

重慶鋼鐵股份有限公司

Chongqing Iron & Steel Company Limited

(H Share Stock Code: 1053) (A Share Stock Code: 601005)



2020

**ENVIRONMENTAL AND
SOCIAL RESPONSIBILITIES REPORT**

2020 Environmental and Social Responsibilities Report

IMPORTANT NOTICE

The board of directors (the “Board”) and all directors of the Company warrant that there are no false representations, misleading statements contained in or material omissions from this report and collectively and individually accept full responsibility for the truthfulness, accuracy and completeness of the contents hereof.

BASIS OF REPORT

This report is prepared in accordance with the Company Law and Securities Law, and other laws and regulations, the “Notice on Enhanced Undertaking of Social Responsibilities for Listed Companies and Release of the ‘Guidelines to Environmental Information Disclosure of Listed Companies at Shanghai Stock Exchange” released by Shanghai Stock Exchange” and the ESG Reporting Guide set forth in Appendix 27 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited based on the specific performance of social responsibilities of the Company.

DEFINITIONS

Unless the context otherwise requires, the following expressions have the following meanings in this report:

Company	Chongqing Iron & Steel Company Limited
Hong Kong Stock Exchange	The Stock Exchange of Hong Kong Limited
Siyuanhe Industrial Development Fund	Siyuanhe (Chongqing) Iron & Steel Industrial Development and Equity Investment Fund Partnership (Limited Partnership)
China Baowu	China Baowu Steel Group Corporation Limited
Desheng Group	Sichuan Desheng Group Vanadium & Titanium Co., Ltd.
Changshou Iron & Steel	Chongqing Changshou Iron & Steel Company Limited
Strategic Emerging Fund	Chongqing Strategic Emerging Equity Investment Fund Partnership (Limited Partnership)
Yufu Assets	Chongqing Yufu Assets Equity Investment Fund Management Co., Ltd.
Reporting Period	the period from 1 January 2020 to 31 December 2020

I. COMPANY PROFILE

Established in August 1997, the Company issued H shares (stock code: 01053) on the Hong Kong Stock Exchange in the same year. The Company issued A shares (stock code: 601005) on Shanghai Stock Exchange in 2007. It initiated judicial reorganization in July 2017 and successfully completed it in December in the same year. Meanwhile, it introduced an experienced professional manager team. The Company was changed into an enterprise with mixed ownership from a state-owned and controlled company upon the judicial reorganization.

On 16 September 2020, Siyuanhe Industrial Development Fund, China Baowu and Desheng Group had signed an Equity Transfer Agreement in respect of the distribution in kind of the 75% equity interests in Changshou Iron & Steel held by Siyuanhe Industrial Development Fund. On the same day, China Baowu had entered into an Acting in Concert Agreement with Strategic Emerging Fund and Yufu Assets. As at 2 December 2020, all the conditions for completion as set out in the Equity Transfer Agreement signed between Siyuanhe Industrial Development Fund and China Baowu and Desheng Group had been fulfilled, Changshou Iron & Steel completed the change of industrial and commercial registration on 2 December 2020, such that China Baowu became the de facto controller of the Company.

The Company is mainly engaged in the production, processing and sale of steel plates, wire rods, bar materials, billets and thin plates; as well as production and sale of coal chemical products and grain slag, etc, with the following production lines: 4,100mm wide and thick plate, 2,700mm medium plate, 1,780mm hot rolled sheet, high speed wire rods, bar materials. The Company's products are applied in various industries, such as machinery, architecture, engineering, automobile, motorbike, shipbuilding, offshore oil, gas cylinder, boiler as well as oil and gas pipelines. The Company's steel products used in hull structure, boilers and pressure vessels were rewarded the title of "Chinese brand products" and four other products were rewarded the title of "Chongqing's brand products". The Company successively obtained the following titles of honor: national Labor Day certificate, national implementation of performance excellence model advanced enterprises, Chongqing famous trademark, Chongqing quality benefit enterprise and Chongqing contract-abiding and trustworthy enterprises.

During the Reporting Period, the Group produced 6.38 million tonnes of iron, 7.12 million tonnes of steel and 6.78 million tonnes of commodity billet; the sales volume of commodity billet was 6.83 million tonnes. The operating income was RMB24.5 billion, and the total profit was RMB624 million; the taxation in the warehouse was RMB600 million, ranking first in the tax contribution of its district.

II. SHARE CAPITAL AND SHAREHOLDER

During the Reporting Period, the share capital of the Company did not change compared to 2019. The total share capital was 8,918,602,267 shares, of which: 8,380,475,067 shares of A shares, accounting for 93.97% of the total shares; 538,127,200 shares of H shares, accounting for 6.03% of the total shares.

During the Reporting Period, the Company's controlling shareholder had not changed, remained as Changshou Iron & Steel, which held 2,096,981,600 shares, with a shareholding ratio of 23.51%; the de facto controller has changed from Siyuanhe Equity Investment Management Co., Ltd. to China Baowu.

At the end of the Reporting Period, the total number of shareholders of the Company totaled 133,960, of which: 133,753 shareholders of A shares, accounting for 99.85%; 207 shareholders of H shares, accounting for 0.15%. The top 10 shareholders of the Company were shown in the table below:

Name of shareholder	Number of shares held <i>(shares)</i>	Percentage of shares held <i>(%)</i>
Chongqing Changshou Iron & Steel Company Limited	2,096,981,600	23.51
HKSCC NOMINEES LIMITED	531,240,621	5.96
Chongqing Qianxin Group Co., Ltd.	427,195,760	4.79
Chongqing Rural Commercial Bank Co., Ltd.	289,268,939	3.24
Chongqing Guochuang Investment and Management Co., Ltd.	278,288,059	3.12
Sinosteel Equipment & Engineering Co., Ltd.	252,411,692	2.83
Bank of Chongqing Co., Ltd.	226,042,920	2.53
Industrial Bank Co., Ltd., Chongqing Branch	219,633,096	2.46
Agricultural Bank of China Limited, Chongqing Branch	216,403,628	2.43
China Shipbuilding Industry Complete Logistics Co., Ltd. (中船工業成套物流有限公司)	211,461,370	2.37
Total	4,748,927,685	53.24

III. INVESTOR RELATION MANAGEMENT

The Company had consistently conducted quality management work on investor relations during the Reporting Period. Through general meetings, performance briefings, collective investor reception, WeChat public account of Secretariat of the Board of Chongqing Iron and Steel, creditor shareholder groups, “005 bead ring” and other communication platforms, media interviews and reports, on-site visits, and counter-roadshows and other forms of investor relations management have been implemented. Investor communication content covered legal information disclosure and its explanations and various aspects including the macroeconomic environment, meso-industry development, micro-enterprise operations. In terms of the Company’s development planning, competitive strategy and corporate cultural construction, exchange of views had been conducted sufficiently, which further diversified the content of effective communication.

Through the above-mentioned rich and diverse communication channels and content, not only the Company’s production and operation results, employees’ spirit and style are displayed, and the Company’s value is conveyed, but also a trustful relationship between the Company and investors has been built, and the investors’ awareness of the cognition and acknowledgement level of the Company are improved. During the Reporting Period, investors had paid more attention to the Company, and many analysts had paid attention to the Company and issued research reports. In addition, the Company also maintained the stability of stock prices and the interests of investors through share repurchases. During the Reporting Period, the total number of A shares repurchased was 50 million, accounting for 0.56% of the total share capital.

IV. CORPORATE GOVERNANCE

(I) Corporate governance structure

The Company was strictly in compliance with the Listing Rules of the Hong Kong Stock Exchange and regulatory rules of Shanghai Stock Exchange, and in accordance with the requirements of relevant laws and regulations, further improved the corporate governance structure of the balances among the general meeting, the Board, supervisory committee and the management. A clear division of labor and responsibilities appeared between those and manager level.

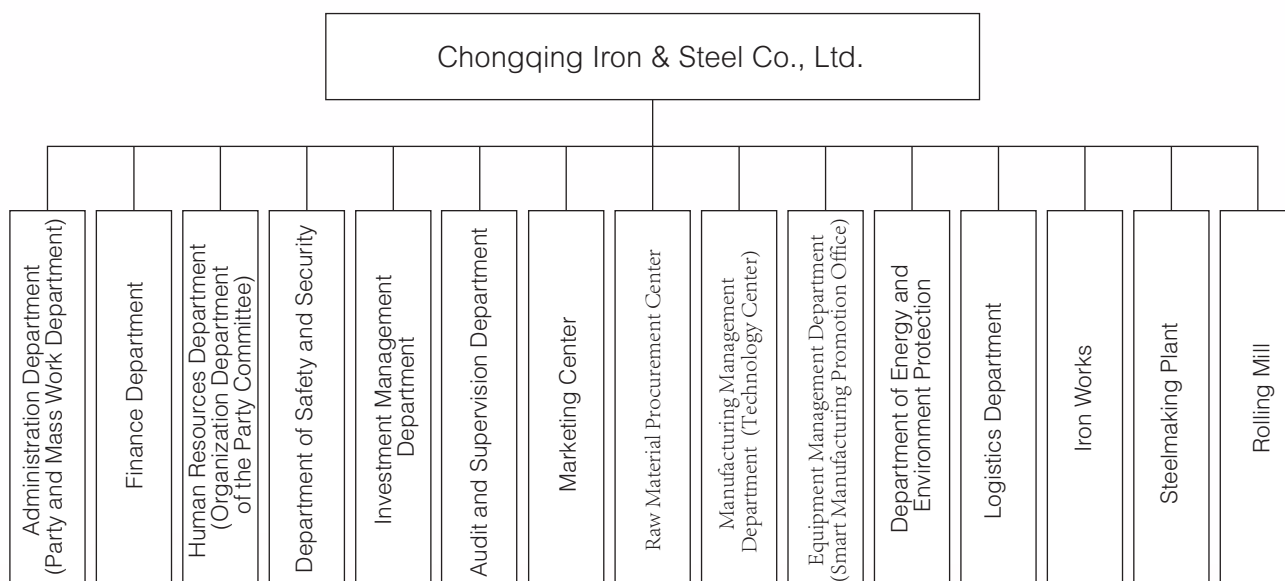
During the Reporting Period, the Company complied with all the provisions of the “Corporate Governance Code”, Appendix XIV of the Rules Governing the Listing Rules of the Hong Kong Stock Exchange.

2020 Environmental and Social Responsibilities Report (Continued)

(II) Company Structure

During the Reporting Period, the Company took the opportunity to follow the new development trend and continuously optimized the organizational structure in accordance with the management requirements of “big department system and big plant system”, realizing centralized and consistent management and adjusting the number of plant-level units from 20 in early 2020 to 15, representing a decrease of 25%. With clearer responsibility boundaries of all units, a streamlined, professional and efficient management mechanism has been gradually established.

At the end of the Reporting Period, the Company's organizations are as follows:



(III) General meeting, the Board and the Supervisory Committee

During the Reporting Period, the Company held the annual general meeting and two extraordinary general meetings, all of which were convened by the Board. The convening, presiding, voting, resolutions and other matters at the shareholders' meetings were legal and compliant, which effectively protected the overall interests of the Company and the legitimate rights and interests of all shareholders.

As at 31 December 2020, the Board of the Company consisted of eight directors, including six non-executive directors. Among the non-executive directors were three independent directors, accounting for one-third of the Board. The composition of the Board complied with the requirements of relevant domestic and foreign laws, regulations and normative documents. The Board had four special committees: the Strategic Development Committee, the Audit Committee, the Nomination Committee, and the Remuneration and Evaluation Committee. Except for the Strategic Committee, each of the special committees is chaired by a different independent director and the Audit Committee is chaired by an accounting professional. During the Reporting Period, the composition of the special committees of the Board complied with relevant requirements.

During the Reporting Period, the Board of the Company convened 15 meetings, and all directors strictly followed the consideration and approval process for significant events within its authority pursuant to relevant requirements. Special committees separately convened meetings in light of their respective responsibilities, which effectively promoted the Board's standardized operation and scientific decision-making.

As at 31 December 2020, the Supervisory Committee of the Company consisted of five supervisors, including two employee representative supervisors and three shareholder representative supervisors. Employee supervisors accounted for two-fifths of the number of supervisors. The composition of Supervisory Committee was reasonable and met the requirements of relevant domestic and foreign laws, regulations and normative documents. During the Reporting Period, the Supervisory Committee of the Company convened 8 meetings. In compliance with laws and regulations, and on the principles of objectivity, fairness and diligence, the Supervisory Committee carried out on-site supervision and investigation at various levels, supervised and reviewed the Company's major decision-making procedures, financial operations and management, operation and management activities, as well as the performance of duties by directors and senior management. It actively prevented operational risks, enhanced the effectiveness of supervision and promoted the Company's standardized operation.

(IV) Internal Controls

During the Reporting Period, the Company further promoted internal control evaluation. The annual internal control evaluation was completed in four stages including revision of evaluation items, centralized training, self-evaluation by each unit and review by the Audit and Supervision department. A total of 531 items were evaluated, covering the five major elements of internal environment, risk assessment, control activities, information and communication, and internal supervision. A total of 8 internal control deficiencies were identified through the evaluation, of which 4 design deficiencies and 4 operational deficiencies were general deficiencies; no major or important internal control deficiencies were identified and the Company's internal control was generally effective.

V. EMPLOYEES

(I) Personnel

At the end of the Reporting Period, the Company had 6,601 employees on the job. According to the professional composition category, there were 5,401 production staff, 80 sales staff, 376 technical staff, 49 financial staff, and 695 administrative staff. According to education background, there were 2 PhDs, 91 masters, 1,049 undergraduates, 2,121 junior colleges, and 3,338 people below junior college. The proportion of technical personnel had gradually improved, and the proportion of personnel with a bachelor's degree or higher had gradually increased.

(II) Employees' recruitment and dismissal

During the Reporting Period, the execution, relief or termination of employees' labor contracts complied with the relevant laws and regulations such as the Labor Law and the Labor Contract Law. 114 new employees were recruited through campus recruitment, social recruitment, and other methods, and 39 labor contracts were terminated according to law, which improved the age, knowledge, and skill structure of employees, and provided talent protection for the development of the Company.

(III) Remuneration policy

Employees' remuneration mainly comprises base salary, subsidies and allowances and bonus. The Company determines the system, method and level of remuneration payment within the budgeted payroll based on the Company's economic benefits and status as well as appraisal results. The payment of social insurance and housing provident fund strictly complies with the relevant laws and regulations. The Company implements mechanism of housing provident fund by individual payment of 12% of wages and enterprise's payment of equal amount based on the actual situation of the Company. During the Reporting Period, a total of RMB256,731,000 of social insurance and RMB169,217,800 of housing provident funds were paid. The Company implemented supplementary medical insurance and critical illness assistance systems to alleviate staff's life pressure caused by illness.

(IV) Staff Training

The Company adopted internal and external staff education and training to ensure the continuous improvement of staff quality. During the Reporting Period, the Company further improved the training management system and completed 559 training projects. 18,730 people were trained and 328 people were certified with vocational qualifications. Special operations training was held for 2,073 people, and 3,410 special operators acquired the certificates with licensed rate of 100%. The Company organized trainings on “knowledge related to hazardous waste” and “environmental protection laws and regulations and standards” to raise employees’ awareness of environmental protection and reduce the risk of environmental damage. As for the existing training deficiencies, the Company proposed specific measures of talent cultivation such as talent quality model, talent training model and learning map.

(V) Staff Promotion

The Company launched the core talent cultivation of “three teams”, proposed the “successor cultivation plan” for the management sequence, the “expert cultivation plan” for the technical business sequence and the “artisan cultivation plan” for the operation and maintenance sequence. With the problem-oriented approach, the Company clearly defined a 1:1 training target for the management sequence at the company level, 193 training targets for 11 engineering and technical professions and 10 major functional business professions, and 138 training targets for 12 skill-based professions. During the Reporting Period, the Company established the “one table for one person” system and career development paths for 35 outstanding young cadres and completed the recruitment process for 107 officers, further strengthening the Company’s talent team.

(VI) Care for staff

The Company ensured the welfare of the employees and comprehensively improved their living and working environment, resulting in a significant increase in their sense of attainment, belonging and happiness during the Reporting Period. The cumulative welfare expense for the year amounted to RMB2.54 million, and the newly increased distribution of holiday souvenirs amounted to RMB1.49 million. A total of RMB800,000 was invested in the activity of “100-day health” for employees, strengthening the health screening of employees, and increasing the frequency and items of medical examination.

The Company launched a “livelihood project” closely related to the “food, housing and transportation” of the staff, which included the investment of RMB7.2 million to improve the dining environment of the staff canteen, the investment of RMB2.89 million to build 1,107 additional parking spaces, the investment of RMB1.1 million to build a football field, build additional electric automobile parking spaces and update cultural and sports equipment to improve the overall environment of the staff dormitory.

VI. RESOURCES AND ENVIRONMENTAL PROTECTION

(I) Environmental protection policies, annual environmental protection targets and effectiveness

The Company adheres to the environmental protection policies of “abiding by laws with integrity, green manufacturing, focusing on prevention, comprehensive governance, full participation, and continuous improvement”, and strives to shape “Chongqing Iron & Steel to be beautiful and picturesque”.

During the Reporting Period, with the continuous improvement of the main performance indicators for environmental protection, the annual environmental protection targets were achieved. The total discharge of major pollutants reached the target requirements; the preparation of the “14th Five-Year” Green Development Plan was completed; the safe disposal rate of hazardous waste was 100%; and there was zero pollution accident throughout the year.

(II) Annual total resource consumption

The energies consumed by the Company are mainly coal, coke, water and electricity. During the Reporting Period, the Company significantly improved its several energy consumption indicators by benchmarking advanced enterprises, optimizing balance models, and strengthening fine control. The self-generation rate increased from 87.56% to 89.71%, representing an increase of 2.45% as compared to 2019. The self-power consumption capacity per ton of steel decreased from 374.38kWh in the previous year to 364.71kWh, representing a decrease of 2.58%; and the coke oven gas release rate decreased from 0.85% to 0.4%, representing a year-on-year decrease of 52.9%, hitting the best level in history.

The main indicators are detailed in the table below:

Resource category	2020	2019	Increase/ decrease
Coal (10 ⁴ t)	488.67	456.74	31.93
Coke (10 ⁴ t)	279.66	258.62	21.04
Electricity (10 ⁴ kWh)	261,523	250,944	10,579
Water (10 ⁴ t)	3,323.56	2,635.38	688.18
Comprehensive energy consumption per ton of steel (kgce/t)	527.68	521.57	6.11
Self-power generation capacity per ton of steel (kWh/t)	357.05	361.58	-4.53
Electricity consumption per ton of steel (kWh/t)	364.71	374.38	-9.67
Converter gas recovery per ton of steel (m ³ /t)	103.03	108.56	-5.53
Coke oven gas release rate (%)	0.4	0.85	-0.45

(III) Environmental protection investment and development of environmental technology

During the Reporting Period, the total investment in environmental protection projects amounted to approximately RMB1,206 million, which was mainly used for wastewater and waste gas treatment, material yard treatment and other projects, achieving good results in the reuse of wastewater and ultra-low emission of waste gas.

1. *Wastewater treatment*

The central wastewater treatment station was expanded and upgraded, and a set of wastewater pretreatment system with a capacity of 20,000 tons/day and a set of wastewater advanced treatment system with a capacity of 15,000 tons/day were newly built to improve the wastewater reuse rate. The coking wastewater treatment system was upgraded to a capacity of 120 tons/hour. An emergency pool with a capacity of 20,000 cubic meters was newly built to provide emergency storage capacity. The newly-built rainwater reuse and treatment system in the plant can collect and dispose the initial rainwater, meet the industrial new water standard, and recycle the water resources. And the pipeline periscope detection technology was used to detect the damage and blockage of the drainage pipe network in the plant area to provide a comprehensively understanding of the pipeline network situation, and offer effective basis for the design of the drainage pipe network renovation scheme and subsequent construction in the plant area.

2. *Exhaust gas treatment*

The Company completed the flue gas desulfurization upgrade and transformation of 2# and 3# sintering machines, the ultra-low emission transformation of the tails and the whole particle electrostatic dust precipitators of 1# and 3# sintering machines, and the ultra-low emission transformation of the cast house and coke tank deduster of 4# blast furnace. The Company has carried out the flue gas desulfurization and denitration projects of 5# and 6# coke ovens, and the process plan has been basically determined. Special rectification and treatment have been conducted for fugitive emissions in the coking area, and the project of volatile organic compounds tail gas of the coal refining system has been implemented.

3. *Stockyard governance*

The focus was on the renovation of open-air stockyards and storage yards. The enclosed stockyard projects have been included in the Company's fixed asset investment projects and implemented step by step.

(IV) Type, quantity, concentration and trace of pollutants and other information on pollutant discharging

During the Reporting Period, the main pollutants were smoke, dust, nitrogen oxides, sulfur dioxide, ammonia nitrogen, etc.; and the emissions per ton of steel for main pollutants were as follows: nitrogen oxides of 0.77kg/t, sulfur dioxide of 0.51kg/t, ammonia nitrogen of 0.001kg/t, and chemical oxygen demand of 0.02kg/t.

Wastewater, exhaust gas and solid waste are generated during the production process of the Company. Exhaust gas is mainly pollutants such as smoke, dust, nitrogen oxides, sulfur dioxide and other pollutants produced during the production process, which are discharged after dust removal and desulfurization treatment in compliance with the regulations. Wastewater is mainly suspended solids, oil, ammonia nitrogen and other pollutants produced during the production process, which are discharged after treatment in compliance with the standards and the regulations. Solid waste mainly includes iron dust, iron oxide scale, metallurgical slag, etc. In particular, 4,391,300 tons of industrial solid waste and 133,800 tons of hazardous waste were produced, which were processed through return-to-production and utilization, and delivery to qualified units for utilization.

(V) Construction and operation of environmental protection facilities

During the Reporting Period, the Company's various pollution prevention facilities were fully equipped, technically qualified, and operating normally. The environmental protection facilities currently in operation include: 11 wastewater treatment facilities, 115 exhaust gas and dust treatment facilities, of which main outlets of waste water and exhaust gas are installed with online monitoring and monitoring facilities, and networking has been implemented in accordance with government requirements. Blast furnace water slag, converter steel slag, iron dust and other industrial solid waste disposal facilities are available. All production processes of the Company have facilities such as noise elimination, noise reduction, sound insulation and isolation, which effectively control environmental noise. The Company had strengthen the management and control of environmental protection facilities, clarify the main body of responsibility, and implement synchronous operation and maintenance of environmental protection facilities and main facilities.

(VI) Disposal of waste generated in the production process, recycling and comprehensive utilization of waste products

During the Reporting Period, the industrial solid waste produced by the Company was 4,391,300 tons, with the utilization volume of 4,385,900 tons and the utilization rate of 99.88%. Among them, 686,200 tons of steel slag and iron dust containing carbon were returned to production and utilized, with the return-to-production and utilization rate of 15.63%. The rest were sold to the surrounding mineral powder plants, cement plants and other qualified units for resource utilization. 133,800 tons of hazardous waste were generated and 133,800 tons of disposed waste were used. The compliance utilization and disposal rate was 100%. In particular, 18,800 tons of tar residue and coking sludge were returned to production and utilization, and the remaining 115,000 tons of coal tar and waste mineral oil were delivered to qualified units for compliance use or disposal, and 35 tons were stored in compliance.

(VII) Environmental impact assessment of construction projects and other environmental protection administrative licensing

The rebuilding of the profile steel to double high rods technical transformation project, the capacity improvement of the raw material yard system and the environmental protection upgrade and transformation project, the new converter gas tank project, the capacity expansion, upgrade and comprehensive utilization project of the wastewater treatment system, the energy efficiency improvement project of waste heat power generation, the surplus gas power generation project and other projects have obtained the environmental assessment approvals.

(VIII) Environmental emergency plan

A sound corporate environmental risk prevention system was established. During the Reporting Period, the Environmental Emergency Plan of Chongqing Iron & Steel Company Limited (《重慶鋼鐵股份有限公司突發環境事件應急預案》) was revised and filed with the environment protection authorities, valid until 16 December 2023, with the filing number of 500115-2020-103-H.

(IX) Self-monitoring program on environmental protection

According to the requirements of the Measures for Self-monitoring and Information Disclosure by the Enterprises Subject to Intensive Monitoring and Control of the State (Trial Implementation) (《國家重點監控企業自行監測及信息公開辦法(試行)》) and the Notice of the Chongqing Municipal Environmental Protection Bureau on the Launch and Operation of Self-monitoring and Information Disclosure Platform by the Enterprises Subject to Intensive Monitoring and Control of the State (《重慶市環境保護局關於開展國家重點監控企業自行監測及信息公開發佈平台上線運行有關工作的通知》), the Company formulated the Self-monitoring Program on Environmental Protection (《環境自行監測方案》) and carried out the self-monitoring activities on environmental protection.

2020 Environmental and Social Responsibilities Report (Continued)

The monitored objects mainly include wastewater, exhaust gas, soil, ambient air and noise in the plant area. The main monitoring methods are online monitoring and manual monitoring.

Monitoring indicators and frequency

Type	Monitoring indicators	Monitoring frequency	Monitoring points	Monitoring method
Wastewater	PH, ammonia nitrogen, chemical oxygen demand, flow rate	Real time	Main wastewater outlet	Online
	PH, chemical oxygen demand, ammonia nitrogen, suspended solids, petroleum, volatile phenols, cyanide, total nitrogen, total phosphorus	Once a week	Main wastewater outlet	Manual
	Fluoride, total copper, total zinc, total iron, total lead, total cadmium, total mercury, total arsenic, total chromium, total nickel, hexavalent chromium	Once a season		
Ambient air	Total suspended particulates, nitrogen oxides, sulfur dioxide	Once a season	3 monitoring points within the plant boundary	Manual
Noise at plant boundary	Noise (daytime, night)	Once a season	4 monitoring points around the plant boundary	Manual
Organized exhaust gas emission	Flue gas flow, flue gas temperature, oxygen content, moisture content, flue gas pressure, particulate matter, nitrogen oxides, sulfur dioxide	Real time	Desulfurization chimneys of 1#, 2#, 3# sintering machine heads; hot blast stove chimneys of 1#, 2#, 3# blast furnaces	Online
	Flue gas flow, flue gas temperature, oxygen content, moisture content, particulate matter, nitrogen oxides, sulfur dioxide, fluoride, ammonia, benzo a pyrene, hydrogen sulfide	Once a season	Production chimney outlet	Manual
	Dioxins	Once a year	Desulfurization chimneys of 1#, 2#, 3# sintering machine heads	Manual
Disorganized exhaust gas emission	Total suspended particulates	Once a year	10 monitoring points in the production workshop	Manual
Soil	PH, arsenic, cadmium, hexavalent chromium, copper, lead, mercury, nickel, semi-volatile organic compounds, volatile organic compounds, dioxins (total toxicity equivalent), polychlorinated biphenyls, polybrominated biphenyls *, phenol, phenanthrene, pyridine *, cyanide, soluble fluoride, petroleum hydrocarbon(C10-C40)	Once a year	23 monitoring points within the plant boundary	Manual

2020 Environmental and Social Responsibilities Report (Continued)

1. *Implementation standards and limits*

Wastewater discharge standard	Direct Discharge Standard in the Discharge Standard of Water Pollutants for the Iron and Steel Industry (GB13456-2012 Table 2)
Exhaust gas emission standard	Emission Standard of Air Pollutants for Ironmaking Industry (GB28663-2012 Table 2) Emission Standard of Air Pollutants for Iron and Steel Sintering and Pelletizing Industry (GB28662-2012 Table 2) Emission Standard of Air Pollutants for Steelmaking Industry (GB28664-2012 Table 2) Emission Standard for Pollutants for Coking Chemical Industry (GB16171-2012 Table 5) Emission Standard of Air Pollutants for Steel Rolling Industry (GB28665-2012 Table 2)
Ambient air emission standard	Ambient Air Quality Standard (GB3095-2012 Table 1) (Level 2)
Noise emission standard	Environmental Noise Emission Standard for Industrial Enterprises at Plant Boundary (GB12348-2008 Table 1(3))
Soil discharge standard	Soil Environmental Quality Risk Control Standard for Soil Contamination of Construction Land (Trial Implementation) (GB36600-2018)

2. *Quality control and quality assurance*

The automatic monitoring system has standardized construction, effective management, and normal operation. It is connected to the competent environmental protection authorities and has passed the acceptance, and the internal quality control is effective.

The wastewater monitoring project is strictly implemented in accordance with the Discharge Standard of Water Pollutants for the Iron and Steel Industry. The exhaust gas monitoring platform, monitoring section and monitoring holes are all in line with the requirements of the Technical Requirements and Testing Methods for Continuous Emission Monitoring System of Flue Gas (SO₂, NO_x, Particulate Matter) from Stationary Pollution Sources, etc. At the same time, the automatic monitoring equipment is calibrated and maintained in accordance with the Technical Specifications for Continuous Emission Monitoring of Flue Gas (SO₂, NO_x, Particulate Matter) from Stationary Pollution Sources. Exhaust gas monitoring is strictly implemented in accordance with the Technical Specifications for Manual Monitoring of Ambient Air Quality and the Technical Specifications for Quality Assurance and Quality Control of Stationary Pollution Source Monitoring. Ambient air monitoring is strictly implemented in accordance with the Ambient Air Quality Standard. Noise monitoring is strictly implemented in accordance with the Environmental Noise Emission Standard for Industrial Enterprises at Plant Boundary. Soil monitoring is strictly implemented in accordance with the Soil Environmental Quality Risk Control Standard for Soil Contamination of Construction Land (Trial Implementation).

3. *Monitoring results*

During the Reporting Period, all the monitoring indicators met the national emission standards. The monitoring data was input into the system and the information was disclosed in a timely and accurate manner. Both the reporting rate and disclosure rate of self-monitoring data were 100%.

- (X) During the Reporting Period, there was no voluntary agreement signed with the environmental protection authorities to improve environmental practices.

VII. PROCUREMENT MANAGEMENT

(I) Supplier management

Management documents such as "Supplier Management Regulations", "Supplier Access Standards" and "Supplier Evaluation Standards" have been formulated to form a supplier access and elimination mechanism based on performance evaluation management, so as to optimise the supplier team and urge them to provide quality resources.

(II) Transparent procurement

The Company has committed to creating an open, fair and equitable procurement environment and have fully implemented the open enquiry procurement model, using the Ouyeel procurement platform to publish enquiry information and further broadened the channels of enquiry sources; at the same time. The Company has implemented online enrolment, registration and quotation for suppliers, making the procurement elements fully open and the procurement process fully transparent.

(III) Green procurement

The Company has established an environmental management concept, developing green procurement, creating an "ecological" procurement supply chain and promoting sustainable development. The Company has strengthened cooperation with suppliers in environmental protection and established a "green development and green use" system in the development of resources such as iron ore, coal and auxiliary raw materials; gave priority to ISO14001-certified suppliers in the procurement of alloys. The Company has strictly controlled the fulfillment of environmental responsibilities by suppliers and rigorously assessed the exceedance of harmful elements in raw fuels to eliminate sources of environmental pollution.

VIII. PRODUCT MANUFACTURING

(I) Improving manufacturing technologies

With the vision of becoming the leader in the steel industry in Southwest China, the Company aims to improve our manufacturing capabilities and implement a strategic path of leading manufacturing technology and cost leadership based on innovation to build our core competitiveness.

During the Reporting Period, 182 manufacturing technology upgrading and transformation projects were implemented, including the upgrading and transformation of the blast furnace process in the iron works, the stability transformation of the hydraulic system in the hot-coil production line in the rolling mill and the upgrading and transformation of the ACC-controlled cooling system in the thick plate production line, with a total planned investment of RMB6,768 million. The Company invested RMB850 million in R&D, with a R&D input ratio of 3.5%, mainly for the development and trial manufacturing of new and characteristic products; a total of 148 patents were obtained, of which 58 were invention patents and 90 were utility model patents.

(II) Strengthening quality responsibilities

The Company has established a standardised quality management organisation, a sound quality management system, an effective quality assurance system and reliable quality testing technology; obtained the certificate of quality management system certification and the certificate of laboratory accreditation from the China National Accreditation Service for Conformity Assessment, achieving a 100% quality awards (certifications) maintenance rate. During the Reporting Period, the Company has maintained stable product quality, enhanced its reputation and promoted product sales.

The Company has enhanced the quality supervision and control throughout the production process and recorded no significant quality accidents. Focusing on "market demand and serving customers", The Company has provided products that have met product standards and contractual agreements to our customers, achieved a comprehensive satisfaction of 94.86 points over the product quality and the Company. In the past five years, the Company has not been punished by the quality and technical supervision departments for product quality problems and has achieved a 100% qualified rate in national product quality supervision inspections at various levels. In order to prevent counterfeiting of the products, the main measures taken include: sticking the logo, hanging the brand name, stamping the steel seal on the products, and stating "Copy is invalid" on the quality certificates, etc.

(III) Advancing the intelligent manufacturing

The year 2020 was a key year for the Company to "shift gears and speed up" intelligent manufacturing. The "3+2" Five-Year Plan for Intelligent Manufacturing was formulated to promote the transformation from "traditional manufacturing" to "digital intelligent manufacturing". During the Reporting Period, 25 "economizing on manpower and increasing efficiency" intelligent manufacturing projects were launched, such as the MES system for double high rods and the unmanned warehouse for double high rods, with a total investment of RMB449 million. The project will significantly improve management efficiency upon completion. In the future, the Company will focus on the "construction of an intelligent platform for operation and control" to improve its production and operation control capabilities and support the realisation of its goal of becoming a green and intelligent manufacturing steel enterprise in high quality with a production capacity over 10 million tonnes.

(IV) Focusing on safety production

The Company has always put safety, especially the personal safety of our staff, in the forefront position, practising the safety concept of "safety first, violation is a crime", implementing the systemization of safety management and standardisation of operations, eliminating all violations to minimise safety risks.

During the Reporting Period, the Company had 2 minor injury accidents and zero serious injuries or above. The qualified rate of occupational disease hazards detection was 98.34%, with zero primary occupational diseases; and there were zero fire accidents with direct economic losses of more than RMB5 million. The safety situation continued to improve and the safety production was stable and under control.

Around the construction of safety standardization, the Company compiled safety standardisation implementation plans and post operation guidelines for factory headquarters and workplace at different levels to promote the cultivation of safe behaviours among employees. The Company conducted various kinds of safety trainings for 9,883 person-times to enhance employees' safety skills. The Company identified 6,610 sources of hazards and achieved a 98% rectification rate of accident hidden hazards, thus realising the dual pre-control of risk prevention and identification hidden hazards. The "1+2+N" emergency response plan system was established and implemented, and 383 drills were conducted to improve the on-site emergency response capabilities of the staff.

2020 Environmental and Social Responsibilities Report (Continued)

(V) Strengthening pandemic prevention and control

In early 2020, in the face of the sudden outbreak of COVID-19 pandemic, the Company quickly set up a response mechanism and took concrete actions on five tasks: firstly, the Company continued to strengthen comprehensive investigation work to prevent the importation and spread of cases; secondly, the Company constantly strengthened the management of public areas such as canteens, bathrooms, staff dormitories and office buildings; thirdly, the Company continuously strengthened the guarantee of protective supplies; fourthly, the Company made scientific and reasonable arrangements for the return of management, technical and business personnel; fifthly, the Company continued to do a good job in publicity and public opinion guidance. Through the above measures, the Company ensured a safe and controllable working environment and achieved an orderly resumption of work and production.

Guidelines for the COVID-19 pandemic prevention and control were formed, which clarified the main units responsible for prevention and control, and the reserve of protective supplies was 2 months; designated isolation sites were set up for each unit and measures for transfer arrangements were established. An enterprise and local joint mechanism has been established with Changshou District and Economic Development Zone and Jiangnan Avenue in Changshou District to open up the medical and pandemic prevention channels of Changshou District Hospital and Jiangnan Health Center.

IX. MARKETING MANAGEMENT

By adhering to the "customer-centered" marketing philosophy, the Company continued to broaden its product sales channels and optimise its pricing mechanism, during the Reporting Period, the level and capability of customer service gradually improved, with the regional market advantages gradually emerged, and the market competitiveness further improved.

A special working group was set up for the "Sichuan-Tibet Railway Line" to increase the tracking efforts of major regional projects. The Company set quantitative indicators from order, price, payment and other aspects, to select the best customer groups; In 2020, the Company entered into direct supply agreements with companies such as Panhua Wanda Steel Sheet, China Construction Steel Structure, China Railway Baoqiao and Anhui Hongxiang to stabilise direct supply orders. A new customer visit system was established to explore the needs of end-user customers, with the proportion of end-user sales market expansion reaching 42.5%. The Company strengthened agent management and developed agent evaluation and management measures.

With the enhancement of market development of steel varieties, during the Reporting Period, the Company achieved sales of 12,000 tonnes of automotive steel, 3,500 tonnes of bridge steel and 6,900 tonnes of weathering steel plates. The Company improved its product pricing system, optimised its pricing mechanism and strictly regulated the pricing execution procedures to ensure honesty and trustworthiness to all customers. The Company improved the business management and control model and implemented the "separation of management and operation". The Company promoted the construction of informatization projects for the whole process of customer services and achieved effective improvement of business capabilities and standards.

X. COMMUNITIES AND POVERTY ALLEVIATION

As an enterprise with a history of 130 years, the Company has always been concerned about its own development while adhering to its original intention of “serving the nation with steel” and its mission of “strengthening the nation with steel”. It will not forget its origin and the favour received from the nation, and is committed to contributing back to the society.

In 2020, the final year of poverty alleviation, the Company actively participated in China Baowu’s targeted poverty alleviation projects and purchased poverty alleviation products; in accordance with the overall deployment of the Changshou District Committee and District Government on poverty alleviation, the Company established partner assistance with Tianxing Village in Jiangnan Avenue and invested to help to improve the construction of tap water pipeline facilities to ensure the safety of drinking water for residents; it also launched a volunteer donation activity targeting the aged of no family in the village.

In August 2020, Chongqing experienced the largest floods since 1981 and activated the highest level of flood control response. The situation in Shantuo Village of Jiangnan Town, Changshou District, was more serious, with more than 50 families being relocated in an emergency. In order to help the affected villagers to resume their normal lives quickly, the Youth League Committee of the Company gathered youth volunteers to form a service team together with volunteers from the Jiangnan Avenue League Working Committee of Changshou District to provide post-disaster recovery volunteer services such as roadblock clearance and crop transfer.

XI. SELF-ASSESSMENT ON PERFORMING SOCIAL RESPONSIBILITIES

During the Reporting Period, the Company continuously strengthened the concept of social responsibility and made great efforts in terms of corporate governance, employees’ rights protection, environmental protection as well as poverty alleviation and donations, which were recognized by the employees, communities and society. In 2021, the Company will continuously improve the corporate social responsibility management system and execution mechanism, ensure the concept of social responsibilities through the process. By protecting the legitimate rights and interests of investors and employees, the Company shall also treat suppliers and customers with integrity, and continuously pay attention to environmental protection and others so as to actively practice social responsibility, constantly enhance the image as a listed company.

Chongqing Iron & Steel Company Limited
19 March 2021