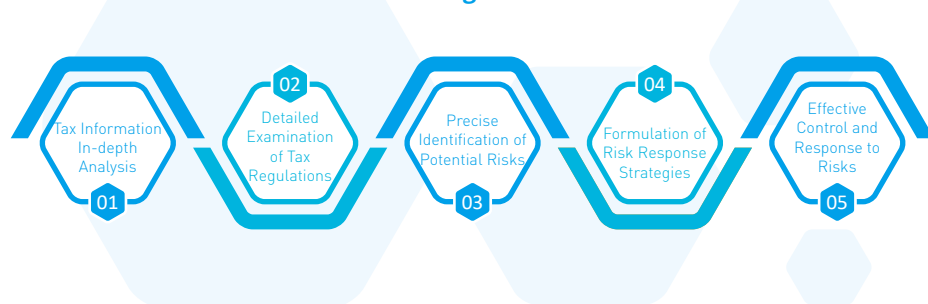
In terms of tax management organizational structure, the company has established a specialized tax management functional department, responsible for the overall tax policy and tax risk control of the company and bases. It also provides tax guidance and consultation for subsidiaries to ensure consistency and synergy of tax management.

To consolidate the foundation of tax management, the company has established tax management systems and standards classified by tax type, supplemented by sound tax process systems such as tax reporting and invoice management. These include the *Tax Management Measures*, the *Implementation Management Measures for Pre-tax Deduction of Enterprise Income Tax for Asset Losses*, the *Implementation Management Measures for Pre-tax Deduction of Research and Development Expenses*, the *Management Measures for Special Additional Deductions for Individual Income Tax*, and the *Stamp Duty Management Measures*, ensuring that the company's daily tax management work is carried out in a standardized, orderly, and efficient manner. The company continuously strengthens employee training to enhance tax awareness and professional ability. It strictly manages invoices to ensure compliant use and further reduce tax risks.

## Tax Risk Management

The company comprehensively controls tax risks through its internal tax risk management system. It has constructed a systematic tax risk assessment and appraisal mechanism, and carries out whole-chain management of tax risk preliminary warning, in-process control, and post-appraisal. The tax risk management mechanism covers various links such as accounting, reporting, monitoring, assessment, prediction, and reporting of tax-related professions. Through refined and process-based management, the standardization of tax work is ensured. When relevant laws and regulations change, the company timely monitors areas that may apply to the company and reviews potential risks in advance to ensure timely adjustment of tax policies and continuous compliance.

### Tax Risk Management Process

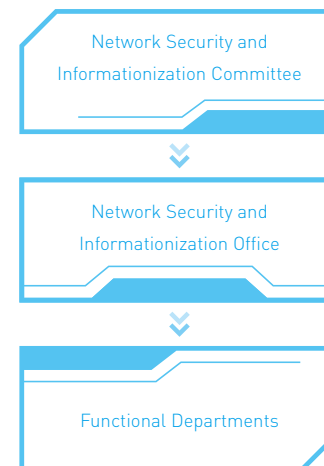


## Data Security

Shougang Co. attaches great importance to information security and data protection as well as customer privacy protection. We continuously improve our information security protection level to ensure the data security of the company and the stable operation of information systems.

### Network and Information Security Management System

In accordance with the principle of "unified planning by senior management, professional organization by information teams, and specialized responsibility by functional departments", the company has established a top-down network and information security management structure. A Network Security and Informationization Committee has been established, chaired by the General Manager and major leaders serving as members. This committee serves as the decision-making and management body for network and information security, responsible for major decisions and strategic planning. Under the committee, a Network Security and Informationization Office has been set up, led by the executive in charge of informationization, and is responsible for overseeing, coordinating, reviewing, monitoring, and addressing information security incidents. Each functional department is responsible for managing information security within its respective area, ensuring comprehensive and coordinated security practices across the organization.



The company strictly complies with laws and regulations such as the *Cybersecurity Law*, the *Personal Information Protection Law*, and the *Data Security Law*. We have formulated information security systems applicable to all employees, such as the *Information Security Policy Management System*, the *Data Management System*, and the *Zero Trust System Management System*. These systems cover organizational structure, human resources, software development, infrastructure, operation and maintenance, supplier management, security risks, and compliance, thus constructing a sound information security management system. These systems clearly stipulate the security assessment of system access for suppliers and the network security responsibilities to be fulfilled. The company continuously strengthens IT infrastructure construction and network security management to improve the quality, efficiency, and compliance level of informatization operation and maintenance. In 2025, the *Management Measures for Employee Information Security* was added, and the *Management Measures for Information Security Incidents* was revised, continuously improving the information security management system, especially for the protection of sensitive data and personal privacy data. An annual review of the information security management system is conducted to ensure the effective implementation of these systems. A company-level monthly scheduling mechanism has been established to coordinate overall network security efforts and to ensure the proper implementation of all tasks. In 2025, no data security or customer privacy leakage incidents occurred.

The company actively carries out information security certification construction to ensure the effective and stable operation of the information security system. We continuously strengthen the classified protection of cybersecurity for information systems and actively carry out level protection assessment and testing. Currently, 33 sets of information systems have successfully passed the classified protection assessment.

Jingtang Co. passed the "Trusted Information Security Assessment Exchange (TISAX)" certification.

Shougang Zhixin passed the ISO/IEC 27001 surveillance certification and the "Trusted Information Security Assessment Exchange (TISAX)" certification.



Qiangang Co. passed the ISO/IEC 27001 surveillance certification.

Cold-R Co. passed the "Trusted Information Security Assessment Exchange (TISAX)" certification.

## Network and Information Security Risk Management

Shougang Co. has established a network and information security risk management mechanism centered on prevention and continuous improvement. The company continually enhances its contingency plans and incident response mechanisms by setting up a three-tiered emergency response system that includes an IT emergency response plan, a system emergency response plan, and a business emergency response plan. Every year, an IT emergency response plan is drafted, an emergency drill plan is formulated, and drills are conducted with progressively increased testing frequency to ensure a swift response and effective handling in the event of a data security incident.

To prevent malicious programs, cyber-attacks, information sabotage, and other incidents that could compromise the confidentiality, integrity, and availability of its information assets, and to avoid major information security events, the company has implemented a series of initiatives focusing on source governance, classified management, emergency drills, vulnerability scanning, and information security awareness training.

### Source Governance

The company continues to deepen the source governance of information security, fully embedding security control requirements into the system full-lifecycle management process, and strictly implementing the requirement that system construction and security protection are planned, implemented, and put into operation simultaneously. Security considerations are prioritized during the scheme planning and design stage to comprehensively judge potential security risks and optimize system architecture design, achieving the organic unity of high reliability, high performance, and high security.

### Classified Management

The company implements a graded and classified management system for information security risk incidents. Once any suspicious situation is identified, an emergency response process is immediately activated, which includes reporting, investigation, handling, and feedback. This ensures that data security incidents are addressed promptly and effectively, safeguarding the integrity and confidentiality of company information.

### Emergency Drills

The company regularly conducts two sets of systems switching and data recovery drills and holds network security emergency drills for each system annually. By simulating real-world scenarios, these drills test the feasibility and effectiveness of the emergency response mechanism. In 2025, the company carried out a total of 33 network and information security emergency drills, fully evaluating the content, drill process, and drill effects, confirming that the emergency plan system is effective.

### Vulnerability Scanning

The company has built a regularized and automated vulnerability monitoring and collection system. By collecting network and information security vulnerability data and conducting regular vulnerability scans, potential security vulnerabilities are discovered and repaired in a timely manner to ensure the security and stability of the system. In 2025, the closed-loop rate of vulnerability disposal reached 100%, and no security incidents occurred due to the exploitation of vulnerabilities.

### Information Security Training

Regular information security training and education activities are conducted for all employees, and information security and privacy protection training is carried out for all new employees to enhance their security awareness and skill levels, creating a culture of information security and privacy protection for all staff. In 2025, a total of 28 information security training sessions were organized.



## Key Performance Indicators Form

Economic Indicator	Unit	2023	2024	2025
Operating revenue	RMB 1,000	113,761,444	108,461,993 <sup>8</sup>	102,918,418
Profit before tax	RMB 1,000	900,320	753,762 <sup>8</sup>	1,290,205
Net profit	RMB 1,000	753,805	603,478 <sup>8</sup>	1,074,862
Total tax	RMB 1,000	2,728,941	1,620,348	2,816,910

Environmental Indicator	Unit	2023	2024	2025
Environmental investment	RMB million	838	268	44
Total investment in environmental protection in the past 5 years	RMB million	4,701	4,975	3,202
Environmental pollution incidents	Item	0	0	0
Environmental fines during the reporting period	RMB 1,000	0	0	0
Environment training coverage	%	100	100	100
Environmental protection performance evaluation (The highest grade: A)	Grade	A	A	A
Proportion of operations certified by the environmental management system	%	100	100	100
Proportion of operations certified by the energy management system	%	100	100	100
Energy consumption	Tonne of standard coal	13,898,235	16,055,181	12,556,125
Total natural gas consumption	m <sup>3</sup>	242,155,100	230,108,541	249,262,939
Total steam consumption	m <sup>3</sup>	2,381,176	2,001,625	2,239,223
Total raw coal consumption	Tonne	6,704,644	6,393,322	6,328,797
Clean energy / renewable energy consumption	Tonne of standard coal	114,459	159,551	251,095
Solar energy consumption	Tonne of standard coal	114,459	159,551	251,095

<sup>8</sup> During the reporting period, Jingtang Co. acquired 100% equity interest in Hebei Shougang Jingtang Machinery Co., Ltd. through a business combination under common control. In accordance with the *Accounting Standards for Business Enterprises* and relevant regulations, the company has retrospectively adjusted the opening balances of the consolidated financial statements and the relevant data for the comparative periods.

Environmental Indicator	Unit	2023	2024	2025
Proportion of clean energy / renewable energy consumption	%	0.82	0.99	2
Volume of externally sourced scrap	1,000 tonnes	1,116	2,813	3,324
Volume of internally recovered scrap	1,000 tonnes	414	956	1,053
Electricity consumption	Million kWh	14,748	15,908	15,245
Self-generated electricity volume	Million kWh	7,645	7,611	7,980
Proportion of self-generated electricity	%	48.56	47.84	52.35
Self-provided clean energy generation capacity (photovoltaic power generation)	MW	13.70	38.90	38.90
Annual generation of self-provided clean energy (photovoltaic power generation)	MWh	15,320	18,220	44,828
Purchased green electricity	Million kWh	916	1,280	1,998
Proportion of purchased green electricity	%	6.21	8.05	12.74
Annual fresh water consumption	1,000 tonnes	68,787	64,922	57,033
Water recycled rate	%	98.73	98.79	98.80
Particulate matter (PM) emissions	Tonne	5,397.81	5,397.15	4,888.92
Sulfur dioxides (SO <sub>2</sub> ) emissions	Tonne	2,075.01	2,000.92	1,761.83
Nitrogen oxides (NO <sub>x</sub> ) emissions	Tonne	4,022.14	4,091.70	4,021.65
Business impact of water-related events	RMB 1,000	0	0	0
Total wastewater discharge	1,000 tonnes	373.74	346.60	425.19
Industrial wastewater discharge	1,000 tonnes	373.74	346.60	425.19
Domestic wastewater discharge	1,000 tonnes	0	0	0
Chemical oxygen demand (COD) in wastewater discharge	Kg	1,590.00	639.03	1,117.61
Ammonia nitrogen (NH <sub>3</sub> -N) in wastewater discharge	Kg	69.00	54.66	48.96
Waste generation	Million tonnes	13.05	13.46	13.26
General waste generation	Million tonnes	12.67	13.00	12.90
General waste recycled	Million tonnes	12.67	13.00	12.90
Hazardous waste generation	Million tonnes	0.38	0.46	0.36

Environmental Indicator	Unit	2023	2024	2025
Hazardous waste recycled	Million tonnes	0.38	0.44	0.36
Waste recycled	Million tonnes	13.05	13.44	13.26
Proportion of waste recycled	%	99.98	99.86	100
Comprehensive utilization rate of solid waste	%	100	100	100
Comprehensive utilization rate of steel slag	%	100	100	100
Comprehensive utilization rate of dust	%	100	100	100
GHG emissions (Scope 1)	tCO <sub>2</sub> e	41,192,512	41,644,387	41,831,526
GHG emissions (Scope 2)	tCO <sub>2</sub> e	2,786,781	2,580,827	2,589,122
GHG emissions (Scope 1 & 2)	tCO <sub>2</sub> e	43,979,293	44,225,214	44,420,648

Social Indicator	Unit	2023	2024	2025
Total number of employees	Person	18,226	17,762	18,293
Number of male employees	Person	16,322	15,932	16,556
Number of female employees	Person	1,904	1,830	1,737
Number of employees aged 30 or younger	Person	1,656	1,500	1,980
Number of employees aged 30-40	Person	9,244	8,161	8,651
Number of employees aged 40-50	Person	4,452	5,066	5,068
Number of employees aged 50 or older	Person	2,874	3,035	2,594
Number of employees with master degree or above	Person	1,631	1,628	1,645
Number of employees with bachelor degree	Person	7,935	7,911	8,227
Number of associate employees	Person	5,573	5,397	5,439
Number of employees at vocational schools and below	Person	3,087	2,826	2,982
Number of labor dispatched employees	Person	0	0	0
Number of part-time employees	Person	0	0	0
Proportion of ethnic minority employees	%	4.86	4.96	4.61
Proportion of employees belonging to vulnerable groups	%	11.25	12.73	10.31

Social Indicator	Unit	2023	2024	2025
Number of employees with disabilities	Person	212	170	149
Proportion of employees with disabilities	%	1.16	0.95	0.81
Employee quit rate	%	1.23	2.18	0.36
Voluntary quit rate	%	1.23	2.18	0.36
Quit rate of male employees	%	1.15	2.14	0.35
Quit rate of female employees	%	0.35	2.53	0.40
Quit rate of employees under 30 years old	%	2.58	4.18	1.31
Quit rate of employees aged 30-40	%	0.74	0.97	0.30
Quit rate of employees aged 40-50	%	0.12	0.54	0.18
Quit rate of employees 50 years old or older	%	0.35	4.92	0.15
Signing rate of labor contracts	%	100	100	100
Proportion of employees covered by collective agreements	%	100	100	100
Social insurance coverage rate	%	100	100	100
Return to work rate of female employees that took parental leave	%	91.79	100	100
Retention rates of female employees that took parental leave	%	100	100	100
Total number of new hires	Person	206	200	113
Number of male new hires	Person	176	180	96
Number of female new hires	Person	30	20	17
Number of discrimination and harassment incidents	Item	0	0	0
Training ratio of employees for anti discrimination and opposition to human rights violations	%	100	100	100
Number of incidents of child labor, forced labor, and human trafficking	Item	0	0	0
Vocational training input	RMB 1,000	21,041	16,150	19,900
Number of employee training	Time	1,223	1,517	1,603
Training coverage	%	100	100	100

Social Indicator	Unit	2023	2024	2025
Total training hours	Hour	1,867,841	1,824,085	1,884,179
Per capita training hours	Hour	104	102	103
Percentage of employees who regularly receive performance and career development examinations	%	100	100	100
Amount invested in employee work injury insurance	RMB 1,000	26,424	25,160	28,524
Employee work injury insurance coverage rate	%	100	100	100
Amount invested in employee workplace safety liability insurance	RMB 1,000	1,091	1,081	1,042
Employee workplace safety liability insurance coverage rate	%	100	100	100
Physical examination coverage	%	100	100	100
Occupational disease frequency	%	0	0	0
Number of newly added occupational diseases	Person	0	0	0
Total investment in work safety	RMB million	167	155	152
Number of work safety accidents	NOS	0	0	2
Number of work safety accidents of general grade or higher	NOS	0	0	0
Number of work-related deaths	Person	0	0	0
Work injury rate	%	0	0	0.012
Working days lost	Day	0	0	210
Lost time injury frequency rate (LTIFR)	Injury frequency rate per million hours worked	0	0	0.06
Number of safety training	Person-times	225,891	278,983	290,421
Safety training hours	Hour	928,362	1,129,329	1,169,451
Safety risk prevention training coverage	%	100	100	100
Percentage of products that need to be withdrawn and recalled for safety and health reasons	%	0	0	0

Social Indicator	Unit	2023	2024	2025
Customer satisfaction	Score	98.76	98.80	98.98
Amount of damages incurred due to major safety and quality liability incidents related to products and services	RMB million	0	0	0
Total number of suppliers	NOS	3,246	3,493	3,553
Proportion of suppliers in mainland China	%	100	100	100
Total number of procurement orders on bidding procurement platform	Item	31,638	36,788	37,081
Proportion of procurement orders on bidding procurement platform	%	100	100	100
Number of ESG training activities for suppliers	Time	439	191	242
Total ESG training hours for suppliers	Hour	487	410	474
R&D investments	RMB 1,000	5,022,122	4,892,268	4,791,579
Proportion of R&D investment to operating revenue	%	4.41	4.51 <sup>9</sup>	4.66
Number of R&D staff	Person	2,481	2,396	2,139
Proportion of R&D staff	%	13.61	13.49	11.69
Proportion of R&D personnel with a master's degree or higher	%	28.21	32.22	33.33
Number of valid patents	PCS	3,570	3,924	4,261
Number of invention patents applied to core business operations	PCS	3,570	3,924	4,261
Number of software copyrights	PCS	13	17	13
Number of patents applied	PCS	1,219	945	1,015
Number of invention patents applied	PCS	737	598	674
Number of patents granted	PCS	685	405	469
Number of innovation patents granted	PCS	229	125	206

<sup>9</sup> During the reporting period, Jingtang Co. acquired 100% equity interest in Hebei Shougang Jingtang Machinery Co., Ltd. through a business combination under common control. In accordance with the *Accounting Standards for Business Enterprises* and relevant regulations, the company has retrospectively adjusted the opening balances of the consolidated financial statements and the relevant data for the comparative periods.

Governance Indicator	Unit	2023	2024	2025
Proportion of independent directors	%	50	50	33.33
Proportion of independent directors serving on Boards of more than 3 listed companies	%	25	0	0
Proportion of independent directors serving on Boards of more than 6 listed companies	%	0	0	0
Proportion of female directors	%	0	12.5	44.44
Number of board meetings	Time	10	8	12
Attendance rate of directors	%	100	100	100
Proportion of female employees in management	%	16.98	18.64	16.95
Share-proportion of senior executives	%	0.0057	0.0029	0.000004

Governance Indicator	Unit	2023	2024	2025
Proportion of shares pledged by major shareholders (holding 5% or more) or top 10 shareholders	%	0	0	0
Number of compliance training participants	Person	12,598	13,283	14,326
Compliance training coverage	%	69	74	78
Total time of compliance training	Hour	28,954	29,357	32,357
Proportion of management personnel who have received anti-bribery and anti-corruption training	%	100	100	100
Proportion of employees who have received anti-bribery and anti-corruption training	%	100	100	100
Amount involved in litigation or significant administrative penalties due to the company's unfair competition practices	RMB 1,000	0	0	0

# Content Index

## GRI Content Index

Statement of use	Shougang Co. has reported in accordance with the GRI Standards for the period January 1st to December 31st, 2025.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	Non-use of GRI Sector standards.

	Disclosure	Location
GRI 2: General Disclosures 2021	2-1	Organizational details About Us
	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 —
	2-6	Activities, value chain and other business relationships About Us, Supply Chain Security
	2-7	Employees Employee Development
	2-8	Workers who are not employees Occupational Health and Safety, Supply Chain Security
	2-9	Governance structure and composition Corporate Governance
	2-10	Nomination and selection of the highest governance body Corporate Governance
	2-11	Chair of the highest governance body Corporate Governance
	2-12	Role of the highest governance body in overseeing the management of impacts Corporate Governance, Sustainable Development Management
	2-13	Delegation of responsibility for managing impacts Corporate Governance
	2-14	Role of the highest governance body in sustainability reporting Sustainable Development Management
	2-15	Conflicts of interest Integrity Ecology
	2-16	Communication of critical concerns Stakeholder Engagement

	Disclosure	Location
GRI 2: General Disclosures 2021	2-17	Collective knowledge of the highest governance body Sustainable Development Management
	2-18	Evaluation of the performance of the highest governance body Sustainable Development Management
	2-19	Remuneration policies Employee Development
	2-20	Process to determine remuneration Employee Development
	2-22	Statement on sustainable development strategy Chairman's Message
	2-23	Policy commitments Integrity Ecology, Employee Development
	2-24	Embedding policy commitments Integrity Ecology
	2-25	Processes to remediate negative impacts Integrity Ecology
	2-26	Mechanisms for seeking advice and raising concerns Stakeholder Engagement, Employee Development
	2-27	Compliance with laws and regulations Each chapter
GRI 3: Material Topics 2021	2-28	Membership associations Innovation
	2-29	Approach to stakeholder engagement Sustainable Development Management
	2-30	Collective bargaining agreements Employee Development
GRI 201: Economic Performance 2016	3-1	Process to determine material topics Sustainable Development Management
	3-2	List of material topics Sustainable Development Management
	3-3	Management of material topics Sustainable Development Management
GRI 203: Indirect Economic Impacts 2016	201-1	Direct economic value generated and distributed Key Performance Indicators Form, Annual Report
	201-2	Financial implications and other risks and opportunities due to climate change Climate Response
	201-3	Defined benefit plan obligations and other retirement plans Employee Development
	201-4	Financial assistance received from government Annual Report
GRI 204: Procurement Practices 2016	203-1	Infrastructure investments and services supported About Us, Social Contributions
	203-2	Significant indirect economic impacts Social Contributions
	204-1	Proportion of spending on local suppliers Key Performance Indicators Form

Disclosure		Location	
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	Integrity Ecology
	205-2	Communication and training about anti-corruption policies and procedures	Integrity Ecology
	205-3	Confirmed incidents of corruption and actions taken	Integrity Ecology
GRI 206: Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Integrity Ecology
	207-1	Approach to tax	Risk Management
GRI 207: Tax 2019	207-2	Tax governance, control, and risk management	Risk Management
	207-3	Stakeholder engagement and management of concerns related to tax	Risk Management
	207-4	Country-by-country reporting	—
GRI 301: Materials 2016	301-1	Materials used by weight or volume	Resource Utilization
	301-2	Recycled input materials used	Resource Utilization
	301-3	Reclaimed products and their packaging materials	Resource Utilization
GRI 302: Energy 2016	302-1	Energy consumption within the organization	Resource Utilization
	302-2	Energy consumption outside of the organization	Resource Utilization
	302-3	Energy intensity	Key Performance Indicators Form
	302-4	Reduction of energy consumption	Resource Utilization
	302-5	Reductions in energy requirements of products and services	Resource Utilization
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	Resource Utilization
	303-2	Management of water discharge-related impacts	Resource Utilization
	303-3	Water withdrawal	Resource Utilization
	303-4	Water discharge	Resource Utilization
	303-5	Water consumption	Resource Utilization
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	Biodiversity Protection
	304-2	Significant impacts of activities, products and services on biodiversity	Biodiversity Protection
	304-3	Habitats protected or restored	Biodiversity Protection

Disclosure		Location	
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	Climate Response
	305-2	Energy indirect (Scope 2) GHG emissions	Climate Response
	305-3	Other indirect (Scope 3) GHG emissions	—
	305-4	GHG emissions intensity	Climate Response
	305-5	Reduction of GHG emissions	Climate Response
	305-6	Emissions of ozone-depleting substances (ODS)	The company's production and operation activities do not generate ODS
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Environmental Management
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	Environmental Management
	306-2	Management of significant waste-related impacts	Environmental Management
	306-3	Waste generated	Environmental Management
	306-4	Waste diverted from disposal	Environmental Management
	306-5	Waste directed to disposal	Environmental Management
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	Supply Chain Security
	308-2	Negative environmental impacts in the supply chain and actions taken	Supply Chain Security
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Key Performance Indicators Form
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employee Development
	401-3	Parental leave	Employee Development, Key Performance Indicators Form
GRI 402: Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes	The company has no material operational changes
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	Occupational Health and Safety
	403-2	Hazard identification, risk assessment, and incident investigation	Occupational Health and Safety
	403-3	Occupational health services	Occupational Health and Safety

	Disclosure	Location
GRI 403: Occupational Health and Safety 2018	403-4 Worker participation, consultation, and communication on occupational health and safety	Occupational Health and Safety
	403-5 Worker training on occupational health and safety	Occupational Health and Safety
	403-6 Promotion of worker health	Occupational Health and Safety
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational Health and Safety
	403-8 Workers covered by an occupational health and safety management system	Occupational Health and Safety
	403-9 Work-related injuries	Key Performance Indicators Form
	403-10 Work-related ill health	Occupational Health and Safety
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Key Performance Indicators Form
	404-2 Programs for upgrading employee skills and transition assistance programs	Employee Development
	404-3 Percentage of employees receiving regular performance and career development reviews	Employee Development
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Corporate Governance, Employee Development
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Employee Development
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	Employee Development
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	Employee Development
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Employee Development

	Disclosure	Location
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	—
	413-1 Operations with local community engagement, impact assessments, and development programs	Social Contributions
GRI 413: Local Communities 2016	413-2 Operations with significant actual and potential negative impacts on local communities	The company has not identified any operations that have actual or potential significant negative impacts on the local community
	414-1 New suppliers that were screened using social criteria	Supply Chain Security
GRI 414: Supplier Social Assessment 2016	414-2 Negative social impacts in the supply chain and actions taken	Supply Chain Security
	416-1 Assessment of the health and safety impacts of product and service categories	Product Quality and Customer Service
GRI 416: Customer Health and Safety 2016	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Product Quality and Customer Service
	417-1 Requirements for product and service information and labeling	Product Quality and Customer Service
GRI 417: Marketing and Labeling 2016	417-2 Incidents of non-compliance concerning product and service information and labeling	Product Quality and Customer Service
	417-3 Incidents of non-compliance concerning marketing communications	Product Quality and Customer Service
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Product Quality and Customer Service

### Explanation of Omitted Disclosed Items for Shougang Co. is as follows:

304-4, 411-1, 415-1	The core business of the company has little relevance or importance to this index information, therefore they will not be disclosed
2-21, 202-1, 202-2, 405-2	Due to information confidentiality requirements, they will not be disclosed to the public temporarily

## SDGs Index

SDGs	Brief introduction	Location
1	No Poverty: End poverty in all its forms everywhere.	Social Contributions
3	Good Health and Well-being: Ensure healthy lives and promote well-being for all at all ages.	Employee Development
4	Quality Education: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.	Social Contributions
5	Gender Equality: Achieve gender equality and empower all women and girls.	Employee Development
6	Clean Water and Sanitation: Ensure availability and sustainable management of water and sanitation for all.	Resource Utilization
7	Affordable and Clean Energy: Ensure access to affordable, reliable, sustainable and modern energy for all.	Resource Utilization, Climate Response
8	Decent Work and Economic Growth: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.	Employee Development
9	Industry, Innovation and Infrastructure: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.	Innovation, Intelligent Manufacturing
10	Reduced Inequalities: Reduce inequality within and among countries.	Employee Development
11	Sustainable Cities and Communities: Make cities and human settlements inclusive, safe, resilient and sustainable.	Social Contributions
12	Responsible Consumption and Production: Ensure sustainable consumption and production patterns.	Circular Economy, Product Quality and Customer Service
13	Climate Action: Take urgent action to combat climate change and its impacts.	Climate Response
14	Life Below Water: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.	Biodiversity Protection
15	Life on Land: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.	Biodiversity Protection
16	Peace, Justice and Strong Institutions: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.	Integrity Ecology
17	Partnerships for the Goals: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.	Supply Chain Security

## Self-Regulatory Guidelines No. 17 for Companies Listed on Shenzhen Stock Exchange—Sustainability Report (For Trial Implementation)

### Topic Index

Dimension	No.	Topic	Clause	Location
Environment	1	Climate response	Articles 21-28	Climate Response
	2	Pollutant discharge	Article 30	Environmental Management
	3	Waste disposal	Article 31	Environmental Management
	4	Ecosystem and biodiversity protection	Article 32	Biodiversity Protection
	5	Environmental compliance management	Article 33	Environmental Management
	6	Energy utilization	Article 35	Resource Utilization
	7	Water resources utilization	Article 36	Resource Utilization
	8	Circular economy	Article 37	Circular Economy
Community	9	Rural revitalization	Article 39	Social Contributions
	10	Social contributions	Article 40	Social Contributions
	11	Innovation	Article 42	Innovation, Intelligent Manufacturing
	12	Ethics of science and technology	Article 43	Innovation
	13	Supply chain security	Article 45	Supply Chain Security
	14	Equal treatment of SMEs	Article 46	Supply Chain Security
	15	Product and service safety and quality	Article 47	Product Quality and Customer Service, Occupational Health and Safety
	16	Data security and customer privacy	Article 48	Data Security, Product Quality and Customer Service
	17	Employees	Article 50	Employee Development
Sustainability-related governance	18	Due diligence	Article 52	Supply Chain Security
	19	Stakeholder engagement	Article 53	Stakeholder Engagement
	20	Anti-commercial bribery and anti-corruption	Article 55	Integrity Ecology
	21	Fair competition	Article 56	Integrity Ecology

# Interpretation

Terms	Definition
CSRC	Refers to China Securities Regulatory Commission
SASAC	Refers to State-owned Assets Supervision and Administration Commission of the State Council
NDRC	Refers to National Development and Reform Commission of the People's Republic of China
MIIT	Refers to Ministry of Industry and Information Technology of the People's Republic of China
SZSE	Refers to Shenzhen Stock Exchange
Company Law	Refers to Company Law of the People's Republic of China
Securities Law	Refers to Securities Law of the People's Republic of China
Civil Code	Refers to Civil Code of the People's Republic of China
Criminal Law	Refers to Criminal Law of the People's Republic of China
Anti-Unfair Competition Law	Refers to Anti-Unfair Competition Law of the People's Republic of China
Anti-Money Laundering Law	Refers to Anti-Money Laundering Law of the People's Republic of China
Audit Law	Refers to Audit Law of the People's Republic of China
Production Safety Law	Refers to Production Safety Law of the People's Republic of China
Law on the Prevention and Control of Occupational Diseases	Refers to Law of the People's Republic of China on the Prevention and Control of Occupational Diseases
Product Quality Law	Refers to Product Quality Law of the People's Republic of China
Labor Law	Refers to Labor Law of the People's Republic of China
Labor Contract Law	Refers to Labor Contract Law of the People's Republic of China
Cybersecurity Law	Refers to Cybersecurity Law of the People's Republic of China
Personal Information Protection Law	Refers to Personal Information Protection Law of the People's Republic of China

Terms	Definition
Data Safety Law	Refers to Data Safety Law of the People's Republic of China
Solid Waste Pollution Environment Prevention Law	Refers to Solid Waste Pollution Environment Prevention Law of the People's Republic of China
Energy Conservation Law	Refers to Energy Conservation Law of the People's Republic of China
Water Law	Refers to Water Law of the People's Republic of China
Water Pollution Prevention and Control Law	Refers to Water Pollution Prevention and Control Law of the People's Republic of China
Patent Law	Refers to Patent Law of the People's Republic of China
Trademark Law	Refers to Trademark Law of the People's Republic of China
Copyright Law	Refers to Copyright Law of the People's Republic of China
Advertising Law	Refers to Advertising Law of the People's Republic of China
Consumer Rights Protection Law	Refers to Consumer Rights Protection Law of the People's Republic of China
Listing Rules	Refers to Listing Rules of Shenzhen Stock Exchange
Self-Regulatory Guidelines No. 1 for Companies Listed—Standard Operations of Main Board Listed Companies	Refers to Self-Regulatory Guidelines No. 1 for Companies Listed on Shenzhen Stock Exchange—Standard Operations of Main Board Listed Companies
Self-Regulatory Guidelines No. 17 for Companies Listed—Sustainability Report (For Trial Implementation)	Refers to Self-Regulatory Guidelines No. 17 for Companies Listed on Shenzhen Stock Exchange—Sustainability Report (For Trial Implementation)
Self-Regulatory Guidelines No. 3 for Companies Listed—Preparation of Sustainability Report	Refers to Self-Regulatory Guidelines No. 3 for Companies Listed on Shenzhen Stock Exchange—Preparation of Sustainability Report
The Articles of Association	Refers to The Articles of Association of Beijing Shougang Co., Ltd.
Board of Directors, the Board	Refers to The Board of Directors of Beijing Shougang Co., Ltd.
Supervisory Committee	Refers to Supervisory Committee of Beijing Shougang Co., Ltd.
Shareholders' General Meeting	Refers to The Shareholders' General Meeting of Beijing Shougang Co., Ltd.



Beijing Shougang Company Limited

## Sustainability Report 2025