XIWANG SPECIAL STEEL COMPANY LIMITED
西王特鋼有限公司

(incorporated in Hong Kong with limited liability)

（於香港註冊成立之有限公司）

Stock Code股份代號：1266

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT
環境、社會及管治報告

2022

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2022
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ABOUT THE COMPANY

Xiwang Special Steel Company Limited (the "**Company**") was founded in December 2003. The Company was listed on the main board of the Stock Exchange of Hong Kong Limited (the "**Stock Exchange**") in February 2012. In January 2014, it was accredited by the Ministry of Industry and Information Technology as a corporation that meets the industry standards. The annual steel smelting and rolling capacity of the Company's design are 3,000,000 tonnes and 3,300,000 tonnes respectively, and its major products include various high-quality steel rods and wires, such as high-quality carbon steel, structural alloy steel, pinion steel, spring steel and ball bearing steel, highstrength building materials, and various types of special steel ingots and forged bars for high-end uses.

The Company maintains its transformation strategy of "from general steel to special steel, then to steel products and to products for public use". It has cooperated with the Institute of Metal Research of Chinese Academy of Sciences ("**IMRCAS**") to establish a clean and intelligent high-end special steel production demonstration line project. The production facilities and processes are gradually becoming more stable and mature, and the steel production capacity is improving steadily. More than 80 types of high-end special steel products are placed in the market now and are highly recognized by high-end customers in the People's Republic of China (the "**PRC**") and across Asia.

This Environmental, Social and Governance ("**ESG**") Report (the "**ESG Report**") for the year ended 31 December 2022 summarises the ESG strategies, policies and accomplishments of the Company, and together with its subsidiaries, collectively the "**Group**", "**we**", "**us**" or "**our**". It demonstrates our long-term commitment to generate sustainable economic, social and environmental values to the community through responsible business practices. The ESG Report has been reviewed and confirmed by the Board of Directors (the "**Board**"). Both English and Chinese versions of the ESG Report are available on Company's website www.xiwangsteel.com. The corporate governance section was covered in the 2022 Annual Report.

公司簡介

西王特鋼有限公司(「**公司**」)始建於2003年12月，2012年2月在香港聯合交易所有限公司(「**聯交所**」)主板上市。2014年1月被國家工信部認定為符合鋼鐵行業規範企業。公司設計煉鋼及軋鋼年產分別為300萬噸和330萬噸，主要產品為優質碳素鋼、合金結構鋼、齒輪鋼、彈簧鋼、軸承鋼等各類優質鋼棒線材、高強度建材以及各類用於高端裝備的特殊鋼鋼錠和鍛材等產品。

公司堅持「由普鋼向特鋼，特鋼向製品，製品向民用」的轉型發展戰略，與中國科學院(「**中科院**」)金屬研究所合作，合力打造的清潔智能化制備高端特殊鋼示範線項目，生產設備和工藝流程日益更加穩定成熟，鋼產量穩步提升，高端特殊鋼產品已達80多個品類，產品得到了中華人民共和國(「**中國**」)乃至亞洲高端領域客戶的高度認可。

本截至二零二二年十二月三十一日止年度之環境、社會及管治(「**環境、社會及管治**」)報告(「**環境、社會及管治報告**」)概述公司，連同其附屬公司統稱「**集團**」或「**我們**」)的環境、社會及管治策略、政策及成果，以彰顯我們透過負責任的商業操守，為社區帶來可持續經濟、社會及環境價值的長期承諾。環境、社會及管治報告已經董事會(「**董事會**」)審閱及確認。環境、社會及管治報告的英文和中文版本均可在公司網站www.xiwangsteel.com查閱。二零二二年年報中已涵蓋企業管治環節。

Reporting Standard

This ESG Report has been prepared in accordance with the disclosure requirements of the Environmental, Social and Governance Reporting Guide (the "**ESG Reporting Guide**") as set out in Appendix 27 to the Rules Governing the Listing of Securities ("**Listing Rules**") issued by the Stock Exchange of Hong Kong Limited. The Group has complied with the disclosure requirements of the "comply or explain" provisions set out in the Listing Rules. The Key Performance Indicators (the "**KPIs**") during the Reporting Period, which are considered as material by the Group, have been disclosed in this ESG Report.

報告標準

本環境、社會及管治報告乃根據香港聯合交易所有限公司頒佈的證券上市規則(「**上市規則**」)附錄二十七環境、社會及管治報告指引(「**環境、社會及管治報告指引**」)編製。集團已遵守上市規則所載的「不遵守就解釋」條文。集團認為重要的報告期間內之關鍵績效指標(「**關鍵績效指標**」)已在本環境、社會及管治報告中披露。

Reporting Scope

This ESG Report covers the principal operating activities of the Group, which are production and sales of steel, trading of commodities and sale of by-product in the PRC, spanning over the period from 1 January 2022 to 31 December 2022 (the "**Reporting Period**"). The scope of the ESG Report has been covered our operations in Hong Kong and the PRC during the Reporting Period. The entities subject to reporting are determined by considering their ESG significance as well as influence to the Group's operations, and they shall collectively constitute a fair picture of the Group's overall ESG performance. The scope of the ESG Report is the same as the scope of the ESG Report in previous year, except for the new additions of Shandong Xiwang Special Steel New Materials Technology Innovation Centre Company Limited and Shandong Xiwang Equipment Manufacturing Company Limited.

報告範圍

本環境、社會及管治報告的範圍涵蓋集團於二零二二年一月一日至二零二二年十二月三十一日期間(「**報告期間**」)在中國的主要經營活動，即生產及銷售鋼鐵、買賣商品及銷售副產品。環境、社會及管治報告範圍覆蓋報告期間在香港及中國的業務營運。實體是否須予報告，乃考慮其環境、社會及管治的重要性以及對本集團營運的影響而定，並將共同地公平反映集團的整體環境、社會及管治表現。除了於報告期間新增山東省西王特殊鋼新材料技術創新中心有限公司及山東西王裝備製造有限公司外，本環境、社會及管治報告的範圍與上年度的環境、社會及管治報告的範圍相同。

Reporting Principles

With the objective to provide relevant contents and quality data for decision making by stakeholders, the following reporting principles have been adopted in the preparation of this ESG Report.

Materiality: relevant and important ESG information to stakeholders is identified and covered. A materiality assessment including stakeholder engagement has been conducted to determine the relative importance of different ESG issues, and the corresponding results are disclosed in the Stakeholder Engagement and Materiality Assessment Sections.

Quantitative: quantitative information is provided, in respect of historical data are measurable and comparable with its ESG performance in the previous year. Relevant explanation is also provided to evaluate the effectiveness of the Group's ESG policies.

報告原則

為提供相關內容及高質量數據以供持份者作決策之用，於編製此份環境、社會及管治報告時已採用下列報告原則。

*重要性：*確定及涵蓋對持份者相關及重要的環境、社會及管治資料。已進行重要性評估(包括持份者的參與)，以釐定不同環境、社會及管治議題的相對輕重而相應結果已在持份者的參與及重要性評估各節中披露。

*量化：*在過往數據方面提供定量信息，有關數據為可計量並可與上一年的環境、社會及管治表現相比較。亦已提供相關解釋，以評估集團的環境、社會及管治政策的成效。

Consistency: unless otherwise specified, a consistent methodology is used in the preparation and presentation of ESG data to allow for a meaningful comparison of ESG performance over time.

*一致性：*除非另有指明，於編製及呈列環境、社會及管治數據時已採用一致的方法，以便讀者就本集團不同年份的環境、社會及管治表現作出具意義的比較。

Balance: objective information is provided, without selections, omissions and presentation formats that may inappropriately influence the readers.

*平衡：*提供客觀的數據，當中概無任何可能會不恰當地影響報告讀者的選擇、遺漏及呈報格式。

Contact details

To continuously refine the Group's sustainability strategy, we welcome any feedback concerning this ESG Report and the Group's sustainability performance. If you have any questions regarding the report, please contact the Group and its contact details are set out as below:

Xiwang Special Steel Company Limited
Address: Unit 2110, 21st Floor, Harbour Centre,
25 Harbour Road, Wanchai, Hong Kong
Or
Xiwang Industrial Area, Zouping, Shangdong Province,
The People's Republic of China
Tel: (852) 3188 4518 or
(86) 543 813 8066
Email: tianli@xiwang.com.cn

聯絡數據

為持續完善集團之可持續發展策略，我們歡迎有關本環境、社會及管治報告及集團之可持續發展績效之任何反饋。若 閣下對本報告持任何疑問，請與集團聯絡。聯絡數據如下：

西王特鋼有限公司
地址：香港灣仔港灣道25號海港中心
21樓2110室
或
中華人民共和國山東省鄒平市
西王工業區
電話號碼： (852) 3188 4518或
(86) 543 813 8066
電郵地址： tianli@xiwang.com.cn

ESG Governance Structure

The Group understands robust governance with clearly-defined roles and responsibilities within in the Group could build up the foundation of ESG management and strengthens the effectiveness on the oversight of ESG strategy. The Group is committed to upholding its corporate social responsibility and fulfilling stakeholder's expectations through solid ESG governance structure as illustrated in the chart below:

The Board
Takes the overall responsibility for the Group's ESG strategy and reporting, identifies, evaluates ESG risks and opportunities, oversees and sets strategic directions and targets, ensures effective ESG risk management and manages internal control systems are in place and reviews progress made against targets

The Management
Monitors ESG risks and provides confirmation to the Board on the effectiveness of ESG risk management and internal control systems

ESG Working Group
Comprises core members from different departments and is responsible for implementation and formulation of ESG strategy. The ESG Working Group implements ESG policies and initiatives, monitors ESG risks and impacts and sustainability trends, evaluates existing ESG policies and reports to the Board on the Group's sustainability performance regularly

環境、社會及管治方面的管治架構

集團明白，集團內部明確界定的角色和責任的強大管治為環境、社會及管治管理奠定根基，並加強對環境、社會及管治策略監督的成效。本集團致力通過下圖所展示在環境、社會及管治方面的穩固管治結構，以肩負其企業社會責任，及實現持份者的期望：

董事會
肩負集團的環境、社會及管治事宜及報告之整體責任、評估環境、社會及管治風險與機會、制定策略方向及目標、確保施行有效的環境、社會及管治風險管理及內部監控制度以及審視進度

管理層
監察環境、社會及管治風險，並向董事會確認環境、社會及管治風險管理及內部監控制度的成效

環境、社會及管治工作團隊
由來自不同部門的核心成員組成並負責執行及制定環境、社會及管治策略。環境、社會及管治工作團隊、實施環境、社會及管治政策及計劃、監察環境、社會及管治風險及影響以及可持續發展趨勢、評估現行環境、社會及管治政策，以及就集團的可持續發展表現向董事會報告

The Board has overall responsibility for ESG strategy and reporting of the Group. It identifies, evaluates and manages ESG risks and opportunities, and subsequently overseeing and setting up strategic directions and targets for the Group in relation to business and operation needs. The Board is also responsible for ensuring that appropriate and effective ESG risk management and internal control systems are in place. Meanwhile, the management of the Company (the "**Management**") monitors ESG risks and provides confirmation to the Board on the effectiveness of risk management and internal control systems. The ESG working group is comprised of key managerial personnel including the CEO and CFO of the Company, as well as representatives of different business operation teams, the ESG working group is responsible for assisting the Board and the Management in managing ESG issues. It executes the ESG strategy formulated by the Board through implementing different ESG policies and initiatives into business operations. Besides, the ESG working group assists the management in constantly monitoring the ESG risks and impacts of the Group, as well as recent trends in sustainability. It holds meeting at least once a year to evaluate the effectiveness of existing ESG policies and identify improvement opportunities, while coordinating any necessary follow up actions. The ESG working group reports to the Board directly and regularly on the Group's sustainability performance.

董事會全面負責集團的環境、社會及管治策略及報告，並確定、評估及管理環境、社會及管治風險與機會，並隨後監督並就集團的業務及營運需要制定策略方向及目標。董事會亦負責確保施行適當及有效的環境、社會及管治風險管理及內部監控制度。與此同時，本公司管理層（「**管理層**」）監察環境、社會及管治風險，並向董事會確認風險管理及內部監控制度的成效。環境、社會及管治工作團隊由主要管理人員組成，包括本公司的行政總裁、財務總監以及不同業務營運團隊的代表，負責協助董事會及管理層管理環境、社會及管治事宜。其執行由董事會訂立的環境、社會及管治策略，於各業務營運內實施不同的環境、社會及管治政策及計劃。此外，環境、社會及管治工作團隊協助管理層持續監察本集團的環境、社會及管治風險及影響以及可持續發展的近期趨勢。其每年舉行至少一次會議，以評價現行環境、社會及管治政策的成效及識別改善機會，並進行所需的跟進工作。環境、社會及管治工作團隊直接及定期就集團的可持續發展表現向董事會匯報，以供其審視及批核。

In addition, the Group's integral enterprise risk management framework has covered ESG risks, the internal audit department performs annual assessment on internal control systems of the Group to identify any potential deficiencies, and makes appropriate recommendations for improvement. A risk management task force has been set up to perform the annual risk assessment process.

再者，集團整體的企業風險管理框架內涵蓋環境、社會及管治風險，內部審計部門對集團的內部監控制度進行年度評估，以識別任何潛在的不足之處，並提出適當的改善建議。集團已成立風險管理專責小組，以進行年度風險評估程序。

Stakeholder Engagement

As an enterprise, who strive to fulfill its responsibilities the Group not only actively develops its business and improves its return, but also places high value on the relationship and communication with stakeholders and their expectation of our business and ESG matters.

持份者參與

作為一間力盡己任的企業，集團不僅積極發展業務，提高回報，同時亦非常重視與持份者的關係及溝通以及持份者對我們的業務及環境、社會及管治事務的期望。

Stakeholders 持份者	Communication method/channel 聯絡方法／渠道	Key concerns 關鍵問題	Action plans 行動計劃
Government	– Participate in discussion in the formulation process of relevant policies and industry standards – Propose initiatives and hold meetings when necessary	– Compliance with regulatory requirements, including policies related to COVID-19 – Ensure production safety – Support local economic and industrial development, and promote employment – Create job opportunities and fulfilling tax obligations in accordance with the law	– Monitor law and regulation updates, and strictly comply with all regulatory requirements – Follow the epidemic prevention requirements of the government, and protect the safety and health of employees – Strengthen safety management and ensure that the production processes comply with safety standards – Create job opportunities – File tax returns timely and pay taxes in a full and timely manner
政府	– 在有關政策及行業標準的制定過程中參與討論 – 在必要時發出倡議及舉行會議	– 遵守監管規定，包括COVID-19相關政策 – 確保安全生產 – 支持當地經濟及工業發展，促進就業 – 創造就業機會並依法履行納稅義務	– 監察法律法規的更新情況，嚴格遵守所有監管規定 – 遵從政府的防疫規定，保護僱員的安全及健康 – 加強安全管理，確保生產過程符合安全標準 – 創造就業機會 – 按時提交納稅申報表，按時全額繳稅

Stakeholders 持份者	Communication method/channel 聯絡方法／渠道	Key concerns 關鍵問題	Action plans 行動計劃
Shareholders and investors	– General meetings and other meetings – Publish annual/interim reports, announcements and circulars	– Business strategies and financial results – Information disclosures and risk control	– Convene general meetings regularly, and actively listen to the views and needs of shareholders and investors – Release operating data and financial results in due course – Assess corporate risks regularly and formulate responding plan
股東及投資者	– 股東大會及其他會議 – 刊發年報／中期報告、公告及通函	– 業務策略及財務業績 – 數據披露及風險控制	– 定期召開股東大會，積極聽取股東及投資者的意見及需求 – 適時發佈營運數據及財務業績 – 定期評估企業風險並制定應對計劃
Employees	– Training and orientation – Regular performance appraisal – Employee caring activities	– Reasonable salary and welfare – Employee promotion and development – Care for employees – Occupational health and safety	– Work out competitive remuneration system and provide fair career development path – Provide regular vocational training and establish a platform for the career development of employees – Listen to employees' feedbacks through various channels – Arrange specific operational training
僱員	– 培訓及入職指導 – 定期表現評估 – 僱員關懷活動	– 合理的薪金及福利 – 僱員擢升及發展 – 關懷僱員 – 職業健康及安全	– 制定具競爭力的薪酬系統，提供公平的職業發展通道 – 定期提供職業培訓，建立員工職業發展的平台 – 透過多種渠道聽取僱員的反饋 – 安排特定的操作訓練

Stakeholders 持份者	Communication method/channel 聯絡方法／渠道	Key concerns 關鍵問題	Action plans 行動計劃
Customers	– Company website – Direct communication with customers – Customers feedbacks and complaints	– Safety and quality of products – Delivery and after-sales service	– Strictly control products' outgoing indicators – Enhance the quality of pre-sales and after-sales services – Immediately follow up and handle customer complaints and improve product and service quality
客戶	– 公司網站 – 與客戶直接交流 – 客戶反饋及投訴	– 產品安全及質量 – 交貨及售後服務	– 嚴格控制產品出貨指標 – 提高售前及售後服務的質量 – 實時跟進及處理客戶投訴，提高產品及服務的質量
Suppliers	– Communication meetings and telephone discussion – On-site inspection	– Environmental protection, qualification and scale – Fair and transparent procurement process – Good relationship with the Group – Supply chain management, and market supply and demand	– Establish open and transparent tendering system, and provide equal competition opportunity to suppliers – Build a platform for communication with suppliers, and facilitate the cooperative development with suppliers in a proactive manner – Check on the qualification of suppliers regularly, and monitor market supply and demand closely
供貨商	– 交流會及電話討論 – 現場檢驗	– 環保、資格及規模 – 公平、透明的採購過程 – 與集團的良好關係 – 供應鏈管理及市場供需	– 制定公開透明的招標制度，向供貨商提供平等的競爭機會 – 建立與供貨商交流的平台，積極促進與供貨商的合作發展 – 定期核查供貨商資格，密切監察市場供需

Stakeholders 持份者	Communication method/channel 聯絡方法／渠道	Key concerns 關鍵問題	Action plans 行動計劃
Peers and industry associations	– Industry conferences – Site visits	– Experience sharing – Cooperation – Fair competition	– Actively attend industry conference and organise site visits
同行及行業協會	– 行業會議 – 現場參觀	– 分享經驗 – 合作 – 公平競爭	– 積極參加行業會議及組織現場參觀
Community	– Media publicity and reports – Participate in community welfare activities	– Corporate social responsibility, support social welfare – Provide employment opportunity	– Actively participate in community welfare activities – Create job opportunities
社區	– 媒體宣傳及報告 – 參加社區福利活動	– 企業社會責任、支持社會福利 – 提供就業機會	– 積極參加社區福利活動 – 創造就業機會

The Group will continue to engage both internal and external stakeholders, listen to them and provide updates to them on our ESG policies and progress.

集團將繼續與內外部持份者接觸、聆聽彼等的需要，並讓彼等得悉我們環境、社會及管治政策及進度的最新發展。

Materiality Assessment

The Group has identified ESG issues that may have potential impacts on its sustainable development from various sources, including issues identified and included in the Group's internal policies, and some reflect by industry trends, the areas of ESG concerns raised by the Group's stakeholders are set out above.

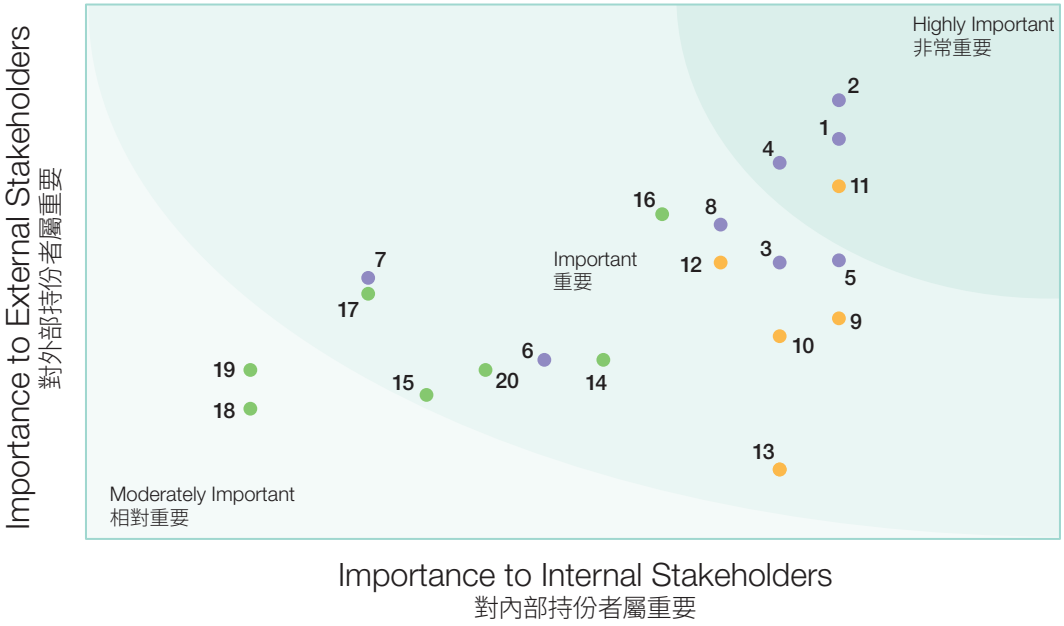
A total of 20 issues were identified by our ESG working group and subsequently ranked by our key stakeholders. The final results are mapped into a materiality matrix as shown below. Out of which 4 issues are classified as highly important, 14 issues are classified as important and the remaining 2 issues are classified as moderately important.

重要性評估

集團已識別來自各種來源可能對其可持續發展有潛在影響的環境、社會及管治事宜，包括集團內部政策中確定及包括在內的事宜、部份則在行業趨勢、上文所載集團持份者提出的環境、社會及管治關注領域中反映。

環境、社會及管治工作團隊已識別合共20項議題，隨後由主要持份者編排重要性的次序。最終結果在下列重要性矩陣展示。當中，4項議題被歸類為非常重要、14項議題歸類為重要，餘下2項議題為相對重要。

Materiality Matrix
重要性矩陣



1 Supply Chain Management
供應鏈管理
2 Service Quality
服務質量
3 Value Chain Standards
價值鏈水平
4 Data Privacy
資料私隱
5 Anti-Corruption
反貪污
6 Fair Competition
公平競爭
7 Community Investment and Involvement
社區投資及參與
8 Compliance
合規
9 Human Rights
人權
10 Equal Opportunity and Diversity
平等機會及多元化
11 Workplace Health and Safety
工作場所健康與安全
12 Training and Development
培訓及發展
13 Prevention of Child Labour and Forced Labour
防止童工及強制勞工
14 Air Pollution
空氣污染
15 Waste Management
廢棄物管理
16 Climate Change
氣候變化
17 Use of Energy
能源運用
18 Use of Water
水源運用
19 Noise Pollution
噪音污染
20 Greenhouse Gas and Air Emissions
溫室氣體及氣體排放

The Group confirms that it has established appropriate and effective management policies and monitoring systems relating to ESG issues, and that contents disclosed in this ESG Report comply with the requirements of the ESG Reporting Guide.

集團確認，已經建立適當和有效的管理政策和監測系統。本環境、社會及管治報告中披露的內容符合環境、社會及管治報告指引的規定。

HUMAN RESOURCES

1. Employment and Labour Standards

A. Employees

The Group upholds the business philosophy of "Health, Integrity, Hardship and Happiness", stresses on a people-oriented and harmonious development, and focuses on maintaining and safeguarding employees' rights and interests. The Group abides by the employees' standards, providing them with a pleasant work environment, competitive salary and benefits and a reasonable promotion path, which nurture its healthy, pragmatic, innovative, hardworking and enterprising staff members.

The Group fully recognizes the importance of talent introduction. Visits major colleges and universities to recruit talents in specific disciplines, such as metallurgical materials and metal machinery.

In order to cultivate its own talent team, on the basis of last year's assessment, the Group continued to carry out basic management improvement projects, actively promoted the skill assessment of key technical positions, and assessed 19 professional and technical leaders in 2022. The Group organized the selection of the four-level talent pool, selected 231 reserve talents, and built a team of loyal enterprises, passionate and innovative reserve talents.

An effective salary incentive mechanism has been established to stabilize and retain the talents needed by the Group, allowing employees to share the profits from the development of the Group.

Takes "efficiency" as priority, the Group conducts assessments based on indicators such as the profit margin etc. All employees contribute to the Group's profitability performance. The remuneration of some of the employees is linked to the operating profits of the Group so as to promote employees' awareness of increasing efficiency and create income, and shares corporate profits and benefits.

人力資源

一、僱傭及勞工準則

A. 僱員

集團秉承「健康西王、誠信西王、憂患西王、快樂西王」的經營理念，堅持以人為本、和諧發展，注重維護和保障職工權益；恪守員工準則，以良好的工作環境，優厚的薪酬福利，合理的晉升渠道，全力塑造健康、務實、創新、拚搏、進取的西王特鋼人。

集團充分認識到人才引進的重要性。赴各大高校針對性的招聘冶金材料、金屬機械等理工科專業人才。

為培養自身人才隊伍，在去年評定的基礎上，集團持續開展基礎管理提升項目，積極推進關鍵技術崗位技能評定工作，評定2022年度專業技術帶頭人19名。集團組織四級人才庫選拔工作，推選後備人才231人，打造一批忠誠企業，激情干事，創新力強的後備人才梯隊。

為穩定和留住企業所需的優秀人才，集團創建有效的薪酬槓桿激勵機制作，使員工能夠共享企業發展所帶來的收益。

以「效益優先」為先導，圍繞利潤完成率等進行考核，實行全員參與集團利潤績效。部份員工薪酬與集團經營利潤掛勾，促進員工增效創收意識，共享企業利潤福利。

In accordance with the principle of "openness, fairness, and impartiality", to select junior management personnel, comprehensive evaluation is conducted in various ways such as open position competition, equal competition, recommendation by seniors, and self-nomination. A clear and smooth promotion path is in place.

集團按照「公開、公平、公正」的原則，在選拔基層管理人員時，以公開競崗、平等競爭、組織推薦和個人自薦等多種形式全面測評，明確和暢通員工晉升通道。

The Group strictly implements the "Labor Law of the People's Republic of China", the "Labor Contract Law of the People's Republic of China", the "Social Insurance Law of the People's Republic of China", the "Law of the People's Republic of China on the Protection of Rights and Interests of Women" and other national laws and regulations, and has established relevant measures, such as "Employees Recruitment Management System", "Remuneration Management System", "Employees Leave Management Measures", "Social Security Management System" and "Employment Contract Management Measures". The Group standardizes the process of recruitment, appointment, selection, assessment and leave-taking of employees, etc. through various management policies.

集團嚴格執行《中華人民共和國勞動法》、《中華人民共和國勞動合同法》、《中華人民共和國社會保險法》、《中華人民共和國婦女權益保障法》等國家法律法規，制定的相關管理制度有《員工招聘管理制度》、《薪酬管理制度》、《員工請銷假管理辦法》、《社保管理制度》、《員工勞動合同管理辦法》等。通過各項管理政策，規範員工的招聘錄用、選拔任用、考核評定、休息休假等流程。

The Group strictly follows the requirements of relevant laws, regulations and policies on national and local social insurance by paying the social insurance contributions and mandatory provident fund for all staff in full and on time to protect their rights and interests. As of 31 December 2022, the Group had a total of 3,202 (2021: 3,459) employees, including 125 (2021: 136) management personnel and 247 (2021: 315) technicians. In terms of education level, 1,083 (2021: 1,148) employees are tertiary educated or above.

集團嚴格按照國家及地方的社會保險有關法律、法規和政策規定，為全體員工按時足額繳納社會保險及強積金費用，維護員工權益。於2022年12月31日，集團共有僱員3202人（2021：3,459人），其中管理人員125人（2021：136人）、技術人員247人（2021：315人）、大專或以上學歷人員1,083人（2021：1,148人）。

The detailed employment information is as follows:

僱傭資料詳情載列如下：

		As at 31 December 2022 Total 於2022年12月31日總數
Total workforce	僱員總數	3,202
Breakdowns by gender	按性別劃分	
Female	女性	352
Male	男性	2,850
Breakdowns by age	按年齡劃分	
< 25	< 25	173
26-30	26–30	231
31-35	31–35	957
36-40	36–40	763
41-45	41–45	594
> 45	> 45	484
Breakdowns by employee type	按僱員類型劃分	
Full time	全職	3,202
Part time	兼職	0
Breakdowns by geographical location	按地區劃分	
The PRC	中國	3,200
Hong Kong	香港	2

As shown from the staff composition, the Group's staff tend to be younger, with higher education level, are engaged for a length of service of 3 years or above, possesses certain particular work experience, and boast strong creativity and productivity.

從員工構成來看，集團整體員工結構年齡年輕化、學歷高素質化，入職3年以上，具備一定工作經驗，富有極強的創造力和生產力。

Employee turnover rate structure

There was 383 employees left in 2022. The staff turnover number and percentage in 2022 are as follows:

員工流失率結構

2022年，有383名員工離職。2022年員工流失人數及百分比如下：

		2022 2022年 Number of employees 員工人數	**2022 2022年 Percentage 百分比**	2021 2021年 Number of employees 員工人數	2021 2021年 Percentage 百分比
Gender profile	**性別結構**				
Male	男	**366**	**95.6%**	85	96.6%
Female	女	**17**	**4.4%**	3	3.4%
Age profile	**年齡結構**				
Under 35 years old	35歲以下	**275**	**71.8%**	63	71.6%
Aged 36-50	36–50歲	**108**	**28.2%**	25	28.4%
Education level	**學歷結構**				
Below technical school	中專以下	**309**	**80.7%**	71	80.7%
Tertiary or above	大專或以上	**74**	**19.3%**	17	19.3%
Length of services	**加入公司時間**				
Less than 3 years	3年以下	**168**	**43.9%**	61	69.3%
3-5 years	3–5年	**175**	**45.7%**	20	22.7%
Over 5 years	5年以上	**40**	**10.4%**	7	8%
By district of domicile	**地區劃分**				
In Zouping	鄒平市內	**365**	**95.3%**	80	90.1%
Outside Zouping	鄒平市外	**18**	**4.7%**	8	9.9%

B. Health and Safety

In order to better manage occupational safety and health works, the Group strictly implements the Production Safety Law of the People's Republic of China, the Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases, the Fire Control Law of the People's Republic of China, the Regulations of Shandong Province on the Obligations of the Safety Production Main Body of Production and Operation Entities, Production Safety Regulations of Shandong Province and other national or local laws and regulations.

During the Reporting Period, the Group had no safety accidents of large level, had no new cases of occupational illness., The occupational illness reporting rate, on-site detection and evaluation rate of occupational hazard factors and employees' occupational health checkup rate were 100%. A series of activities such as risks rating control, examination and management of hidden hazards, safety emergency drills, safety education for all staff, and monitoring and management of key hazards, were continuously held to manage and eliminate hidden hazards of production safety, which have achieved good results and provided strong back up for the realization of business objectives.

To avoid the incidence of occupational illness, in terms of system, a sound occupational health and safety management system is in place. In respect of the process, each staff member is regularly provided with a series of protective equipment including uniform, shoes, helmet, mask and gloves. At the same time, workshops are furnished with necessary emergency medicine. In respect of the prevention, the Group held occupational health body check and occupational hazard factor detection on an annual basis, continuously improves the on-site working environment, and regularly conducts occupational health training for employees to continuously enhance the self-protecting capability and safety awareness of staff members against occupational hazards.

B. 健康與安全

集團嚴格執行《中華人民共和國安全生產法》、《中華人民共和國職業病防治法》、《中華人民共和國消防法》、《山東省生產經營單位安全生產主體責任規定》、《山東省安全生產條例》等國家或地方法律法規，做好職工健康與安全管理工作。

報告期間，集團未發生較大及以上安全生產事故，未出現新增職業病病例，職業病危害告知率100%，職業危害因素現場檢測評估率100%，員工職業健康查體率100%；持續開展風險分級管控與隱患排查治理、安全應急演練、全員安全教育、重大危險源監控管理等一系列活動，控制和消除生產安全隱患，安全工作取得了良好的成效，為經營目標的實現提供了有力保障。

為防範職業病事故發生，從制度上，建立完善了職業健康安全管理體系及制度；從過程上，為每一位員工定期配發工作服、勞保鞋、安全帽、防護口罩、防護手套等一系列勞保用品，同時，各車間也配備了必要的應急物資及應急處理藥品；從預防上，集團每年組織員工開展一次職業健康查體活動及職業危害因素檢測，不斷改善現場工作環境，並對員工定期開展職業健康培訓，持續提升員工自身的職業危害自我保護能力及安全防護意識。

Optimize the safe production accountability system and enhance the strength of implementation of responsibility, the keys to safety management are implementation of responsibility. The Safety Division of the Group has therefore signed the "Responsibility Letter of Safe Production Objectives Management" which covers every aspect of operations and every staff member of the Group. The Group has organized, guided and supervised various departments to continuously carry out special examinations on safe production and occupational health according to their respective actual production situations. Safety inspection and supervision of production plants were conducted daily, with a total of 63 (2021: 75) safety supervision orders issued and more than 1,028 (2021: 1,360) hidden safety hazards rectified.

完善安全生產責任體系，著力提升責任落實力度，安全管理重在責任落實，安全處組織簽訂了全方位、全員覆蓋的《安全生產目標管理責任書》。開展、指導、督促各部門根據各自安全生產實際持續開展安全生產、職業衛生專項檢查，每天對各生產廠進行一次安全監督檢查，共下發安全監督指令63份（2021：75份），整改安全隱患1028（2021：1,360）餘項。

Employees Health and Safety Data Indicators	**員工健康與安全數據指標**	**2022 2022年**	2021 2021年
Person-times of safety production training	安全生產培訓人次	**3,202**	3,459
Specific training for all employees	全體員工專項培訓	**3,202**	3,459
Number of job-related deaths	因工作關係死亡的人數	**0**	0
Percentage of work-related fatalities to total workforce (%)	因工作關係死亡的人數佔全部員工人數的比重(%)	**0**	0
Lost work days as a result of work-related injury	因工傷損失的工作日數	**0**	0

Measures in Response to COVID-19

In face of the COVID-19 epidemic, the Group strictly complies with the requirements of deployment by the superior Party committees, and government departments with our thoughts unified and actions being taken responsively to keep abreast of the new changes and new characteristics of the epidemic optimize and adjust the epidemic prevention and control strategy and methods timely, in order to coordinate the epidemic prevention and control as well as safe production with scientific allocation on the basis of unwavering efforts in pandemic prevention and control.

Since the latest wave of outbreak of the epidemic, the Group has promptly initiated work plans and implemented epidemic prevention and control efforts in accordance with the requirements of deployment by both the superior Party committees and government departments and the thematic meetings on epidemic prevention and control in a timely manner. We have established a leading group for epidemic prevention and control, with its functionalities into full play by convening epidemic analysis meetings every morning to summarize and advise the work on epidemic prevention and control. At the same time, the Group enhances its supervision and examination through the daily on-site inspection with respect to the implementation situation of the prevention and control measures by the working committee of epidemic examination. Issues are being indicated and rectified upon discovery, and being reported and handled timely, so as to duly raise the prevention and control awareness of the lead cadres and staff as a whole.

應對新冠疫情

面對COVID-19新冠疫情，集團嚴格按照上級黨委政府部署要求，統一思想，迅速行動，準確把握疫情形勢的新變化、新特點，及時優化調整疫情防控策略和方法、在抓實抓細疫情防控工作基礎上，科學調度，統籌疫情防控和安全生產。

疫情爆發以來，集團迅速啟動工作預案，第一時間按照上級黨委政府及疫情防控專題會議部署要求落實疫情防控工作。成立疫情防控領導小組並充分發揮職能作用，每早召開疫情分析會，總結、指導疫情防控工作。同時強化監督檢查，疫情檢查工作組每天深入現場檢查防控措施落實情況，發現問題當場指出，當場整改，並及時通報處理，切實增強全體幹部職工的防控意識。

The leading group for epidemic prevention and control promotes the latest situation and prevention and control requirements of the epidemic to all of the employees through various channels. On the basis of close-circuit management of the industrial park, stringent disinfections are carried out in the workplaces, with regular disinfections being carried out in areas such as office areas, industrial areas and operating areas. Nucleic acid testings for all staff are being organized scientifically and efficiently on a regular basis. A strict filing and approval system is being implemented for the personnel entering or exiting the factories. Comprehensive disinfections would be carried out for external vehicles uploading and unloading goods before entering the factories, with the drivers required to stay inside the vehicles for the whole process and the operating staff of the Group will be entrusted to handle relevant formalities. Collective dining-in in the canteen is cancelled, and a take-away system for employees is being implemented. Gatherings of employees and collective activities are reduced, and both the number of meetings convened and the time spent on meetings have decreased. Convening meetings via video calls or phone calls is advocated. The Group activates internal investigation mechanism, for the comprehensive and detailed investigation for employees one-by-one. Classified management and control, as well as the principles of "stay indoors unless necessary" and "no gatherings unless necessary" are being implemented stringently. Sufficient resources for epidemic prevention and control are proactively prepared.

疫情防控領導小組利用不同形式，每天實時向全體員工宣傳疫情最新情況和防控要求。對園區封閉管理的基礎上，對工作場所嚴格消殺，對於辦公區、廠區、作業區等區域，定期消殺。科學高效組織定期全員核酸檢測。對於進出廠人員，實行嚴格的報備審批制度。對外來裝卸貨物車輛實行進廠前全面消殺滅菌，司機全程不下車，由公司業務人員代為辦理相關手續。餐廳取消集體堂食，實行職工取餐制度。減少員工聚集和集體活動，減少會議召開，縮短會議時間，提倡召開視頻或電話會議。啟動內部摸排機制，全面逐一詳實排查，落實分級管控，嚴格落實「非必要不外出」、「非必要不聚集」，積極備足疫情防控物資。

The Group strictly implemented the normalized epidemic prevention and control measures, to ensure the smooth operations of production and business and the health and safety of its employees.

集團嚴格落實常態化疫情防控工作，確保生產經營順利運行及職工健康安全。

C. Development and Training

Development and training are one of the key factors for the Group's success. During the Reporting Period, to satisfy the development needs of staff at various levels of the talent team, the Group constantly carried out trainings for the improvement of foundation management, actively drove forward skills assessment of key technical positions on the basis of 2021 review. Through implementation of a management model comprising dynamic tracking and bottom-line elimination on the assessed 300-technician team, 19 professional technician leaders were finally assessed in 2022.

In 2022, the relevant indicators of the participation in training of the Group's staff are as follow:

C. 發展及培訓

發展及培訓是集團成功關鍵因素之一，為滿足人才隊伍各層次人員發展需求，報告期間，集團在總結2021年的基礎上，持續開展基礎管理提升項目，積極推進關鍵技術崗位技能評定工作。對已評定的300人的技師隊伍實行動態追蹤、末尾淘汰管理模式，最終評定2022年度19名專業技術帶頭人。

於2022年度，集團員工參與培訓相關指標如下：

Categorized by staff gender

按員工性別劃分

2022	2022年	Total person-times 總人次	Percentage 比例	Average training hours per person 人均培訓課時
Female	女	1,051	14.22%	22 training hours 課時
Male	男	6,337	85.78%	25 training hours 課時

Categorized by staff type

按員工類別劃分

2022	2022年	Total person-times 總人次	Percentage 比例	Average training hours per person 人均培訓課時
Senior management	高層管理人員	79	1.1%	19 training hours 課時
Middle management	中層管理人員	757	10.2%	27 training hours 課時
Junior management	基層管理人員	1,383	18.7%	36 training hours 課時
Junior employees	基層員工	5,169	69.9%	31 training hours 課時

In 2021, the relevant indicators of the participation in training of the Group's staff are as follows:

於2021年度，集團員工參與培訓相關指標如下：

Categorized by staff gender

按員工性別劃分

2021	2021年	Total person-times 總人次	Percentage 比例	Average training hours per person 人均培訓課時
Female	女	1,358	12.9%	37 training hours 課時
Male	男	9,141	87.1%	29 training hours 課時

Categorized by staff type

按員工類別劃分

2021	2021	Total person-times 總人次	Percentage 比例	Average training hours per person 人均培訓課時
Senior management	高層管理人員	147	1.4%	22 training hours 課時
Middle management	中層管理人員	919	8.7%	38 training hours 課時
Junior management	基層管理人員	2,825	26.9%	59 training hours 課時
Junior staff	基層員工	6,608	63%	25 training hours 課時

The trainings covered business management, safety management, environmental management, etc.

培訓內容涵蓋經營管理、安全管理、環境管理等內容。

In order to thoroughly implement the work requirement of "establishing a talent team", the Group encouraged staff to study professional knowledge and inherit the technician spirit. On the basis of the cooperative training in the previous year, the Group continued to organize training courses in cooperation with other professional institutions in 2022.

深入貫徹集團「人才梯隊建設」工作要求，鼓勵職工研習專業知識，傳承工匠精神。在上年度合作培訓的基礎上，2022年集團繼續與其他專業院校合作舉辦培訓課程。

For training of new staff, the Group constantly carried out apprentice activities, encouraging outstanding staff to play a role in mentoring. During the Reporting Period, 113 employees passed the assessment by way of mentor grading in teaching, which effectively improved the retention rate of new staff after being employed.

新員工培訓方面，持續開展師徒帶教活動，鼓勵優秀職工發揮傳幫帶作用。報告期間通過師徒帶教考核轉正113人，有效地提升了新員工入職後穩崗率。

In terms of external training, the Group further standardized the organization and management of external training in the management process, and increased the review and tracking of external training. During the Reporting Period, based on the needs and management needs of various departments, the Group made full use of external lecturer resources, and the system management consulting unit carried out "management system series training".

外部培訓方面，在管理流程上進一步規範外部培訓組織及管理，增加外部培訓的審核及跟蹤。報告期間內從各部門需求及管理需求出發，充分利用外部講師資源，由體系管理諮詢單位開展「管理體系系列培訓」。

The Group continued to strengthen the cooperation between schools and enterprises. This year, 50 students from Binzhou Vocational and Technical College and Luzhong Vocational College had been sent to practical training and internships, and professional technicians had been sent to deliver on-site explanations and hand-in-hand teaching. In the end, 31 trainees stayed in the Group to continue their work, and the retention rate of students for internships was 62%.

繼續加強校企合作的力度，本年度先後安排濱州職業技術學院、魯中職業學院的50名學子進行崗位實踐實習，安排專業技術人員給大家現場講解，手把手教學。最終31名學員留在集團繼續工作，學生實習留崗率62%。

D. Labor Standards

All employees of the Group are located in the mainland China and Hong Kong, and there has been no breach of the Labor Law or any other applicable standards and regulations during their employment. Salary, overtime pay and benefits are based on local minimum (and maximum) standards. 100% of the Group employees are full-time employees and there are no part-time employees. The Group strictly complies with the Provisions on the Prohibition of Using Child Labor (《禁止使用童工規定》) and Provisions on Special Protection for Juvenile Workers (《未成年工特殊保護規定》) issued by the State Council of the PRC, with the adoption of effective measures to examine the actual ages of the employees while induction, to ensure that they are generally aged between 18 and 45, with special employees aged between 45 and 60. Any form of child labor or forced labor is forbidden in the Group. The Group duly complies the Labor Law of the People's Republic of China (《中華人民共和國勞動法》). All of our employees must be recruited on the principle of voluntariness. Detention and forced labor are strictly prohibited and to make sure that the personal freedom and personalities of the employees would not be violated. The Group adheres to an open, fair and impartial recruitment procedure on the principles of equal competition, merit-based selection and priority to internal candidates, which enables its human resources system to be more scientific and reasonable.

The Group implements an 8-hour working day system. The Group strictly complies with the national statutory holidays and the day-off system stipulated by the Group in order to safeguard employees' proper working hours and rest days.

D. 勞工準則

集團所招聘的僱員100%位於中國內地及香港，錄用期間遵從勞動法的相關規定，無違反相關準則及法規現象：勞工工資、加班費及相關福利均依據當地最低(最高)工資標準支付；集團僱員100%為全職員工，無兼職僱傭人員。集團嚴格貫徹國務院《禁止使用童工規定》和《未成年工特殊保護規定》，入職時採取有效方法查驗真實年齡，確保僱員正常普工錄用年齡在18至45歲，特殊人群在45至60歲，禁止以任何形式僱傭童工或強制勞工。切實遵守《中華人民共和國勞動法》，所有聘用僱員必須以自願為原則，禁止監禁和強迫使用勞工，保證僱員人身自由和人格不受侵犯。面向社會堅持公開、公平、公正的招聘員工、平等競爭、擇優錄用、先內後外的原則，使人力資源系統更趨科學、合理。

集團實行8小時工作制。嚴格執行國家法定節假日及集團規定的休假制度，充分保障員工工作時間和休息休假時間。

The Groups creates equal and diversified employment opportunities during the recruitment and selection process, and is determined to forbid discrimination based on the race, color, religion, gender or nationality of its employees, and thereby resulting in differential treatments in terms of remuneration, term, tenure, working conditions and employment rights. Any forms of discrimination against female employees, especially pregnant female employees, are strictly prohibited.

集團在人員僱傭和選拔時創造平等、多元化的就業機會，堅決不因僱員的種族、膚色、宗教、性別或國籍產生歧視，從而在薪酬、任期、工作任期、工作條件或就業權益上予以差別待遇。禁止以任何形式歧視女工，特別是懷孕女工。

"The Law on Employment Contracts" is strictly complied with and employment contract is entered into with each staff member on their joining day. Contributions into basic pension insurance, basic medical insurance, unemployment insurance, injury insurance and maternity insurance are paid according to the laws. Financial gains of the Group are shared with the staff, contributing to harmonious labor relations.

嚴格遵守《勞動合同法》，員工入職當日內與其簽訂勞動合同。依法為員工繳納基本養老保險、基本醫療保險、失業保險、工傷保險和生育保險，切實能讓職工共享到經濟成果，構建起和諧的勞動關係。

For timely identification of problems in the Group, the Group conducts staff satisfaction survey, sets up employee opinion mailbox, collects constructive advices and opinions from employees, and allows employees to participate in the Group's management to enhance employees' sense of participation and satisfaction. The Group regularly gives feedback to departments on the advices or opinions raised by employees, follows up and formulates rectification measures, and publicizes the progress of rectification.

為了及時發現問題，集團組織員工滿意度調查，設立員工意見電子信箱，征集員工建設性的建議和意見，讓員工參與集團管理，提升職工參與感和滿意度。定期將員工提出的建議或意見反饋問題存在部門，跟蹤制定整改措施，並將整改情況進度予以公示。

2. Business Management

A. Supply Chain Management

The Group has adopted the "Procurement Management Procedure or Manual" in accordance with the Contract Law of the People's Republic of China, the Bidding Law of the People's Republic of China, the Special Equipment Safety Law of the People's Republic of China, the Regulations on the Safety Administration of Dangerous Chemicals and other laws and regulations, which specifies the criteria for selecting suppliers, including (1) A good track record in the industry, with financial statements available. Priority for inspection will be given to suppliers which have continuous business performance with large steel factories; (2) Units with solid financial strength. Registered capital ranking the top 10 in the industry is one of the conditions of priority inspection. (3) Suppliers recommended by other steel factories. The Group considers factors including credit standing, service quality and delivery time after consulting steel factories that the Group has close relationship with. Before making the formal selection, the prospective supplier is asked to provide a sample for examination or trial to ensure the good quality of the parts supplied and site visit to the supplier will be conducted to confirm its delivery capability, the soundness of quality assurance system and financial strength etc.

The e-commerce platform was constantly optimized. Suppliers meeting the Group's conditions are managed in a centralized manner by setting up a procurement and trading platform on which Group price inquiry, tender invitation and signing of procurement contract are conducted. Suppliers' services are tracked throughout the procurement process for monitoring and evaluation of the suppliers based on their financial strength, delivery capability, advance payment capability, quality of delivery, contract performance, after-sales service and business integrity. The evaluation results determine whether the prospective suppliers meet the entry requirements, according to which a "contract supplier register" is established. Finally, suppliers not meeting the requirements will be disqualified. As at December 2022, there was a total of 1,257 suppliers, 49.1% of which are located in the Shandong Province and 50.9% outside Shandong Province.

二、運營管理

A. 供應鏈管理

集團按照《中華人民共和國合同法》、《中華人民共和國招標投標法》、《中華人民共和國特種設備安全法》、《危險化學品安全管理條例》等法律法規採納了《採購管理程序或手冊》，在手冊中明確規範供貨商選擇條件：(1)在行業內有良好的記錄，對方提供財務報表，特別是在一個大型鋼鐵廠有連續業績的供貨商優先做為我們考察的對象；(2)資金實力雄厚的單位，註冊資金在行業內前10的單位做為優先考察的條件之一；(3)其他鋼廠推薦的供貨商，在選擇供貨商向熟悉的鋼廠諮詢該供貨商的資信、質量服務、交貨期等情況，做為選擇供貨商的考察依據之一。在正式選擇前，對方先行提供試用件進行檢驗或者試用，以確保該配件的質量狀況；對供貨商進行實地考察，確認該供貨商的供貨能力，質量保證體系的完備，資金實力等。

持續優化電子商務平台。對符合條件的供貨商，設立採購交易平台進行集中管控，在交易平台上進行公司詢價、招標、簽訂採購合同，在採購過程中全程跟蹤供貨商的服務，對供貨商進行監督考核和評價。評價內容包括供貨商的資金實力、供貨能力、資金墊付能力、交貨數量、交貨質量、合同履約、售後服務、誠信經營等，按照評價結果評定供貨商是否符合准入要求，建立《合同供貨商目錄》，對最終不符合要求的供貨商取消准入資格。截止到2022年12月份累計共有供貨商1257家，山東省內佔有49.1%、山東省外佔50.9%。

The Group continues to improve its supply chain management and quality of the supplier team. In order to serve the cause of stable production and to enhance cost effectiveness, the Group has established a communication system with suppliers and conducted benchmarking against outstanding enterprises in the industry. Supply-chain related environmental protection laws, quality management system requirements and industry entry standards formulated by the government and applicable to the Group are all incorporated into the procedures for the entry and dynamic management of all its suppliers. The survival of the fittest principle is applied in the Group's selection of suppliers in order to prompt suppliers to enhance their compliance and competitiveness, which enables the Group to further prevent social and environmental risks relating to the supply chain.

集團持續完善供應鏈管理，提升供貨商隊伍的素質，為進一步服務穩定生產和降本增效，與供貨商建立溝通機制及與行業內優秀企業進行對標管理，將國家制定的對公司涉及的供應鏈相關的行業環保法規，質量管理體系規定及行業准入標準等納入對所有供貨商准入和動態管理的管理流程中，對供貨商進行優勝劣汰，促使供貨商提高其合規性和競爭力，使集團進一步防範供應鏈相關社會和環境風險。

B. Product Responsibility

1. *Maintenance and Protection of Intellectual Property*

The Group strictly complies with laws and regulations such as the "Trademark Law", the "Patent Law", the "Copyright Law", the "Law against Unfair Competition", the "Foreign Trade Law" and the "Intellectual Property Law" and to become a committee of Metallurgical Professional Committee under the China Intellectual Property Development Alliance. In the continuous pursuit of innovation and excellence, the Group fully leveraged the value of proprietary intellectual properties, which effectively enhance the Group's core competitiveness. As of the date of this ESG Report, the Company's subsidiaries has successively won a more than ten national, provincial and municipal honours, such as the first prize of China Invention and Entrepreneurship Innovation Award and the National Advanced Collective Entity in the Steel Industry. The Group obtained 39 scientific and technological innovation achievement identifications and evaluations for new products, applied for 166 invention and utility model patents, and was granted 136 invention and utility model patents. The Group held and participated in 61 amendments to national standards and industry standards, participated in 1 key project of the Ministry of Science, 1 key project of the Ministry of Industry and Information Technology, 2 project of the Chinese Academy of Sciences and undertook a number of key projects in various provinces and cities.

B. 產品責任

1. *維護和保障知識產權*

集團公司嚴格遵守《商標法》、《專利法》、《著作權法》、《反不正當競爭法》、《對外貿易法》和《知識產權法》等法律法規，成為中國知識產權聯盟冶金專業委員會委員單位。秉承不斷創新追求卓越的理念，充分發揮自主知識產權價值，增強集團核心競爭力。截止本環境、社會及管治報告日，公司各子公司先後榮獲中國發明創業創新一等獎、全國鋼鐵工業先進集體等10餘項國家和省市級榮譽稱號；取得新產品科技創新成果鑒定、評價39項，申請發明及實用新型專利166項，已授權發明及實用新型專利136項。集團主持和參加國家標準、行業標準制修訂61個，參加國家科技部、工信部重點項目各1個，參加中科院專項2個，並承擔多個省市重點項目。

2. *Quality Testing and Products Recall*

As the Group attaches high importance to product quality, the Group has formulated and executed quality testing systems and relevant procedures for its products in accordance with the standards in the Product Quality Law of the People's Republic of China, the Standardization Law of the People's Republic of China, the Metrology Law of the People's Republic of China and its Rules for Implementation, the Law of the People's Republic of China on the Protection of Consumer Rights and Interests, the Regulations of the People's Republic of China on Certification and Accreditation and other laws and regulations. The Quality Test Center of the Group is certified by China National Accreditation Service for Conformity Assessment's national laboratory and the test data are accurate and reliable. The Group stresses on the advanced management system and products system to strengthen its processes and systems. The material certifications that the Group obtained include ISO9000 Quality Management System, Armament Quality Management System. Products are manufactured in the production process according to the metallurgical and product specifications in the information system and production is organized according to the standards established for each process. Those passing the appearance and performance indicators test will be automatically determined to be stored while the unqualified products will be subject to material blockade in the information system and be dealt with according to the "Unqualified Product Management System". No products sold or delivered has ever been recalled due to safety and health concerns so far.

2. *質量檢測和產品回收*

集團高度重視產品質量，依據《中華人民共和國產品質量法》、《中華人民共和國標準化法》、《中華人民共和國計量法》及實施細則、《中華人民共和國消費者權益保護法》、《中華人民共和國認證認可條例》等法律法規相關標準，制定並執行有關產品質量檢測的制度及相關規程。集團的質量檢測中心通過了中國合格評定國家認可委員會國家實驗室認可，檢測數據準確可靠。集團注重先進的管理體系和產品體系以加強其過程與系統，獲得重要證書包括ISO9000質量管理體系認證、武器裝備質量管理體系。在生產過程中，各產品依據信息化系統中的冶金規範與產品規範，按照對各工序制定的標準組織生產，產品外觀及性能指標檢驗合格的產品自動判定入庫，不合格產品在信息化系統中進行物料封鎖，並按照《不合格產品管理制度》處理。截至目前為止，對已售或已運送產品並未發生因安全與健康理由而需要回收的情況。

3. *Products and Customer Complaints*

As the Group attaches great importance to customer complaints, it has formulated and strictly enforced the "Rules of Customer Service Management". In order to strictly manage customer information, all customer information in the directory has been uploaded to the system. The information of all new customers are added by the staff of the Information Department to safeguard confidentiality. The level of permission to access the system is assigned in accordance with the job duties. In case of any violation of the rules or loss or leakage of confidential information, the persons concerned will be dealt with seriously and their immediate superiors shall bear leadership responsibilities. The Group cares about the after-sales service and the feedback from customers on their use of products and provides its customers with professional technical support. During the Reporting Period, there have been no significant litigations or complaints arising from the product quality and services.

As the Group puts much emphasis on the prevention of legal risks relating to the advertisement and promotion of products and services, it strictly complies with the Advertising Law of the People's Republic of China, the Regulations on Control of Advertisement, the Implementation Rules for the Regulations on Control of Advertisement, the Anti-Unfair Competition Law of the People's Republic of China and other laws and regulations. During the Reporting Period, there were no significant litigations or complaints arising from the advertisement and promotion of products and services.

3. *產品及客戶投訴*

集團高度重視客戶投訴制定並嚴格執行《客戶服務管理細則》，為嚴格管理客戶信息，所有客戶名錄信息均上傳系統，凡有新客戶需要增加，統一由信息部人員新增信息，並做好保密工作。根據崗位職責，分配系統權限級別。如有違規、遺失或洩密，對有關當事人予以嚴肅處理，直接上級承擔領導責任。關注售後服務與客戶的產品使用反饋，為客戶提供專業的技術支持，報告期內，沒有發生產品質量及服務引發的的重大法律訴訟及投訴。

集團高度關注防範有關產品和服務的宣傳及推廣相關的法律風險，嚴格遵守《中華人民共和國廣告法》、《廣告管理條例》、《廣告管理條例實施細則》、《中華人民共和國反不正當競爭法》等相關法律法規。報告期間，沒有發生過產品和服務宣傳推廣引發的重大法律訴訟及投訴。

C. Anti-corruption

There were no cases of corruption, bribery, fraud, illegal fundraising, or money laundering in the Group during the Reporting Period. In order to strengthen the supervision of staff members and combat financial crimes, staff members can report by mail, email, telephone or face-to-face meetings on any violations of laws and regulations which is detrimental to the Group's interest, including any breach and dereliction of duty, abuse of power and offering and acceptance of bribe as may be committed by various staff members of the Group. In 2022, the Company made the anti-bribery and corruption policy available on the Company's website.

Whistle-blowing Mechanisms

The Group attaches great importance to the integrity and honesty of our employees. To enable the reporting of suspected misconducts, we have set up a whistle-blowing channel for our employees in which all reported cases will be handled with strict confidentiality to safeguard the interests of the reporters. We will regularly review our policies and procedures to ensure they remain effective in detecting and preventing corrupt practices, while complying with relevant laws and regulations including the Prevention of Bribery Ordinance (Cap. 201 of the Laws of Hong Kong), Anti-Money Laundering and Counter-Terrorist Financing Ordinance (Cap. 615 of the Laws of Hong Kong) and the Anti-money Laundering Law of the People's Republic of China. During the Reporting Period, we were not aware of any concluded legal cases regarding corrupt practices brought against the Group or our employees. In 2022, the Company made the whistle-blowing policy available on the Company's website.

C. 反貪污

報告期間集團未有貪污、行賄受賄、欺詐、非法集資、洗黑錢等訴訟案件。為加強員工監督，打擊經濟犯罪，員工可通過信函、電郵、電話、面談等多種形式舉報集團各類人員的失職、瀆職、以權謀私、行賄受賄等損害集團利益的違法違規行為。2022年，公司已經將反賄賂及貪污政策上載至公司網站。

舉報機制

集團極其重視僱員的品格和誠信。為助舉報疑似的不當行為，我們已為僱員設立舉報渠道，當中所有舉報個案均會嚴格保密處理，以保障舉報者的權益。我們將定期檢討政策及程序，以確保其於偵察及防範貪污行為方面仍然有效，同時符合相關法律及法規，包括香港法例第201章防止《賄賂條例》、香港法例第615章《打擊洗錢及恐怖分子資金籌集條例》及中華人民共和國反洗錢法。於報告期間，我們並無獲悉任何關於貪污行為而對集團或我們的僱員提出訴訟的法律案件。2022年，公司已經將舉報政策上載至公司網站。

3. SOCIETY

A. Social Responsibility

As part of its commitment to social responsibility, the enterprise has assumed more social responsibilities, made further contributions and served the society while growing its business.

1. *Environmental Protection*

The Group adheres to the environmental protection philosophy of "saving energy and reducing consumption and waste, developing circular economy, and creating environmental-friendly Xiwang". The Group has strictly complied with the requirements of the "Environmental Protection Law of the People's Republic of China", "Law of the People's Republic of China on Prevention and Control of Air Pollution", "Law of the People's Republic of China on Prevention and Control of Water Pollution", "Law of the People's Republic of China on Prevention and Control of Soil Pollution", "Law of the People's Republic of China on Prevention and Control of Solid Waste Pollution", "Law of the People's Republic of China on Prevention and Control of Pollution from Environmental Noise" and the "Emission Standards for Air Pollutants in the Steel Industry" (DB 37/990-2019). The Group acted upon the "Opinion on Promoting the Implementation of Ultralow Emission in the Steel Industry" (Huan Da Qi [2019] No.35), and other laws, regulations, standards and local norms on environmental protection. The Group's discharge volume of major pollutants is lower than the special emission limits under the current standards of the State and Shandong Province. The Group's emission levels of sulfur dioxide, nitrogen oxide and PM10 all meet the national standards and requirements and the total emission of pollutants has continued to decrease.

三、社會

A. 社會責任

企業積極承擔社會責任，讓企業在發展的同時，承擔更多的社會責任，為社會服務，為社會多做貢獻。

1. *環境保護*

集團秉承「節能降耗減廢、發展循環經濟，打造綠色西王、生態西王」的環保理念，嚴格執行《中華人民共和國環境保護法》、《中華人民共和國大氣污染防治法》、《中華人民共和國水污染防治法》、《中華人民共和國土壤污染防治法》、《中華人民共和國固體廢物污染防治法》、《中華人民共和國環境噪聲污染防治法》、《鋼鐵工業大氣污染物排放標準》(DB 37/990-2019)要求，落實《關於推進實施鋼鐵行業超低排放的意見》(環大氣[2019]35號)和環保方面的其他各項法律法規、標準及其地方性規範。主要污染物排放均低於國家及山東省現行標準特別排放限值要求；環境空氣指標二氧化硫、氮氧化物、PM10均達到國家標準要求；污染物排放總量持續降低。

The Group adheres to "Environmental Protection is the First Priority in Corporate Development" (企業發展、環保先行), with the goal of improving environmental quality and creating a beautiful environment. The Group continued to increase investment in environmental protection and comprehensive environmental governance. A number of intensive environmental control measures have been implemented, including sealed and closed storage management of all raw fuels; utilization of the advanced process technology in the industry to achieve a multi-dimensional ultra-low emission. The average emission concentration per hour of particulates, sulfur dioxide and nitrogen oxide in flue gas was not higher than 10, 35, and 50 mg/m^3, respectively; realization of the clean recycling of intermediate products such as gas and residual heat and the clean transportation of bulk materials. As the Group actively builds green factories, implements "Industrial Green Development Plan" (2016-2020) (工業綠色發展規劃(2016–2020年)) and "Green Manufacturing and Engineering Implementation Guide (2016–2020)", it was rated as a "Green Factory" (The Third Batch of Green Manufacturer List) by the Ministry of Industry and Information Technology. On 20 October 2022, the Group passed the inspection of ultra-low emissions and the public display of the progress of ultra-low emissions transformation and evaluation of iron and steel enterprises organized by the China Iron and Steel Association.

集團堅持「企業發展、環保先行」，以提升環境質量，創造美好環境為目標，持續加大環保投入和環境綜合治理。集團實施了多項環保深度治理項目，包括實現了原燃料全部封閉料倉管理；利用業內先進工藝技術，實現多維度超低排放，煙氣中顆粒物、二氧化硫、氮氧化物小時均值排放濃度分別不高於10、35、50毫克／立方米；實現煤氣及餘熱等中間品的清潔回收利用及大宗物料的清潔運輸。集團積極落實《工業綠色發展規劃（2016–2020年）》和《綠色製造工程實施指南（2016–2020年）》，被國家工業和信息化部評為「綠色工廠」（第三批綠色製造名單）。2022年10月20日，集團通過了中國鋼鐵工業協會組織的超低排放驗收和鋼鐵企業超低排放改造和評估監測進展情況公示。

2. *Social Charity*

With respect to charity work, the Group combines charity work with its business development strategies and spiritual development, and continuously enriches its development. The Group regularly conducts charitable donations from the staff and poverty alleviation activities for the underprivileged annually.

During the prevention and control period of the pandemic in 2022, the Group established a leading group for the prevention and control of COVID-19 pandemic, which was fully responsible for the prevention and control of the pandemic in industrial parks and employee communities. Employees of the Group voluntarily joined the community pandemic prevention and control team.

2. *社會慈善*

在慈善事業上，集團將慈善事業與企業的發展戰略和精神文明建設相結合，不斷提升集團發展內涵。集團每年定期開展職工愛心捐助、扶貧幫困送溫暖活動。

2022年疫情防控期間，集團成立新冠肺炎疫情防控工作領導小組，全面負責工業園區及職工社區的疫情防控工作。集團員工自覺加入到社區疫情防控工作隊伍中。

B. Caring for Employees

The Group has been taking better care of its employees in terms of both hardware and software.

In terms of hardware environment, the Group provides a comfortable, bright, safe and healthy work environment, with amenities including dormitory, canteen and recreational facilities, etc. for employees

In terms of software environment, staff activities are regularly organized. Staff committee is established to organize regular meetings to listen to employees' opinions.

B. 員工關懷

集團一直從硬環境和軟環境方面加大員工關懷。

在硬環境方面，為廣大員工提供舒適、明朗、安全、健康的工作環境，配備職工公寓、職工餐廳、休閒設施等等。

在軟環境方面，定期組織員工活動。成立員工生活委員會，定期組織員工座談，傾聽員工心聲。

ECOLOGICAL COMMUNITY

The Group adheres to the environmental protection philosophy of "saving energy and reducing consumption and waste, developing circular economy, and creating environmental-friendly Xiwang" to protect the environment and give back to society.

Strictly fulfills the requirements of the "Environmental Protection Law of the People's Republic of China", "Law of the People's Republic of China on Prevention and Control of Air Pollution", "Law of the People's Republic of China on Prevention and Control of Water Pollution", "Law of the People's Republic of China on Prevention and Control of Soil Pollution", "Law of the People's Republic of China on Prevention and Control of Solid Waste Pollution", "Law of the People's Republic of China on Prevention and Control of Pollution from Environmental Noise", and the "Emission Standards for Air Pollutants in the Steel Industry" (DB 37/990-2019), the Group acted upon the "Opinion on Promoting the Implementation of Ultra-low Emission in the Steel Industry" (Huan Da Qi [2019] No.35), and other laws, regulations, standards and local norms on environmental protection. The Group's discharge volume of major pollutants is lower than the limits under the current standards of the State and Shandong Province.

1. Environmental protection performance

The Group continues to increase its investment in environmental protection and the relevant comprehensive control and management, successfully passing the review of ISO14001: 2015 environmental management system, ISO50001: 2018 Energy Management System and "Clean Production Review".

There were no major environmental and public pollution incidents in the Group during the Reporting Period. The safe use of radioactive sources and the disposal of hazardous wastes in compliance with regulations were in place. Total emission of pollutants has continued to decrease and air quality has continued to improve, with the emission of smoke dust at 0.298 kg/ton steel, sulfur dioxide at 0.075 kg/ton steel and nitrogen oxide at 0.175 kg/ton steel, which are far below the requirement of Shandong Province, as shown in Table 1:

生態環境

集團秉承「節能降耗減廢、發展循環經濟，打造綠色西王、生態西王」的環保理念，保護環境、回報社會。

嚴格執行《中華人民共和國環境保護法》、《中華人民共和國大氣污染防治法》、《中華人民共和國水污染防治法》、《中華人民共和國土壤污染防治法》、《中華人民共和國固體廢物污染防治法》、《中華人民共和國環境噪聲污染防治法》、《鋼鐵工業大氣污染物排放標準》(DB 37/990–2019)要求，落實《關於推進實施鋼鐵行業超低排放的意見》(環大氣[2019]35號)和環保方面的其他各項法律法規、標準及其地方性規範，主要污染物排放均低於國家及山東省現行標準限值要求。

一、環境保護工作業績

集團持續加大環保投入和環境綜合治理，順利通過ISO14001:2015環境管理體系復審；ISO50001:2018能源管理體系審核。

報告期間，集團未發生重大環境污染事故和公眾環境事件。放射源安全使用，危險廢物合規處置，污染物排放總量持續降低，環境空氣質量持續改進，煙粉塵排放量0.298千克／噸鋼、二氧化硫排放量0.075千克／噸鋼、氮氧化物排放量0.175千克／噸鋼，遠低於山東省要求，如表1：

Table 1: Comparison of Emissions of pollutants per ton of steel

表1：噸鋼污染物排放量對比

Type of pollutants	**污染物種類**	**Actual emission in 2022 2022年實際排放值 (kg/ton steel) （千克／噸鋼）**	Actual emission in 2021 2021年實際排放值 (kg/ton steel) （千克／噸鋼）
Smoke dust	煙粉塵	**0.298**	0.287
Sulfur dioxide	二氧化硫	**0.075**	0.063
Nitrogen oxide	氮氧化物	**0.175**	0.16

The Group continuously fulfills the requirements of environmental protection standards such as being green and low-carbon. The total emission of the three pollutants, namely particulates, sulfur dioxide and nitrogen oxide will decrease furtherly by 30% in the coming year on the basis of 2022; the examination on carbon emission would be commenced, and the carbon emission per ton would decrease year-by-year, in order to reach peak carbon dioxide emissions before 2030.

持續落實綠色、低碳等環保標準要求，顆粒物、二氧化硫、氮氧化物三項污染物排放總量在2022年基礎上，在未來一年再降低30%；開展碳排放核查，噸鋼碳排放量逐年降低，2030年前達到碳達峰。

2. Sewage Permit The Group has invested heavily in

The Group passed the review of Binzhou Environmental Protection Bureau (濱州市環保局) in November 2017 and was first granted a sewage permit.

二、排污許可證

於2017年11月，濱州市環保局通過對集團核查，首次發放了排污許可證。

3. Intensive environmental protection investment

Since 2013, the Group has invested significant resources in environmental protection measures and implemented a number of in-depth environmental treatment projects covering organized/unorganized emissions control and implementing clean transportation, resulting in the actual emissions of pollutants in various processes being far below the national special emission limits. To create a green and ecological landscape, the green area of the Group is currently more than 28% (2021: 27%). Specific data on pollutant emissions are as follows:

三、環保項目深度環保投資

2013年以來，集團投放重大資源在環保措施，實施了涵蓋有／無組織排放控制及清潔運輸等多項環保深度治理項目，使各工序污染物實際排放濃度遠低於國家及省排放限值要求，打造生態、園林式工廠，綠化面積達28%（2021：27%）以上。污染物排放具體數據如下：

Production facilities 生產設施	Type of pollutants 污染物種類	DB37/990-2019 Emission Standards for Pollutants in the Steel Industry DB37/990–2019 鋼鐵工業污染物排放標準 (mg/m³)	2022 Concentration of pollutants emission 2022年污染物排放濃度值 (mg/m³)	2021 Concentration of pollutants emission 2021年污染物排放濃度值 (mg/m³)
Sintering machine heads 燒結機機頭	Particulates 顆粒物	10	**4.29**	4.87
	Sulfur dioxide 二氧化硫	35	**12.5**	8.69
	Nitrogen oxide 氮氧化物	50	**34.5**	32.7
Sintering machine tails 燒結機機尾	Particulates 顆粒物	10	**3.84**	3.98
Feed Launder Dust Removal in Blast Furnace 高爐礦槽除塵	Particulates 顆粒物	10	**2.52**	2.88
Cast Iron Dust Removal in Blast Furnace 高爐出鐵場除塵	Particulates 顆粒物	10	**3.64**	3.76
Primary dust removal of converter 轉爐一次除塵	Particulates 顆粒物	20	**5.4**	8.5
Secondary dust removal of converter 轉爐二次除塵	Particulates 顆粒物	10	**2.24**	3.18
Secondary dust removal of converter 轉爐三次除塵	Particulates 顆粒物	10	**5.6**	9.1
Dust removal of electric furnace 電爐除塵	Particulates 顆粒物	10	**1.26**	2.63
Dust removal of refining furnace 精煉爐除塵	Particulates 顆粒物	10	**4.5**	3.6

4. Comprehensive utilization of resources

A. Energy and Resource Management

The Group vigorously promoted cost reduction and efficiency increase and adopted advanced technology to improve the recovery and comprehensive utilization rate of gas and residual heat. The consolidated electricity consumption in total was 386.92 kWh/ton steel (2021: 368.84 kwh/ton steel) in and the oxygen consumption in the steelmaking process was 66.78 m^3/ton steel (2021: 59.54 m^3/ton steel) in 2022, which were mainly impacted by the decrease in production during the year. By continuing using the residual heat, we aim at keeping next reporting period's consolidated electricity consumption per ton at 90% to 105% of the current levels.

B. Water Resource Management

Processing, cascade recycling and cycle utilization rate of cooling water generated from processes and equipment of the Group are all higher than 95%. Wastewater produced in the production process is collected and processed in a centralized manner. Wastewater generated in daily lives is collected and transported to water treatment plant of the Group. Some of the reclaimed water treated by the water treatment plant will be recycled to the Group for flushing slag in blast furnace and converters. Fresh water consumption was 2.31 tonnes per ton steel (2021: 1.86 tonnes per ton steel). The decline in year-on-year performance was mainly due to factors such as the complex environment and weakening downstream demand as a result of the decline in production, but the consumption was still lower than the requirement of Shandong Province. The Group did not encounter any issues about sourcing water that is fit for purpose in 2022.

By continuing to use the above equipment, we aim at keeping next reporting period's fresh water consumption cost at 95% to 110% of the current levels.

四、資源綜合利用

A. 能源及資源管理

集團大力推進降本增效，採用先進工藝提高煤氣及餘熱的回收及綜合利用率。2022年，噸鋼綜合電耗合計386.92千瓦時(2021：368.84千瓦時)，煉鋼工序噸鋼氧氣消耗66.78立方米(2021：59.54立方米)，主要受本年度生產下降影響。透過持續使用餘熱，我們旨在於下個報告期間維持噸鋼綜合消耗於目前水平的90%至105%。

B. 水資源管理

集團內部的工藝冷卻水、設備冷卻水等全部處理、串級循環利用，循環利用率高於95%。對生產過程產生的廢水集中收集和處理；生活產生的廢水，收集輸送到集團水處理廠，水處理廠處理的部分中水回用到集團，用作高爐沖渣水、轉爐熱焖渣等用水，噸鋼新水消耗為2.31噸(2021：1.86噸)，同比表現下降主要受複雜環境和下游需求減弱等因素影響生產回落所致，但仍低於山東省要求。2022年集團不涉及就求取適用水源相關的任何問題。

透過持續使用上述的設備，我們旨在於下個報告期間維持新水消耗成本於目前水平的95%至110%。

C. Solid Waste Management

The Group attaches great importance to the reuse of blast furnace slag, steel slag and iron-containing dust after professional treatment. In 2022, a total of 900,220.8 tonnes (2021: 986,962.8 tonnes) of blast furnace slag were produced, which were 440.8 kg per ton iron (2021: 423.0 kg per ton iron). In 2022, a total of 322,131.47 tonnes of steel slag, (2021: 403,325 tonnes of steel slag) were produced, which were 135.3 kg per ton steel (2021: 144 kg per ton steel).

The Group attaches high importance to the generation and disposal of hazardous wastes and entrusts all hazardous wastes such as waste engine oil and waste oil drums generated in the production process to units with treatment qualifications. 47.08 tonnes of waste mineral oil were disposed of in compliance with regulations in 2022, and the compliant disposal volume per tonne of steel was 0.0198kg; 53.34 tonnes of waste oil drums were disposed of in compliance with regulations, and 0.0224 kg per ton of steel was disposed of in compliance with regulations. Multi-measures have been adopted to reduce hazardous wastes, so as to reduce the impact on the environment.

In the coming year, the Group will endeavour to maintain the density of all hazardous and non-hazardous wastes intensities at 90% to 100% of the current levels.

C. 廢物管理

集團重視對高爐礦渣、鋼渣及含鐵除塵灰進行專業處理後的再利用。2022年合計產生高爐礦渣900,220.8噸（2021：986,962.8噸），噸鐵產生量為440.8千克（2021：423.0千克），2022年合計產生鋼渣322,131.47噸（2021：403,325噸），噸鋼產生量為135.3千克（2021：144千克）。

集團高度重視有害廢物的產生和處置，對生產過程中產生的廢機油、廢油桶等有害廢物全部委託具有處理資質的單位進行處理。2022年合規處置47.08噸廢礦物油，噸鋼合規處置量為0.0198千克；合規處置53.34噸廢油桶，噸鋼合規處置量為0.0224千克。已採納多項舉措降低有害廢棄物及其對環境的影響。

未來一年，集團將竭力維持所有有害及無害廢棄物的密度於目前水平的90%至100%。

5. Reduce energy consumption and carbon emissions

The Group has set up an energy management department and established an energy management system which is responsible for the overall energy management of the Group and for implementing a three tiered management system, namely "The Company-Energy Management Department-Production Plant" system. High-performance, energy-efficient and environment-friendly technology and equipment are used in project construction.

In terms of raw materials, the Group only uses high grade iron ore powder such as those with low content of hazardous elements. In terms of equipment, technologies such as double regenerative heating furnaces for steel rolling and recycling of reclaimed water are adopted to reduce energy consumption.

During the Reporting Period, the total greenhouse gas emission is approximately 3,762,335 tonnes (2021: 4,619,997 tonnes) carbon dioxide equivalent, corresponding to 1.58 (2021: 1.65) tonnes of carbon dioxide equivalent emission per ton of steel, according to a rough calculation. The Group strictly complies with the Interim Measures for the Administration of Carbon Emission Permit Trading (Order No. 17 of the National Development and Reform Commission of the People's Republic of China) and other relevant regulations to control carbon dioxide emissions.

With the above measures, we aim at continuing complying the regulations to control carbon dioxide emissions and maintain the carbon dioxide emission level at 90% to 115% of the current levels in the next reporting period.

The Group was not involved in any issues about packaging materials used in finished products during the Reporting Period.

五、降低能耗、減少碳排放

集團設有能源管理部並建立了能源管理體系，全面負責集團能源的綜合管理，實行「公司 — 能源管理部 — 生產廠」的三級管理體系。在項目建設過程中選用高效、節能、環保的工藝裝備。

原料方面，集團全部採用高品位、例如低有害元素的鐵礦粉。設備方面，採用軋鋼雙蓄熱式加熱爐、中水循環利用等技術，降低能耗。

報告期間，溫室氣體總排放量約為3,762,335噸（2021：4,619,997噸）二氧化碳當量，對應1.58（2021：1.65）噸／噸鋼二氧化碳當量排放。集團嚴格依據《碳排放權交易管理暫行辦法》（中華人民共和國國家發展和改革委員會令第17號）等相關規定對二氧化碳排放進行管理。

透過上述措施，我們旨在持續遵守控制二氧化碳排放的法規，並維持二氧化碳排放水平於目前水平的90%至115%。

報告期間，集團不涉及制成品所用包裝材料的事項。

6. Formulating emergency plans for environmental pollution to ensure environmental safety

The Group attaches great importance to environmental safety. In order to prevent the occurrence of environmental pollution incidents, relevant technical personnel joined together to look into the factors and production steps which are more prone to environmental pollution incidents in various production processes, and have formulated more than 10 emergency response plans for environmental pollution according to factors identified and the features of production processes, such as "Emergency Plans for Environmental Pollution Incidents", "Special Emergency Plans for Radioactive Sources", "Special Emergency Plans for Coal Gas Incidents", "Special Emergency Plans for Hazardous Wastes", and "Special Emergency Plans for Emission Reduction in Response to Heavily Polluted Weather", with drills organized.

六、制定環境污染應急預案，確保環境安全

集團十分重視環境安全，為了防止環境污染事故的發生，組織有關技術人員詳細了解各生產工藝中易發生環境污染事故的因素和生產環節，根據易發生環境污染事故的因素和生產工藝特點，制定應對方案，如「環境污染事故應急預案」、「危險廢物專項應急預案」等10餘個環境污染應急救援預案並組織演練。

Climate change

The Group understands that the worsening climate change brings potential risks to our business. Physical risks related to climate change, such as typhoons, floods and other extreme weather conditions, may affect our upstream raw material production and transportation, resulting in delays of our production plan. In addition, extreme weather conditions may also increase the costs of our maintenance and the expenses of machineries and increase the risk of asset depreciation. Furthermore, transition risks related to climate change, such as energy conservation and emission reduction policies, will result in higher material prices and higher costs due to the carbon tax effect on the supply chain. Therefore, we put great efforts in reducing carbon emission and seeking efficient ways to achieve low-carbon emission and continuously assess, review and manage climate risk-related goals.

氣候變化

集團明白氣候變化日益惡化同時給我們的業務帶來潛在風險。氣候變化相關的物理風險，例如，台風、洪水等極端天氣有機會影響我們的上游原材料生產以及運輸過程，導致生產受延遲。同時，極端天氣事件亦會對增加我們維修和建造機器的費用以及增加資產貶值風險。另外，氣候變化相關的過渡風險，例如節能減排相關政策會令供應鏈受到碳稅的影響而導致材料價格上漲，成本增加的風險。因此，我們積極號召減少碳排放，探索高效的方法實現低碳排放，並持續地評估、審視及管理氣候風險相關目標。

According to the Task Force on Climate-related Financial Disclosures (TCFD), climate-related risks consist of transition risks and physical risks. Transition risks come from the low-carbon economic transition to better adapt to the global climate, including risks related the policy, law, technology, market and reputation. Physical risks are related to extreme weather and the risk of rising global average temperature, including acute risks (typhoons, floods), chronic risks (rising mean temperatures, rising sea levels) and other risks. We identified the most important climate-related risks to our business and operations as follows:

根據氣候相關財務信息披露工作組(TCFD)，氣候相關風險包括轉型風險及實體風險。轉型風險指為適應全球氣候而進行低碳經濟轉型引致的風險，包括與政策、法律、技術、市場及聲譽等有關的風險。實體風險指與極端天氣有關的風險以及全球平均氣溫上升的風險，包括急性風險(台風、洪水)、慢性風險(平均氣溫上升、海平面上升)及其他風險。我們已識別以下對我們業務及運營而言最重要的氣候相關風險：

Climate risk 氣候風險	Category 類別	Description 描述	Financial impact 財務影響
Transition risk 轉型風險	Policies and regulations 政策及法規	Tightened regulations on climate-related requirements 對氣候相關要求的規定日趨嚴格	Increase in expenses to meet these requirements 加大開支以符合規定
Transition risk 轉型風險	Market 市場	Higher raw materials costs 原材料成本較高	Increase in cost of sales 成本增加
Transition risk 轉型風險	Technology 技術	Preliminary expenses for low-emission technological transformation 低排放技術轉型的前期費用	Preliminary costs for adopting and deploying new practices and processes 採用或部署新慣例及流程的前期費用
Physical risk 實體風險	Acute risks 急性風險	Typhoons, drought and floods 台風、干旱及洪水	Increase in costs, eroding the profit margin 運營成本增加、侵蝕毛利

The Group is dedicated to systematically identifying opportunities created by climate change. For such efforts to be effective, the Group is fully aware that the entire value chain must be considered. We are committed to working with our upstream and downstream partners to address climate change risks. The Group targets to promote the use of more environmentally friendly natural resources and machineries. To address climate-related risks, the Group will continue to explore and maximise the application of innovative technologies, such as the application of new energy and water technologies. This helps us formulate a low-carbon economic and business portfolio and remain competitive in the midst of global climate change.

集團致力於有系統地識別氣候變化帶來的機遇。為有效識別有關機遇，集團充分意識到需考慮整個價值鏈。我們承諾聯合上下游的合作伙伴共同應對氣候變化風險。因此，集團計劃推動使用更多環保的可持續性天然資源及機器。為應對氣候相關風險，集團將繼續探索並盡量應用創新技術，如新能源及水技術。這有助於我們制定低碳經濟及業務組合，並在全球氣候變化中保持競爭力。

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聯交所ESG報告指引內容索引表

Mandatory Disclosure Requirements 強制披露規定	Section/Declaration 章節／聲明
Governance Structure 管治架構	ESG Governance Structure ESG管治架構
Reporting Principles 匯報原則	Reporting Standard 報告標準
Reporting Boundary 匯報範圍	Reporting Scope 報告範圍

Subject Areas, Aspects, General Disclosures and KPIs 主要範疇、層面、一般披露及關鍵績效指標	Description 描述	Section/Declaration 章節／聲明
Aspect A1: Emissions **層面A1：排放物**		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Ecological Community — Environmental Protection Performance
一般披露	有關廢氣及溫室氣體排放、向水及土地的排污、有害及無害廢棄物的產生等的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	生態環境 — 環境保護工作業績
KPI A1.1	The types of emissions and respective emissions data.	Ecological Community — Environmental Protection Performance
關鍵績效指標A1.1	排放物種類及相關排放數據。	生態環境 — 環境保護工作業績

Subject Areas, Aspects, General Disclosures and KPIs 主要範疇、層面、一般披露及關鍵績效指標	Description 描述	Section/Declaration 章節／聲明
KPI A1.2 關鍵績效指標A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility). 直接(範圍1)及能源間接(範圍2)溫室氣體排放量(以噸計算)及(如適用)密度(如以每產量單位、每項設施計算)。	Ecological Community — Intensive Environmental Protection Investment 生態環境 — 環境保護工作業績
KPI A1.3 關鍵績效指標A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility). 所產生有害廢棄物總量(以噸計算)及密度。所產生有害廢棄物總量(以噸計算)及(如適用)密度(如以每產量單位、每項設施計算)。	Comprehensive Utilization of Resources — Solid Waste Management 資源綜合利用 — 廢棄物處理
KPI A1.4 關鍵績效指標A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility). 所產生無害廢棄物總量(以噸計算)及(如適用)密度(如以每產量單位、每項設施計算)。	Comprehensive Utilization of Resources — Solid Waste Management 資源綜合利用 — 廢棄物處理
KPI A1.5 關鍵績效指標A1.5	Description of emissions target(s) set and steps taken to achieve them. 描述所訂立的排放量目標及為達到這些目標所採取的步驟。	Comprehensive Utilization of Resources 資源綜合利用
KPI A1.6 關鍵績效指標A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them. 描述處理有害及無害廢棄物的方法，及描述所訂立的減廢目標及為達到這些目標所採取的步驟。	Comprehensive Utilization of Resources — Solid Waste Management 資源綜合利用 — 廢棄物處理

Subject Areas, Aspects, General Disclosures and KPIs 主要範疇、層面、一般披露及關鍵績效指標	Description 描述	Section/Declaration 章節／聲明
Aspect A2: Use of Resources **層面A2：資源使用**		
General Disclosure 一般披露	Policies on the efficient use of resources, including energy, water and other raw materials. 有效使用資源（包括能源、水及其他原材料）的政策。	Comprehension Utilization of Resources 資源綜合利用
KPI A2.1 關鍵績效指標A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility). 按類型劃分的直接及／或間接能源（如電、氣或油）總耗量（以千個千瓦時計算）及密度（如以每產量單位、每項設施計算）。	Comprehension Utilization of Resources 資源綜合利用
KPI A2.2 關鍵績效指標A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility). 總耗水量及密度（如以每產量單位、每項設施計算）。	Comprehension Utilization of Resources 資源綜合利用
KPI A2.3 關鍵績效指標A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them. 描述所訂立的能源使用效益目標及為達到這些目標所採取的步驟。	Comprehension Utilization of Resources 資源綜合利用
KPI A2.4 關鍵績效指標A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them. 描述求取適用水源上可有任何問題，以及所訂立的用水效益目標及為達到這些目標所採取的步驟。	Comprehension Utilization of Resources — Water Resources Management 資源綜合利用 — 水資源管理
KPI A2.5 關鍵績效指標A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced. 制成品所用包裝材料的總量（以噸計算）及（如適用）每生產單位佔量。	Not Applicable as the Group Did Not Extensively Using Packaging Materials during the Reporting Period 報告期間，由於集團並無使用包裝材料，因此並不適用

Subject Areas, Aspects, General Disclosures and KPIs 主要範疇、層面、一般披露及關鍵績效指標	Description 描述	Section/Declaration 章節／聲明
Aspect A3: The Environment and Natural Resources **層面A3：環境及天然資源**		
General Disclosure 一般披露	Policies on minimising the issuer's significant impacts on the environment and natural resources. 減低發行人對環境及天然資源造成重大影響的政策。	Reduce Energy Consumption and Carbon Emissions 降低能耗、減少碳排放
KPI A3.1 關鍵績效指標A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them. 描述業務活動對環境及天然資源的重大影響及已採取管理有關影響的行動。	Reduce Energy Consumption and Carbon Emissions 降低能耗、減少碳排放
Aspect A4: Climate Change **層面A4：氣候變化**		
General Disclosure 一般披露	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer. 識別及應對已經及可能會對發行人產生影響的重大氣候相關事宜的政策。	Formulating Emergency Plans for Environmental Pollution to Ensure Environmental Safety — Climate Change 制定環境污染應急預案，確保環境安全 — 氣候變化
KPI A4.1 關鍵績效指標A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them. 描述已經及可能會對發行人產生影響的重大氣候相關事宜，及應對行動。	Formulating Emergency Plans for Environmental Pollution to Ensure Environmental Safety — Climate Change — Physical Risks and Transition Risks 制定環境污染應急預案，確保環境安全

Subject Areas, Aspects, General Disclosures and KPIs 主要範疇、層面、一般披露及關鍵績效指標	Description 描述	Section/Declaration 章節／聲明
Aspect B1: Employment **層面B1：僱傭**		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, antidiscrimination, and other benefits and welfare.	Employment And Labour Standards
一般披露	有關薪酬及解雇、招聘及晉升、工作時數、假期、平等機會、多元化、反歧視以及其他待遇及福利的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	僱傭及勞工準則
KPI B1.1	Total workforce by gender, employment type (for example, full-or part-time), age group and geographical region.	Employment And Labour Standards
關鍵績效指標B1.1	按性別、僱傭類型(如全職或兼職)、年齡組別及地區劃分的僱員總數。	僱傭及勞工準則
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	Employment And Labour Standards
關鍵績效指標B1.2	按性別、年齡組別及地區劃分的僱員流失比率。	僱傭及勞工準則

Subject Areas, Aspects, General Disclosures and KPIs 主要範疇、層面、一般披露及關鍵績效指標	Description 描述	Section/Declaration 章節／聲明
Aspect B2: Health and Safety **層面B2：健康與安全**		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards	Health And Safety
一般披露	有關提供安全工作環境及保障僱員避免職業性危害的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	健康與安全
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	Health And Safety
關鍵績效指標B2.1	過去三年(包括匯報年度)每年因工亡故的人數及比率。	健康與安全
KPI B2.2	Lost days due to work injury.	Health And Safety
關鍵績效指標B2.2	因工傷損失工作日數。	健康與安全
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Health And Safety
關鍵績效指標B2.3	描述所採納的職業健康與安全措施，以及相關執行及監察方法。	健康與安全
Aspect B3: Development and Training **層面B3：發展及培訓**		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Development and Training
一般披露	有關提升僱員履行工作職責的知識及技能的政策。描述培訓活動。	發展及培訓
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Development and Training
關鍵績效指標B3.1	按性別及僱員類別(如高級管理層、中級管理層)劃分的受訓僱員百分比。	發展及培訓
KPI B3.2	The average training hours completed per employee by gender and employee category.	Development and Training
關鍵績效指標B3.2	按性別及僱員類別劃分，每名僱員完成受訓的平均時數。	發展及培訓

Subject Areas, Aspects, General Disclosures and KPIs 主要範疇、層面、一般披露及關鍵績效指標	Description 描述	Section/Declaration 章節／聲明
Aspect B4: Labour Standards **層面B4：勞工準則**		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour	Labour Standards
一般披露	有關防止童工或強制勞工的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	勞工準則
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour	Labour Standards
關鍵績效指標B4.1	描述檢討招聘慣例的措施以避免童工及強制勞工。	勞工準則
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	Labour Standards
關鍵績效指標B4.2	描述在發現違規情況時消除有關情況所採取的步驟。	勞工準則
Aspect B5: Supply Chain Management **層面B5：供應鏈管理**		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	Supply Chain Management
一般披露	管理供應鏈的環境及社會風險政策。	供應鏈管理
KPI B5.1 關鍵績效指標B5.1	Supply Chain Management 按地區劃分的供貨商數目。	Supply Chain Management 供應鏈管理
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	Supply Chain Management
關鍵績效指標B5.2	描述有關聘用供貨商的慣例，向其執行有關慣例的供貨商數目，以及相關執行及監察方法。	供應鏈管理

Subject Areas, Aspects, General Disclosures and KPIs 主要範疇、層面、一般披露及關鍵績效指標	Description 描述	Section/Declaration 章節／聲明
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Supply Chain Management
關鍵績效指標B5.3	描述有關識別供應鏈每個環節的環境及社會風險的慣例，以及相關執行及監察方法。	供應鏈管理
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Supply Chain Management
關鍵績效指標B5.4	描述在揀選供貨商時促使多用環保產品及服務的慣例，以及相關執行及監察方法。	供應鏈管理
Aspect B6: Product Responsibility **層面B6：產品責任**		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Product Responsibility
一般披露	有關所提供產品和服務的健康與安全、廣告、標簽及私隱事宜以及補救方法的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	產品責任
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons	Product Responsibility — Quality Testing and Products Recall
關鍵績效指標B6.1	已售或已運送產品總數中因安全與健康理由而須回收的百分比。	產品責任 — 質量檢測和產品回收
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	Product Responsibility — Products and Customer Complaints
關鍵績效指標B6.2	接獲關於產品及服務的投訴數目以及應對方法。	產品責任 — 產品及客戶投訴

Subject Areas, Aspects, General Disclosures and KPIs 主要範疇、層面、一般披露及關鍵績效指標	Description 描述	Section/Declaration 章節／聲明
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Product Responsibility — Maintenance and Protection of Intellectual Property
關鍵績效指標B6.3	描述與維護及保障知識產權有關的慣例。	產品責任 — 維護和保護知識產權
KPI B6.4	Description of quality assurance procedure and recall procedures.	Product Responsibility — Quality Testing and Products Recall
關鍵績效指標B6.4	描述質量檢定過程及產品回收程序。	產品責任 — 質量檢測和產品回收
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	Product Responsibility — Products and Customer Complaints
關鍵績效指標B6.5	描述消費者數據保障及私隱政策，以及相關執行及監察方法。	產品責任 — 產品及客戶投訴
Aspect B7: Anti-corruption **層面B7：反貪污**		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Anti-Corruption
一般披露	有關防止賄賂、勒索、欺詐及洗黑錢的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	反貪污
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Anti-Corruption
關鍵績效指標B7.1	於匯報期內對發行人或其僱員提出並已審結的貪污訴訟案件的數目及訴訟結果。	反貪污

Subject Areas, Aspects, General Disclosures and KPIs 主要範疇、層面、一般披露及關鍵績效指標	Description 描述	Section/Declaration 章節／聲明
KPI B7.2 關鍵績效指標B7.2	Description of preventive measures and whistleblowing procedures, how they are implemented and monitored. 描述防範措施及舉報程序，以及相關執行及監察方法。	Whistle-blowing Mechanisms 舉報機制
KPI B7.3 關鍵績效指標B7.3	Description of anti-corruption training provided to directors and staff. 描述向董事及員工提供的反貪污培訓。	Anti-Corruption 反貪污
Aspect B8: Community Investment **層面B8：社區投資**		
General Disclosure 一般披露	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests. 有關以社區參與來了解營運所在社區需要和確保其業務活動會考慮社區利益的政策。	Social Responsibility — Environment Protection 社會責任 — 環境保護
KPI B8.1 關鍵績效指標B8.1	Focus areas of contribution (e.g. education environmental concerns, labor needs, health culture, sport). 專注貢獻範疇(如教育、環境事宜、勞工需求、健康、文化、體育)。	Social Responsibility — Social Charity, Caring for Employees 社會責任 — 社會慈善、員工關懷
KPI B8.2 關鍵績效指標B8.2	Resources contributed (e.g. money or time) to the focus area. 在專注範疇所動用資源(如金錢或時間)。	Social Responsibility 社會責任

XIWANG SPECIAL STEEL COMPANY LIMITED

西王特鋼有限公司