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 Environmental considerations in publication of this report
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2018 中钢集团可持续发展报告
 2018 Sustainability Report



2018 中钢集团 可持续发展报告 Sustainability Report



关于本报告

ABOUT THE REPORT

可靠性保证

中国中钢集团有限公司保证 2018 年可持续发展报告信息的真实性、准确性和完善性，并努力做到兼顾内容的实质性和平衡性。我们期待通过发布可持续发展报告与利益相关方加强沟通，建立互信，共同创造可持续的未来。

报告范围

时间范围：2018 年 1 月 1 日—12 月 31 日，部分内容超出此范围。

组织范围：中国中钢集团有限公司总部、各平台公司及所属企业。为便于表述和阅读，“中国中钢集团有限公司”在本报告中也以“中钢集团”“中钢”“集团”“公司”和“我们”表示。

发布周期

此报告为中钢集团发布的第 12 份年度可持续发展报告。

报告数据说明

此报告所引用的 2018 年财务数据可能与最终数据略有差异，请以经审计的财务报告为准；其他数据来源于公司正式文件和统计报告。

报告参考标准

国务院国资委《关于中央企业履行社会责任的指导意见》《关于国有企业更好履行社会责任的指导意见》；
中国社科院经济学部企业社会责任研究中心《中国企业社会责任报告编制指南（CASS-CSR4.0）》；
全球报告倡议组织《可持续发展报告指南》（GRI 4.0）；
联合国全球契约十项原则；
国际标准化组织《ISO26000（2010）》。

报告发布语言与形式

本报告以中英文两种文字出版，以纸质版和网络版两种形式发布。

联系方式

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Reliability Assurance

Sinosteel Corporation hereby assures the authenticity, accuracy and completeness of the 2018 Sustainability Report, and strives to take into account the substantialness and balance of the content. We look forward to enhancing the communication with stakeholders, establishing the mutual trust and jointly creating a sustainable future with the stakeholders through issuing the Sustainability Report and other approaches.

Reporting Period and Scope

Reporting period: January 1, 2018 - December 31, 2018, and part of contents are beyond this range.
Reporting Scope: Sinosteel Corporation headquarters, platform companies and all its subsidiaries and branches. For the convenience of presentation and readability, "Sinosteel Corporation" is referred to as "Sinosteel Corporation", "Sinosteel", "The Company" and "We" in the Report.

Release Cycle

This report is the 12th annual Sustainability Report released by Sinosteel Corporation.

Report Data Specification

2018 financial data referred in this report may be slightly different with the final data; the audited financial report shall prevail; other data are based on the Company's official documents and statistical reports.

Report Reference Standards

Guidelines for Central Enterprises to Fulfill Social Responsibilities, Guidance for the State-owned Enterprises to Better Fulfill the Social Responsibilities issued by the SASAC of the State Council;
Preparation Guidelines for China Corporate Social Responsibility Reports by the Research Center for Corporate Social Responsibility of Chinese Academy of Social Sciences (CASS-CSR4.0);
Sustainability Reporting Guidelines by the Global Reporting Initiative (GRI 4.0);
Ten Principles of United Nations Global Compact (UNGC);
ISO 26000 (2010) by International Standard Organization.

Reporting Language and Form

The report is published in both Chinese and English, and made in paper version and online version.

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管理者致辞



徐思伟
Xu Siwei

中国中钢集团有限公司
董事长 党委书记

Chairman and Party Secretary of
Sinosteel Group Corporation Limited



2018年是深入贯彻落实党的十九大精神的开局之年，也是中钢深入推进二次创业的攻坚之年。我们以十九大精神为指引，以发展规划为引领，以高质量发展为目标，继续坚持稳中求进的工作总基调，强化风险管控，突出抓重点、补短板、强弱项，进一步调整优化业务结构和资源配置，加快优势产业培育发展；进一步深化改革创新，激发内生动力和活力；进一步加强党的建设，坚持全面从严治党，砥砺前行，开拓进取，奋力开创中钢二次创业新局面。

长久以来，中钢集团在一步一步砥砺前行的路途中，点点滴滴汇聚发展之力，以赤子之心承担社会责任。在价值产业链、绿色创新链、和谐共赢链三大责任板块持续发力，向纵深探索。我们对可持续发展的承诺已融入事业版图的方方面面，根植于员工心中，并贯穿于运营、管理和服务全流程。

我们深知，中钢集团的发展离不开所有中钢人的奋斗、自然资源的馈赠、合作伙伴的鼎力相助……这些元素都是推动中钢二次创业的动力燃料，也是我们在社会责任领域关注的重中之重。

我们坚信，企业长青的根基在于对发展质量、对责任的不懈追求，以及对自然资源、人力资源、社区等相关方的尊重与关怀。

我们希望，在经济增长、价值增长的时间发展脉络上，中钢集团能够留下深刻而向上的责任印记！



刘安栋
Liu Andong

中国中钢集团有限公司
总经理 党委副书记

President and Deputy Party
Secretary of Sinosteel Group
Corporation Limited



FROM THE MANAGEMENT

Year 2018 was the first year to implement the spirit of the the 19th National Congress of the Communist Party of China, it was also a crucial year for Sinosteel to deeply promote a new undertaking. Guided by the spirit of the 19th National Congress of the Communist Party of China, we continued to adhere to the general keynote of seeking improvement in stability, strengthened risk management and control, focused on the key points, strengthened weak links and reinforced the weakness, further adjusted and optimized the business structure and resource allocation, and accelerated the cultivation and development of competitive industries with the high-quality development as the target; further deepened reform and innovation, and stimulated endogenous driving forces and vitality; further strengthened the party building, insisted on strengthening the party self-discipline comprehensively, forged ahead and strove to create a new pattern for starting a new undertaking of Sinosteel.

For a long time, Sinosteel has been gathering force gradually and shouldering social responsibilities during the course of forging ahead. We continued to make efforts in three major sectors of value industry chain, green innovation chain, harmony and win-win chain, so as to explore profoundly and deeply. Our commitment to sustainability has been incorporated into every aspect of our business, deeply rooted in our employees, and run throughout the entire process of our operations, management and service processes.

We are fully aware that, Sinosteel's development is inseparable from the efforts of all Sinosteel personnel, gifts of natural resources, and the strong support of partners, all of which are the driving fuel for the second undertaking of Sinosteel, and are also the priority of our attention in social responsibilities.

We firmly believe that, corporate sustainability lies in the unremitting pursuit of development quality and responsibilities as well as respect and care for natural resources, human resources, communities and other relevant stakeholders.

We hope that, Sinosteel could leave profound and upward mark of responsibilities during economic growth and value growth!

走进中钢集团

ABOUT SINOSTEEL

公司简介

Company Profile

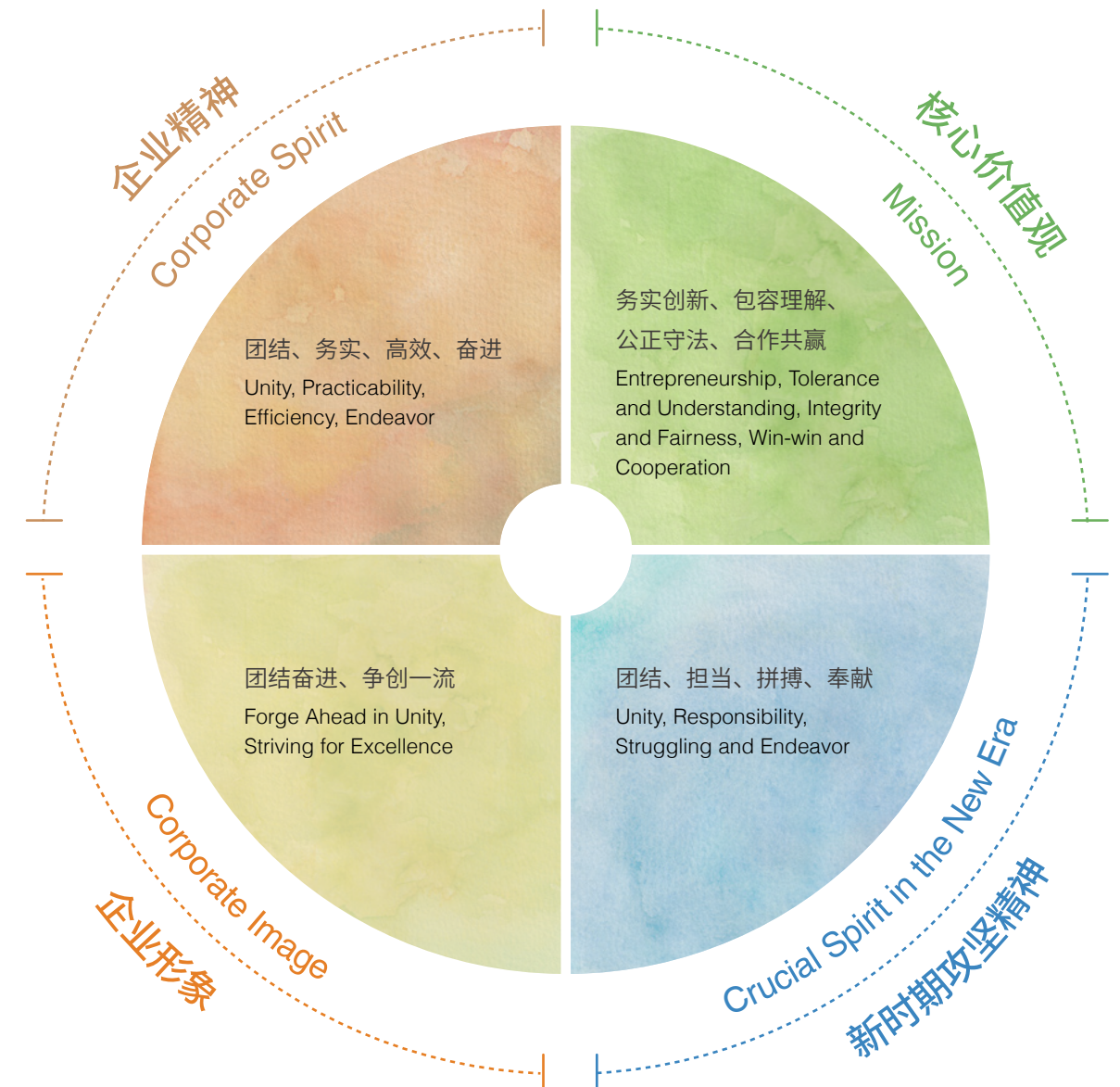
中国中钢集团有限公司（简称中钢集团，英文简称 Sinosteel）是由国务院国有资产监督管理委员会履行出资人职责的中央企业。中钢集团主要从事冶金矿产资源开发与加工，冶金原料、产品贸易与物流，相关工程技术服务与设备制造，是一家为冶金工业提供资源、科技、装备集成服务，集矿产资源、工程装备、科技新材、贸易物流、投资服务为一体的大型跨国企业集团。目前，中钢集团所属企业 65 家，其中境内 49 家，境外 16 家。

Sinosteel Group Corporation Limited (abbreviated as "Sinosteel") is a central enterprise under the administration of the State-Owned Assets Supervision and Administration Commission. It mainly engages in the developing and processing of metallurgical mineral resources, trading and logistics of metallurgical raw materials and products, and related engineering technical services and equipment manufacture. It is a large-scale multinational enterprise provides resources, technology and equipment integration services for the metallurgical industry, integrating mineral resources, engineering equipment, new technology materials, trade & logistics, and investment services. At present, Sinosteel has 65 subsidiaries, including 49 at home and 16 in overseas regions.

板块 Section	定位 Positioning	公司名称 Company Name	简称 Abbreviated as
矿业资源 Mineral Resources	国内矿产资源平台 Domestic mineral resources platform	中钢矿业开发有限公司 Sinosteel Mining Co., Ltd	中钢矿业 Sinosteel Mining
	海外矿产资源平台 Overseas mineral resources platform	东悦投资有限公司 Orient Joyce Investment Co., Ltd	东悦投资 Orient Joyce
工程装备 Engineering Equipment Section	工程技术平台 Engineering technology platform	中钢国际工程技术股份有限公司 Sinosteel Engineering and Technology Co., Ltd	中钢国际 Sinosteel MECC
	装备制造平台 Equipment manufacturing platform	中钢装备技术有限公司 Sinosteel Equipment Technology Co., Ltd	中钢装备 Sinosteel Equipment
科技新材 New Material Technology Section	科技新材平台 New material technology platform	中钢科技发展有限公司 Sinosteel Scie-Tech Development Co., Ltd	中钢科技 Sinosteel Scie-Tech
贸易与服务 Trade and Service Section	国内贸易与服务平台 Domestic trade and service platform	中钢国贸控股有限公司 Sinosteel Trade Holding Co., Ltd	中钢国贸 Sinosteel Trade
	海外贸易平台 Overseas Trade platform	中钢国际控股有限公司 Sinosteel International Holding Company Limited	中钢香港 Sinosteel Hong Kong
资产管理 Asset Management Section	资产管理平台 Asset management platform	中钢资产管理有限责任公司 Sinosteel Asset Management Co., Ltd	中钢资产 Sinosteel Asset

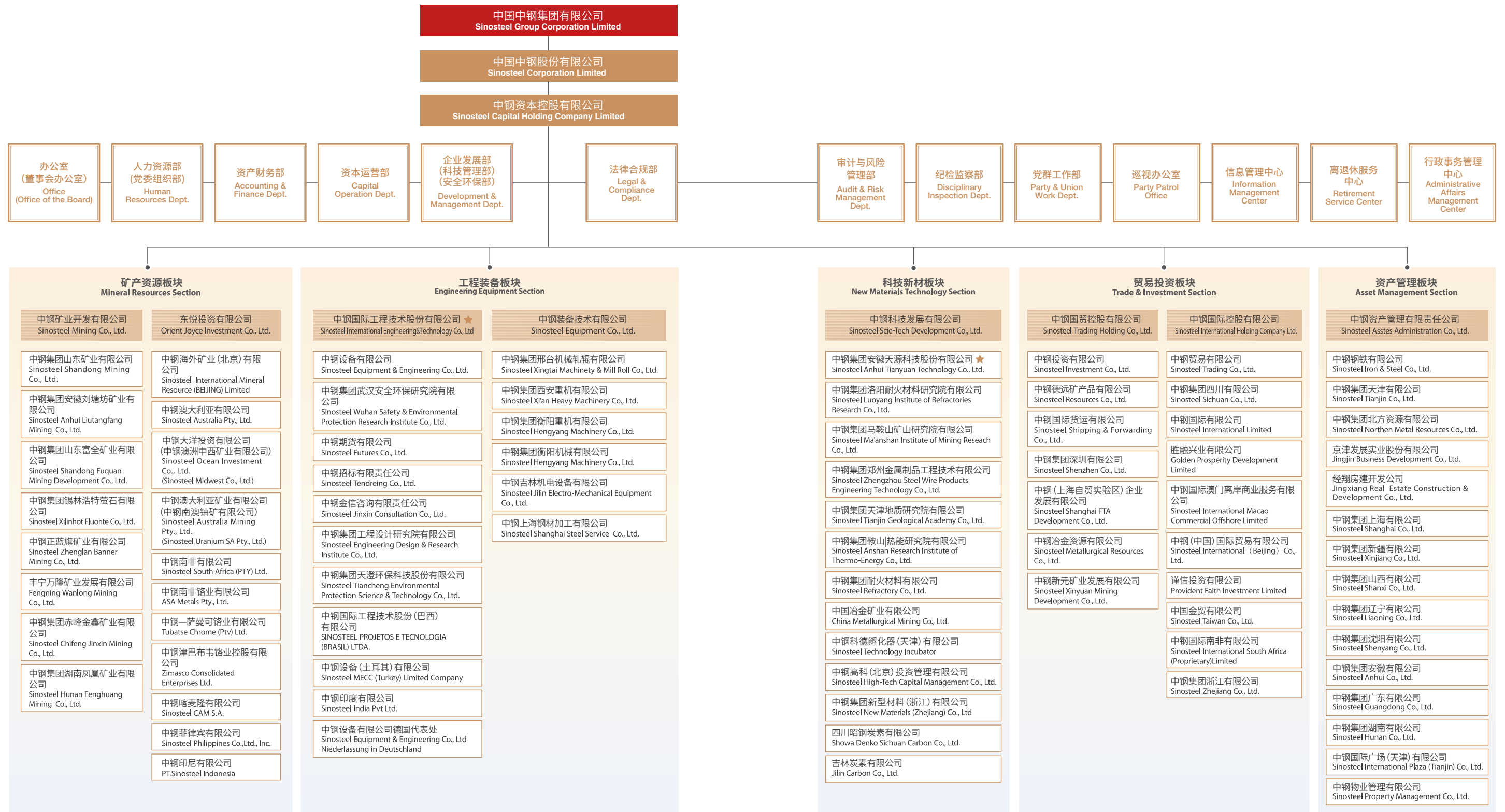
企业文化

Enterprise Culture



中国中钢集团有限公司组织架构图

Organization Chart of Sinosteel



上市公司 ★ Listed companies

发展战略 Development Strategy

充分利用两种资源、两个市场，聚焦发展矿产资源、工程技术、高端装备、科技新材优势产业，优化提升贸易与服务增值能力，力争成为冶金工业及相关产业国际知名服务商。

Sinosteel strives to be a well-known international service provider in metallurgical industry and related industries by coordinating resources and markets at home and abroad, focusing on mineral resources, engineering equipment, high-end equipment, new hightech materials and other advantageous industries, and optimizing trade& logistics and investment services.

发展理念

积极践行创新、协调、绿色、开放、共享的发展理念，坚持质量第一、效益优先，实现由要素拉动向创新驱动转变，从本质上促进企业可持续发展。

Development Philosophy

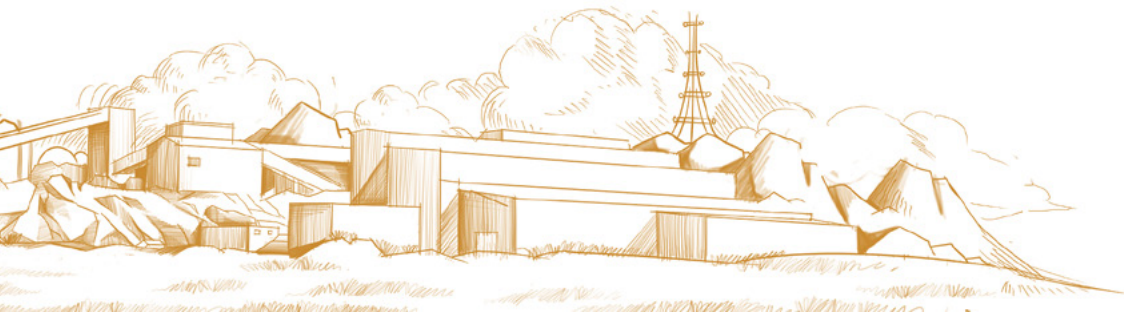
Actively implement the development concepts of innovation, coordination, green, openness and sharing, adhere to the principle of quality first and efficiency first, realize the transformation from element-driven to innovation-driven, and promote sustainable development of enterprise essentially.

业务定位

做优做强资源、工程、装备、科技四大核心业务，提升优化金融投资、贸易物流增值服务能力，持续关注产业延伸拓展，不断寻找新的利润增长点。

Business Positioning

Make the four core businesses of mineral resources, engineering technology, high-end equipment and new material technology better and stronger, improve and optimize the value-added service capacity in financial investment and trade logistics, focus on the expansion and extension of industry continuously and strive to seek new profit growth points constantly.



四大优势产业 Four Major Competitive Industries



矿产资源板块
Mineral Resources Section

作为中钢的战略关键性业务，借力国家政策、资本市场和客户支持，整合铁矿、铬矿以及萤石资源，努力打造形成具有核心竞争力和重要影响力的拳头产品。

It is a strategically vital business section of Sinosteel, which leverages national policies, capital markets, and customer support to integrate iron ore, chrome ore and fluorite resources, and strives to create key product with core competitiveness and significant influence.



工程装备板块
Engineering Equipment Section

作为中钢的战略拓展性业务，不断强化工程总承包能力，抓住国家“一带一路”和国际产能合作等契机，加快“走出去”步伐，培育新的增长点。

As a strategic expansion business sector of Sinosteel, it continuously strengthens the general contracting capacity of the project, seizes the opportunity of the “Belt & Road Initiative” and international capacity cooperation and accelerates the pace of “going out” and with new growth points.



科技新材板块
New Material Technology Section

作为中钢的创新性业务，构建科技创新资源平台，着力培养一批高端科研人才，推出一批重大科研成果，培育一批优势产业项目，为打造核心能力、培育比较优势和探索战略转型提供有力支持。

As an innovative business sector of Sinosteel, it builds a platform for scientific and technological innovation resources and develops a group of high-end talents, research results and advanced projects to strongly support the core capacity, compared advantages and the exploration of strategic transformation.



贸易与服务板块
Trade and Service Section

紧紧围绕服务实体经济这一目标，为实体企业提供有竞争力的供销解决方案，着力推进营销渠道建设，逐步打造以专业化协同为支撑的供应链体系。

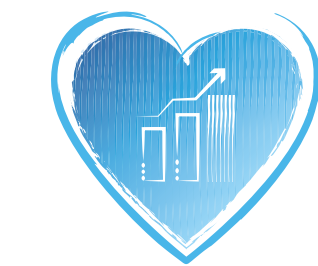
Closely revolving around the fundamental goal of serving the real economy, Trade & Service Section provides competitive supply and marketing solutions for business entities, and promotes the construction of marketing channels, gradually building a supply chain system supported by professional synergy.

可持续发展理念 Sustainable Development Philosophy

中钢集团切实履行经济、环境和社会三重底线责任，结合行业特征和企业特点，始终兼顾各利益相关方的利益，提出了由“价值产业链、绿色创新链、和谐共赢链”构成的可持续发展理念，坚持提升价值创造，坚信绿色发展引领未来，坚定贡献社会和谐发展。

Sinosteel earnestly fulfills economy, environment and society triple bottom-line responsibility. According to industry and enterprise characteristics, Sinosteel gives consideration to the interests of every stakeholder all the time in the process of serving iron & steel industry and steel production enterprises, adheres to promoting value creation, strongly believes green development leading the future, and firmly contributes to the harmonious development of our society.

中钢集团可持续发展责任模型 Sinosteel Sustainable Development Responsibility Model



价值产业链
坚持创造价值
Value Industry Chain, Insist on Creating Value

这是中钢集团可持续发展的经济维度，指公司注重为股东创造价值。同时兼顾银行、政府、客户和供应商等利益相关方的利益，持续提升整个产业链的价值创造能力，实现中钢集团的基业长青。

This is the economic dimension of Sinosteel's sustainable development. It refers that the company focuses on creating value for shareholders in the development process and takes into account the interests of stakeholders such as banks, governments, customers and suppliers, continuously enhances the value creation capability of the entire industry chain and realizes the long-term success of Sinosteel.



绿色创新链
绿色播种希望
Green Innovation Chain, Sowing Hope

这是中钢集团可持续发展的环境和创新维度，指公司注重环境保护，发展低碳经济，提升上下游企业的环保水平，通过持续创新培育发展新动力、拓展发展新空间，不断致力于钢铁产业链的绿色制造、创新发展，以促进中钢集团的可持续发展。

This is the environment and innovation dimension of Sinosteel's sustainable development. It refers that the company focuses on environmental protection, develops a low-carbon economy, improves the environmental protection level of upstream and downstream enterprises, through continuous innovation fosters new development momentum. It expands new development space, and continuously commits to green manufacturing and innovation development of the steel industry chain to promote the sustainable development of Sinosteel.



和谐共赢链
爱心铸就未来
Harmony and Mutual Win Chain, Love Creates the Future

这是中钢集团可持续发展的社会维度，指公司在发展过程中，始终注重企业运营对员工、社区等利益相关方整体福利水平的提升，以推动中钢集团与社会的和谐共赢。

This is the social dimension of Sinosteel's sustainable development. It refers that the company always pays attention to the improvement of the level of overall welfare of employees, community and other stakeholders by enterprise operation in order to promote the harmony and win-win situation between Sinosteel and the society.

可持续发展治理 Governance for Sustainable Development

中钢集团在聚焦主营业务、有序推进经营活动的同时，扎实推进社会责任治理工作，持续健全社会责任管理体制，根据管控模式调整与业务情况，社会责任工作由社会责任工作领导小组负管理责任，办公室作为归口管理部门，负责社会责任工作的整体推进。

2018年，中钢集团与利益相关方积极沟通，持续加强履责能力建设，发布了《中钢集团2018年可持续发展报告》和《中钢集团可持续发展非洲报告（2018）》。此外，中钢所属海外企业——中钢萨曼可铬业有限公司已连续8年单独发布企业社会责任报告。

While focusing on the main business and advancing the business activities orderly, Sinosteel also promotes the governance of social responsibilities in a pragmatic manner, continues to improve the social responsibility management system. The social responsibility is managed by the Social Responsibility Leading Panel according to the adjustment of control mode and business, and the Office as the centralized management department is responsible for the overall advancement of social responsibilities.

In 2018, after consulting with stakeholders actively, Sinosteel strengthened its capacity continuously, and published 2018 Sinosteel Sustainability Report and 2018 Sinosteel Sustainability Africa Report. In addition, Tubatse Chrome (Pty) Ltd has released its own Social Responsibility Report for 8 consecutive years.

可持续发展沟通与议题识别 Sustainability Communication and Issue Identification

责任沟通 Responsibility Communications

中钢非常重视与各利益相关方的沟通，建立互信，促进合作，共同创造可持续的未来。在公司内部，我们充分利用职工代表大会、建议箱、员工沟通会、培训活动等渠道，加强领导与员工之间的沟通。对外，公司通过定期发布可持续发展报告，准确披露公司当年的经济、社会、环境的履责情况，让利益相关方更了解企业。

Sinosteel attaches great importance to the communications with all stakeholders, so as to build mutual trust, promote cooperation and jointly create a sustainable future. Inside the Company, we make full use of worker's congress, suggestion box, staff communication sessions, training activities and other channels to strengthen the communication of leaders and employees. Outside the Company, the Company releases sustainability report regularly to disclose the performance of responsibility in economy, society and environment of the year, so that the stakeholders could understand the company better.

<p>期望:</p> <ul style="list-style-type: none"> • 国有资产保值增值 • 防范经营风险 <p>回应:</p> <ul style="list-style-type: none"> • 遵守法律法规 • 参加工作会议 • 定期汇报 • 实施绩效考核 	<p>期望:</p> <ul style="list-style-type: none"> • 保障国家资源安全 • 遵纪守法 • 促进经济社会和谐发展 <p>回应:</p> <ul style="list-style-type: none"> • 按时足额纳税 	<p>期望:</p> <ul style="list-style-type: none"> • 基本权益保障 • 职业发展通道畅通 • 个人价值实现 <p>回应:</p> <ul style="list-style-type: none"> • 定期召开职工代表大会 • 完善健全工会组织 • 组织员工座谈会 • 开展员工满意度调查 	<p>期望:</p> <ul style="list-style-type: none"> • 提供可靠的产品 • 维护良好的客户关系 • 提供优质服务 <p>回应:</p> <ul style="list-style-type: none"> • 优化客户关系管理 • 规范客户合作洽谈 • 开展客户第三方满意度调查 	<p>Expectations:</p> <ul style="list-style-type: none"> • Maintain and appreciate the state-owned assets • Prevent business risks <p>Response:</p> <ul style="list-style-type: none"> • Comply with laws and regulations • Attend work meetings, • Report regularly • Implement performance appraisal 	<p>Expectations:</p> <ul style="list-style-type: none"> • Guarantee the security of national resources • Abide by laws and disciplines • Promote harmonious economic and social development <p>Response:</p> <ul style="list-style-type: none"> • Pay taxes in full and on time 	<p>Expectations:</p> <ul style="list-style-type: none"> • Protect the basic rights and interests • Maintain smooth career development channels • Realize personal value <p>Response:</p> <ul style="list-style-type: none"> • Convene the worker's congress regularly • Improve and perfect the labor union organization • Organize the staff symposiums • Conduct surveys on staff satisfaction 	<p>Expectations:</p> <ul style="list-style-type: none"> • Provide reliable products • Maintain good relationship with customers • Provide quality services <p>Response:</p> <ul style="list-style-type: none"> • Optimize the management of customer relationship • Standardize the cooperation negotiation with customers • Conduct surveys on satisfaction of customers and the third party 	<p>期望:</p> <ul style="list-style-type: none"> • 协同创新 • 优势互补 • 提高价值创造能力 • 建立长期合作关系 <p>回应:</p> <ul style="list-style-type: none"> • 高层互访 • 项目合作 • 不定期会晤 • 签订战略合作协议 	<p>期望:</p> <ul style="list-style-type: none"> • 保护周边社区环境 • 带动社区繁荣 • 促进社区和谐 <p>回应:</p> <ul style="list-style-type: none"> • 开展社区需求调研 • 实施社区共建计划 • 公益捐赠 • 组织员工志愿者活动 	<p>期望:</p> <ul style="list-style-type: none"> • 支持 NGO 组织倡议及活动 • 发挥大企业模范及表率作用 • 推动可持续发展各项工作 <p>回应:</p> <ul style="list-style-type: none"> • 参与行业协会等 NGO 组织的活动 • 参加项目研讨 • 开展项目合作 	<p>期望:</p> <ul style="list-style-type: none"> • 遵守商业道德 • 公平、公开、公正实施招投标 • 为供应商提供指导与帮助 <p>回应:</p> <ul style="list-style-type: none"> • 签订合作协议 • 将供应商纳入 ERP 管理 • 供应商关怀活动 • 供应商满意度调查 	<p>Expectations:</p> <ul style="list-style-type: none"> • Make collaborative innovation • Complement each other's advantages • Improve the ability to create value • Establish long-term cooperative relationship <p>Response:</p> <ul style="list-style-type: none"> • High-level visits • Project cooperation • Meet irregularly • Sign strategic cooperation agreements 	<p>Expectations:</p> <ul style="list-style-type: none"> • Protect the environment of surrounding communities • Drive the community prosperity • Promote community harmony <p>Response:</p> <ul style="list-style-type: none"> • Carry out investigations on communication needs • Implement co-construction plan of communication • Public welfare donation • Organize volunteer activities of employees 	<p>Expectations:</p> <ul style="list-style-type: none"> • Support the initiatives and activities of NGO • Give full play to the role of large enterprise as a role model • Promote the work of sustainable development <p>Response:</p> <ul style="list-style-type: none"> • Take part in the activities organized by industrial associations and other NGOs • Participate in project discussions • Carry out project cooperation 	<p>Expectations:</p> <ul style="list-style-type: none"> • Abide by business ethics • Conduct bidding and tendering in an open, fair and impartial manner • Guide and help the suppliers <p>Response:</p> <ul style="list-style-type: none"> • Sign cooperative agreements • Incorporate the suppliers into ERP management • Supplier care • Surveys on supplier's satisfaction
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议题识别 Issue Identification

中钢集团认真研究分析国内外各项方针政策，识别并筛选出对公司和利益相关方都重要的实质性议题，并绘制实质性矩阵，指导公司有的放矢地开展社会责任工作。

Sinosteel has studied and analyzed the policies at home and abroad carefully, identified and screened out substantive issues that are important to the Company and stakeholders, and drawn substantive matrix to guide the Company to carry out social responsibilities with a definite target.



结合国家宏观政策导向、国内外社会责任标准研究分析、行业对标、利益相关方访谈与调研、公司发展战略规划，进行详细分析总结。

Make detailed analysis and summary by combining the orientation of national macro-policies, research and analysis of social responsibility standards at home and abroad, industrial benchmarking, interviews and surveys of stakeholders and Company's development strategic planning.

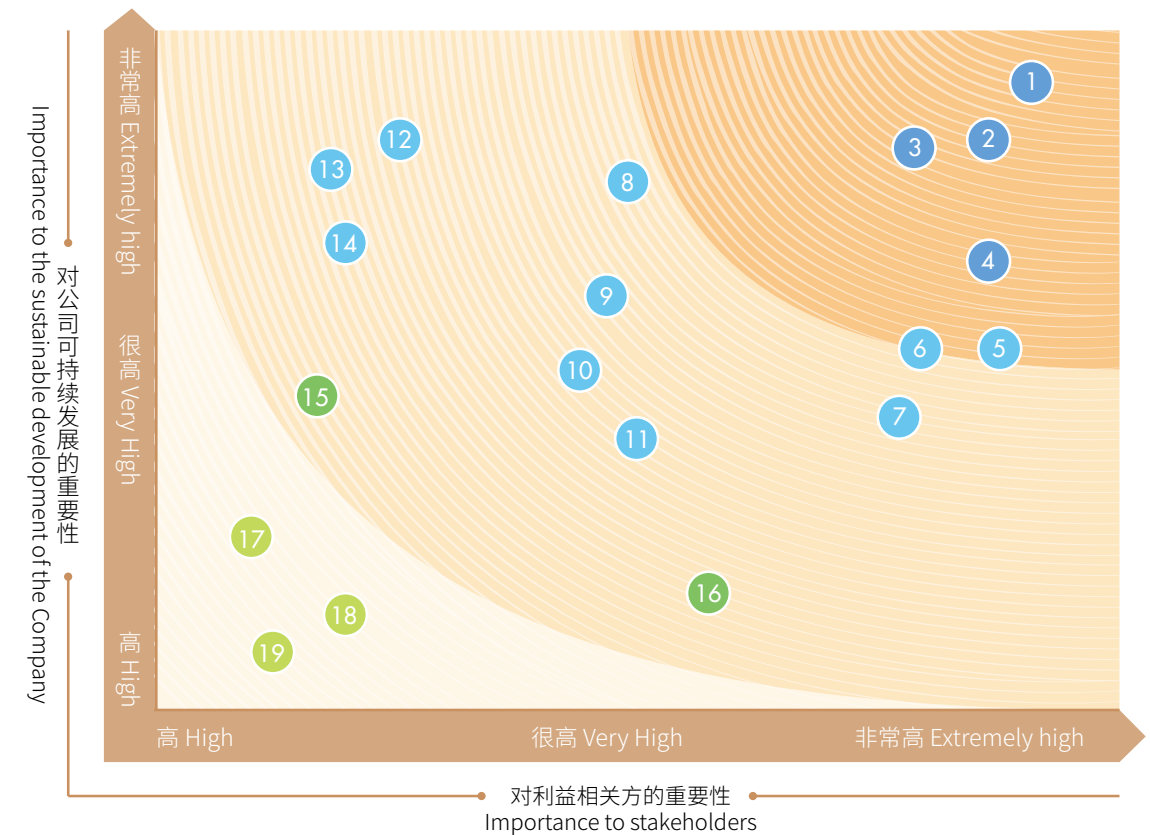
根据与公司活动、产品、服务有关的影响来识别实质性主题和议题，包括公司内部和外部的各种具体情况，识别出对公司可持续发展以及利益相关方都重要的议题。

Identify substantive themes and issues based on impacts related to Company's activities, products and services, including all kinds of internal and external specific situations of the Company, identify issues that are important to the sustainable development of the Company and stakeholders.

按照“对公司可持续发展的重要性”以及“对利益相关方的重要性”两个维度，对实质性议题进行重要性排序，并将实质性议题内容转化为报告内容。

Rank the importance of substantive issues based on the two dimensions, namely "importance to the sustainable development of the Company" and "importance to stakeholders", and transform the substantive issues into report.

实质性矩阵 Issue Identification



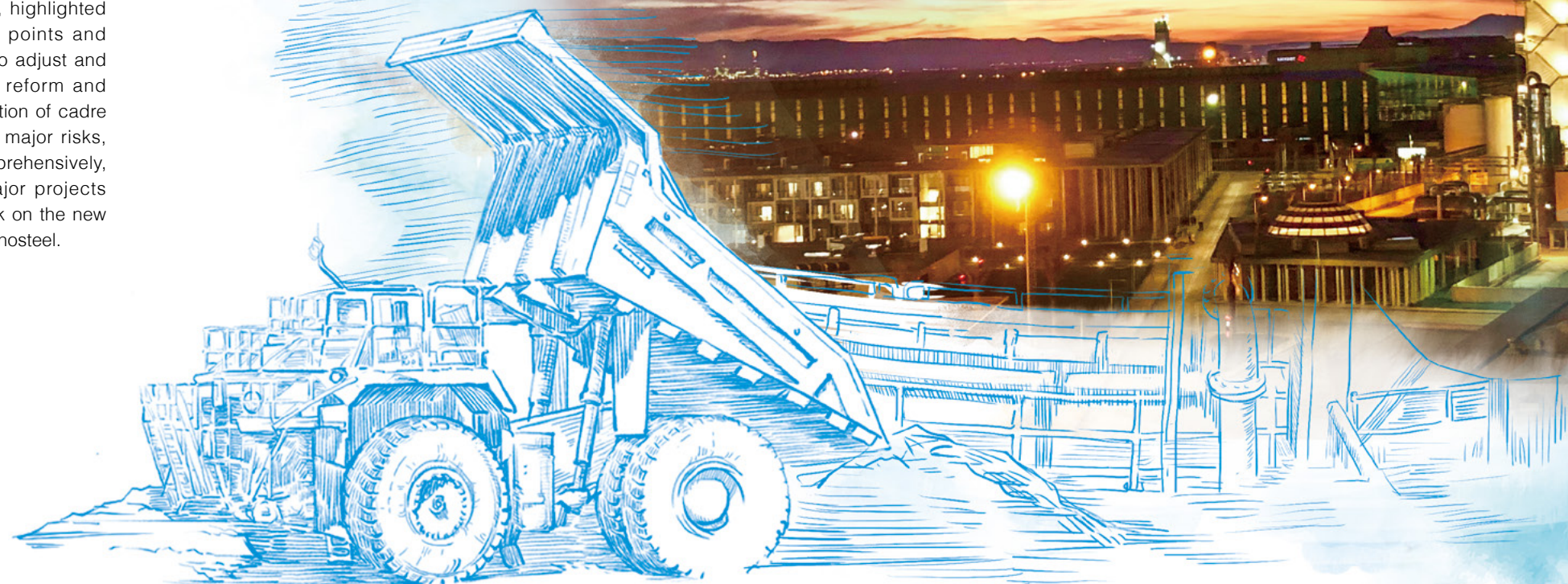
- | | | |
|---|--|---|
| <ul style="list-style-type: none"> 1 优质的产品
High-quality products 2 优质的服务
High-quality service 3 良好客户关系
Good relationship with customer 4 社区繁荣和谐
Community prosperity and harmony 5 循环经济
Circular economy Energy 6 节能减排
Conservation and emission reduction 7 绿色生产
Green production | <ul style="list-style-type: none"> 8 技术创新与应用
Technological innovation and application 9 保障员工权益
Guarantee the rights and interests of employees 10 关爱员工
Care for employees 11 职业发展通道畅通
Smooth channels for career development 12 国有资产保值增值
Technological innovation and application 13 防范经营风险
Prevention of business risks | <ul style="list-style-type: none"> 14 安全生产
Care for employees 15 推动行业进步
Promote the industrial progress 16 供应链管理
Supply chain management 17 促进经济社会和谐发展
Promote the harmonious development of economic society 18 推进扶贫助困
Advance the poverty alleviation and help to get out of difficulties 19 按时足额纳税
Pay taxes in full and on time |
|---|--|---|

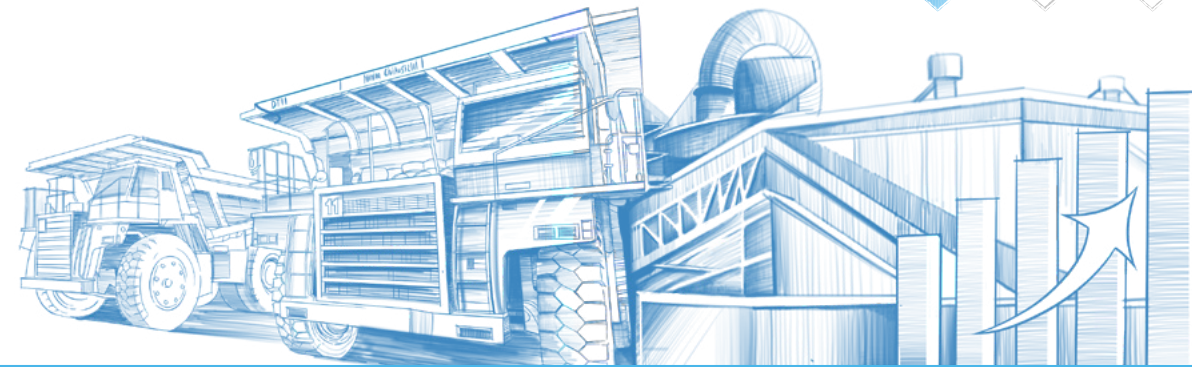
发展之基，价值中钢

DEVELOPMENT FOUNDATION, VALUE IN SINOSTEEL

2018年，中钢集团坚持以习近平新时代中国特色社会主义思想为指导，围绕战略规划执行落地，突出抓重点、补短板、强弱项，持续调整优化结构，深化改革创新，加强干部队伍建设，防范化解重大风险，全面加强党的建设，努力实现重点项目和关键事项的突破，奋力走好中钢二次创业新征程。

In 2018, guided by the Thought on Socialism with Chinese Characteristics for a New Era proposed by Chairman Xi Jinping, Sinosteel focused on the implementation of strategic planning, highlighted the key points, strengthened weak points and reinforced the weakness, continued to adjust and optimized the structure, deepened reform and innovation, strengthened the construction of cadre team, protected against and resolve major risks, strengthened the party building comprehensively, strived to make breakthrough in major projects and key issues, and strived to embark on the new journey to the second undertaking of Sinosteel.





聚焦实业主业，努力实现高质量发展

FOCUS ON MAIN BUSINESSES OF INDUSTRY, TRY TO REALIZE HIGH-QUALITY DEVELOPMENT

回首中钢集团变革奋进之路，风雨兼程，辛劳与喜悦相伴，坎坷与收获并行。我们迎难而上，合力攻坚，聚焦主业实业，抓好当期经营，瞄准矿产资源、工程技术、高端制造、科技新材料等优势业务，持续加大产业培育，经营业绩创近六年来最好水平，在努力实现高质量发展的路上迈出了坚实的步伐。

Looking back to the Sinosteel's way to revolution and advancement, it has been marching forward though accompanied with pains and gains, frustrations and joy. We have made joint efforts to tackle difficulties, focus on main business of industries, make great efforts to current operations, and target at the competitive businesses like mineral resources, engineering technologies, high-end manufacturing, new material technologies, etc., enlarged the industry cultivation continuously, took solid steps on the way to high-quality development. Our business performance hit the best level of the past six years.

大力发展矿产资源业务 Vigorously Develop Mineral Resources Business

举集团之力整合南部非洲铬矿资源

Integrate the chromium ore resources in Southern Africa with the joint efforts of the Group

中钢深耕细作海外市场 30 多年，奠定了海外矿产资源开发核心优势产业的基础。2018 年，在国资委的大力指导下，中钢按照最具影响力和竞争力的铬铁资源供应商定位，举全集团之力实施南部非洲铬铁资源整合。经过系统谋划和艰苦谈判，最终组建由中钢主导的中方联合体，成功并购好望角项目，实现铬资源储备世界第一，进一步提升了中钢在全球铬矿资源领域的影响力。

Sinosteel has been working in the overseas market for more than 30 years, which has laid the foundation for the core advantage industry of overseas mineral resources development. In 2018, with the strong guidance and support of the SASAC, Sinosteel was positioned as the most influential and competitive supplier of Chromium resources worldwide, and the entire group implemented the integration of Chromium resources in southern Africa. After systematic planning and arduous negotiations, China's consortium was finally established and *the Cape of Good Hope project* was successfully acquired, realizing the first place in the world in the reserve of chromium resources, which further enhanced the influence of Sinosteel in the field of global Chromium resources.



知识延展 Knowledge Extension

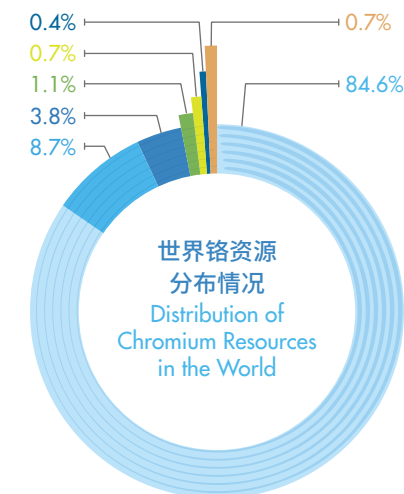
世界铬资源分布情况 Distribution of Chromium Resources in the World

铬作为一种重要的矿产资源，广泛运用于冶金工业、耐火材料及化工工业上。其中最主要的用途是以铬铁合金的形式作为冶金工业不锈钢生产的重要原料，可有效增强不锈钢的硬度和抗腐蚀性。

据国际铬业发展协会统计，2011 年，南非铬铁矿储量 **3100 亿吨**，占全球的 **84.6%**。

As an important mineral resource, chromium is widely used in the metallurgical industry, refractory materials and chemical industry. Ferrochrome alloy is an important raw material for the production of stainless steel in the metallurgical industry, it can effectively enhance the hardness and corrosion resistance of stainless steel, which is also the main application.

According to the International Chromium Development Association, in 2011, South Africa has 310 billion tons chromium ore reserves, accounting for 84.6% in the world.



- 南非 / South Africa
- 哈萨克斯坦 / Hashakstan
- 津巴布韦 / Zimbabwe
- 芬兰 / Finland
- 印度 / India
- 巴西 / Brazil
- 其他国家 / Others

注：该分布情况为 2011 年数据。
Note: This distribution 2011 data.



工程技术业务再创新高 Engineering technology business hit a new record

中钢设备建成北非地区最大综合性钢厂 ——TOSYALI 阿尔及利亚 230 万吨综合钢厂项目竣工投产



Sinosteel Equipment & Engineering Co., Ltd. Established the Largest Comprehensive Steel Mill in North Africa - TOSYALI Algeria Comprehensive Steel Mill with the Capacity of 2.3 Million Tons Was Completed and Put into Operation

2018 年，中钢国际工程所属中钢设备总承包建设的 TOSYALI 阿尔及利亚 230 万吨综合钢厂项目竣工投产，这是北非地区最大的综合性钢厂。

该综合钢厂项目位于阿尔及利亚西北部的奥兰 (Oran) 地区，是 TOSYALI 集团在海外的最大投资项目，也是阿尔及利亚本地最大的冶金投资项目。项目总承包范围包括一座年产 400 万吨球团厂、一座年产 250 万吨直接还原铁厂、以及 230 万吨的电炉炼钢车间和两条棒线材轧钢车间。由于项目建设工期紧，任务重，技术要求高，中钢设备领导亲自挂帅，组织精兵强将驻场办公，与一线施工管理人员同吃同住，积极克服诸多困难，实现了整个综合钢厂项目的竣工投产，得到了业主的高度认可，也成为中钢设备海外工程承包的又一张靓丽名片。

曾经，在中钢人的眼里，阿尔及利亚是美丽的，是神秘的，如今它更是亲切的、温暖的。因为，中钢

人曾在这里默默付出，它的发展和进步有我们真诚的劳动和不懈的努力。在改革开放的奋勇浪潮下，在“一带一路”的精神指引下，在中钢人的铿锵足音下，我们和各国友人必将会在携手共建、互利共赢的路上行稳致远。

此外，2018 年，中钢国际工程大力开拓“一带一路”沿线市场，顺利签约广西柳州防城港新建钢铁基地配套 350 万吨焦化项目、俄罗斯 MMK 焦化等一批国内外重点项目，年度新签合同额创历史新高。其中：

俄罗斯 MMK250 万吨焦化项目，合同额 47 亿元，该项目是中国第一座走向国门的 7m 以上大型焦炉，具有较强的市场示范效应；

南非铂金矿项目是中国企业在南非矿业领域签订的第一个 EPC 总承包项目，也是中钢签订的第一个铂族金属领域 EPC 总承包项目。



In 2018, TOSYALI Algeria comprehensive steel mill, which was constructed by Sinosteel under an overall contract, with the capacity of 2.3 million tons was completed and put into operation, and it is the largest comprehensive steel mill in North Africa.

This comprehensive steel mill project is located in Oran, the northwest Algeria, and it is also the largest overseas investment project of TOSYALI Group as well as the largest metallurgical investment project in Algeria. The general contracting scope of project includes a pelletizing plant with an annual output of 4 million tons, a direct reduction iron plant with an annual output of 2.5 million tons as well as electric steel plant with an output of 2.3 million tons, a rolling plant with two production lines of rod and wire. Due to the tight project construction period, heavy tasks and high technical demands, the leaders of Sinosteel Equipment took the challenge personally, organized the elites of the company to reside on spot, ate and lived together with the front-line construction management, overcame many difficulties, completed and put the entire comprehensive steel mill project into operation, which was not only highly recognized by the owner, but also became an iconic image of Sinosteel in overseas engineering contracting.

In the past, Algeria was beautiful and mysterious in the opinion of Sinosteel's personnel; but now, it is

more cordial and warmer. That's because Sinosteel's personnel have made contributions here silently, and its development and progress are inseparable from our sincere hardworking and unremitting efforts. Under the brave tide of reform and opening up, guided by the spirit of the "Belt and Road", Sinosteel forges ahead and walked steadily to the achieve the great goal by working with friends from all over the world for mutual benefits and win-win progress.

In addition, Sinosteel MECC explored the markets vigorously along the "Belt and Road", signed a batch of key important project at home and abroad among which are 3.5 million tons of coking project matched with the newly built iron and steel base at Port of Fangcheng with Guangxi Liuzhou Iron and Steel Group Company Limited, MMK coking project in Russia in 2018, and hit a new high for annual new contract amount.

The contract amount of MMK coking project of 2.5 million tons up to 4.7 billion RMB. The project was the first large-scale coke oven above 7 meter exported had a strong demonstration role of market;

The platinum mine project in South Africa is the first EPC project signed by a Chinese enterprise in the mining field of South Africa, and it is also the first EPC project in pure platinum that Sinosteel signed.





装备制造业务转型升级 Transformation and Upgrading of Equipment Manufacturing Business

中钢邢机以整体搬迁为抓手，引领行业高质量发展

Sinosteel Xingtai Machinery & Mill Roll. Co., Ltd. (Refer to as: Sinosteel XTMMC) Took the Integral Relocation as the Breaking Point to Lead the High-quality Development of the Industry

中钢邢机是全球产销规模最大、市场占有率最高、研发实力最强的冶金轧辊行业研发制造企业。

2018年，中钢邢机统筹配合邢台市城市整体规划要求和自身做专、做精、做大、做强的发展需求，在中钢集团和河北省委省政府、邢台市委市政府的大力支持和正确指导下，按照创新、协调、绿色、开放、共享五大发展理念和高质量发展的要求，在多次深入讨论论证的基础上，制定了中钢邢机“退市进园、搬迁新址、统一规划、合理布局、全面升级”的发展思路。

唯改革者进，唯创新者强，唯改革创新者胜。中钢邢机业已启动史上规模最大的退市进园项目，这是新的开始，也是新的跨越。新厂区“三大中心”建设预计投入80亿元，实现营收120亿元以上，建成后未来将形成邢台市城区新地标。作为世界轧辊行业领军企业，中钢邢机将继续朝着更好、更快、更优的方向发展，引领行业高质量发展。

Sinosteel XTMMC is a specialized R&D and manufacturing enterprise, with the world's largest production and marketing scale, the highest market share and the most powerful R&D strength.

In 2018, Sinosteel XTMMC coordinated with overall planning requirements of Xingtai and its own development demand



of making itself more specialized, more exquisite, bigger and stronger, and formulated the development concept of "withdrawing from city and moving into science park, relocating to a new place, unified planning, proper layout and comprehensive upgrading" on the basis of multiple in-depth discussions according to the five major development concepts of "innovation, coordination, green, openness and sharing" under strongly support and correct guidance of Sinosteel, party committee and government of Hebei Province as well as municipal party committee and municipal government of Xingtai.

"Only those who innovate can make progress, grow stronger and prevail." Sinosteel XTMMC has launched the largest withdrawal from city into science party in history, which is not only a new start, but also a new leap. It is expected to invest 8 billion RMB to construct the "three centers" in the new plant area, and realize the revenue of more than 12 billion RMB, and it would be become the new landmark of Xingtai City in the future after its completion. As the world's leading roll enterprise, Sinosteel XTMMC will continue to develop better, faster and more optimal, and lead the industry to develop in a high quality.

科技新材业务积极整合 Actively Integrate the New Material Technology

中钢天源制定锂电池用四氧化三锰行业标准，助力新能源汽车行业快速发展

Sinosteel Anhui Tianyuan Technology Co., Ltd (SATT for short) Developed the Industrial Standards of Manganese-manganic Oxide for Lithium Batteries, Which Helped the Rapid Development of New Energy Automobile Industry

近年来，新能源汽车行业发展势头迅猛，其核心要件——锂电池里便有“中钢元素”。2018年9月，中钢天源承办的《锂电池用四氧化三锰》行业标准审定会在安徽省马鞍山市举行。会上，中钢天源作为“标准”的起草单位向与会代表就编制过程、编制原则和产业化情况等内容作了汇报和说明，并根据与会专家组的修改意见建议，再次修改完善，形成报批稿，上报国家标准委审批、颁布、实施。

经审定，该项行业的技术指标达到国际先进水平，它的发布实施将促进四氧化三锰企业供给侧改革，调整产品结构，提升产品质量，提高我国四氧化三锰产品的国际市场竞争能力，促进行业的可持续发展。

In recent years, the new energy automobile has gained rapid development momentum, with its core element - lithium battery containing the "Sinosteel Element". In September 2018, the accreditation meeting for the industry standard of Manganese-manganic Oxide for Lithium Batteries undertaken by SATT was held in Ma'anshan City, Anhui Province. On the meeting, SATT reported and stated the preparation process, preparation principle of the standard as well as industrialization to the representatives attending the meeting as the drafting unit of the standard, modified and improve the standards based on the modification opinions and suggestions of the participating experts, and formed a draft for approval, issuance and implementation by the Standardization Administration of China.

After examination and approval, the technical index contained in the industry standard has reached the international advanced level, and its release and implementation will promote the supply-side reform of the manganous-manganic oxide enterprises, adjust the product structure, improve the product quality, improve the competitiveness of China's manganous-manganic oxide products on international markets, thus promoting the sustainable development of the industry.



引进来：聘任美国科学院院士

Bring in: Academician of the American Academy of Sciences



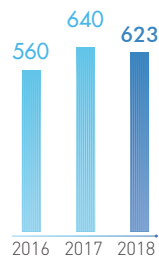
专家评审

Expert review

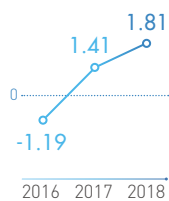


重要指标 Important Indicator

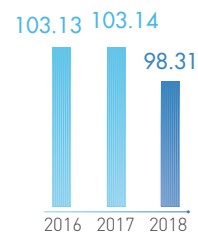
营业收入
Operating revenue
(亿元/100 million)



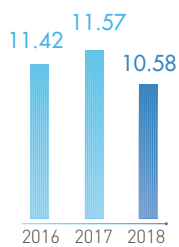
净利润
Net Profit
(亿元/100 million)



资产负债率
Debt-to-assets ratio
(%)



纳税额
Tax paid
(亿元/100 million)



党建助力，统一思想 Assist in Party Building, Unify the Thoughts

2018年，中钢集团紧紧围绕中心工作，以提升企业党建工作质量为本出发点，稳步有序推进各项党建工作任务落实，持续推动党的建设、思想政治工作、新闻宣传、精神文明和企业文化建设，群团、对口扶贫等方面工作深入开展，取得了显著成效。

In 2018, Sinosteel took improving the quality of corporate's Party building as the fundamental starting point by focusing on centers, pushed the implementation of the Party building tasks steadily and orderly, continued to promote the Party building, ideological and political work, news propaganda, construction of spiritual civilization and corporate culture as well as alliance, carried out targeted poverty alleviation etc., all of which have achieved remarkable results.

中钢集团党委所属党组织现有

36 个党委

548 个党总支（支部）

11059 名党员

Party organisations
under Sinosteel Party
committee:

36 Party committees

548 general Party
branches (sub-branches)

11,059 party members

服务集团党委思想政治建设工作 Serve the Ideological and Political Construction of the Group's Party Committee

2018年，集团37位党的十九大精神宣讲团成员赴基层企业对党的十九大精神进行了40场次以上的宣讲。

In 2018, 37 members of the Preach Team for the spirit of the 19th National Congress of the Communist Party of China, went deep into grass-roots enterprises to preach the 19th National Congress of the Communist Party of China for more than 40 times.

集团党委召开了36次党委会，研究审议相关议题209项，收集整理相关意见建议32条。

The Party committee of the group held 36 meetings of the Party committee, studied and deliberated 209 related issues, and collected 32 relevant suggestions.

集团党委中心组召开党的十九大精神第三次集体学习研讨会

The Party Committee Central Panel of the Group Convened the Third Collective Learning Seminar for Implementing the Spirit of the 19th National Congress of the Communist Party of China

2018年2月7日，集团党委中心组召开第三次学习宣贯党的十九大精神专题学习研讨会，深入学习贯彻习近平新时代中国特色社会主义思想。会议集体学习了习近平新时代中国特色社会主义思想的基本内涵和基本方略、《习近平关于国有企业改革发展和党建论述摘编》、《习近平谈治国理政》（第二卷）、中央政治局民主生活会、习近平总书记“1·5”重要讲话精神等有关内容。

On February 7, 2018, the Party Committee Central Panel of the Group convened the 3rd special learning seminar to study, publicize and implement the spirit

of the 19th National Congress of the Communist Party of China, and made in-depth study on the Thought on Socialism with Chinese Characteristics for a New Era proposed by Chairman Xi Jinping. The meeting studied the basic connotation and basic strategy of the Thought on Socialism with Chinese Characteristics for a New Era proposed by Chairman Xi Jinping, *Excerpt of Xi Jinping Statements on Reform and Development of State-owned Enterprises and Party Building*, *Xi Jinping: the Governance of China (Volume II)*, meeting of democratic life of the Political Bureau of the Central Committee of the CPC, the spirits of the "1·5" important address made by Chairman Xi Jinping.





加强基层党组织建设

Strengthen the construction of primary party organization

中钢集团党委以夯实“三基建设”基础为根本，持续加强组织建设，着力提升组织力。推进党组织“全覆盖”，严格落实“四同步”“四对接”要求；加强党员教育培训，筑牢党员理想信念；推进党支部规范化标准化建设，进一步提升各级党组织的组织力；推动“两学一做”学习教育常态化制度化，规范基层各项制度落实。

The Party committee of Sinosteel Group took the strengthening of the "Three-base Construction" foundation as the basis, reinforced the organization construction continuously, and strove to enhance the organizing capacity. It also promoted the "full coverage" of the Party organizations, implemented the requirements of "Four Synchronizations" and "Four Connections" strictly; strengthened the education and training of the party members, and built up their ideas and beliefs; advanced the standardization and normalization construction of the party branches, and promoted the organizing capacity of the party organizations at all levels; promoted to normalize and institutionalize the "Studies on the Theoretical and Practical Issues of Party Building", and standardized the implementation of systems at primary party organization.



中钢衡重组织机关党员开展系列义务劳动

Sinosteel Hengyang Machinery Co., Ltd Organized the Party Members of Organs to Carry out a Series of Voluntary Labor

2018年8月4日，中钢衡重机关党员通过开展系列义务劳动，于当日9时成功在太阳高照前完成了停车场防晒棚的搭建任务。这次义务劳动是三个党支部联合发起的，旨在深入贯彻公司党委“学先进见行动”实践活动的总要求，为企业的改革重组和转型发展凝心聚力。

On August 4, 2018, the Party members of the organs in Sinosteel Hengyang Machinery Co., Ltd developed a series of voluntary labor, and completed the construction tasks of sun sheds at the parking lot successfully before the sun blazed at 9 o'clock. The voluntary labor was initiated jointly by three Party branches with the purpose of implementing the general requirements for the practical activity of "Learning from Advancement and Putting it into Practical Actions" proposed by the Party committee of Sinosteel Hengyang Machinery Co., Ltd for extensive development on the occasion of commemorating the 97th anniversary of the founding of the CPC, so as to gather strength for the reform and restructuring, transformation and development of the enterprise.



中钢邢机举办党的十九大精神及国企党建知识竞赛

Sinosteel XTMMC Held Knowledge Contest for the Spirit of the 19th National Congress of the Communist Party of China and Party Building in State-owned Enterprises

2018年3月，中钢邢机组织开展了党的十九大精神及国企党建知识竞赛，通过以“练”促“学”，以“赛”促“学”，实现了党的十九大精神进车间、入班组、到个人、全覆盖。

此次活动全公司参与人数达3409人，答题92145次，人均答题27次，9家单位全员参与率达100%，22家单位全员参与率达80%以上。

In March 2018, Sinosteel XTMMC held a knowledge contest for the spirit of the 19th National Congress of the Communist Party of China and the party building in state-owned enterprises, which infused the spirit into workshop, team and shift and into individuals, with a full coverage by "practicing" to promote "learning", and "contest" to promote "learning".

A total of 3,409 employees attended the event, with 92,145 answers, 27 answers per capital. The participating rate of all members in 9 units reached 100%, and that of all members in 22 units reached over 80%.



中钢热能院赴红色基地开展革命传统教育活动

Sinosteel Anshan Research Institute of Thermo-Energy Co.,Ltd carried out revolutionary traditional education at the Red Base



落实全面从严治党 Implement strict in Party governance

一是加强制度建设，为提升企业党建工作质量提供参照；二是抓住党建第一责任人，扎实做好党组织书记抓党建述职评议考核工作；三是突出党建主体责任，认真做好党建工作责任制考核评价工作。

Firstly, strengthen the system construction, provide reference for improving the quality of the party building in enterprises. Secondly, focus on the first person responsible for the Party building, and complete the report, review and appraisal of the Party building by the secretary of the Party organization. Thirdly, highlight the entity responsibility of the Party building, and focus on the review and appraisal of job responsibility system for the Party building.

中钢德远矿产品开展红色主题教育活动



Sinosteel Resources Co., Ltd. Carried out Red Theme Education Activities

2018年9月7日，中钢德远矿产品在门头沟区斋堂镇马栏村开展红色革命主题教育，全体党员和入党积极分子参加了活动。

On September 7, 2018, Sinosteel Resources Co., Ltd. carried out a red revolutionary theme education in Ma Lan Village, Zhaitang Town, Mentougou District.

大家参观了冀热察挺进军司令部旧址陈列馆，回顾了冀热察挺进军充分发动群众，开展抗日武装斗争，打击日本侵略者的生动历史。在陈列馆现场，公司党总支书记刘静，给全体党员上了题为《不忘初心、牢记使命，弘扬抗战精神，为贸易调整转型勇当先锋》的党课。

All Party members and Party activists participated in the event. The members visited the exhibition hall of the former site of Jirecha headquarters, and reviewed the vivid history of Jirecha marching into full mobilization of the masses, carrying out anti-Japanese armed struggle, and combating the Japanese aggressors. At the site of the exhibition hall, Liu Jing, Secretary of the company's Party branch, gave all party members a party lesson entitled "Don't forget the heart, remember the mission, promote the spirit of the war of resistance, and be a pioneer in the transformation of trade adjustment."



加强党员队伍建设

集团高度重视在生产经营科研管理一线和青年职工中发展党员，把各类经营技术管理骨干培养发展成党员，把青年职工中的优秀分子吸收到党员队伍中。

Strengthen the Construction of the Party Member Teams

The group attaches great importance to developing the Party members from the front-line of production, operation, scientific research and management as well as from young employees, cultivated and developed all kinds of business and technical management backbone into Party members, and attracted outstanding young employees into the ranks of Party members.

集团党委领导接见团员青年代表并开展座谈



Leaders of the Group's Party Committee Met the Youth Representatives of League Members and Held Discussions



2018年4月25日，值共青团中钢集团第四次代表大会召开之际，徐思伟董事长、刘安栋总经理等集团领导亲切接见部分参会代表，并与来自集团生产、科研、经营、管理等各岗位的14名基层团员青年代表座谈。

On April 25, 2018, on the occasion of the 4th representative assembly of the Communist Youth League in Sinosteel, Chairman Xu Siwei and President Liu Andong and other group leaders had a discussion with some of the participants. 14 primary youth representatives from production, scientific research, operations and management of the group etc.

与会代表围绕“青年如何立足岗位，在集团二次创业新征程中发挥更大作用，实现个人发展”畅谈了个人奋斗历程和工作体会，并从加强青年人才队伍建设、加大基层青年发现培养力度、建立容错机制激励青年干劲、搭建平台促进青年交流、增强青年对企业的归属感等方面对集团提出了有益建议。

Representatives presented, talked their personal struggling and work experience about "how the youth keep a foothold in their post, and play a greater role in the second new journey of entrepreneurship and achieve personal development", and proposed some useful suggestions to the group from strengthening the construction of young talent team, enlarging the discovery and training efforts of primary youth staffs, establishing a fault-tolerant mechanism to motivate the youth, build a platform to promote youth communications, and enhancing the sense of belonging of the youth to enterprise.



顶层设计，规划落地 Top-level Design, Planning Implementation

强化战略引领

2018年，中钢集团突出加强顶层设计，组织修订了三年滚动发展战略与规划（2018-2020），将战略规划作为配置资源的根本依据，作为预算投资、考核薪酬的重要标尺。各平台及所属企业积极承接集团战略，推动业务发展与滚动规划的有机衔接，为进一步提高主业发展质量奠定了基础。

Strengthen the Strategic Guide

In 2018, Sinosteel highlighted the top-level design, and organized to revise Three-Year Development Strategy and Planning for Sinosteel Group (2018-2020), which took the strategic planning as the fundamental basis for resource allocation, and as the important criteria for budget investment and salary assessment. All platforms and affiliated enterprises shall actively link with the group's strategies, promote the organic connection between business development and rolling planning, and lay a foundation for further improving the development quality of the main industry.

发挥投资引导

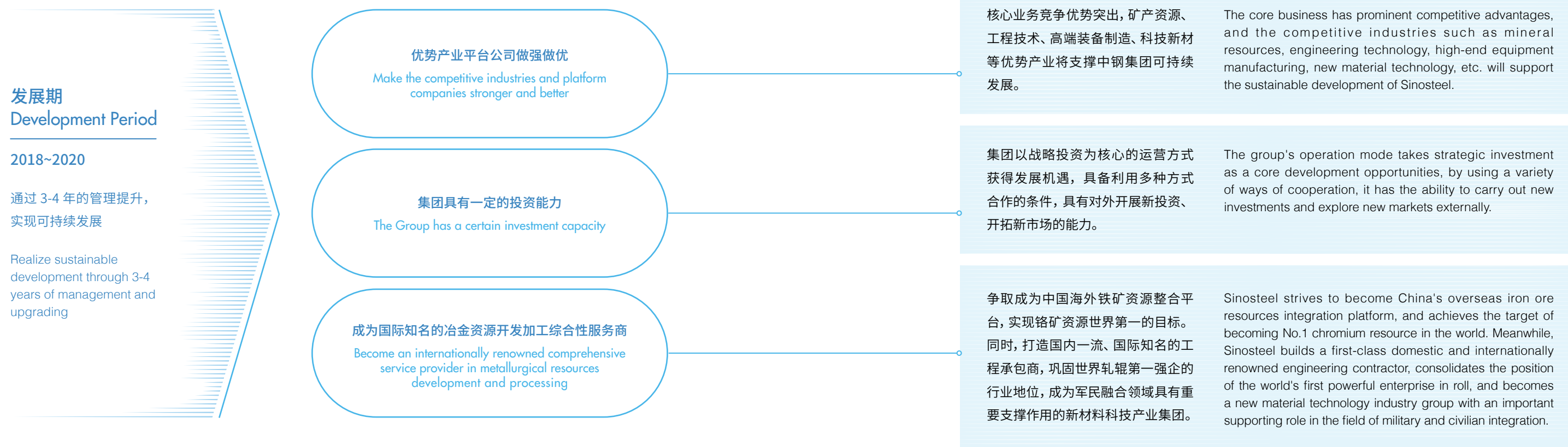
2018年，中钢将投资管理与战略规划、全面预算有机衔接，发挥投资对产业培育发展的引导作用，打造两个“世界一流”。一方面，成功实施南部非洲铬铁资源整合，争取实现铬资源世界第一的战略目标。另一方面，以中钢邢机整体搬迁为抓手，实现高端装备制造转型升级，打造世界一流轧辊强企。2018年，实际完成投资2.6亿元，其中固定资产投资0.4亿元，股权投资2.2亿元。

Investment Guideline

In 2018, Sinosteel linked its investment management with strategic planning and comprehensive budget, giving full play to the guiding role of investment in the cultivation and development of the industry, and creating two "world-class" aims. On the one hand, it has successfully implemented the integration of Chromium and iron resources in southern Africa and strived to achieve the first strategic goal of Chromium resources in the world. On the other hand, with the overall relocation of Sinosteel XTMMC as a grab, high-end equipment manufacturing transformation and upgrading, to create a world-class roller manufacturing enterprise. In 2018, the actual investment was 260 million RMB, of which investment in fixed assets was 40 million RMB and equity investment was 220 million RMB.

三年滚动发展战略与规划

Three-Year Development Strategy and Planning of Sinosteel





深化改革，提质增效

Deepen Reform, Improve Quality and Efficiency

中钢集团认真贯彻落实全面深化改革的工作要求，点面结合推动改革试点，通过改革助推结构调整。

Sinosteel has earnestly implemented the requirements for deepening reform comprehensively, promoted the reform experimentation by linking work at selected spots with that in entire areas, and boosted structural adjustment through reform.

稳妥推进改革试点

Advance the Reform Experimentation Steadily



中钢国际工程、中钢马矿院成功入选国务院国企改革“双百行动”名单

Sinosteel MECC and Sinosteel Ma'anshan Institute of Mining Research Co., Ltd. were Listed into State-owned "Double-hundred Action" Sponsored by the State Council

2018年下半年，国务院国有企业改革领导小组部署的国企改革“双百行动”正式启动。在公布的“双百企业”名单中，包括224家中央企业及其子企业，中钢集团所属中钢国际工程技术股份有限公司、中钢集团马鞍山矿山研究院有限公司位列其中。

国企改革“双百行动”，是指国务院国有企业改革领导小组选取百余户中央企业子企业和百余户地方国有骨干企业，在2018—2020年期间全面落实国有企业改革“1+N”政策要求，深入推进综合性改革，力求在改革重点领域和关键环节率先取得突破，打造一批治理结构科学完善、经营机制灵活高效、党的领导坚强有力、创新能力和市场竞争力显著提升的国企改革尖兵，凝聚起全面深化国有企业改革的强大力量。

In the second half of 2018, the "Double-hundred Action" on the reform of state-owned enterprises deployed by the Leading Panel for the Reform of State-owned Enterprises of the State Council was launched officially. Among the list of "Double-

Hundred Enterprises" published, which included 224 central enterprises and their subsidiaries, Sinosteel Engineering and Technology Co., Ltd. and Sinosteel Ma'anshan Institute of Mining Research Co., Ltd. affiliated to Sinosteel were listed.

The "Double-hundred Action" on the reform of state-owned enterprises refers to the action that the Leading Panel for the Reform of State-owned Enterprises of the State Council selects more than hundreds of subsidiaries of the central enterprises and local state-owned backbone enterprises, which shall implement "1 + N" policy requirements comprehensively for the reform of state-owned enterprises during the period of 2018-2020, further promote the comprehensive reform, strive for breakthroughs in key areas and crucial links of reform, build a batch of pioneer in the reform of state-owned enterprises with scientific and perfect governance structure, flexible and efficient operating mechanism, powerful leadership of the Party and significant increase in innovation ability and international market competitiveness, and gather strong power to deepen the reform of the state-owned enterprises comprehensively.

优化总部及平台公司设置

下沉运营管理职能，实施贸易与投资、冶金矿业与科技、工程等业务的整合，平台公司数量由最初的11家整合为8家。加快内部业务重组，完成中钢安环院注入中钢国际工程，进一步优化了业务链条。

Optimize the settings of headquarters and platform companies

By delegating the operation and management functions, and integrating trading and investment, metallurgical mining and technology, engineering and other businesses, the platform companies has been consolidated from 11 to 8.



中钢深圳深化改革

Sinosteel Shenzhen Co., Ltd. Deepened the Reform

长期以来，中钢深圳着力提高中钢品牌在华南地区业界的影响力，以“为客户创造价值”为目标提供专业的服务。经过几年来的辛勤耕耘，中钢深圳在华南的钢贸圈和不锈钢行业内建立了良好的声誉。2018年，公司结合当前经营状况及形势，积极探索出了一条切合自身实际的改革发展路径：

以钢材和冶金炉料为核心产品，继续将华南市场作为主战场，在风险合理可控的前提下，将贸易与加工物流配送结合为一体，力争为客户提供以客户需求为中心的特色增值服务。

未来几年，深圳公司将继续结合中央“走出去”的战略，在保持现有业务量的基础上，继续开发不锈钢制品和其他钢材产品的出口业务，并且争取突破原有出口地东南亚市场，把业务拓展到其他区域市场。



中钢深圳业务部考察业务现场

Business Division of Sinosteel Shenzhen Inspects the Business Site

For a long time, Sinosteel Shenzhen has been striving to improve the influence of Sinosteel's brand in South China, and providing professional services with the goal of "creating value for customers". After years of hard work, Sinosteel Shenzhen has established good reputation in steel trade and stainless steel industry in South China. In 2018, the Company explored a practical reform and development path in line with its own reality based on current business status and situation.

Took the steel and metallurgy furnace charge as the core products, the company continued to take South China market as a key battleground, combined trade and processing, logistics and distribution as a whole under the premise of proper control of the risk, strove to provide customers with special value-added services centered with customer demands.

In the next few years, Sinosteel Shenzhen will continue to develop the export business of stainless steel products and other steel products on the basis of maintaining the current business volume in combination with the "Going Abroad" strategy proposed by the Central Government, and strive to break through the current export markets in Southeast Asia and expand the business to other regional markets.



扎实推进供给侧结构性改革 Advance the Supply-side structural Reform Steadily

按计划完成专项任务。

Completed special tasks as planned.



加强人才队伍建设

全面盘点和规划人才队伍，进一步加大人才队伍建设工作力度，坚持党管干部原则，在干事中选人用人，同时营造干事创业的良好氛围。

Strengthen the Construction of Talent Teams

Check and plan for the talent teams comprehensively, enlarge the efforts in constructing talent teams, adhere to the principle of placing cadres under the Party supervision, select and appoint cadres during work; meanwhile, create a good atmosphere of entrepreneurship.

中钢集团三项措施推进干部队伍建设

The Group Promoted the Construction of Cadre Teams by Three Measures

2018 年，集团继续完善中层领导人员轮岗交流、专务等制度，大胆使用优秀年轻人才，有效推进全系统干部队伍建设。

In 2018, the group continued to complete the job rotation, senior management among the middle-level leaders, made bold use of outstanding young talents, and promoted the development of cadre teams effectively throughout the system.

目前，集团管理中层干部共计 196 名，其中 45 岁及以下年轻干部 42 人，占 21.43%，比 2017 年提升 3.94%。

Currently, there are 196 middle-level cadres in the group, among whom 42 are young cadres aged 45 or below, accounting for 21.42%, which increased by 3.94% over 2017.



一是不断推进领导干部轮岗交流，根据工作需要和干部特点，有计划、有步骤地安排领导干部进行多岗位锻炼。2018 年共轮岗交流干部 13 人次。

First, the group continued to promote the job rotation among the leading cadres, arranged them to take up different posts in a planned and orderly manner according to work needs and characteristics of cadres. There were a total of 13 cadres involving in the job rotation in 2018.



二是 2018 年 3 月印发了《关于推进干部队伍年轻化的实施意见》，明确了中层领导人员退出领导岗位的条件和年龄要求，进一步落实干部退出机制。2018 年共有 4 位原中层领导人员退出领导岗位，转为非领导职务的中层专务。

Second, the group issued the Opinions on Implementation of Promoting the Younger Cadres in March 2018, which clarified the conditions and age requirements for middle-level leaders to quit from leading posts, and further implemented the mechanism for the cadres to quit. There were 4 former middle-level leaders who quitted from leading post in 2018, and transferred to middle-level senior management of non-leadership position.

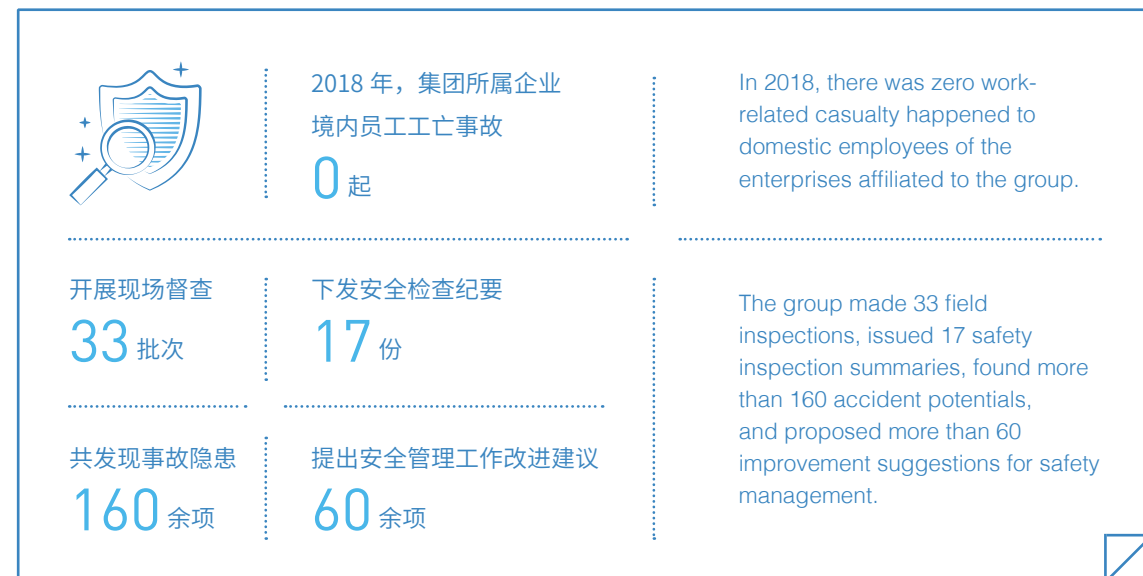


三是坚持大胆使用优秀年轻干部，更好地推动集团改革发展和二次创业进程。2018 年提拔的 23 名中层领导人员中有 13 名年龄在 45 岁及以下。

Third, the group insisted on making bold use of outstanding young cadres, which better promoted the reform and development as well as second undertaking of the group. Of all 23 middle-level leaders promoted in 2018, there were 23 at the age of and below 45.



安全生产，构筑基石 Safety Production Lay the Solid Foundation



完善管理体系建设 Perfect the Construction of the Management Systems

制订下发《安全生产节能环保绩效考核管理办法》《外包工程安全管理规定》《党政领导干部安全生产责任制规定》和《安全生产责任制考核管理办法》四项制度，修订了《总部安全生产责任制》，进一步完善了集团安全管理制度体系。以问题为导向，推动重点任务落实。



Formulated and issued four systems including *Measures for the Administration of Performance Appraisal for Energy Conservation and Environmental Protection in Safe Production*, *Provisions on Safety Management of Outsourced Projects*, *Provisions on Responsibility System for Safe Production of the Leading Cadres of the Party and Government* and *Measures for Examination and Administration of the Responsibility System for Safe Production*, revised the *Safe Production Responsibility System of the Headquarters*, which further improved the safety management system of the group. Oriented with problems, the group will promote the implementation of key tasks.



中钢西重：安全生产承诺签名活动

Sinosteel Xi'an Heavy Machinery Co., Ltd.: Signature Activity for Production Safety Commitment

2018年6月，中钢西重在炼铁设备分公司现场举行了安全生产承诺签名活动启动仪式，动员全体员工“查患纠违从我做起，行为安全时刻牢记”，时刻“坚守安全红线，担当安全责任”。此外，中钢西重还通过安全发展主题宣传、安全培训和宣讲、隐患排查治理、应急知识培训和演练等一系列活动，进一步树立红线意识和安全发展理念。

On June 2018, Sinosteel Xi'an Heavy Machinery Co., Ltd. held a opening ceremony for the signature

activity of production safety commitment, mobilized all employees to "Start from Myself to Check Hidden Danger and Rectify Violations, Bear the Behavior-based Safety in Mind All the Time", and "Adhere to Red Line for Safety and Assume the Safety Responsibility" all the time. In addition, Sinosteel Xi'an Heavy Machinery Co., Ltd also further established the red-line awareness and safety development concept by a series of activities like theme publicity on safety development, safety training and preach, identification and governance of potential risks, emergency knowledge training and drill, etc.



组织开展专项治理 Organize to Develop Special Rectification Campaign

2018上半年，集团组织开展了为期3个月的安全生产突出问题专项治理活动和为期6个月的“两基一现”安全管理专项提升活动，督促、指导企业夯实基础、巩固基层、守住现场，着力构建安全生产长效机制。

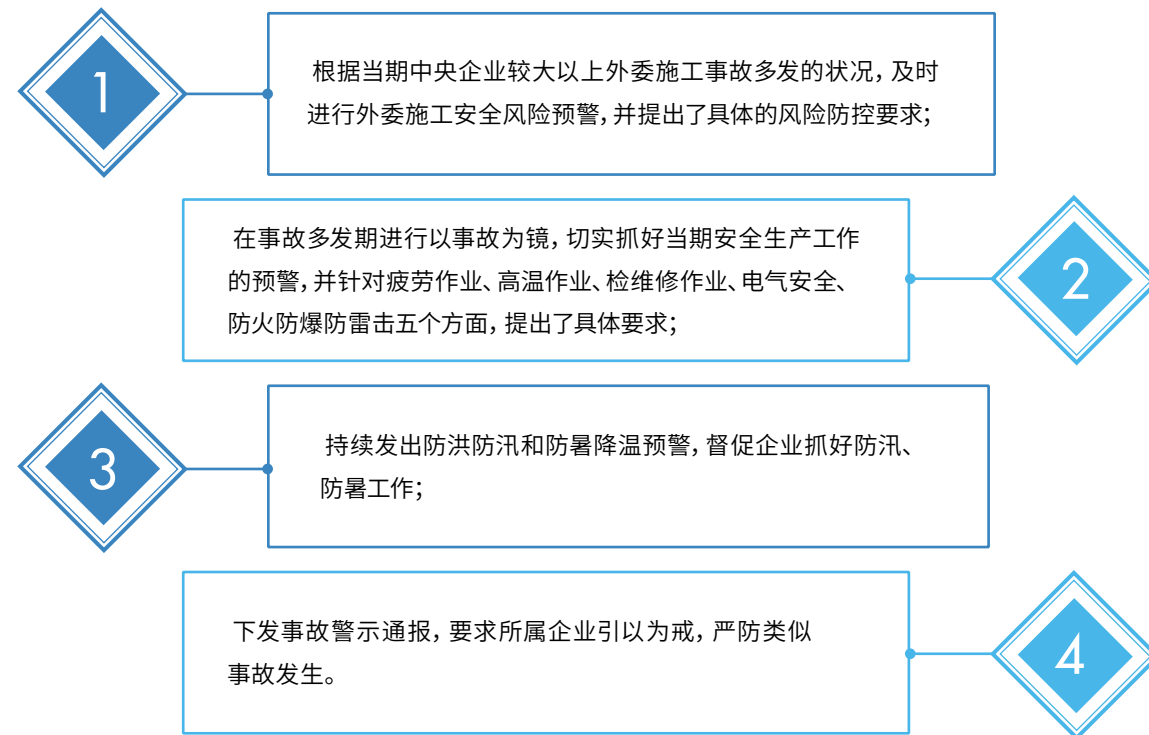
In 2018, the group organized to develop a 3-month special campaign to deal with the prominent production safety problems and a 6-month special promotion activity of "Two Basics and One Field" safety management, aimed at urging and supervising the enterprises to lay a solid foundation, consolidate the grass-roots, hold out the field, and strove to construct a long-term mechanism for production safety.



实施安全风险预警 Implement Security Risk Warning

2018年，集团公司多次实施安全风险预警：

In 2018, the Group implemented the security risk warning for several times:



According to the current situation that large and above scale outsourced construction accidents happen in central enterprises, the group conducted timely safety risk warning for outsourced construction, and proposed specific risk prevention and control requirements;

During the period that accidents happen frequently, the group focused on the warning for the work safety of the period by taking accidents as mirror, and proposed specific requirements for fatigue operations, high-temperature operations, high-temperature operations, inspection and maintenance, electrical safety, fire and explosion prevention as well as lighting protection;

Give out early warnings against flood and heatstroke, urge the enterprises to get prepared for flood control and heatstroke prevention;

Give out notices on accident warnings, requiring the enterprise concerned to take warning and prevent from similar accidents.

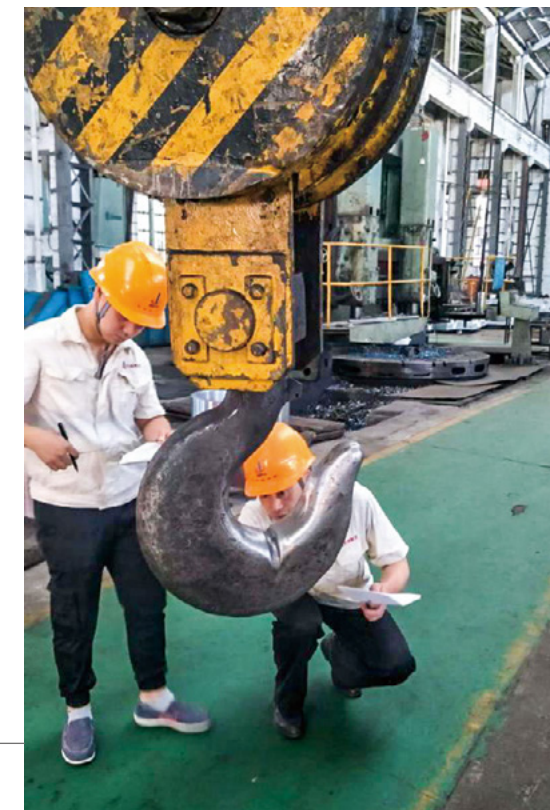
中钢衡机开展安全事故警示教育周活动

Sinosteel Hengyang Machinery Co., Ltd. Conducted Accident Warning Education Week



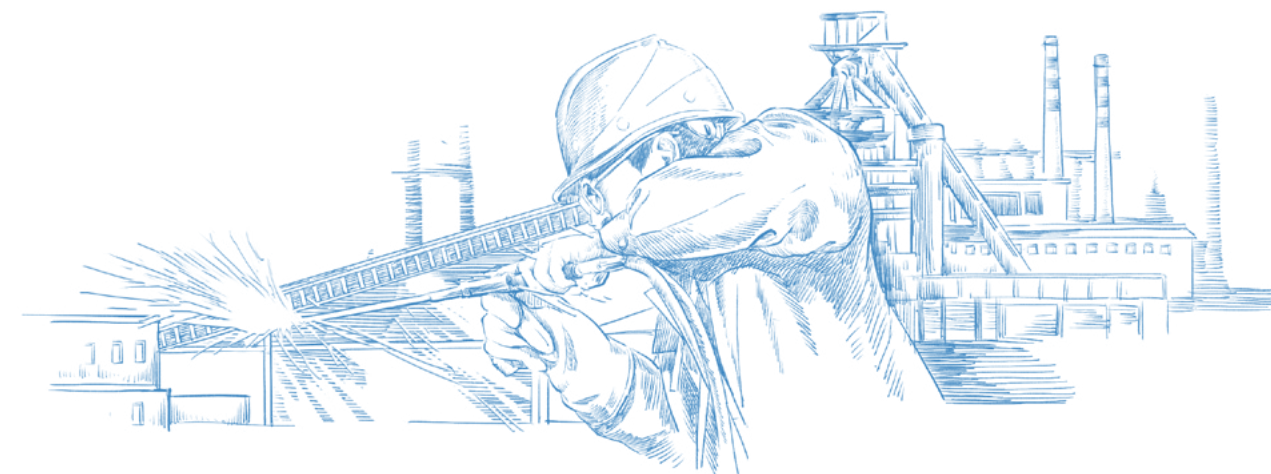
2018年6月，中钢衡机安全环保部组织约50名安全管理人员观看了《安全生产典型事故盘点》《人的不安全行为分析及16种危险人群》等安全教育警示片，进一步增强员工安全责任意识 and 法律意识。

In June 2018, the Safety and Environmental Protection Department of Sinosteel Hengyang Machinery Co., Ltd. organized about 50 safety management staff to watch the safety education warning film such as *Typical Accidents in Production Safety, Analysis on People's Unsafe Behavior and 16 Kinds of Risk Group*, etc., which further improved the employee's consciousness of safety responsibility and legal awareness.



中钢衡重检查组细查行车吊钩磨损情况

Sinosteel Hengyang Machinery Co., Ltd. Checks the Wear of Crane Hook



永续之道，绿色中钢

WAY TO SUSTAINABILITY, GREEN SINOSTEEL

中钢集团坚持“夯基垒台、立柱架梁、规范管理、量化考核”的总体工作思路，抓重点、补短板、打基础，着力构建节能环保长效机制。

我们以客户为导向创新了诸多绿色科技，并以此改善我们的生活、工作环境。我们在工作实践中采用一系列制度建设、科技创新等手段持续减少能源使用和温室气体排放，同时也在日常运营中努力减少自身的能源足迹，从而将气候变化的影响降至最低。

Sinosteel adheres to the general working concepts of "laying foundation and building base, setting up pillars and erecting beam, standardizing management, quantizing assessment", focuses on key points, strengthens the weak points, lays a solid foundation, and strives to build a long-term mechanism of energy conservation and environmental protection.

We have created many customer-oriented innovation green technologies, through which we improve our living and working environment. We have adopted a series of institutional construction, scientific and technological innovation and other means to reduce energy consumption and greenhouse gas emission in our working practice; meanwhile, we also seek to reduce energy use in our daily operations, thus minimizing the impact of climate changes.





科技创新， 助推中钢二次创业提档加速

SCIENTIFIC AND TECHNOLOGICAL INNOVATION,
ACCELERATE SINOSTEEL'S SECOND UNDERTAKING



科技创新是中钢集团二次创业不可或缺的助推力和加速器，是实现高质量发展的内生动力。2018年，中钢集团以科技规划为依托，研究政策，提升能力，促进转化，发挥科技创新对集团优势产业发展的推动作用。

The scientific and technological innovation is an indispensable impetus and accelerator for Sinosteel's second undertaking, and is also an endogenous driving force for high-quality development. In 2018, Sinosteel, relying on scientific and technological planning, studied policies, enhanced capacity, promoted transformation, and gave full play to scientific and technological innovation in promoting the development of the group's competitive industries.



科技新政研究宣贯 Study, Publicize and Implement the New Scientific and Technological Policies

积极与各主管部门沟通协调，掌握政策、争取政策、利用政策，更好地发挥政策在科技创新中的重要助推器作用。

In order to give full play to the important role of policy in scientific and technological innovation, Sinosteel communicates and coordinates actively with competent departments to master, strive for and utilize policies.



中钢集团组织召开科技创新及能力建设座谈会

Sinosteel Organized and Convened Scientific and Technological Innovation and Capacity Building Symposium

2018年12月7日，中钢集团组织召开所属企业科技创新及能力建设座谈会。科技部、工信部和国资委相关部门领导出席，听取中钢科技创新工作情况汇报，并详细介绍了相关科技政策精髓、行业市场动态和工作计划信息，帮助集团更好地把握相关政策精神和工作动态，继续在国家创新体系中继续发挥更大的作用。

Sinosteel organized a symposium on scientific and technological innovation and capacity building among the affiliated enterprises on December 7, 2018. Directors of the Ministry of Science and Technology, the Ministry of Industry and Information Technology of the People's Republic of China, and SASAC were invited to

attend the meeting. After listening to the report of the scientific and technological innovation of Sinosteel, the directors of the three ministries and commissions introduced in detail the essence of scientific and technological policies, industry market trends and schedule information to help Sinosteel grasp the spirit of relevant policies and work trend, and promote the group's existing national innovation platform resources to continue to play a greater role in the national innovation system.

中钢集团南京先进材料研究院成立

Sinosteel Nanjing Research Institute of Advanced Materials Was Established

2018年9月，中钢集团南京先进材料研究院正式成立。研究院主要从事高端磁性材料、新能源材料、高分子材料、金属制品等领域研发工作，同时配套科技孵化器、成果转化基金等，集聚研发资源，加快科技成果转化、知识成果转移以及产业并购为一体，对中钢集团吸引高端人才、完善科技创新体系、促进科技成果转化起到重要作用。



In September 2018, Sinosteel Nanjing Research Institute of Advanced Materials was established. The research institute was mainly engaged in high-end magnetic materials, new energy materials, high-polymer materials, metal products and others; meanwhile, it focused on R&D resources by supporting technology incubators, the achievement transformation fund, etc sped up the transformation of scientific and technological achievements, transformation of intellectual achievements and industry mergers and acquisitions as a whole, which played an important role in attracting high-end talents, improving the scientific and technological innovation system, promoting the transformation of scientific and technological achievements.



研发平台建设 Construct R&D Platform

2018年，中钢集团从政策导向和资源配置等方面支持所属企业建设国家级创新平台，大力支持所属国家重点实验室在相关行业开展竞争前技术、核心技术和共性技术及新产品研究；支持国家工程研究中心、国家级企业技术中心、行业产业技术创新联盟的培育和发展，提升行业服务能力和行业影响力。

截至2018年底，依托集团所属企业建立了29个各类国家级科技研发和服务平台，包括：

By the end of 2018, a total of 29 state-level R&D and service platforms were established relying on its affiliated enterprises, including:



In 2018, Sinosteel supported its affiliated enterprises to build a national innovation platform based on policy orientation and resource allocation, and strongly supported its key state laboratories to conduct research on pre-competition technologies, core technologies, generic technologies and new products in relevant industries; supported the cultivation and development of national engineering research centers, national enterprise technology centers, and industrial technology innovation alliances, thus to enhanced the service capacity and the industrial influence.

新增3家省级研发平台：

3 new provincial R&D platforms:





创新成果涌现 Innovation Achievements Sprang Up

2018 年以来，中钢集团所属企业再接再厉，科技创新各项工作进展顺利，数十项标志性重大成果陆续涌现。

Since 2018, the affiliated enterprises of Sinosteel continued to make persistent efforts, and made progress in scientific and technological innovations; dozens of major landmark achievements have emerged in succession.

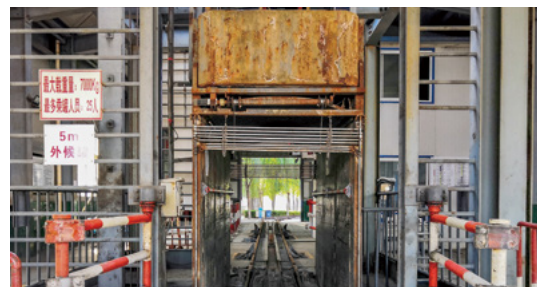


中钢富全矿业智能化建设向前迈进

Sinosteel Shandong Fuquan Mining Co., Ltd. Moved Forward in Intelligent Construction

2018 年 10 月，中钢富全矿业副井提升系统完成智能化升级改造，正式启用电梯模式运行，成为国内首家副井提升系统采用工业电梯模式运行的矿山企业。

In October 2018, Sinosteel Shandong Fuquan Mining Co., Ltd. completed intelligent upgrading for its hoisting system of auxiliary shaft, which is the first mining enterprise in China to adopt industrial elevator mode for the hoisting system of auxiliary shaft.



副井罐笼
Cage of Auxiliary Shaft

该模式创新之处在于：

Its innovations lie in :

- 1 在不改变原有安全程序模块基础上，增加联锁自动控制
On the basis of not changing the original security program module, added automatic interlocking control
- 2 研发了可自行升降罐帘，使其和安全门、摇台一起联锁控制，模拟电梯门实现自动开关
Developed automatic lifting cage curtain, so that it could be interconnected controlled with safety gate and cradle, and simulated the elevator door for automatic opening and shutoff
- 3 研发了一套罐笼接触式电池充电器，可以有效地保证充电安全及罐笼内部用电
Developed a set of contact-type battery charger of cage, which can effectively ensure the charger safety and power utilized within the cage
- 4 采用罐笼无线通讯装置，乘罐人员可实时了解罐笼运行状态，并实现了地表集控人员与罐笼内人员即时对讲、监控、报警等功能
Adopted wireless communication device of cage, the tank passengers can know the running state of cage in time, so that the centralized control personnel on the surface could talk with, monitor and warn the personnel inside the cage

中钢衡机研制卷取黑色金属强力型热轧卷筒创下国内记录

Sinosteel Hengyang Machinery Co., Ltd. Has Successfully Developed a Powerful Hot Roll, and It Broke the National Record



强力型热轧卷筒
Powerful Hot-rolled Roller

2018 年底，最大卷取带宽为 2400 毫米，最大带卷重量达 48.7 吨的强力型热轧卷筒顺利通过国内某大型钢铁公司用户验收，从中钢衡机发往用户现场，标志着中钢衡机成功研制出目前国内卷取黑色金属带材卷重最大、带宽最宽的强力型热轧卷筒。

At the end of 2018, the biggest reeling-up width is 2,400mm, and the powerful hot roll with the largest coiled stock of up to 48.7 tons passed the acceptance of a certain large-scale domestic steel company, so it was sent to the user's field from Sinosteel Hengyang Machinery Co., Ltd, marking that Sinosteel Hengyang Machinery Co., Ltd. has successfully developed a powerful hot roll with the largest strip coil weight of ferrous metal and the widest reeling-up width at home.



中钢马矿院干选回收系统总包工程带料成功试车

The Dry Separation Recovery System of Sinosteel Ma'an Shan Institute of Mining Research Co., Ltd. Has Been Tested Successfully with Materials

2018 年 10 月，中钢马矿院承担的包钢集团白云鄂博铁矿主排土场的含铁有用岩干选回收系统总承包工程项目全流程带料试车成功。该项目是在白云鄂博铁矿主排土场 4 号 5 号皮带之间，新建一套干选回收系统，处理量为 4500 吨/时，包含一条 1600 毫米给料皮带、两台 CDTG1527 干选机、一条 1200 毫米干选精矿皮带。给料皮带骑跨在 5 号皮带上方，设计巧妙，尾部可移动，实现了新旧系统的自由切换，在国内首次采用该工艺。

In October 2018, the general contracting project of the dry separation and recovery system for useful rocks containing iron at the main refuse dump of BaoGang Group Baiyun-Ebo Iron Mine undertaken by Sinosteel Ma'an Shan Institute of Mining Research Co., Ltd. was successfully tested with materials. The project was located between belt No.4 and No.5 of the main refuse dump of Baiyun-Ebo Iron Mine, and a new set of dry separation and recovery system was established, with the processing capacity of 4,500 tons/hour, including a 1,600mm feed belt, two sets of CDTG1527 dry separator and one set of 1,200mm dry-separation concentrate belt. The straddling of feed belt is located above No.5 belt, with clever design and movable tail, and it can switch freely between old and new systems, and this technology was adopted in China for the first time.



科技成果转化

Transformation of the Science and Technology Achievements

梳理钢铁行业耐火材料、采选矿、铁合金和碳素领域绿色节能减排先进技术，完成中国金属学会委托的钢铁行业绿色节能减排先进技术相关丛书编写。

Sorted out advanced technologies for green energy conservation and emission reduction in refractory materials, mining and beneficiation, ferroalloy and carbon, and completed the preparation of books on advanced technologies for green energy conservation and emission reduction in steel industry entrusted by the Chinese Society for Metals.

2018年，依托科技规划和产业政策，

谋划梳理企业潜在项目 **67** 项、

已转化或待转化重大科技成果 **80** 项

Relied on scientific and technological planning and industrial policies, Sinosteel planned and sorted out 67 potential projects of enterprises and 80 major scientific and technological achievements that have been transformed or yet to be transformed in 2018.



中钢安环院：工业过程气体激光在线监测设备产业化

Sinosteel Wuhan Safety and Environmental Protection Research Institution Co., Ltd.: Industrialization of Industrial Process Gas Laser Online Monitoring Equipment

2018年，中钢安环院开发了一氧化碳等气体激光在线检测分析及仪器，能够在各种高温、高粉尘、高腐蚀环境下进行实时在线的气体浓度测量，具有准确性高、响应速度快、运行费用低等优点。该产品目前已获得国家防爆电气产品质量监督检验中心颁发的合格证，在国家光电子信息产品质量监督检验中心通过多项电磁兼容试验。



原国家安监总局副局长王德学调研监测设备

Wang Dexue, Former Deputy Director of Former State Administration of Work Safety Investigates the Monitoring Equipment

In 2018, Sinosteel Wuhan Safety and Environmental Protection Research Institution Co., Ltd. develop the gas laser online detection analytical technology and instrument for carbon monoxide, etc., which can measure the gas concentration online in real time under high temperature, high dust and high corrosive environment, with the advantages of high accuracy, fast response speed, low operation costs, etc.

Currently, the product has obtained the qualification certificate issued by China National Quality Supervision and Test Center for Explosion Protected Electrical Products, and has passed multiple electromagnetic compatibility experimentations in National Optical Products Inspection Services Center.

中钢耐火：大型焦炉、热风炉用新型材料研发及产业化

Sinosteel Refractory: Research and Development and Industrialization of New Materials for Large-scale Coke Oven and Air-heater

中钢耐火通过对耐材的技术创新，实现了焦炉的有效节能减排，填补了国内外焦炉节能环保技术的空白。

这种新型材料经过优化配置，在大型焦炉、热风炉上使用，能够大幅提升大型焦炉的运行质量，提高大型焦炉的生命周期，降低炼吨焦所需的燃料量，从源头上减少氮氧化物、二氧化硫及二氧化碳等污染物的排放，节能、减排效果明显。整体可使焦炉节能达到 20% 至 30%，排放减少 15% 至 20%，出焦效率提高至少 5%。

近三年，该项目已实现新增销售收入超过 5 亿元，项目技术连续四年入选《国家重点节能低碳技术推广目录》（节能部分），授权专利 10 项，获冶金科学技术一等奖。

Sinosteel Refractory realized the effective energy conservation and emission reduction of coke oven by technological innovation of refractory materials, which filled the gap in energy conservation and

environmental protection technology of coke oven at home and abroad.

This new material can be used on large-scale coke oven and air-heater through configuration optimization, which can significantly improve the operating quality of the large-scale coke oven, improve the life cycle of the large-scale coke oven, lower the amount of fuel required by producing a ton of coke, reduce the emission of pollutants such as nitrogen oxide, sulfur dioxide and carbon dioxide at the source, with obvious energy conservation and emission reduction effect. The coke oven can save 20% to 30% of the energy as a whole, with the emissions reduced by 15% to 20%, and the coking efficiency increased by at least 5%.

In recent three years, this project has increased the sales revenue of more than 500 million RMB, and the project technology has been listed in the *Catalogue for National Key Energy-saving and Low-carbon Technology Promotion (Energy-saving Section)*, with 10 authorized patents, and is awarded with First Prize for Metallurgical Technology.



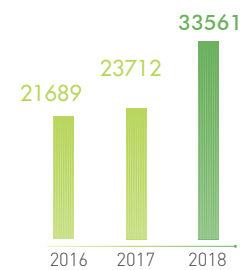
焦炉用新型耐火材料生产现场

Production Site of New Refractories for Coke Oven

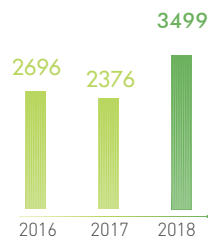


重要指标 Important Indicator

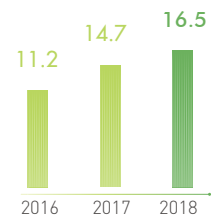
研发投入
R&D investment
(万元 /RMB Ten Thousand)



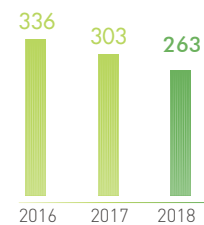
研发人员数量
Number of R&D staff
(人 /Person)



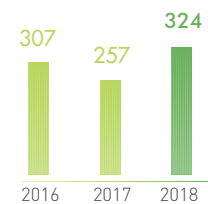
研发人员比例
Ratio of R&D staff
(百分比 /%)



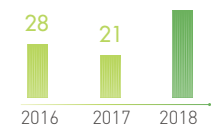
当年申请专利数
Patent applications of the year
(项 /Item)



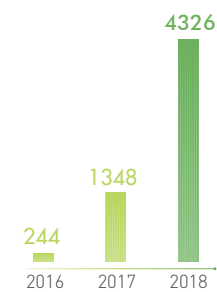
当年授权专利数
Authorized patents of year
(数 /Item)



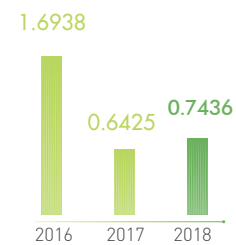
重要科技奖项
(国家 + 省部级)
Major technological awards
(National + Ministerial and provincial level)
(项 /Piece)



环保投入
Environmental protection investment
(万元 /RMB Ten Thousand)



碳强度
Carbon intensity
(CO₂ 吨 / 万元
Ton of carbon dioxide equivalent (CO₂e) / RMB 10,000)



2018年，中钢集团科技创新奖项与荣誉（部分）：

Scientific and technological innovation awards and honors received by Sinosteel in 2018 (partial):

中钢马矿院
Sinosteel Ma'an Shan Institute of Mining Research Co., Ltd.

中钢安环院
Sinosteel Wuhan Safety and Environmental Protection Research Institution Co., Ltd.

国家科技进步 **二等奖**

Second Prize of National Award for Progress in Science and Technology

省部级科技 **进步奖** 及部级工法称号

Provincial and Ministerial Award for Progress in Science and Technology and Ministerial Award for Technological Method and Engineering Method



中钢热能院

Sinosteel Anshan Research Institute of Thermo-Energy Co., Ltd.

辽宁省科技进步 **三等奖**

Third Prize of Liaoning Provincial Award for Progress in Science and Technology

辽宁省金属学院优秀科技论文 **一等奖**

First Prize of Liaoning Institute of Metals for Excellent Article of Science and Technology



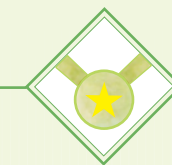
中钢洛耐院

Sinosteel Luoyang Institute of Refractories Research Co., Ltd.

牵头完成的“现代煤气化装置用关键耐火材料研发及工业化应用集成技术”项目

获 2018 年度河南省科学技术进步 **一等奖**

Excellent Refractory Enterprise in Henan Province "Research and Development of Key Refractories for Modern Coal Gasification Plant and Industrial Application Integration Technology" completed by the Company was awarded with First Prize of Henan Province for Progress in Science and Technology in 2018.



中钢邢机
Sinosteel XTMMC

中钢股份副总工程师、中钢洛耐院院长 李红霞
Li Hongxia, Deputy Chief Engineer of Sinosteel and President of Sinosteel Luoyang Institute of Refractories Research Co., Ltd.

国家工业互联网试点 **示范项目**

National Pilot Demonstration Project of Industrial Internet

中华国际科学交流基金会 **“杰出工程师奖”**

"Excellent Engineer" awarded by International Scientific Exchange Foundation of China





勉力夯实环境管理

Strive to Strengthen the Environmental Management

2018年，中钢按照“一级抓一级，一级考核一级，层层抓落实”的原则，修订完成了《中钢集团有限公司安全生产节能环保绩效考核管理办法》，使节能环保绩效考核更加系统、全面、量化可操作。明确了节能环保制度建设、“三同时”落实、设施检查维护、工艺技术装备改造升级等4大类13项节能环保重点工作任务。编制了《中钢集团环保工作现场检查表》和《中钢集团环保工作文件检查表》。



In 2018, Sinosteel revised the Measures of Sinosteel for the Administration of Performance Appraisal for Energy Conservation and Environmental Protection in Safe Production according to the principle that "Supervised and responsible step by step, implementation level by level", so as to make the performance appraisal of energy conservation and environmental protection more systematic, comprehensive, quantifiable and operable; made clear of 13 key tasks of energy-saving and environmental protection of 4 categories, including the construction of energy-saving and environmental protection system, implementation of "Three Simultaneities", equipment inspection and maintenance, transformation and upgrading of technological process equipment, etc.; prepared the Checklist of Sinosteel for Environmental Protection Site and Checklist of Sinosteel of Working Documents on Environmental Protection.

创新成就绿色运营

Innovation Leads to Green Operations

中钢集团通过科技创新推进自身与合作方的低成本、低能耗、高效率、高效益运营模式实施落地。

Sinosteel implemented the operation mode with low costs, low energy consumption, high efficiency and high benefits by scientific and technological innovation means between itself and the partners.

2018年，集团所属企业污染事件发生 **0** 起

In 2018, no contamination accident happened to the affiliated enterprises of Sinosteel.

中钢设备带式焙烧机球团技术助力发展绿色钢铁

Pelletizing Technology of Belt-type Roasting Machine Developed by Sinosteel Equipment Assists in the Development of Green Steel

2018年初，中钢设备完成的《带式焙烧机球团技术开发与应用》项目通过了由中国钢铁工业协会组织的科技鉴定会的鉴定。鉴定委员会认为，该成果达到了国际先进水平，具有重要的推广应用价值。这项填补国内空白的技术成果，具备了走出去参与国际市场竞争能力，彰显了“中国力量”。

带式焙烧机生产率高，具有自动化、大型化优势，但复杂性强，因此国内技术公司完全依靠自身力量提供带式焙烧机球团技术仍是一项空白。在这一背景下，中钢设备坚持自主创新，确立了攻关项目，做了大量的研究工作，最终独立完成伊朗SISCO公司250万吨规模的带式球团厂设计，形成了多项专利技术，填补了国内空白。

At the beginning of 2018, the Development and Application of Pelletizing Technology of Belt-type Roasting Machine project completed by Sinosteel Equipment was appraised by the Technology

Appraisal Committee organized by China Iron and Steel Industry Association. The Technology Appraisal Committee believed that, the achievement has reached the internationally advanced level, with important popularization and application value. The technological achievement, which filled the gap at home, has the capacity to go abroad and compete in the international markets, demonstrating the "power of China".

The belttype roasting machine has high productivity and advantages in automation and enlargement; however, as it is so complex that there is no domestic technological companies can provide pelletizing technology of belttype roasting machine completely by themselves. Under such context, Sinosteel Equipment adhered to independent innovation, and established a key project, made a lot of research, finally independently completed the design of belt-type pelletizing plant with the scale of 2.5 million tons for SISCO company in Iran, including a number of patented technology, and filled the domestic gap.



中钢设备承建的印度 JSPL90 万吨焦化项目
JSPL900,000 Tons of Coking Project in India Undertaken by Sinosteel Equipment



中钢矿业向科技创新和工艺优化要效益，让矿山再现青山绿水

Sinosteel Mining Co.,Ltd. Get Benefits from Scientific and Mine Land Reclamation



从中钢正蓝旗矿业一眼望去，一侧是广阔的农田，另一侧是无垠的草地，美丽的风光让人根本感觉不到这是一座矿山。可以说，中钢矿业所属的矿山已经彻底告别了“脏险累差”，车间里多是自动化生产加工设备，几乎看不到工人。

Upon the first glance from Sinosteel Zhenglan Banner Mining Co., Ltd., it is vast farmland on one side, with endless meadow on the other side, and beautiful scenery makes it almost impossible feel it a mine. It can be said that, the mines owned by Sinosteel Mining has completely bid farewell to "dirty, dangerous, tiring and poor" conditions, and the workshop is configured with automated production and processing equipment mostly, with hardly any workers in sight.

2018年，中钢矿业坚持科技创新和关键技术工艺优化，除了依托矿业公司自身的科技攻关智慧外，还广泛借助社会群体的力量，充分发挥创新要素合力。如与安环院、制品院等科研机构，以及东北大学、北科大等大专院校保持良性互动、协同创新，深化产学研多领域的合作。此外，中钢矿业还邀请西安建筑科技大学的专家对山东尾矿库进行绿化改造，力争将其建成高标准绿色矿山的全国典范。

In 2018, Sinosteel Mining adhered to the technological innovations and optimization of key technological process, it also made full use of the strength of social groups, and made full use resultant force of innovative elements in addition to the scientific and technological wisdom of Sinosteel Mining itself. For example, it maintained positive interaction, made collaborative innovation with Sinosteel Wuhan Safety and Environmental Protection Research Institution Co., Ltd., Sinosteel Zhengzhou Research Institute of Steel Wire and Steel Wire Products Co., Ltd. and other scientific research institutions as well as Northeastern University, University of Science and Technology Beijing and other universities and colleges, and deepened the industry-university-research cooperation in multiple fields. In addition, Sinosteel Mining also invited experts from Xi'an University of Architecture and Technology to make greening improvements to tailing impoundments in Shandong, and strove to develop it into a national model of high-standard green mine.



中钢刘塘坊矿业
Sinosteel Anhui Liutangfang Mining Co., Ltd.

中钢安环院打造精品服务，助力资源回收利用

Sinosteel Wuhan Safety & Environmental Protection Research Institute Co., Ltd. created high-quality services to facilitate the recovery and utilization of resources



2018年，中钢安环院向建设单位武汉深能环保新沟垃圾发电有限公司顺利完成“钥匙”转交，标志着深能环保新沟垃圾发电厂渗滤液处理系统扩容改造项目圆满完成。该项目属于武汉市节能减排“零排放”工程，解决了长期困扰垃圾焚烧发电厂的渗滤液处理难题，实现了污染物充分治理、废水废渣充分回收利用，同时也为企业带来良好的经济和社会效益。

In 2018, Sinosteel successfully completed the "key" transfer to the construction unit Wuhan Shenneng Environmental Protection Xingou Waste Power Generation Co., Ltd., marking the successful completion of the leachate treatment system expansion and transformation project of Shenneng Xingou Garbage Power Plant. The project belongs to the "zero emission" project of Wuhan Energy Conservation and Emission Reduction, which has solved the leachate treatment problem that has long plagued garbage incineration power plants, achieved full treatment of pollutants, and full recycling of wastewater waste residue. At the same time, it also brings good economic and social benefits to enterprises.



坚定推进低碳发展

Promote Low-carbon Development Resolutely

中钢集团深刻理解发展低碳经济有利于“资源节约型，环境友好型”的两型社会建设，有利于实现人与自然和谐相处。我们遵循专业、创新和高效的原则，通过建设能源管理体系、实施节能项目、开展技术和管理节能等方式，持续减少运营过程中的能源消耗和温室气体排放，推进低碳发展进程，为全社会的降碳减排任务贡献力量，助力低碳社会建设。

Sinosteel is fully aware that, the development of low-carbon economy is conducive to the construction of "resource-economical and environment-friendly society", and to the harmony between human beings and nature. We follow the principle of profession, innovation and high efficiency, reduce the energy consumption and greenhouse gas emission during the operation by constructing energy management system, implementing energy-saving projects and developing energy conservation of technologies and management, etc., promote low-carbon development, contribute to the task of carbon reduction and emission reduction, and assist in the construction of low-carbon society.



中钢天澄创新研制一对“明星 CP”：PM2.5 捕手 & 扬尘克星

Sinosteel Tiancheng Developed a Couple of "Star CP" innovatively: PM 2.5 Catcher and Dust Cracker



PM2.5 捕手：让日子徜徉在“新风”里

由中钢天澄牵头承担的国家“十二五”863课题“钢铁窑炉烟尘PM2.5控制技术与装备”项目取得重大成果，并得以快速转化和工业应用，于2014年12月在鞍钢180吨转炉烟气除尘改造项目上建成示范工程，该成果荣获2017年度环保部环境保护科学技术奖二等奖。

成果先进之处：

The achievements are advanced in that:

是控制烟气细颗粒物的有效手段，是国家倡导的具有原始自主创新的新技术和新装备。

It is an effective means to control fine particulate matters in fume, and is a new technology and equipment with original independent innovation advocated by the state.

显著提升了我国对PM2.5细颗粒物控制技术上的核心竞争力。

It has significantly improved the core competitiveness of China in PM2.5 control technologies.

可用于钢铁、有色金属、水泥、机械、化工等行业，应用范围十分广泛。

It can be used in iron and steel, non-ferrous metals, cement, machinery, chemical industry, etc., with a wide range of application.

PM 2.5 Catcher: Making life wander in the fresh air

The "Control Technology and Equipment for the Fume of Steel Furnace", which was a 863 project of national "12th Five-Year" Plan and led by Sinosteel Tiancheng, made significant achievements, and was transformed and applied in industry rapid. It was constructed into a demonstration project on fuel gas and dust removal renovation project of 180t converter in Ansteel, which was awarded with Second Prize for Environmental Protection Technology Award by the Ministry of Environmental Protection.

核心技术和性能指标达到世界领先水平。

The core technologies and technical performance indicators have reached the world's leading level.

节能显著、运行稳定、价格实惠的技术装备。

It is the technological equipment with remarkable energy conservation, stable operations and affordable price.

阳光膜封闭技术与材料：是扬尘的克星，亦是靓丽的风景

2018年5月，中国西北地区最大的膜结构料（灰）场封闭工程成功封顶，这个采用最新膜材料和大跨度轻钢结构型式铸就的“东西长224米，南北宽145米，封闭面积高达33000平米”的新型料场，颠覆了人们多年来对传统料场封闭形式的想象，集“环保、节能、景观”等诸多特性于一身，顶部全部采用PVDF膜材料封闭，檐口标高12.6米，最大建筑高度22.6米，封闭内最高净空约20米，可储存各类矿粉约13万吨。从高空和远处眺望，如“大鹏（棚）展翅”，成为一道靓丽的风景线。

该项目是中钢天澄承担的“十三五”国家重点研发计划课题“城市料场（灰场）扬尘控制阳光膜封闭技术与材料”的示范工程之一。

成果先进之处：

- 阳光膜大棚封闭效果理想，照明效果显著。
- 膜材料和膜建筑结构安全稳定，可抵御台风、雪灾等恶劣天气。
- 卓越的环保特性、全封闭式结构设计、高效的节能率、低建设成本和维护成本。
- 长时间的使用寿命、便捷的施工条件、智能化的监控体系。
- 是大型料场无组织排放扬尘控制的理想方案。



料场鸟瞰

Overlook Stock Yard

Solar membrane sealing technology and material: is not only the dust cracker, but also beautiful scenery

In May 2018, the largest membrane structure stock (ash) yard project was capped successfully in China's northwest region, and this new stock yard "with the east-west length of 224m, south-north length of 145m, enclosed area of up to 33,000 square meters" constructed by the latest membrane materials and large-span light steel structure, has overturned people's imagination for the enclosed form of traditional stock yard, which has integrated many features like "environmental protection, energy conservation and beautiful scenery" as one, with its top sealed by PVDF membrane material, cornice elevation of 12.6 meters, the highest clearance within the enclosure with the maximum building height of 22.6 meters, which can store about 130,000 tons of all kinds of ores. When overlooking from the height and distance, it looks like a great hawk spreading its wings, becoming beautiful scenery.

This project is one of the demonstration projects of "solar membrane sealing technology and materials for controlling dust in urban stock yard (ash yard)", which is a national key research and development project of the 13th Five-Year Plan undertaken by Sinosteel Tiancheng.

The achievements are advanced in that:

- The solar membrane greenhouse has satisfactory sealing effect, with remarkable lighting effects.
- The membrane materials and membrane construction are safe and stable, which can resist typhoon, snow disaster and other bad weather.
- With excellent environmental protection features, fully enclosed structure design, efficient energy saving rate, low construction cost and maintenance cost.
- Long service life, convenient construction conditions, intelligent monitoring system.
- Ideal scheme for controlling the unorganized dust emissions in large-scale stock yard.



初心之源，和谐中钢

ADHERE TO THE ORIGINAL INTENTION,
CREATE HARMONIOUS SINOSTEEL

中钢集团以“履行社会责任，共创和谐环境”为年度主题，以真诚透明的态度践行承诺，积极回应利益相关方的关切与期望，实现共同发展、共同繁荣。

With the annual theme of "fulfilling social responsibilities and creating a harmonious environment", Sinosteel implements its commitment in a sincere and transparent manner, responds to the concerns and expectations of stakeholders actively, so as to achieve common development and prosperity.





坚持合作共赢，为构建更加紧密的中非命运共同体作出新贡献

ADHERE TO COOPERATION AND MUTUAL BENEFITS, AND MAKE NEW CONTRIBUTIONS TO BUILD AN EVEN CLOSER CHINA-AFRICA COMMUNITY WITH A SHARED FUTURE



中国和非洲从来就是休戚与共的命运共同体，双方有着深厚的传统友谊和良好的合作关系。一直以来，中钢集团立足中非关系的大局，高度重视与非洲相关企业的合作，于上世纪 90 年代率先走进非洲，本着互利互惠、优势互补的原则，在这片“富饶大陆”上不断深耕细作，陆续在南非、津巴布韦投资约 35 亿元人民币，建设了 3 个铬矿资源开发与加工项目，铬铁总产能近 100 万吨 / 年，为促进中国钢铁工业发展、繁荣当地经济作出了重要贡献。

中钢在非发展的 20 多年里，始终注重做中非友好的连接纽带，生意做到哪里就在哪里播下友好的种子，项目建在哪里就在哪里树起友谊的丰碑。

China and Africa have always been a community with a shared future, and both sides enjoy profound traditional friendship and sound cooperative relationship. Based on the overall situation of China-Africa relationship, Sinosteel has always attached great importance to the cooperation with Africa-related enterprises. It took the lead into Africa in the 1990s, and made deep ploughing and intensive cultivation constantly on the rich continent according to the principle of mutual benefits and complementary advantages, Sinosteel invested about 3.5 billion RMB into South Africa and Zimbabwe, constructed 3 chrome ore resources development and processing projects, with the ferro-chrome production capacity of nearly 1 million tons/year; therefore, it has made an important contribution to promoting the development of China's iron and steel industry and the prosperity of the local economy.

Sinosteel has always focused on building a bond of friendship between China and Africa in the more than 20 years of development in Africa; wherever the business is done, the seeds of friendship will be sown; wherever the project is built, a monument of friendship will be erected.



2008 年中钢集团发布中国企业第一份可持续发展国别报告

Sinosteel released the first Africa sustainability report in 2008, which is also the first country report of the Chinese enterprises



十年磨一剑，2018 年中钢发布第二份非洲报告

Sinosteel released the second Africa sustainability report in 2018



坚持走工业化发展之路，实现经济共荣 Adhere to the Way of Industrial Development, Achieve Economic Prosperity

中钢与非洲最初合作起步于单纯的进出口贸易。在中南建交之前成立了第一家中南合资企业——中钢南非铬业有限公司，成为当时南非最大规模的资源类企业。随着中非经济的发展与南南合作的加强，中钢根据非洲工业化发展的需要，大力开展国际产能合作，逐步发展到“资源 + 贸易”“资源 + 工业”相结合的新合作模式。通过实业化的带动，中钢与非洲相关企业分享了技术与经验，有力带动和促进了当地经济的发展。

The initial cooperation between Sinosteel and Africa started from pure import and export trade. Before the establishment of diplomatic ties between China and South Africa, the first China-South Africa joint venture - ASA Metal Pty. Ltd. - was established, and it was the largest resource enterprise in South Africa at that time. With the economic development in China and Africa and the strengthening of South-South cooperation, Sinosteel promoted the international capacity cooperation vigorously, gradually developed the new cooperation mode combining "resources + trade", "resources + industries", built and cultivated an African resources industrial platform, built up smelting plants one after another in Southern Africa, promoted the mining engineering construction in Midwest and Northern Africa. By industrialization, Sinosteel shared technologies and experience with relevant African enterprises, thus effectively promoting the development of local economy.



中钢津巴布韦开采出全球地下最深的铬矿山

Zimasco Consolidated Enterprises Ltd Mined the World's Deepest Underground Chromium Mine



坚持走本地化运营之路，实现合作共赢 Adhere to localized Operation, Achieve Win-win Cooperation

中钢以合资的方式运作在非企业，积极推进本土化运营。除董事会、设计、施工等工作由国内团队担当，合资企业的运营管理基本由当地员工和职业经理人负责，最大程度发挥各自的比较优势，取得了巨大成功。中钢在非洲的工厂与工程项目直接和间接解决了近万人的就业，拉动了一批配套产业和服务业的发展，为当地政府贡献了大量税收，赢得了当地各方的一致认可与尊重。



中钢集团在非企业本地化雇佣率高达 99%

The localized employment rate of Sinosteel's enterprises in Africa reached up to 99%

Sinosteel operates the enterprises in Africa in the means of joint venture, and promotes the localized operations actively. Except the Board of Directors, design and construction were assumed by domestic teams, the operation and management of the joint venture were undertaken by local staff and professional managers, utilized their respective comparative advantages and achieved great success. Sinosteel's factories and engineering projects in Africa have provided

employment for nearly 10,000 persons directly and indirectly, stimulated the development of a number of supporting industries and service industries, contributed a great deal of tax revenue to local governments, and won unanimous recognition and respect of all local parties.

坚持走绿色发展之路，实现生态共护 Adhere to Green Development, Achieve Joint Ecological Protection

中钢十分注重维护非洲良好的生态环境，着力发展“绿色工业”，在非洲的铬铁厂采用了世界最先进的加工设备，运用封闭冶炼技术，不仅大幅降低碳排放量，还能将生产过程中产生的热能回收发电、循环利用。结合保育矿区、复垦植被，努力实现工业发展对自然环境的“零伤害”。中国国家主席习近平一直强调“绿水青山就是金山银山”，中钢通过身体力行传播到了非洲大陆。我们与非洲人民同样希望，若干年后在这片广袤土地上，不仅挺立着世界上最先进的工厂，而且在蓝天白云下，青山依旧，绿水长流。

Sinosteel attaches great importance to maintaining good ecological environment in Africa, strives to develop a green industry, adopts the world's most advanced processing equipment in ferro-chrome plant in Africa, and applies closed smelting technologies, which not only reduced the carbon emission significantly, but also recycles the heat generated during the production for power generation for cyclic utilization. Combining the conservation of mining areas and reclamation of vegetation, Sinosteel strives to achieve "zero harm" of industrial development to natural environment. Chairman Xi Jinping has stressed repeatedly that, "Lucid waters and lush mountains are invaluable assets", Sinosteel spread the concept to African continent by earnest practice. We share the same hope with the African people that, not only the world's most advanced factories will stand on this vast land, but also will the blue sky and white clouds be with us, with green mountains and flowing water.

坚持走和谐共生之路，实现幸福共享 Adhere to Harmonious Coexistence, and Achieve Happiness Sharing

“把心留在非洲”是中钢当地企业文化的重要内涵，“真、实、亲、诚”是中钢坚持履行社会责任的心声。中钢在搞好经营发展的同时，不忘反哺当地社会，广泛参与社区活动、公益事业，尽可能为所在地区人民带来更多的帮扶和福利。多年来，中钢在南非资助数十间中小学校，设立奖学金帮助优秀学生攻读大学。据悉，已经有受资助的毕业生加入到采矿与冶金工程公司，以自己的专业技术回馈社会，实现了企业与社会和谐共生发展。



奎奎社区医院护士合唱《中钢之歌》以表达谢意

Nurses of Kwekwe Community Hospital Sings the Song of Sinosteel to Express Their Gratitude

Sinosteel keeps to fulfillies social responsibility with sincerity, honesty, kindness and earnestness. While focusing on business development, Sinosteel never forgets to repay local society, by extensively participating in community activities and public welfare undertakings, Sinosteel tries its best to help with and bring more welfare to local people. Over the years, to realize the harmonious co-existence of enterprises and society, Sinosteel has funded dozens of primary and secondary schools in South Africa, and set up scholarships to help outstanding students to go to university. It is reported that some funded graduates have joined Sinosteel to give back to the society with their professional skills.



资助学校学生

Students of Aided School



一带一路，携手共建 Implement Belt & Road Initiative, Join Hands to Build a Better Future

中钢集团积极践行“一带一路”倡议和国际产能合作，2018年海外工程业务新签约额再创新高，持续带动国内工程技术、装备制造、材料等业务“走出去”，在业界具有重要影响。

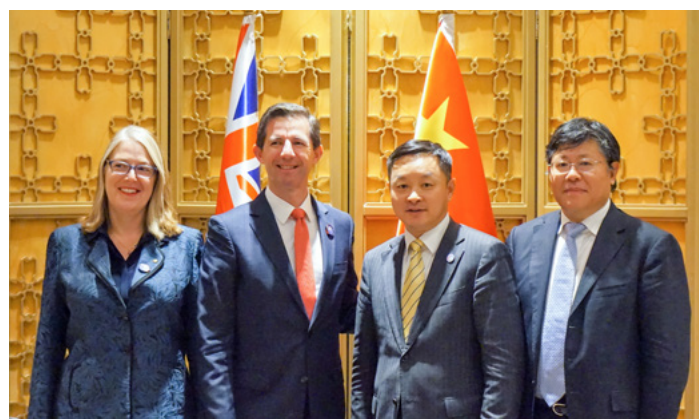
Sinosteel has been implementing the "Belt and Road" Initiative actively and promoting international production capacity cooperation, and signed new contracts for overseas engineering business, accelerated the export of domestic engineering technology, equipment manufacturing, materials and other businesses, played an important role in the industry.



徐思伟董事长率中钢交易分团参加首届中国国际进口博览会

Chairman Xu Siwei led the Sinosteel Trading Group to participate in the first China International Import Expo

11月5日—10日，主题为“新时代 共享未来”的首届中国国际进口博览会在上海举行。这是迄今为止世界上第一个以进口为主题的国家级展会，是国际贸易发展史上的一大创举，体现了中国支持多边贸易体制、推动发展自由贸易的一贯立场，是中国推动建设开放型世界经济、支持经济全球化的实际行动。



参会期间，徐思伟董事长应邀与澳大利亚贸易旅游投资部长参议员西蒙·伯明翰和澳大利亚驻华大使安思捷进行了亲切友好会谈。

During the meeting, Xu Siwei was invited to hold friendly talks with Australian Minister of Trade, Tourism and Investment, Simon Birmingham and Australian Ambassador, Ms Jan Adams.

From November 5th to 10th, the first China International Import Expo with the theme of "New Era, Shared Future" was held in Shanghai. This is the world's first national-level import exhibition. It is a great innovation in international trade history, which reflects China's consistent position in supporting the multilateral trading system and promoting the development of free trade. It is a practical action to promote an open world economy and support economic globalization.

Chairman Xi Jinping attended the opening ceremony and delivered a keynote speech entitled "Work Together for an Open Global Economy That is Innovative and Inclusive". Xusiwei, chairman of

国家主席习近平出席开幕式并发表了题为《共建创新包容的开放型世界经济》的主旨演讲。中钢集团董事长、党委书记徐思伟现场聆听了习近平主席的演讲，并第一时间向中钢集团代表团传达习近平主席讲话精神。中钢股份副总经理宫敬升参加相关论坛及签约活动。

在中央企业交易团集中签约活动中，中钢与三家国外知名供应商签署电解铜、天然橡胶、锰矿合作框架协议。

Sinosteel, listened to Chairman Xi Jinping's speech at the scene and conveyed the spirit of President Xi Jinping's speech to the delegation of Sinosteel for the first time. Gong Jingsheng, vice president of Sinosteel, participated in related forums and signing activities.



Sinosteel signed cooperation framework agreement respectively on electrolytic copper, natural rubber, and manganese mines with three well-known foreign suppliers.

刘安栋总经理一行赴澳参加中澳商务理事会等活动

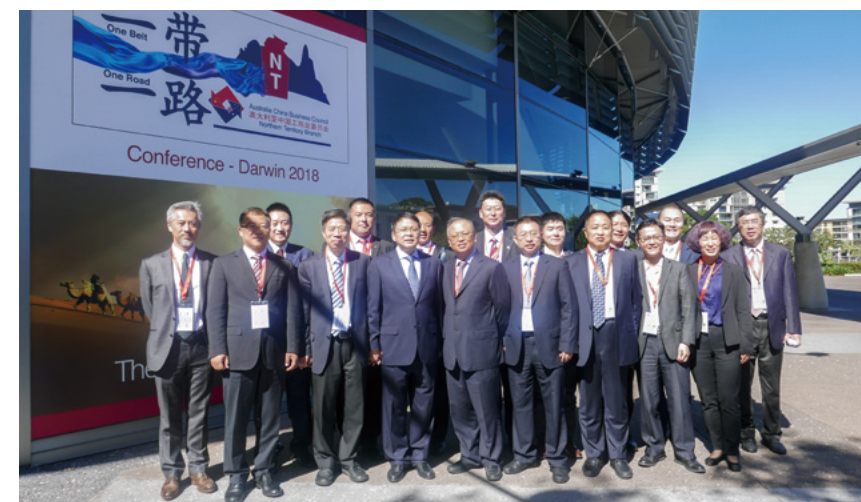
President Liu Andong and his delegations went to Australia to participate the China-Australia Business Council and other activities

2018年7月9日，集团总经理、党委副书记刘安栋赴澳大利亚出席中国-澳大利亚商务理事会并作致辞。中钢集团作为商务理事会主席单位，刘安栋代表商务理事会和中钢集团向长期以来给予支持和信任的嘉宾表示感谢，回顾了中澳两国合作典范——恰那铁矿的发展历程，分享了中钢在澳投资经营多年的心得体会等。

7月10日，刘安栋一行连夜赶往达尔文参加“一带一路”澳大利亚研讨会。会上，刘安栋作主题发言时表示，中钢愿做“一带一路”的积极参与者，进一步加强合作，共同推动钢铁行业制造模式变革和产业转型升级。

On July 9, 2018, Liu Andong, president of the group and deputy secretary of the Party Committee, went to Australia to attend and address the China-Australia Business Council. On behalf of the Business Council and the Sinosteel, the president of Sinosteel, Liu Andong thanked the guests for their long-standing support and trust, revisited the development of the Channar Joint Venture, a model of cooperation between the two countries and also he shared the experience of China-Australia investment for many years.

On July 10, Liu Andong and his delegations rushed to Darwin, to participate in the "Belt and Road" Australian seminar. At the meeting, Liu Andong made a keynote speech. He said that Sinosteel is willing to be an active participant in the "Belt and Road" to further strengthen cooperation and jointly promote the transformation of the manufacturing model and industrial transformation and upgrading of the steel industry.





关爱员工，成就理想 Care for Employees, Realize Dreams

中钢始终坚持以人为本，坚持员工与企业共同发展、和谐发展的理念，持续推进员工发展、激励、沟通机制建设。截至 2018 年底，中钢员工总数为 21193 人，其中外籍员工 2671 人，女性员工 3859 人，劳动合同签订率和社会保险缴纳率均为 100%。

Sinosteel has been always adhering to the concept of human orientation, and harmonious development of employees and enterprises, and promoted the construction of employee development, incentive and communication mechanism continuously. By the end of 2018, Sinosteel had 21,193 employees, 2,671 of which are foreign employees and 3,859 female employees. The labor contract signing rate and social insurance payment rate are both of 100%.

关注员工成长 Care for Employees' Growth

企业改革发展的根本推动力量和保障力量是人才，“人才强企”是中钢发展的基本方略。中钢集团始终把人力资源的投资、利用、引进、激励和开发放到了企业发展首位。

The fundamental driving force and guarantee force of enterprise reform and development is talent, and "Advancing the Enterprise by Talents" is the basic strategy for the development of Sinosteel. Sinosteel has always put the investment, utilization, introduction, incentive and development of human resources in the first place for the development of enterprise.



“身边的榜样”主题故事会
The story-telling session of the example theme around you



据不完全统计，
2018 年人均培训投入

446.1 元

In 2018, according to incomplete statistics, Sinosteel invested 446.1 RMB per capita in training.



中钢集团举办“英才一期”2018 年集训

Sinosteel Held "the excellent talent training" in 2018

2018 年 10 月，中钢集团在上海举办“英才一期”2018 年集训。这是“英才一期”集训的第三年，此次集训以提升组织管理能力和领导力为重点，主要安排了战略谋划与执行、组织能力提升工作坊、领导力与执行力等核心课程，加强党性修养和信念的党课，以及学习先进经验、开拓视野的宝武集团和产业园的参访活动。

近三年新任职的集团中层副职领导人员以及中层副职领导后备人才共计 67 人参加本次集训。

Sinosteel held "the excellent talent training" in October 2018 in Shanghai. This year was the third year to hold the training, which mainly focus on improving the organization and management capacity and leadership of the leading cadres according to the three-year training plan, and the core courses, such as strategic planning and implementation, organization ability promotion workshop, leadership and execution lifting, etc.. Party classes and arranged in the training strengthened the Party spirit and beliefs. The visit of China Baowu Steel Group and its industrial parks is a good chance to learn advanced experience and broaden the horizon.

The participants included the newly appointed middle-level deputy leaders of the Group and reserve talents of middle-level deputy leaders since 2016, with a total of 67 persons participating in the intensive training.



学员们分组比拼
The Trainees Competed with Each Other by Groups



2018 年新员工拓展活动
New Staff Training in 2018



丰富员工生活 Enrich Employee's Life

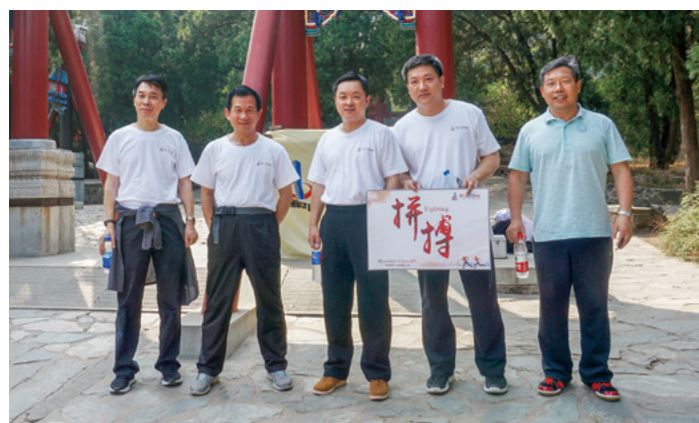
中钢集团始终坚持全心全意依靠职工办企业，按照“发展为了职工，发展依靠职工，发展成果与职工共享”的方针，持续为员工改善工作环境，积极开展劳动竞赛、技能联赛、职工文体娱乐等系列活动，营造团结奋进、积极向上的文化氛围。

Sinosteel operate the business wholeheartedly by relying on employees. Based on the philosophy of "development for employees, by employees, and sharing the development achievements with employees", Sinosteel continue to improve the working environment for employees, carry out labor competition, skill competition, entertainment and recreation of staffs and other activities actively, so as to create a unified and positive cultural atmosphere.



踏石留印抓大事 二次创业再攀登——中钢成功举办第十四届主题登山活动

Step onto the stone and leave your footprint on it, Focus on overall situations, Start a new undertaking - Sinosteel Held the 14th Theme Mountaineering Activity



2018年4月20日，中钢集团第十四届主题登山活动在北京香山举办。徐思伟董事长同近600名中钢员工一同参加了活动。本届登山活动以“踏石留印抓大事，二次创业再攀登”为主题，在登山路线中融入2018年集团要集中精力抓好经营发展的十件大事，引导员工深入了解今年的工作重点任务，把各项工作往前头赶、往实里抓。

通过此次登山活动，广大员工提升了对企业文化的认知度，也展现了昂扬奋进的精神风貌，一时间欢声笑语洒遍整个香山公园。

On April 20, 2018, the 14th theme mountaineering activity of Sinosteel was held in Xiangshan in Beijing. Chairman of Sinosteel Xu Siwei took part in the activity with nearly 600 employees. The mountaineering activity, which was themed as "Step onto the stone and leave your footprint on it, Focus on overall situations, Start a new undertaking", incorporated 10 major issues of business development that the Group should focus on in 2018, and guided the employees to understand the key tasks this year, so as to push forward all the work and work in a down-to-earth manner.

The mountaineering activity not only promoted the awareness of employees for corporate culture, but also showed their high spirit for forging ahead. The cheering laughter were everywhere throughout Beijing Xiangshan.

中钢集团庆“三八”妇女节健步走活动

Sinosteel Held a Brisk Walking Activity to Celebrate the International Working Women's Day in March 8

为庆祝第108个“三八”国际劳动妇女节，2018年3月8日，中钢工会在奥林匹克森林公园南园组织开展第六届户外健步走活动。京内单位410人参与，创历届健步走活动新高。

In order to celebrate the 108th international Working Women's Day in March 8, Sinosteel Labor Union organized and conducted the 6th Brisk Walking activity at the South Park of Olympic Forest Park on March 8, 2018. About 410 women workers from the units in Beijing participated in the activity, with the number hitting a new high of all previous activities.



中钢集团举办京内单位第四届职工运动会

Sinosteel Held the 4th Employee's Sports Meeting Among the Units in Beijing

2018年10月13日，中钢集团京内单位第四届职工运动会在中国人民大学体育场正式拉开帷幕。集团总部和京内单位共8支代表队、近500名运动员参与各项角逐。

在各类集体项目中，各队运动员配合默契、斗志昂扬，以飒爽身姿和拼搏精神生动地诠释了中钢“团结、担当、拼搏、奉献”的新时期攻坚精神。

On October 13, 2018, the 4th Employee's Sports Meeting among the units in Beijing was kicked off officially in the stadium of Renmin University of China. A total 8 teams, involving nearly 500 sportsmen from the headquarters and units in Beijing took part in the sports meeting.



All the sportsmen worked closely together, with high morale for all kinds of collective programs, which interpreted the crucial spirit of "Unity, Accountability, Struggling and Dedication" upheld by Sinosteel for the new era with their valiant posture and fighting spirit.



回报社会，共享未来 Repay the Society, Share the Future

2018年，中钢集团对定点扶贫点翁牛特旗捐资达112万元、培训人员248人次、购买农特产品19万元（其中翁牛特旗8.5万元），全面完成责任书相关要求。

In 2018, Sinosteel donated 1.12 million RMB to Wengniuteqi, the targeted poverty alleviation, trained 248 persons, and bought agricultural products of 190,000 RMB (among which, Wengniuteqi accounted for 85,000 RMB), and completed all relevant requirements specified in letters of responsibility.

捐赠单位 Donating Unit	受赠对象 Recipient	累计捐赠金额（万元） Accumulated Donation Amount (10,000 RMB)
中国中钢集团有限公司 Sinosteel Group Corporation Limited	内蒙古赤峰市翁牛特旗乌丹镇兴隆地村 Xinglongdi Village, Wudan Town, Wengniuteqi, Chifeng City, Inner Mongolia	100
中国中钢集团有限公司 Sinosteel Group Corporation Limited	内蒙古赤峰市翁牛特旗慈善总会 Chifeng Wengniuteqi Charity Federation, Inner Mongolia	10
中钢期货有限公司 Sinosteel Futures Co., Ltd.	内蒙古赤峰市翁牛特旗乌丹镇兴隆地村 Xinglongdi Village, Wudan Town, Wengniuteqi, Chifeng City, Inner Mongolia	2.25
中国金贸有限公司 Sinosteel Taiwan Co., Ltd.	台湾花莲县政府 Government of Hualian County, Taiwan	2.16
中钢集团耐火材料有限公司 Sinosteel Refractory Co., Ltd.	洛阳耐火材料（集团）实业总公司福利缝纫厂 Welfare Sewing Factory of Luoyang Refractory (Group) Industrial Corporation	0.85
中钢集团天澄环保科技股份有限公司 Sinosteel Tiancheng Environmental Protection Science & Technology Co., Ltd.	湖北省宜昌市夷陵区三峡移民项目款项 Funds for Migrants from Three Gorges Area, Yiling District, Yichang City, Hubei	30
中钢集团衡阳机械有限公司 Sinosteel Hengyang Machinery Co., Ltd.	衡阳市珠晖区慈善会 Hengyang Zhuhui District Charity Federation	2
合计 Total		147.26

注：统计范围为中钢集团境内企业捐赠额，未含所属海外企业的对外捐赠金额。

Note: The statistics covers the amount donated by domestic enterprises of Sinosteel, excluding the external amount donated by overseas enterprises.



产业扶贫，用真情与实干换百姓笑颜

Alleviate Poverty by exploring specialty industry & Practical Work

内蒙古自治区赤峰市翁牛特旗兴隆地总人口约4000人，村基础设施薄弱，农牧业增收渠道缺乏，截至2017年底，该村建档立卡贫困户共400余户。

中钢集团选派扶贫干部程文杰驻村，深入摸底调查，掌握每个贫困户家庭收入来源、家庭成员状况，分析致贫原因，组织村“两委”班子广泛听取村民需要，明确了产业脱贫致富的思路。中钢集团领导多次实地考察走访，最终确立了肉驴养殖项目。该项目占地90亩，包括高标准驴舍12栋，现存栏优质母驴近200头，采取“合作社+良种肉驴繁殖场+贫困户”模式。贫困户和养殖社签订养殖合作协议，得到分红和劳务双份收入。

2018年3月，中钢赤诚扶贫产业基地成立，在肉驴养殖项目的基础上，引进母牛、梅花鹿和羊，还在附近的山坡开垦并修整数百亩土地，铺设农膜滴灌设施，种植葵花和青储，使得40多个贫困户家庭，做到不出村有活干、适宜干，每天收入120元左右，通过合作共赢，初步形成了贫困户增收致富的长效机制。



Xinglongdi Village, Wengniuteqi, Chifeng City has a total population of about 4,000 people, with poor infrastructure in the village and lack of channels for increasing income from agriculture and animal husbandry. By the end of 2017, there were more than 400 registered poor households in the village.

Since Cheng Wenjie, a poverty alleviation cadre of Sinosteel stationed in the village, he has made thorough investigations, mastered the income source and family members of each poor household, and analyzed the causes of poverty. He organized the "two committees" team of the village to widely listen to the needs of villagers, finally set definite road to explore specialty industry that is suitable for the local so as to get rid of poverty and become better off. Leaders of Sinosteel made field investigation repeatedly, and established the meat donkey breeding project. The project covered an area of 90 acres, including 12 high-standard donkey houses, with nearly 200 high-quality female donkeys in stock. The project adopted the mode of "cooperatives, breeding ground of well-bred meat donkeys and poor households". The poor households signed the breeding cooperation agreement with the breeding cooperatives, and get the dividend and income from labor services.

In March 2018, Sinosteel Chicheng Poverty Alleviation Industrial Base was set up, and introduced cow, sika deer and sheep on the basis of the meat donkey breeding project; in addition, it also reclaimed on the nearby hillside and finished several hundred acres of land, laid agricultural film and dropped irrigation facilities, grew sunflower and ensilage, so that more than 40 poor households could work and are appropriate to work with no needs to go out the village, with the daily income of about 120 RMB, thus forming a long-term mechanism for poor family to increase income and become rich initially through win-win cooperation.

未来展望

OUTLOOK



2016年，联合国正式启动《2030年可持续发展议程》，呼吁各国采取行动，为今后15年实现17项可持续发展目标而努力。《2030年可持续发展议程》的核心内容是涵盖经济、社会、环境等三大领域的17项目标和169项具体目标，可以说这是一份造福人类和地球的行动清单，也是当前国际发展领域的纲领性文件。

中国政府高度重视，全面启动可持续发展议程落实工作，制定出台了《中国落实2030年可持续发展议程国别方案》，为全球可持续发展贡献了中国方案和中国智慧。

春树桃李，夏得阴其下，秋得食其实。一个企业，乃至一个国家的发展想要行稳致远，必然要着眼未来、规划长远，注重短期目标与长期目标的统一，谋求经济、社会、环境三大领域的和谐共融发展。可持续发展战略，正是这样一种理念。

在经济领域，中钢集团以习近平新时代中国特色社会主义思想为指引，追求高质量、平衡式的发展，聚焦主业实业，大力推动改革创新，突出抓

好风险防控，力争创造优质绩效、提供精益服务、贡献更大价值，努力打造冶金工业及相关产业国际知名服务商。

在环境领域，中钢集团以“绿水青山就是金山银山”理念为统领，大力实施科技兴企，推动管理变革，有效驱动绿色创新发展，致力于贡献绿色经济、循环经济、低碳经济。

在社会领域，中钢集团以推动构建人类命运共同体为目标，在全球范围内，秉承优势互补、合作共赢的理念，坚持正确义利观，不断提升利益相关方整体福利水平，追求国家之间的文化共鉴、社区与员工的幸福共享、企业与社会的和谐共赢。

面向未来，中钢集团将继续贯彻创新、协调、绿色、开放、共享的发展理念，加快推进可持续发展议程落实工作，坚定不移地推动建设持久和平、普遍安全、共同繁荣、开放包容、清洁美丽的世界，继续为中国乃至全球可持续发展事业做出力所能及的贡献。

In 2016, the UN launched *2030 Agenda for Sustainable Development* officially, which called on all countries to take actions to achieve 17 goals of sustainable development in the next 15 years. The core contents of *2030 Agenda for Sustainable Development* includes 17 targets and 169 specific targets in the three major fields of economy, society and environment; therefore, it was not only a list of actions benefiting the mankind and the earth, but also a framework documents for current international development.

The Chinese government attached great importance to the implementation of the *2030 Agenda for Sustainable Development*, formulated and released *China's National Plan on Implementation of the 2030 Agenda for Sustainable Development*, thus contributed China's plan and wisdom for the world's sustainable development.

The peach and plum trees that are planted in spring, give shade in summer, with their fruits to be harvested in autumn. If an enterprise or even a country wants to achieve steady and long-term development, it is necessary to look to the future and make long-term plan, pay attention to the unity of short-term goals and long-term ones, and seek the harmonious development of economy, society and environment. It happened to coincide with *Sustainable development strategy* on this concept.

Sinosteel, guided by the Thought on Socialism with Chinese Characteristics for a New Era proposed by Chairman Xi Jinping, would pursue high-quality and balanced development, focus on the main business and industry, promote the reform and innovation vigorously,

highlight the risk prevention and control, strive to create high-quality performance, provide lean services and contribute more value, and strive to become a well-known international service provider for metallurgical industry and related industries in the economy field.

Guided by the concept of lucid waters and lush mountains are invaluable assets, Sinosteel develops the enterprise vigorously with science and technologies, promotes the management reform, drives the development of green innovation effectively, contributes to green economy, circular economy and low-carbon economy in the environment field.

Sinosteel takes the promotion and construction of community with a shared future for mankind as the objective. Adhere to the concept of complementing each other's advantages, cooperation and win-win, the correct ideal of moral and profit, promote the overall well-being of stakeholders constantly, it pursues the mutual cultural learning between countries, sharing of the happiness between community and staff, and harmonious win-win between enterprise and society for the society.

Facing the future, Sinosteel will continue to implement the development concept of innovation, coordination, green, openness and sharing, accelerate the implementation of the agenda for sustainable development, promote the construction of lasting peace, universal security, common prosperity, openness and inclusiveness, clean and beautiful world unswervingly, continue to make its contributions to sustainable development cause both in China and the whole world.

关键绩效指标

KEY PERFORMANCE INDICATORS



市场 Market

	2016年	2017年	2018年
营业收入 Operating revenue (亿元/100 million)	560	640	623
净利润 Net Profit (亿元/100 million)	-1.19	1.41	1.81
资产负债率 Debt-to-assets ratio (%)	103.13	103.14	98.3
纳税额 Tax paid (亿元/100 million)	11.42	11.57	10.58

	2016年	2017年	2018年
研发投入(万元) R&D investment (万元/10,000 RMB)	21689	23712	33561
研发人员数量(人) Number of R&D staff (人/Person)	2696	2376	3499
研发人员比例(%) Ratio of R&D staff (%)	11.2	14.7	16.5
当年申请专利数(个) Patent applications of the year (项/Item)	336	303	263
当年授权专利数(个) Authorized patents of year (数/Item)	307	257	324
重要科技奖项(国家+省部级) Major technological awards (National + Ministerial and provincial level) (项/Piece)	28	21	50



环境 Environment

	2018年	2018年
境内员工工亡事故 work-related casualty (起)	0	0
安全生产投入 Safe production investment (万元/RMB 10 thousand)	9286	4326
安全培训次数 Number of safety training (次/Times)	450	0.7436
安全培训人次 Person-time of safety training (人次/Person-time)	21017	
所属企业污染事件 contamination accident (起)		0
环保投入 Environmental protection investment (万元/10,000 RMB)		4326
碳强度 Carbon intensity (CO ₂ 吨/万元 / Ton of carbon dioxide equivalent/(CO ₂ e)/10,000 RMB)		0.7436



社会 Society

	2016年	2017年	2018年
员工总数 Number of employees (人/Person)	24062	22296	21193
外籍员工 Number of foreign employees (人/Person)	2151	2268	2671

	2018年	2018年
女性员工(人) Number of female employees (人/Person)	3859	99
劳动合同签订率 Labor contract signing rate (%)	100	147.26
社会保险缴纳率 Social insurance contribution rate (%)	100	248
人均培训投入 Per capita training investment (元/RMB)	446.1	
在非本地化雇佣率 Localized employment rate in Africa (%)		99
境内公益捐赠 Domestic charity donation (万元/RMB 10 thousand)		147.26
公益培训 Public welfare training (人次/Person-time)		248

评级报告

RATING REPORT

《2018 中钢集团可持续发展报告》评级报告



受中国中钢集团有限公司委托，“中国企业社会责任报告评级专家委员会”抽选专家组成评级小组，对《2018 中钢集团可持续发展报告》（以下简称《报告》）进行评级。

一、评级依据

中国社会科学院《中国企业社会责任报告指南（CASS-CSR 4.0）》暨“中国企业社会责任报告评级专家委员会”《中国企业社会责任报告评级标准（2019）》。

二、评级过程

1. 评级小组审核确认《报告》编写组提交的《企业社会责任报告过程性资料确认书》及相关证明材料；
2. 评级小组对《报告》编写过程及内容进行评价，拟定评级报告；
3. 评级专家委员会副主席、评级小组组长、评级小组专家共同签署评级报告。

三、评级结论

过程性 (★★★★★)

集团成立社会责任领导小组，董事长担任组长，审定报告提纲及核心专题，董事会办公室牵头成立社会责任报告工作小组，办公室主任担任组长，把控核心架构及关键议题；将报告定位为披露责任信息、回应利益相关方诉求、强化社会责任管理的重要工具，构建了多层次、多形态的报告体系；根据国家相关政策、公司重大事项、行业对标分析、利益相关方调查等识别实质性议题；计划通过官方网站发布报告，并将以电子版、印刷品、中英文版等形式呈现报告，具有卓越的过程性表现。

实质性 (★★★★☆)

《报告》系统披露了贯彻宏观政策、产品质量管理、产品创新、安全生产、环保技术和设备的研发与应用、节约能源资源、厂区周边环境治理等钢铁业关键性议题，叙述详细充分，具有领先的实质性表现。

完整性 (★★★★)

《报告》主体内容从“发展之基，价值中钢”“永续之道，绿色中钢”“初心之源，和谐中钢”等角度系统披露了钢铁业核心指标的 70.10%，完整性表现优秀。

平衡性 (★★★★)

《报告》披露了“集团所属企业境内员工工亡事故”“集团所属企业污染事件发生”“发现事故隐患”等负面数据信息，平衡性表现优秀。

可比性 (★★★★☆)

《报告》披露了“营业收入”“净利润”“碳强度”“环保投入”“安全生产投入”“员工总数”等 17 个关键指标连续 3 年的对比数据，可比性表现良好。

可读性 (★★★★★)

《报告》以集团可持续发展责任模型为主线，从“价值产业链”“绿色创新链”“和谐供应链”三部分展开，系统阐述企业在经济、环境、社会维度的履责理念、实践与成效，框架结构清晰，重点议题突出，回应了利益相关方的期望与诉求，展现了企业对履行社会责任的深刻理解；封面及篇章页选用特色履责场景的实景图，呼应篇章主题，提升了报告的辨识度；章节跨页嵌入叙述性引言，提纲挈领，利于读者快速了解章节内容，具有卓越的可读性表现。

创新性 (★★★★☆)

《报告》各章开篇设置“聚焦实业主业，实现高质量发展”“科技创新，助推中钢二次创业提档加速”“坚持合作共赢，为构建更加紧密的中非命运共同体作出新贡献”责任专题，聚焦企业特色履责实践，响应高质量发展、科技创新等时政热点问题，凸显了中央企业的责任担当；创新发布《中钢集团非洲可持续发展报告》，构建了“综合报告+专项报告”的多形态报告体系，创新性表现领先。

综合评级 (★★★★☆)

经评级小组评价，《2018 中钢集团可持续发展报告》为四星半级，是一份领先的企业社会责任报告。

四、改进建议

1. 增加数据的披露，提高报告的完整性；
2. 增加对负面数据及企业履责不足之处的披露，提高报告的平衡性；
3. 增加企业历史关键绩效数据的披露，提高报告的可比性。

魏紫川 钟宏武 王大洋

评级专家委员会副主席

评级小组组长

评级小组专家

过程性评估员
任姣姣、董德尚

出具时间：
2019 年 6 月 27 日



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魏紫川 钟宏武 王大洋

Wei Zichuan
Vice Chairman of the
Chinese Expert Committee
on CSR Report Rating

Zhong Hongwu
Team leader of the
expert rating team

Wang Dayang
Expert of the expert
rating team

Process assessor:
Ren Jiaojiao
Dong Deshang

Date of Issuing:
27th June 2019



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指标索引

INDICATOR INDEX

完全采用	部分采用	未采用	不适用
●	◐	◑	N/A

CASS-CAR3.0 指标索引				
	指标编号	指标描述	披露位置	披露情况
第一部分：报告前言（P 系列）				
报告规范	P1.1	报告信息说明	扉页	●
	P1.2	报告边界	扉页	●
	P1.3	报告体系	扉页	●
	P1.4	联系方式	扉页	●
报告流程	P2.1	报告实质性议题选择程序	P17	●
高管致辞	P3.1	企业履行社会责任的机遇和挑战	P2	●
	P3.2	企业年度社会责任工作成绩与不足的概括总结	P2	◐
企业简介	P4.1	企业名称、所有权性质及总部所在地	P4-7	●
	P4.2	企业主要品牌、产品及服务	P8-9	●
	P4.3	企业运营地域，包括运营企业、附属及合营机构	P6-7	◐
	P4.4	按产业、顾客类型和地域划分的服务市场	P9	●
	P4.5	按雇用合同（正式员工和非正式员工）和性别分别报告从业员工总数	P68	●
年度进展	P5.1	年度社会责任重大工作	P12	●
	P5.2	年度责任绩效	P76	●
	P5.3	年度责任荣誉	P12	●
第二部分：责任管理（G 系列）				
责任战略	G1.1	社会责任理念、愿景、价值观	P10-11	●
	G1.2	辨识企业的核心社会责任议题	P16-17	●
责任治理	G2.1	社会责任组织体系	P12	●
	G2.2	企业内部社会责任的职责与分工	P12	●
责任绩效	G4.1	企业在经济、社会或环境领域发生的重大事故，受到的影响和处罚以及企业的应对措施	-	N/A
责任沟通	G5.1	利益相关方的关注点和企业的回应措施	P14-15	●
	G5.2	企业内部社会责任沟通机制	P14-15	●
	G5.3	企业外部社会责任沟通机制	P14-15	●
	G5.4	企业高层领导参与的社会责任沟通与交流活动	P66-67	●
责任能力	G6.1	通过培训等手段培育负责任的企业文化	P69-71	●
第三部分：市场绩效（M 系列）				
股东责任	M1.1	股东参与企业治理的政策和机制	-	N/A
	M1.2	保护中小投资者利益	-	N/A
	M1.3	规范信息披露	扉页	●
	M1.4	成长性	P20-25	●
	M1.5	收益性	P20-25	●
	M1.6	安全性	P20-25	●
客户责任	M2.1	客户关系管理体系	-	◑
	M2.2	产品知识普及或客户培训	-	N/A

	指标编号	指标描述	披露位置	披露情况	
客户责任	M2.3	客户信息保护	-	N/A	
	M2.4	止损和赔偿	-	N/A	
	M2.5	产品质量管理体系	-	N/A	
	M2.6	产品合格率	-	N/A	
	M2.7	支持产品服务创新的制度	P44-47	●	
	M2.8	客户满意度调查及客户满意度	-	N/A	
	M2.9	积极应对客户投诉及客户投诉解决率	-	N/A	
	伙伴责任	M3.1	战略共享机制及平台	P66-67	●
		M3.2	诚信经营的理念与制度保障	-	◑
M3.3		公平竞争的理念及制度保障	-	◑	
M3.4		经济合同履约率	-	◑	
M3.5		供应商通过质量、环境和职业健康安全管理体系认证的比率	-	◑	
第四部分：社会绩效（S 系列）					
政府责任	S1.1	企业守法合规体系	-	◑	
	S1.2	守法合规培训	P38-41	●	
	S1.3	禁止商业贿赂和商业腐败	P30-31	◐	
	S1.4	纳税总额	P26	●	
	S1.5	响应国家政策	P34-37	●	
	S1.6	确保就业及（或）带动就业的政策或措施	P68-71	●	
	S1.7	报告期内吸纳就业人数	P77	●	
员工责任	S2.1	劳动合同签订率	P68	●	
	S2.2	民主管理	-	◑	
	S2.3	按运营地划分的员工最低工资和当地最低工资的比例	-	◑	
	S2.4	社会保险覆盖率	P68	●	
	S2.5	按雇用性质（正式、非正式）划分的福利体系	-	◑	
	S2.6	女性管理者比例	-	◑	
	S2.7	职业病防治制度	-	◑	
	S2.8	职业安全健康培训	P77	◐	
	S2.9	年度新增职业病和企业累计职业病	-	◑	
	S2.10	体检及健康档案覆盖率	P68	●	
	S2.11	员工职业发展通道	P68-71	●	
	S2.12	员工培训体系	P68-71	●	
	S2.13	员工培训绩效	P68-71	●	
	S2.14	困难员工帮扶投入	-	◑	
安全生产	S3.1	安全生产管理体系	P38	●	
	S3.2	安全应急管理机制	P38	●	
	S3.3	安全教育与培训	P39-41	●	
	S3.4	安全培训绩效	P38-41	●	

意见反馈

FEEDBACK FROM READERS

中钢集团非常关心您对这份社会责任报告的意见，请就本报告提出您的意见和见解并反馈给我们，以便我们对报告持续改进。

Sinosteel is very concerned about your comments on this social responsibility report, so we would like you to provide us with your comments and opinions on this report and feedback to us, so that we can improve the report constantly.

请回答好以下问题后将表格传真到 +8610-62689800，或寄到中国北京海淀区海淀大街 8 号中钢国际广场。

Please fax the following form to +8610-62689800 after answering the following questions, or mail it to Sinosteel International Plaza, No. 8 Haidian Street, Haidian District, Beijing

1. 在本报告中，您有没有找到您需要的内容？如果没有，请写下您想要的内容。

Have you found what you need in this report? If no, please write down what you want to get.

2. 报告中哪一部分您最感兴趣？

Which part interests you the most in the report?

如果愿意，请告诉我们关于您的信息：

If available, please tell us your information:

姓名 Name		职业 Occupation	
机构 Institution		联系地址 Address	
邮编 Post Code		电子邮件 E-mail	
电话 Telephone		传真 Fax	

我们的联系方式如下：

Our contact information is shown as follows:

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 Website: http://www.sinosteel.com

	指标编号	指标描述	披露位置	披露情况
安全生产	S3.5	安全生产投入	P77	●
	S3.6	安全生产事故数	P77	●
	S3.7	员工伤亡人数	P77	●
社区责任	S4.1	员工本地化政策	P64	●
	S4.2	企业公益方针或主要公益领域	P65、P72-73	●
	S4.3	捐赠总额	P72	●
	S4.4	企业支持志愿者活动的政策、措施	-	◎
	S4.5	员工志愿者活动绩效	-	◎
第五部分：环境绩效（E 系列）				
绿色经营	E1.1	建立环境管理组织体系和制度体系	P54	●
	E1.2	企业环境影响评价	P54	●
	E1.3	环保总投资	P77	●
	E1.4	环保培训与宣教	-	◎
	E1.5	环保培训绩效	-	◎
	E1.6	绿色办公措施	P38、P64	◎
绿色工厂	E2.1	节约能源政策措施	P54	◎
	E2.2	全年能源消耗总量	-	◎
	E2.3	企业单位产值综合能耗	P77	●
	E2.4	减少废气排放的政策、措施或技术	P57-59、P64	●
	E2.5	废气排放量及减排量	-	◎
	E2.6	减少废水排放的制度、措施或技术	P57-59、P64	●
	E2.7	废水排放量级减排量	-	◎
	E2.8	减少废弃物排放制度、措施或技术	P57-59、P64	●
	E2.9	废弃物排放量及减排量	-	◎
	E2.10	发展循环经济政策 / 措施	-	◎
	E2.11	再生资源循环利用率	-	◎
	E2.12	建设节水型企业	-	◎
	E2.13	年度新鲜水用水量 / 单位工业增加值新鲜水耗	-	◎
	E2.14	中水循环使用量	-	◎
	E2.15	减少温室气体排放的计划及成效	P52	◎
绿色产品	E3.1	供应商通过 ISO14000 环境管理体系认证的比例	-	◎
	E3.2	废旧产品回收的措施和绩效	-	N/A
	E3.3	包装减量化和包装物回收的政策和绩效	-	N/A
绿色生态	E4.1	保护生物多样性	P64	◎
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第六部分：报告后记（A 系列）				
未来计划：公司 对社会责任工作的 规划	(A2)	报告评价：社会责任专家或行业专家、利益相关方或专业机构对报告的评价	P78	●
	(A3)	参考索引：对本指南要求披露指标的采用情况	P80-82	●
	(A4)	意见反馈：读者意见调查表及读者意见反馈渠道	P83	●