



China Hongqiao Group Limited
中國宏橋集團有限公司

(Incorporated under the laws of the Cayman Islands with limited liability)
Stock Code : 1378



ENVIRONMENTAL, SOCIAL **2019**
AND GOVERNANCE REPORT

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ABOUT THIS REPORT

This report is the Environmental, Social and Governance Report (“**ESG Report**” or the “**Report**”) of China Hongqiao Group Limited (the “**Company**”) and its subsidiaries (collectively referred to as “**China Hongqiao**”, the “**Group**” or “**We**”), which provides detailed information on the various works of China Hongqiao in full implementation of the concept of sustainable development and fulfillment of corporate social responsibility in 2019. For details of corporate governance, please refer to the Corporate Governance Report set out in the 2019 Annual Report of the Group.

REPORTING SCOPE

The Report focuses on the environmental and social performance of the core business segments of China Hongqiao in the People’s Republic of China (the “**PRC**”) during the period from 1 January 2019 to 31 December 2019 (the “**Year**”). The key performance indicators disclosed in this Report covers the Company and all its subsidiaries (data set out in Appendix I), in which all key performance indicators related to the environmental area are in compliance with the principle of “comply or explain”.

REPORTING STANDARD

The Report has been prepared in accordance with the Environmental, Social and Governance Reporting Guide under Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the “**Stock Exchange**”). Unless otherwise specified, currency units in this Report are denominated in Renminbi.

INFORMATION AND FEEDBACK

For detailed information about the work of the Group in environmental protection, social responsibility and corporate governance, please refer to our official website (www.hongqiaochina.com). The Group values your opinions on the Report. If you have any comments or suggestions, please feel free to email us via zghqesg@hongqiaochina.com.



CHAIRMAN'S STATEMENT

Nowadays, the issue of climate change is raising alarm across the globe, and as technology develops rapidly, the public is increasingly concerned about environmental protection and the overall interest of the society. As one of the world's largest aluminum producers, China Hongqiao has consistently followed the direction and pace of the Country's development and is committed to creating a greener, more environment-friendly and energy conserving aluminum industry chain, pay more attention to the community and undertake more environmental and social responsibility while creating greater value for its shareholders. The Group adheres to the principle of "Taken from society, Give back to society" and manages its business in a reliable and stable manner while playing a leading role and acting as an incubator in driving the high-quality, highly efficient and sustainable development of the aluminum industry. Through this ESG Report, China Hongqiao wishes to demonstrate its belief, commitment and efforts to undertake social responsibility to the public.



Zhang Bo, Chairman

During the Year, the Group continued to implement its business model of "Integration of Aluminum and Electricity", "Integration of Upstream and Downstream Businesses" and "Global Integration", and strived to accelerate the industrial cluster development and to optimise its cost structure and economies of scale. It further increased its input in environmental protection and strived to advance the sustainability of the aluminum industry through significantly increasing the proportion of green and low-carbon production. In addition, the Group also invested substantially in technological innovation and actively carried out in-depth cooperation with the University of Chinese Academy of Sciences in areas such as talent cultivation, innovative technology development, industrial services and international capacity cooperation.

The Group has been pursuing optimisation of its energy structure and give impetus to the innovative development of green aluminum. During the Year, the Group's green aluminium innovation industrial park commenced construction in Yunnan Province. The Group will fully bank on the abundant clean hydropower of Yunnan and at the same time actively utilise photovoltaic power, in an effort to replace traditional energy with clean energies of hydropower and photovoltaic power so as to reduce the consumption of coal and carbon emission, increase the proportion of clean energy, achieve the goal of adjusting energy structure and make greater contribution to winning the "Blue Sky Defence War". Meanwhile, we shall also strengthen the recycling and utilisation of secondary aluminum and strive to establish the largest industrial base for recycling secondary aluminum in China. Currently, after completion of the super-low emission reform in primary aluminum production, the Group's emissions in sulphur dioxide, hydrogen fluoride and particulates are better than national emission standards and its various energy consumption and emission indicators have also reached world leading standard, and thus realising comprehensive super-low emission.



Furthermore, in order to promote the common development of the industry and achieve green development, the Group actively participated in the drafting and formulation of the Assessment Specification for Green Aluminum Plants (《鋁行業綠色工廠評價規範》) with the hope of guiding the creation of green production plants among its counterparts and promoting green transformation and upgrade of the industry. For the purpose of promoting the high-quality, highly efficient and sustainable development of the aluminum industry in China, the Group and Shandong Innovation Group (山東創新集團) jointly hosted the 2019 International Aluminum Industrial Chain Development Summit, which provided an equal, open and mutually beneficial exchange and cooperation platform for more than 200 companies from more than 20 countries and regions around the world, so as to share resources, development and cooperation achievements and seek win-win cooperation with counterparts

China Hongqiao always cares for the needs of the community and actively participates in social welfare activities to give back to society. As students are the driving force of our future, the Group sees helping students with financial needs as a key mission. The Group carried out large-scale charity activities in Wenshan Prefecture, Yunnan and established the Weiqiao Rainbow Home (魏橋彩虹之家), which provides a caring and loving environment to meet the living and education needs of the left-behind children in the local poverty areas. We will continue to expand the coverage of this project to the Yanshan County. During the Year, the Group established 20 poverty relief and education charity teams, helped over 50 needy students from the community and 22 students from families of our employees with financial needs to complete their education.

The Group adheres to the people-oriented management principle and attaches great importance to employees' development. We provide various types of pre-employment and in service trainings to enhance the theoretical knowledge and practical operation standard of our employees and provide opportunities for them to give full play to their personal value. In addition, in order to strengthen the sense of belonging, the Group endeavours to create a harmonious and healthy working environment and promote the physical and mental development of employees through organising cultural and recreational activities, which also reinforced team spirit among employees.

Looking ahead, we shall continue adhering to the “innovative, harmonious, green, open and sharing development” philosophy, undertaking corporate social responsibility, responding to relevant national policies, facilitating sustainable economic, social and environmental development and acting as a role model among its peers.

Zhang Bo

Chairman of the Board

6 July 2020





ABOUT CHINA HONGQIAO

CORPORATE PROFILE

The Company was incorporated in the Cayman Islands, with shares of which listed on the Main Board of the Stock Exchange in 2011, principally engaged in the manufacturing and sales of molten aluminum alloy, aluminum alloy ingots, aluminum busbars, aluminum alloy processing products and alumina products as a global leading aluminum product manufacturer. After years of hard work, the Group has basically formed the operation pattern of the whole upstream and downstream industrial chain of bauxite mining, alumina, aluminum products, deep processing and sales of aluminum products, and achieved remarkable economies of scale.

During the Year, China Hongqiao has built nine production bases in Zouping, Weiqiao, Bincheng district, Huimin, Yangxin, Beihai, Zhanhua, Boxing and Indonesia, with an annual operation capacity of 6.459 million tonnes of aluminum products. In 2019, the Group's total output of aluminum products reached approximately 5.644 million tonnes, and the output of aluminum alloy processing products reached approximately 630,000 tonnes.

Downstream customers of China Hongqiao's aluminum alloy include CITIC Dicastal, the world's largest aluminum wheel manufacturer; Bohai Piston, the largest piston manufacturer in Asia; Shandong Innovation Group, the largest aluminum alloy manufacturer in the PRC; BAIC Group and other renowned domestic and overseas enterprises. Intensive processed aluminum products are well-recognized by more than 100 customers such as Ball Corporation, CPMC, ORG Packaging, Shengxing Group, Pacific Can, United Can, Baosteel Packaging. In recent years, the intensive processing sector has undergone rapid development. Major products such as cans and lids materials, aluminum foil billets and CTP substrate materials have been successfully developed and put on the market in large quantities. Product quality has reached the advanced level in the PRC.



MANAGEMENT PHILOSOPHY

China Hongqiao upholds its core value of “serving the Country and benefiting the people”, and takes it as its driving force and mission to facilitate economic development, provide job opportunities, increase income for farmers and build a harmonious society, in a bid to contribute to the local economic and social development. Meanwhile, China Hongqiao responds positively to the PRC’s strategic planning of “The Belt and Road Initiative” by promoting international energy production cooperation in the Well Harvest Winning Alumina Project, which has commenced production in Indonesia and the joint venture bauxite project in Guinea. This not only demonstrates the influence of the PRC’s enterprises in the global market, but also boosts the local economic development and the construction of infrastructure, which are highly praised by the local government and residents.

With an aim to establish a “resource-saving and environmentally-friendly” enterprise, China Hongqiao has made every effort to achieve sustainable development by setting up an environmentally-friendly, green and efficient production model. In recent years, China Hongqiao has achieved remarkable results in environmental protection by promoting the transformation of environmental protection facilities, eliminating obsolete production capacity, developing and introducing advanced production equipment, and has commenced standardized, scientific, informatized and professional management in its operation.

ESG RESPONSIBILITY MANAGEMENT

STAKEHOLDER ENGAGEMENT

The Group deeply understands the close relationship between stakeholders and the business development of the Group. The preparation of the Report, with the participation of different stakeholders, has prompted us to be more informed about the Group’s current management on the environmental and social levels. The information we collected is both a summary of relevant environmental and social work performed by the Group during the Year and the basis of formulating our strategies for short-term and long-term sustainable development.



In order to understand the stakeholders' opinions and demands, the Group communicated with them through various channels so as to review and enhance our performance in environmental, social and corporate governance and meet their reasonable demands.

Stakeholders	Expectations and Requirements	Communication and Response Methods
Government and regulatory authorities	<ul style="list-style-type: none"> • In compliance with the national policies and laws and regulations • Promotion of the local economic development • Creation of job opportunities • Tax payment on time and in full • Production safety 	<ul style="list-style-type: none"> • Regular submission of information • Regular communication with regulatory authorities • Special report • Inspection and supervision
Shareholders	<ul style="list-style-type: none"> • Investment returns • Operation in compliance with laws and regulations • Increase of company value • Transparency of information and effectiveness of communication 	<ul style="list-style-type: none"> • General meeting • Announcement by the Company • E-mail, telephone and website of the Company • Special report • On-site inspection • Annual investor conference
Partners	<ul style="list-style-type: none"> • Integrity management • Fair competition • Fulfillment of contracts in compliance with laws • Mutual benefit and win-win cooperation 	<ul style="list-style-type: none"> • Review and assessment meeting • Business communication • Communication and seminars • Discussion of cooperation
Customers	<ul style="list-style-type: none"> • Outstanding products and services • Health and safety • Fulfillment of contracts in compliance with laws • Integrity management 	<ul style="list-style-type: none"> • Customer service center and hotline • Customer opinion survey • Customer communication meeting • Social media platforms • Visits • Home visits

Stakeholders	Expectations and Requirements	Communication and Response Methods
Environment	<ul style="list-style-type: none"> Fulfillment of emission standards 	<ul style="list-style-type: none"> Communication with local environmental protection department
	<ul style="list-style-type: none"> Energy conservation and emission reduction 	<ul style="list-style-type: none"> Communication with local residents
	<ul style="list-style-type: none"> Efficient use of water resources 	<ul style="list-style-type: none"> Investigation and inspection
	<ul style="list-style-type: none"> Ecological protection 	<ul style="list-style-type: none"> Real-time online monitory platforms
Industry	<ul style="list-style-type: none"> Setting up industry standards 	<ul style="list-style-type: none"> Communication with local labor departments
	<ul style="list-style-type: none"> Promotion of industry development 	<ul style="list-style-type: none"> Participation in industry forums
		<ul style="list-style-type: none"> Visits and inspections with industry peers
Employees	<ul style="list-style-type: none"> Safeguarding rights and interests 	<ul style="list-style-type: none"> Internal publication and intranet of the Company
	<ul style="list-style-type: none"> Occupational health 	<ul style="list-style-type: none"> Employee representatives meeting
	<ul style="list-style-type: none"> Remuneration and benefits 	<ul style="list-style-type: none"> Democratic forums
	<ul style="list-style-type: none"> Career development 	<ul style="list-style-type: none"> Employees mailbox
	<ul style="list-style-type: none"> Employee caring 	<ul style="list-style-type: none"> Employee meetings
		<ul style="list-style-type: none"> Training and workshop Vocational trainings in collaboration with institutions
The community and the public	<ul style="list-style-type: none"> Improvement of community environment 	<ul style="list-style-type: none"> Communication with the community
	<ul style="list-style-type: none"> Participation in charitable activities 	<ul style="list-style-type: none"> Website of the Company
	<ul style="list-style-type: none"> Openness and transparency of information 	<ul style="list-style-type: none"> Announcement by the Company
		<ul style="list-style-type: none"> Interviews with media Social media platforms



MATERIALITY ASSESSMENT

In preparing the Report, China Hongqiao has entrusted an independent third-party consultant to conduct a materiality assessment in a fair and equal manner. The materiality assessment is implemented in three phases:

- (i) To identify 30 potentially material issues that may affect the Group’s business or stakeholders at environmental, social and governance levels based on relevant national and local standards and policies, industrial features and the Group’s own development;
- (ii) To invite internal and external stakeholders (including employees, management, directors, customers, suppliers and the community) to complete online questionnaires so as to collect and examine their awareness of each of the issues; and
- (iii) To analyze 483 eligible questionnaires and form a two-dimensional matrix of “Importance to the Group’s Business” and “Importance to Stakeholders” to determine the priorities for potential material issues.

Below is the materiality matrix analyzed based on the results of the questionnaires.



Environment and Resources	Employment and Labor Practices	Operating Practices	Community Investment
1. Environmental compliance	15. Employment compliance	22. Operational compliance	35. Public charity
2. Exhaust management	16. Remuneration and benefits	23. Managing environmental risks of supply chain	36. Promotion on social development
3. Wastewater management	17. Working hours and holiday entitlement	24. Managing social risks of supply chain	37. Poverty alleviation
4. Noise management	18. Diversity and equal opportunities of staff	25. Procurement practices	
5. Greenhouse gas emissions	19. Occupational health and safety	26. Quality management	
6. Waste management	20. Employee training and development	27. Customers' health and safety	
7. Energy use	21. Prevention of child labor and forced labor	28. Responsible marketing and promotion	
8. Use of water resources		29. Customer services management	
9. Green energy projects		30. Protection of intellectual property	
10. Use of raw and packaging materials		31. Research and development	
11. Soil pollution management		32. Information safety	
12. Ecological protection		33. Customers' privacy protection	
13. Responding to climate change		34. Anti-corruption	
14. Prevention and handling of environmental incidents			




By analyzing the results of questionnaires, the Group identified 11 material topics which are disclosed in detail in the Report.

Aspects	Material Topics	Corresponding Sections
Environment and resources	1. Environmental compliance	Promoting Green Production
	2. Exhaust management	Prevention and Control of Pollution
	3. Waste water management	Prevention and Control of Pollution
	8. Use of water resources	Green Office
	12. Ecological protection	Prevention and Control of Pollution
	14. Prevention and handling of environmental incidents	Prevention and Control of Pollution
Employment and labor practices	15. Employment compliance	Recruiting Talents
	19. Occupational health and safety	Health and Safety
	21. Prevention of child labor and forced labor	Recruiting Talents
Operating practices	22. Operational compliance	Supply Chain Management
	26. Quality management	Quality Management and Innovation Research and Development

PROMOTING GREEN PRODUCTION

In recent years, China has attached great importance to the concept of ecological civilization, comprehensively strengthened the protection on ecological environment, promoted prevention and control of pollution, and increased its construction efforts on environmental protection year by year to deepen the ecological protection policies. By always working hard to adhere to the path of green development, as the abiding theme in electrolytic aluminum industry, China Hongqiao actively increased investment in environmental protection to build a green electrolytic aluminum enterprise with low consumption, low emission and high input-output ratio, and strived to become a benchmarking enterprise of green environmental protection in the aluminum industry, while promoting the ecological environmental protection and construction of ecological civilization. During the Year, in strict compliance with environmental laws and regulations of the Country and places of operation, China Hongqiao continued to promote green production in the four aspects of prevention and control of pollution, energy conservation and consumption reduction, resource recycling and reusing, and green office. In addition, the environmental management system established and formulated by the Group has accredited with the ISO14001:2015 certification, the International Organization for Standardization, reflecting the Group's commitment to environment protection management which obtained effective results.



Shandong provincial local standards DB37 T3597-2019 Assessment Specification for Green Plants for Aluminum Industry (《鋁行業綠色工廠評價規範》), which was jointly drafted and formulated by China Hongqiao and Shandong Institute of Standardization, has been issued by Shandong Bureau of Market Supervision and Management, and was officially implemented in 23 August 2019.

PREVENTION AND CONTROL OF POLLUTION

The Environmental Protection Department of the Group is responsible for supervising the environmental protection of the Group comprehensively, including formulating and monitoring the implementation of our internal environmental protection policies and guidelines, establishing environmental risk contingency plans, organizing training and emergency drills on environmental incidents, regularly inspecting the Group's production facilities and pollutants discharge facilities, conducting environmental performance appraisal for each production unit and keeping abreast of the latest development of the environment-related regulations and standards in the PRC. The Group also strictly monitors governance and emissions of "three wastes", to integrate environmental protection equipment into its normal production management system. It implements 24-hour real-time supervision of the pollutant discharge standards and operational parameters of environmental protection facilities to ensure the long-term stable operation and fulfillment of standards. The Group has always been reviewing the management system on emissions, improving the processing facilities for emissions, and striving to control emission of pollution so as to reduce its impact on the surrounding environment.



Exhaust Gas Treatment

The Group's emissions of exhaust gas mainly come from power plant boilers and aluminum production. The Group continued to strictly comply with the relevant laws and regulations such as the Law of the PRC on the Prevention and Control of Atmospheric Pollution. The exhaust gas is emitted in compliance with relevant standards after purification in the factory. Real-time monitoring data is uploaded by our automatic monitoring equipment installed on the exhaust emission outlet to the monitoring platform of the government's environmental protection department so that the exhaust gas emission level of the Group can be monitored remotely and continuously.

Sources of Exhaust Gas	Major Components	Processing Facilities and Processes
Boilers at power plant	Nitrogen oxides	Denitration system: Low-nitrogen combustion + SCR (Selective Catalytic Reduction) process
	Particulates	Dust removal system: High-efficiency electrostatic precipitator + wet dust collector or tubular dust collector
	Sulfur dioxide	Desulfurization system: Limestone-gypsum wet desulfurization and magnesia wet desulfurization
Alumina production	Sulfur dioxide	Desulfurization system: Tannin extract wet desulfurization
	Nitrogen oxides	Denitration system: Low-nitrogen combustion + SNCR (Selective Non-Catalytic Reduction) + SCR process
	Particulates	Dust removal system: Electric-bag composite dust removal
Electrolytic aluminum production	Sulfur dioxide	Desulfurization system: Limestone-gypsum wet desulfurization
	Fluoride	Dry flue gas purification system: Alumina adsorption + bag dust capture
	Particulates	
Aluminum deep processing production	Emissions from aluminum melting furnace, holding furnace and ingot heating furnace ¹	Emit after disposal by bag filter
	Tiny amount of non-methane hydrocarbon gas produced from hot rolling and annealing process	Collected by gas-collecting hood and emit after disposal by oil fog purifier/spray and fogging + water treatment

¹ The main fuel of such process is natural gas which belongs to clean energy, and does not produce highly concentrated air pollutants.



In order to further reduce exhaust emissions and improve the quality of the surrounding ecological environment, the Group continues to invest in environmentally-friendly equipment. During the Year, in addition to completing the construction of electrolytic aluminum flue gas desulfurization ultra-low emission transformation project of the electrolytic aluminum business, the Group has also actively upgraded and reformed other devices to improve the performance of devices and reduce exhaust emission.

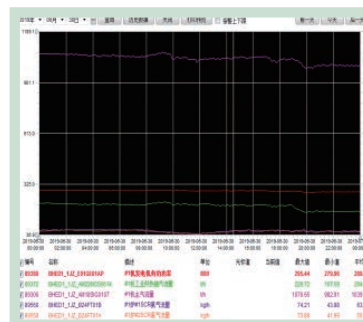
Cases of Upgrading and Transformation of Emission Reduction Equipment

Newly added electrolytic aluminum flue gas desulfurization technology



In the electrolysis cell addition desulfurization system of the Group's electrolytic aluminum business, the flue gas will be sent to the desulfurizing tower after the dust is removed by the dust collector, the sulfur dioxide in it will be absorbed by limestone and slurry and undergo a chemical reaction to form a gypsum crystal. The desulfurized flue gas passes through the demister to remove entrained droplets and leaves the absorption tower at the top to discharge, which will effectively reduce the impacts of the emission of sulfur dioxide on the environment.

Replacement and renew of boiler desulfurization catalyst



Emission of nitrogen oxides may become unstable upon expiration of the boiler desulfurization catalyst's chemical life. Accordingly, we conduct comprehensive evaluation and analysis on the chemical life and mechanical strength of the catalysts, replace the catalyst with serious boiler wear, and regenerate and renew the boiler catalyst intact. After the renewal and upgrade, the amount of ammonia sprayed is lowered and the emission of nitrogen oxide is stabilized.



Wastewater Discharge

The wastewater discharged by the Group mainly consists of production wastewater and domestic sewage. The Group continued to strictly comply with the relevant laws and regulations such as the Wastewater Pollution Prevention and Control Law of the PRC. The wastewater is processed in the factory for simple pretreatment to meet the requirements of the Water Quality Standards for Discharge to Municipal Sewers (GB/T 31962-2015) and be discharged into the local municipal sewage treatment plant through municipal pipelines. The Environmental Protection Department of the Group collects samples from outfalls and performs quality sampling test every month to ensure that the wastewater meets the discharge standards. In addition, the outfalls are equipped with online monitoring system and connected with the local environmental protection departments, and the relevant data is uploaded on a real-time basis.

In order to improve water efficiency and prevent water pollution, the Group has continued to implement various measures as follows:

- Wastewater produced from alumina production is fully recycled and reused, attaining zero discharge of wastewater;
- Cooling water used in the casting process is recycled for use in the electrolytic aluminum production process;
- Water discharged from the cooling water tower of the power plant is recycled in priority;
- Water used for spraying and cleaning of vehicles is recycled and used to a certain extent before being applied for coal yard spraying;
- The fluoride in the fluoride-containing wastewater generated from desulfurization can be reduced by adsorption of desiccant, thus enabling the wastewater to be reused after treatment;
- Building a rainwater precipitation and decontamination pools in the aluminum plant to reduce the content of pollutants such as alumina powder and fluoride salts in rainwater, thus to avoid the discharge of polluted rainwater and to allow part of the treated rainwater to be reused for production;
- Switching to a square, non-filling cooling tower to improve the cooling effect and reduce water consumption.

Waste Disposal

The final solid waste generated by the Group can be classified into non-hazardous waste and hazardous waste. The Group strictly implements the regulations such as the Law of the PRC on Prevention and Control of Environmental Pollution by Solid Waste, the Standard for Pollution Control on the Storage and Disposal Site for General Industrial Solid Wastes (GB 18599-2001), the Control Standard of Contaminated Hazardous Waste Storage (GB 18598-2019) and so on, to ensure that solid wastes are properly disposed of.

Types of Wastes	Major Components	Disposal Methods
Non-hazardous waste	Domestic garbage	Cleared and handled by the Municipal Sanitation Department
	Waste accessories	Sold to qualified recycling companies
	Ash from power plant, slag, desulfurization gypsum	Sold to building materials companies for recycling
	Scrap and dust of carbon anode blocks	Sold to external parties for comprehensive utilization
	Construction waste	Entrusting qualified entities for handling
Hazardous waste	Waste lubricants, waste denitration catalyst	Sold to qualified companies for extracting valuable ingredients through smelting, purification and other methods
	Coal tar	Entrusting qualified entities for handling
	Waste carbon residue (slag)	Recycling the useful substances through the flotation process and selling them to qualified recycling companies
	Overhauling residue of electrolysis cells	Entrusting qualified entities for handling
	Red mud	Stored in special red mud storage facilities, recycling and reusing some of the useful substances, or making them into bricks and selling them to construction companies

The Group proactively reduces the amount of waste by recycling and reusing waste. For example, the Group uses dual chamber furnace process to melt the waste generated during the production process, including the scrap with impurities, recycled materials, wastes collected from the market and/or clean materials, so as to reduce the amount of industrial waste. Moreover, the Group adopts flotation process and comprehensively utilizes the waste carbon residue (slag) generated from the aluminum smelting process. The products obtained from flotation are electrolyte powder and carbon powder. Part of the resulting electrolyte powder is reused as raw material for electrolytic aluminum production, and part of it is for selling. Carbon powder, as the raw material, is sold to external parties. The comprehensive utilization of aluminum electrolytic waste carbon residue serves as a good illustration of resource recycling of waste carbon residue to avoid environmental pollution, and at the same time, creates greater economic benefits for the Group.



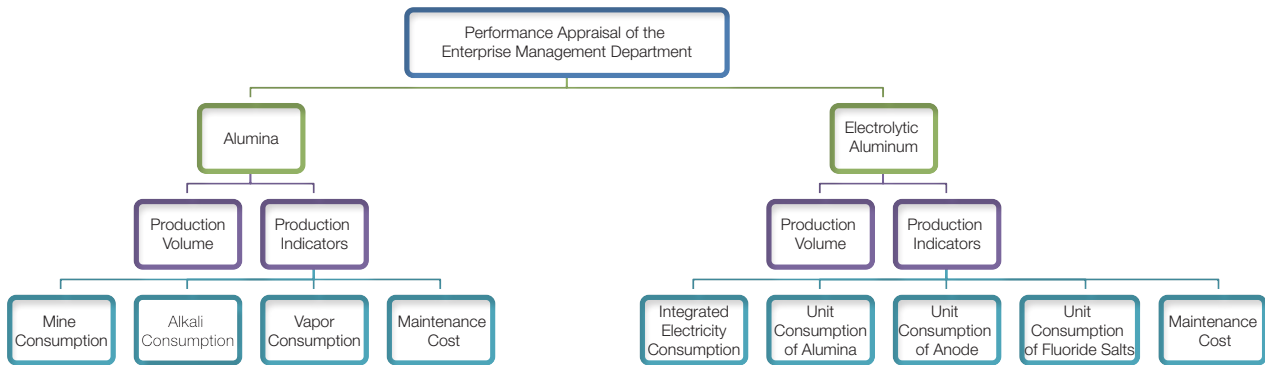
Besides, red mud, a kind of strong alkaline hazardous solid waste, is generated during the alumina production process. If the red mud is disposed of improperly, the groundwater, soil and atmosphere will be heavily polluted. In order to prevent the deterioration of the ecological environment caused by red mud and the damage to human health, the Group strictly follows the Regulations on the Prevention and Control of Environmental Pollution Caused by Tailings to conduct prevention and supervision of red mud. The red mud produced is discharged into the red mud storage facility which is under strict leakage prevention and safety management after it is dewatered and filtered, we also set up a control zone around the alumina production facility and the red mud storage facility and a number of groundwater observation wells to monitor whether the red mud has polluted the surrounding environment. As the red mud contains a large number of mineral elements that can be recycled, we recycle highly magnetic materials by centrifugation and magnetic separation, and make the remaining materials into bricks as building materials. In addition, we also regularly hold emergency drills to simulate the surrounding environment to prevent the spread of red mud in severe weather conditions and enhance the management and control capabilities of red mud.

ENERGY CONSERVATION AND CONSUMPTION REDUCTION

With scientific and effective lean management alongside persevering exploration and innovation, in recent years, the Group has made remarkable achievements in saving energy and reducing consumption and has diminished production costs effectively, setting a new model of energy conservation in the industry, among which, the primary aluminum production line designed by Shandong Weiqiao Alumina & Power Co., Ltd. (山東魏橋鋁電有限公司) (“**Weiqiao Aluminum & Power**”) is equipped with advanced and reliable technologies and has effectively increased output and energy utilization rate and achieved the environmental goals for energy conservation and emission reduction. In addition, the energy-saving standardization management system established by the Group can be integrated into an organic entity through various tasks, including energy-saving assessments, management and control, statistics, monitoring and measurement, so as to achieve the purpose of energy-saving and energy efficiency enhancement. During the Year, the electrolytic aluminum production energy-saving mode of Weiqiao Aluminum & Power continued to be listed as a standardization demonstration project by the Standardization Administration of the PRC, thus enabling Weiqiao Aluminum & Power to become the only selected aluminum smelting enterprise in the PRC. In the future, Weiqiao Aluminum & Power will participate in the revision of energy conservation standards and actively promote advanced technologies and products.

Resource Management

The Group continues to comply with laws and regulations and industrial standards regarding energy management, energy measurement and energy consumption quotas, including the Aluminum Industry Standardization Requirements, the Integrated Energy Consumption Limit for Electrolysis Aluminum (DB 37/743-2015) and the Norm of Energy Consumption Units for Products of Aluminum Metallurgical Enterprise (GB 21346-2013). The enterprise management department of the Group is responsible for overseeing the energy conservation and emission reduction work during the production process so as to reduce waste. The enterprise management department organizes training and promotional activities regularly and formulates a monthly quota plan for each production unit and conducts monthly performance appraisal on the fulfillment of indicators of each production unit. In addition, the Group strictly monitors the use of packaging materials of aluminum deep-processing products to eliminate wasteful practices.





Energy-saving Transformation

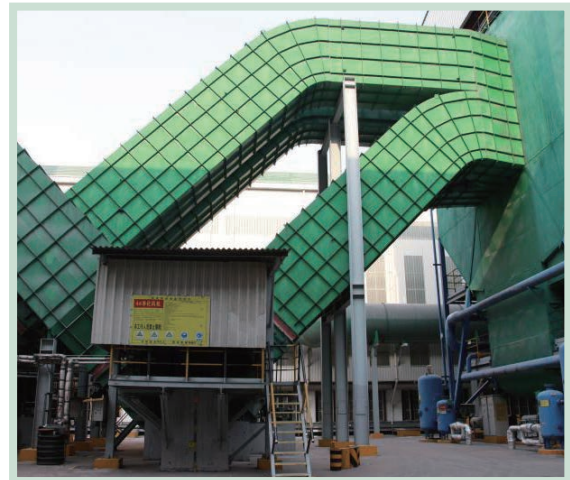
The Group regards energy-saving transformation as an important part in its production management system. In addition to requiring all production units to attach great importance to energy conservation, it also urges all employees to actively participate in energy-saving technological transformation so as to enhance the utilization efficiency of energy and resources. During the Year, the Group completed a number of energy conservation and technology transformation projects, including optimization and transformation on electrolytic aluminum flue gas desulfurization ultra-low emission, dry ash selection and technical reform, use of dilution tank and dilution slot for heating process, reuse of limestone causticized slag after back to bottom, so as to continuously improve environmental protection technologies and maintain ultra-low emissions.

Cases of Energy-Saving Equipment Upgrading

**Use of dilution tank and dilution slot
for heating process**




**Frequency conversion control of purifying
draught fans in electrolytic aluminium plants**



In order to lower steam consumption, the Group has been reusing steam, i.e. the spent steam, for the purpose of heating. Through the transformation process, the Group has added spent steam recycling for dilution tank and dilution slot, which will be used for heating on steam supply pipes and steam preheating section, respectively, combined with the existing spent steam from the steam evaporator, the intake air volume of spent steam heating tubes has been greatly increased, thereby improving the utilization rate of spent steam and reducing the production and consumption of steam.

In order to comprehensively control the energy consumption of purifying draught fans in electrolytic aluminum plants, the Group transformed the purifying draught fans from fixed speed to controllable frequency. Such transformation allows the Group to track load changes in real time and intelligently control the speed of the machines so as to ensure it achieves the purpose of purifying the air while reducing unnecessary waste.



In order to further increase the effect of energy-saving, the Group and its aluminum-processing enterprises avoided the processing of secondary re-melting of traditional re-melted aluminum ingots by using molten aluminum alloy, which helps to minimize energy consumed by aluminum ingots during the process of secondary re-melting, such as heavy oil and natural gas, while reducing the emissions of carbon dioxide, dust and flue gas during the process of re-melting. With the increase in number and proportion of molten aluminum alloy used, the Group's effectiveness in energy-saving and emission reduction has become more significant.

Green Aluminium Innovation Industrial Park

In line with the global trend of energy reform and in conformity with the national policies of energy structure optimisation, adjustment of key industry distribution and industrial transfer, the Group cooperates with the People's Government of Yunnan Province to establish a green aluminium innovation industrial park which will fully enjoy and utilise the policy for integrating water, electricity and aluminum promoted by the People's Government of Yunnan Province. By banking on the clean hydropower advantage of Yunnan, the industrial park will replace traditional energy with clean energies such as hydropower and photovoltaic power, which will further enhance the energy efficiency of the Group's production, reduce its reliance on traditional energy, reduce the emission of pollutants and greenhouse gases and lower production cost. The green aluminium innovation industrial park will also enable the Group to fully implement its development strategy of "Integration of Upstream and Downstream Businesses" and pursue sustainable development.

RECYCLING AND REUSING WASTE

Through using dual chamber furnace process to melt the waste with impurities, recycled materials, wastes collected from the market and/or clean materials, the Group recycles and reuses aluminum scraps generated during the production process so as to reduce industrial waste. Such technique provides a comprehensive system that can be easily operated, and in particular, for the melting of waste with thin wall and impurities, which reduces the wasting of thin-wall materials and the environmental impact caused by the recycling of aluminum scraps.

The Group adopts flotation process and comprehensively utilizes the waste carbon residue (slag) generated from the aluminum smelting process. The products obtained from flotation are electrolyte powder and carbon powder. Part of the electrolyte powder is reused as raw material for electrolytic aluminum production, and part of it is for selling. Carbon powder, as the raw material, is sold to external parties. The comprehensive utilization of aluminum electrolytic waste carbon residue serves as a good illustration of resource recycling of waste carbon residue to avoid environmental pollution, and at the same time, creates greater economic benefits for the Group.

As for red mud, which contains a large number of mineral elements that can be recycled, we recycle highly magnetic materials such as iron through processing red mud with moisture by centrifugation and magnetic separation, and make the remaining materials into bricks for building materials.



GREEN OFFICE

The Group proactively responds to the national environmental and protection policies, adheres to low carbon and environmental protection philosophy in office, and encourages all employees to set their own examples and start small, such as saving water and electricity, and reducing the consumption of paper and other office supplies in daily office activities. We also encourage employees to commute to and from workplace on foot or by public transports and comply to the restriction on the use of private cars that is based on even- and odd-numbered license plates in order to reduce the use of motor vehicles and adopt a greener and healthier way of travel.

Water Consumption Management	Electricity Consumption Management	Office Supplies Management
<ul style="list-style-type: none"> • Posting water-conservation slogans in toilets • Purchasing and using water saving appliances • Strengthening daily maintenance of water meters, plumbing and water appliances to avoid the “running”, “spraying”, “dripping” and “leakage” of water • Reusing of steam condensation • Changing supply pumps of domestic water and purified water and improving the utilization efficiency of devices 	<ul style="list-style-type: none"> • Posting energy-conservation slogans in office • Purchasing and using office supplies with energy efficiency labels • Turning off power supply of various kinds of electrical appliances after work to reduce standby energy consumption • Installing LED and other lightings with high efficiency • Strengthening lighting power management, turning on the lights selectively in big office, and installing voice-activated switch in staircases • Setting temperature of air conditioners at 26°C or above during summer • Using video and teleconferences to replace unnecessary business trips 	<ul style="list-style-type: none"> • Posting paper-saving slogans in office • Making full use of paperless office platform, intranet, communication software and other channels to process documents online • Reducing font size and margins when printing, making text format more compatible with paper and promoting double-sided printing and paper recycling • Sharing printer to reduce idle equipment • Collecting and reusing paper bags and card indexes • Following the principle of “Adjusting first, reporting after” to strengthen the audit and reporting on various plans • Repairing and utilizing old and used materials to improve material usage efficiency

ADHERING TO PEOPLE-ORIENTED GOVERNANCE

Excellent talents are the cornerstone to achieve the Group's strategic goals and driving force for sustainable development. By adhering to the employment principle of "selecting appropriate talents, respecting value and being people-oriented", the Group not only strives to maintain employees' physical and mental health, but also attracts talents through scientific talent training methods, an effective incentive mechanism, a platform of fair competition and vast opportunities of career development, enabling all employees to fully demonstrate their personal value in the Group, match their personal planning with the business development goals of the enterprise and achieve mutual growth of the employees and the enterprise.

RECRUITING TALENTS

In order to facilitate the continuously growing business scale, we recruit talents from different cultures, different backgrounds and different regions to join our team to increase the diversity of employees. The Group strictly complies with the relevant laws and regulations, in the recruitment, dismissal, promotion and remuneration of employees such as the Labor Law of the PRC, the Labor Contract Law of the PRC and the Labor Contract Regulations of Shandong Province, to protect the legitimate rights and interests of employees in a legal manner.

Employment Policy

The Group carries out its recruitment mainly through a variety of channels such as social recruitment, online recruitment, campus recruitment, telephone contact, employee recommendation and talent exchange. Eligible applicants will be assessed in the form of medical examinations, paper examinations and interviews, during the process, the Group upholds the principle of equal opportunity, and considers and employs talents in a fair, open and just manner and promises that it will never discriminate on grounds of gender, age, race, religion, marital status, and so on. In order to eliminate the employment of child labor and forced labor, the Group not only checks the identity and age of candidates carefully during recruitment in accordance with the relevant laws and regulations such as the Provisions on the Prohibition of Using Child Labor, but also strictly prohibits any employee from working overtime on a compulsory basis or to arrange work beyond their job duties. Exit interviews will be conducted by the Group for departing employees to find out their reasons for leaving and make improvement according to their reasonable suggestions.



The Group has established a sound remuneration management system and provides competitive remuneration packages to attract talents. Under the premise of ensuring fairness and incentives for the assessment of wages, each department regularly assesses and adjusts the wage level according to the salary standard of the post, workload, work performance, years of service, skill levels of the employees and other factors. In addition to the basic wage, the employees' remuneration also includes performance-based bonus and various types of subsidies such as skill subsidies, position subsidies, and high temperature allowances. In order to evaluate employee performance fairly and objectively, the Group has formulated and implemented the Employees Performance Dynamic Management System and the Group grants extra bonuses as incentives to outstanding employees after conducting regular employee performance assessments to enhance the quality of work, work efficiency and motivation of the employees. We will purchase and pay social insurances for employees, such as pension insurance, medical insurance, unemployment insurance, work injury insurance, maternity insurance, etc., in accordance with related labor and social welfare laws and regulations, while providing them with additional benefits such as free accommodation, medical, food and transportations. The Group has also established a reasonable dismissal system and formulated legal conditions of dismissal in accordance with the relevant laws and regulations.

Rights Protection

The Group is committed to safeguarding the rights of its employees and eliminating any exploitation of rights. In order to ensure that employees have enough resting time, the Group stipulates that the working hours of employees should not exceed the statutory standards and relevant provisions shall be set out in labor contract. Eight-hour working system and three shifts with four groups are adopted for employees in each production unit. Employees are required to work overtime only under specific circumstances. Overtime payment is made to employees in accordance with the applicable standards stipulated in relevant laws. All employees enjoy statutory holidays, home leave, marital leave, funeral leave and maternity leave.

The Group firmly opposes gender discrimination. Employees, regardless of gender, are treated equally and the distribution of work is implemented according to actual needs. The Group also protects the lawful rights and interests of female employees according to law and complies with the relevant laws and regulations to provide female employees with benefits during pregnancy, delivery and lactation, including arranging breastfeeding time for employees returning to work after delivery.

TALENT CULTIVATION

“Strong enterprise with great talents” is one of the important strategic goals of the Group. The Group highly values personal development of our employees by not only creating the clear career development path for all kinds of talents, but also encouraging their continuous growth through performance appraisal, job selection and training, so as to provide backup force for the sustainable and stable development of the enterprise.

Performance Evaluation and Promotion

Apart from serving as the basis for employees’ compensation adjustment, the Employees Performance Dynamic Management System of the Group is also an important basis for employee competition, promotion and change of position. Employees who have achieved outstanding results in performance appraisal will be given priority in the process of promotion.

In addition, the Job Selection System is adopted in each production unit and the Group has also set up a selection and employment mechanism that can better identify the outstanding talents from the peers. Following the principles of “fair, just, open, competitive and merit-based”, outstanding employees will have the opportunity to compete for different positions. The most suitable candidates are selected level by level through a series of assessment, including branch factory assessment, written tests, interviews, practice exams, safety assessment and democratic evaluation. The job selection process is closely monitored by all the employees for reporting and complaining about any violations.



Career Path (Operation)



Career Path (Maintenance)



Employees' Training

By adhering to the talent concept of “cultivating talents by demand”, the Group has established a comprehensive and diversified staff training system for our employees to help them master the skills and knowledge for their work. We provide specific training programs which are guided by experienced staff for all new employees to help them master all necessary skills during the first four months of their internships. In addition, we also provide our employees with regular training in production safety, environmental management and energy resource management to cultivate their awareness of production safety and energy conservation. In terms of quality control, we regularly provide technical and theoretical learning and technical practice tests for our employees to improve their skills and ensure product quality.

During the Year, the Group continued to implement each of the annual training programs and commence job training, professional and technical personnel training, elementary management training and middle and senior management training.

Trainees	Training Goals	Training Methods and Contents
Management training for middle and senior management cadre	To improve management skills and overall quality of management cadres	Participating in training classes for middle and senior management cadre taught by experts and professors; reading educational materials; cadre warning education is performed through watching films and televisions for integrity advocacy, corruption punishment cases, warning videos and so on.
Branch factory employees	To meet eligibility criteria and able to operate independently	New employees: receiving educations about rules and regulations of the Company, safety awareness, environmental awareness, dedication, ethics, compliance with disciplines and laws and other aspects After determining the type of job or changing position: learning knowledge of the environment quality system, job responsibilities, fire safety and emergency knowledge, environmental protection knowledge and the related skills of the assigned position
Production plant employees	To meet eligibility criteria and able to operate independently	Trainings targeting at technical courses on process, machine operation knowledge, equipment maintenance and care, and at the same time providing chemical knowledge, emergency knowledge, fire safety and environmental awareness, job safety regulation, strengthening sense of responsibility, and so on.

Trainees	Training Goals	Training Methods and Contents
Logistics department employees	To improve the overall capability of employees	Personnel training, business skills and specialized trainings on the integrated management system
Electricians, welders, climbing workers, chemical managers, and so on	To ensure the normality and safety of electricity consumption for production and living of the Company and improve environmental quality	Political thoughts and professional ethics education, safety education, environmental education, emergency knowledge training, job safety regulation training, technical theory study and practice
Special types of work, internal auditors, firefighters, safety officers, and so on	To standardize operations and eliminate employees who are not competent for the work	ISO14001 Environmental Management System Standards Training, professional skills operation training, safety management training, environmental awareness and concept training

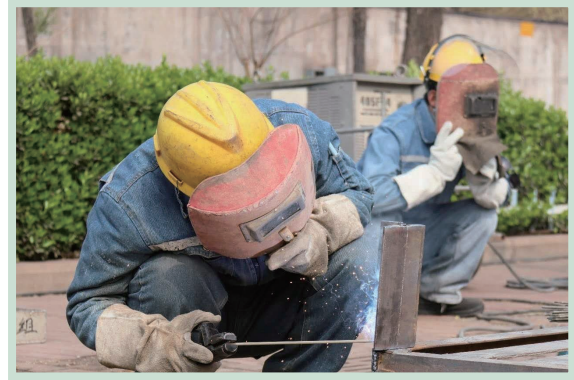
In addition, the Group held various technical trainings for cadres during the Year, including topics on “Organizational Behavior”, “Corporate Culture and Management Communication”, “Improving Personal Influence” and “Growth Thinking”, which aim to develop employees’ soft skills in communication, decision-making, team spirit, etc, so that the employees may develop comprehensively and make progress together with the Group.



“Rocker Plan” middle and senior management cadre training program opening ceremony



Anode casting technique training



Welder tool making technique training

Special training on technical condition control
of electrolysis cell

Electrolysis cell maintenance technique training

In addition to providing internal trainings, during the Year, the Group continued the cooperation with Soochow University, Shandong University, Binzhou Vocational College, Northeastern University and Central South University, respectively, according to which, the Group may select its internal staff to attend relevant training programs organized by these institutions, which helps improve workforce quality and management capabilities. In the meantime, apart from the courses in those training programs, the Group may organize specialized training for relevant staff when requirements of designated products or recommendations for improvement are received. We have put the mechanism of training evaluation in practice to review the training outcomes and enhance the whole training system. The evaluation includes safety examination, professional examination, skill examination, etc.

HEALTH AND SAFETY

The Group adheres to the safety production guideline of “comprehensive management with priority of safety and emphasis on prevention”, and implements strict safety production management and employees’ occupational health management to minimize personal injury and death as well as economic losses during production and operation.

Production Safety Management

In accordance with laws and regulations such as the Work Safety Law of the PRC, the Special Equipment Safety Law of the PRC, the Interim Provision on the Identification and Treatment of Hidden Perils of Work Safety Accidents, the Provisions on Safety Training of Production and Operation Entities and the Regulations on Safety Production in Shandong Province, the Group has developed a comprehensive and detailed safety management system and accident emergency plan.

With the launching of safety month activities, the Group provides its employees with various safety trainings such as training on first-aid knowledge, usage of special equipment (such as lifting machinery) and emergency treatment to increase their safety awareness and strengthen their abilities to handle emergencies. We also conduct regular assessments to the safety knowledge of the management of our subsidiaries to ensure that they have the required safety risk management and processing capabilities. In addition, the Group also highly values the health condition of employees. Through occupational health courses, such as prevention training for occupational disease, and symptoms and emergency treatment for heat stroke, employees’ awareness of maintaining a healthy body is raised, thereby performing their best in their posts.



Fire drill training



First aid training

In order to enhance the safety production capability of employees, the Group continues to optimize its production systems and introduces automation technology to upgrade production facilities. During the Year, the Group introduced various machine improvements to lower safety risk, including upgrading and transformation on busbar lifting frame, adding intelligent inspection robot for electrolytic cell, etc. to lower the safety risk during operation while reducing the labor intensity, improve the operation environment and working efficiency.



Case studies - upgrading and transformation on busbar lifting frame

Busbar lifting frame is a specialized equipment for production of electrolytic aluminum. The original busbar lifting frame of the Group's production plants used manual operation of valves and manual control of cylinders, motors and other actions, which took time and effort. In order to enhance the application of automation, reduce the labor intensity of workers, increase per capita labor efficiency and protect the safety of employees, the Group upgraded the busbar lifting frame into full automatic busbar lifting frame, the manually and directly operating machines are changed into using remote to control cylinders, motors and other actions. After the transformation, it can effectively reduce the frequency employees get on and off the electrolytic cell and the operating frequency, shorten the busbar lifting time, improve the working efficiency, reduce the labor intensity and the occurrence of unsafe conditions.



The upgraded busbar lifting frame

In order to properly deal with potential accidents and safety risks, in addition to providing regular production safety trainings and safety system upgrade on equipment, the Group also regularly holds emergency drills for sudden environmental and safety accidents, applies the emergency instructions on the accidental emergency plan into real life environment to better prepare for dealing with emergencies and minimize the impact of the accident.

Case studies – emergency drills for leakages of hazardous waste warehouse

The Group organized emergency drills for leakages of hazardous waste warehouse in September of this Year, including checking emergency tools, actual dealing with leakage of dangerous goods, etc. On-site comments will be made after the drills are over, problems, deficiencies and effectiveness of the emergency response team personnel will be evaluated to improve the emergency response capability of the emergency response team.



Emergency drills for leakages of hazardous waste warehouse

In response to the novel coronavirus pneumonia epidemic, the Group formulated and implemented a number of epidemic prevention and control measures and plans. The prevention measures for the epidemic includes setting up epidemic prevention and control slogans and posting signs of epidemic prevention measures, regularly disinfecting the production area and production equipment, distributing epidemic prevention supplies, etc., so as to spread the knowledge related to the virus and effective measures to prevent and control the epidemic to all members of the Group. With the determined anti-epidemic mind of the Group and the concerted efforts of the employees, China Hongqiao successfully surmounted the hardship of the novel coronavirus pneumonia outbreak.



Employees disinfecting the production area



Occupational Health Management

The Group strictly abides by relevant laws and regulations including the Work Safety Law of the PRC, the Law of the PRC on the Prevention and Control of Occupational Diseases and the Provisions on the Supervision and Administration of Occupational Health at Work Sites, to implement the management work regarding employees' occupational health during production process, which include warning and notification of occupational disease hazards, occupational disease prevention education, maintenance of protective equipment and facilities, monitoring and evaluation of hazards, reporting of hazard incidents and emergency rescue, and so on.

The Group provides employees with complete and professional labor protective supplies such as helmets, safety goggles, earplugs, anti-high temperature protective shoes, insulated shoes and gloves, acid-resistant gloves, dust masks and gas masks and strictly supervises the use of protective supplies and the operation and protective functions of protective devices. In addition, the Group regularly disinfects the production area and production equipment to prevent the spread of any infectious diseases in the production area. In order to identify and control various sources of occupational hazards such as air pollutants, dust, noise and radiation, the Group has entrusted a qualified occupational health and technical service agency to test occupational hazards in each production plant regularly. For new recruits or employees exposed to occupational hazards, the Human Resource Department will arrange occupational health checks before and during employment and create health records to monitor the health conditions of employees regularly. Occupational health checks will also be provided for employees when they leave the Group.

CARING FOR EMPLOYEES

The support and dedication of each employee is indispensable for the growth and development of the Group. In addition to providing an ideal working environment for employees, the Group also extends its care to employees' families and lives.

Welfare System

The Group upholds the principle of "ensuring housing for employees, education for their children, medical services for the illness and pension insurance for the retired". We are continuously improving the employees' welfare system that integrates housing, education, health care and pension insurance mechanisms.

Housing	Education	Medical	Pension
<ul style="list-style-type: none"> • Providing free dormitory with heating supply, air-conditioner, Wi-Fi and other facilities for single employees • Providing married employees with a house, charged at cost, together with free heating supply, and electricity and water supply charged at cost 	<ul style="list-style-type: none"> • Investing into the construction of primary and secondary schools at local communities and constructing normalized high-standard kindergartens to provide convenient education services for employees' children with low tuition fees • Awarding employees' children with excellent results in the national college entrance examinations 	<ul style="list-style-type: none"> • Setting up non-profit outpatient hospitals in various industrial parks and residential areas to provide medical services to employees and their families • Applying medical insurance for staff 	<ul style="list-style-type: none"> • Granting condolences and gifts to retired employees • Applying pension insurance for employees

Helping Employees in Need

The Group has always adhered to the philosophy of “thinking from the employees’ perspective, resolving their concerns”, providing them with what they are in need and caring about their families and lives. The Group’s labor union carries out regular surveys and visits to employees in difficulties, and takes the initiative to understand the living situation of these employees, their family relationships and financial burdens. Priority is given to employees who are suffering from illnesses, or whose families encounter misfortunes or difficulties in life. During the Year, the Group invested a total relief payment of RMB83,000 to provide assistance to 19 families in need, helping them to overcome the hardships.



Providing financial and material assistance to employees in economic difficulties



Providing financial assistance to the sick employees

In response to the employees and their families that are affected by floods, the Group provides vehicle damage subsidiaries to 281 employees’ families to repair vehicles and resume to their normal life as soon as possible with a total amount of subsidiaries of RMB0.924 million. In addition, the Group also donated RMB12,000 to Sany Foundation as an educational subsidy to support 6 students to continue with their studies.



Cultural and Sports Activities

In order to help employees achieve work-life balance, enrich their spare-time life and enhance their sense of belonging and cohesion for the Group, the Group held various types of employee activities during the Year, including sports week and sports gala, Mid-autumn festival party, New Year's Day evening variety show, etc. This Year coincides with the 70th anniversary of founding of the PRC, the Group intentionally organized the "Keep in mind the original intention and mission" speaking contest as an activity for celebrating the 70th anniversary of founding of the PRC, and reminding the employees to keep in mind their original intention. In addition, we held a series of "Walking into the Factories" activities during the Year, to allow the employees' families to visit and experience employees' working environment and conditions, which broadened the families' horizon and provided a substantial family activity.

Meanwhile, the Group holds large-scale technical competitions in autumn and winter every year. In addition to demonstrating the technical level of the participants, the competitions also test the safety knowledge and safety operation skills of the employees, ensuring the quality and safety. Generous rewards are given to employees who have excellent performance in the competitions, and the Group will also arrange work experience sharing sessions among employees to promote learning and communications between employees, improve employees' business skills and foster their spirits of excelling at work.



The New Year's party



Employees' sports gala



"Walking into the Factories" activity



"Keep in mind the original intention and mission" Speaking contest



Operation technical competitions for welders



Technical operation competitions on anode casting

PURSUIING EXCELLENCE IN QUALITY

Molten aluminum alloy, the major product of China Hongqiao, is the main material for manufacturing aluminum products and other products including aluminum deep-processing products such as coils, can stocks, aluminum foils, etc. China Hongqiao possesses advanced manufacturing equipment, specialized production technology, strong R&D (research and development) capability as well as scientific and highly efficient management model. By virtue of pursuit and persistence of excellence in quality, China Hongqiao is able to continue providing customers with high quality, safe and stable products along with excellent service.

SUPPLY CHAIN MANAGEMENT

The raw materials necessary for the production and operation of the Group mainly include raw coals, bauxites and anode carbon blocks, and the required supplies mainly include equipment, accessories, production ancillaries, labor insurance and office supplies. In order to maintain a healthy and orderly supply chain system, continuously optimize the supplier teams and reduce the environmental and social risks posed by substandard suppliers, the Group has been devoted to improving the procurement process and establishing and strengthening the development, supervision, assessment and management of suppliers. The Group has established long-term relationships with a number of suppliers and has endeavoured to ensure that they comply with the Group's commitment to quality and ethics and the Group's anti-bribery policy.



Procurement of Raw Materials and Supplies

The Group appoints tender companies to procure the raw materials (other than bauxites) and supplies in accordance with the materials consumption plan submitted by each production unit. The procurement is in compliance with its internal procurement management system, which covers the procurement process, procurement discipline, quality requirements, contract execution and management, acceptance process upon arrival and punishment standards for non-conforming products, and so on. After supplier's operation qualifications, economic strength, equipment conditions and supply capacity are inspected and assessed by the tender company, the eligible suppliers are then selected to participate in the tender. The bidding process strictly follows the regulations such as the Bidding Law of the PRC and is conducted in an open, fair and equal manner to secure the interests of both parties. In addition to the principle of "comparing quality of the same products, comparing price of the same quality and comparing service of the same price", the Group also adopts the principle of conducting procurement from nearby suppliers to reduce transportation costs and carbon emissions caused during transportation.

Procurement of Raw Coal

The Group implements a bidding system for coal suppliers. To avoid over-purchase and waste production, coal-using units report the monthly coal use plan on the basis of monthly usage amount, and then the Coal Supply Department determines the amount of coal required and target purchasing amount through tender on the basis of inventory. Apart from considering the price, the Group also evaluates factors such as the bidder's integrity, the environmental impact (including sulphur content), etc., to ensure the quality of the coal purchased.

QUALITY MANAGEMENT AND INNOVATION RESEARCH AND DEVELOPMENT

The Group implements the "one-vote veto system" for quality control. Every process of the production line is checked carefully, forming a quality control network that all steps are closely connected and monitored by all staff members. "Two prohibitions", which include prohibition of passing defective products from the former procedures to the latter procedures and prohibition of storing and outputting disqualified products, are enforced in our production. While "three unacceptance", which comprise unacceptance of unconvinced reasons, unacceptance of unimproved measures and unacceptance of the irresponsibility of any personnel in charge, are put in place for quality incidents.

The Group has set up a well-equipped and highly functional quality control center, and the quality management system is also in line with the standard of the International Organization for Standardization ISO 9001: 2015. Through continuously upgrading its production technology and equipment through innovative R&D and encouraging staff members to participate in minor reforms and activities related to tackling key problems of QC (Quality Control) thoroughly, the Group strives to ensure stability and enhancement of product quality.

Quality Control

The Group has set up a quality control system that closely monitors the quality of raw materials, semi-finished products and finished products step by step. All production processes of raw materials from entering to leaving the factory are traceable, in which composition testing, random sampling, labeling, packing, transportation and storage all strictly comply with relevant standards and specifications. For raw materials, ancillary materials and non-conforming products which fail in the initial and final testing procedures, the Group will conduct isolation, analysis and correction and provide opinions and suggestions for the incident according to the Control Procedures of Non-Conforming Products.

To guarantee the health and safety of its products, the Group strictly conforms to the requirements of national, industrial and international standards such as the National Food Safety Standard for Food Contact Materials and Use of Additives Standards for Products (GB9685-2016) and the National Food Safety Standard for Water-based Modified Epoxy Paint of the Inner Wall Cans (GB 11677-2012) to ensure that the toxic and harmful contents contained in the packing products for food and drugs meet the legal standards and make sure the production environment and processes fulfill the specific hygienic requirements. Can materials produced by the Group currently meet the width and thickness requirements of all domestic and foreign can factories and are capable to satisfy the specific requirements of customers. The performance in terms of indicators is widely recognized by clients. The Group has established stable partnerships with more than one hundred renowned enterprises at home and abroad, including Ball Corporation, CPMC, ORG Packaging, Shengxing Group, Pacific Can, United Can, Baosteel Packaging.

Promotion of SAP&MES Information Platform

In order to deal with the increasingly complex information management needs, and facilitate the transition of refinement, digitization and informatization management of the Group, we in corporation with IBM Company and Shanghai Baosight, through years of efforts, have built the System Applications and Products (SAP) & Manufacturing Execution System (MES) informatization platform. SAP&MES platform provides a comprehensive system that connects enterprise management, all production lines and on-site production equipment to help us plan and organize production and operation activities reasonably and efficiently, and achieve efficient control and management on quality. Meanwhile, by collecting and utilizing production management data, we can more objectively analyze and discover problems in production technology, capacity planning, quality management, etc., providing a new source of power for the Company to improve the overall operational efficiency and quality management.



Innovation and R&D

Innovation and R&D are the major driving forces for the Group to reduce energy consumption, optimize production technique and enhance product quality. The Group has always attached great importance to innovative platform construction and industry and academic collaboration. On the one hand, we actively invest resources into the R&D team, establish research centers and laboratories, hire research and development personnel purchase advanced equipment, etc. On the other hand, we continue to strengthen the partnership with scientific research institutions in the form of industrial and academic collaboration. During the Year, the Group continued to exchange and cooperate with Soochow University, Central South University, Northeastern University and other universities. Besides, the Group encourages its staff to work on improvements of production facilities and techniques regarding safety, energy conservation, efficiency enhancement and environmental protection and to learn from and promote the technical transformation projects with promotional value. During the Year, the Group implemented a total of 643 minor reform projects and 44 patents, of which 29 have been authorized. Hence, the Group spares no effort in continually improving its performance in environmental protection, employee safety safeguard and quality control.

Facilitating development of the industry

The Group took part in formulating several national and industrial standards, such as the Unalloyed Aluminum Ingots for Remelting (GB/T 1196-2017) and the Safety Guidance for Use of Vacuum Ladles (DB37/T2800-2016), promoting the standardization in the PRC's aluminum industry and improving the quality control of aluminum products and production safety management. During the Year, the Group participated in the formulation of the Assessment Specification for Green Aluminum Plants (《鋁行業綠色工廠評價規範》) published by Shandong Provincial Administration for Market Regulation. In addition, we wrote papers on innovation and R&D such as "Effect of homogenization cooling rate on precipitated phase of 6110 aluminum alloy"(《均勻化冷卻速率對6110鋁合金析出相的影響》) and "The optimal homogenization parameters of 6082 aluminum alloys based on eutectic phase quantification" (《基於共晶相量化的6082鋁合金的最佳均勻化制度》) jointly with a number of renowned scholars, in an effort to promote the continuous and mutual progress and development of the Group and the industry.

Furthermore, the Group participated in a number of international aluminum industry forums and exhibitions, such as the Global High-end Aluminum Summit 2019, China International Aluminum Week 2019 and 2019 International Aluminium Industrial Chain Development Summit. Exhibitions and summits provide an exchange platform for the international aluminum industry, enabling aluminum producers across the world to exchange and learn from each other the latest technology, knowledge and development of the industry, which will foster the development of the international aluminum industry.



Booth in the 2019 China (Shanghai) International Aluminium Industry Exhibition



SALES AND SERVICES

The Group maintains long-term relationships with multiple clients and adopts a business model of “production based on sales” and provides various products with different specifications in accordance with the requirements of downstream customers, which ensures its product supply and minimizes the stock inventory. The Group mainly promotes its sales and services through participating in customer seminars and exhibitions and publishing promotional videos and booklets. During the Year, the Group continued to strictly comply with relevant laws and regulations such as the Advertising Law of the PRC and the Trademark Law of the PRC, as well as its internal rules including the Working Rules of Sales Corporation and the Corporate Customer Credit Management System. All products and business information shall be carefully reviewed before being publicly disclosed to eradicate any acts of misleading or cheating clients with false information. The Group has registered multiple trademarks in China and Hong Kong according to relevant laws while signing cooperation agreements with different working partners, showing that the Group highly respects the trademark rights of others and lawfully protect the trademarks of the Group from any violation.

In order to understand customer’s satisfaction with the Group’s products, the Group has stipulated working regulations for sales companies and required sales personnel to actively contact customers and establish a continuous and stable communication channel, so as to collect customers’ opinions and improve service quality. If we receive complaints from customers relating to our products, we will reply to customers as soon as possible after completing investigation and take appropriate improvement measures if necessary, to prevent the recurrence of similar incidents.

PRIVACY PROTECTION

The Group gives priority to information security to protect both internal privacy and client information. Its information center provides training sessions regarding information safety, system application and security on a non-regular basis to improve employees’ skills in system application and arouse their awareness of security. In order to regulate the use and management of computers and internet resources, according to internal regulations and rules such as the Administrative Rules for Security of Using Office Computers and Network, the Group regulates relevant data backup and protection, anti-virus system management, central computer room management and user password setting, and strictly prohibits unauthorized access to external devices and disclosure of confidential documents and ensures the normal operation of the equipment in computer room and proper storage of important data.

In addition to improving information security, the Group also ensures that the privacy interests of both the Group and its customers are protected by supervising the bidding and purchasing procedures strictly, carrying out education regarding secrecy, signing confidentiality agreements with employees in specific positions, and with customers and suppliers.

ANTI-CORRUPTION PRACTICE

The Group always adopts the attitude of “zero tolerance” towards unlawful acts such as bribery, extortion, fraud and money laundering. During the Year, the Group continued to abide by the relevant laws and regulations such as the Anti-Money Laundering Law of the PRC and the Criminal Law of the PRC and put the Anti-fraud Control Procedures, the Administrative Measures on Complaints and Reports and other internal rules and regulations into practice. The Group has set up the Economic Supervision Department as a permanent body to urge each department to carry out the anti-fraud duties. All departments convene an anti-corruption meeting each month to summarize, review and study cases of non-compliance occurred in the past. The Chairman of the Board also holds regular anti-corruption meetings to mobilize and supervise the leaders of various departments to strengthen the building of a clean and honest organization. In addition, the Disciplinary Inspection Committee and the Economic Supervision Department of the Group jointly prepared an anti-corruption publication entitled Anti-Corruption In Organization (《勤廉陣地》), which recorded a number of typical cases of corruption and carried out in-depth information collection and analysis. During the Year, the Group organized a large-scale, full coverage with zero-miss integrity education training with the theme of “studying cases, plugging loopholes and strengthening management” to enhance employees’ awareness of probity.

For bidding and purchasing, the Group has adopted strict monitoring measures. In addition to ensuring fairness, openness and justness in the bidding process, the Group also requires personnel and management cadres related to bidding and procurement to sign an undertaking of integrity. The procurement department also signs an agreement on anti-corruption with the bidders to prevent the acts like accepting rebates or engaging in private transactions. During the Year, the Group is not aware of any non-compliance with the relevant laws and regulations in relation to bribery, extortion, fraud and money laundering that has a significant impact on the Group.



Employees participating in anti-corruption training



Annual anti-corruption publication published by the Group



CARING FOR SOCIAL WELL-BEING

The successful development of China Hongqiao is attributed to the full support and trust of the Country and all parties from the society. China Hongqiao always keeps in mind the initial mission of “building a business for the Country and benefiting the people”. We accumulate our love by little acts of kindness and give back to society and people by actively participating in social welfare undertakings and fulfilling our responsibilities and missions as a corporate citizen.

COMMUNITY WELFARE

The Group always pays close attention to the interests of the community where it operates and regards improving the community well-being as an important way to realize its value. Over the years, the Group has organized various types of public welfare activities and encouraged employees to participate in these activities such as tree planting activity, sanitary activities inside and outside the factory, blood donation and book donation activities, to contribute to the maintenance of a comfortable and clean community and helping others.



Staff participating in blood donation activity



Staff assisting in book donation

In order to make their ends most of the grassroots in China have to leave their hometowns to work in cities, and their left-behind children are likely to be neglected and lack family care and education. In view of this, the Group and the Beijing Rainbow Charity Foundation (北京彩虹公益基金會) jointly launched the project of Weiqiao Rainbow Home (魏橋彩虹之家) during the Year to provide an environment for the left-behind children in Yanshan of Yunnan to meet their educational and life needs, and they can also be accompanied and cared for.



Launching ceremony of Weiqiao Rainbow Home

In addition, the Group is very concerned about the impact of floods on the community. During the Year, the Group donated relief funds and items such as food, clothes and daily supplies to communities that were affected by floods. The Group also expressed sympathy and solicitude to such communities and provided manpower to assist the rebuilding of the affected communities, helping them to resume normal life as soon as possible.



Staff carrying relief supplies for flood prevention



OVERSEAS CONTRIBUTIONS

To advocate the economic strategy of “The Belt and Road Initiative” of the Country, China Hongqiao has devoted itself to promoting the economic development of the places where it has overseas projects in recent years, and also contributing to the local economic development to fulfill its corporate social responsibility.

Guinea

The SMB Winning Consortium formed by the Group, Winning International Group of Singapore, Yantai Port Group and United Mining Supply (UMS) of Guinea established in Guinea upheld the concept of “development in mutual benefit, benefiting the people”. Since 2014, while developing bauxite resources, the SMB Winning Consortium has also been committed to promoting the economic and social development of Guinea, making an ongoing contribution to local employment, education, transportation, medical welfare, leisure and sustainable development projects of the community, and creating a new mode for multi-party cooperation and mutual benefit in overseas mining development.

During the Year, the SMB Winning Consortium continued to abide by relevant local laws and regulations in Guinea including the Mining Law and the Environment Law and made generous investments in the community construction to promote development of the local community and economy, which greatly improved the living standards of the citizens of Boké in Guinea. For ensuring clean water supply and proper health protection for local residents, the SMB Winning Consortium planned to drill wells for over 50 villages in Guinea, of which 30 wells were completed during the Year and immediately provided clean water for the residents. In addition, the SMB Winning Consortium planned to invest seven hectares of land to establish bases for agricultural development. On the premise of being adaptable to the unique climate condition of Guinea, such bases will utilise China’s advanced agricultural facilities, techniques and management experience to develop an agricultural facility and farming model that can be widely promoted, and cultivate a number of breedable vegetable varieties, with the aim of developing a group of new local agricultural workers who can independently carry out field management, and thereby driving development of the local economy. During the Year, the SMB Winning Consortium successfully established agricultural production bases in five communities.

Contributions and outcomes from SMB Winning Consortium to the Guinean Community

Employment	<ul style="list-style-type: none"> Actively supported youth employment and gave priority to recruiting candidates from surrounding communities Promoted localization by hiring more qualified local individuals and gradually reducing the proportion of foreign employees Provided local employees with tailor-made training and cultivation programs to facilitate the handover of key positions and major management positions to local employees Donated fishing boats to the local residents to support fishermen in developing offshore fisheries
Education	<ul style="list-style-type: none"> Established literacy training centres, built and reconstructed primary schools Cooperated with Jiangsu Maritime Vocational Institute to jointly establish the “Winning Mariners College of Jiangsu Maritime Vocational Institute (江蘇海事職業技術學院)” with an aim of training the young mariners from Guinea and other West African countries
Medical welfare	<ul style="list-style-type: none"> Provided local employees with free medical services and their immediate family with medical services Provide local employees with free annual body check services and actively commenced education training on diseases Donated to local villages to build clinics and temporary isolation clinics, and provided residents with medical security and limit the spread of virus In response to the novel coronavirus pneumonia epidemic, donated anti-epidemic supplies and funds to the locals
Transportation	<ul style="list-style-type: none"> Donated USD8.7 million for repairing the approximately 25 km road connecting the surrounding villages to Boké to tackle the difficulty in travelling by foot during rainy season and the road dust dispersion Cooperated with local railway company to establish the first local green railway company and construct local railway facilities which are in line with the concept of sustainable development
Well-being	<ul style="list-style-type: none"> Invested more than RMB1.0 million for the construction of a local water treatment plant, ensuring the water is safe for consumption Drilled wells in surrounding communities and repaired some existing wells with faults or damages, solving the water shortage problem Showed respect to local customs and culture with active involvement in the community, such as giving out rice and livestock at local festivals, actively participating in and funding wedding and funeral as well as religious ceremonies of local villagers Gave out candies, notebooks and footballs to children in local villagers before International Children’s Day
Culture and leisure	<ul style="list-style-type: none"> Sponsored and organized social football matches and sponsored the local professional team Installed outdoor large-screen TVs with electricity supplied for villagers to watch TV shows such as football matches
Sustainable community development	<ul style="list-style-type: none"> Planted the cashew trees in the restored mining area and returned the administrative right of the land to the local villagers after the bloom; the mining area after reclamation will become an orchard that brings the villagers income Promoted the planting technology of agricultural sheds and vegetable farms to support the local sustainable development
Others	<ul style="list-style-type: none"> Organized several China-Guinea economic forums to promote economic development between both countries Donated millions of US dollars to complete the future entire development planning of the capital, Conakry, and to assist in clean-up activities in Conakry and Boké Donated USD5 million to sponsor the comprehensive inspection of mining resources in Guinea and help the local government accurately understand the status of national resources Cooperated with the local outstanding enterprises to jointly develop the mining industry in Boké Procured the application for international commercial port of Boké to turn Boké to a major port of Guinea



SMB Winning Consortium's investment
in the construction of wells



SMB Winning Consortium's agricultural production bases

As of December 2019, SMB Winning Consortium has more than 5,000 project staff directly or indirectly involved in Guinea, and the number of the subcontractors and merchants who specially served SMB Winning Consortium reached over 3,000, and more than 50,000 job opportunities (including indirect employment) have been cumulatively created in Guinea. During the Year, tax paid by SMB Winning Consortium to Guinea amounted to USD200 million. Its projects have been running smoothly in Guinea which attracted more enterprises and investors to invest in the mining, infrastructure construction and agricultural industries, hence driving the economic growth of Guinea.

Indonesia

PT. Well Harvest Winning Alumina Refinery (“PT. Well Harvest Winning”), jointly established by the Group, Indonesian Halida Group (印尼哈利達集團) and Singapore Winning Group (新加坡韋立集團), is the largest industrial alumina company in Indonesia and even in Southeast Asia, which fills the domestic industrial gap in Indonesia. By adhering to the vision of “people-oriented governance and cooperation for achieving mutual benefits”, PT. Well Harvest Winning consecutively hired thousands of Indonesian labor, which greatly contributed to local employment, driving both economic and social development. In addition, PT. Well Harvest Winning has established a specialized social responsibility group to launch various projects that are related to the well-being of the local community such as road and bridge maintenance, construction of mosques and security guard’s booths, repairing damaged coastlines and building schools. Besides, PT. Well Harvest Winning has been actively in donating funds to people in need, providing education funds, medical assistance and participating in fire-safety work.

During the Year, PT. Well Harvest Winning has accumulatively invested more than USD 350,000 to establish a cooperation union with the local villagers to continue teaching them farming, fishing and other skills so that the local villagers can be self-reliant and this improves their living standards. PT. Well Harvest Winning also actively carried out charity events including coastline restoration, fire-safety work, investment in school construction and education funds. Through various methods, including improving education, health conditions and family economic status and increasing villagers’ income, PT. Well Harvest Winning helps the local villagers to establish a comprehensive and sustainable development of human and natural resources. Through the provision of food subsidiaries, education and consultation on healthy living and free medicine to children, pregnant women and the elderly, PT. Well Harvest Winning improves the standard of health services and continuously improves the public health environment.

Along with self-development, PT. Well Harvest Winning will continue to integrate the fulfilment of social responsibility into the development strategy and cooperate culture of the Company, organically integrate economic and social benefits as a value pursuit, and give back to the local community through various means.



PT. Well Harvest Winning providing free food and health consultations for babies, pregnant women and the elderly to local villages



PT. Well Harvest Winning donating educational facilities to local early childhood education institutions



APPENDIX I: SUMMARY OF KEY PERFORMANCE INDICATORS

KEY PERFORMANCE INDICATORS	2019	2018
Emissions		
<i>Exhaust gas</i>		
Nitrogen oxides (tonnes)	11,709	12,844
Sulfur dioxide (tonnes)	22,549	46,006
Particulates (tonnes)	1,283	1,833
Fluoride (tonnes)	331	195
<i>Wastewater</i>		
Ammonia nitrogen (tonnes)	4	6
Total nitrogen (tonnes)	69	70
Chemical oxygen demand (tonnes)	201	252
Greenhouse gas (“GHG”)		
Total GHG emissions (scope 1&2) (ten thousand tonnes of CO ₂ equivalent)	6,831	8,423
Scope 1 Total direct GHG emissions (ten thousand tonnes of CO ₂ equivalent)	5,499	6,658
Scope 2 Total indirect energy GHG emissions (ten thousand tonnes of CO ₂ equivalent)	1,331	1,765
GHG emission intensity (tonnes of CO ₂ equivalent/tonne of production capacity per annum)	10.58	13.04
Solid waste		
<i>Non-hazardous waste</i>		
Total non-hazardous waste generated (ten thousand tonnes)	1,112	1,680
Non-hazardous waste intensity (tonnes/tonne of production capacity per annum)	1.72	2.60
<i>Hazardous waste</i>		
Total hazardous waste generated (ten thousand tonnes)	1,914	1,828
Hazardous waste intensity (tonnes/tonne of production capacity per annum)	2.96	2.83

KEY PERFORMANCE INDICATORS	2019	2018
Use of resources		
<i>Energy</i>		
Total energy consumption ^{Note 1} (TWh)	215	252
Energy consumption intensity (MWh/tonne of production capacity per annum)	33.27	39.01
Total electricity consumption ^{Note 2} (TWh)	83	92
Total steam consumption ^{Note 3} (ten thousand tonnes)	3,392	2,992
<i>Water</i>		
Total water consumption (ten thousand cubic meters)	21,049	20,084
Water consumption intensity (cubic meters/tonne of production capacity per annum)	32.59	31.09
<i>Packaging materials</i>		
Wood products		
Total consumption (tonnes)	3,198	4,006
Intensity (tonnes/ten thousand tonnes of finished products)	40.49	101.61
Paper products		
Total consumption (tonnes)	484	539
Intensity (tonnes/ten thousand tonnes of finished products)	6.13	13.68
Plastic products		
Total consumption (tonnes)	302	407
Intensity (tonnes/ten thousand tonnes of finished products)	3.82	10.32
Metal products		
Total consumption (tonnes)	137	237
Intensity (tonnes/ten thousand tonnes of finished products)	1.74	6.02

Note 1: The total energy consumption includes the consumption of coal and diesel oil for generating electricity and steam, natural gas for producing aluminum products, and purchased electricity.

Note 2: The total electricity consumption of the Group includes the self-generated electricity and purchased electricity. All self-generated electricity of the Group was for internal use.

Note 3: All steam of the Group was self-generated, part of it was for internal use, and the rest was sold to external parties.



APPENDIX II: ESG REPORTING GUIDE CONTENT INDEX

ESG Aspects	General Disclosure and Key Performance Indicators (“KPI”)		Chapters/Statement
A. Environment			
A1: Emissions	General Disclosure		Promoting Green Production – Prevention and Control of Pollution
	KPI A1.1	The types of emissions and respective emissions data.	Appendix I: Summary of Key Performance Indicators
	KPI A1.2	Greenhouse gas emissions in total and intensity.	Appendix I: Summary of Key Performance Indicators
	KPI A1.3	Total hazardous waste produced and intensity.	Appendix I: Summary of Key Performance Indicators
	KPI A1.4	Total non-hazardous waste produced and intensity.	Appendix I: Summary of Key Performance Indicators
	KPI A1.5	Description of measures to mitigate emissions and results achieved.	Promoting Green Production – Prevention and Control of Pollution, Promoting Green Production – Energy Conservation and Consumption Reduction, Promoting Green Production – Green Office
	KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	Promoting Green Production – Prevention and Control of Pollution, Promoting Green Production – Waste Recycling and Reusing, Promoting Green Production – Green Office

ESG Aspects	General Disclosure and Key Performance Indicators (“KPI”)		Chapters/Statement
A2: Use of Resources	General Disclosure		Promoting Green Production – Energy Conservation and Consumption Reduction
	KPI A2.1	Direct and/or indirect energy consumption by type in total and intensity.	Appendix I: Summary of Key Performance Indicators
	KPI A2.2	Water consumption in total and intensity.	Appendix I: Summary of Key Performance Indicators
	KPI A2.3	Description of energy use efficiency initiatives and results achieved.	Promoting Green Production – Energy Conservation and Consumption Reduction, Promoting Green Production – Green Office
	KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	Promoting Green Production – Prevention and Control of Pollution, Promoting Green Production-Green Office
	KPI A2.5	Total packaging material used for finished products and with reference to per unit produced.	Appendix I: Summary of Key Performance Indicators
A3: The Environmental and Natural Resources	General Disclosure		Promoting Green Production
	KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Promoting Green Production



ESG Aspects	General Disclosure and Key Performance Indicators (“KPI”)		Chapters/Statement
B. Social			
Employment and Labour Practices			
B1: Employment	General Disclosure		Adhering to People-Oriented Governance – Recruiting Talents, Adhering to People-Oriented Governance – Talent Cultivation, Adhering to People-Oriented Governance – Caring for Employees
	KPI B1.1	Total number of employees by gender, type of employment, age group, and region.	N/A
	KPI B1.2	Employee turnover rate by gender, age group and region.	N/A
B2: Health and Safety	General Disclosure		Adhering to People-Oriented Governance – Health and Safety
	KPI B2.1	Number and rate of work-related fatalities.	N/A
	KPI B2.2	Lost days due to work-related injury.	N/A
	KPI B 2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	Adhering to People-Oriented Governance – Health and Safety
B3: Development and Training	General Disclosure		Adhering to People-Oriented Governance – Talent Cultivation
	KPI B3.1	The percentage of employees trained by gender and employee category.	N/A
	KPI B3.2	The average training hours completed per employee by gender and employee category.	N/A

ESG Aspects	General Disclosure and Key Performance Indicators (“KPI”)		Chapters/Statement
B4: Labor Standards	General Disclosure		Adhering to People-Oriented Governance – Recruiting Talents
	KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	Adhering to People-Oriented Governance – Recruiting Talents
	KPI B4.2	Description of steps taken to eliminate such practices when discovered.	N/A
Operating practices			
B5: Supply Chain Management	General Disclosure		Pursuing Excellence in Quality – Supply Chain Management
	KPI B5.1	Number of suppliers by geographical region.	N/A
	KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	Pursuing Excellence in Quality – Supply Chain Management
B6: Product Responsibility	General Disclosure		Pursuing Excellence in Quality – Sales and Services, Pursuing Excellence in Quality – Privacy Protection
	KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	N/A
	KPI B6.2	Number of products and service-related complaints received and how they are dealt with.	N/A
	KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Pursuing Excellence in Quality – Sales and Services
	KPI B6.4	Description of quality assurance process and recall procedures.	Pursuing Excellence in Quality – Quality Management
	KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Pursuing Excellence in Quality – Privacy Protection



ESG Aspects	General Disclosure and Key Performance Indicators (“KPI”)		Chapters/Statement
B7: Anti-corruption	General Disclosure		Pursuing Excellence in Quality – Anti-Corruption Practice
	KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Pursuing Excellence in Quality – Anti-Corruption Practice
	KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	Pursuing Excellence in Quality – Anti-Corruption Practice
Community			
B8: Community Investment	General Disclosure		Caring for Social Well-Being
	KPI B8.1	Focus areas of contribution.	Caring for Social Well-Being
	KPI B8.2	Resources contributed to the focus area.	Caring for Social Well-Being