

Beijing Shougang Co., LTD

2019 Social Responsibility Report

22 April 2020

Preface

I Definitions

The Company, the Group, Shougang, Shougang Co.	Beijing Shougang Company Limited
The Articles of Association	The Articles of Association of the Company
Qiangang Co.	Shougang Qian'an Iron&Steel Co., Ltd. (Branch of the Company)
Jingtang Co. / Jingtang Base.	Shougang Jingtang United Iron&Steel Co., Ltd. (Holding subsidiary of the Company, holds 51%)
Cold-R Co.	Beijing Shougang Cold Rolling Co., Ltd. (Holding subsidiary of the Company, holds 70.28%)
Zhixin Co.	Shougang Zhixin Qian'an Electromagnetic Materials Co., Ltd. (Wholly-owned subsidiaries of the Company)
New-E Co.	Beijing Shougang New Energy Automobile Material Technology Co., Ltd. (Holding subsidiary of the Company, holds 47.4%)
Qian'an Conference Centre	Shougang Qian'an Conference Centre Co., Ltd. (Wholly-owned subsidiaries of the Company)
Qianshun Base	Qiangang Co, Zhixin Co., located in Qian-an, Hebei province, and Cold-R Co., located in Shunyi District, Beijing, establishing an up-stream and downstream integrate production management system and research and development system.
Reporting Period	From 1 January 2019 to 31 December 2019

II Scope of Report

This "Beijing Shougang Co., Ltd. Social Responsibility Report 2019" covers the performance of the Shougang Co. and its holding subsidiaries in 2019.

Note: This report is prepared based on the Chinese text and is prepared in both Chinese and English versions. In the event of any discrepancy between the Chinese and English versions, please subject to Chinese text.

Section I. Overview

Shougang Co. was exclusively initiated by Shougang Corporation (renamed as Shougang Group in 2017), it was established by social fundraising and was listed on the Shenzhen Stock Exchange in December 1999. The company's registered capital is RMB5.2893896 billion.

The theme of "scientific development", the main line of "accelerating the transformation of economic development mode", and the goal of "the first-class products, the first-class management, the first-class environment, the first-class benefits" have always been adhered by Shougang Co. The company also obeys the development policy that environmental protection is superior to economic benefits, makes great efforts in energy efficient utilization, energy saving and emission reduction, insists on down-to-earth, fine and demanding attitude, strives to build a digital steel enterprise, and tries to build a world-class green steel company with employees, enterprises, society and environment for common development.

Section II. Protection of Shareholders' rights

I . Corporate governance

1. Corporate governance framework

According to requirements of the Company Law, Securities Law, Guidelines for the Governance of Listed Companies and Guidelines for the Standardized Operation of Listed Companies on the Shenzhen Stock Exchange and other relevant laws, regulations, and regulatory documents, the company continues to deepen standardized operations, strengthen scientific governance, and create innovative and interactive communication channels, maintain good investor relationships, constantly improve the internal control system and the construction of a comprehensive risk management system, strictly fulfill the obligation of information disclosure, and effectively increase the quality of corporate governance operations. The company has a corporate governance structure such as general meeting of shareholders, board of directors, board of supervisors and board of management. In 2019, the company continues to improve its management system and organizational structure in accordance with market changes, operational productions and development needs. During the reporting period, the company has 5 holding subsidiaries: Shougang Jingtang United Iron & Steel Co., Ltd., Beijing Shougang Cold Rolling Co., Ltd., Shougang Zhixin Qian'an Electromagnetic Materials Co., Ltd., Beijing Shougang New Energy Automobile Material Technology Co., Ltd., and Shougang Qian'an Conference Centre Co., Ltd.

2. Independence of the company in terms of business, personnel, assets, institutions, finance, etc. relative to the controlling shareholders

The company and its controlling shareholders maintain completely independence in terms of business, personnel, assets, institutions, finance, etc. The company has a complete procurement, production, marketing and operational management system, has a complete product research and development institutions and personnel, and also has the ability of independent production and operation.

II. General meeting

In accordance with the Articles of Association and the Rules of Shareholders' General Meetings and other related regulations, the company determines the time and place for the general meeting,

and issues notice for the shareholders' general meeting in accordance with regulations. The company uses the methods of "on-site + online voting " to hold the general meeting of shareholders, to ensure that the matters submitted to the general meeting for consideration and approval are in compliance with the law and to ensure that shareholders, especially small and medium-sized shareholders can exercise their rights.

In 2019, the company held two general meetings, and adopted 17 proposals such as the 2018 Annual Board Report of Beijing Shougang Co., Ltd., Beijing Shougang Co., Ltd.'s Proposal on Amending the Articles of Association, Beijing Shougang Co., Ltd.'s Proposal on Abandoning the Right of Priority Purchase of Shares of Shougang Jingtang United Iron & Steel Co., Ltd., and the financial service agreement between Beijing Shougang Co., Ltd. and Shougang Group Finance Co., Ltd. to Conduct Financial Services.

The general meetings were held in details as follows:

Sessions	Meeting type	Percentage of investor participation	Held Date	Disclosure Date	Show Index
2018 Annual General Meeting	Annual General Meeting	87.29%	14/6/2019	15/6/2019	China Securities Journal, Securities Times, Shanghai Securities News and CNINFO (http://www.cninfo.com.cn)
2019 First Interim General Meeting	Interim General Meeting	79.71%	23/12/2019	24/12/2019	China Securities Journal, Securities Times, Shanghai Securities News and CNINFO (http://www.cninfo.com.cn)

III. Information disclosure

The company performs its information disclosure obligations in accordance with relevant laws, regulations and regulatory documents, and the relevant provisions of the Shenzhen Stock Exchange. The company establishes a normalized internal audit process for information disclosure, continuously improves the efficiency and quality of information disclosure, and ensures the truthfulness, accuracy, and completeness of information disclosure, and that there are no false records, misleading statements or major omissions. The company should disclose information to investors in a timely and fair manner through the China Securities Journal, Shanghai Securities News, Securities Times, and CNINFO. In 2019, the company disclosed 74 announcements and filed 97 documents with the Shenzhen Stock Exchange.

IV. Profit distribution

Since the establishment of the company, it has always attached great importance to the return of shareholders, and maintained the legitimate rights and interests of all shareholders, especially

small and medium-sized shareholders. According to various regulations and related requirements issued by the regulatory authorities, the company promptly revises and improves the terms of the profit distribution policy in the Articles of Association, and strictly implements the approval procedures. The standard and proportion of the company's cash dividend are clear and definite.

According to the Articles of Association: "the annual distribution of profits to shareholders depends on the lower proportion of all available profits of the parent company and the consolidated statements realized in the current year ", the company did not distribute cash profits and implement capital reserve conversion to increase share capital in 2019.

V. Communication with investors

The company has formulated Investor Relations Management System, Information Disclosure Management System and other related systems to regulate the communication with investors. During the reporting period, the company organized and held telephone conferences on the performance for the 2018, the first quarter of 2019 and the first half of 2019 to report the industry's development prospects, operation, production, and responded positively to the concerns of investors. At the same time, the company also maintains communication with investors through the interactive trading platform of the Shenzhen Stock Exchange, the reception day for investors of listed companies in Beijing, and the daily telephone hotline to answer investors' consultations and other ways to maintain communication with investors, and answers investors' questions to ensure the smooth communication channels between the company and investors. In 2019, the company had 4 investor activities such as field investigations and performance meetings.

Section III. Protection of Employee's Rights and Interests

I. The protection of employees' interests

The company strictly implements the provisions of national and local laws, regulations and normative documents, participates in social insurance in accordance with laws and regulations, and through the establishment of a perfect system, to ensure the rights and interests of employees such as labor protection, labor compensation, break and vacation; for internal retired employees, the company adjusts the basic pension of enterprise retirees with reference to Beijing Municipal Human Resources and Social Security Bureau every year to ensure the stable life of the retirees; For the purpose of the company's transformation and improvement of work efficiency, the company adheres to the people-oriented principle, makes the use of the separation and resettlement of employees, ensures that the relocated employees have stable thinking and work, realizes the harmonious development of employees and enterprises, and maintains the social harmony and stability.

The company strictly abides by the Labor Law, Labor Contract Law and other laws, regulations and normative documents, and strictly implements the national regulations and standards in terms of social security and labor rights and interests of employees. Firstly, according to the policies and regulations for the filing of labor relationships, with the labor contract signing rate of 100%, and no illegal employment; The second is to pay employee compensation in full and on time and pay social insurance in accordance with the regulations; Thirdly, strictly implements the national working hours system, and performs the approval procedures in accordance with the regulations; The last one is to strictly implement policies for special groups such as work-related injuries,

non-work-related injuries, female workers (pregnancy, childbirth, lactation) and etc.

The company strictly implements the Special Regulations on Labor Protection of Female Employees, Provisions on the Scope of Taboo Work for Female Employees and other provisions, as well as various provisions of the company's regulations on the labor protection for female employees, so as to achieve gender equality in equal pay for equal work, vocational education, technical training, promotion, participation in democratic management of enterprises and other ways. Female employees are organized to participate in female health lectures and conducted special physical examinations, with a general survey rate reached 100%, which safeguarded the health and legal rights of female employees.

II. Safety production

The company conscientiously implements the Safety Production Law, Safety Production Regulations of Hebei Province and other laws, regulations and normative documents, firmly establishes the safety concept of "safety first, life first", adheres to the construction of safety standard as the main line, construction of the "double control" mechanism as the core, essential safety management as a key point, and practices the "responsibility-driven, innovation-driven, talent-driven" concept, focuses on risk prevention and control, implements safety work from four aspects which are "strict, detailed, practical, ruthless", and fully implements the main responsibility of safety production.

For Qianshun Base, the first is to continuously optimize the essential safety management, focus on the basic management of safety, strengthen the construction of information and technology, constantly optimize the essential safety management, further promote the activity named safety standardization into teams, and accomplish the safety responsibility as "one post, one list". The second is to focus on improving quality of safety management team, establish an expert library composed of experts on energy media, hazardous chemicals, special equipment, etc., and participate in the essential effect assessments, joint base inspections, special inspection of engineering projects and other activities to enhance the breadth and depth of the overall knowledge. The third is to innovate on safety education and training, focus on the construction of safety culture leading, organize advanced enterprises to learn competitively, collect the needs of safety education and training, develop a safety education training matrix system, implement precise job training, and enhance the safety atmosphere. The fourth is to deepen the construction of security culture. It carries out family-enterprise linkage, family-friendly activities, and actively promotes the construction of a safe "home" culture for teams, so that family members can become "family supervisors". The last one is to focus on emergency rescue system, improve and strengthen emergency capacity-building. It adheres to the combination of full-time and part-time rescue, develops comprehensive emergency combat drills and assessments, test plans, and train teams.

For Jingtang Base, the first is to adhere to the work requirement of "the party and the government share the same responsibility, dual responsibility for one post, joint management, and accountability for dereliction of duty ", so that there must be responsibilities for each position, responsibilities must be quantified, and quantification must have standards, and ensure the

implementation of safety responsibilities. The second is to formulate the Implementation Plan for Promoting Essential Safety Management in 2019, adopts the method of pilot first and steady follow-up by other companies to comprehensively promote the in-depth development of essential safety management. The third is to formulate Management Measures for Emergency Response Plans for Production Safety Accidents, standardize the management of emergency plans, carry out emergency plan drills, improve the emergency handling capacity of all staff, and reduce the risk of safe production. According to the evaluation of China Association of Work Safety (CAWS), the safety standardization level of Jingtang Co.'s cold rolling department is in the leading position of the industry. The fourth is to formulate the Guidebook on the Construction of Safety Production Risk Management and Control System and the Implementation of Hidden Dangers and implementation plans to promote and improve the "dual control" system. It carries out comprehensive safety inspection for important festivals and major events such as the Spring Festival and National Day, and carries out hidden danger investigation and special rectification for all employees to ensure a stable system. The fifth is to strengthen safety training and improve the quality of safety personnel and employees' safety literacy. It performs the monthly publicity activity of safety production with the theme of "preventing risks, removing hidden dangers and curbing accidents" to help safe production.

III. Vocational training

In accordance with the overall requirements of the "13th Five-Year Plan" human resources planning, combined with the annual work focus, the training for Qianshun Base closely focuses on the key tasks of operation and production, adheres to the concept of joint development of enterprises and employees, focuses on building management capabilities, and focuses on the cultivation of "key employees", and aims at the cultivation of knowledge-based, skill-based, and innovative workforces, constantly optimizes system construction, pays attention to ability training, and implements professional development. The company focuses on standardizing the education and training of employees, improving the management mechanism, strengthening basic work, transforming single training management to the talent development function, increasing the cultivation of high-skilled talents, and delivering high-skilled talents for enterprise development. In 2019, 160 training projects were completed.

Guided by the development strategic planning, Jingtang Co. systematically plans to establish a training management system suitable for the construction of talent echelon. Around the goal of cultivating "loyal, clean and responsible" leaders, 6 sessions of leadership lectures and 6 sessions of rotation training for mid-level leaders were held, a training course for youth backbone lasting more than 2 months was held to broaden the working ideas of leaders and refine their working styles. With the goal of improving the ability of professional and technical personnel to a deeper and more refined development, strengthen the study and discussion, exchange abroad, and promote the construction of essential safety and other internal training teachers. The company focuses on the weaknesses of skilled operators, give full play to the advantages of platforms such as training bases, simulation systems and professional skill competitions. Including maintenance personnel, 1094 people attended the multi-position, multi-level skill competitions and practical rotation trainings, and 3750 people were trained for special (equipment) operations and team leader qualifications to continuously improve the ability of employees.

IV. Workers union activities

In 2019, the company conscientiously implemented all work requirements of the National Federation of Trade Unions, Beijing Federation of Trade Unions and Hebei Federation of Trade Unions, fully fulfilled the basic duties of the trade unions to safeguard the legitimate rights and interests of employees and serve the workers wholeheartedly. The company insisted on taking serving the overall as the core, taking harmony as the goal, taking workers as the foundation, and focusing on the basic level, and promoted various activities of the trade union around the company's operation and production goals and tasks.

The company promotes cultural and sports projects and enrich employees' cultural life. It successfully completed the 2019 Spring Festival Gala and the staff welcome the Spring Festival series of activities; organized and planned the "Youth • Loyal Heart" theme activities and others to commemorate the "March 8th" series of activities; successfully organized the completion of the Workers' Congress, the Staff Games, and the Staff Cultural Festival; organized a series of activities such as basketball games, football leagues, badminton leagues, table tennis leagues, chess games, billiards games, and activities for the celebration of "May Day" and "National Day" and other series of activities; participated in the "Hegang Cup" table tennis competition of the 6th National Metallurgical Workers' Game, the 4th International Great Wall Walking of Qian'an city, and the 2019 National Basketball Game; established the company calligraphy and painting association to enrich the cultural life of employees.

Section IV. Honest Operation, Protection of Suppliers' and Customers' Rights and Interests

I. Operating in good faith according to law

Qianshun Base strictly implements the job rotation management system for personnel with business disposal rights, checks risk points against business process and risk positions, formulates preventive measures and incorporates them into the system, tightens and fastens the "cage" of the system. It works with long-term cooperation units to build a clean and honest environment, extend and expand the content and methods of clean and honest education, coordinate joint training and inspection, conduct warning education activities by visiting Beijing warning education base, Jidong Branch Nanbao prison, etc., continuously enhance the awareness of integrity, build a joint prevention and control mechanism for clean and honest government risks, and achieve joint progress and win-win success cooperation with customers. Using the new mode of "Internet plus", online auctions for the sale of available materials will exceed RMB 2 billion in the whole year, to achieve the prevention and control of integrity risks and supervision first. It should effectively deal with risks such as power out of control, decision-making errors and behavioral risks, and build a "firewall" for the healthy development of enterprises. The online auction business was reported by Beijing TV's "Qingfeng Beijing" column.

Jingtang Co. carries out supervision around the operation of power and strengthens the risk prevention and control management of clean government. In combination with the changes in the supply and marketing business model, it organizes the investigation and sorting out of business

processes and risk points of integrity, formulates prevention and control measures, and plugs management loopholes; further standardizes online auction and sales business, promotes the rotation of personnel with business disposal power, coordinates the promotion of joint supervision, improves the construction of integrity risk prevention and control system, and prevents the risk of corruption; strongly promotes the construction of clean culture, and strengthens the activities of co-construction of integrity. It carries out in-depth warning education on "taking the case as a reference and promoting reform through the case", enriches the content of integrity culture, strengthens the publicity and report of integrity, and reinforces the concept of integrity practice. The company adheres to the operation in good faith according to laws. During the reporting period, there was no case that the company and its directors, supervisors and senior managers were investigated by the competent authorities, imposed by the judicial authorities or discipline inspection departments, transferred to the judicial authorities or investigated for criminal responsibility, and no commercial bribery was found.

II. Protection of suppliers' and customers' rights and interests

1. Protection of suppliers' rights and interests

The company actively does the following works: first, timely revises the Supplier Management Measures and Provisions on the Quality Management of Raw Materials and so on, improves the management system, and forms a closed-loop management of compliance procurement. Second, it strengthens the quality control of raw materials. The statistical data for purchase standards, miscellaneous deduction, high quality and good price terms and so on are carried out in the production, sales and purchase system, so as to realize automatic settlement of the document for the incoming inspection data of materials, reduce human intervention, ensure that the settlement process does not fall, and effectively ensure the purchase quality. The third is to continuously improve supplier management. It adheres to the principle of equality, win-win successes and development, and cooperates with suppliers and actively accepts the supervision of suppliers. Taking the construction of production and marketing integration as an opportunity, electronic management was carried out for 1800 suppliers, procurement business process was optimized, and improved the efficiency of contract signing by more than 80%; technology, quality and business communication platforms were built to further consolidate and enhance supply chain cooperation, especially strategic cooperation with key suppliers. The fourth is to further promote sunshine procurement. Working with long-term cooperative units to build a clean and honest culture, cooperates with the Discipline Inspection Commission and supervision department, and combines the production and marketing system, electronic platform and business process optimization projects together to promote the "sunshine procurement". It is not only to build a fair competition, integrity and standardized procurement and supply environment, to achieve standardized, transparent, efficient and controllable procurement business, to successfully prevent commercial bribery, but also to effectively reduce procurement costs. In 2019, the procurement cost decreased by 6.36%.

2. Customers' Rights and Interests

The company vigorously responds to market changes, strengthens its management awareness, coordination awareness and service awareness, and comprehensively optimizes and improves cooperation relationships. First, the company adheres to the service concept of "customer-oriented", takes the integrated construction of production and marketing as the link,

uses the technical marketing of automobile board as the starting point, takes the construction of one-stop customer service platform as the goal, promotes the construction of customer service system in a multi-pronged way, and comprehensively improves the quality of customer service. Secondly, the company promoted the work of EVI, held the Dongfeng Nissan meeting, BMW • Shougang Media Day, the 2nd “Shougang Automotive Steel Technology Forum”, Nissan’s 3rd “Shougang Day”, and the medium plate customer conference. Throughout the year, 33 EVI projects were organized and carried out, and a total of 2,228 material or parts certification opportunities were obtained. The third is to make use of the integrated service advantages of the production, sales and research team, and for key users, establish a service team composed of customer representatives, production line engineers and R&D engineers to provide professional guidance and technical services for strategic direct users. During the whole year, the service coverage rate for the engine factory of the auto plate technical service team reached 89%. In 2019, Shougang Co. won awards and honors from 17 customers, including BMW Brilliance’s “Quality Excellence Award”, Great Wall Motor’s “Cost Improvement Award” and Haier’s “Golden Magic Square Award”. The company's manufacturing and service has been continuously recognized by users.

III. Liabilities for product quality

The company fully implements quality management responsibilities and advances product quality by improving quality control capabilities, consolidating management foundation, and reducing quality losses. The company deepens the quality management concept of "consistent system", focuses on solving key quality problems and implementing measures to promote the improvement of product quality. It has established the quality inspection and tracking mechanism for weekly checking plate meetings and monthly regular meetings. During the year, the supervision and implementation of the checking plate meetings have arranged 69 key tasks, and 68 closed-loop tasks have been completed, and 26 hidden quality problems have been solved. Aiming at the quality problems exposed by the product manufacturing process and customer complaints, the gap in the quality management is inverted, the standards are clearly defined, the process is matched, the operation is standardized, and the quality management level is constantly improved. The product quality cost is 4.1% lower than the same period last year, and the handling cycle of customer quality objections under the supervision of listing is shortened by 12%. The company focuses on the "100 day quality improvement" activities. Through more than 50 quality training activities, such as product awareness, process communication, defect awareness training, customer voice transmission, quality challenge competition, the company implements the "manufacturing + service" concept, focuses on solving difficulties, creates an atmosphere to improve the quality awareness of all employees, and each process carries out a series of work on the bottlenecks restricting the quality and ability improvement of the production line, and the production rate has a year-on-year drop of 5%. The company has completed the goal of "continuously improving user satisfaction and improvement of quality management throughout the process".

Section V. Environmental Protection and Green Development

In accordance with the Clean Production Promotion Law and other laws and regulations, as well as local government regulations and regulatory documents, the company has established a perfect professional management organization and environmental protection management system, adheres to the long-term mechanism of environmental protection and green development, strictly abides

by various laws and regulations related to environmental protection, improves professional management system, job operating procedures and operating records of environmental protection facilities, and ensures the environmental protection facilities operate efficiently. During the reporting period, all the company's pollutants were discharged in compliance with the standards, with the completion rate of 100% for the total amount of pollutants and 100% for the environmental protection of pollutants. The synchronous operation rate of environmental protection equipment is 100%. The company has no major environmental protection or other major social safety problems.

I. Emissions of pollutants

The pollutants produced by the company have all organized and meet the standard emissions. For the detailed emissions in 2019, please refer to the attached table.

II. The construction and operation of pollution prevention facilities

According to the ultra-low emission standards for pollutants from the iron and steel industry in the nation and Hebei Province, the company has completed the "2019 Green Action Plan", actively adopts various new environmental protection technologies to transform environmental protection facilities, holds regular project promotion meetings and coordinates to solve existing problems.

Qiangang Co. has completed 20 environmental protection projects, becoming the first in China and the only enterprise in the steel industry that has passed the assessment and acceptance of ultra-low emission in the whole process. Through a series of measures such as improving the environmental protection management system, insisting on daily inspection and implementing problem rectification, the daily production operation and operational control of environmental protection facilities are continuously strengthened, and the environmental protection facilities and production facilities operate synchronously and stably. The company strengthens the maintenance and management of environmental protection facilities, and conducts simultaneous maintenance of main production facilities and environmental protection facilities such as desulfurization, denitrification, dust removal, wastewater treatment and so on. After self-monitoring and supervision by the environmental protection department, all kinds of pollutants can reach the standard.

Jingtang Co. has built a total of 200 waste gas treatment facilities for dust removal and desulfurization, 14 main wastewater treatment facilities, 7 solid waste treatment facilities, comprehensive coal utilization facilities, and a 0.6 million tons/year slag fine grinding cement production line, 250,000 tons/year steel-making first dust-removing ash pelletizing project. In 2019, the flue gas desulfurization and denitrification facilities were constructed simultaneously in 2#, 3# pellets as the "Three Simultaneous", and the desulfurization and denitrification facilities of 1# pellet were upgraded. The circulating fluidized bed desulfurization + medium temperature SCR denitrification process was used for sintering and pellet; The seawater desulfurization and SCR denitrification process was used for desulfurization of self-provided power plant. At present, all environmental protection facilities are operating well, and various indicators have reached the emission requirements. On February 1, 2019, all processes passed the acceptance of ultra-low emissions in Tangshan City, marking that the environmental management level of Jingtang Co. has

reached a new level and reached the domestic leading level.

The Cold-R Co. constructs annealing furnaces and gas boilers that use natural gas as fuel, and reduces waste gas pollution from the source, constructs 11 sets of waste gas treatment facilities such as oil mist purification system and acid mist purification system, and all waste gas meets the standard; The company constructs one wastewater station, through four systems including acid-containing wastewater treatment system and dilute alkali wastewater treatment system, all the wastewater are discharged after reaching the standard. In terms of noise prevention and control, low-noise equipment and vibration reduction measures are adopted. Silencers are installed at the outlets of the iron oxide powder depot; air compressors, nitrogen compressors and other equipment are installed inside of the factory, and soundproof covers are settled, and noise reduction tower is constructed at the outlet of nitrogen generators; vibration and noise reduction and sound insulation measures are used in the boiler room; three silencers are installed at the outlet to minimize noise pollution. The above environmental protection facilities are operating well and all pollutants are discharged up to the standard.

Zhixin Co. has dealt with waste gas, odor, noise control, soil pollution prevention, dust emission and other aspects. It has carried out key environmental protection transformation projects such as acid regeneration water washing tower transformation, dust collector cloth bag change to high-efficiency filters cartridge transformation and various maintenance projects. The company's existing environmental protection facilities are all in stable operation, and pollutants are discharged to the standard.

III. Construction of environmental impact assessment of projects and other environmental protection administrative permits

In order to further implement energy conservation and emission reduction, enhance the corporate environmental image, the company invested projects such as Qiangang Co. Dust-removing Environmental Management Project and Qiangang Co. Whitening Water and Exhausted Steam for Blast Furnace Slag Project, which have been registered on the registration form of construction project environmental impacts. In September 2017, the company obtained a new version of the sewage permit issued by the Tangshan Environmental Protection Bureau.

Jingtang Co. adheres to the equally importance principle of production development and environmental protection, evaluates the environmental impact assessment project strictly in accordance with the Environment Impact Assessment Act of China, constructs strictly in accordance with the EIA approval during the implementation of the project. All construction projects are supported by construction of environmental protection facilities, to meet the “Three Simultaneous” management requirements for environmental protection. In April 2019, the Reply Letter on the Opinions on the Changes of the One Step of the Second Phase of Jingtang Co. (Hebei Environmental Assessment Letter [2019]No.465) was obtained from Hebei Provincial Department of Ecology and Environment. In April 2019, the change for sewage permit was completed, and the second phase of the one-step project sewage outlet was incorporated into the standardized management.

Cold-R Co. actively responded to the Beijing Municipal Economic Information Bureau, the State Ministry of Industrial Information to carry out green manufacturing transformation and upgrading work call, carried out the construction of green factory in 2019, and was selected on the Ministry of Industry and Information of the Country's list of green factories as the fourth batch on July 17, 2019, which improved the company's green production visibility, established a good social image. Zhixin Co. has no circumstances on construction project environmental impact assessment and other environmental protection administrative license in 2019.

IV. Emergency plans for environmental emergencies

In accordance with the Environmental Protection Law of the People's Republic of China and other laws and regulations and normative documents, Qiangang Co. has formulated the Emergency Plan for Environmental Emergencies. The plan focuses on strengthening the daily management and safety prevention of production, strictly prevents all kinds of sudden environmental events, regulates and strengthens the abilities to deal with environmental emergencies, focuses on preventing the occurrence of sudden environmental events, gradually improves the mechanism of early warning, disposal and rehabilitation of environmental emergencies, and establishes the company's emergency disposal system, which would be strong, orderly, efficient, unified and coordinated, for emergency environmental emergencies. On this basis, Qiangang Co. also formulated two special plans, one is Sudden Environmental Event Emergency Plan Special for Atmospheric, and the other is Sudden Environmental Event Emergency Plan Special for Water, to further improve the air pollution and water pollution emergency response capacities.

According to the requirements of the Emergency Treatment Plan for Environmental Emergencies (Third Edition), Jingtang Co. identifies gas storage tanks, pipelines and benzene tanks, acid storage tanks, liquid ammonia storage tanks and other dangerous chemicals and toxic and harmful substances production, storage areas as dangerous target for emergency rescue, implements 11 emergency drills including wastewater over the standard, waste acid leakage, waste oil leakage, radioactive source loss and so on, ensures effective implementation of rescue under emergency, in accordance with the requirements of the Plan, and improves the prevention and treatment skills of sudden environmental pollution events.

Cold-R Co., in accordance with the Emergency Plan for Environmental Emergencies requirements, organizes to carry out planning exercises in acid rolling, heat treatment work area and public auxiliary areas, timely rectifies when found problems, enhances the company's emergency response capacity of environmental emergencies.

Zhixin Co., in accordance with the Emergency Plan for Environmental Emergencies, organizes each unit to carry out emergency drills of environmental emergencies, comprehensive coverage of water, gas, sound, slag, radiation and other projects.

V. Environmental self-monitoring program

In accordance with the relevant provisions of the National Key Monitoring Enterprises Self-Monitoring and Information Disclosure Measures (Trial) and National Key Monitoring

Enterprises Pollution Source Supervision and Information Disclosure Measures (Trial) and other relevant regulations, Qiangang Co. establishes and improves the pollution source monitoring and information disclosure system, formulates the Pollutant Emission Monitoring Plan 2019, and implements it strictly. Qiangang Co. organizes and implements self-monitoring activities 1288 times in the whole year, covering all pollution factors such as wastewater and waste gas. The monitoring results showed that 100% of the pollutants are up to the standard.

The environmental monitoring system of Jingtang Co. consists of two parts: automatic monitoring and manual monitoring. The manual monitoring system delegates the monitoring activities to qualified third-party testing agencies, and regularly conducts environmental monitoring on the waste gas, wastewater, noise and radioactive sources in the factory according to the monitoring plan. Monitoring data and reports are formed, and all pollutants are discharged up to standard throughout the year.

According to the requirements of the Beijing Municipal Bureau of Environmental Protection's "notice on supervision and assessment of total emission reduction monitoring system of main pollutants", the Cold-R Co. supervises and tests each discharge point on a daily, monthly, and quarterly basis. In 2019, all emission indicators of pollution sources of the company reach the standard.

According to the requirements of relevant national regulations, Zhixin Co. has formulated the 2019 Self-Monitoring Plan, the company entrusts qualified third-party testing agencies to carry out environmental monitoring monthly and quarterly in accordance with the monitoring plan, and all pollutants are discharged up to standard throughout the year.

VI. Other environmental information that should be disclosed

On the basis of adhering to the environmental protection work, Qiangang Co., Jingtang Co., Cold-R Co., and Zhixin Co. use the national key monitoring enterprises' self-monitoring information disclosure platform, website of government environmental protection department and self-established information disclosure platform, to publicize and display the environmental protection projects, operation of environmental protection facilities, names and emissions of major pollution sources, monitoring methods, monitoring indicator names, solid waste comprehensive utilization, etc. and actively accepts social supervision.

VII. Other environmental related information

In order to develop circular economy and low-carbon economy, build resource-saving, environment-friendly and low-carbon oriented company, and also achieve a good and rapid development of the company, Shougang Co. launched the preparation of environmental responsibility report at the end of 2016. The scope of the environmental responsibility report includes Qiangang Co., Jingtang Co., Cold-R Co., and other subsidiaries. In April 2019, the 2018 Environmental Responsibility Report of Beijing Shougang Co., Ltd. was released on the website of Shougang Co. (<http://www.sggf.com.cn>).

Section VI. Public Relations and Social Welfare

Based on enterprise development, the company actively repays the society, carries forward the

volunteer spirit of "dedication, friendship, mutual assistance, and progress", sincerely fulfills its social support responsibilities, and helps to win the battle against poverty.

I. Volunteer services

The Youth League Committee enriches the framework of "Team Organization + Volunteer Service Team" and creates a recognized volunteer service team. The first is to actively practice the spirit of volunteers, select outstanding young people to participate in "The Belt and The Road" Summit, "Beijing World Expo", "Chairman Mao's Memorial" and other major national activities and volunteer service activities in important places, with the highest standards and best services, it wins recognition. The cumulative service exceeds 540 hours. The second is to carry out the theme of "Green Environment, Youth First" in 2019. Focusing on the task of "urgent, difficult and important" regional greening and beautification, the company's young volunteers carried out 4 times of voluntary tree planting activities, with more than 300 participants in total, more than 11,000 square meters of tree planting area and more than 63,000 seedlings were planted. The third is to organize Lei Feng month series activities of "gathering youth power to help the development of enterprise", starting from serving enterprises, employees and the the society, and centering on the themes of civilized production, caring service and improving the environment, the company organized and carried out 9 voluntary service activities such as "Volunteer into the Community, Warm People's Hearts" and "Civilized 2019" and so on, there are more than 300 youths participated in the volunteer service and more than 810 hours of volunteering work are used, which actively demonstrated the responsibility and volunteerism of the company's youth.

II. Donations with love

In 2019, on the basis of providing cool in summer, warm in winter and care in major festivals, the company strictly implemented the Difficult Relief Management System, categorized policies and aided the targeted groups, and effectively solved the practical problems for employees in difficulties. The company raised and distributed RMB 855,700.00 by organizing the donation activity of "Offering Love".

To implement general secretary Xi Jinping's spirit of important instructions for retired soldiers, and actively carry out the comprehensive strengthening of the construction of service guarantee system for retired soldiers and improve the level of support services. Jingtang Co. donated RMB 300,000.00 to the Foundation of Caring Retired Soldiers in Caofeidian District, Tangshan, Hebei Province, earnestly helped and rescued the retired soldiers who have special difficulties, which reflected the corporate responsibility.

III. Energy saving and emission reduction

Qiangang Co. actively responds to the national energy-saving and emission-reduction policy and uses the residual heat of blast furnace slag flushing water to provide heating for local schools, hospitals and communities with an area of more than 1.01 million square meters. Replacing the original coal-fired boiler for heating, which can reduce coal combustion by more than 226,000 tons per year, save energy of 31,510 tons of standard coal, reduce CO₂ emissions by 78,568 tons, and reduce SO₂ emissions by 477 tons.

IV. Carry out work of targeted poverty alleviation

1. Poverty alleviation in 2019

The company worked together with the recipient area of Yangyuan County, Zhangjiakou, Hebei Province, and did jobs in the targeted poverty alleviation. First, according to the requirements of the relevant notifications from Beijing Municipality, the company would first consider purchasing high-quality agricultural and sideline products in poverty-stricken area for distributing welfare and prizes to its employees. According to the list of Beijing Commodity Poverty Alleviation Platform, the company purchased high-quality agricultural and sideline products, such as oatmeal, organic green bean, konjac flour, Yunyang sweet potato flour, etc., with poverty alleviation expenditure of RMB 63,900.00. Secondly, the company organized the donation activity of "warm winter clothes", the majority of party members and league members actively donated more than 400 pieces of cotton clothes, down jackets, etc. Thirdly, the company gave rice, flour, oil and other products that worth RMB 24,900.00 and consolation money of RMB 15,000.00 to poor families, elderly people of no family, and party members who are in need.

2. Plan for poverty alleviation in 2020

2020 is the year to win the battle for poverty alleviation, and the company will continue to do the work for targeted poverty alleviation in targeted areas in accordance with the unified arrangements of Beijing Municipality and the higher party committees. One is to accurately grasp the coincidence of local specialty agricultural and sideline products with the needs of employees; the second is to give priority to the purchase of products for employee benefits and prizes according to the product information in Beijing Commodity Poverty Alleviation Platform; the third is to publicize tourism resources of the aided areas, and encourage company employees to travel to the aided areas for tourism consumption, and promote industrial development; the last one is to organize targeted donations and poverty alleviation donations. The company actively coordinates with the Beijing Charity Foundation, and through the "Offering Love" activity, to achieve charitable donations for the elderly, students, the disabled, the sick, and the poor.

Conclusion

2020 is the year of building a moderately prosperous society in all respects and the end of the "13th Five-Year Plan". It is also the year of planning for the "14th Five-Year Plan", and the first year of Shougang's new century. Standing at a new starting point and starting a new journey, there is a long way to go. Hence, the company must stick to its original aspiration and make great efforts.

Shougang Co. will adhere to the concept of "people-oriented, honest operation, efficient development, mutual benefit and win-win, dedication to the society", and always obey to walking with the times, customers, shareholders and employees, and strive to build a new generation of metallurgical demonstration enterprise of "circular economy, energy saving and environmental protection, clean and high efficiency", and attempt to maximize the interests of all parties in business activities, and take it from the society, dedicate it to the society, actively fulfill social responsibilities and help build a harmonious society.

Shougang Co. 2019 Annual Pollutant Emission

Name of the company or subsidiary	Names of major pollutants and characteristic contaminants	Number of drains	Distribution of emission drains	Emission concentration	Implemented pollutant emission standards	Total emissions (tons)	Total approved emissions (tons)
Qiangang Co.	COD (Chemical Oxygen Demand)	1	The company total wastewater discharge port.	15-30mg/L	50mg/L	96.4	103
Qiangang Co.	Ammonia Nitrogen	1	The company total wastewater discharge port.	0.5-1mg/L	5mg/L	6.9	7.5
Qiangang Co. (Including Zhixin Co.)	Sulfur Dioxide	29	Hot blast stove: 3 discharge ports; Heating furnace of hot rolling mill: 5 discharge ports; Boiler power generation: 2 discharge ports; Cycling power generation: 3 discharge ports; Annealing furnace of cold rolling mill: 13 discharge ports; Steelmaking kiln roof: 3 discharge ports.	1-20mg/m3	Hot blast stove, heating furnace of hot rolling mill: 50mg/m3, Boiler power generation, cycling power generation, annealing furnace of cold rolling mill, Steelmaking kiln roof:35mg/m3	829.3	965

Qiangang Co. (Including Zhixin Co.)	Nitrogen Oxides	29	Hot blast stove: 3 discharge ports; Heating furnace of hot rolling mill: 5 discharge ports; Boiler power generation: 2 discharge ports; Cycling power generation: 3 discharge ports; Annealing furnace of cold rolling mill: 13 discharge ports; Steelmaking kiln roof: 3 discharge ports.	5-40mg/m3	50mg/m3	1821.7	2130
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<p>Qiangang Co. (Including Zhixin Co.)</p>	<p>Particulate Matter</p>	<p>88</p>	<p>Boiler power generation: 2 discharge ports; Cycling power generation: 3 discharge ports; Dust removal of finishing mill: 2 discharge ports; Tension leveler of 1# cold rolling mill, dust removal of scale removal of welding machine: 1 discharge port; Dust removal of shot blasting machine in Annealing and Pickling Line of 2# cold rolling plant: 2 discharge ports; Dust removal of Flattening and Coating Line of 2# cold rolling plant: 2 discharge ports; Dust removal of finishing line of 2# cold rolling mill: 2 discharge ports; Dust removal of iron powder warehouse at acid regeneration station: 2 discharge ports; Dust removal of scrap cutting: 2 discharge ports; Hot blast stove: 3 discharge ports; Annealing furnace of cold rolling mill: 13 discharge ports; Dust removal of Slab finishing (electric dust removal): 1 discharge port; Primary dedusting of converter of No.1 Steelmaking Plant: 4 discharge ports; Secondary dedusting of converter of No.1 Steelmaking Plant: 6 discharge ports; Dry dedusting of No.2 Steelmaking Plant: 1 discharge port.</p>	<p>1-3mg/m3</p>	<p>5mg/m3</p>	<p>1244.1</p>	<p>2050</p>
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Jingtang Co.	Sulfur Dioxide	42	Coke oven chimney, coke pushing, coke outlet, CDQ outlet, outlet of baghouse system after desulphurization of sintering machine, outlet of hot blast stove of no.1 and no.2 bf, lime kiln roasting, heat treatment furnace, 2 × 300mw generating units chimney exit, gas boiler chimney exit.	Coke oven chimney :<20 mg/m3; Coke pushing :<30 mg/m3、Coke outlet :<70 mg/m3; CDQ outlet :<80 mg/m3; Sintering desulfurization:<35 mg/m3; Lime kiln roasting: < 50 mg/m3; Hot blast stove :<50 mg/m3; Heat treatment furnace:<50 mg/m3; Coal-fired and gas-fired generating units:<20 mg/m3; Gas boiler:<30 mg/m3	Coke oven chimney:30 mg/m3;Coke pushing: 30 mg/m3、Coke outlet:70 mg/m3; CDQ outlet: 80 mg/m3; Sintering desulfurization: 180 mg/m3; Hot blast stove: 80mg/m3; Lime kiln roasting: 80 mg/m3; Heat treatment furnace: 150 mg/m3; Coal-fired and gas-fired generating units: 35mg/m3; Gas boiler: 50 mg/m3	1020	5209.5
Jingtang Co.	Nitrogen Oxides	38	Coke oven chimney, outlet of baghouse system after desulphurization of sintering machine, outlet of hot blast stove of no.1 and no.2 bf, lime kiln roasting, heat treatment furnace, 2 × 300mw generating units chimney exit, gas boiler chimney exit.	Coke oven chimney :<100 mg/m3; Sintering desulfurization :<50mg/m3; Outlet of hot blast stove of No.1 and No.2 BF :<150mg/m3; Continuous annealing line of cold rolling mill and hot rolling mill、annealing furnace of HDG line :<150 mg/m3; Lime kiln roasting: < 200 mg/m3; Coal-fired and gas-fired generating units :<50 mg/m3; Gas boiler :<150 mg/m3	Coke oven chimney :130mg/m3; Sintering desulfurization :300 mg/m3; Outlet of hot blast stove of No.1 and No.2 BF、heating furnace of hot rolling mill、continuous annealing line、annealing furnace of HDG line、Roasting device of waste acid regeneration station:300mg/m3; Lime kiln roasting: 400 mg/m3; Coal-fired and gas-fired generating units:50 mg/m3; Gas boiler:150 mg/m3	4365	11666.5

Jingtang Co.	Particulate Matter	176	<p>Coke pushing、coke outlet, CDQ outlet, coke oven chimney, dust removal outlet of stock ground transfer station, dust removal outlet of sintering machine batching, crushing, finished products screening, dust removal outlet of sintering machine tail and ring cooler, dust removal outlet of primary flue gas of bf tapping field, secondary flue gas of bf tapping field、dust removal outlet below the blast furnace bunker, dust removal outlet of cast iron machine, dust removal outlet of blast furnace pulverized coal production, dust removal outlet of hot blast stove of bf, steelmaking electric dust removal、steelmaking secondary dedusting outlet, dust removal outlet of flame descaling, lime kiln top dust collector outlet, heat treatment furnace、dust removal of finishing mill, dust removal exit of tension leveler and welder of PLTCM, dust removal exit of iron powder warehouse, 2 × 300mw generating units chimney exit, gas boiler chimney exit.</p>	<p>Coke pushing、Coke outlet、CDQ outlet、Coke oven chimney:<10 mg/m3; The transfer point of stock ground:<10 mg/m3; Sintering machine batching, crushing, finished products screening、sintering machine tail and ring cooler:<10 mg/m3; primary flue gas and Secondary flue gas of BF tapping field:<10 mg/m3; Below the blast furnace bunker、cast iron machine、blast furnace pulverized coal production、hot blast stove of BF:<10mg/m3; Steelmaking electric dust removal: <20mg/m3; Steelmaking secondary dedusting、flame descaling、Lime kiln top dust collector:<10mg/m3; Heat treatment furnace、finishing mill, tension leveler and welder of PLTCM:<10 mg/m3; Iron powder warehouse:<10mg/m3; Coal-fired and gas-fired generating units:<10 mg/m3; Gas boiler:<20 mg/m3</p>	<p>Coke pushing、Coke outlet、CDQ outlet、Coke oven chimney:10 mg/m3; The transfer point of stock ground:20mg/m3; Sintering machine batching, crushing, finished products screening、sintering machine tail and ring cooler :20mg/m3; Primary flue gas and Secondary flue gas of BF tapping field:15 mg/m3; Below the blast furnace bunker、cast iron machine、blast furnace pulverized coal production、 : 10mg/m3; Hot blast stove of BF:15mg/m3; Steelmaking electric dust removal :50 mg/m3; Steelmaking secondary dedusting :15mg/m3; Dust removal of Lime kiln top and flame descaling: 30mg/m3; Heat treatment furnace:15mg/m3; Finishing mill :20mg/m3; Tension leveler and welder of PLTCM :20mg/m3; Iron powder warehouse: 30mg/m3; Coal-fired and gas-fired generating units: 10mg/m3; Gas boiler: 20mg/m3</p>	4746	6687.4
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Cold-R Co.	COD	1	Wastewater stations	10-28 mg/m3	30mg/m3	5.817	67.5
Cold-R Co.	Ammonia Nitrogen	1	Wastewater stations	0.1-1 mg/m3	1.5(2.5) mg/m3	0.5044	3.937
Cold-R Co.	Sulfur Dioxide	8	Continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line, roaster of acid regeneration station, hydrogen production generator, 1# boiler room, 2# boiler room, 3# boiler room.	3 mg/m3	Continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line, Roaster of acid regeneration station, Hydrogen production generator:20 mg/m3; 1# boiler room, 2# boiler room, 3# boiler room:10 mg/m3	4.7186	18
Cold-R Co.	Nitrogen oxides	8	Continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line, roaster of acid regeneration station, hydrogen production generator, 1# boiler room, 2# boiler room, 3# boiler room.	Continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line:25-80 mg/m3; Roaster of acid regeneration station :20-65 mg/m3; 2# boiler room :20-40 mg/m3; 1# boiler room, Hydrogen production generator, 3# boiler room :20-65 mg/m3	Continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line, Roaster of acid regeneration station, Hydrogen production generator :100 mg/m3; 1# boiler room, 2# boiler room, 3# boiler room :80 mg/m3	50.8205	148.184

Cold-R Co.	Particulate matter	10	Exhaust gas of tension leveler, continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line, roaster of acid regeneration station, hydrogen production generator, iron powder warehouse at acid regeneration station, 1# boiler room, 2# boiler room, 3# boiler room.	Exhaust gas of tension leveler :0.5-4 mg/m ³ ; continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line, Roaster of acid regeneration station, Hydrogen production generator :2-8 mg/m ³ ; iron powder warehouse at acid regeneration station:0.5-5 mg/m ³ ; 1# boiler room, 2# boiler room, 3# boiler room:2-4 mg/m ³	Exhaust gas of tension leveler, continuous annealing furnace, annealing furnace of 1# HDG line, annealing furnace of 2# HDG line, Roaster of acid regeneration station, Hydrogen production generator, iron powder warehouse at acid regeneration station :10 mg/m ³ ; 1# boiler room, 2# boiler room, 3# boiler room :5 mg/m ³	9.3649	18.75
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