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中钢洛耐科技股份有限公司
环境、社会及治理(ESG)报告
Environmental, Social and Governance (ESG) Report



转型发展 和合共生

Transformational Develop Harmony Thrives



封面说明

以洛耐“四季厂区”开篇，串联企业与自然共生的理念；突出“不忘初心、牢记使命”国企责任底色；义务献血场景具象化社会责任，辅以洛阳牡丹元素呼应地域属性，搭配品牌标识，传递企业可持续发展担当。

目录

CONTENTS

01 关于报告	04
About This Report	
02 董事长致辞	06
Message From the Chairman	
03 我们的洛耐	08
About Luonai	
08 议题识别	90
Topic Identification	
09 关键绩效	92
Key Performance	
10 读者意见反馈	94
Feedback	



04

责任专题
Column on Responsibility

科学治理 夯实质臻发展之基

Scientific Governance
Consolidate the Foundation of Pursuit Development

22

05

责任专题
Column on Responsibility

锐意创新 凝聚科技引领之力

Bold Innovation
Gather the Power of Technology Leadership

38

06

责任专题
Column on Responsibility

低碳赋能 绘就绿色永续之卷

Low-carbon Driving Force
Unfold a Scroll of Green Sustainable Future

50

07

责任专题
Column on Responsibility

价值共享 厚植和合共生之本

Value Sharing
Deepen the Roots of Harmonious Growth

62

01 关于报告

About This Report

报告范围及边界

Report Scope and Boundaries

除非有特殊说明,本报告主要描述中钢洛耐科技股份有限公司(简称“中钢洛耐”“洛耐”“公司”或“我们”)环境、社会及治理绩效成果。除特殊说明外,报告中涉及的货币均为人民币。

Unless otherwise specified, this report primarily outlines the environmental, social, and governance (ESG) performance of Sinosteel Luonai Materials Technology Co., Ltd. (referred to herein as "Sinosteel Luonai," "Luonai," "the company," or "We"). All monetary figures in the report are denominated in CNY unless otherwise indicated.

时间范畴

Timeframe

本报告覆盖的周期为2025年1月1日至2025年12月31日,为增加报告可比性和完整性,部分内容可能会超出上述范围。

This report covers the period from January 1, 2025, to December 31, 2025. To enhance comparability and completeness, certain content may extend beyond the above timeframe.

编制依据

Basis for Preparation

据《上海证券交易所上市公司自律监管指引第14号——可持续发展报告(试行)》《中国企业可持续发展报告指南(CASS-ESG 6.0)》(非金属矿物制品业)等。

This report is prepared in accordance with the "Self-Regulatory Guidelines for Listed Companies on the Shanghai Stock Exchange No. 14—Sustainable Development Report (Trial)", "Guidelines for China Enterprise Sustainable Development Report (CASS-ESG 6.0)(Non-metallic Mineral Products Industry)" etc.

质量承诺

Quality Assurance

公司承诺,本报告内容不存在任何虚假记载、误导性陈述或重大遗漏,并对内容的真实性、准确性、完整性负责。

The company undertakes that this report contains no false records, misleading statements, or material omissions and assumes responsibility for the truthfulness, accuracy, and completeness of its content.

发布形式

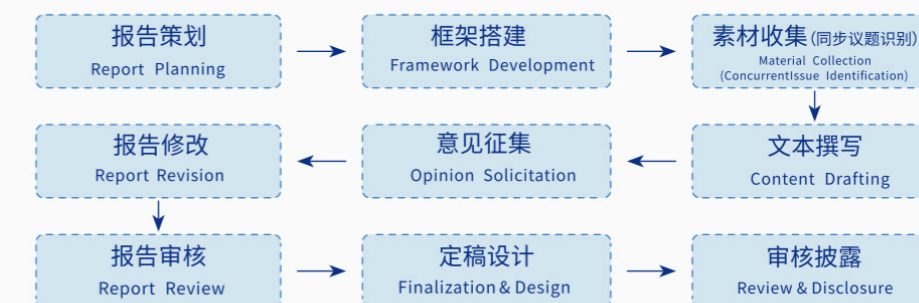
Release Format

本报告以印刷品、电子文档形式发布。如需获取电子版请访问中钢洛耐公司官网(<https://www.lyrg.com.cn>)。

This report is available in both printed and electronic formats. For an electronic copy, please visit the official website of Sinosteel Luonai at <https://www.lyrg.com.cn>.

编制流程

Preparation Process



文本语言

Text Language

本报告以中文、英文两种文字发布,若两种文字的表述存在差异,以中文表述为准。

This report is released in both Chinese and English. In case of any discrepancy between the two language versions, the Chinese text shall govern.

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董事长致辞

Message From the Chairman



中钢洛耐党委书记、董事长

2025年,是中钢洛耐全力推进转型发展的关键之年,也是公司以ESG理念锚定航向、以责任担当践行使命的奋进之年。一年来,我们始终坚守“诚信、创新、绿色、协同”的价值观,将环境、社会、治理要求深度融入战略布局、生产经营与改革发展全过程,沿着“治理筑基、创新赋能、绿色筑底、价值共享”的实践路径,在科技攻关、低碳转型、社会履责等方面笃行实干、奋勇争先,交出了一份有温度、有厚度、有力度的ESG年度答卷。

以治理之基,固发展之本。我们始终坚持党建引领与公司治理深度融合,将党的领导嵌入决策、执行、监督全流程,完善董事会多元化治理架构,建立健全ESG专项管理体系,以战略委员会为核心统筹ESG工作推进,实现“编撰-审议-披露”全流程规范化管理。我们严守合规经营底线,构建全流程风险管理体系,深化投资者关系管理与信息披露透明度,以科学治理筑牢企业高质量发展的制度根基。

以创新之力,铸产业之魂。作为耐火材料行业的先行者,我们始终坚持以科技自立自强为己任,紧扣国家重大战略需求,打造“研发中心+产线研发”双轨创新体系,在重型燃气轮机材料、固废处理、石化材料等领域攻克多项“卡脖子”技术,斩获国际发明展览会银奖、中国宝武技术创新重大成果奖等多项荣誉。中国宝武首席科学家、中钢洛耐首席科学家、先进耐火材料全国重点实验室主任李红霞当选中国工程院院士,彰显了公司在行业内的顶尖学术地位与人才高地优势。我们以创新驱动产品升级、技术突破,不仅为

高端装备制造、绿色冶金等领域提供了关键材料支撑,更以技术创新推动行业向高端化、绿色化、智能化、高效化转型。

以绿色之径,绘永续之卷。我们深入践行“绿水青山就是金山银山”的发展理念,将低碳转型作为企业发展的核心战略,制定碳达峰碳中和管理办法,完善环境管理体系,全年投入环保资金2210.89万元,实现二氧化硫、氮氧化物排放量同比大幅下降,一般工业固废综合利用率100%。我们大力发展可再生能源,建成分布式光伏项目,超额完成年度温室气体减排与能耗管控目标;深度融入绿色贸易体系,氮化物结合碳化硅系列制品的环境产品声明(EPD)在中国钢铁行业全产业链EPD平台上成功发布;推进厂区生态建设,新增绿地2万余平方米,以实际行动守护生态底色,让绿色成为企业发展的鲜明底色。

以共享之责,筑共生之基。企业的发展,源于社会,归于社会。我们始终坚守“价值共享、和合共生”的发展理念,深耕员工关怀,建立双通道职业发展体系,实现社会保险全覆盖,全年开展186项培训,以暖心举措守护员工成长;践行社会公益,投入50余万元助力乡村振兴,与地方学校开展教育共建,组织志愿服务践行社会责任;深耕供应链协同,搭建阳光采购平台,开展供应商ESG培训,助力中小企业发展,构建公平、绿色、共赢的供应链生态;拓展海外履责边界,以“一带一路”为纽带,推动海外业务本地化运营,实现项目属地雇佣率70%,以负责任的国际化运营推动中外互利共赢。

一分耕耘,一分收获。2025年,我们的不懈努力得到社会各界充分认可:成功入选国家知识产权强国建设示范企业创建名单,获评2025—2026年度钢铁工业用耐火材料优秀企业,荣获河南省耐火材料行业科学技术奖一等奖、中国宝武“金牛奖”、“金狮”ESG年度优秀社会责任案例”等多项荣誉。成绩的取得得益于各界伙伴的鼎力支持,更得益于全体洛耐人的同心奋斗。

道阻且长,行则将至;行而不辍,未来可期。2026年,是充满机遇与挑战的一年,更是公司转型发展的关键之年。站在“十五五”发展的新起点,中钢洛耐将继续秉持可持续发展理念,紧扣公司发展战略,以“一马当先”的锐气、“马不停蹄”的干劲,持续深化治理体系优化,攻坚核心技术创新,加快低碳转型步伐,厚植社会责任担当,以更高标准的ESG实践推动企业开启转型发展新篇章!

The year 2025 marks a crucial year for Sinosteel Luonai to fully integrate into the development framework of China Baowu and press ahead with its transformation and development. It is also a year of endeavor in which the company anchors its course with the ESG philosophy and fulfills its mission with a strong sense of responsibility. Over the past year, we have remained committed to our core values of Integrity, Innovation, Green Development and Collaboration. We have deeply integrated environmental, social and governance requirements into the entire process of strategic planning, production and operation, as well as reform and development. Following the practical path of "Governance as the Foundation, Innovation Empowerment, green base building, and Value Sharing", we have taken solid and proactive steps in scientific and technological breakthroughs, low-carbon transition and social responsibility performance. In doing so, we have delivered a caring, substantial and impactful annual ESG report.

Building a solid foundation through governance to secure the root of development. We remain committed to deeply integrating Party building leadership with corporate governance, embedding the Party's leadership into the entire process of decision-making, implementation and oversight. We have improved the diversified governance structure of the Board of Directors, established and refined a dedicated ESG management system, and coordinated the advancement of ESG initiatives with the Strategy Committee at the core, achieving standardized management throughout the entire "compilation-review-disclosure" process. We strictly adhere to the bottom line of compliant operations, establish a full-process risk management system, enhance investor relations management and information disclosure transparency, and consolidate the institutional foundation for the company's high-quality development through sound governance.

Forging the soul of the industry through the power of innovation. As a pioneer in the refractory materials industry, we have always taken scientific and technological self-reliance and self-improvement as our mission. Focusing on major national strategic needs, we have built a dual-track innovation system of "R&D center + production line R&D". We have achieved breakthroughs in a number of "bottleneck" technologies in fields such as heavy-duty gas turbine materials, solid waste treatment, and petrochemical materials, and have won numerous honors including the Silver Medal at the International Exhibition of Inventions and the Major Technological Innovation Achievement Award of China Baowu. Li Hongxia, Chief Scientist of China Baowu, Chief Scientist of Sinosteel Luonai, and Director of the State Key Laboratory of Advanced Refractories, was elected as an Academician of the Chinese Academy of Engineering, highlighting the company's top academic status and talent advantage in the industry. Driven by innovation, we have promoted product upgrading and technological breakthroughs. We have not only provided critical material support for high-end equipment manufacturing, green metallurgy and other sectors, but also advanced the industry's transformation toward high-end, green, intelligent and efficient development through technological innovation.

Charting a path toward sustainability through green development. We fully practice the development philosophy that "Lucid waters and lush mountains are invaluable assets." Taking low-carbon transition as a core strategy for corporate development, we have formulated management measures for carbon peaking and carbon neutrality and improved our environmental management system. In 2025, we invested CNY 22.1089 million in environmental protection, achieving a substantial year-on-year reduction in sulfur dioxide and nitrogen oxide emissions, and reaching 100% comprehensive utilization rate of general industrial solid waste. We vigorously develop renewable energy and have completed

distributed photovoltaic projects, exceeding our annual targets for greenhouse gas emission reduction and energy consumption control. We have deeply integrated into the green trade system, and the Environmental Product Declaration (EPD) for our nitride-bonded silicon carbide products was successfully released on the EPD platform for the entire industrial chain of China's steel industry. We have promoted ecological construction in our production areas, adding more than 20,000 square meters of green space. With concrete actions, we safeguard the ecological foundation and make green a defining feature of the company's development.

Building a foundation for coexistence through shared responsibility. A company's growth originates from society and belongs to society. We have always upheld the philosophy of "value sharing and harmonious coexistence". We care deeply for our employees, established a dual-channel career development system, achieved full coverage of social insurance, and carried out 186 training programs throughout the year, supporting employees' growth with thoughtful measures. We actively practice public welfare by investing over 500,000 yuan in rural revitalization, conducting education cooperation with local schools, and organizing volunteer services to fulfill social responsibilities. We deepen supply chain collaboration by building a transparent procurement platform, providing ESG training for suppliers, supporting the development of small and medium-sized enterprises, and fostering a fair, green and win-win supply chain ecosystem. We expand our global social responsibility footprint. With the Belt and Road Initiative as a link, we promote localized operation of overseas businesses, achieving a 70% local employment rate for overseas projects. Through responsible international operations, we promote mutual benefit and win-win results between China and partner countries.

No pain, no gain. In 2025, our unremitting efforts have been fully recognized by all sectors of society. We were successfully selected into the list of Demonstration Enterprises for the Construction of a National Intellectual Property Powerhouse, rated as an Excellent Enterprise of Refractories for Iron and Steel Industry for 2025-2026, and won a number of honors including the First Prize of the Science and Technology Award of the Henan Refractory Industry, the China Baowu "Golden Bull Award", and the "Golden Lion" Annual Outstanding ESG Social Responsibility Case Award. These achievements are attributable to the strong support of partners from all walks of life, and more importantly, to the concerted efforts of all employees of Sinosteel Luonai.

The road ahead is long and arduous, yet progress brings promise; with unceasing efforts, the future is full of hope. 2026 is a year brimming with opportunities and challenges, and a crucial year for the company's transformational development. Standing at the new starting point of the 15th Five-Year Plan period, Sinosteel Luonai will continue to uphold the concept of sustainable development, closely follow its corporate development strategy, and forge ahead with vigor of leading the charge and momentum of continuous endeavor. We will further deepen the optimization of governance systems, strive for breakthroughs in core technological innovation, accelerate low-carbon transformation, strengthen social responsibility, and advance higher-standard ESG practices to usher in a new chapter of transformational development for the enterprise!

03

我们的洛耐

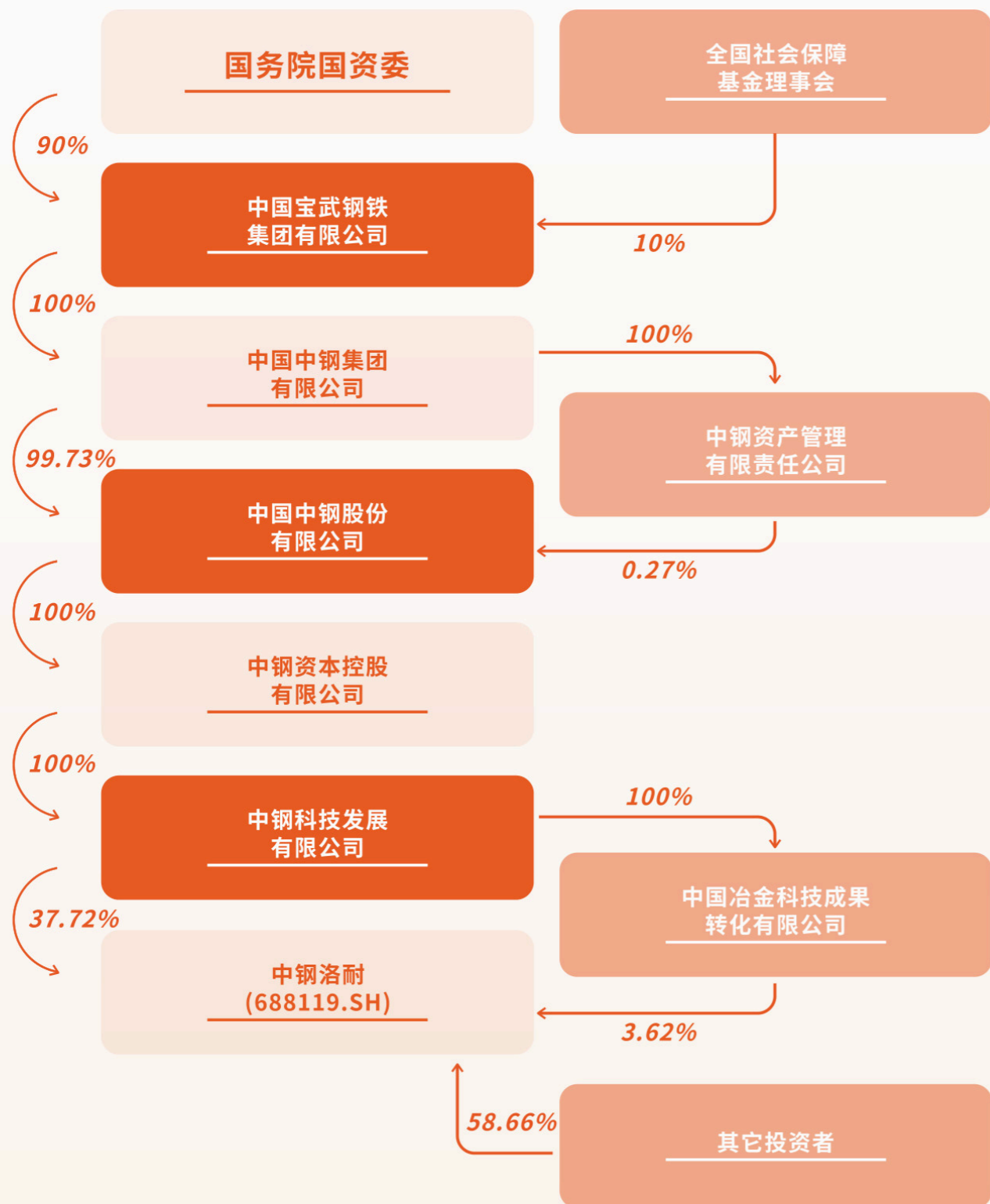
About Luonai

中钢洛耐由原中钢集团耐火材料有限公司与中钢集团洛阳耐火材料研究院有限公司于2019年12月联合重组而成，是中国先进的中高端耐火材料研发制造、工程设计和技术集成服务商。拥有先进耐火材料全国重点实验室、耐火材料国家工程研究中心和国家耐火材料质量检验检测中心等国家级研发和服务平台，是中央企业爱国主义教育基地和首批科学家精神教育基地。2022年6月6日，中钢洛耐在上海证券交易所科创板上市（股票代码688119）。

Sinosteel Luonai was formed in December 2019 through the joint restructuring of the former Sinosteel Refractories Co., Ltd. and Sinosteel Luoyang Institute of Refractories Research Co., Ltd. It is a leading R&D, manufacturing, engineering design and technical integration service provider of medium- and high-end refractory materials in China. Sinosteel Luonai has national-level R&D and service platforms including the State Key Laboratory of Advanced Refractories, the National Engineering Research Center for Refractories, and National Quality Inspection and Testing Center for Refractories. It is also a patriotic education base for central enterprises and one of the first batch of Education Bases for the Spirit of Scientists. On June 6, 2022, Sinosteel Luonai was listed on the Science and Technology Innovation Board of the Shanghai Stock Exchange (stock code: 688119).

公司概况

About US



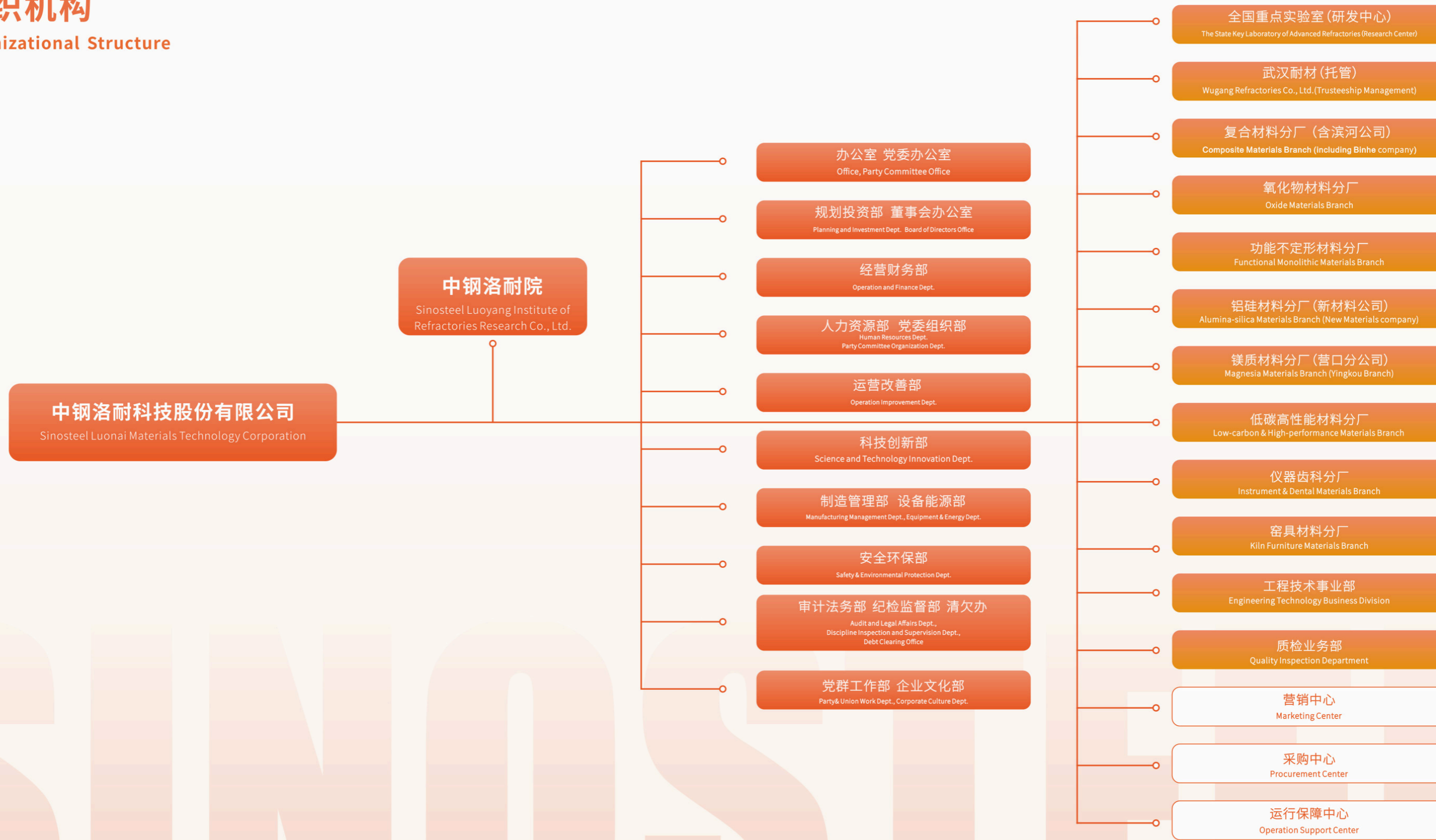
历史沿革

Company History



组织机构

Organizational Structure



创新平台

Innovation Platform

研发平台

Research and Development Platforms



先进耐火材料全国重点实验室
State Key Laboratory of Advanced Refractories



国家认定企业技术中心
National Recognized Enterprise Technology Center



国家地方联合工程实验室
National-local Joint Engineering Laboratory

成果转化平台

Achievement Transformation Platforms



耐火材料国家工程研究中心
National Engineering Research Center for Refractories



河南省高温新材料产业研究院
Henan Provincial Industrial Research Institute of High-temperature New Materials



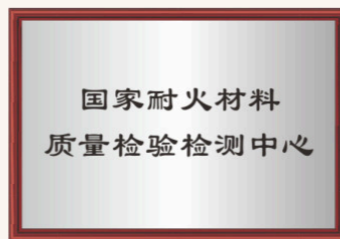
河南省先进高温材料中试基地
Henan Provincial Pilot Base for Advanced High-temperature Materials

行业服务平台

Industry Service Platforms



产业技术基础公共服务平台
Industrial Technology Basic Public Service Platform



国家耐火材料质量检验检测中心
National Quality Inspection and Testing Center for Refractories

企业文化

Corporate Culture

企业愿景：成为高温非金属材料行业领先企业

Vision: To become a leading enterprise in the high-temperature non-metallic materials industry.

企业使命：聚焦科技创新与价值创造, 引领高温非金属材料业技术进步和绿色低碳发展

Mission: Focus on technological innovation and value creation, and lead technological progress as well as green and low-carbon development of the high-temperature non-metallic materials industry.

价值观：诚信 创新 绿色 协同

Values: Integrity, Innovation, Green, Collaboration



企业精神:极致求实 争创一流 合作共赢 科技报国

Corporate Spirit:

Pursuit of ultimate truthfulness, Striving for first-class excellence,

Win-win cooperation, Serving the country through science and technology.

定位:为高温工业提供环境友好和更具价值系统解决方案的创新型科技企业

Positioning: An innovative technology enterprise providing environmentally

friendly and high-value system solutions for high-temperature industries.

商业模式:以客户为中心,提供先进的高温非金属材料产品及全生命周期配套服务

Business Model: Customer-centric, providing advanced high-temperature non-metallic material products and supporting full life-cycle services.

企业文化

Corporate Culture

经营理念:合作 共赢 协同 发展

Business Philosophy: Cooperation, Win-win, Synergy, Development

管理理念:守正 创新 务实 奋进

Management Philosophy: Integrity, Innovation, Pragmatism, Endeavor

人才理念:以人为本 德才兼备 事得其人 人尽其才

Talent Philosophy: People-oriented, Both Virtue and Competence, the Right Person for the Job, Full Utilization of Talents

科研理念:极致求实 合作共赢 技术引领 科技报国

R&D Philosophy: Ultimate Pragmatism, Win-win Cooperation, Technological Leadership, Serving the Country Through Science and Technology

安全理念:以人为本 安全发展

Safety Philosophy: People-oriented, Safety-focused Development

质量理念:追求卓越 永创一流

Quality Philosophy: Pursuit of Excellence, Striving for First-class

生产理念:精益生产 追求完美 绿色制造 节能环保

Production Philosophy: Lean Production, Pursuit of Perfection; Green Manufacturing, Energy Conservation and Environmental Protection

环保理念:绿色 低碳 循环 持续

Environmental Philosophy: Green, Low-carbon, Circular, Sustainable

讲好红色故事 传承红色基因

主营业务

Main Business

公司核心业务是中高端耐火材料的研发、制造、销售和服务,现有硅质系列制品、镁质系列制品、高铝系列制品、复合系列制品、高纯氧化物制品、功能型材料制品、不定形及预制件制品8个系列,200多个品种。产品广泛应用于钢铁、有色金属、石油和煤化工、陶瓷、水泥、玻璃、电力、环保和国防军工等多个高温领域,产品出口至南美、北美、欧洲、非洲及亚洲等40多个国家和地区。

The company's core business covers the R&D, manufacturing, sales and services of high-end refractory products. It currently provides 8 series and more than 200 varieties of products, including silica-based products, magnesia-based products, high-alumina products, composite products, high-purity oxide products, functional refractory products, as well as monolithic refractories and pre-cast products. These products are widely used in various high-temperature industries such as iron and steel, non-ferrous metals, petroleum and coal chemical, ceramics, cement, glass, electric power, environmental protection, national defense and military industry. The company exports its products to more than 40 countries and regions across South America, North America, Europe, Africa and Asia.



公司拥有国家耐火材料质量检验检测中心,通过ISO、ASTM、DIN、EN等国际先进标准检测能力认证,是国内耐火材料行业检验业务范围最广的质检中心。

The company houses the National Refractory Materials Quality Inspection and Testing Center, which has obtained accreditation for testing capabilities in line with internationally advanced standards including ISO, ASTM, DIN and EN. It is the quality inspection center with the most comprehensive scope of inspection services in China's refractory industry.

多个品种的高温检测仪器、齿科设备及新材料生产。高温检测仪器主要有耐火材料力学性能、热学性能、使用性能、结构性能等检测设备;齿科设备主要有自动可编程真空烤瓷炉、纯钛铸造机、氧化锆结晶炉及五轴雕刻机等;新材料主要有高性能晶体纤维、硬质材料加工工具、新能源用窑具材料等,性能优异。

Manufacture of various high-temperature testing instruments, dental equipment and new materials. High-temperature testing instruments mainly include equipment for testing mechanical properties, thermal properties, service performance and structural properties of refractories. Dental equipment mainly includes automatic programmable vacuum porcelain furnaces, pure titanium casting machines, zirconia sintering furnaces, five-axis carving machines, etc. New materials mainly include high-performance crystalline fibers, hard material processing tools, kiln furniture materials for new energy, etc., all with excellent performance.

其他产品和服务

Other Products and Services

公司拥有先进技术实力和技术优势,可为耐火材料生产企业、耐火材料用户提供技术开发、技术转让、技术咨询、技术服务、人才培养等诸多服务。

With advanced technological strength and advantages, the company provides technology development, technology transfer, technical consulting, technical services, personnel training and other services for refractory manufacturers and refractory end-users.

工程设计、工程咨询、各类工业窑炉设计、制造、施工安装和技术培训的专业技术服务。项目涉及高温隧道窑、梭式窑、回转窑、推板窑、气化炉、矿热炉、铁合金炉、热处理炉等多种高温设备。公司在炉型结构设计、炉衬材料选型配置、窑炉施工等方面具有相对独特的创新技术,并拥有多项专利,尤其在节能环保、施工自动化、优化建设成本等方面具有较强优势。

Professional technical services including engineering design, engineering consulting, design, manufacturing, construction, installation and technical training for various industrial kilns and furnaces. Projects cover a variety of high-temperature equipment such as high-temperature tunnel kilns, shuttle kilns, rotary kilns, pusher kilns, gasifiers, submerged arc furnaces, ferroalloy furnaces, and heat treatment furnaces. The company possesses distinctive innovative technologies in furnace structure design, lining material selection and configuration, kiln construction, etc., with a number of patents. It enjoys strong advantages especially in energy conservation and environmental protection, construction automation, and capital cost optimization.



企业荣誉 Enterprise Honors



- ◆ 先进耐火材料全国重点实验室主任李红霞当选中国工程院院士
Li Hongxia, Director of the State Key Laboratory of Advanced Refractories, was Elected as an Academician of the Chinese Academy of Engineering.
- ◆ “石英熔炼炉用关键耐火材料制备技术研究”项目荣获河南省耐火材料行业科学技术奖一等奖
The Project Research on Preparation Technology of Key Refractories for Quartz Melting Furnaces Won the First Prize of the Science and Technology Award of the Henan Provincial Refractory Industry.
- ◆ “新一代碳化硅材料关键技术研发及产业化”项目荣获2025年中国宝武技术创新重大成果奖三等奖
The Project Key Technology R&D and Industrialization of New-Generation Silicon Carbide Materials Won the Third Prize of the 2025 China Baowu Major Technological Innovation Achievement Award.
- ◆ 成功入选国家知识产权强国建设示范企业创建名单
The Company was Successfully Selected into “the National List of Demonstration Enterprises for Intellectual Property Powerhouse Construction”.
- ◆ 两项成果——“铝电解用自结合碳化硅材料”与“高纯净钢连铸用关键耐材的开发与生产实践”荣获第十一届国际发明展览会银奖
Two Achievements-“Self-bonded Silicon Carbide Materials for Aluminum Electrolysis” and “Development and Production Practice of Key Refractories for High-purity Steel Continuous Casting” Won Silver Medals at the 11th International Exhibition of Inventions.
- ◆ 入选河南省首批授权使用“美豫名品”名单
The Company was Selected into the First Batch of Authorized “Mei Yu Famous Brands” List in Henan Province.
- ◆ 氮化物结合碳化硅系列制品荣获钢铁行业全产业链EPD平台注册证书
The Nitride-bonded Silicon Carbide Series Products Obtained the Registration Certificate From the EPD Platform For the Whole Steel Industry Chain.

- ◆ 荣获“2025-2026年度钢铁工业用耐火材料优秀企业”称号
The Company was Awarded the Title of “Excellent Enterprise in Refractories For Iron & Steel Industry (2025-2026)”.
- ◆ 员工荣获中国宝武“金牛奖”
An Employee of the Company Won the Baowu Golden Bull Award.
- ◆ 荣获2025“金狮”ESG年度优秀社会责任案例
The Company Won the 2025 “Golden Lion” ESG Annual Excellent Social Responsibility Case Award.
- ◆ 科研团支部荣获“全国钢铁行业五四红旗团支部”称号
The Scientific Research Youth League Branch was Awarded the Title of “National May 4th Red Flag Youth League Branch in the Iron & Steel Industry”.



04

祖国万岁

科学治理

夯实质臻发展之基

Scientific Governance

Consolidate the Foundation of Pursuit Development



党建引领把方向

Party Leading the Strategic Direction

公司将党的领导融入公司治理各环节,通过修订《公司章程》明确党委法定地位,建立党委前置研究讨论重大事项清单制度,对发展战略、重大投融资等事项先经党委研究后再提交董事会、经理层决策,以党建引领保障企业发展方向不偏、行动有力。

The company integrates Party leadership into all aspects of corporate governance. By revising the Articles of Incorporation, it clarifies the statutory status of the Party Committee, and establishes a system of pre-research discussion list for major matters by the Party Committee. Matters such as development strategies and major investments and financing are first deliberated by the Party Committee before being submitted to the Board of Directors and the management for decision-making. Party building ensures the enterprise stays on the right track and acts with strong resolve.

2025年,公司党委扎实推进党建各项工作。召开党委扩大会、民主生活会等党建重要会议,严格落实“第一议题”制度,发挥党委理论学习中心组引领作用,推动理论学习走深走实。深入开展贯彻中央八项规定精神学习教育,抓好学习研讨、查摆问题、开门教育,及时抓好整改落实和建章立制,推动作风建设走深走实。组织党员干部参加深入贯彻中央八项规定精神学习教育读书班,为全体党员配发《习近平关于加强党的作风建设论述摘编》等学习书籍,引导党员干部准确把握中央八项规定精神的具体内容和实践要求,不断增强贯彻落实的政治自觉、思想自觉和行动自觉。

In 2025, the company's Party Committee solidly advanced all work related to Party building. It held important Party meetings including enlarged Party Committee meetings and democratic meetings, strictly implemented the "First Topic" system, and gave full play to the leading role of the Party Committee Theoretical Learning Center Group to deepen theoretical learning in a thorough and practical manner. The company thoroughly carried out study and education on implementing the spirit of the Eight-point Decision on Improving Party and Government Conduct, focusing on study and discussion, problem identification and open education, promptly promoting rectification and improvement as well as establishing rules and systems to further advance the improvement of Party conduct in a thorough and practical manner. Party members and officials were organized to attend study classes on thoroughly implementing the spirit of the Eight-Point Decision. All Party members were provided with study materials such as Excerpts from Xi Jinping's Important Discourses on Improving Party Conduct, guiding them to accurately grasp the specific content and practical requirements of the decision, and continuously enhance their political consciousness, ideological consciousness and operational consciousness in its implementation.

公司党委充分运用纪检监察、审计监督、财会监督、督促检查、调查研究、信访反映等途径,全面深入查找落实中央八项规定精神及其实施细则方面存在的问题。组织公司干部职工参观警示教育基地,提升警示教育震慑力、穿透力、感染力。为固化整改成效,制定《中钢洛耐党委会议“第一议题”制度实施办法(试行)》《关于深入贯彻落实中央八项规定精神进一步加强作风建设的实施意见》等制度,不断健全长效机制,以高质量党建引领公司治理效能提升,助力企业可持续发展。

The Party Committee comprehensively identified problems in implementing the spirit of the Eight-point Regulations and its implementation rules through disciplinary inspection and supervision, audit oversight, financial supervision, inspection and supervision, investigation and research, and petition reporting. Cadres and employees were organized to visit education bases on legal and disciplinary warnings to enhance deterrence, penetration, and influence of such education. To consolidate rectification results, the company formulated systems including the Implementation Measures for the "First Agenda Item" System of Sinosteel Luonai Party Committee (Trial) and the Implementation Opinions on Further Strengthening Work Style Construction by Thoroughly Implementing the Spirit of the Eight-point Regulation, continuously improving long-term mechanisms. High-quality Party building elevates corporate governance efficiency and supports sustainable enterprise development.



正风肃纪促发展

Fostering Discipline and Integrity for Development

中钢洛耐始终坚持以习近平新时代中国特色社会主义思想为指导,全面贯彻落党中央及上级党委关于党风廉政建设和反腐败工作的各项部署要求,坚定不移推进全面从严治党向纵深发展,一体推进不敢腐、不能腐、不想腐。不断强化政治引领与政治监督,压紧压实党风廉政建设主体责任,通过层层签订党风廉政建设责任书,构建责任闭环;聚焦“关键少数”,切实加强“一把手”和领导班子的监督,持续提升监督治理效能。持之以恒落实中央八项规定精神,常态化纠治“四风”、深化作风建设,坚持以案促改、以案促治,用好典型案例开展警示教育,不断筑牢党员干部廉洁自律思想防线。同时着力加强纪检监察队伍自身建设,锻造忠诚干净担当的纪检铁军,以严的基调正风肃纪反腐,为公司发展提供坚强政治保障。

Sinosteel Luonai always adheres to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, fully implements the arrangements and requirements of the CPC Central Committee and superior Party committees on improving Party conduct, building clean government and combating corruption. It firmly advances the full and rigorous governance of the Party in depth, and takes coordinated steps to ensure that officials do not dare to, are unable to, and have no desire to engage in corruption. The company continuously strengthens political guidance and oversight, and fully implements the primary responsibility for improving Party conduct and building clean government. A closed-loop responsibility system is established by signing responsibility documents for improving Party conduct and building clean government at all levels. Focusing on the "key minority", it effectively strengthens oversight over top executives and leading teams, and continuously improves the effectiveness of supervision and governance. It persistently implements the spirit of the Eight-point Regulation of the CPC Central Committee, conducts regular efforts to address the "Four Malfeasances" and deepen work style improvement. The company uses cases to promote reform and governance, and leverages typical cases to conduct warning education, continuously strengthening the ideological line of defense against corruption for Party members and officials. Meanwhile, the company focuses on strengthening the self-development of its discipline inspection cadre team, forging a loyal, clean and responsible iron discipline inspection force. With a strict tone, it upholds integrity, strengthens discipline and fights corruption, providing a strong political guarantee for the company's development.



诚信文化铸品牌

Integrity Culture Forges a Strong Brand



2025年,是公司“诚信文化建设年”,公司以“横向拓展、纵向深入、重点突出、逐层递进”的工作格局推进诚信文化建设,将其深度融入公司治理与生产经营全流程。成立由党委书记、董事长任组长的诚信文化建设推进小组,制定专项工作方案,党委理论学习中心组及基层党组织分层开展诚信文化专题学习与正反面案例警示教育。通过举办“诚信杯”篮球赛、开展“先进标兵话诚信”活动、“诚信大家谈”等多种形式强化宣传引导,开展诚信文化调查,绝大多数受访者认为其对企业高质量发展具有积极推动作用。开展诚信主题创作活动,打造体验式传播模式,征集书法、绘画、AIGC等各类诚信文化作品。各职能部门及生产经营单元坚持问题导向,聚焦关键领域开展诚信缺失问题自查自纠,查摆问题均完成点对点整改。

The year 2025 is designated as the Year of Integrity Culture Construction of the company. Adopting a work pattern of "horizontal expansion, vertical penetration, highlighted priorities and progressive advancement", the company has promoted the construction of integrity culture, and deeply integrated it into the entire process of corporate governance, production and operation. The company has set up a leading group for the promotion of integrity culture, with the Secretary of the Party Committee and Chairman serving as the group leader, and formulated a special work plan. The theoretical study center group of the Party Committee and grassroots Party organizations have carried out hierarchical special studies on integrity culture and warning education with both positive and negative cases. To strengthen publicity and guidance, the company has held a variety of activities, including the "Integrity Cup" basketball match, "Advanced Models Talk about Integrity" and "Integrity Forum". A survey on integrity culture has been conducted, and the vast majority of respondents hold the view that integrity culture plays a positive role in promoting the high-quality development of the enterprise. The company has also launched integrity-themed creation activities, created an experiential communication model, and collected various integrity culture works such as calligraphy, painting and AIGC creations. All functional departments and production & operation units have adhered to the problem-oriented approach, focused on key areas to conduct self-inspection and self-correction of integrity deficiencies, and completed point-to-point rectification of all identified problems.

守誠
信信
致中
遠鋼

武漢耐材
秦常傑書

诚信文化作品

多措并举强化公司治理

Strengthen Corporate Governance

董事会履责

Standardize Board Performance

公司董事会严格遵循《公司章程》《公司董事会议事规则》及股东大会授权履行职责,建立了科学、民主、高效的重大事项决策机制,对公司定期报告、关联交易、募集资金管理、基本制度制定与修订、董事补选等职权范围内重大事项审慎决策,持续提升公司规范治理水平。董事会下设战略委员会、审计委员会、提名委员会、薪酬与考核委员会四大专门委员会,各司其职、协同运转。



The Board of Directors of the company strictly performs its duties in accordance with the Articles of Association, the Rules of Procedure for the Board of Directors and the authorization of the shareholders' general meeting. It has established a scientific, democratic and efficient decision-making mechanism for major matters, and prudently makes decisions on major matters within its terms of reference, including periodic reports, connected transactions, management of raised funds, formulation and revision of basic systems, and by-election of directors, so as to continuously improve the company's standardized governance level. The Board has four special committees under it, namely the Strategy Committee, Audit Committee, Nomination Committee, and Remuneration and Assessment Committee, which perform their respective duties and operate in coordination.

公司建立独立董事专门会议机制,制定《独立董事专门会议工作制度》,为独立董事独立履职提供坚实制度保障。按规定须披露的关联交易、公司及相关方承诺变更或豁免方案等事项,均需经独立董事专门会议审议、全体独立董事过半数同意后,再提交董事会审议。

The company has established a special meeting mechanism for independent directors and formulated the Working System for Special Meetings of Independent Directors, providing a solid institutional guarantee for independent directors to perform their duties independently. Matters subject to disclosure as required, including connected transactions, proposals on the alteration or exemption of commitments made by the company and relevant parties, shall be deliberated at the special meeting of independent directors and approved by more than half of all independent directors before being submitted to the Board of Directors for deliberation.

报告期内,董事会严格依照《公司章程》规范运作,共召开13次董事会会议,高效审议决策公司重大事项;各专门委员会依议事规则勤勉履职,为董事会科学决策提供专业支撑。

During the reporting period, the Board of Directors conducted its operations in strict accordance with the Articles of Association of the company, convening a total of 13 board meetings to efficiently deliberate and decide on major corporate matters. Each special committee diligently performed its duties in accordance with its respective rules of procedure, providing professional support for the Board of Directors to make scientific decisions.

严格治理架构与权责划分

Rigorous Governance Structure & Clear Power-responsibility Division

公司董事会由9名董事组成,含职工董事1名、外部董事6名(其中独立董事3名,占比1/3),人员构成符合监管要求。董事会成员兼顾经营层管理人员、股东派出人员及独立董事,专业背景覆盖耐火材料、会计、法律等领域,治理结构多元化、专业化,为科学决策奠定坚实基础;女性董事1名,占董事会总人数的1/9。报告期内召开5次股东大会,董事出席率100%。

The Board of Directors of the company consists of 9 directors, including 1 employee representative director and 6 external directors (among whom 3 are independent directors, accounting for one-third). The composition meets the regulatory requirements. The Board of Directors include management executives, shareholder-appointed representatives and independent directors, with professional backgrounds covering refractory materials, accounting, law and other fields. The diversified and professional governance structure lays a solid foundation for scientific decision-making. There is 1 female director, accounting for one-ninth of the total number of directors on the Board. During the reporting period, 5 general meetings of shareholders were convened, with a 100% attendance rate of directors.

严格落实董事长与总经理分权制衡机制，权责边界清晰。董事长主要行使股东会、董事会召集主持，决议监督，法定代表人及董事会授予的其他职权；总经理对董事会负责，主持公司生产经营管理工作，组织实施董事会决议，拟订内部管理及制度方案，行使人事任免、薪酬奖惩等经营管理相关职权，二者各司其职、有效制衡。

The company strictly implements the mechanism of separation of powers with checks and balances between the Chairman and the General Manager, with a clear division of powers and responsibilities. The Chairman is primarily responsible for convening and presiding over general meetings of shareholders and meetings of the Board of Directors, supervising the implementation of resolutions, performing duties as the legal representative, and exercising other powers conferred by the Board of Directors. The General Manager is accountable to the Board of Directors, takes charge of the company's production, operation and management, organizes the implementation of the Board's resolutions, formulates plans for internal management systems and rules, and exercises operational and management authorities including personnel appointment and dismissal, salary adjustment, rewards and penalties. The two perform their respective duties and maintain effective checks and balances.

根据公司实际，进行监事会改革，改革前监事会由3名监事组成，其中外部监事2名，职工监事1名，召开监事会会议5次，监事出席率100%。2025年12月11日，经2025年第四次临时股东大会审议，取消监事会。

In light of the company's actual situation, reform of the supervisory board was carried out. Prior to the reform, the Supervisory Board comprised 3 supervisors, including 2 external supervisors and 1 employee representative supervisor. During the relevant period, 5 supervisory board meetings were held, with a 100% attendance rate of supervisors. On December 11, 2025, upon deliberation and approval at the Fourth Extraordinary General Meeting of Shareholders of 2025, the Supervisory Board was abolished.



健全ESG治理体系

Improve the ESG Governance System

公司建立健全ESG工作领导机制，董事会充分发挥战略引领作用，将ESG工作纳入战略委员会核心职责，由战略委员会作为ESG专门工作机构，研究公司ESG发展相关风险与机遇，为公司ESG工作制定战略建议。战略委员会由5名董事组成，董事长担任主任委员，公司ESG报告需经战略委员会审议通过后方可提交董事会审定披露。

The company has established and improved a leading mechanism for ESG work. The Board of Directors fully leverages its strategic leadership role, and incorporates ESG work into the core responsibilities of the Strategy Committee, which serves as the special working body for ESG affairs. The Strategy Committee studies the risks and opportunities related to the company's ESG development, and formulates strategic proposals for the company's ESG initiatives. The Strategy Committee consists of 5 directors, with the Chairman of the Board serving as the Chairman of the Strategy Committee. The company's ESG Report shall be deliberated and approved by the Strategy Committee before being submitted to the Board of Directors for review and approval as well as public disclosure.

公司已形成“编撰-审议-披露”全流程、规范化的ESG报告管理机制，由ESG报告编撰工作小组牵头，各业务部门协同配合，完成报告框架搭建、素材收集整理、编写设计等全流程工作；董事会战略委员会对报告内容严格审议，确保报告真实、准确、完整，符合监管披露标准，定期审查公司ESG表现，推动公司ESG工作持续优化。

The company has established a standardized, full-process ESG report management mechanism covering compilation, review and disclosure. Led by the ESG Report Compilation Task Force and with the coordination of all business departments, the entire process including framework development, data and material collection and organization, as well as drafting and design is completed. The Strategy Committee of the Board of Directors conducts rigorous review of the report to ensure it is true, accurate, complete and compliant with regulatory disclosure standards. The Strategy Committee also regularly reviews the company's ESG performance and promotes continuous improvement of the company's ESG practices.



投资者关系及权益保护

Investor Relations & Equity Protection

公司严格遵守《上市公司投资者关系管理工作指引》《上海证券交易所科创板上市公司自律监管指引第1号—规范运作》等相关制度及公司《投资者关系管理制度》，规范开展投资者关系管理活动。

The company strictly complies with the Guidelines for Investor Relations Management of Listed Companies, the Self-regulatory Guidelines for Listed Companies on the Science and Technology Innovation Board of the Shanghai Stock Exchange: No. 1-Standard Operating Practices, as well as other relevant regulations and the company's Investor Relations Management System, and conducts investor relations management activities in a standardized manner.



通过多种渠道与投资者沟通交流，提高信息透明度，维护投资者权益。报告期内，共组织召开3次业绩说明会，向广大投资者公告公司发展情况，积极与投资者现场沟通交流。通过组织开展形式多样的投资者活动，利用法定信息披露平台以及股东大会、机构调研、投资者关系热线电话、邮箱、上证e互动平台等方式与投资者交流沟通，积极听取投资者意见建议，及时回复投资者关注事项及提出的问题，宣传公司价值，在召开股东大会时严格按照相关规定执行累积投票制、中小投资者单独计票制，保障全体投资者特别是中小投资者的合法权益。

The company maintains communication with investors through various channels to enhance information transparency and protect investors' rights and interests. During the reporting period, the company held a total of 3 results briefings to inform investors of the company's development and conduct in-person exchanges with them. Through a variety of investor relations activities, the company communicates with investors via statutory information disclosure platforms, general meetings of shareholders, institutional visits, investor relations hotlines, email, SSE e-Interaction Platform, and other channels. It actively listens to investors' opinions and suggestions, responds promptly to their concerns and inquiries, and promotes the company's value. In convening general meetings of shareholders, the company strictly implements the cumulative voting system and the separate voting system for retail investors in accordance with relevant regulations, so as to safeguard the legitimate rights and interests of all investors, especially minority investors.

强化信息披露

Strengthen Information Disclosure

公司制定了《信息披露管理制度》《内幕信息知情人登记管理制度》《新闻发言人制度》等系列制度，为公司信息披露工作提供制度保障。通过指定网站上海证券交易所(www.sse.com.cn)及指定报刊《中国证券报》《上海证券报》《证券时报》《证券日报》，真实、准确、完整、公平、及时进行信息披露，确保公司所有股东公平获取公司信息。公司严格按照相关规定履行信息披露和内幕信息管理，未发生信息披露及内幕信息违规行为。

The company has formulated a series of policies including the Information Disclosure Management System, the Inside Information Insider Registration Management System, and the Spokesperson System, providing institutional guarantees for the company's information disclosure work. The company discloses information truthfully, accurately, completely, fairly, and timely through the designated website of the Shanghai Stock Exchange (www.sse.com.cn) and designated newspapers: China Securities Journal, Shanghai Securities News, Securities Times and Securities Daily, ensuring that all shareholders of the company have equal access to corporate information. The company strictly performs information disclosure and inside information management in accordance with relevant regulations. No violations of information disclosure or inside information management have occurred.



中钢洛耐科技股份有限公司 2025年半年度报告摘要

公司代码: 688119



切实保障数据安全

Data Security Protection

公司高度重视数据安全与隐私保护,严格遵守相关法律法规及监管要求,持续完善涵盖数据全生命周期的分类分级管理体系。在保障数据安全的基础上,积极推动数据要素合规、高效流通与应用,充分释放数据价值,为整体数字化转型提供坚实支撑。在基础设施与网络安全层面,建立了多层次防护体系。数据中心机房配备精密空调、不间断电源(UPS)、动力环境监控系统及自动备份设备,确保物理环境稳定可靠。办公及业务网络全面部署防火墙、入侵检测与防护系统、威胁态势感知平台以及零信任安全接入网关,并通过实施严格的身份鉴别、最小权限访问控制和操作审计机制,有效防御外部攻击与内部风险,切实保障公司及客户数据与隐私安全。

The company places great importance on data security and privacy protection, strictly abides by relevant laws, regulations and regulatory requirements, and continuously improves a classified and graded management system covering the entire data life cycle. On the basis of ensuring data security, the company actively promotes the compliant and efficient circulation and application of data elements, fully unlocks data value, and provides solid support for the overall digital transformation. With respect to infrastructure and cybersecurity, the company has established a multi-layer protection system. The data center computer room is equipped with precision air conditioners, uninterruptible power supply (UPS), power and environment monitoring systems, and automatic backup equipment to ensure a stable and reliable physical environment. Firewalls, intrusion detection and prevention systems, threat intelligence platforms, and zero-trust security access gateways are fully deployed on office and business networks. Through the implementation of strict identity authentication, least-privilege access control, and operation auditing mechanisms, the company effectively defends against external attacks and internal risks, and effectively safeguards the data and privacy security of the company and its customers.



健全守法合规体系

Sound Compliance System

公司践行习近平法治思想,优化依法治企体系,实行总法律顾问制度,修订《公司章程》《董事会议事规则》等多项制度;建立“统一领导、分级负责”的合规管理体系,设立专职合规岗位,在市场交易、安全环保、劳动用工等重点领域开展合规审查,报告期内审查合同9618份、合规审查覆盖率100%。

The company applies Xi Jinping Thought on the Rule of Law, optimizes its system for law-based corporate governance, and implements the the Chief Legal Officer (CLO) System. It has revised multiple regulations and systems including the Articles of Association and the Rules of Procedure of the Board of Directors. A compliance management system featuring "unified leadership and hierarchical responsibility" has been established, with full-time compliance posts set up. Compliance reviews are conducted in key areas such as market transactions, safety and environmental protection, and labor and employment. During the reporting period, 9,618 contracts were reviewed, achieving a 100% compliance review coverage.

2025年,组织涵盖《公司法》《安全生产法》《反不正当竞争法》等内容合规培训,参培人数6169人次,总学时33108小时;开展保密知识、环境保护等专项培训,主要负责人、安全管理人员等关键岗位持证率100%,员工合规意识显著提升。

In 2025, the company organized compliance training covering the Company Law, the Work Safety Law, the Anti-unfair Competition Law and other relevant laws. A total of 6,169 participants attended the training, with an cumulative duration of 33,108 training hours. Specialized training was also conducted on confidentiality, environmental protection and other topics. The certification rate of key positions such as primary responsible persons and safety managers reached 100%, and the compliance awareness of employees was significantly enhanced.



审查合同

9618份

合规审查覆盖率

100%

参培共计

6169人次

累计时长

33108小时

强化风险防控

Enhance Risk Prevention and Control

2025年,公司细化《全面风险与内部控制管理制度》《经营突发事件报告处理程序(应急预案)》《风险评价标准》等风险内控管理制度,不断完善公司风险内控管理制度体系,为风险内控管理工作提供制度保障。结合公司风险管控实际,组织协调企业应对风险识别、风险处置、风险防控等系统工作:建立风险预警监督机制;强化客商授信管控,增强公司经营突发事件报告处置机制,不定期发布公司各类风险专题提示,引导各单位增强风险管理意识,严格落实对应条线管理部门风险管控措施,守住风险底线,支撑公司总体经营稳定运行。



In 2025, the company refined its risk and internal control management systems, including the Comprehensive Risk and Internal Control Management System, Procedures for Reporting and Handling Operational Emergencies (Emergency Plan), and Risk Evaluation Standards, further improving the risk and internal control system to provide institutional support for relevant management work. In light of the company's actual risk management needs, it organized and coordinated systematic efforts in risk identification, risk response, and risk prevention and control across the enterprise. A risk early warning and supervision mechanism was established; credit control over customers and business partners was strengthened; the reporting and response mechanism for operational emergencies was enhanced; and various special risk alerts were issued on an irregular basis. These efforts guided all departments to raise risk management awareness, strictly implement risk control measures assigned to competent authorities, hold the bottom line against risks, and support the stable operation of the company's overall business.

2025年,公司强化风险管理意识,规范风险报告处理程序,识别重大风险8项,及时发现解决公司风险管理“盲点”“堵点”,夯实基础工作。

In 2025, the company strengthened risk management awareness and standardized risk reporting and handling procedures. Eight major risks were identified, and blind spots and bottlenecks in the company's risk management were promptly detected and resolved, further consolidating foundational work.

反不正当竞争

Anti-unfair Competition

公司严格遵循《中华人民共和国反不正当竞争法》及国家、地区相关法律法规,自觉维护公平有序的市场竞争秩序,切实保障其他经营者与消费者的合法权益。同时,公司坚持公正、诚信、合法、合规开展市场交易活动。2025年,公司未发生任何不正当竞争情形,不存在虚假宣传、商业诋毁、串通招投标、市场混淆等不正当竞争行为,未涉及不正当竞争相关诉讼案件。

The company strictly abides by the Anti-unfair Competition Law of the People's Republic of China and relevant national and local laws and regulations, consciously maintains a fair and orderly market competition order, and earnestly safeguards the legitimate rights and interests of other operators and consumers. At the same time, the company adheres to fairness, integrity, legality and compliance in conducting market transactions. In 2025, the company had no instances of unfair competition. No unfair competition practices such as false advertising, commercial defamation, collusive tendering and bidding, or market confusion occurred, nor was the company involved in any litigation related to unfair competition.



05

锐意创新 凝聚科技引领之力

Bold Innovation
Gather the Power of Technology Leadership



2025年,公司紧扣国家重大战略需求,以科技自立自强为发展目标,持续完善创新体系,加大研发投入,攻坚核心技术,深化协同合作,在技术创新、成果转化、知识产权保护等方面取得一系列突破,同时以规范的科技伦理建设和扎实的国家战略服务行动,推动科技创新与社会价值深度融合,为行业转型升级和国家高质量发展注入耐火材料领域核心力量。

In 2025, the company closely aligned with the major strategic needs of the country, aiming for greater self-reliance and strength in science and technology. It continued to improve its innovation system, increased R&D investment, tackled key core technologies, and deepened collaborative cooperation, achieving a series of breakthroughs in technological innovation, achievement transformation, and intellectual property protection. Meanwhile, through well-regulated scientific and technological ethics development and solid actions to serve national strategies, the company promoted the deep integration of scientific and technological innovation with social value, injecting core strength from the refractory materials sector into the industrial transformation and upgrading as well as the high-quality development of the country.



构建双轨创新体系

Establish a Dual-track Innovation System

公司立足自身发展战略,打造“研发中心+产线研发”双轨创新体系,实现前沿技术攻关与市场需求落地的双向联动。研发中心依托先进耐火材料国家重点实验室,聚焦高温极端环境材料研发、行业前沿技术探索等前瞻性、基础性、共性技术开展研究;产线研发团队紧密对接市场与生产实际,主攻产品迭代、工艺优化和技术降本,让创新成果快速转化为生产力。

为强化科技创新顶层设计,公司成立由领导班子、所属单位负责人和技术专家组成的科技创新委员会,统筹内外部创新资源,构建产学研用协同创新体系;同步设立技术专家委员会,为科技规划、项目评审、技术协同提供专业支撑,通过定期工作会议机制推进重大科技攻关,全面提升创新决策科学性和成果转化效率。同时,公司加速推进统一科研体系建设,打造耐火材料总包和“耐材管家”特色商业模式,以体系创新推动企业发展升级。

Based on its development strategy, the company has built a dual-track innovation system featuring "R&D Center + Production Line R&D", realizing the two-way linkage between cutting-edge technological research and the implementation of market demand. Relying on the State Key Laboratory of Advanced Refractory Materials, the R&D Center focuses on the research of forward-looking, basic and common technologies such as the research and development of materials for extreme high-temperature environments and the exploration of cutting-edge industrial technologies. The production line R&D team closely connects with the market and actual production, focusing on product iteration, process optimization and technology-based cost reduction, enabling innovative achievements to be quickly transformed into productive forces.

To strengthen the top-level design for scientific and technological innovation, the company has established a Scientific and Technological Innovation Committee composed of the leading team, principals of affiliated units and technical experts. The Committee coordinates internal and external innovation resources and builds a collaborative innovation system integrating industry, universities, research institutes and users. In the meantime, the company has set up a Technical Expert Committee to provide professional support for scientific and technological planning, project evaluation and technical collaboration. It promotes major scientific and technological breakthroughs through a regular working meeting mechanism, and comprehensively enhances the scientificity of innovation decision-making and the efficiency of achievement transformation. In addition, the company has accelerated the construction of a unified scientific research system, and developed the distinctive business models of refractory material general contracting and "Refractory Material Steward", driving enterprise development and upgrading through systematic innovation.

2025年,公司持续加大研发投入,研发投入总额达10475.40万元,为各项技术研发、平台建设、项目攻坚提供坚实资金保障。公司拥有完善的研发平台矩阵,其国家级平台涵盖先进耐火材料国家重点实验室、耐火材料国家工程研究中心等6大平台,省部级平台包含中原学者科学家工作室、河南省先进高温材料中试基地等7大平台,同时布局产业技术基础公共服务平台等多个产业服务与技术推广平台,形成多层次、全链条的研发创新支撑体系。



研究生毕业典礼

In 2025, the company continued to increase its R&D investment, with a total R&D investment of CNY 104.754 million providing solid financial support for various technological R&D, platform construction and key project breakthroughs. The company has a well-established matrix of R&D platforms, including 6 national-level platforms such as the State Key Laboratory of Advanced Refractory Materials and the National Engineering Research Center for Refractory Materials, as well as 7 provincial and ministerial-level platforms including the Central Plains Scholar Scientist Studio and the Henan Pilot Test Base for Advanced High-Temperature Materials. In addition, the company has deployed a number of industrial service and technology promotion platforms such as the industrial technology infrastructure public service platform, forming a multi-level, full-chain support system for R&D and innovation.

聚焦核心技术攻关

Focus on Key Core Technology Breakthroughs

2025年,公司紧扣国家重大战略需求和重点客户发展需要,集中优势资源开展关键核心技术攻关,在多个领域实现技术突破和产业化落地,形成一批具有自主知识产权的重大创新成果。

In 2025, focusing on the major strategic needs of the country and the development demands of key customers, the company pooled superior resources to tackle key core technologies, achieving technological breakthroughs and industrial application in multiple fields, and forming a number of major innovative achievements with independent intellectual property rights.

重型燃气轮机材料领域:牵头承担国家重点研发计划项目,突破陶瓷隔热瓦国产化制备等核心技术,相关技术实现国产化应用,产品寿命达到进口水平。

Heavy-duty Gas Turbine Materials: The company led the implementation of a national key R&D program project, achieving breakthroughs in core technologies such as the localized manufacturing of ceramic insulation tiles. Relevant technologies have been applied domestically, with product service life reaching the level of imported counterparts.

薄带连铸领域:攻克薄带连铸用结构功能一体化陶瓷布流器核心技术,优化材料热膨胀性能并完善热模拟评价方法,研制的布流器使用寿命与应用效果达到国际先进水平。

Strip Casting: Breakthroughs were made in the core technology of structural-functional integrated ceramic flow distributors for strip casting. The thermal expansion properties of the material were optimized and the thermal simulation evaluation method was improved. The service life and application performance of the developed flow distributor have reached international advanced levels.

固废处理领域:突破垃圾焚烧炉排炉炉衬材料国外专利壁垒,创制全球首台气氛可控加压连续氮化烧结炉,开发出具有自主知识产权的碳化硅结构功能化新型耐火材料,寿命达国际领先水平,整体技术国际先进,核心技术国际领先。

Solid Waste Treatment: The company broke through foreign patent barriers on lining materials for waste incineration grate furnaces, and developed the world's first pressurized continuous nitriding sintering furnace with controllable atmosphere. It has created new silicon carbide structural and functional refractories with independent intellectual property rights, whose service life reaches the international leading level. The overall technology is internationally advanced, and the core technologies are world-leading.

石化材料领域:研发Catofin丙烷脱氢固定床反应器用耐火材料,创新材料组成与炉衬结构设计,总体技术国际先进、部分指标国际领先。

Petrochemical Materials: The company developed refractory materials for Catofin propane dehydrogenation fixed-bed reactors, with innovative material composition and lining structure design. The overall technology is internationally advanced, with some indicators reaching world-leading levels.



公司推进高端产能建设,实施年产3000吨高端连铸三大件功能材料生产线建设项目,持续丰富高端产品矩阵。

The company promoted the development of high-end production capacity by implementing the construction project of a production line with an annual output of 3,000 tons of functional materials for the three key components of high-end continuous casting, further enriching its portfolio of high-end products.



2025年,公司累计发表学术论文**50余篇**,获得授权专利**47项**,其中发明专利**8项**、实用新型**39项**,获河南省耐火材料行业协会科技进步奖**3项**、宝武技术创新重大成果奖**1项**(主持),科技创新硬实力持续提升。

In 2025, the company published more than 50 academic papers and was granted 47 patents, including 8 invention patents and 39 utility model patents. It also won 3 Science and Technology Progress Awards from the Henan Refractory Industry Association and 1 China Baowu Major Technological Innovation Achievement Award (as the lead organizer). The company's scientific and technological innovation strength has been continuously enhanced.

累计发表学术论文

50 余篇

发明专利

8 项

实用新型

39 项

获河南省耐火材料行业协会科技进步奖

3 项

宝武技术创新重大成果奖

1 项



完善创新保障机制

Enhance the Innovation Support Mechanism

健全知识产权全链条管理

Improve Whole-chain IP Management

公司高度重视知识产权保护,构建“创造-运用-保护-管理”全链条工作体系,密切关注市场、行业及政策动态,及时识别并防范知识产权潜在风险;加强员工知识产权专项培训,通过课程、讲座等形式提升员工保密与知识产权保护意识。凭借在知识产权领域的突出表现,公司成功入选国家知识产权强国建设示范企业创建名单,知识产权管理水平跻身行业前列。

The company attaches great importance to intellectual property protection and has established a whole-chain work system covering "creation, application, protection and management". It closely monitors market, industry and policy developments to promptly identify and guard against potential intellectual property risks. It also strengthens targeted training on intellectual property for employees through courses and lectures to enhance their awareness of confidentiality and IP protection. With its outstanding performance in the IP field, the company has been successfully selected into the list of Demonstration Enterprises for the Construction of a National Intellectual Property Powerhouse, ranking among the industry leaders in IP management.

深化战略合作与平台协同

Strengthen Strategic Partnerships and Cross-platform Collaboration

公司以先进耐火材料全国重点实验室为核心,完善战略合作与协同创新机制,2025年完成重点实验室重组申报并获批,组织召开3次实验室发展战略研讨会;编制实验室开放课题基金、实验室运行管理办法,初步建立多地协同运行机制,推动科研资源共享、技术协同攻关。未来,实验室将通过构建企业牵头、高校和科研院所深度参与的创新联合体,统筹共建单位优势资源,做大代表性成果;推进核心实验平台升级改造,补齐关键设备短板;完善实验室制度体系,优化科研协作机制,加速“实验室成果”向“生产线产品”转化。



先进耐火材料全国重点实验室发展战略研讨会

The company, with the State Key Laboratory of Advanced Refractory Materials as the core, has improved its mechanisms for strategic cooperation and collaborative innovation. In 2025, it completed and obtained approval for the restructuring application of the key laboratory, and convened three seminars on the laboratory's development strategy. It has formulated the open project fund regulations and operation management measures of the laboratory, initially established a multi-site collaborative operation mechanism, and promoted the sharing of scientific research resources and joint technological breakthroughs. In the future, the laboratory will build an innovation consortium led by enterprises with deep participation of universities and research institutes, integrate the superior resources of co-construction units, and develop more representative achievements. It will also upgrade core experimental platforms, fill gaps in key equipment, improve the institutional system, optimize research collaboration mechanisms, and accelerate the transformation of "laboratory achievements" into "production line products".

强化科技伦理建设

Strengthen Scientific and Technological Ethics

公司坚守科技伦理核心原则,将增进人类福祉、推动行业健康发展融入科技创新全过程,注重科技工作者的社会责任培育与心理健康建设。在第九个全国科技工作者日,公司联合涧西区科协开展心理健康讲座,为科技工作者普及情绪与压力管理知识,引导其树立积极健康的工作生活态度,助力科技工作者以良好状态投身科研攻关,实现个人价值与企业价值双赢。

The company adheres to the core principles of scientific and technological ethics, integrates promoting human well-being and the healthy development of the industry into the entire process of scientific and technological innovation, and attaches importance to fostering the social responsibility and mental health of scientific and technological personnel. On the 9th National Science and Technology Workers' Day, the company, in conjunction with the Association for Science and Technology of Jianxi District, held a mental health lecture to popularize knowledge on emotion and stress management for scientific researchers. This initiative guided them to adopt a positive and healthy attitude toward work and life, supporting them in devoting themselves to research and breakthroughs in good condition, and achieving a win-win situation for both personal value realization and enterprise development.

彰显社会服务价值

Demonstrating the Value of Social Service

完善战略服务制度体系

Improve Institutional System for Strategic Services

公司深入贯彻国家重大战略部署,将服务国家战略与企业发展深度融合,制定《科技创新奖励管理办法》《科技成果转化管理和奖励办法》等多项制度,通过完善激励机制充分调动员工创新积极性,释放企业创新创造活力;将关键核心技术攻关、科技自立自强纳入企业发展核心战略,强化国家战略科技力量布局,推动创新链、产业链、资金链、人才链深度融合。

The company fully implements the nation's major strategic plans, deeply aligning with national strategies. It has formulated a number of policies including the Measures for the Administration of Science and Technology Innovation Awards and the Measures for the Administration and Reward of the Transformation of Scientific and Technological Achievements. By improving its incentive mechanisms, the company fully motivates employees to innovate and unlocks the enterprise's innovative and creativity. It incorporates the breakthrough of key core technologies and the pursuit of self-reliance and self-strengthening in science and technology into its core corporate development strategy, strengthens the deployment of national strategic scientific and technological forces, and promotes the in-depth integration of the innovation chain, industrial chain, capital chain and talent chain.

落地多项战略服务行动

Launch a Series of Strategic Service Actions

公司以实际行动践行国家科技创新、绿色发展、新型工业化等重大战略,重点开展五大行动:一是高标准建设先进耐火材料全国重点实验室,优化耐火材料国家工程研究中心等创新平台;二是攻坚氢冶金耐还原气氛侵蚀炉衬材料、电炉短流程熔渣侵蚀材料、废弃耐材高值化回收等关键技术;三是强化创新主体地位,牵头承担国家科技计划项目;四是实施节能降碳改造、资源循环利用等绿色项目;五是完善科技成果转化体系,加速创新成果产业化落地。

The company practices major national strategies including scientific and technological innovation, green development and new industrialization with concrete actions, focusing on five major initiatives: Building the State Key Laboratory of Advanced Refractory Materials to high standards and optimizing innovation platforms such as the National Engineering Research Center for Refractory Materials; tackling key technologies such as lining materials resistant to reducing atmosphere corrosion in hydrogen metallurgy, materials resistant to slag erosion in short-process electric furnaces, and high-value recycling of waste refractory materials; strengthening its role as a major innovation entity and taking the lead in undertaking national science and technology programs; implementing green projects including energy-saving and carbon-reduction renovations and resource recycling; improving the transformation system for scientific and technological achievements and accelerating the industrial application of innovative results.

取得战略服务成效

Deliver Effective Results in Strategic Services

2025年,公司在服务国家重大战略方面斩获多项标志性成果,攻克一批“卡脖子”技术:在重型燃机领域实现隔热陶瓷材料关键技术自主可控,为我国高端装备制造提供材料保障;在核废料处理领域,开展抗辐射、耐高温、耐侵蚀新型材料研发,突破晶格畸变抑制等核心技术,提升核废料处理系统安全性与稳定性,为国家核安全保驾护航;在绿色发展领域,推进废弃耐火材料与冶金渣高值化回收技术攻关,助力工业固废资源化利用,同时实施节能降碳改造,推动传统产业绿色化转型。

In 2025, the company achieved a number of iconic results in serving major national strategies and conquered a batch of bottleneck technologies. In the field of heavy-duty gas turbines, it realized independent control of key technologies for thermal insulation ceramic materials, providing material support for China's high-end equipment manufacturing. In nuclear waste treatment, it developed new radiation-resistant, high-temperature-resistant and erosion-resistant materials, achieving breakthroughs in core technologies such as lattice distortion control, which improved the safety and stability of nuclear waste treatment systems and safeguarded national nuclear security. In green development, it advanced research on high-value recycling technologies for waste refractories and metallurgical slag to support the resource utilization of industrial solid waste, while carrying out energy-saving and carbon-reduction renovations to promote the green transformation of traditional industries.

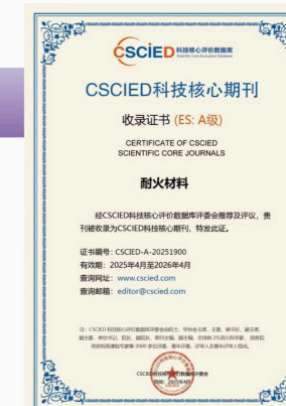
提升行业服务质量

Upgrade Service Quality For the Industry

筑牢学术传播高地 Strengthen Academic Communication Platform

2025年,主管主办的《耐火材料》、《China's Refractories》两大期刊持续发挥行业学术核心载体作用。《耐火材料》蝉联中文核心期刊,入选中国知网统计源期刊、CSCIED科技核心期刊,复合影响因子达2.074,稳居学科Q1区;《China's Refractories》入选中国知网统计源期刊、CSCIED科技核心评价数据库,复合影响因子达0.647,同比增长24%,国际影响力获权威认证。两大期刊全年刊发论文覆盖材料研发、生产应用、标准创新等全领域,全面反映高温行业科技发展最新成果,为全球科研工作者搭建高质量学术交流与成果传播平台。

In 2025, the two journals sponsored and authorized by the company, Naihao Cailiao (Refractories) and China's Refractories, continued to serve as core academic platforms for the industry. Naihao Cailiao (Refractories) retained its status as a Chinese core journal, and was listed as a statistical source journal of CNKI and a key scientific and technical journal of CSCIED. With a composite impact factor of 2.074, it remained in the Q1 zone of the discipline. China's Refractories was included in the CNKI statistical source journals and the CSCIED key scientific and technical evaluation database, achieving a composite impact factor of 0.647, representing a year-on-year increase of 24%, with its international influence officially recognized. Throughout the year, the two journals published papers covering the entire spectrum of research and development, manufacturing and application, standard innovation and other fields, fully reflecting the latest scientific and technological progress in the high-temperature industry. They have built a high-quality platform for academic exchange and achievement dissemination for researchers worldwide.



搭建多元交流平台 Develop Multi-dimensional Communication and Interaction Platforms

2025年,公司牵头举办多场行业高规格学术会议与技术交流活动,成为展示行业技术成果、促进产学研用融合的重要窗口。成功举办全国耐火原料学术交流会(西安)、第十八届全国不定形耐火材料学术会议(昆明)等行业盛会,两场会议吸引800余位行业代表参会,收录高质量论文114篇,同期展览汇聚110余家企业参展,有效推动行业技术交流、经验共享与资源对接,助力行业上下游协同创新。



In 2025, the company took the lead in organizing a number of high-level industry academic conferences and technical exchange events, becoming an important showcase for industry technological achievements and a key platform for promoting industry-university-research-application integration. It successfully held several major industry events, including the National Academic Exchange Conference on Refractory Raw Materials (Xi'an) and the 18th National Academic Conference on Monolithic Refractories (Kunming). The two conferences attracted more than 800 industry delegates, received 114 high-quality papers, and brought together over 110 exhibitors. These events effectively facilitated technical exchange, experience sharing and resource matching across the industry, supporting collaborative innovation among upstream and downstream enterprises.

发挥标准引领作用 Act as a Standard Pacesetter

公司将技术优势与创新成果转化为行业标准,成为引领行业技术发展方向的核心力量。2025年主持及参与发布标准26项,其中:国际标准1项,国家标准11项,行业标准12项,团体标准2项,全程组织协调42项标准新项目申报及29项ISO标准投票工作,成功推动ISO 16206:2025《硅砖中残余石英定量相分析-X射线衍射法》等国际标准落地。同时积极筹备并承办ISO/TC33第32届年会及工作组会议,及时传播标准动态、推动标准落地实施,为行业技术统一、成果转化与国际交流奠定坚实基础。

The company transforms its technological advantages and innovative achievements into industry standards, establishing itself as a key leader in shaping the industry's technological development. In 2025, it presided over or participated in the issuance of 26 standards, including: 1 international standard, 11 national standards, 12 industry standards and 2 group standards. It organized and coordinated the application of 42 new standard projects and voting on 29 ISO standards throughout the year, successfully driving the implementation of international standards such as ISO 16206: 2025 Refractory products-quantitative phase analysis of residual quartz in silica bricks-X-ray diffraction method. Meanwhile, the company actively prepared for and hosted the 32nd Annual Meeting and Working Group Meetings of ISO/TC33, sharing timely updates on standards and promoting implementation. This laid a solid foundation for unified technical specifications, achievement transformation and international exchanges in the industry.

培育行业专业人才 Nurture Industry Professional Talents

公司聚焦行业人才需求,打造“专题授课+现场观摩+交流研讨”多元化培训模式。2025年成功举办耐火材料基础知识、碱性耐火材料专题、耐火材料前沿技术与综合能力提升高级研修班、综合技能培训研习班等多场培训活动,吸引近200位行业从业者参与学习,为行业培养了一批理论扎实、技能过硬的专业人才,持续为耐火材料行业高质量发展注入人才活力。

The company focuses on the talent needs of the industry and has developed a diversified training model featuring "specialized lectures + on-site observation + exchanges and seminars". In 2025, it successfully held a series of training programs, including basic knowledge of refractories, specialized courses on basic refractory materials, advanced seminars on cutting-edge technologies and comprehensive capability improvement, as well as comprehensive skills training workshops. These events attracted nearly 200 industry practitioners. By cultivating a group of professionals with solid theoretical knowledge and proficient skills, the company continues to inject talent vitality into the high-quality development of the refractory industry.



06

低碳赋能 绘就绿色永续之卷

Low-carbon Driving Force
Unfold a Scroll of Green Sustainable Future



环境管理和政策

Environmental Management and Policies

- 中钢洛耐始终坚守“绿水青山就是金山银山”的生态文明理念，将环保工作作为企业高质量发展的生命线，推动环保要求深度融入企业发展战略、投资决策、生产经营全过程，统筹推进制度体系建设、环保设施升级、风险防控能力提升等重点工作，逐步向“源头预防、过程控制、系统治理”的现代化治理模式转变。

Sinosteel Luonai has always adhered to the ecological civilization philosophy that "lucid waters and lush mountains are invaluable assets". The company regards environmental protection as the lifeline of the enterprise's high-quality development, and integrates environmental requirements deeply into its development strategy, investment decisions and the entire process of production and operation. It has made coordinated efforts in key tasks such as institutional system development, environmental protection facility upgrading and risk prevention and control capacity improvement, and has gradually shifting to a modern governance model characterized by "prevention at the source, control during the process and systematic management".

- 2025年，公司制修订《环境保护事件问责管理办法》《放射性污染防治管理办法》《环境污染防治设施管理办法》《典型环境违规行为和违反环境保护禁令考核办法》《碳达峰碳中和管理办法》等制度，加强考核问责和对辐射及环保设施的管理。

In 2025, the company formulated and revised a series of management systems, including the Measures for the Accountability of Environmental Protection Incidents, Measures for the Prevention and Control of Radioactive Contamination, Measures for the administration of Environmental Pollution Prevention Facilities, Measures for the Assessment of Typical Environmental Violations and Violations of Environmental Protection Prohibitions, and Measures for Carbon Peak and Carbon Neutrality Management, so as to strengthen assessment and accountability as well as the management of radiation and environmental protection facilities.

→ 报告期内共投入环保资金 **2210.89** 万元，缴纳环保税共计 **32.95** 万元。

→ During the reporting period, the total investment in environmental protection reached CNY 22.1089 million, and the total environmental protection tax paid was CNY 329,500.

合规排放和再生

Compliant Emissions and Recycling

废水 Wastewater

2025年，洛新生产区完成C区雨污分流工作；涧西生产区完成水平衡测试及验收。公司及所属子公司定期对厂区生活污水管道、隔油池、沉淀池、总排口进行清理和维护，规范排污口设置。其中，耐研滨河经污水处理设施处理后的废水用于绿化，可实现废水零排放。报告期内，公司万元产值用新水量为1.72吨(现价)/万元，循环使用的水量为398.45万吨。

万元产值用新水量
1.72
吨(现价)/万元

循环使用的水量
398.45
万吨

In 2025, the Luoxin Production Zone completed the rain-sewage diversion work in Area C; the Jianxi Production Zone completed the water balance test and acceptance. The company and its subsidiaries regularly clean and maintain domestic sewage pipelines, oil separation tanks, sedimentation tanks and main discharge outlets, and standardize the layout of sewage outlets. Among them, wastewater treated by sewage treatment facilities at Sinosteel Ningxia LIRR Binhe New Material Co., Ltd. was reused for greening, achieving zero wastewater discharge. During the reporting period, the company's fresh water consumption per CNY 10,000 of output value was 1.72 tons, and the recycled water volume reached 3.9845 million tons.

废气 Waste Gas

公司持续深化大气污染防治，对年度废气减排目标进行了分解，签订目标责任书。全年完成复合材料分厂C区二期窑炉烟气治理、铝硅材料分厂烟气治理设施升级改造等4项技改项目，同时加强对施工项目的环保监管。

2025年实际二氧化硫排放总量**19.35**吨，氮氧化物排放总量**29.75**吨，分别比去年同期**下降23.32%**和**32.92%**，颗粒物**38.16**吨，挥发性有机物**1.25**吨，化学需氧量(COD)**10.59**吨，氨氮**3.13**吨，总氮**3.55**吨。

The company has continuously strengthened the prevention and control of air pollution, decomposed the annual waste gas emission reduction targets, and signed target responsibility letters. Throughout the year, four technical renovation projects were completed, including the flue gas treatment for the second-phase kilns in Zone C of the Composite Materials Branch and the upgrading and renovation of flue gas treatment facilities at the Alumina-silica Materials Branch. Meanwhile, environmental protection supervision over construction projects was strengthened. In 2025, the actual total emissions were 19.35 tons of sulfur dioxide, 29.75 tons of nitrogen oxides, down 23.32% and 32.92% year-on-year respectively; 38.16 tons of particulate matter; 1.25 tons of volatile organic compounds (VOCs); 10.59 tons of chemical oxygen demand (COD); 3.13 tons of ammonia nitrogen; and 3.55 tons of total nitrogen.

废弃物 Waste

2025年公司进一步规范固危废的管理、处置合同及台账记录,完成一般固废暂存区的升级改造;一般工业固废自行或交其他单位回用,危废交由资质第三方处置。2025年一般工业固体废物综合利用率100%,合规化处置危险废物约32吨,合规暂存处置率100%。



In 2025, the company further standardized the management, disposal contracts and ledger records of solid and hazardous wastes, and completed the upgrading and renovation of the temporary storage area for general solid waste. General industrial solid waste was reused either by the company itself or by other entities, while hazardous waste was disposed of by qualified third parties. In 2025, the comprehensive utilization rate of general industrial solid waste reached 100%. Approximately 32 tons of hazardous waste was disposed of in compliance with regulations, achieving a 100% compliant temporary storage and disposal rate.

During the reporting period, the company identified 1,437 environmental factors and formulated corresponding control measures for significant environmental factors. The Jianxi Production Zone completed the revision and filing of the Emergency Plan for Environmental Emergencies. The emergency plans for environmental emergencies and their filings for other production zones were within their validity periods. Various units of the company carried out 11 environmental emergency drills, which improved the emergency response and disposal capabilities for environmental incidents.

生物多样性保护 Biodiversity Conservation

公司积极践行国家生态保护战略,聚焦黄河流域生态治理目标,大力推进厂区绿化工作。选用本地适生树种,为昆虫、鸟类等生物提供栖息地,以实际行动履行企业社会责任。

2025年,公司共新增绿地2万余平方米,补种草坪4800余平方米;移栽女贞、桂花等560余棵,石楠630余株。

The company actively implements the national ecological protection strategy, focuses on the ecological governance goals of the Yellow River Basin, and vigorously promotes greening in the plant area. Native adaptable tree species are selected to provide habitats for insects, birds and other organisms, fulfilling corporate social responsibility through concrete actions. In 2025, the company added more than 20,000 square meters of green space, replanted over 4,800 square meters of lawn, transplanted more than 560 trees including privet and sweet osmanthus, and over 630 photinia plants.



辐射安全管理 Radiation Safety Management

2025年,公司完成“320KV工业探伤机项目”环评、辐射安全许可证申领及竣工环保验收等工作,辐射项目“三同时”执行率100%。

In 2025, the company completed the environmental impact assessment, application for radiation safety license, and acceptance of completed environmental protection for the "320KV Industrial Flaw Detector Project". The implementation rate of the "three-simultaneities" principle for radiation-related projects reached 100%.

环保预警及应急机制 Environmental Early Warning and Emergency Mechanism

报告期内,公司组织识别环境因素1437项,针对重要环境因素分别制定了控制措施。涧西生产区完成了《突发环境事件应急预案》的修订和备案,其他生产区的突发环境事件应急预案和备案均在有效期内;公司各单位开展11次环保应急演练,提升了环保事件的应急响应和处置能力。



环境因素识别培训

节能降碳

Energy Conservation and Carbon Reduction

健全能源管理体系, 落地能效提升行动

Improving Energy Management System and Implementing Energy Efficiency Improvement Initiatives

报告期内, 中钢洛耐发布《2025年能源环保与绿色低碳工作目标及重点工作安排》, 将能源管理纳入党委及行政工作计划统筹推进, 成立制造管理部(设备能源部), 强化能源管理专业力量。为达成能效目标, 公司开展落后设备淘汰与新能源项目建设, 专项统计筛查并淘汰更换**58台**落后电机, 伊川厂区光伏项目基本建成, 为能源效率提升提供硬件支撑。



环保设备改造

During the reporting period, Sinosteel Luonai issued the 2025 Work Objectives and Key Arrangements for Energy, Environmental Protection, Green and Low-carbon Development, integrating energy management into the overall work plans of the Party Committee and administrative management for coordinated advancement. The Manufacturing Management Department (Equipment and Energy Department) was established to strengthen professional capabilities in energy management. To achieve energy efficiency targets, the company carried out the elimination of outdated equipment and the construction of new energy projects. Through special statistics and screening, 58 sets of inefficient motors were phased out and replaced. The photovoltaic project at the Yichuan Plant was basically completed, providing hardware support for improving energy efficiency.

精准管控能源消耗, 提升清洁能源占比

Precise Management and Control of Energy Consumption & Increasing Proportion of Clean Energy

2025年, 公司大力发展可再生能源, 新建3MW分布式光伏项目, 叠加已投用的光伏项目, 预计年发电量可达1000万千瓦时, 年减少二氧化碳排放约5810吨; 全年使用天然气、新能源电等清洁能源折合29617吨标准煤, 清洁能源使用占比显著提升。公司总能耗41628吨标准煤, 万元产值能耗强度达0.204吨标准煤/万元, 能源利用效率稳步提升。

In 2025, the company vigorously developed renewable energy by constructing a new 3MW distributed photovoltaic project. Combined with the already operational photovoltaic projects, the estimated annual power generation capacity will reach 10 million kWh, reducing carbon dioxide emissions by approximately 5,810 tons per year. Throughout the year, the consumption of clean energy such as natural gas and new energy electricity was equivalent to 29,617 tons of standard coal (tce), resulting in a significant increase in the proportion of clean energy use. The company's total energy consumption is 41,628 tce, with an energy consumption intensity of 0.204 tce per CNY 10,000 of output value, and its energy utilization efficiency has steadily improved.



光伏发电



规范水资源管理, 严控包装材料消耗

Standardizing Water Resource Management and Strictly Controlling Packaging Material Consumption

公司制定《能源管理办法》, 将水资源管理要求纳入制度体系, 实现水资源精细化管理。组织开展“中国水周”宣传活动, 以“线上+线下”相结合的方式, 组织开展以“推动水利高质量发展, 保障我国水安全”为主题的宣传活动。2025年, 公司实际用水总量**16.72万吨**。

The company has formulated the Energy Management Measures, integrating water resource management requirements into its institutional system to achieve refined control over water resources. It launched publicity activities for "China Water Week" through a combination of online and offline channels, with the theme of "Promoting High-quality Development of Water Conservancy and Safeguarding National Water Security". In 2025, the company's actual total water consumption was 167,200 tons.

公司坚持绿色低碳与循环发展理念, 建立健全原材料节约与绿色包装管理体系, 通过优化尺寸、余料回收、定制化包装及废旧托盘、吨包装袋循环复用等措施, 从源头降低消耗、杜绝浪费, 有效降本增效, 彰显公司绿色运营、低碳发展的责任与担当。



Adhering to the philosophy of green, low-carbon and circular development, the company has established and improved a management system for raw material conservation and green packaging. By optimizing dimensions, recycling surplus materials, adopting customized packaging, and reusing waste pallets and ton bags, the company has reduced consumption and eliminated waste at the source, effectively cutting costs and improving efficiency. This demonstrates the company's responsibility and commitment to green operation and low-carbon development.



推进资源回收利用, 强化供应链绿色管理

Promoting Resource Recycling and Strengthening Green Supply Chain Management

2025年, 公司通过外部回收和内部破碎产品回收**10742.6吨**, 回收量占销售出库产品的**3.48%**, 产品回收体系逐步完善。在供应链端, 公司聚焦原材料环境影响管控, 累计完成**16个**产品的碳足迹核算, 推动供应链绿色化升级。

In 2025, the company recovered 10,742.6 tons of materials through external recycling and internal crushing of products, accounting for 3.48% of the total products delivered for sale, and the product recycling system has been gradually improved. On the supply chain side, the company focused on controlling the environmental impacts of raw materials, completed carbon footprint accounting for 16 products in total, and promoted the green upgrading of the supply chain.



践行绿色办公理念, 推动全员低碳行动

Practicing Concept of Green Office and Promoting Low-carbon Actions Among All Employees

公司制定并落地多项绿色办公措施, 推行非必要不打印、非正式文件双面打印、单面废纸回收再利用的纸张管理模式; 严格执行办公设备节能要求, 下班关闭电脑、打印机等电源, 空调温度设置夏季 $\geq 26^{\circ}\text{C}$ 、冬季 $\leq 20^{\circ}\text{C}$; 倡导白天优先利用自然光, 推广“135”绿色出行方式(1公里步行、3公里骑行、5公里公交), 将低碳理念融入日常办公全流程。

The company has formulated and implemented a number of green office measures, adopting a paper management model of "no printing unless necessary, double-sided printing for informal documents, and recycling of single-sided waste paper". It strictly implements energy-saving requirements for office equipment: computers, printers and other devices are turned off after work; air conditioner temperature is set at $\geq 26^{\circ}\text{C}$ in summer and $\leq 20^{\circ}\text{C}$ in winter. The company advocates priority use of natural light during daytime and promotes the "1-3-5" green travel mode (walking within 1 km, cycling within 3 km, and taking public transport within 5 km), integrating the low-carbon concept into the entire process of daily office work.

应对气候变化 Addressing Climate Change



构建气候治理机制, 识别评估相关风险

Establishing Climate Governance Mechanism and Identifying & Assessing Related Risks

公司建立健全应对气候相关风险和机遇的治理机制, 每年统一组织能源管理体系审核, 对能源及碳排放开展专项风险评估。同时制定能源管理风险识别程序, 对生产过程中的气候因素进行全面识别、科学评价, 并制定针对性应对措施, 将气候风险管理融入生产运营全流程。

2025年, 公司温室气体减排资金投入386.01万元。

The company has established and improved a governance mechanism for addressing climate-related risks and opportunities. It conducts a unified annual audit of the energy management system and carries out special risk assessments on energy consumption and carbon emissions. Meanwhile, it has formulated an energy management risk identification procedure to comprehensively identify and scientifically evaluate climate-related factors in the production process, and developed targeted response measures, integrating climate risk management into the entire production and operation process. In 2025, the company invested CNY 3.8601 million in greenhouse gas emission reduction.



锚定气候管控目标, 超额完成减排任务

Anchoring Climate Control Targets and Overfulfilling Emission Reduction Tasks

结合发展实际, 公司设定“十五五”万元产值能耗及碳排放目标, 以指标约束推动绿色转型。2025年设定年度温室气体排放目标**0.515吨/万元**, 实际完成**0.505吨/万元**, 万元产值能耗目标**0.222吨标准煤/万元**, 实际完成**0.204吨标准煤/万元**, 两项核心指标均超额完成。为实现减排目标, 公司采取建设屋顶分布式光伏、淘汰落后节能电机等举措, 全年实现温室气体减排量**3877吨二氧化碳**。

Based on its actual development, the company has set energy consumption and carbon emission targets per CNY 10,000 of output value for the 15th Five-Year Plan period, driving green transformation through indicator constraints. In 2025, the annual target for greenhouse gas emissions was set at 0.515 tons per CNY 10,000, while the actual result was 0.505 tons per CNY 10,000. The energy consumption target per CNY 10,000 of output value was 0.222 tce per CNY 10,000, with an actual achievement of 0.204 tce per CNY 10,000. Both core indicators were overfulfilled. To achieve emission reduction goals, the company adopted measures such as constructing rooftop distributed photovoltaic systems and phasing out inefficient energy-consuming motors, achieving a total greenhouse gas emission reduction of 3877 tons of carbon dioxide (tCO₂).



精准核算碳排放, 多举措推进“双碳”落地

Accurately Accounting For Carbon Emissions and Promoting the Implementation of the "Dual Carbon" Goals Through Multiple Measures

公司积极推进碳管理体系建设, 依据国家通则制定碳排放计算方法, 自主完成碳排放量核算; 同时通过开展节能宣传周、低碳日活动, 推进碳足迹核算工作, 全方位助力国家“双碳”目标实现。2025年公司直接(范围1)温室气体排放量46918吨二氧化碳, 间接(范围2)温室气体排放量56414吨二氧化碳。温室气体排放强度为0.505吨/万元。

温室气体排放强度
0.505 吨/万元



The company actively promotes the development of its carbon management system, formulates carbon emission calculation methods in accordance with national general rules, and independently completes carbon emission accounting. Meanwhile, it carries out activities such as Energy Conservation Publicity Week and Low-carbon Day, and advances carbon footprint accounting, providing all-round support for achieving the national "Dual Carbon" goals. In 2025, the company's direct (Scope 1) greenhouse gas emissions were 46,918 tCO₂, and indirect (Scope 2) greenhouse gas emissions were 56,414 tCO₂. The greenhouse gas emission intensity was 0.505 t per CNY 10,000 of output value.



推进固碳生态建设, 守护绿色发展底色

Promoting Ecological Carbon Sequestration and Safeguarding the Foundation of Green Development

公司重视生态固碳与绿色保护, 现有植被覆盖面积约**30万平方米**, 每年可实现固碳约**100吨**二氧化碳当量, 以实际行动推进生态保护, 筑牢绿色发展生态根基。

The company attaches great importance to ecological carbon sequestration and green protection. The existing vegetation coverage is approximately 300,000 square meters, which can achieve an annual carbon sequestration of about 100 tons of carbon dioxide equivalent. With concrete actions, the company promotes ecological protection and consolidates the ecological foundation for green development.

07

价值共享 厚植和合共生之本

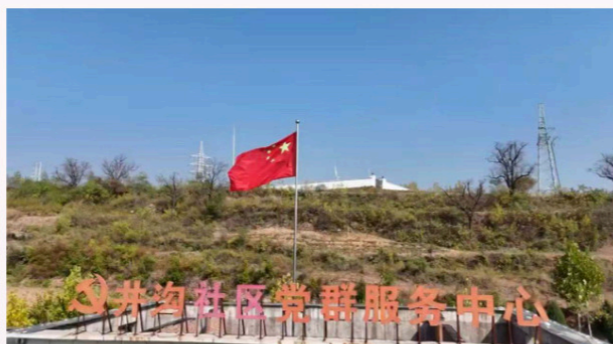
Value Sharing
Deepen the Roots of Harmonious Growth



社会公益

Social Welfare

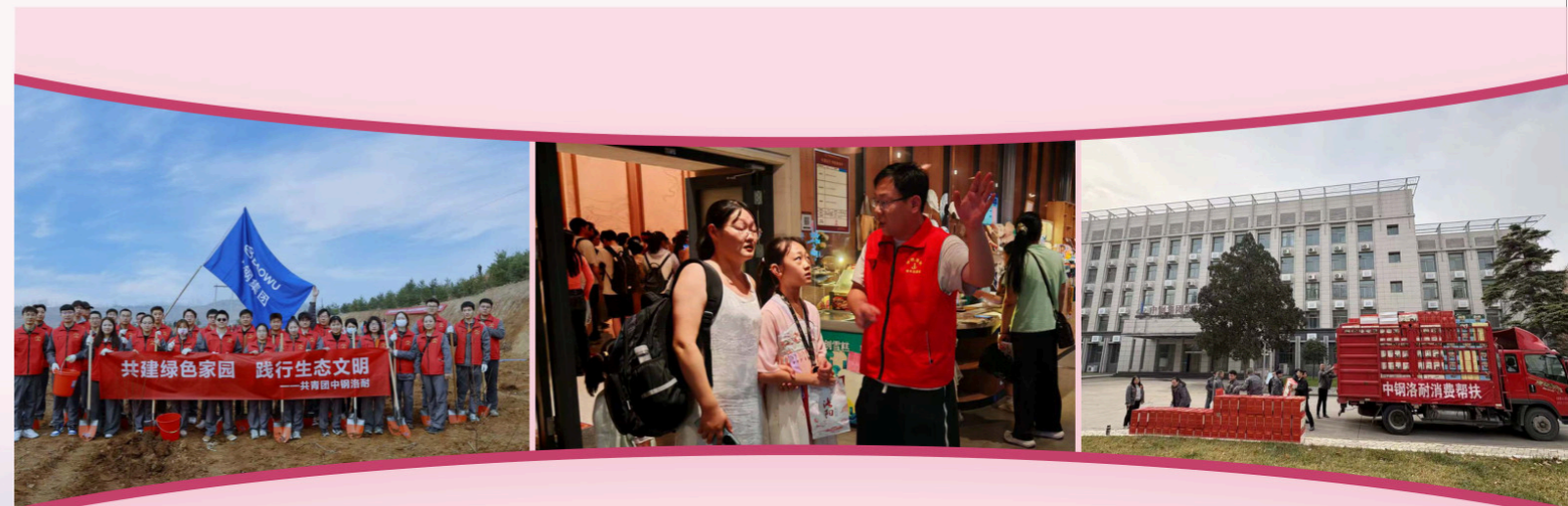
公司严格落实“四个不摘”政策,持续深化对汝阳县城关镇井沟社区的定点帮扶工作。2025年,社会公益慈善总投入61.1万元,其中,社会公益捐赠8.1万元,采购帮扶村特色农产品53万元,带动农户增收,惠及人数1802人;配合地方政府持续开展人居环境和党群服务中心提升工作,铺设沥青路面,硬化空地,铺设路牙石,有效解决主路途经的几个自然村交通不便问题,多渠道提高群众幸福指数,持续巩固脱贫攻坚成果,助力乡村振兴。



The company strictly implements the policy of "Four No Withdrawals", and continuously deepens the targeted assistance work for Jinggou Community, Chengguan Town, Ruyang County. In 2025, the total investment in social public welfare and charity reached CNY 611,000, including CNY 81,000 in social public welfare donations and CNY 530,000 used for purchasing characteristic agricultural products from the assisted villages, which helped increase farmers' income and benefited 1,802 people. In cooperation with local governments, the company continued to improve the living environment and upgrade the Party-mass Service Center, including laying asphalt pavements, hardening open spaces and installing curb stones. These efforts effectively solved the traffic inconvenience in several natural villages along the main roads, raised people's sense of happiness through multiple channels, continuously consolidated the achievements of poverty alleviation, and boosted rural revitalization.



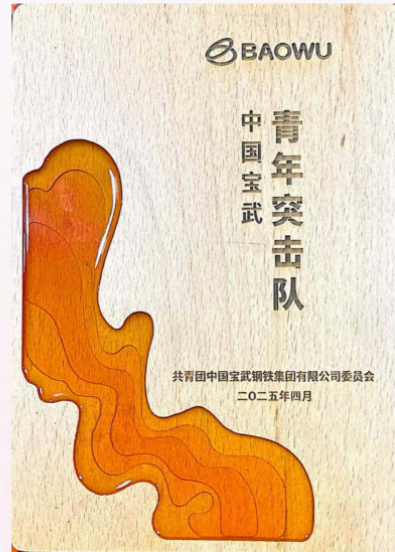
报告期内,中钢洛耐组织开展“传承雷锋精神 共建美好家园”主题志愿服务、“共建绿色家园 践行生态文明”义务植树、“缅怀革命先烈 传承红色基因”祭扫、应天门遗址暑期志愿服务等活动,累计参与137人次,服务时长478小时。



社会公益活动

During the reporting period, Sinosteel Luonai organized a series of volunteer activities, including: "Carry Forward the Spirit of Lei Feng and Build a Beautiful Home" volunteer services, "Build a Green Home and Practice Ecological Civilization" voluntary tree planting, "Cherish the Memory of Revolutionary Martyrs and Inherit the Red Gene" tomb-sweeping activities, and summer volunteer services at the Ying Tianmen Site. A total of 137 person-times participated, with accumulated service duration reaching 478 hours.

关爱员工 Employee Care



报告期内,公司拥有在职职工2519人,其中四十岁及以下占比29.17%,少数民族64人,博士研究生13人,硕士研究生159人,大学专科及以上学历占比40.41%。

During the reporting period, the company had 2,519 active employees, of which 29.17% were aged 40 and below, 64 were ethnic minorities, 13 held doctoral degrees, 159 held master's degrees, and 40.41% had junior college education or above.



大学专科及以上学历占比

40.41 %



公司严格遵守《中华人民共和国劳动法》《中华人民共和国劳动合同法》等相关法律规定,秉持民主、合法的程序制定多样化和平等机会的劳动人事规章制度,营造良好的从业环境。公司坚持公正、公平、公开的雇佣原则,反对一切以种族、性别、年龄、家庭背景、宗教信仰等为由的歧视行为,确保所有员工在招聘、劳动、薪资、培训、晋升、补偿等阶段都能享受到公平对待。

报告期内,社会保险覆盖率100%,人均带薪年假12.5天,女性员工产假、男性员工护产假按国家规定执行;开展“党内关怀帮扶”走访慰问活动,为生活困难党员、职工、劳模等发放慰问金9.4万元。

The company strictly abides by the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China and other relevant laws and regulations. It formulates diversified and equal-opportunity labor and personnel rules and regulations through democratic and legal procedures, creating a sound working environment. The company adheres to the principle of impartial, fair and open employment and opposes all forms of discrimination based on race, gender, age, family background, religious belief and other grounds, ensuring that all employees are treated fairly in recruitment, employment, salary, training, promotion, compensation and other aspects. During the reporting period, the social insurance coverage rate reached 100%; the average annual paid leave was 12.5 days; and maternity leave for female employees and paternity leave for male employees were implemented in accordance with national regulations. The company carried out "CPC Care and Assistance" visits and condolences, distributing CNY 94,000 in consolation funds to Party members, employees and model workers in difficulty.

职工活动



民主管理

Democratic Management

公司开展民主管理,普及劳动安全卫生教育,改善操作环境和工作条件,为基层工会配备“安康药箱”,为职工创造健康、安全的工作环境,对员工的薪酬、福利、工作时间、休假、劳动保护等员工权益进行了制度规定,充分保障员工权益。报告期内,公司召开3次工代会、现场听取审议2025年总经理工作报告、个别代表资格审查报告等重要文件;书面审议《中钢洛耐厂务公开实施办法(草案)》《中钢洛耐职工代表大会实施办法(草案)》及安全生产、节能减碳环保、职工需求改进情况等专项报告,通过平等协商签订《中钢洛耐集体合同》《中钢洛耐女职工特殊权益保护专项集体合同》,筑牢劳动关系和谐根基。



The company carries out democratic management, popularizes education on labor safety and health, improves the operating environment and working conditions, and equips grassroots trade unions with "health and safety first-aid kits" to create a healthy and safe workplace for employees. It has formulated institutional provisions on employees' rights and interests such as salary, welfare, working hours, leave and labor protection, fully safeguarding employees' legitimate rights and interests. During the reporting period, the company held 3 staff congresses, heard and reviewed important documents including the 2025 General Manager's Work Report and the Report on the Qualification Review of Individual Deputies on site. It also reviewed in writing the Measures for the Implementation of Factory Affairs Disclosure of

Sinosteel Luonai (Draft), the Measures for the Implementation of the Staff Congress of Sinosteel Luonai (Draft) and special reports on work safety, energy conservation and carbon reduction, environmental protection, and improvement of employees' needs. Through equal consultation, the company signed the Collective Contract of Sinosteel Luonai and the Special Collective Contract on the Protection of Special Rights and Interests of Female Employees of Sinosteel Luonai, consolidating the foundation for harmonious labor relations.



职代会、工代会签约



参观工运史馆

职工发展与培训

Staff Development and Training

公司建立完善人力资源全面激励体系,构建员工职业发展晋升体系。一是建立适合中钢洛耐“扁平化、高效化”管理要求的、规范统一的岗位体系管理制度,明确岗位类型、族群、层级、任职资格条件、岗位晋升机制和职数控制等管理要求,逐步实现制度化、规范化、科学化。二是建立员工职业生涯多通道晋升机制即纵向岗位层级晋升激励机制。三是建立适用于不同员工类型分类薪酬体系,倡导能力和业绩导向,提升薪酬激励的精准性,充分发挥薪酬激励作用。

The company has established a comprehensive human resources incentive system and a career development and promotion system for employees. First, it has established a standardized and unified post system management system that meets the "flat and efficient" management requirements of Sinosteel Luonai, clarifying management requirements such as post types, groups, levels, qualification conditions, post promotion mechanisms and position quota control, gradually realizing institutionalization, standardization and scientification. Second, it has established a multi-channel career promotion mechanism for employees, namely an incentive mechanism for vertical post level promotion. Third, it has established a classified salary system suitable for different types of employees, advocating ability and performance orientation, improving the accuracy of salary incentives, and giving full play to the role of salary incentives.



职业技能等级认定理论知识考试

2025年,结合公司战略发展及实际经营需要,对公司各部门的培训需求进行实地调查分析,统筹制定全年培训计划,并积极做好各项落实工作。对新员工进行入职三级安全教育培训,开展实训教育,深入一线了解员工工作状况,引导新员工逐步了解公司发展和管理模式。按照岗位和层级对在岗员工开展有针对性岗位技能培训,组织公司中层及以上干部、一般管理岗位人员培训,不断提升管理与专业技术人员的领导能力及综合素质,夯实公司高效发展根基。2025年培训投入34.46万元,通过线下和线上相结合的形式,开展中央企业干部研学班、管理人员能力提升、技术业务人员专项学习、安全生产管理人员与特殊工种人员取证复审、能源环保管理能力提升等186项培训,累计培训26544人次,合计160287.5学时。



培训投入

34.46 万元

累计培训

26544 人次

培训项目

186 项

合计培训

160287.5 学时



职工培训

In 2025, in line with the company's strategic development and actual operational needs, the company conducted on-site investigation and analysis of training needs of all departments, formulated the annual training plan, and actively promoted the implementation of various tasks. The company provided three-level safety induction training for new employees, carried out practical training, went to the frontline to understand employees' working conditions, and guided new employees to gradually learn about

the company's development and management model. Targeted on-the-job skill training was carried out for in-service employees according to posts and levels; training was organized for middle-level and above cadres and general management personnel to continuously improve their leadership and comprehensive quality, consolidating the foundation for the company's efficient development. In 2025, the company invested CNY 344,600 in training. Through a combination of offline and online forms, 186 training programs were carried out, including training courses for central enterprise cadres, management capability improvement, special learning for technical and business personnel, certification and review for safety management personnel and special-type workers, and energy and environmental protection management capability improvement. A total of 26,544 person-times were trained, with a total of 160,287.5 training hours.

安全生产与职业健康管理

Work Safety and Occupational Health Management

按照生产经营业务范围,组织对公司涉及的职业健康安全法律、法规进行识别,识别确定公司涉及的35部法律、57部门规章、132部标准规范,建立公司《职业健康安全法律、法规和标准清单》,并组织各单位学习相应的法律、法规,及时传达给相关人员,确保相关方要求及时落实。报告期内,完成11项职业健康安全规章制度及标准、预案的制修订,并组织对制度进行宣贯、解读,确保各项制度有效落实,持续健全完善安全制度体系,夯实职业健康安全管理基础。

In accordance with its production and business scope, the company identified the applicable occupational health and safety laws and regulations, confirming a total of 35 laws, 57 departmental rules and 132 standards and specifications. It established the List of Occupational Health and Safety Laws, Regulations and Standards, organized all departments to study relevant legal provisions, and promptly communicated them to relevant personnel to ensure timely implementation of stakeholder requirements. During the reporting period, the company formulated and revised 11 occupational health and safety rules, regulations, standards and emergency plans, and conducted communication and interpretation to ensure effective implementation. The safety system was continuously improved, laying a solid foundation for the occupational health and safety management system.

报告期内,公司对1528名接触职业病危害员工开展职业健康检查,体检覆盖率 100%;确诊职业病7例,均按规定落实治疗、工伤鉴定及岗位调整等后续处置工作,保障员工合法权益。

开展478个职业病危害因素点位的年度检测,检测合格率 100%

组织《职业病防治法》宣传周活动,开展主题宣讲40余次

发放《职业病防治知识手册》等宣传材料1000余份。

During the reporting period, the company provided occupational health examinations for 1,528 employees exposed to occupational disease hazards, achieving 100% coverage. Seven cases of occupational diseases were diagnosed, and follow-up measures including medical treatment, work-related injury assessment and post adjustment were implemented in accordance with regulations to protect employees' legitimate rights and interests. Annual monitoring was carried out at 478 occupational hazard monitoring points, with a 100% qualified rate. The company held more than 40 themed lectures during the Occupational Disease Prevention Law Publicity week and distributed more than 1,000 copies of promotional materials including the Handbook of Occupational Disease Prevention Knowledge.

2025年,安全生产投入983.74万元。组织开展综合性及特种设备、建设和承包项目、消防等专项安全检查59次,排查治理隐患868项,接受政府部门及集团公司安全检查19次,排查治理隐患189项。隐患按期整改率100%。全年无生产安全事故,无因工死亡事故,因工受伤率为0。

In 2025, the company invested CNY 9.8374 million in work safety. A total of 59 comprehensive and special safety inspections were conducted covering special equipment, construction and contracting projects, fire safety and other fields, identifying and rectifying 868 hidden dangers. The company accepted 19 safety inspections from government authorities and the Group, with 189 hidden dangers identified and rectified. The rectification rate of hidden dangers on schedule reached 100%. There were no work safety accidents, no work-related fatalities, and the work-related injury rate was 0 throughout the year.



报告期内,公司开展安全管理人员取证、职业卫生、有限空间五类人员提升、消防安全、事故案例警示等专项培训,实现主要负责人、特种作业人员等各级人员合规持证率100%;开展《职业病防治法》宣传周、安全生产月、消防宣传月等主题活动46场,组织消防疏散演练、安全宣誓、“安康杯”知识竞赛等特色活动;编制发放《危险作业安全提示手册》等宣传材料3700份,拍摄违章警示视频10部,构建特色安全文化;全年累计开展各类培训、竞赛13次,培训受众3000余人次、合计76.5学时,培训覆盖率达100%。



During the reporting period, the company carried out special training on safety management personnel certification, occupational health, training for five categories of personnel in confined spaces, fire safety, accident case warnings and other topics, achieving 100% compliance certification rate for key persons in charge, special operation personnel and staff at all levels. A total of 46 themed activities were held, including the Occupational Disease Prevention Law Publicity Week, Work Safety Month and Fire Safety Promotion Month, featuring fire evacuation drills, safety oaths and the “Ankang Cup” knowledge competition. The company compiled and distributed 3,700 copies of promotional materials including the Handbook of Safety Tips for Hazardous Operations and produced 10 violation warning videos to build a distinctive safety culture. In total, 13 training sessions and competitions were held throughout the year, covering more than 3,000 participants with a total of 76.5 training hours, achieving 100% training coverage.



报告期内,开展公司级事故应急预案演练3次,各单位完成预案及现场处置方案演练评审70余次,以练代训提升员工应急处置能力。完成洛阳地区**1300余台(套)**消防设施及各厂区建筑消防设施的维保检测,修订完善应急预案,健全应急资源调查与风险评估体系,全面提升公司应急保障能力。

During the reporting period, the company conducted 3 company-level emergency response drills for accidents, and all units completed more than 70 drills and reviews of emergency plans and on-site disposal plans, improving employees' emergency response capabilities through practical training. The company completed maintenance and inspection of more than 1,300 sets of fire-fighting facilities in the Luoyang area and building fire-fighting systems in various plants, revised and improved emergency plans, and improved the emergency resource survey and risk assessment system, comprehensively enhancing the company's emergency support capacity.

供应链ESG管理

Supply Chain ESG Management

公司按照“应招必招、能招尽招”管理要求,始终将合规治理贯穿采购全流程,建立涵盖《招标管理办法》《供应商管理办法》等在内的全流程制度体系,实现招标采购规范化、标准化运作。报告期内,公司完成原材料、包装、运输服务、项目施工等488个规定招标项目的招标工作,节资率达10.30%,以高效合规运作实现资源优化配置。



节资率

10.3 %

In accordance with the management principle of “mandatory bidding for eligible projects and full adoption of bidding wherever applicable”, the company has always integrated compliance governance into the entire procurement process. It has established a full-process institutional system including the Bidding Management Measures and Supplier Management Measures, realizing normalized and standardized operation of bidding and procurement. During the reporting period, the company completed bidding for 488 mandatory bidding projects covering raw materials, packaging, transportation services, project construction and others, with a fund-saving rate of 10.30%, achieving optimal resource allocation through efficient and compliant operations.

在采购流程透明度建设方面,搭建阳光采购平台,对达到招标限额标准的项目公开招标,对未达到限额标准的项目公开询比,对不公开招标、询比的项目严格执行集团审批流程,确保采购全流程可追溯、可监督。同时建立供应商异议快速响应通道,保障合作方合法权益,构建公平公正的采购环境。

In terms of enhancing transparency in the procurement process, the company has built a sunshine procurement platform. Projects meeting the bidding threshold are publicly tendered; those below the threshold adopt public inquiry and comparison; and projects exempt from public bidding or inquiry are subject to strict group approval procedures, ensuring the entire procurement process is traceable and supervisable. Meanwhile, a rapid response channel for supplier objections has been established to protect the legitimate rights and interests of partners and build a fair and impartial procurement environment.

供应商ESG尽职调查

Supplier ESG Due Diligence

供应商准入 Supplier Access

结合生产单位需求严选新进供应商,明确质量、环保等多维度资质要求,通过OA准入审批后方可入库,并对不同类型供应商实施分类管控。

New suppliers are strictly selected based on the needs of production units, with clear multi-dimensional qualification requirements for quality, environmental protection and other aspects. Suppliers are only be included in the supplier database after approval via the OA system, and classified management is implemented for different types of suppliers.

供应商审核 Supplier Audit

对新增及现有稳定合作供应商,实行现场审核(按需)与年度审核结合的体系,对不合格项指导整改并跟踪验证效果。

A combined system of on-site audits (as needed) and annual audits is adopted for new and existing long-term cooperative suppliers. Rectification is guided for non-conforming items, and the results are tracked and verified.

供应商评估 Supplier Evaluation

以定量绩效、采购方及用户单位评价为标准,结合多类核心指标,对供应商开展年度综合评分。

Annual comprehensive scoring of suppliers is conducted based on quantitative performance, evaluations from procurement and user units, and a combination of various core indicators.

供应商分级与动态管理 Supplier Classification and Dynamic Management

将供应商分为合格级(I、II级)、保留级、警告级、禁入级,建立动态优化机制;报告期内1家中标供应商违约,已被罚没保证金并纳入禁止交易名单。

Suppliers are classified into Qualified (Level I, Level II), Probation, Warning and Prohibited categories, with a dynamic optimization mechanism established. During the reporting period, one successful supplier breached the contract, whose deposit was forfeited and who was added to the prohibited transaction list.

供应商ESG培训 Supplier ESG Training

为践行国企社会责任、落实国家可持续发展战略,中钢洛耐以提升供应链生态质量为目标,面向全体合作供应商开展ESG专项培训与宣传教育。活动聚焦环境、社会、治理(ESG)三大核心维度,通过政策解读、案例剖析、经验分享等形式,传递ESG发展理念与合规要求;编制发放《供应商ESG行为指引手册》,组织线上专题宣讲会,多渠道推动ESG理念融入供应链合作全流程。

To fulfill the social responsibility of a state-owned enterprise and implement the national sustainable development strategy, Sinosteel Luonai has carried out ESG-specific training and publicity for all cooperative suppliers with the goal of improving the quality of the supply chain ecosystem. Focusing on the three core dimensions of Environment, Social and Governance (ESG), the activities disseminate ESG development concepts and compliance requirements through policy interpretation, case analysis and experience sharing. The company has compiled and distributed the Supplier ESG Behavior Guidance Manual, organized online special briefings, and promoted the integration of ESG concepts into the entire supply chain cooperation process through multiple channels.

可持续采购 Sustainable Procurement

中钢洛耐践行国家“双碳”目标、扛起国企责任,以可持续发展为核心,全面升级可持续采购体系,将绿色、合规、责任理念融入采购全流程。源头优先选用绿色认证、低碳标识产品与服务,严控高耗能高污染物资准入;以ESG为标尺,将环境绩效、社会责任、合规治理纳入供应商评估核心,构建“优胜劣汰”动态机制;秉持全生命周期理念,推动包装减量化、物流低碳化、资源循环化,协同上下游供应商,助力产业绿色转型,共建低碳高效共赢的供应链生态。

Sinosteel Luonai implements the national “Dual-carbon” goals and shoulders the responsibilities of a state-owned enterprise. Centered on sustainable development, the company has comprehensively upgraded its sustainable procurement system, integrating the concepts of green development, compliance and responsibility into the entire procurement process. At the source, priority is given to products and services with green certifications and low-carbon labels, and access to energy-intensive and highly polluting materials is strictly controlled. Using ESG as a benchmark, environmental performance, social responsibility and compliance governance are incorporated into the core of supplier evaluation, establishing a dynamic mechanism of “survival of the fittest”. Adhering to the life-cycle concept, the company promotes packaging reduction, low-carbon logistics and resource recycling. It collaborates with upstream and downstream suppliers to support the green transformation of the industry and jointly build a low-carbon, efficient and win-win supply chain ecosystem.

保障产业链供应链安全稳定 Ensuring Security and Stability of Industrial and Supply Chains

中钢洛耐立足耐火材料行业领军地位,依托全链条业务优势,积极应对自然灾害、市场波动等多重挑战,从产能保障、供应链韧性、技术赋能、协同共赢四个维度系统发力,筑牢产业链供应链安全稳定防线,以龙头担当服务国家战略。

As a leader in the refractory industry, Sinosteel Luonai relies on its full-chain business advantages to actively respond to multiple challenges such as natural disasters and market fluctuations. The company has made systematic efforts in four dimensions: production capacity guarantee, supply chain resilience, technological empowerment and win-win cooperation, so as to build a solid defense line for the security and stability of the industrial and supply chains, and serve national strategies with the responsibility of a leading enterprise.

强化产能保障, 筑牢应急保供底盘**Strengthening Production Capacity Guarantee to Consolidate the Foundation For Emergency Supply**

公司加强生产过程精益管理, 提高生产调度效率, 坚持以客户为中心, 满足客户定制化需求, 面对市场竞争等多重挑战, 以坚实业务优势筑牢上下游产业链供应链安全屏障。在应对突发风险方面, 构建产能布局与应急响应机制, 保障特殊时期供应不间断。

The company has strengthened lean management of the production process and improved production scheduling efficiency. Adhering to a customer-centered approach, the company meets customers' customized demands. Faced with multiple challenges including market competition, it has built a secure barrier for the upstream and downstream of industrial chain and supply chain with solid business advantages. In response to sudden risks, it has established a production capacity layout and emergency response mechanism to ensure uninterrupted supply during special periods.

锻造供应链韧性, 对冲外部风险波动**Forging Supply Chain Resilience to Hedge Against External Risk Fluctuations**

建立供应商AB角、动态安全库存双轨保障模式, 拓展33家原材料生产源头企业, 推行集中采购、联合储备、源头直供, 有效平抑原材料价格波动。在大宗等关键物料采购中精准把握市场窗口期, 实现采购成本阶梯式下降; 通过源头管控与成本优化, 显著提升供应链抗风险能力, 保障生产经营连续稳定。

A dual-track guarantee model of supplier "AB roles" and dynamic safety inventory has been established. The company has expanded cooperation with 33 raw material manufacturers, implemented centralized procurement, joint reserve and direct supply from sources, effectively stabilizing raw material price fluctuations. In the procurement of bulk and key materials, the company has accurately seized market windows to achieve a step-by-step decline in procurement costs. Through source control and cost optimization, the anti-risk capability of the supply chain has been significantly improved, ensuring the continuous stability of production and operation.

以技术创新强化供应链核心竞争力**Strengthening the Core Competitiveness of the Supply Chain Through Technological innovation**

承担多项国家重点研发计划, 聚焦高端材料“卡脖子”难题, 联合下游开展关键技术攻关, 提供定制化整体解决方案, 打破高端耐火材料进口依赖, 实现核心材料自主可控, 为钢铁、有色金属等关键领域产业链降本增效、安全运行提供支撑。

The company undertakes a number of national key R&D programs, focuses on "bottleneck" problems of high-end materials, jointly conducts key technological research with downstream enterprises, and provides customized overall solutions. It has broken the import dependence on high-end refractories and achieved independent control of core materials, supporting cost reduction, efficiency improvement and safe operation of industrial chains in key fields such as iron and steel, and non-ferrous metals.

深化协同共赢, 构建生态伙伴关系**Deepening Win-win Cooperation and Building Ecological Partnership**

公司核心产品供应保障率100%, 产品合格率稳居行业领先, 有力支撑钢铁、有色金属等国家关键产业链自主可控与稳定运行。通过技术输出、标准引领与供应链优化, 带动上下游企业协同降本、联动抗险, 牵头制定多项行业标准, 培育优质配套集群, 以自身强韧性带动全链提升, 充分彰显行业领军企业在维护国家产业链供应链安全中的责任与担当。

The supply guarantee rate of the company's core products reaches 100%, and the product qualification rate remains industry-leading, strongly supporting the independent control and stable operation of key national industrial chains such as iron and steel and non-ferrous metals. Through technology transfer, standard leadership and supply chain optimization, the company drives upstream and downstream enterprises to jointly reduce costs and resist risks. It has led the formulation of a number of industry standards and cultivated high-quality supporting industrial clusters. By enhancing its own resilience, the company promotes the improvement of the entire chain, fully demonstrating the responsibility and commitment of an industry-leading enterprise in safeguarding the security of national industrial and supply chains.

平等对待中小企业**Equal Treatment of Small and Medium-sized Enterprises**

中钢洛耐全力营造公平竞争的市场环境, 构建包容性商业生态。建立中小企业专项准入机制, 破除注册资本、业绩门槛等限制, 以市场化方式预留采购份额、降低投标成本, 为中小企业创造更多参与机会; 优化阳光透明评标体系, 开通采购异议快速响应通道, 保障中小企业合法权益。针对中小企业发展痛点, 推出准入免费、供应链管理培训等支持, 严格执行货款支付保障制度、缩短回款周期, 联动金融机构提供供应链金融支持, 缓解其资金压力; 搭建中小企业专场供需对接平台, 推动大中小企业配套融通发展, 建立常态化沟通机制, 倾听企业诉求、动态优化采购策略, 助力中小企业融入产业链供应链, 共建协同共赢生态。

Sinosteel Luonai is committed to fostering a market environment of fair competition and building an inclusive business ecosystem. The company has established a special access mechanism for small and medium-sized enterprises (SMEs), removing barriers such as registered capital and performance thresholds. It reserves

procurement shares and reduces bidding costs through market-oriented measures, creating more participation opportunities for SMEs. It has optimized the open and transparent bidding evaluation system and launched a rapid response channel for procurement objections to safeguard the legitimate rights and interests of SMEs. To address the development pain points of SMEs, the company provides support including free access qualification and supply chain management training. It strictly implements the payment guarantee system, shortens the payment cycle, and cooperates with financial institutions to offer supply chain financial services to ease their capital pressure. It has built a special supply-demand matching platform for SMEs to promote the integrated development of large, small and medium-sized enterprises. A regular communication mechanism has been established to listen to corporate demands and dynamically optimize procurement strategies, helping SMEs integrate into the industrial and supply chains and jointly build a collaborative and win-win ecosystem.

质量保障

Quality Assurance

中钢洛耐构建完善质量管理体系,先后通过GB/T19001-2016质量管理体系、GJB9001C-2017质量管理体系认证,部分仪器设备产品获得CE认证;国家耐火材料质量检验检测中心通过中国国家实验室认可委员会“三合一”认可,取得ISO、ASTM等多项国际标准能力授权,全方位保障出厂产品质量稳定可靠;强化制度与人才建设,制定《质量环境能源职业健康安全手册》等配套文件及管理制度,保障管理体系有效运行,每年通过第三方认证机构监督审核,持续保持体系认证资格;推进质量改进与创新,通过开展质量专题培训、QC小组活动,鼓励全员参与质量提升;2025年,公司4项QC小组课题获洛阳市优秀质量管理小组一等奖,2项获二等奖。2025年,公司产品合格率为**97.68%**。

Sinosteel Luonai has established a sound quality management system. It has successively obtained certifications for the GB/T 19001-2016 Quality Management System and GJB 9001C-2017 Quality Management System, and some instruments and equipment products have obtained CE certification. The National Refractory Materials Quality Inspection and Testing Center has passed the "triple accreditation" by the China National Accreditation Committee for Laboratories and obtained capability authorizations for multiple international standards including ISO and ASTM, ensuring the stable and reliable quality of ex-factory products in all aspects. The company strengthens institutional and talent development by formulating supporting documents and management systems such as the Quality, Environment, Energy, Occupational Health and Safety Management Manual to ensure the effective operation of the management system. It passes the annual surveillance audit by third-party certification bodies and continuously maintains its system certification qualifications. It promotes quality improvement and innovation by carrying out special quality training and QC group activities to encourage full participation in quality enhancement. In 2025, four QC group projects of the company won the First Prize and two won the Second Prize of Luoyang Excellent Quality Management Teams. In 2025, the company's product qualification rate reached 97.68%.

问题产品处理

Defective Product Handling

当公司提供的产品或服务被证实对客户生命或财产安全存在潜在或实质性威胁时,将采取全方位处置措施。

If our products or services are confirmed to pose potential or substantial threats to customers' lives or property safety, a full range of disposal measures will be implemented.

1.立即停止销售并启动召回程序

Immediate suspension of sales and initiation of recall procedures

一旦确认产品或服务存在安全隐患,企业应迅速停止销售该产品或提供该服务。对于已经销售或提供的产品或服务,企业应启动召回程序,通知客户并提供退换货或维修服务。

Once a safety hazard in a product or service is confirmed, the company shall promptly suspend the sale of such product or provision of such service. For products or services already sold or provided, the company shall initiate a recall procedure, notify customers, and offer return, replacement or repair services.

2.发布公开声明:

Issuance of public statements

向客户发表声明,承认问题,向客户表达歉意,并承诺采取积极措施解决问题。

Issue a statement to customers acknowledging the problem, apologize to customers, and commit to taking proactive measures to resolve the issue.

3.启用应急响应机制

Activation of emergency response mechanism

公司建立有专门的质量应急响应小组,负责处理危机事件,做到快速反应、有效沟通和高效解决问题。

The company has established a dedicated quality emergency response team responsible for handling crisis incidents, enabling rapid response, effective communication and efficient problem-solving.

4.加强质量控制和监管**Strengthening of quality control and supervision**

对质量控制和监管体系进行全面审查和改进,确保类似问题不再发生。包括加强原材料检验、改进生产工艺、提高检测频率等措施。

Conduct a comprehensive review and improvement of the quality control and supervision system to prevent recurrence of similar problems. Measures include strengthening raw material inspection, improving production processes, increasing testing frequency, etc.

5.提供客户支持和补偿**Provision of customer support and compensation**

为受影响的客户提供必要的支持和补偿,如免费维修、更换新产品、退款或提供优惠等。

Provide necessary support and compensation to affected customers, such as free repairs, new product replacements, refunds or discounts.

6.加强内部培训和意识提升**Enhancement of internal training and awareness**

加强对员工的培训和意识提升,确保员工了解并遵守安全标准和操作规程,减少人为错误和安全隐患。

Strengthen training and awareness-raising for employees to ensure they understand and comply with safety standards and operating procedures, reducing human error and safety hazards.

7.持续改进和创新**Continuous improvement and innovation**

将此次事件作为改进和创新的机会,不断优化产品和服务,提升客户体验和满意度。

Take the incident as an opportunity for improvement and innovation, continuously optimize products and services, and enhance customer experience and satisfaction.

8.建立长期监测和反馈机制**Establishment of a long-term monitoring and feedback mechanism**

建立长期监测和反馈机制,定期评估产品和服务的安全性能,收集客户反馈,及时发现并解决问题。

Establish a long-term monitoring and feedback mechanism to regularly evaluate the safety performance of products and services, collect customer feedback, and identify and resolve issues in a timely manner.

负责任营销

Responsible Marketing

中钢洛耐始终将“负责任营销”深度融入ESG治理体系,以合规经营为底线、以客户价值创造为核心,构建全流程负责任营销模式。

Sinosteel Luonai has deeply integrated “responsible marketing” into its ESG governance system. Adhering to compliant operation as the bottom line and customer value creation as the core, the company has built a full-process responsible marketing model.



1.规范产品宣传行为,在产品宣传册编制、行业展会推广、客户深度交流等活动中,严格依据产品实际性能参数、真实使用效果、第三方权威评价、客户客观反馈及相关法律法规,开展合规合法营销传播,坚决杜绝夸大功效、隐瞒风险、过度营销等不合规行为,切实保障客户知情权。

Standardizing the product promotion. During the compilation of product brochures, promotion at industry exhibitions, in-depth communication with customers, and other activities, the company conducts marketing communications in strict accordance with actual product performance parameters, real application effects, third-party authoritative evaluations, objective customer feedback and relevant laws and regulations. It firmly eliminates non-compliant practices such as exaggerating efficacy, concealing risks and excessive marketing, effectively protecting customers' right to information.

2.推进服务体系精益化与定制化,秉持“服务前置化、价值共创化”理念,将“服务在用户开口之前”“为客户创造价值”落到实处,派驻专业团队深入客户生产现场提供全周期技术服务,精准响应客户需求、挖掘潜在价值、协同创造隐性价值,聚焦客户生产痛点推动产品迭代与技术创新,摒弃低端价格竞争,以精益服务为客户降本增效、赋能绿色转型;创新工程总包、区域总包等服务模式,延伸服务链条助力客户优化成本管控,实现供需协同可持续发展。

Promoting lean and customized service systems. Upholding the concepts of “service advancement” and “value co-creation”, the company puts into practice the principles of “serving users before they ask” and “creating value for customers”. Professional teams are stationed at customers' production sites to provide full-cycle technical services, accurately respond to customer needs, explore potential value and jointly create implicit value. Focusing on customers' production pain points, the company promotes product iteration and technological innovation, abandons low-end price competition, and helps customers reduce costs, improve efficiency and empower green transformation through lean services. It innovates service models such as EPC and regional general contracting, extends the service chain to help customers optimize cost control, and achieves coordinated and sustainable development between supply and demand.

3.深化大客户战略,立足核心经营逻辑稳步推进大客户合作,整合内外部优质资源为核心大客户提供定制化综合解决方案,打造长期稳定、高效协同的供应渠道,强化现场技术服务与交流,建立现场问题PDCA闭环管理机制,增强大客户信赖感与依存度,实现企业与大客户可持续共赢。

Deepening the key customer strategy. Based on its core business logic, the company steadily advances cooperation with key customers, integrates internal and external high-quality resources to provide customized comprehensive solutions for core key customers, and builds long-term, stable and highly coordinated supply channels. It strengthens on-site technical services and exchanges, establishes a PDCA closed-loop management mechanism for on-site problems, enhancing key customers' trust and dependence, and achieving sustainable win-win between the company and its key customers.



健全客户投诉应对机制

Improved Customer Complaint Response Mechanism

中钢洛耐针对客户反馈的各类问题,第一时间响应、快速启动处置流程,通过对投诉案例的系统复盘,深入剖析问题根源,同步优化服务流程、完善产品适配方案,持续增强客户信任感与忠诚度,确保每一项投诉都得到精准回应与满意解决,为构建长期稳定的可持续合作关系筑牢基础。2025年,实现客户投诉解决率**100%**。



客户投诉解决率

100%

Sinosteel Luonai responds promptly to all kinds of customer feedback and quickly initiates disposal procedures. Through systematic review of complaint cases, it conducts in-depth cause analysis, optimizes service processes and improves product adaptation plans, continuously enhancing customer trust and loyalty. The company ensures every complaint receives an accurate response and satisfactory resolution, laying a solid foundation for long-term, stable and sustainable cooperative relationships. In 2025, the customer complaint resolution rate reached 100%.

完善售后服务体系

Improved After-sales Service System

公司依托ISO9001体系与售后管理制度,建立全周期系统化售后服务体系,通过明确第一责任人、常态化满意度调查、一线实地调研等方式,实现客户需求快速响应与闭环管理。2025年围绕产品质量、服务质量、交货期、包装质量、使用效果五大核心维度开展客户满意度测评,全年客户满意度达**99.58%**,为构建长期稳定、可持续的客户合作关系奠定坚实基础。

Relying on the ISO 9001 system and after-sales management regulations, the company has established a full-cycle systematic after-sales service system. By defining the primary responsible person, conducting regular satisfaction surveys and on-site survey, it achieves rapid response to customer needs and closed-loop management. In 2025, customer satisfaction surveys were carried out around five core dimensions: product quality, service quality, delivery time, packaging quality and application effect. The annual customer satisfaction score reached 99.58%, laying a solid foundation for building long-term, stable and sustainable customer partnerships.

客户信息安全与隐私保护

Customer Information Security and Privacy Protection

中钢洛耐以负责任的数据管理为原则,建立全流程信息安全与隐私保护体系,通过岗位分级授权、关键环节可追溯管控,结合保密协议约定与合规体系嵌入,全面守护客户商业秘密、业务数据及个人信息安全,有效防范信息安全风险,保障企业与客户合法权益。

Adhering to the principle of responsible data management, Sinosteel Luonai has established a full-process information security and privacy protection system. Through hierarchical authorization by position, traceable control of key links, combined with confidentiality agreements and embedded compliance systems, the company fully safeguards customer trade secrets, business data and personal information, effectively prevents information security risks, and protects the legitimate rights and interests of the customers and itself.

海外履责

Overseas Responsibility Performance

2025年,中钢洛耐深入践行全球发展倡议,积极响应国家“一带一路”政策,将绿色低碳与可持续发展理念全面融入海外业务全链条,海外业务实现区域多元化、品类多样化、模式高端化的高质量发展趋势,在重点市场、重点领域取得突破,以负责任的国际化运营持续创造海外价值、履行海外责任。



In 2025, Sinosteel Luonai thoroughly implemented the Global Development Initiative, actively responded to the national Belt and Road Initiative, and fully integrated the concepts of green, low-carbon and sustainable development into the entire chain of overseas business. Overseas business has achieved high-quality development featuring diversified regions, varied product categories and high-end business models, with breakthroughs in key markets and key sectors. Through responsible international operation, the company continues to create overseas value and fulfill overseas responsibilities.

全球市场多点突破, 高端业务成效显著

Breakthroughs in Global Markets, Outstanding Results in High-end Business

公司立足存量优质客户深耕经营,纵向聚焦客户卡脖子问题与降本增效核心诉求,持续夯实合作体量、扩大业务规模;横向拓展周边关联业务领域,以点带面放大市场辐射面。在亚洲、欧洲等海外重点市场业务落地并取得实质性突破,为国际化布局与全球市场竞争力提升筑牢坚实基础。

The company operates based on existing high-quality customers by focusing on customers' bottleneck problems and core demands for cost reduction and efficiency improvement, continuously consolidating cooperation scale and expanding business volume. It expands into surrounding and related business fields, expanding market radiation from point to area. Substantial business breakthroughs have been achieved in key overseas markets including Asia and Europe, laying a solid foundation for international layout and improvement of global market competitiveness.

在欧洲市场,RH真空脱气炉用耐材实现零的突破,成功进入奥地利大型钢厂并实现批量供货试用,荷兰钢厂项目进入技术方案论证阶段;焦炉用零膨胀硅砖成功供应安赛乐米塔尔德国钢厂,充分彰显公司在高端耐材领域的核心技术实力。在亚洲市场,与朝鲜耐火达成战略合作,联合保障意大利高炉项目耐火材料供应;圆满完成中国台湾钢铁大型焦炉项目整体供货,进一步巩固高端焦炉耐材领先优势;持续深耕中亚市场,稳定保障哈萨克斯坦某钢厂焦炉维修用硅砖供应。在东南亚市场,成功突破印尼有色金属冶炼领域,与阿曼矿业签订炼铜阳极炉耐材供货合同,实现销售额510万元;与印尼MMP公司达成炼镍转炉耐材供货合作,成功切入核心冶炼赛道。此外,玻璃窑用硅砖获得全球市场认可,与圣戈班等7家国际企业保持稳定订货;齿科设备在俄罗斯市场实现快速增长,成为海外业务全新增长点。



海外项目一次性顺利出铜

In the European market, refractories for RH vacuum degassing furnaces achieved a zero breakthrough, successfully entering a major Austrian steel plant with trial application, completing the technical scheme demonstration phase for a steel plant project in the Netherlands, successfully supplying zero-expansion silica bricks for coke ovens to ArcelorMittal's steel plant in Germany, which fully demonstrate the core technical strength in high-end refractories. In the Asian market, the company reached a strategic cooperation with Chosun Refractories Co., Ltd. to jointly ensure refractory supply for an Italian blast furnace project, fully completed the overall supply of a large coke oven project for Taiwan Steel Group, further consolidating its leading edge in high-end coke oven refractories. It continued to deepen the Central Asian market and stably guaranteed silica brick supply for coke oven maintenance at a steel plant in Kazakhstan. In the Southeast Asian market, the company made a breakthrough in the non-ferrous metal smelting sector in

Indonesia, signing a refractory supply contract for copper smelting anode furnaces with Oman Mining, realizing sales of CNY 5.1 million. It reached cooperation on refractory supply for nickel smelting converters with Indonesian MMP Company, successfully entering the core smelting sector. In addition, silica bricks for glass furnaces gained global recognition, with stable orders maintained with 7 international enterprises including Saint-Gobain. Dental equipment achieved rapid growth in the Russian market, becoming a new growth driver for overseas business.

创新总包服务模式, 赋能海外产业升级

Innovative General Contracting Service Model and Empowering Overseas Industrial Upgrading

中钢洛耐整合研发设计、集中供应、现场施工、运维服务全链条资源, 以工程总包模式为海外客户提供一体化解决方案。在动力电池三元前驱体材料领域, 供应电熔镁铬砖、不定型耐材近1万吨, 实现销售额5000余万元。在电石冶炼领域, 销售额达5300万元, 以全流程、高品质服务助力当地产业提质升级。

The company integrated whole-chain resources including R&D and design, centralized supply, on-site construction and operation & maintenance services, providing integrated solutions for overseas customers through the EPC general contracting model. In the field of power battery ternary precursor materials, it supplied nearly 10,000 tons of fused magnesia-chrome bricks and monolithic refractories, achieving sales of over CNY 50 million. In the calcium carbide smelting sector, sales reached CNY 53 million, supporting local industrial quality and efficiency upgrading with full-process, high-quality services.



深耕本地化运营, 践行海外社会责任

Deepening Localized Operations & Fulfilling Overseas Social Responsibilities

公司以高品质产品与专业化服务兑现“一带一路”建设承诺, 印尼青山大K项目自2022年起持续开展属地化人才培育, 面向当地施工团队开展耐火材料砌筑、设备维护、锚固件焊接等专业技能培训, 打造符合中国标准、兼具本地实操能力的复合型施工队伍。报告期内, 项目本地化雇佣率达70%, 覆盖普工、木工、泥工、焊工、司机等多个工种, 中方技术人员占比持续下降, 真正实现属地化管理、本土化运营, 以实际行动促进当地就业与技能提升, 推动中外互利共赢、共同发展。

The company honored its commitments to the Belt and Road Initiative with high-quality products and professional services. Since 2022, the Indonesia Tsingshan Big K Project has continuously carried out localized talent cultivation, providing professional skills training for local construction teams in refractory masonry, equipment maintenance, anchor welding and other fields, building a comprehensive construction team that complies with Chinese standards and possesses local practical capabilities. During the reporting period, the project's localized employment rate reached 70%, covering general workers, carpenters, bricklayers, welders, drivers and other types of work. The proportion of Chinese technical personnel continued to decline, truly realizing localized management and operation. With concrete actions, the company promoted local employment and skills improvement, advancing mutual benefit, win-win and common development between China and foreign countries.



08 议题识别

Topic Identification

公司建立与利益相关方的常态化沟通机制,采用调查问卷方式,综合考虑各ESG议题的“影响重要性+财务重要性”双重重要性评估维度,充分了解各议题对公司的重要程度以及各利益相关方对于公司ESG表现的评价。公司的主要利益相关方分为以下7类,各类利益相关方所关注的主要ESG议题如下:

The company has established a regular communication mechanism with stakeholders. Through questionnaire surveys, and the dual assessment dimensions of “impact importance + financial importance” for various ESG topics, the company fully understands the importance of each topic to the company as well as stakeholders’ evaluations of the company’s ESG performance. The company’s main stakeholders are divided into the following seven categories, and the key ESG topics concerned by each stakeholder group are as follows:

利益相关方 Parties Concerned	主要关注议题(财务重要性) Main Issues of Financial Importance	主要关注议题(影响重要性) Main Issues of Influence Importance
投资者/股东 Investors / Shareholders	能源利用 Energy Utilization 创新驱动 Innovation-driven Development 尽职调查 Due Diligence	污染物排放 Pollutant Emissions 废弃物处理 Waste Treatment 能源利用 Energy Utilization
员工 Employees	环境合规管理 Environmental Compliance Management 创新驱动 Innovation-driven Development 产品和服务安全与质量 Safety and Quality of Products and Services	污染物排放 Pollutant Emissions 环境合规管理 Environmental Compliance Management 员工权益 Employee Rights and Interests
供应商/合作伙伴 Suppliers / Partners	供应链安全 Supply Chain Security 科技伦理 Tech Ethics 平等对待中小企业 Fair Treatment of SMEs	废弃物处理 Waste Treatment 员工权益 Employee Rights and Interests 产品和服务安全与质量 Safety and Quality of Products and Services
客户 Customers	创新驱动 Innovation-driven Development 数据安全与客户隐私保护 Data Security and Customer Privacy Protection 科技伦理 Tech Ethics	废弃物处理 Waste Treatment 产品和服务安全与质量 Safety and Quality of Products and Services 利益相关方沟通 Stakeholder Engagement

评级机构 Rating Agencies	社会贡献 Social Contribution 创新驱动 Innovation-driven Development 数据安全与客户隐私保护 Data Security and Customer Privacy Protection	废弃物处理 Waste Treatment 平等对待中小企业 Fair Treatment of SMEs 水资源利用 Water Resource Utilization
社区 Communities	平等对待中小企业 Fair Treatment of SMEs 反不正当竞争 Anti-unfair Competition 反商业贿赂及反贪污 Anti-commercial Bribery and Anti-corruption	应对气候变化 Climate Change Response 生态系统和生物多样性保护 Ecosystem and Biodiversity Conservation 能源利用 Energy Utilization
媒体 The Media	循环经济 Circular Economy 尽职调查 Due Diligence	社会贡献 Social Contribution 乡村振兴 Rural Revitalization

ESG 重要性议题分析流程

ESG materiality issue analysis process

议题识别: 根据监管机构指引,结合国内外权威ESG标准研究、行业优秀ESG报告对标、公司发展战略和内外利益相关方关注的内容识别出反映中钢洛耐治理、环境和社会影响的ESG议题。

Topic Identification: Based on regulatory guidelines, authoritative domestic and international ESG standards, outstanding ESG reports in refractories industry, the company’s development strategy, and concerns of internal and external stakeholders, ESG topics reflecting the governance, environmental and social impacts of Sinosteel Luonai are identified.

议题辨析: 编制实质性议题调查问卷,了解利益相关方对初步识别和筛选出的ESG议题的重要性排序。

Topic Screening: A questionnaire on topics is developed to understand stakeholders’ priority ranking of the initially identified and screened ESG topics.

议题评估: 根据问卷调查结果,进一步分析梳理各项ESG议题的影响重要性和财务重要性的双重重要程度,筛选出利益相关方关注度高、与公司可持续发展密切相关的核心ESG议题,作为2025年ESG报告披露重点。

Topic Evaluation: Based on questionnaire results, the dual importance of each ESG topic including impact significance and financial materiality is further analyzed. Core ESG topics with high stakeholder attention and close relevance to the company’s sustainable development are selected as the key disclosure priorities for the 2025 ESG Report.

09 关键绩效

Key Performance

名称	单位	2025年
资产总额 Total Assets	亿元 100 million yuan	50.17
营业收入 Operating Income	亿元 100 million yuan	19.97
研发投入总额 Total R&D Investment	万元 10,000 yuan	10475.40
研发投入占比 R&D Investment Ratio	%	5.25
纳税总额 Total Tax	亿元 100 million yuan	1.01
专利授权数 Number of Patents Granted	件 pcs	47
参与标准制定 Participation in Standard Development	项 items	26
安全生产投入 Investment in Workplace Safety	万元 10,000 yuan	983.74
职业健康与安全培训覆盖率 Coverage Rate of Occupational Health & Safety Training	%	100
隐患按期整改率 On-time Rectification Rate of Hidden Risks	%	100
因工死亡、受伤人数 Number of Work-related Deaths & Injuries	人 person	0
职工总数 Total Workforce	人 person	2519
社会保险覆盖率 Social Insurance Coverage Rate	%	100
劳动合同签订率 Labor Contract Signing Rate	%	100
职业培训投入 Occupational Training Investment	万元 10,000 yuan	34.46
职业培训累计人次 Total Participants in Occupational Training	人次 person-time	26544
职业培训学时 Occupational Training Hours	学时 hours	160287.5

名称	单位	2025年
环保纳税 Environmental Protection Tax	万元 10,000 yuan	32.95
产品合格率 Product Qualification Rate	%	97.68
环保资金投入 Environmental Protection Investment	万元 10,000 yuan	2210.89
固体废物综合利用率 Comprehensive Utilization Rate of Solid Waste	%	100
合规暂存处置率 Compliant Temporary Storage & Disposal Rate	%	100
审查的供应商数量 Number of Suppliers Audited	个 units	948
因不合规被中止合作的供应商数量 Number of Suppliers Terminated for Non-compliance	个 units	0
客户满意度 Customer Satisfaction	%	99.58
投诉解决率 Complaint Resolution	%	100
合规审查覆盖率 Compliance Review Coverage Rate	%	100
关键岗位持证率 Certification Rate of Key Positions	%	100
温室气体减排量 Greenhouse Gas Emission Reduction	吨二氧化碳 tCO ₂	3877
扶贫及乡村振兴项目总投入 Total Investment in Poverty Alleviation & Rural Revitalization	万元 10,000 yuan	56.6
志愿服务参与人次 Volunteer Service Participants	人次 person-time	137
志愿服务时长 Volunteer Service Hours	时 hours	478
员工体检覆盖率 Employee Physical Examination Coverage Rate	%	100
员工流失率 Employee Turnover Rate	%	1.44

10 读者意见反馈

Feedback

亲爱的读者：

您好！感谢您阅读《中钢洛耐科技股份有限公司2025年度环境、社会及治理(ESG)报告》，中钢洛耐非常关心您对本份报告的意见，为向您及其他利益相关方提供更专业、更有价值的企业ESG信息，恳请您协助完成反馈意见表中的相关问题，并选择以下方式反馈给我们：

地址：河南省洛阳市涧西区西苑路1号

邮编：471000

联系电话：0379-64208820

电子邮箱：xinwen@lyrg.com.cn

官网：www.lyrg.com.cn

您的信息：

姓 名： 工作单位：

联系电话： 邮箱地址：

开放性问题：

您对中钢洛耐ESG工作有哪些建议？

您认为本报告为您提供了哪些有价值的ESG信息？

您认为本报告存在哪些不足之处？

您认为本报告还需要增加披露哪些ESG信息？

Dear Readers:

Greetings! Thank you for reading the 2025 Environmental, Social and Governance (ESG) Report of Sinosteel Luonai Materials Technology Corporation .Sinosteel Luonai highly values your feedback on this report. To provide you and other stakeholders with more professional and valuable corporate ESG information, we sincerely invite you to complete the questions in the feedback form and send it back to us via the channels below:

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Email: xinwen@lyrg.com.cn

Website: www.lyrg.com.cn

Your Information:

Name: Organization:

Tel: Email:

Open Questions:

What suggestions do you have for the ESG work of Sinosteel Luonai?

What valuable ESG information do you think this report has provided for you?

What shortcomings do you find in this report?

What additional ESG information do you believe should be disclosed in this report?

(内容由AI生成，仅供参考)