

KING Stock Code: 03788



2019 ENVIRONMENTAL, SOCIAL & GOVERNANCE REPORT





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About this report





This report is prepared in accordance with Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Hong Kong Stock Exchange") (the "Listing Rules") – "Environmental, Social and Governance Reporting Guide". All information herein reflects the performance of China Hanking Holdings Limited (the "Company", together with its subsidiaries, the "Group" or "We") in respect of environmental management and corporate social responsibility from 1 January 2019 to 31 December 2019, which is available for public use to enhance transparency and increase the confidence and understanding of the stakeholders toward the Group.

Scope

The Company was incorporated in the Cayman Islands on 2 August 2010, and was listed on the Hong Kong Stock Exchange on 30 September 2011, stock code: 03788. The Company is a rapidly-growing global mining and metal group with mineral resources spanning China and Australia. Currently, the Company is mainly engaged in the exploration, mining, processing and smelting of iron, gold and other strategic medals, sales of products, and development of mineral resources.

This report covers the iron ore business in the PRC ("Iron Ore Business"), the green building materials business of producing foamed ceramics ("Green Building Materials

Business"), high-purity iron business ("**High-Purity Iron Business**") and gold mine investment business in Australia ("**Gold Mine Business**") owned by the Group. Compared to 2018, the High-Purity Iron Business was added to and the Nickel Ore Business was removed from the Company's businesses (on 30 June 2019, the Group acquired the controlling stake of the High-Purity Iron Business and sold the Nickel Ore Business).

Source of Data and Internal Verification

Information contained in this report is compiled from the measures taken, policies adopted and related statistics provided by main senior managers of the Group. Sources of the data contained in this report include industrial publicly available data, the internal datasheets of the Group, questionnaire surveys and administrative documents. The data is collected and summarized by the Environmental, Social and Governance ("**ESG**") taskforce before being submitted to the Company's audit department for verification and to the board of directors of the Company (the "**Board**") for review. Upon completion of the review, such data is released.

This report shall be read in conjunction with the annual report. Unless the context otherwise requires, the terms contained herein shall have the same meanings as the terms disclosed in the annual report. This report is prepared in both English and Chinese versions and is available on the websites of the Company and the Hong Kong Stock Exchange (the HKEXnews). Should there be any discrepancy between the English and the Chinese versions, the Chinese version shall prevail. If you have any doubts or suggestions regarding this report, please contact us at any time, which will enable us to **China Hanking Holdings Limited** continuously **Investor Relations Department** improve our ESG Address: 23/F., Effectual Building, practices. Our 16 Hennessy Road, Wanchai, **Hong Kong** contact details 852 3158 0506 Tel: are as follows: Fax: 852 3158 0508 Email: ir@hanking.com Vebsite: http://www.hankingmining.com



The Company is committed to building safe, harmonious and green mines, and implementing sustainable development philosophy. The Board has set up the multi-level health, safety, environmental protection and community organization from the Board to the production workshops at each mine of the business segments. The Health, Safety, Environmental Protection and Community Committee under the Board is responsible for leading the works regarding health, safety, environmental protection and community across the Group. The Safety and Environmental Protection Department has been established in the Iron Ore Business to manage issues regarding safety, environmental protection, fire fighting and occupational hazards. Relevant enforcement organizations and full-time staff are appointed in each mine and their respective production workshops to enforce and supervise the implementation of relevant policies. A safety division was established in the Green Building Materials Business to oversee works related to safety, environmental protection, firefighting and occupational hazards. A production safety division was established in the High-purity Iron Business to oversee works related to health, safety, environmental protection and occupational hazards. In 2019, the Health, Safety, Environmental Protection and Community Committee organizations of each business segment were further improved, forming an organization featured with definite responsibilities and effective supervision.

Based on the review of the Health, Safety, Environmental Protection and Community Committee, the Board confirms that the Group has fully complied with the "comply or explain" provision and most of the recommended disclosure provisions set out in the ESG Reporting Guide. The environmental, social and governance measures taken by the Group are appropriate and effective during the reporting period.



CHINA

- IRON ORE BUSINESS
- HIGH-PURITY IRON BUSINESS

AUSTRALIA GOLD ORE BUSINESS



Responsibility of the Board

Health, Safety, Environmental Protection and Community Organization of the Group



Materiality Assessment

The determination and analysis of materiality topics are conducted through three processes: identification, prioritisation and verification.

Identification

During the identification phase, we have considered material issues in G4 Sustainability Reporting Guidelines of Global Reporting Initiative (GRI), issues required to be disclosed by Appendix 27 to the Main Board Listing Rules – ESG Reporting Guide, as well as material issues that stakeholders care about in the process of engagement. The Group has identified the following 17 material issues and determined the scope and boundary of the impacts of such issues.

Prioritization

In the prioritisation phase, through questionnaire surveys, we consider and prioritise the identified material issues in terms of their impacts on the business and the environment.



Verification

In respect of the identified materiality topics, the Group collects opinions from relevant managers and carries out verification so as to reach consensus. In addition, the Group has formulated administrative measures regarding the indicators involved in the materiality topics to determine the means of collection and procedures of indicator information disclosure.



Stakeholders' Engagement

The Company is committed to creating a win-win community for all parties. The Company identifies stakeholders as individuals or organizations that interact with the Group and are influenced by, and have an influence on or have a vested interest in the Group. The stakeholders of the Group include not only internal stakeholders such as the employees and directors, but also external stakeholders such as our shareholders and investors, partners, communities, the public and governments.

The Group aims to maintain open and effective communication with stakeholders to achieve the maximum of social integrated benefits (including the maximum of enterprise earnings). Going forward, the Group will maintain and promote the communication with the stakeholders and collect their opinions extensively through various forms, optimizing the substantive analysis. Meanwhile, the Group will also adopt a more quantitative, balanced and consistent reporting principles to present the content and information of the report.

Communication with Key Stakeholders of the Company in 2010

Communication with Key Stakeholders of the Company in 2019					
Stakeholders	Key interests	Ways of engagement and communication			
The Board	Strategy and development Business continuity planning Corporate operational issues Financial position Ethics and integrity	Board meetings General meetings Management meetings Press release Annual & interim reports, circulars, announcements Email and telephone			
Employees	Remuneration and welfare Employment Development and training Occupational health and safety Labor standards	Labor union activities Employees' activities Training and learning activities Staff meetings Face-to-face communication			
Shareholders and investors	Planning and development Business continuity planning Corporate operational issues Financial position Ethics and integrity	Annual & interim reports Press, announcements General meetings Investor communication sessions On-site visits			
Customers	Planning and development Business continuity planning Service commitment Market information Product quality Legal compliance Ethics and integrity	Regular visits and follow-ups Company's website and promotional materials			

Communication with Key Stakeholders of the Company in 2019					
Stakeholders	Key interests	Ways of engagement and communication			
Suppliers	Business continuity planning Legal compliance Financial position Corporate governance and internal control Anti-corruption Occupational health and safety	Open tendering On-site visits Fairs			
Peers	Market information Company development Business continuity and strategic planning Corporate operation Financial position	Seminars Exchange visits Industry organization conferences			
Communities	Charity and donation Community investments Labour demands Education	Enterprise visit Charitable assistance Volunteer service Community building activities			
Governments	Corporate governance and internal control Market information Legal compliance Ethics and integrity Company development Sustainable development and strategic planning Financial position	On-site inspections and checks Research and discussion through work conferences Work reports preparation and submission for approval			



Stakeholders' Engagement

Communication with stakeholders



2019 Board meeting on interim results



2019 Forum of Kangaroo Club



Cheng Guohui, vice mayor of Fushun City, inspects the safety work of Maogong Mine



"National Important Laboratory of Northeastern University - Industrial Intelligence Test Base" unveiled



Green Building Materials Business participates in China International Exhibition on Housing Industry



Initiation ceremony for Shanghai representative office

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Emissions Control and Management

The Group regards reducing and standardizing discharge of waste as one of the important tasks for an enterprise to fulfill its environmental protection responsibility, and makes efforts to reduce the generation and emission of waste by utilizing technologies and recycling.

The Group has obtained the required work safety license and its emission of industrial "three wastes" has reached the required standards, which are detailed below:

Management and Types of Emissions, as well as Respective Emissions Data (A1.1/A1.3/A1.4/A1.5/A1.6)

Iron Ore Business

The Iron Ore Business uses physical magnetic separation method to produce iron concentrate without producing hazardous substances. During the production process, it controlled emission of three main types of wastes as required and realized zero pollution in accordance with the Rules Governing Mining Solid Wastes (礦山固體廢棄物管理辦法), Rules Governing Environmental Protection (環境保護管理辦法) and Rules Governing Hazardous Waste (危險廢物管理辦法). To properly keep, use and dispose of mining solid wastes, and centralize the management of mining solid wastes, all waste stones generated in the mining process have been used for backfilling, roadbuilding, drainage ditch construction and repairs, among others. Advanced technologies are used to minimize tailings generated in ore processing. Tailing sand is used for production of baking-free bricks and foamed ceramics in the Green Building Materials Business. Zero emission of wastewater is achieved by recycling wastewater. We have entered into contracts with recyclers to recycle waste oil for comprehensive use and treatment. Noises and dusts will be emitted during the mining and hauling operation at mine sites, as well as the crushing and machine operation at the processing plant. Exhaust gas will be emitted by running fuel-powered equipment.

Green Building Materials Business

The Green Building Materials Business primarily emits exhaust gas of equipment, wastewater and solid wastes. The solid wastes include scraps and powders arising from the cutting process, and such wastes can be fully recycled after being mixed with other formula materials. Wastewater can also be fully recycled to realize zero emission.

High-Purity Iron Business

The waste gas produced in the sintering process and shaft furnace pellet roasting process of High-Purity Iron Business contains sulfur dioxide, nitrogen oxide and particulate matter. In order to reduce the pollutant emission, the High-Purity Iron Business has built the sintering machine desulfurization system with electrostatic precipitator, and the shaft furnace desulfurization system with electrostatic precipitator.



In accordance with the Implementation Plan for Ultra-Low Emission Transformation of Liaoning Iron and Steel Industry in 2019, the Company plans to start ultra-low emission transformation for the High-Purity Iron Business by the end of 2023, and complete the transformation by the end of 2025, in order to meet the ultra-low emission requirements of the iron and steel enterprises.

Gold Mine Business did not carry out any production activity in 2019, so there was no emission from its production.

Business	Process	Emissions	Category of pollutants	Total volume (metric tons or 10,000 cubic meters)	Initiatives taken to reduce the emissions
	Mining	Stones arising from mining process	Non-hazardous waste	604,139.05	Part of the waste stones generated in mining is used for road construction and drainage ditch construction, and the rest is used to form overburden rock.
Iron Ore Business	Processing	Tailing sand	Non-hazardous waste	3,167,382.69	 Advanced technologies are used to minimize tailings; In 2019, 480,000 tons of pre-cast sands were used for construction; Tailing sand is used for production of baking-free bricks and foamed ceramics in the Green Building Materials Business.
		Waste water	Non-hazardous waste	0	 Recycling of mineral processing wastewater to realize zero discharge; Except water for mining use, all the mine water will be pumped to the processing plant for use.
		Waste oil	Hazardous waste	12.52	Recycled by waste oil recyclers for comprehensive use and treatment.
	Production	Waste water	Non-hazardous waste	0	Zero emission is achieved by recycling.
Green Building Materials	Workshop	Scraps and powders generated from the cutting processes	Non-hazardous waste	0	The wastes are fully recycled after being mixed with formula materials.
	Production	Desulfurized gypsum	Non-hazardous waste	694.12	Use low-sulfur raw materials.
High-Purity Iron Business	Workshop	Waste resin	Hazardous waste	0	Stacking (It shall be contained in bags that are stored in the warehouse on the cement floor. Such bags of waste resin should be supported by pallets, covered with tarpaulins to avoid pollution, and treated by qualified firms).
		Industrial waste water	Non-hazardous waste	0	Complete internal recycling, no discharge.
		Blast furnace gas	Non-hazardous waste	56,272.97	As the fuel of sintering machine, shaft furnace, boiler and hot blast furnace.
		Particulate matter	Non-hazardous waste	288.74	Real time on-line monitoring, and dedusting by sprinkling water.

Recycling

The industrial waste water from the iron ore processing plant of the Iron Ore Business is completely recycled and is not discharged. Part of the underground mine water is used by the underground mining units. The rest is pumped to the processing plant for use in production.

The waste water of the Green Building Materials Business will be fully recycled after sedimentation, with no discharge.

Blast furnace gas generated by High-Purity Iron Business during blast furnace smelting process can be used as fuel of sintering machine, shaft furnace, boiler and hot blast furnace.

Analysis of greenhouse gas (GHG) emissions arising from energy consumption (A1.2)

The direct GHG emissions of the Group are mainly caused by fossil fuel consumed for production and office operation, including diesel, gasoline, coal, coke powder, coke, natural gas and blast-furnace gas. Indirect GHG emissions are caused by power consumed during the production process of enterprises. Other indirect GHG emissions are mainly from the emission sources of business air travel by our employees.

GHG emissions (A1.2)

Category	Iron Ore Business	Green Building Materials	High-Purity Iron Business	Gold Mine Business	HQ in China
Scope 1	-5,587.29 ^{Note}	114.17	585,716.10	-	82.66
Scope 2	118,424.45	2,521.61	82,743.61	27.55	63.01
Scope 3	19.23	31.12	8.34	12.14	40.50
Carbon dioxide equivalent (metric tons)	112,856.39	2,666.90	668,468.05	39.69	186.17
Iron Ore Business Annual output of iron ore concentrates (metric tons)	1,860,098.00	Iron Ore Business GHG emissions per ton of iron ore concentrates (metric tons CO ₂ e)		0.0	607
High-Purity Iron Business Annual output of high-purity iron (metric tons)	287,905.03	High-Purity Iron Business GHG emissions per ton of high-purity iron (metric tons CO ₂ e)		2.3	218
Green Building Materials Business Annual output of foamed ceramics (cubic meters)	34,177.00	GHG emissions per cubic	laterials Business meter of foamed ceramics ons CO ₂ e)	0.0	781

Note: The Iron Ore Business planted 470,000 trees in 2019, which reduced GHG emissions by 10,810 metric tons of carbon dioxide equivalent. Excluding the direct GHG emission of Iron Ore Business, GHG emission reduction reached 5,587.29 metric tons of carbon dioxide equivalent.

Scope 1: Refers to the direct GHG emissions. The emissions of the Group are derived from the GHG generated by consumption of stationary source and mobile source, and minus the GHG removal from new tree planting each year (Global warming potential (GWP) is derived from the Fifth Assessment Report (AR5) by Intergovernmental Panel on Climate Change (IPCC)).

Scope 2: Refers to the indirect GHG emissions where the GHG emissions are derived from the purchased electricity. The GHG emission factors of the Iron Ore Business, Green Building Materials Business, High-Purity Iron Business and the Headquarters are derived from the GHG Protocol Tool for Energy Consumption in China (Version 2.1). The measurement of GHG emission of the Gold Mine Business is based on the GHG Protocol.

Scope 3: Refers to other indirect GHG emissions. The Group chooses to disclose the emissions caused by business air travel by our employees, which is calculated in accordance with ICAO Carbon Emissions Calculator.

In order to reduce GHG emissions, the Group has implemented policies encouraging our employees to substitute overseas business travel with conference call to reduce business travels. Moreover, public transportation is encouraged. Such measures will reduce GHG emissions caused by private cars and aircrafts on a business trip.

In 2019, the Group acquired the High-Purity Iron Business and sold the Nickel Ore Business. Excluding the impact of the High-Purity Iron Business and Nickel Ore Business, the Group's GHG emissions fell by 11.50% year on year.



Management of tailing ponds and recycling of tailing sands: The tailing ponds in the Iron Ore Business are designed, constructed and managed in strict accordance with the Administrative Rules for Safety Supervision in Tailing Ponds (《尾礦庫安全監督管理規定》) and Safety Technological Regulations for Tailing Ponds (《尾礦庫安全 技術規程》) of the PRC, and all related safety and environmental standards have been fulfilled.

Tailing sand is discharged into tailing pond along with tailing slurry, and finally deposited in tailing pond. For the daily management and monitoring of tailing pond, we have adopted multi-point ore drawing to improve the effective capacity utilization ratio of tailing pond, used effective monitoring means to measure the height of saturation line of tailing pond dam body, reasonably controlled the water level in the pond before flood season, and ensured that the minimum dry beach width and safety free board of tailing pond meet applicable safety requirements, thereby ensuring the safe operation of tailing pond.

Iron Ore Business has adopted a number of solutions to comprehensively utilize tailing sand: (i) using tailing sand from the processing plant in the production of non-burnt bricks for construction; (ii) using advanced processing techniques to throw out primary dry sands for construction use, (iii) reducing the volume of tailing sand through technological improvement; and (iv) using tailing sand to produce foamed ceramics and other building materials.



The Green Building Materials Business of the Group produces foamed ceramics using the tailing sands generated by the Iron Ore Business. Foamed ceramics are light and A1 fireproof materials that are soundproof and waterproof. It has high strength and is easy to be installed and processed. With the potential to be used in subways, hospitals, libraries, commercial properties and residential properties, the foamed ceramics can fully replace the existing wall and thermal insulation materials used in domestic market. Therefore, we see great growth potential in our Green Building Materials Business. In 2019, it consumed 2,000 metric tons of tailing sand, which means decreasing emission of the same amount of tailing sand of Iron Ore Business. The green building materials project can reduce the land used by the tailing ponds and maximize the value of our products. The project realizes the circular economy goal of improving both productivity and environmental protection, and also represents part of the Group's efforts to expand into other sectors in the industry chain and respond to industry changes.

The Gold Mine Business will remove and repair the existing tailings pond, and the new tailings from the processing plant will be deposited underwater in the mine pit in the same way as before. If any cutting material is found to





produce acid, it will be put into the pit like underground waste rock. The pit will be large enough to store all the waste rock and tailings 26 meters underground. According to historical studies, at least 1-5 meters depth of water will be put on the waste materials to limit their oxidation.

Dust prevention and removal measures: Dust control, collection and reduction measures are taken to manage dust.

Specialized dust removal equipment is put in place in the processing plant of the Iron Ore Business. Wet operation is used in underground mining. Sprinkling trucks and pipelines are used to remove dusts on roads. In the grinding workshops and processing plant, a wet grinding process has been adopted to prevent dusts. Bag filters have been installed across the crushing workshops, screening workshops, waste ore storehouse, main building and other areas of the processing plant, and high-level emission has been adopted to eliminate dusts resulting from production, with the dust removal ratio reaching 99%. Employees are required to use protective equipment at work.

To prevent unorganised discharge of dust, the Green Building Materials Business installed dustproof cover in the raw materials spray drying area. Fine dusts are transferred via spiral closed transportation instead of belts. Dust control facilities are installed in the cloth loading area, which greatly improves the dust control and equipment maintenance effect in the operation area. Overall working environment of the production workshop is also significantly improved.

Dust removal transformation of High-Purity Iron Business:

Transformation of new dust removal system: four newly built dust removal equipment have been put into use. Such equipment is mated with high-voltage inverter, generating high enough air volume to support production demand. The emission indicators have reached the design effect, and fallen below 10mg/m³.

The electric dust removal system of shaft furnace was upgraded from 3 electric fields to 4 electric fields, and the emission indicators fell blow 10mg/m³.

The multi-pipe dust removal system at sintering machine heads was demolished, rebuilt and transformed into 4 electric-field electrostatic precipitator. The dust treatment capability was improved greatly, and the environment was notably enhanced. The emission indicators fell blow 10mg/m³.



The sintering machine desulfurization system with electrostatic precipitator, and the shaft furnace desulfurization system with electrostatic precipitator were constructed

and put into use, which reduced pollutant emission of the sintering process and shaft furnace pellet roasting process.

Noise reduction measures: Noise absorption, insulation and control technologies are adopted to ensure the noises in the plants meet the requirements set forth in "Emission Standard for Industrial Enterprises Noise at Boundary" (GB12348-2008).

The Iron Ore Business optimizes blasting design, applies structural insulating materials, conducts technical process transformation, uses low noise equipment, installs shock pads on crushers, screening machines and ball grinders, and takes other effective measures to mitigate damages caused by noise, achieving satisfactory results.

The Green Building Materials Business has used low-noise equipment, and used various noise reduction measures in the major noise-generating procedures such as powder production, compaction, polishing and deburring. These measures include reducing the vibration of equipment, isolating notices of production facilities, strengthening the vegetation in plants, and others.

Reduction of off-gas emissions: The Company selects and uses diesel-powered equipment strictly compliant with national emission standards in a reasonable fashion, and switches off equipment not running for a long time in a timely manner, so as to reduce its off-gas emissions. Moreover, use frequencies and routes of forklifts are optimized to reduce off-gas emissions.

Treatment of domestic waste: In response to national policies, the Company promotes waste sorting and forbids littering or burning of domestic waste. Domestic waste and waste water emitted from the Iron Ore Business are discharged into the impermeable septic tanks, and transformed into fertilizer for crops. Non-perishable domestic waste is moved to the refuse depot for disposition. The domestic waste of Green Building Materials Business is stored in a centralized and classified manner, and the domestic sewage is discharged into the impermeable septic tanks in plants. Third-party organizations are regularly appointed to clean up and transport wastes.



Use of Resources

For mining companies, mineral resources are their foundation to survive and thrive. The Group values and encourages thrifty and efficient use of resources, while preventing waste of resources by enhancing its effort in recycling.

The Company has set a goal to use cleaner and renewable energy as much as possible without affecting the production of the Company, use energy-saving technologies in new buildings and equipment, incorporate efficiency upgrade of energy impact into our future plans, and educate employees of the Company on how to minimize energy use and consumption at work. (A2.3)

Mineral resources

As at 31 December 2019, the Group's iron ore resources amounted to about 90,955 thousand metric tons, with about 35,577 thousand metric tons that meet standards defined in JORC Code.

As at the end of 2019, the PGO under the Gold Mine Business has about 2 million ounces of gold resources that meet standards defined in JORC Code, with an average grade of 1.1 grams per metric ton. Gold resources has reached 230,000 ounces, with an average grade of 3.9 grams per metric ton.

Use of other key resources

Besides mineral resources, other key resources used by the Group include water, electricity, gasoline, diesel, coal, coke, coke powder, natural gas and blast furnace gas. Use of each of these resources and measures for more efficient use of them are summarized below.

		Total annual consumption by Iron Ore Business	Total annual consumption by High-Purity Iron Business	Total annual consumption by Gold Mine Business	Total annual consumption by the Green Building Materials Business	Total annual consumption by the Headquarters
Gasoli	ine (liters)	62,058.00	42,857.00	-	12,956.52	31,074.75
Diese	el (liters)	1,574,418.61	452,200.00	-	33,612.05	-
Coal (m	netric tons)	460.70	31,782.43	-	-	-
Power cons	sumption (kWh)	104,180,000.00	72,790,960.00	24,240.00	2,218,302.91	55,428.59
Coke (n	netric tons)	-	158,636.37	-	-	-
Coke powde	er (metric tons)	-	17,022.83	-	-	-
	ural gas lard cubic meters)	-	-	-	5,988,959.00	-
Blast fu (10,000 standa	urnace gas ard cubic meters)	-	56,272.97	-	-	-
	Surface water	1,697,378.00	-	-	-	-
Water (metric	Underground water	-	178,960.00	-	12,323.00	-
tons)	Municipal water supply	-	-	-	-	- (borne by the lessor)

Energy and Water Consumption (A2.1/A2.2):

In 2019, the annual output of iron ore concentrates of the Iron Ore Business was 1,860,098 metric tons. The Green Building Materials Business produced 34,177 cubic meters of foamed ceramics plates and 49,622 meters of lines for the year. The High-Purity Iron Business had a high-purity iron output of 287,905 metric tons.

The unit energy consumption and water o	Consumption of per metric ton of iron ore concentrates by Iron Ore Business	Consumption of per metric ton of high- purity iron by High- Purity Iron Business	Consumption of per cubic meter of foamed ceramics plates by Green Building Materials Business
Gasoline (liters)	0.03	0.15	0.38
Diesel (liters)	0.85	1.57	0.98
Coal (metric tons)	0.0002	0.11	-
Power consumption (kWh)	56.01	252.83	64.91
Natural gas (10,000 standard cubic meters)	-	-	175.23
Blast furnace gas (10,000 standard cubic meters)	0.00	0.20	-
Water (metric tons)	0.91	0.62	0.36

The unit energy consumption and water consumption are as follows (A2.1/A2.2):





Water (A2.4)

Water is a kind of critical and limited resource that is vital to all life. However, human activities have had a negative impact on the supply of fresh water in many areas. Water shortage is a global issue and its impact can be felt locally. We have gauged our footprints, and prioritized water source protection, water conservation and water efficiency.

The water use target of the Iron Ore Business is to reduce the use of new water year by year. Mine water inflow and return water of tailing pond are the main sources of water for production. Technical transformations and other measures are carried out to continuously reduce the per ton water consumption of iron ore concentrate.

The water for green building materials production is mainly from the raw material treatment process. By adding appropriate water reducing agent and optimizing formulas, the water consumption has been reduced and the industrial wastewater is fully recycled to achieve zero emission.



The High-Purity Iron Business' industrial waste water is recycled internally without external discharge. After the installation of LPH intelligent energy-saving equipment, the business can control the load change of the water pump and fan motor via real-time monitoring based on the pressure (flow) of the detection system, and adjust the operation load of the water pump and fan motor in real time to realize intelligent control.

The Gold Mine Business, through a water management system, enables on-site accommodation of all mining-affected water and storage of clean water during the dry season. In the event of a natural stream during the rainy season, the impoundment dam can discharge water into the environment. Water from the impoundment dam is also used to support on-site dust control. Moreover, 200 milliliters of water is planned to be transferred to third party for irrigation every year.

Electricity

The Group has lowered unit power consumption by using energy-saving transformers and motors and other energysaving facilities, building energy-saving projects, reasonably selecting large equipment, reducing the number of equipment, improving the output per equipment and increasing production capacity. The Group requires its employees to turn off electric equipment unused for a long time in a timely manner, and raises the awareness of its employees to save electricity by posting promotional signage, so as to prevent unnecessary wastage.

The Iron Ore Business improves production capacity and reduces power consumption through technical transformation, rational design and layout of equipment, as well as more scientific layout planning.

The Green Building Materials Business reduces power consumption by optimizing raw material processing technology, and adopting peak and valley power consumption and intermittent operation in ball mill, spray drying tower and other major energy-consuming equipment. The firing process is adjusted to save fuel consumption. Full raw material recycling is realized in respect of scraps and powders generated from the cutting processes.

The High-Purity Iron Business analyzes the power consumption of the whole plant and makes full use of peak and valley power metering to arrange intermittent equipment startup to avoid peak operation. 80% of workshop lighting system uses LED lights with good lighting effect and less maintenance needs. On the premise of ensuring the production use, the maintenance work intensity is greatly reduced and the power consumption is reduced. The ironmaking plant uses the high-voltage section II reactive compensation automatic device. The reactive compensation is automatically switched on and off, and the power factor is controlled at 0.97-0.98. Thanks to our achievements in energy conservation, we have won tariff rewards from local electricity authorities.

Diesel

The diesel consumed in the Iron Ore Business is mainly consumed by the production equipment of the Company, not including the diesel oil consumed by the contractors. The Company reduces its diesel consumption by selecting diesel-saving equipment, using diesel-powered equipment reasonably, turning off equipment not running for a long time in a timely manner, and preventing spill when refueling. In the meantime, the Company has enhanced the management of diesel purchase, transport, storage and use, in order to prevent any waste, abuse and loss. Part of ore is lifted by the skip in the main shaft, reducing vehicle use and diesel consumption.

The High-Purity Iron Business decomposes energy-saving objectives and links evaluation with performance.

Gasoline

The Group's consumption of gasoline is mainly used for corporate vehicles. In order to reduce the consumption, we strictly control the use of vehicles by reducing the utilization rate. Vehicles are powered off in a timely manner when appropriate during the use process.

Coal

The Group's Iron Ore Business and High-Purity Iron Business consume coal resources. The Iron Ore Business has reduced coal consumption by converting its coal-burning boilers into electric ones.

Blast Furnace Gas

In 2019, the Green Building Materials Business stopped using blast furnace gas and the High-Purity Iron Business reduced blast furnace gas emission by 44.30% year on year through technical transformation.

Recycling and reuse (A1.5/A1.6)

The Group encourages the recycling of waste and used materials, with an aim to reduce waste of resources and turn waste into wealth. Dedicated mechanical maintenance department at each mine can revamp abandoned and worn-out equipment for reuse.

In 2019, the High-Purity Iron Business recycled 2,065.82 metric tons of bulk iron, including sale of bulk iron and crushing and smelting of small pieces of iron. By stabilizing furnace conditions, the iron control was strengthened to reduce the production of bulk iron.

The raw materials for green building materials production are tailings discharged by Iron Ore Business, which realizes emission reduction and circular economy. In 2019, the Green Building Materials Business recycled 2 metric tons of stainless-steel rods, and 120 metric tons of shed boards, edges and beams.



Protection of Environment and Natural Resources (A3.1) Provide high-quality raw materials for clean energy



The main products of the Group, high-grade iron ore concentrates and high-purity iron, will ultimately be used to manufacture wind turbine casts, thereby forming a relatively complete industrial chain and providing high-quality raw materials for clean energy.

Upholding the tenet of building "Green Mines", the Iron Ore Business of the Group takes the environmental protection and restoration measures, strives to build modernized ecological mines, and aims to achieve the targets of energy conservation and emission reduction as well as cleaner production and mitigate impacts of production activities on environment by ways of recycling and technology upgrade. Report on environmental impact assessment is prepared for each operating project which will not commence until such report is reviewed and passed by professional experts, so as to minimize the impact of the operating project on the environment. **(A3)**

The Group complies with all environmental protection laws and regulations of each place where the Group operates, takes necessary environmental protection measures, fulfills the responsibility of restoration of mine environment, and prepares and implements the plans for protecting, restoring and treating the mine environment. The restoration of the geological environment at the mine sites goes well. No major geological disasters have occurred in recent years.

To carry out mining activities, the Group needs to occupy part of the land. After the mining is completed, the Group will restore the land and vegetation through land reclamation and revegetation measures. The Group's mining activities also consume a lot of mineral resources. Therefore, the Group maximizes the use efficiency of mineral resources by improving the rates of resource utilization, extraction and recovery. Meanwhile, the Group keeps discovering new mineral resources through exploration activities, resulting in an increase of our mineral reserves.

Improvement of the extraction rate and recovery rate(A1.5/A2.3)

Mining and processing mineral resources are the core business of the Group. The Group strives to improve the recovery rate and the extraction rate of useful metal contained in the ores to reduce mineral resource consumption, while offsetting such consumption by increasing its mineral reserve.

The Iron Ore Business minimizes the mining loss rate and dilution rate and maximizes the processing recovery rate by optimizing its mining methods and processing techniques, strengthening the management of on-site operations, and establishing strict technical standards for mining and processing in light of the actual conditions of each mine.

The extraction rate and recovery rate of the Iron Ore Business are as follows:

Mine	Extraction rate	Recovery rate
Aoniu Mine	Underground mining: 92.06%	Magnetic iron recovery rate of raw ore: 98.21%
Maogong Subsidiary	Underground mining: 88.21%	Magnetic iron recovery rate of raw ore: 98.33%

Revegetation and reclamation

The geological environment treatment project resolved the environmental and geological problems of the mines, improved and restored the ecological condition as well as recovered the use value of the land, which in turn improved the living environment for the local residents. Remedy was made to the damaged mine body through backfill and slope protection to ensure slope stability and eliminate potential geological hazard. Site preparation and reclamation were conducted to restore the basic function of the land. Revegetation was carried out to restore the ecological function of the mines, so as to improve the ecological condition of the mines.



Fushun Hanking Forest Farm Limited, a subsidiary of the

Group, is responsible for the revegetation and reclamation of the Iron Ore Business as well as the integrated development and utilization of idle forest and land. It has established nurseries and farms at the mine, nurturing seedlings for reclamation.

In 2019, the Iron Ore Business continued to implement the concept of "lucid waters and lush mountains are invaluable assets" and carried out greening and tree planting in plant area of the mines. By the end of 2019, the Group reclaimed 551 mu of forest land, among which Aoniu Mine reclaimed 321 mu of green areas and planted 240,000 trees, and



Maogong Subsidiary reclaimed 230 mu of green areas and planted 230,000 trees. The Iron Ore Business also plants fruit trees and raises chickens and ducks in the factory area. Every autumn, employees can enjoy the green and healthy food from our own farms. These fruit trees not only green the plant areas, but also provide food to employees.

In response to the government's policy for treatment of mountains, rivers, forests, fields and lakes, the Green Building Materials Business has carried out massive greening activities. In 2019, the business planted 400 trees.

Addressing Climate Change

Climate change may seriously affect the ecosystem, community and local economy that the Company relies on. We have always been concerned about climate change and closely monitored the risks and opportunities that climate change may bring to the Company's business. By improving the energy efficiency of its production and reducing the carbon footprint, the Company contributes to the world's efforts of addressing climate change risks.



Emergency plan for environmental accidents

Extreme weather such as rainstorm and blizzard may significantly impact

the Company's business and disrupt normal production, transportation and other activities. Each business segment of the Company has prepared and filed the emergency plan for environmental accidents after review. The Iron Ore Business has set up an emergency rescue team and signed a rescue agreement with a professional organization. In 2019, the Iron Ore Business and the High-Purity Iron Business carried out emergency drills in accordance with the emergency plan, with an aim to prevent any environmental accident and the expansion of negative impact.

Environment monitoring, management, investigation, assessment and report

Each business segment of the Group has hired qualified professional firms to regularly monitor the water quality, air quality and noises in mines, and strengthens the monitoring, investigation, assessment and reporting on the ecosystem of the production operation zones. All reports showed that the Group's operating indicators comply with applicable laws and regulations.





Employment and Labour Practices

Employment

Adhering to the philosophy of "human oriented", the Group encourages the employees to exert their creativity and potential and to align personal development with enterprise growth. We advocate the culture of "winning together", and look to achieve mutual development between individual employee and the enterprise. As at 31 December 2019, the Group has a total of 1,534 employees.

Equal opportunity

The Group provides equal opportunities for employees in all aspects with a view to create a fair and nondiscriminatory working environment. Female employees are equally entitled to any opportunities as male employees, and shall not lose their jobs or deserve a pay cut due to maternity. Nobody should be discriminated in term of recruitment and career development due to their religion and race. Furthermore, the Company has adopted a policy, whereby employees shall abstain from any matter relating to their family relatives. No direct or close relative, or relative by marriage of recruitment heads or key managers of the recruiting units should apply for key positions in such recruiting units. Such rule aims to create a fair competition environment and to avoid negative impacts of nepotism so as to maintain impartiality of management.

Diversity

With the diversified development of our business, the Group recruited employees with diversified backgrounds. The table below presents the distribution of our employees by nationality or region:

Distribution of our employees by nationality or region in 2019 (B1.1/B1.2)							
Nationality or region of employees	Number of employees	Percentage of total workforce	Loss of employees	Turnover rate			
Mainland China	1,528	99.61%	80	5.29%			
Hong Kong, China	1	0.06%	0	0.00%			
Australia	5	0.33%	0	0.00%			
Total	1,534	100%	80	5.29%			

Note: turnover rate = loss of employees (i.e. the number of regular employees voluntarily resigned) ÷ annual average workforce of the Company (1,514 employees)

Among which, the annual average workforce of Iron Ore Business, Green Building Materials Business, High-Purity Iron Business and Gold Mine Business amounted to 680, 150, 633 and 5 employees respectively, while the annual average workforce of headquarters reached 46 employees.

Distribution of our employees by position in 2019 (by employment category) (B1.1)					
Employment category	Gender	Number of employees at the end of the year	Percentage of total workforce at the end of the year	Loss of employees	Turnover rate
Orniananant	Male	28	1.83%	0	0.00%
Senior management	Female	6	0.39%	0	0.00%
Middle and a second second	Male	38	2.48%	0	0.00%
Middle management	Female	9	0.59%	0	0.00%
Technological and	Male	118	7.69%	13	0.86%
operational employees	Female	51	3.32%	3	0.20%
	Male	1,118	72.88%	54	3.57%
Other employees	Female	166	10.82%	10	0.66%
Total		1,534	100%	80	5.29%

Note: turnover rate = loss of employees (i.e. the number of regular employees voluntarily resigned) ÷ annual average workforce of the Company (1,514 employees)

The Group's employee structure by gender and age (B1.1)





Employment and Operating Practices

The Group's employee structure and turnover rate by gender and age (B1.1/1.2))					
Gender and age	Number of employees at the end of the year	Percentage of total workforce at the end of the year	Loss of employees	Turnover rate	
Male					
30 and under	102	6.65%	18	1.2%	
31-40	275	17.93%	12	0.8%	
41-50	513	33.44%	17	1.1%	
51 and above	406	26.47%	20	1.3%	
Sub-total	1,296	84.49%	67	4.43%	
Female					
30 and under	30	1.96%	2	0.1%	
31-40	85	5.54%	3	0.2%	
41-50	103	6.71%	7	0.5%	
51 and above	20	1.30%	1	0.10%	
Sub-total	238	15.51%	13	0.86%	
Total	1,534	100%	80	5.29%	

Note: turnover rate = loss of employees (i.e. the number of regular employees voluntarily resigned) ÷ annual average workforce of the Company (1,514 employees)

In 2019, the turnover rate of the Group's employees was 5.29%. The Company realizes the importance of talents to the development of an enterprise, and has arranged meetings between the president and the cadre employees on a regular basis, to discuss their career development and planning as well as problems at work, with an aim to prevent loss of the cadre employees.

Remuneration and benefits

The Group's remuneration policy is based on the principle of "those who deliver more will be paid more". Remunerations are determined in accordance with individual contribution and performance of employees. The contributions of key managers and employees will be recognized. Assessment and distributions are made via basic salary, performance salary, floating bonus, share incentive plans and other forms. The ordinary employees are paid under a monthly salary system and workers

at workshops are paid under a piece rates system. Employees' income is closely linked to the Company's economic performance, and will be adjusted from time to time in accordance with the Company's operational results, the value of employee positions, individual capability and performance, the level of social development and other factors, with the goal of motivating employees at work.

The Company pays social insurances and provides food, accommodation (non-local employees), transportation and communication subsidies for the employees. In 2019, the total remuneration and benefit paid to the employees of the Group amounted to approximately RMB116,262,000.

Benefits are a major part of our remuneration system. The Company has issued Administrative Rules for Employee Benefits, which stipulated types and standards for employee benefits regarding the 5 mandatory insurance schemes and housing funds for employees, lunch subsidies, holiday benefits, wedding benefits, condolence for pass-away, health benefits, consolation for the injured and ill, employee birthday, summer sunstroke prevention and maternity benefits. The Company conducts health checks for every employee once every year.

Caring for employees

The Group not only provides employees with competitive remunerations and benefits, but also offers necessary reliefs to employees who face difficulties in life due to special reasons. In every festival or memorial day, managers at all levels will extend their sincere care and greetings to employees who are still working on their positions. Every summer, the labor unions of each subsidiary will send heatstroke prevention and cooling items to employees.

In order to enrich the employees' leisure life and enhance their physical and mental health, the Group organizes physical examinations and tours every year and held various cultural, sports and social activities for the employees. All business segments of the Company also have staff recreation rooms with books, entertainment and fitness facilities, etc.



The newly-built employee cultural center in Maogong Mine covers 1,600 square meters and has a floor area of 2,400 square meters. It has basketball court, badminton court, Ping-Pong tables, billiard room, fitness room, reading room, training room and bathroom. Employees can be well entertained in the center. Going forward, the center will become a place for nurturing corporate culture. Employees will be able to have sports, cultural recreational activities, games and trainings in the center.

The Group cultivates team spirit by holding tree planting activity, staff birthday parties, staff relay race and other activities. In this way, the Group creates a good workplace atmosphere for all team members to participate, excel and advance.





Employment and Operating Practices



Working hours and holidays

The Group strictly complies with the provisions regarding working hours and holidays under the law of the places where each business operates. The administrative departments at the headquarters of the Group adopt a five-day week working pattern with eight working hours a day. The production departments at each mine work in shifts with consideration of the actual production conditions. The Group provides personal leave, sick leave, marriage leave, compassionate leave, maternity leave, breastfeeding leave, work injury leave, home leave and paid annual leave (statutory holidays and public holidays are not included in annual leave) for the convenience of the employees to balance their work and life.

Health and safety

The Group is committed to reducing the potential safety and health risks in the workplace of employees, adheres to the direction of "Safety First, Prevention Foremost" to provide employees with a full range of production safety facilities and develops relevant systems and operating procedures. Through continuous fund investment, technology upgrading and implementation of supervision and appraisals, the Group spared no efforts to enhance safety awareness, so as to ensure health and safety production. **(B2)**

In 2019, the Group continued to enhance management and control over safety and health risks, and achieved the annual targets of zero death, zero serious injury accident and zero incidence of occupational disease of our employees, zero fire and zero environmental pollution. The rectification rate of accident risks and the implementation rate of safety instructions have all reached 100%. The rates of three-level safety education training by new employees and all employees, as well as the rate of attendance with special operation certificate have all reached 100%. The minor injury rate and occupational disease rate per thousand persons are 0 in the Iron Ore Business. The injury rate per thousand persons is 0 in Green Building Materials Business and 6.15‰ in High-Purity Iron Business.

Breakdown of accidents incurred by the Group in 2019(B2.2)					
Production safety indicator	Accident	Description	Lost days		
Pollution accident	0		0		
Fire accident	0		0		
	4	1 person suffered minor injury due to slippery accident in employee bath;	90		
Minor injury		4	4	3 people suffered minor injury due to two traffic accidents happening outside the plant;	180
		1 person suffered minor injury due to incompliant operation.	0		
Serious injury	0		0		
Death	0		0		

There was **NO** industrial accident in the Group involving fatality in the past three years. (B2.1)

Note: The accident data set out in the above table were calculated in accordance with the classification standard of casualty accidents as specified by the State Council.

Employment and Operating Practices

Dedicated organization and personnel

The health and safety working organizations at all levels of the Group from the Board to the production workshops at each business segment have been set up and are responsible for the implementation and monitoring of health and safety work, constituting a multi-level health and safety management system and organizational structure as well as a comprehensive fleet of competent personnel. Please refer to the organizational chart on page 6 of this report for details.

Systemization of health and safety management Standardization of operational processes Clear definition of duties

Safety systems and procedures(B2.3)

The Group implements occupational health system and earnestly abides by the Occupational Disease Prevention and Treatment Measures. While developing production, the Group also strives to enhance occupational hazard evaluation, and monitors the occupational health condition at workplace, so as to provide scientific basis for the proper prevention and treatment of occupational diseases. The Group arranges physical examination for employees at positions with potential occupational hazards on a regular basis, and strengthens occupational diseases examination for those who are exposed to dust, toxic and hazardous materials.

- **Double prevention mechanism construction:** The Iron Ore Business has set up a detailed hazard identification system for mines of the Company. The system has identified the hazard source for the whole staff, and formulated and implemented measures to manage the hazard sources through the identification conclusions. Moreover, a mobile companywide hazard identification system has been developed to enable company-wide efforts in checking and identifying hazards.
- In terms of occupational hazards, the High-Purity Iron Business has equipped workers with anti-dust face masks, anti-noise earplugs and protective equipment. Moreover, the use of such equipment will be checked in weekly and quarterly checks and other safety checks. Check and assessment results on occupational hazards in workplace will be publicized. In terms of safety, carbon monoxide and oxygen content warnings are set for dangerous factors such as limited space and positions exposed to coal gas. Dangerous work is subject to an approval system. Specialized staff implements on-site approval and guidance at coal gas protection station. The safety management system is improved, and such system's implementation is monitored via various checks. Educational measures and punishments are imposed against "three violations" behaviors (namely violation of instructions, violation of operation regulations and violation of labour discipline). Hazards are removed timely via various checks.
- 2019 is the first year of Green Building Materials Business' operation. In the year, the business obtained the ISO9001 quality management system certification, environmental management system certification and occupation health and safety management system certification, indicating that the Green Building Materials Business can use a systematic model to manage product quality, environmental production, safety and occupational health.



In 2019, the Group has organized all employees to undergo heath checkups, and arranged **977 employees** to accept checkups for occupational diseases.

Safety education

In order to enhance the employees' health and safety awareness, the Group organizes training every year, holds regular safety work meetings, reminds employees of safety before work every day, promotes safety activities month and safety lectures, organizes safety knowledge contests and operation skill competition of major jobs, and sets up safe and healthy work bulletin, safety warning signs, banners and slogans, etc. The employees are trained to be aware of "four do not hurt": do not hurt others, do not hurt themselves, do not be hurt by others and protect others from being hurt.

Our rates of "three-level" safety education training for newly-recruited employees and all employees, attendance with special operation certificate, implementation of safety instructions and rectification of accident risks as well as other rates have reached 100%.

In 2019, 745 employees have received safety education (internal training) in Iron Ore Business, and 68 safety managers and 98 employees for special operation were trained with corresponding courses (initial training and second review). Such training intensified the professional safety education and imbedded safety awareness into the mind of employees.

In 2019, the Iron Ore Business held several training courses on mine safety production. Through these courses, employees summarized experience through accident cases, and their safety awareness and risk prevention ability were further enhanced.

Employment and Operating Practices

Technical measures

The Company has complied with all national standards regarding design of safety facilities, design of occupational health, protection facilities and occupational health protection facilities. The Company provides labor protection appliances like safety helmet, protective goggles, earplugs, mouth masks, uniform for special purpose, respirators, dustproof masks, acid-proof gloves and back splint, etc. to the employees, and appointed safety officer to supervise and check the using and wearing of such labor protection appliances. The Company also equips fire-fighting equipment in flammable sites, and constructs security fences along the roads for ore transportation to prevent accidents.

The "Six Major Systems" for underground operation of the mines of the Company's Iron Ore Business have functioned well. The "Six Major Systems" include: monitoring and



supervision, personnel positioning, communication and liaison, compressed air self-rescue, water supply and rescue, and emergent shelter. These systems enable voice communication between the inside and outside of the pit, personnel and equipment tracking and positioning, remote monitoring of key underground equipment, video monitoring of key underground locations and monitoring of various environmental parameters. In conjunction with other refuge and self-rescue systems, the Six Major Systems can help underground personnel take refuge and rescue themselves, so as to protect their health and safety.

Production safety month themed activities

As the 18th national "production safety month" came in June 2019, and in an active response to the national call to promote production safety, the Iron Ore Business established the leading group for the "production safety month" campaign. With a theme of "Preventing risks, eliminating hazards and stemming accidents", the campaign aims to prevent risks, remove hazards and stem accidents. In accordance with the Law on Work Safety, the Dual Prevention System of Hierarchical Control of Safety Risks and Investigation and Control of Hidden Dangers, as well as other safe production management systems of mining companies, a series of activities were held during the production safety month, which helped create a safe production environment and enhance all staff's safety awareness.


In June 2019, the "Safety Production Training Course", the "Underground Mine Roof Fall and Water Accident" emergency drill and the "Knowledge Competition for Safety Production in 2019" were organized by Aoniu Mine. The contents of these activities covered the post responsibility system, the occupational hazards of mines, the production safety law, the general working knowledge, among others. These activities enhanced the Company's emergency handling and rescue capabilities in case of safety accidents, as well as boosted employees' safety awareness and the safety production management systems.

On 27 June 2019, Maogong Subsidiary held the "Safety and Health Cup" safety knowledge competition in the training room on the second floor of the mining department. Six teams took



part in the competition, which comprised four parts. Moreover, contestants interacted with audience in the competition. Questions asked in the competition were selected from the Laws on Safe Production in Mines (《礦山安全生產法》), Regulations of Liaoning Province on the Administration of Production Safety (《遼寧省安全生產管理條例》) and Safe Operation Procedures in Metal and Non-metal Mines (《金屬非金屬礦山安全操作規程》). These questions were closely related to daily work of Maogong Mine.

Supervision and assessment

The Group develops and implements a number of supervision, inspection and assessment systems, conducts regular and unscheduled inspections and assessments, including quarterly, monthly, weekly, daily, occasional and mutual safety inspections, so as to timely detect and effectively rectify all kinds of safety risks. The Company keeps controlling major hazards such as explosives magazines, oil storage and tailing ponds, monitors safety information of all locations of mines (including mining yards, processing plants, workshops, sedimentation tanks, waste dumps, topsoil, etc.), and performs safety oversight over contractors. 423 safety inspections have been conducted by Iron Ore Business throughout the year. 186 safety inspections have been conducted by Green Building Materials Business throughout the year.

Employment and Operating Practices

The Group continues to carry out strict safety production responsibility assessment. The Group has implemented the "one-vote veto safety system". The effectiveness of production safety is linked to individual economic benefits, promotion and appraisals, and the Group strictly implements the provisions of reward and punishment. In 2019, the mining company signed the Letter of Commitment on Safety Production Objective Assessment (《安全生產 目標考核責任狀》) with general manager of each mine, while each mine signed such Letter of Commitment with workshops as well as teams and groups, with an aim to implement and assign safety and environmental protection tasks at all levels.



The Iron Ore Business imposed a fine of RMB19,000 and granted RMB9,000 in reward regarding safe production. The Green Building Materials Business granted RMB49,500 in reward and imposed a fine of RMB550 regarding safe production. The High-Purity Iron Business granted no reward and imposed a fine of RMB59,500 regarding safe production.

In May 2019, Maogong Mine, on behalf of the non-coal mines in Liaoning Province, welcomed the 15th inspection team of the State Council's Safety Committee and passed the examination of mine production safety.

Fund insurance

The Group ensures the fund investment in health and safety and sets aside safety measure fees exclusively for health and safety protection purpose every year.

In 2019, the Iron Ore Business invested RMB28,760,000 as safety measure expense, which was used for the improvement of the Company's production safety conditions, the addition, updating and maintenance of safety equipment and environmental protection facilities, the purchase of labor protection appliances, special equipment inspection (15 throughput) as well as safety promotion and education. Through the aforesaid investments in safety and environmental protection, safety condition and environmental protection at each mine have been further improved. The High-Purity Iron Business invested RMB1,347,310.81 as safety measure expense, and inspected special equipment for 3 times. The Green Building Materials Business invested RMB302,683 as safety measure expense.

Development and training

The Company understands that the improvement of the overall quality and professional skills of all employees not only means the enhancement of skills of employees, but also the enhancement of the Group's overall competitiveness. The Group pays much attention to the employees' development and training, and has developed and implemented the training management system, training system and process in respect of its employees, with an aim to promote the improvement of both employees and the Company.

To better understand the training needs of employees and make the Company's training work more targeted and practical, the Company conducts annual training needs survey for all employees every year. After careful analysis of the feedback, the survey results are used as basis for formulating next year's training plans. The Company formulates annual training plans based on the Company's resources and the survey results. **(B3)**

The Company prohibits any sexual discrimination, and male and female employees enjoy the same opportunities for education and training.

Training for directors and management

The Company places great emphasis on training for directors and management, and requires its directors to learn Guidelines on Disclosure of Inside Information issued by the Securities and Futures Commission and training materials provided by the Stock Exchange. The company secretary shall attend not less than 15 hours of professional training courses every year. In addition, a variety of training programs and seminars have been organized by the Company.



Dr. Wang Anjian share Discussion on Mineral Resources with directors and senior managers.



Chartered Financial Analyst Mr. Ma Qingshan shared Corporate Strategy and Internal Control Discussion with directors and senior managers.



Employment and Operating Practices

Trainings for employees(B3.1/B3.2)

In 2019, the Headquarters of the Company organized 7 internal training courses, which involve target management, teamwork, work cooperation, among others. Details are as follows:

Employee category	Gender	Number of employees trained	Average training hours	Percentage of employees trained
Queins	Male	7	1.21	58.33%
Senior management	Female	2	3.33	66.67%
	Male	2	4.00	100%
Middle management	Female	5	6.90	100%
Technological and	Male	1	3.50	100%
operational employees	Female	2	4.00	100%
	Male	10	4.04	71.41%
General staff	Female	12	8.15	92.31%









Based on the work nature of each position, the Iron Ore Business gradually provides on-site practical teaching on the basis of theoretical courses. Employees can learn and understand skills through on-site viewing or hands-on operation.

In early 2019, the Human Resources Department of the Iron Ore Business conducted a detailed investigation on the training needs and related contents of the existing staff through various ways, and set up corresponding training courses based on the nature of trainees' positions and the overall training plan of the Company. Employee symposiums were held from time to time, and employees were asked to express their opinions on training and other issues. The Human Resource Department also timely adjusted the training plan and supervised implementation of such plan. Details are as follows:

Employee category	Gender	Number of employees trained	Average training hours	Percentage of employees trained
	Male	7	2.71	100%
Senior management	Female	1	3.00	100%
	Male	47	7.00	100%
Middle management	Female	3	11.00	100%
Technological and	Male	64	8.17	100%
operational employees	Female	32	11.28	100%
	Male	465	3.11	100%
General staff	Female	57	4.58	100%



Employment and Operating Practices

In the Green Building Materials Business, employees above the workshop manager level will be trained first. After that, they will communicate related training contents to employees. Such arrangement enables companywide communication of safety knowledge. Details are as follows:

Employee category	Gender	Number of employees trained	Average training hours	Percentage of employees trained
	Male	3	3.33	100%
Senior management	Female	2	5.00	100%
	Male	3	3.33	100%
Middle management	Female	1	10.00	100%
Technological and	Male	22	0.45	100%
operational employees	Female	12	0.83	100%
	Male	93	0.01	100%
General staff	Female	18	0.06	100%

In 2019, the High-Purity Iron Business achieved a coverage ratio of 100% in training of ordinary employees, and no training was provided to other employees. Details are as follows:

Employee category	Gender	Number of employees trained	Average training hours	Percentage of employees trained
	Male	548	5.67	100%
General staff	Female	81	5.73	100%

Internal trainers

The Company has started to build a team of internal trainers. Internal trainers will help support the Company's strategy and human resource development plan, develop internal knowledge, pass on the Company's management and technical experience, spread Hanking's corporate culture, create a knowledge sharing atmosphere, further improve the training system and help build a platform where employees can grow. In 2019, the Company had 31 permanent internal trainers and 18 candidate internal trainers that can provide training on management, technology, legal affairs and production.

These internal trainers have all been our top employees. They are classified into junior, middle, senior and honorary internal trainers. These internal trainers will be assessed, further developed, evaluated, promoted and motivated. They are encouraged to enhance their capabilities and train others.

In 2019, the trainings for internal trainers are as follows:

Serial No.	Training Name	Internal Trainer Grade	Single Training Class Hour	Number of Participants
1	Building excellent lecturer team	Junior	1	13
2	Training on internal lecturers	Junior	1	15

Labour standards

The Group follows the relevant provisions in the Labour Law and the Labour Contract Law and complies with the relevant rules of the International Labour Standards ("ILS") to safeguard the labour interest. **(B4)**

The Group respects the right of workers to choose their profession freely, regulates labor management, prohibits forced labour and prohibits the recruitment and use of child labour, so as to protect the health and safety of our employees and enhance the management of occupational health. During the reporting period, the Group has never recruited or used child or forced labour. (B4.1)

A labour union is established by various levels of corporate bodies of the Group as required and employees may join a union of their own free will. The Group has signed the Special Collective Contract on Protecting Female Employees' Labor Rights with female employees.

A human resources department is established by the Group's headquarters and various levels of corporate bodies to regularly review and deal with violations of labour standards. During the reporting period, no violation of labour standards was identified. **(B4.2)**

Operating Practices

We consider that the relationship between corporate development and social development is mutually supportive and mutually beneficial. Therefore, we safeguard the interest of stakeholders and co-develop with them.

Supply chain management

The Group considers suppliers as important partners, and builds close relation with suppliers. The Group has formed and implemented materials procurement management system in accordance with the Labor Law of People's Republic of China and the Environmental Protection Law of People's Republic of China. When selecting suppliers, the Group considers the strength, reputation, and historical performance of suppliers and gives priority to eco-friendly products and services, and bans procurement of products or services that do not comply with applicable environmental standards. Such procurement policy ensures that our products and services comply with national environmental standards. The Group evaluates suppliers on punctuality, quality, service, reputation, safety and environmental protection every year, and regularly assesses the social and environmental risks in supply chain to ensure the safety of its supply chain. In 2019, the Group did not find any supplier that has material social or environmental negative impact. **(B5)**

On the basis of the material requirement plans developed by the production department and the categories of the materials, the Group generally purchases, stores and manages materials through three methods, namely bidding, price enquiry/comparison and sentinel procurement. Materials stock and the consumption of procured materials are analyzed continuously. Contracts shall be signed for all purchases and the Company strictly supervises and controls the performance of the contracts and the payment of the funds.

In 2019, the suppliers of the Group are mainly from China. Of which, 56 suppliers are selected through bidding, 313 suppliers are selected through price enquiry/comparison and 27 suppliers (regional agents) are selected through sentinel procurement. The selection of suppliers of the Group shall be subject to the approval process and supervision procedure, and shall be supervised by the legal department and audit department of the Group, so as to ensure a fair selection procedure. **(B5.1/B5.2)**

Product responsibility

The Group attaches importance to its product quality and reputation as well as implements product quality management in strict accordance with the relevant PRC laws and regulations and industry standards. Subject to the Product Quality Law of People's Republic of China, the Advertising Law of People's Republic of China, the Road Safety Law of People's Republic of China and other laws and regulations related to product liability, the Group has developed and implemented measures on management of product quality and sales, and enhanced product quality inspections and sales management, so as to ensure that superior products are offered for customers. Before leaving the production plants at the mines and upon delivery to the customers, the products sold to customers by the Iron Ore Business shall be subject to measurement and quality inspection. The data provided by the Company on the quantity and quality of the products shall be compared with those provided by the customer. If there is a considerable disparity between the results of both parties, the Company and the customer shall solve the dispute through negotiation. If no settlement is reached, the dispute shall be referred to a third-party authoritative organization for review and arbitration. Products sold by the High-Purity Iron Business to customers will be followed up on by phone calls, ensuring they meet customers' quality standards. In 2019, the Group did not see any major violation of laws or regulations in respect of product responsibility, and did not receive any complaint about products or services. **(B6/B6.1)**

The Iron Ore Business strictly complies with applicable laws, regulations and policies. All of its contracts explicitly stipulate the ownership of intellectual property and such contracts should be strictly observed in operation. The Green Building Materials Business complies with the Patent Law of People's Republic of China and other applicable laws, and also authorizes third-party specialized firms to handle intellectual property protection works. **(B6.3)**

The Iron Ore Business strictly implements its quality inspection in accordance with applicable laws and policies, as well as related company systems, in order to ensure compliance with product quality standards. A product recall process is formed. In case of any product problem, related products should be recalled in accordance with such processes. In 2019, the grade of iron ore concentrates in the Iron Ore Business reached about 69%, with low content of sulphur and phosphorus. Our excellent product quality helps lower production costs of customers. (B6.4)

If the Green Building Materials Business experiences any product quality problem, the Production Technology Department will immediately check the cause of such product quality problem. The department will determine quality type and degree of severity via on-site check, production quality inspection and quality analysis meetings. It will also come up with a solution until product quality becomes satisfactory. **(B6.4)**

The High-Purity Iron Business has passed the certification of the GB/T24001-2016 Environmental Management System Requirements and Guidelines for Use and ISO45001-2018 Occupational Health Safety Management System Requirements. Its production and operations comply with national or local environmental laws. All its environmental test indicators meet required standards. The pig iron produced by the business does not contain radioactive substance, lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyls, polybrominated biphenyls, or any other harmful heavy metals. The radiation dose rate of our pig iron is less than 0.40uSv/h. We check product quality through chemical analysis. Unqualified products are processed in two ways. Firstly, they may be sold at lower prices. Secondly, those unsalable products will be smelted again in blast furnace. **(B6.4)**

The Company has formed sound partnership with its customers that features quality, mutual benefits and joint development. The Company keeps customer information in strict confidence, and stores customer information in different files by category. (B6.5)

Operating Practices

Anti-corruption

The Group is on no account engaged in bribery, blackmail, fraud and money-laundering. No employee of the Group is allowed to obtain illegal interests by taking advantage of their authority or convenience at jobs.

The Group has developed and implemented the auditing and offence reporting system, and also has engaged independent auditors to conduct external audits on the Company, with an aim to prevent and control the fraud or wrongdoings within the Company through internal and external audit. On 18 February 2019, the Company passed the Integrity Management System of China Hanking Holdings Limited, in order to meet the needs in specialized management, improve internal supervision and inspection, create an honest and efficient working environment, strengthen the integrity construction in the Company and regulate employees' conducts.(**B7**)

The Company undertakes to comply with the laws and regulations on business operation. The employees have the right to report alleged violations of state laws, regulations and policies, internal control problems of the Company, and other fraud or violation of Company's disciplines to the Company. The Company's audit department is responsible for dealing with reporting of violations in relation to functional departments, mines and employees of the Company. Informants may provide detailed information to the audit departments of the Company through telephones, letters, e-mails, and interviews, etc. Upon receipt of such information, the audit departments will submit such information to president or chairman based on the informants' grade. With the approval of the chairman or the president, employees will be arranged to collect evidence. When necessary, other departments and employees may be asked to help. Related investigations will cover as many related parties as possible, including informants, persons being reported, and other departments and persons involved by such reports. Investigators will provide a report and give opinions after thorough investigation. After communicating with related people, the investigation results will be submitted to the president of the Company. If the informant, or the person being reported disagrees with such investigation findings and related outcomes, they may file an appeal to the audit departments in writing within 10 workdays after receiving the official punishment documents. Under such circumstance, the audit departments may assign employees to do a reinvestigation. If no appeal is filed before required deadline, the investigation results should be deemed to be accepted. (B7.2)

During the reporting period, no litigation relating to anti-corruption was identified by the Group. (B7.1)

Community Engagement

Adhering to the tenet of "harmonious mines", the Group built a harmonious relationship with the local communities through many communication channels. It listens to the requests of the community parties, timely gives back to the society and uses its best endeavors to support the community education affairs, infrastructure development and community environmental improvement. The Group prioritizes the employment of local workers and selection of local suppliers. (B8)

Fighting COVID-19 and Making Donations(B8.1/8.2)

The COVID-19 hit Hubei Province and many other places of China in January 2020. The Company has closely monitored the development of the epidemic and safety of people in the epidemic-hit areas. It has performed the social responsibility in the "people-oriented" principle. The Company donated RMB2 million to Huanggang Charity Federation, RMB2 million to Red Cross Society of Fushun and RMB1 million to Xiaochang County Charity Federation. Moreover, the party secretary of the Group launched a donation activity where 137 party members donated RMB31,012 to the Organizational Department of Party Committee of Fushun to fund the anti-epidemic efforts.





To ensure safe production and employee security, the Group has followed the local governments' documents and advices of medical experts to use both remote and on-site working modes. Moreover, various preventative measures are taken, such as delaying and cancelling activities and meetings, using virtual meetings to replace actual ones, limiting employees' travel via flights, realizing remote office via apps and video conference, and keeping sound disinfection and ventilation after work resumption. Every employee is provided with face masks and alcohol hand sanitizers. Employees' body temperatures are measured every morning. After 5 pm, the epidemic situation will be reported. We also regularly share the latest anti-epidemic progress, guidelines and expert opinions with all employees.

Our employees are located in both China and Australia. We care for all of our employees and their families' wellbeings. We would like to shoulder our social responsibility and join hands with people from all walks of life to fight the COVID-19. We believe we will overcome the difficulties.

Community Engagement

Community environment(B8/8.1)

Upholding the principle of "establishing harmonious relationship between villages and enterprises", the Group reinforced communication with the local communities, so as to promote harmonious coexistence with the villages. As we are part of the community, efforts to construct the community are to improve our living environment. The Group actively supported the community environmental construction, raised their awareness towards environmental protection and tried to make contributions to the community.

In 2019, the Iron Ore Business invested RMB200,000 and appointed 15 employees to work for 7 days to repair 1.3 kilometers of roads in Aoniu Village. Moreover, 3 employees were appointed to work for 3 days to water plants and flatten lands on both sides of roads in Maogong Village. 2 employees were appointed to work for 4 hours to remove snow on roads in Maogong Village.



Community care(B8.1/8.2)

The Group cares about the local people who are in need of help, and provided them with necessary support. On the eve of every Spring Festival, the Iron Ore Business staff visit the low-income worker families and bring them rice, flour, oil and other necessities. The Iron Ore Business also occasionally organizes some young employees of the Company to clean the houses for the villagers with mobility disabilities and provide assistance within their capacity.

In 2019, Aoniu Mine appointed 9 employees and spent RMB120,000 and 8 days to deliver life supplies (including rice and noodles) to the poor families.

Labour demand(B8.1)

The candidates from the community where the Group runs business enjoy the priority to be recruited, which not only relieves the local employment pressure, increases villagers' income, but also promotes good relationship between villages and enterprises.

The table below presents the employment of local villagers by each mine operated by the Iron Ore Business in 2019:

Mines	Total number of employees	Number of local employees	Percentage of local employees to total workforce
Aoniu Mine	345	182	52.75%
Maogong Subsidiary	303	233	76.90%
Shangma Subsidiary	32	21	65.63%
Total	680	436	64.12%

All employees of the Green Building Materials Business are local people.

The High-Purity Iron Business also hired many local employees. In its recruitment, the business gives priority to candidates from local communities under the same merits. The High-Purity Iron Business' employee sources in 2019 are as follows:

Total workforce	I workforce Number of local employees	
642	470	73.21%

The Gold Mine Business will provide about 104 job opportunities after being put into production. Its employees will mainly include underground mining workers, processing plant workers, maintenance staff, managers and contractors. Most of its employees will be local residents. It will also hire some employees that are shipped there by air.

Community Engagement

Education(B8.1/8.2)

The founding ceremony of the Deshan Love Foundation and the granting ceremony of student subsidies under 2019 Fushun Women's Federation's "Chunlei Student Assistance Program · Deshan Love Foundation" were held in August 2019. The Deshan Love Foundation was funded by Mr. Yang Jiye, the chairman of the Company. It is also the first charitable fund established under an individual name in Fushun City. The fund mainly supports education as well as children and women-related charitable causes. Fushun Love Education Fund was established under the fund. Mr. Yang Jiye donated RMB1 million to the fund in the first installment, which is mainly used to support education as well as children and women-related social charitable causes. It also represents a new attempt to use personal wealth to fund charitable cause and alleviate poverty. The first disbursement of RMB176,000 under Deshan Love Foundation was used in "Chunlei Student Assistance Program" where 182 students from poor families were helped. From 2017, Mr. Yang Jiye and Fushun Women's Federation organized the "Chunlei Student Assistance Program - Hanking Helps You Realize Dreams" for three consecutive years, donating RMB1.5 million and helping 723 students from poor families on an accumulative basis so far.



The young employees in the Iron Ore Business has extended care and love to children from poor families and left-behind children in villages. Moreover, they hoped to help young people grow healthily. These young employees initiated the "Love Plus" program to help children from poor families and left-behind children in villages. 25 volunteers took part in the charitable program. They used their off-duty time to accompany these students and help them study, in order to extend love to these children. The program also enhanced the relation between the Company and the nearby villages.





Indicators Index

This indicators index illustrates the Company's compliance with indicators of "comply or explain" and "recommended disclosures" set out in Environmental, Social and Governance Report issued by the Stock Exchange during the reporting period.

Aspects	Key Performance Indicators	Disclosures	Pages	Explanation
A. Environme	ntal			
General Disclosure	Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	•	11-12	
A1.1	Types of emissions and respective emissions data.	•	12-13	
A1.2	Total emissions volume (in metric tons) and, where appropriate, intensity of greenhouse gases (e.g. per unit of production volume, per facility).	•	14	
A1.3	Total hazardous waste produced (in metric tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	•	13	
A1.4	Total non-hazardous waste produced (in metric tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	•	13	
A1.5	Description of measures to mitigate emissions and results achieved.	•	12-17, 22, 24	
A1.6	Description of how hazardous and non- hazardous wastes are handled, reduction initiatives and results achieved.	•	12-13,15-17 22	
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	•	18	
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	•	18-19	

Indicators Index

Aspects	Key Performance Indicators	Disclosures	Pages	Explanation
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	•	18-19	
A2.3	Description of energy use initiatives and results achieved.	•	18, 24	
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	•	20-21	
A2.5	Total packaging material used for finished products (in metric tons) and, where appropriate, with reference to per unit produced.	0		N/A (The Company's products do not need packaging)
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	•	23	
A3.1	Description of the significant impacts of business activities on the environment and natural resources and the actions taken to manage such impacts.	•	23-25	

Aspects	Key Performance Indicators	Disclosures	Pages	Explanation
B. Social				
Employment a	and Labour Practices			
General Disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, holidays, equal opportunity, diversity, antidiscrimination, and other benefits and welfare. 	•	26,28-30	
B1.1	Total workforce by gender, employment type, age group and geographical region.	٠	26-28	
B1.2	Employee turnover rate by gender, age group and geographical region.	٠	26-28	
General Disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards. 	•	31	
B2.1	Number and rate of work-related fatalities.	٠	31	
B2.2	Lost days due to work injury.	٠	31	
B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	•	32-33	
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	•	37	
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	•	38-40	
B3.2	The average training hours completed per employee by gender and employee category.	•	38-40	

Indicators Index

Aspects	Key Performance Indicators	Disclosures	Pages	Explanation
General Disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour. 	•	41	
B4.1	Description of measures to review employment practices to avoid child and forced labour.	•	41	
B4.2	Description of steps taken to eliminate such practices when discovered.	•	41	
Operating Pr	actices			
General Disclosure	Policies on managing environmental and social risks of the supply chain.	•	42	
B5.1	Number of suppliers by geographical region.	•	42	
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	•	42	
Product Res	ponsibility			
General Disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters in respect of products and services provided and methods of redress. 	•	42	
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	•	42	
B6.2	Number of products and service related complaints received and how they are dealt with.	•	42	

Aspects	Key Performance Indicators	Disclosures	Pages	Explanation
B6.3	Description of practices relating to observing and protecting intellectual property rights.	•	43	
B6.4	Description of quality assurance process and recall procedures.	•	43	
B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	0		Recommended disclosure
General Disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering. 	•	44	
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.	•	44	
B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	•	44	
Community				
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	•	45, 46	
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	•	45-48	
B8.2	Resources allocated (e.g. money or time) to the focus area.	•	45-46, 48	