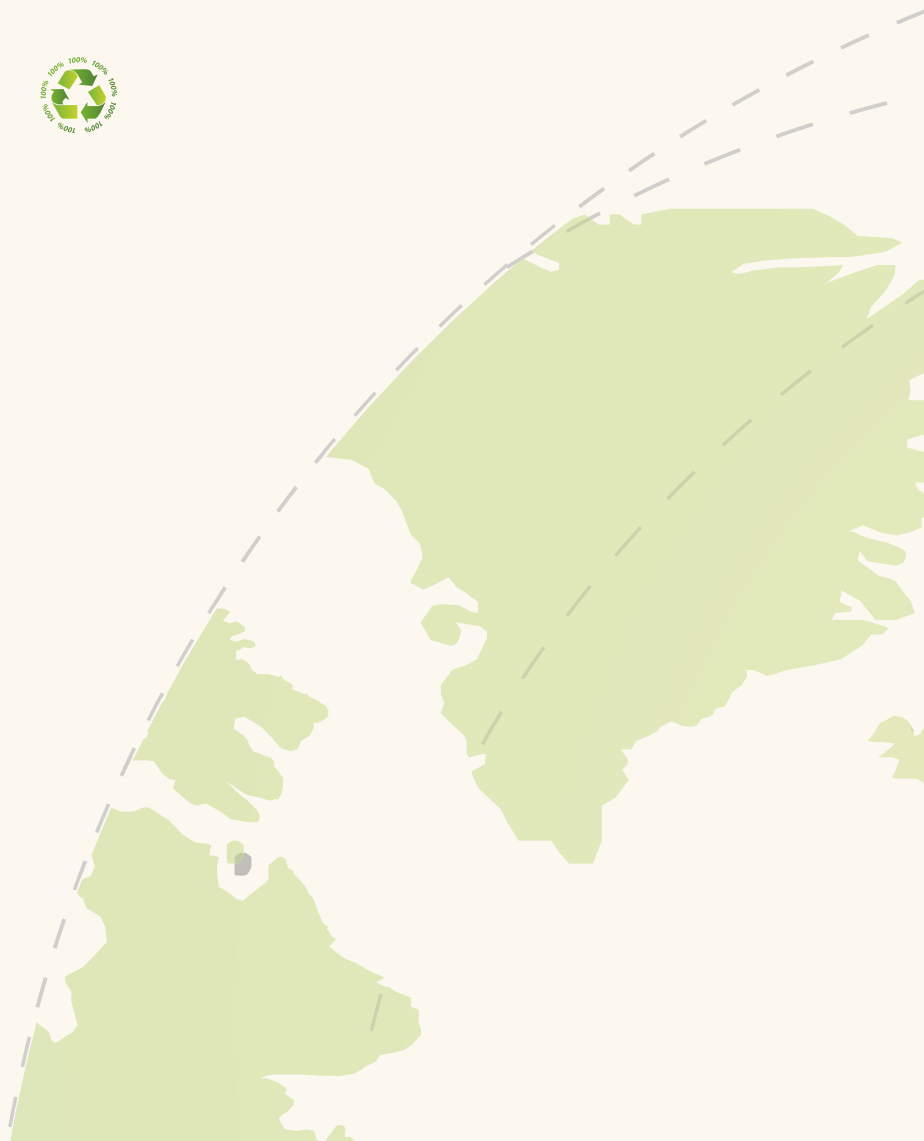




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中国黄金国际资源有限公司  
China Gold International Resources Corp.Ltd.

# 環境、社會及管治報告 Environmental, Social and Governance Report

## 2018





## Notice

This report is the ninth corporate social responsibility report (also referred to Environmental, Social and Governance Report) published by China Gold International Resources Corp. Ltd. (the “Company” ). It highlights efforts made by the Company over the past year, including responsible management, energy-conservation and environmental protection, work safety, rights and interests of employees, science and technology innovations, creation of harmonious communities and other initiatives with an aim to strengthen the communication and connection with all interested parties. For the convenience of expression and reading, China Gold International Resources Corp. Ltd. is also referred to as “China Gold International”, “the Company”, “Company” or “we”. China Gold International has two subsidiaries, the Tibet Huatailong Mining Development Co. Ltd. (also referred to and Huatailong, Jiama Mine or Jiama) and Inner Mongolia Pacific Mining Co. Ltd (also referred to and Inner Mongolia Pacific, CSH Mine or CSH).



### Basis of Preparation

Sustainable Development Goals of the United Nations

Guideline on Fulfillment of Corporate Social Responsibility of Central Enterprises issued by the State-owned Assets Supervision and Administration Commission of the State Council ( “SASAC” )

Environmental, Social and Governance Reporting Guide issued by Hong Kong Stock Exchange

Guide on Preparation of Corporate Social Responsibility Reports of Chinese Enterprises (CASS-CSR4.0) published by Chinese Academy of Social Sciences



### Time Period

This report mainly covers the calendar year 2018, and may refer to major events in our history where appropriate.



### Subject Scope

This report covers head quarter of the Company, Vancouver office and its subsidiaries.



### Source

This report is designed to give a true view of our proactive practice in economic, social and environmental responsibilities for overall coordinated and sustainable corporate development. All information and data are derived from our official documents, statistics reports and financial statements, as well as the corporate social responsibility practices of the business units that are pooled, summarized and reviewed by our functional departments. In case of any inconsistencies between the financial information and that in the annual report, the annual report shall prevail. Unless otherwise specified, all financial data stated in this report are denominated in Renminbi (RMB).



### Rating Agency

This report has been rated by an independent third party, authorized by the Research Center for Corporate Social Responsibility, Economics Division, Chinese Academy of Social Sciences. The rating results are set out in the appendix hereto.



### Availability

Requests for printed copies of this report should be addressed to the Board Secretary Department of China Gold International Resources Corp. Ltd. This report is also available in electronic version on our website.



## Contents



03



MESSAGE FROM THE CHAIRMAN

MESSAGE FROM THE CEO

Corporate Profile

08

RESPONSIBILITY  
MANAGEMENT

Responsible System

Responsibility Topics

Responsibility Enhancement

Communications on Responsibilities

Social Recognitions

21

ENVIRONMENTAL PROTECTION  
AND ENERGY CONSERVATION

Energy Conservation and Emission

Reduction

Recycling of Water Resource

Environmental Protection



33

**WORK SAFETY**

Safety Investment and Performance  
 Safety Supervision  
 Identification of Potential Hazards  
 Management of Hazardous  
 Chemicals  
 Safety Culture

42

**EMPLOYEES' INTERESTS**

Employees' Interests  
 Occupational Health

51

**TECHNOLOGICAL INNOVATIONS**

Investment in Technological  
 Innovations  
 Achievements in  
 Technological Innovations

54

**HARMONY AND WIN-WIN**

Corporate Governance  
 Compliance with Laws and Regulations  
 Investor Relations  
 Customer Relationship  
 Supplier Relationship  
 Creditor Relationship  
 Communication and Cooperation  
 Community Welfare

**Appendix:**

Supporting Sustainable Development Goals of  
 the United Nations  
 ESG Reporting Guide Content Index  
 Social Responsibility KPI of the China Gold  
 International

## Message From The Chairman



Mr. Song Xin  
Chairman of Board of Directors and Executive Director

No pains, no gains. In 2018, the global economic situation is complex and changeable. China Gold International (hereinafter referred to as “this company”) firmly established the internationalized operation concept, grasped the profound connotation of “high-quality development”, focused on “quality revolution”, and continuously promoted the revolution of resource quality, asset quality, operation quality and safety quality at a steady and steady pace. We successfully completed the annual production and operation tasks by solving all kinds of difficulties and overcoming various obstacles, and laid a solid foundation for building a world-class mining company with global competitiveness.

Lucid water and lush mountains are invaluable assets. In 2018, this company always adhered to the concept of harmonious construction of environmentally friendly communities and integrated it into the company's strategy. We attached importance to our own development, paid more attention to green development and community harmony, and took the responsibility of stakeholders to create value and actively participate in social welfare undertakings. Our annual investment in education and community public welfare has won a good reputation and won wide praise and recognition from local residents and governments at all levels.

Science and technology are primary productive forces. In 2018, this company vigorously promoted the transformation of scientific and technological innovation and growth mode, promoted the company to achieve sustainable and high-quality development, and adopted practical measures in the construction of green mines, promotion and application of energy-saving and environmental protection technologies, which enabled the company to operate quality and ecological environment. The level of safety and environmental protection had been significantly improved, and it had won wide support from all sectors of the community.

In 2018, we successfully hosted “Fenghua Qunying Glorious Night 2018”, which is a social responsibility activity held in Canada for the seventh consecutive year since 2012. It helped us to establish a long-term close relationship with mainstreams in Canada, continuously output positive image information of enterprises, establish a smooth and benign communication channel, and build a good image of Chinese enterprise in the international mining industry.

In 2018, We successfully entered Shenzhen-Hong Kong Stock Connect and incorporated into the Hang Seng Index, realized the transactions of the Toronto Stock Exchange, Shenzhen Stock Exchange and the Hong Kong Stock Exchange, which highlighted the company's function as an international capital operation platform. We believe that this is an important milestone in the company's development, and it has greatly enhanced our position in the global capital market.

I would like to thank all the employees, directors and managers who had contributed to the development of the company's business, and I would like to express my heartfelt gratitude to the communities and shareholders in which we operate. At the same time, I would like to thank the contractors and suppliers, academic experts, media, mining finance and investors for your long-term concern and support for our company. In 2019, with the support and concern of the government and all shareholders, with the unremitting efforts of all employees, this company will continue to actively implement social responsibilities and vigorously do a good job in production & operation, safe production, environmental protection, and harmonious co-construction. We sincerely promise that we will actively benefit the local people and achieve a harmonious and win-win situation for enterprises and localities.

**Mr. Song Xin**

Chairman of Board of Directors and Executive Director

## Message From The CEO



Mr. Jiang Liangyou  
CEO and Executive Director

Year 2018 is a very extraordinary year in the history of China Gold International Resources Co., Ltd. (hereinafter referred to as “this company”) In this year, in accordance with the requirements of the Board of Directors and the unified deployment of the parent company which named China National Gold Group Co., Ltd., this company adhered to the general tone of steady progress, forged ahead, struggled ahead, strengthened management, faced problems and earnestly promoted high-quality development, and all production and operation reforms were steadily advanced. While fully completing production and operation indicators, it created new value for shareholders, employees and society.

In 2018, this company abided by the market commitment and successfully completed its production and operation indicators. The company had overcome the huge fluctuations in product prices and had achieved profitability in mine operations for the 11th consecutive year; without considering the loss of 15.82 million USD in book exchange because of RMB exchange rate depreciation, it was close to achieving pre-tax breakeven in 2018.

In 2018, this company had strengthened the foreign cooperation and made significant progress in key projects. Phase II of Jiama achieved full commercial production, copper production had reached a record high, and expansion capacity is being released; CSH carried out optimization of slope parameters, achieved stable steps and sustained & steady development, and it is currently conducting demonstration of resource development outside the boundary.

In 2018, this company enhanced the intrinsic safety, and green safety & environmental protection have reached a new level. Jiama Mine revolves around the main line of “Creation Year of Intrinsic Safety System”. Through establishing the safety culture system, strengthening “three basics” (basic level construction, basic work and basic training), and improving the level of mechanized operation, the intrinsic safety capability of this company has been effectively improved, and the health, safety and environment, which promotes the health, safety and environmental protection of the company. CSH Mine laid emphasis on its occupational health, safety and environmental protection, launched the “Safe Production Month” activities, continuously improved relevant management systems, and strengthened safety training. The million-hour labor injury rate was zero this year. At the same time, continuously strengthening the control and management of pollution sources, and paying close attention to the daily maintenance of various environmental protection equipment and facilities to ensure that emissions meet the standards.

In 2018, this company had increased the investment in science and technology, and its research and development had achieved staged achievements. Jiama Mine successfully applied for high-tech enterprise once again, and at the same time, it closely followed the development needs, and obtained a series of scientific research results cooperated with research institutes, which forms a good atmosphere of “Mass Entrepreneurship and Innovation”. Key projects of the “13th Five-Year Plan” national key R&D plan “Deep Resources Exploration”, “Research & Development and Demonstration of Key Technologies for Large-scale Unmanned Mining in Underground Metal Mines” and 2017 National Intelligent Manufacturing Integrated Standardization Project “General Model Standard and Test Verification for Digital Workshops in the Gold Production Industry” that are undertaken by Jiama Mine had successfully achieved the staged achievements. CSH Mine continued to increase the research & development and investment of intellectual property rights, and obtained 6 patents through technology cooperation, transfer, application, etc., the project named “Development and Utilization of Natural Caving Method for Resources Outside the Open Space” that was cooperated with Changchun Gold Design Institute has submitted the Pre-feasibility Report, and the



project named “Research on Improving the Technical and Economic Indicators of CSH Gold Mine by Multi-objective Optimization” that carried out by CSH Mine and University of Science and Technology Beijing had been initiated.

In 2018, this company continued to reduce the “five fees”, which had achieved remarkable results in reducing costs and increasing efficiency. Jiama Mine dynamically managed all funds, effectively maintained the solvency of enterprise, and used the financial instruments at the same time to increase capital income by more than RMB 8 million; through the direct supply of materials, the total cost reduction was more than RMB 12 million, and the accumulated annual reduction of the total amount was RMB 37.65 million, the efficiency was RMB 6.34 million, and the revitalization fund was RMB 3 million. CSH Mine has reduced the cost and increased efficiency by RMB 39.58 million through a series of measures such as the old repairment & waste utilization, institutions optimization and personnel streamlining.

In 2018, this company optimized the prospecting ideas, the geological management and capacity enhancement have been continuously improved. Jiama Mine carried out the training to popularize the application of SURPAC software, incorporated geological model updates into daily work management, and effectively guided the formulation and implementation of mining plans; at the same time, in accordance with the new prospecting concept, a new skarn ore body was discovered in the blank area, which added the confidence to the start of the phase III. CSH Mine used high-precision gravity sweeping, IP profile measurement and other geophysical exploration techniques combined with drilling to conduct prospecting work. The drilling project has now controlled the deepest resources in the mining rights to a maximum of 340 meters.

In 2018, this company strived to participate in overseas mergers and acquisitions, the projects-screening are more standardized and efficient. The team of this company participated in the mergers and acquisitions of overseas project of the group company, promoted and carried out reasonable on-site investigation of “Caspian Sea” project and the “Victoria Lake” project. After the institution reform of the group company, the overseas resource development team of this company independently conducted a reasonable on-site investigation of the “New Moon” project and the “Apollo” project, and selected quality projects as much as possible to carry out on-site reasonable investigation.

In 2018, this company adhered to the win-win concept of enterprise and local economy, and continuously promoted the community development. Jiama Mine actively carried out the “One Helps One” project to help the natural villages around the mining area, which

can solve practical difficulties for the masses, and improve the wealth-acquiring skills of the poor; the company adhered to the “employees localization” and continuously improved the sense of participation of farmers and herdsmen. CSH Mine actively innovated and fulfilled the social responsibility, established a wealth-acquiring project for resident farmers and herdsmen to produce sustainable benefits, and jointly built a “harmonious mining area” and a “harmonious society”, which was fully affirmed by masses and all levels of governments.

In 2018, this company actively integrated into overseas markets and the international image continues to improve. This year, this company was named the top 100 companies in Canada by the “Vancouver Business Journal” (ranked 31st), the largest company in British Columbia (ranked 9th), and the fastest growing company in British Columbia (ranked 80th). While pursuing economic benefits, this company also actively interacted and communicated with all sectors of society, actively participated in social welfare activities, established long-term close ties with mainstream Canadians, continuously outputted positive image information, established a smooth and benign communication channel, and built a caring and responsible corporate image in the international mining industry.

In 2019, it is a key year for this company to be better, stronger and bigger. In the face of the complicated international situation, this company will continue to follow the work ideas ----- “Being Strict, In-depth, Cautious and Honest”, continue to do a good job in the production and operation of Jiama Mine and CSH Mine, and further improve the operation rate and recovery rate of the equipment, and continue to create new capacity records while maintaining year-on-year growth in performance; increasing the resources acquisition and environment protection of two mining enterprises, and fully promote the sustainable development of enterprise; actively fulfilling social responsibilities and fully promoting the reform and development of this company to a new level, creating better performance and handing over a satisfactory answer to all shareholders and each interested party.

**Mr. Jiang Liangyou**

CEO and Executive Director



## Corporate profile

China Gold International is a mining company focused on acquisition, exploration, mining and development of gold and other nonferrous resources. It is headquartered in Vancouver, British Columbia, Canada. China National Gold Group Co., Ltd. (hereinafter referred to "China Gold" "CNG" or the "Group" ) is the controlling shareholder of the Company.

The Company's principal mining operations are the Chang Shan Hao Gold Mine ("CSH Gold Mine" or "CSH Mine" or "CSH"), located in Inner Mongolia Autonomous Region, China and the Jiama Copper-Gold Polymetallic Mine ("Jiama Mine" or "Jiama"), located in Tibet Autonomous Region, China. China Gold International holds a 96.5% interest in the CSH Gold Mine. Phase I of the CSH commenced commercial production in July 2007, Phase II expansion in August 2013. And the Company holds 100% interest in the Jiama Mine from December 1, 2010. Jiama hosts a large-scale copper-gold polymetallic deposit consisting of copper, gold, molybdenum, silver, lead and zinc metals. Phase I of the Jiama Mine commenced commercial production in September 2010, Phase II in July 2018.

China Gold International's common shares are listed on the Toronto Stock Exchange ("TSX") and the Stock Exchange of Hong Kong Limited ("HKSE") under the symbol CGG and the stock code 2099, respectively. Additional information relating to the Company, including the Company's Annual Information Form, is available on SEDAR at [www.sedar.com](http://www.sedar.com) as well as Hong Kong Exchange News at [www.hkexnews.hk](http://www.hkexnews.hk).

The Company's development vision is: harboring a high sense of responsibility, building itself into a large-scale mining company and a significant player in international capital markets and the global mining industry.

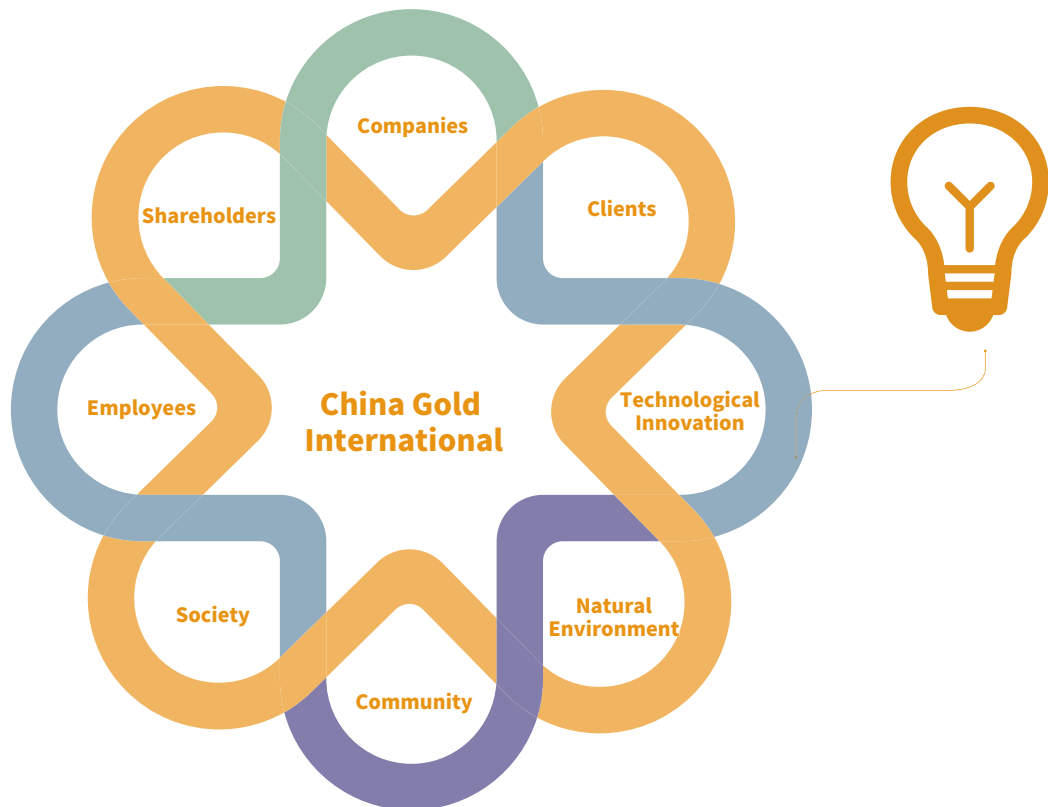
### Key Economic Indicators

Item	Unit	2018	2017	2016	2015	2014
Total Revenue	Million USD	571	412	339	340	278
Operating earnings	Million USD	43	79	34	39	73
Net (loss) profit	Million USD	(4)	64	(12)	(7)	42
Basic earnings per share	Cents	(1.22)	15.93	(3.36)	(2.07)	10.02
Total asset	Million USD	3,216	3,230	2,967	2,781	3,013
Total non-current liabilities	Million USD	1,301	1324	737	971	850

# 01

## Responsibility Management

### ● Social Responsibility Philosophy



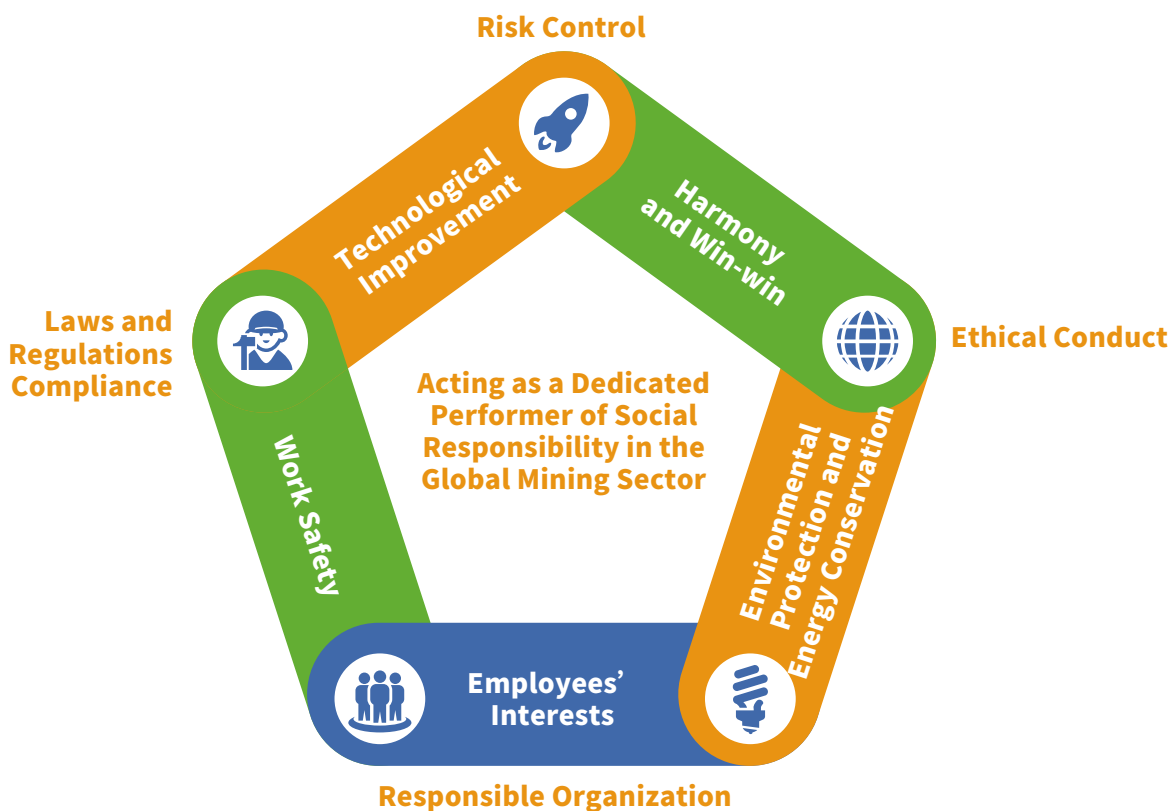
### 01.Social Responsibility Vision

Our social responsibility vision: carry out all businesses in an ethic and sustainable way, protecting and advancing the interests, health, safety, benefit and individual development of employees directly and indirectly serving China Gold International; operate in an environmentally responsible manner, seeking to solve the technologic bottlenecks through innovative development; and become a part of the international community and take opportunities to promote the development concept of China Gold International so as to ensure a sound image as a dedicated performer of social responsibility in the global mining sector.



## 2.Social Responsibility Model

Aiming at "acting as a dedicated performer of social responsibility in the global mining sector" , China Gold International takes initiatives covering accountability, risk control, compliance and business ethics to achieve core values such as environmental protection, energy conservation, work safety, employees' interests, technological progress, harmony and win-win. The process is illustrated in the model below:



We keep in mind that an enterprise should effectively manage the impacts of its business on the stakeholders and natural environment in performing its core social function to pursue economic benefit, seeking to maximize corporate, social and environmental benefits for harmonious mutual development with its stakeholders.

### 3.Social Responsibility Values

- 01 Adhere to the fullest, rational and scientific principle in exploitation and utilization, to promote scale exploitation and comprehensive utilization of gold and nonferrous metallic mineral resources.
- 02 Never carry out gold production wherever compromising ecological environment.
- 03 Create spiritual wealth as well as material wealth instead of merely pursuing gold as a monetary token, attach importance to environmental protection and reasonable exploitation and utilization of resources, and live up to social responsibility and obligations.

### 4.Core Responsibilities

 <b>Environmental protection and energy conservation</b>	<p>Seek to establish a resource conservation and environment-friendly enterprise. Minimize the consumption of natural resources and environmental impact in efficiently exploiting and utilizing mineral resources.</p>
 <b>Work safety</b>	<p>Seek to create a safe production and operation environment. Incorporate the work safety culture across all production and operation processes, strengthen the management framework and system construction for safety, and build up a sound and longstanding safety mechanism.</p>
 <b>Employees' interests</b>	<p>Adhere to the "human-oriented and give full scope to the talents" concept to fully protect employees' interests, provide them a good platform for growth and inspire their enthusiasm and creativity, thus achieving mutual development between the Company and employees.</p>
 <b>Technological progress</b>	<p>Adhere to the concepts of "Science and technology are primary productive forces" and "Leveraging the leading technologies to serve the country", actively participate in the national researches on the difficulties in processing and refining of gold and complex polymetallic ore; and actively make industrialization attempts to tackle the technologic difficulties in processing and refining low-grade gold ore and increase the utilization efficiency of gold and nonferrous resources.</p>
 <b>Harmony and win-win</b>	<p>On the premise of "business integrity for win-win and multi-win" and the mutual respect and benefit principle, promote extensive cooperation with the stakeholders; continuously improve customer services, strengthen supplier management, and carry forward strategic cooperation with local government, suppliers, creditors, enterprises and public sectors and other entities; consider the interests of local people, create more employment opportunities, and strive to achieve win-win with the stakeholders.</p>

## 5. Social Responsibility Performance Scorecard

A: Target achieved (>95%) B: Proceed as scheduled C: Failed

Scope of responsibilities	Social responsibility targets for 2018	Completeness of target
 Responsibility management	Set up an internal social responsibility management framework that covers all functions, tier-two business units and major production enterprises, as well as sound communication channels.	A
	Provide multi-level social responsibility training and workshops to improve social responsibility awareness of management personnel and employees.	A
	Publicize legal knowledge, provide anti-corruption training, deepen efficiency monitoring, and nurture the business concept of compliance.	A
 Economic performance	Benchmark to the domestic best-in-class practices, improve resource reserve system and marketing service system, and strive to achieve the strategic transformation.	A
	Strengthen business management and realize asset preservation and appreciation.	A
	Enhance the control over premium resources, increase resource acquisition capability and promote capital operation.	B
 Safety performance	Strengthen work safety and build up a sound management model of safety production to cater for strategic transformation.	A
	Advance the safety standardization management system construction, effective monitor major hazard sources, and improve the emergency rescue system, aiming at zero fatality in work safety and minimizing the occurrence of other accidents.	A
	Strengthen the safety management information system and the safety education and training framework to continuously improve safety performance.	A
 Caring to employees	Accelerate safety-oriented technological renovations in processes and equipment, strengthen R&D, and leverage technological innovations to achieve safety management.	A
	Strictly follow the national laws and regulations to protect legitimate rights and interests of employees.	A
	Provide on-the-job training and reinforce the career ladder for employees.	A
 Environmental performance	Build up a sound occupational safety and healthcare system for employees.	A
	Fulfill the responsibilities for employees, and gradually improve the compensation packages as planned.	A
	Assist the employees in need to overcome difficulties.	A
 Social performance	In respect of energy conservation and emission reduction, standardize fundamental management and target management, press forward monitoring, inspection and assessment to meet the preset goal.	A
	Increase environment investment, uplift innovation capability in environmental technologies, promote application of energy conservation technologies, and improve comprehensive utilization of renewable resources, aiming at the domestically leading and internationally advanced performance.	A
	Develop mineral resources in a scientific way, and improve comprehensive utilization of resources, recycling of remnant ore and reuse of wastes.	A
 Social performance	Increase the support for public welfare, and help the impoverished areas through multiple means.	A
	Support community education, improve health survey and build up community infrastructure to achieve mutual development of the enterprise and the community.	A
	Increase local procurement and achieve employment localization to promote economic growth of the community.	A
	Observe business ethics and fight against commercial bribery to create a fair competitive market.	A

## Responsible System

### 01. Administrative authorities

The Company gradually builds up a sound corporate social responsibility management system. The social responsibility strategic issues are decided and managed by the Nominating and Corporate Governance Committee, Audit Committee, Compensation and Benefits Committee, and Health, Safety and Environmental Committee of the Board of Directors (the "Board") of the Company and its subsidiaries, and implemented by the management of the Company.

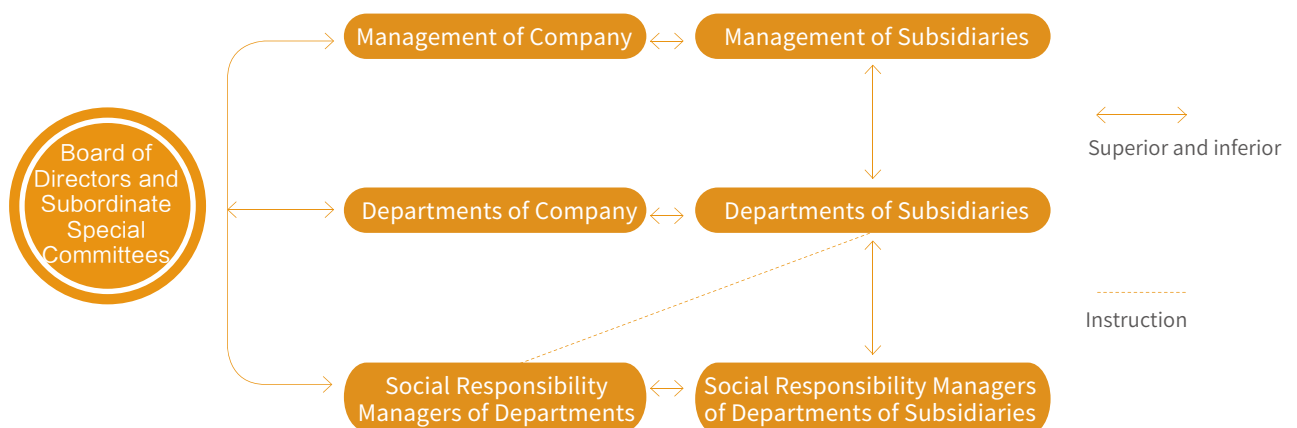
Social responsibility team, including major management from the subsidiaries, is responsible for decision-making and management of their social responsibility issues.

### 02. Daily management bodies

At relevant departments of the headquarters and the subsidiaries (branches), management bodies, posts and personnel, responsible for carrying out social responsibility work, are deployed covering safety management, energy conservation, emission reduction and environmental protection, compensation and benefits, occupational health, technological innovations and employees' interests.

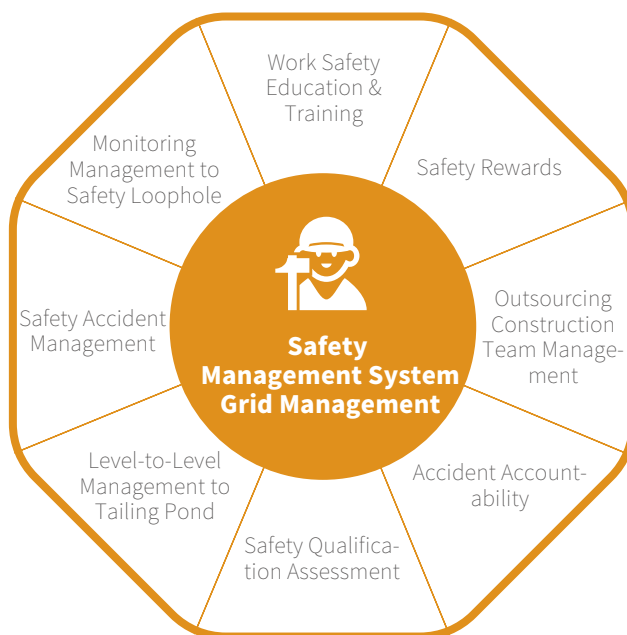
The General Office is responsible for disclosing corporate social responsibility information, as well as responding to enquiries of investors, regulatory authorities and other stakeholders on corporate social responsibility issues.

### 03. Organization structure



#### 04. Specific safety management system

China Gold International always puts safety, health and environmental protection first, increasing the investment in safety and eco protection in recent years. Following safety and eco protection provisions of China and the Company, the Company requires its two subsidiaries to improve regulatory system and to improve the capacity of work safety. In 2018, China Gold International made all efforts to implement "dual responsibilities on one position", urged its subsidiaries to implement the system of safety and eco protection management, and carried out special rectification movements for safety and environmental protection. China Gold International and its two subsidiaries have adhered to the three bottom lines of "safety, eco protection and stability", increasing the investment in safety and environmental protection. We have optimized the safety to improve intrinsic safety in accordance with relevant regulations of the Government and Company.



#### 05. Specific environment management systems

Attaching great importance to environmental management systems, the Company has established the Health, Safety and Environmental Committee with organization and environmental professionals staffed at the headquarters and the subsidiaries under three well-established environmental management systems.

- Organizational management system

The subsidiaries and branches are required to set up definite environmental administrative authorities, and establish corporate environmental management system consisting of persons in charge of the subsidiaries, environmental management departments, heads of workshops and workshop environmental officers. By strengthening the leadership, addressing project implementation and funding and exercising strict monitoring and management, the systems are designed to improve self-environmental management capabilities of the units, ensuring them to meet the emission reduction targets for major pollutants.

- Statistic and monitoring system

The subsidiaries and branches are required to staff dedicated environmental monitoring inspectors, who are responsible for formulating and implementing the plans for regular monitoring of major and typical pollutants, ensuring normal operations of pollutant treatment facilities, and establish the pollution source monitoring database.

- Reward & punishment system

Environmental management structure, environmental management systems, environmental records management and control for major pollutants in the subsidiaries and branches are included into performance evaluation. Environmental protection responsibility system has been established and implemented.

## ○ Responsibility Topics

In order to fulfill its social responsibilities, the Company attaches importance to building a sound participation mechanism for its stakeholders. The Company draws upon the social responsibility standards and the best practices of other enterprises, with reference to its development goal and strategy, industrial characteristics and the expectation and requirements of the stakeholders, to identify the social responsibility topics in a rational manner.

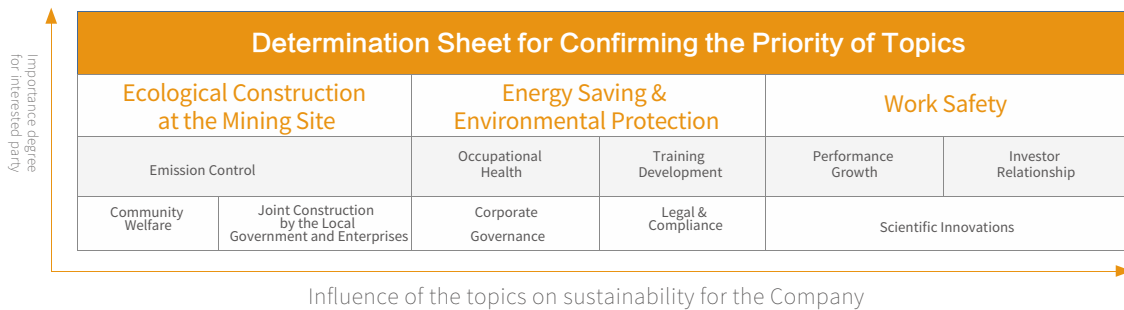
### 1. Process to identify social responsibility topics

**Confirm objective of social responsibility** confirm social responsibility objective regarding the CSR standard and the best responsibility practice.

**Understand expectation of interested parties** actively communicate with interested parties to understand the significant topics they care about.

**Select major topics** formulate work plan and put into practice, draw up the action plan, confirm scope of participation and provide action resources.

**Formulate work plan and put into practice** select and put in order the topics according to the concern of interested parties and the influence of the topics on the Company.

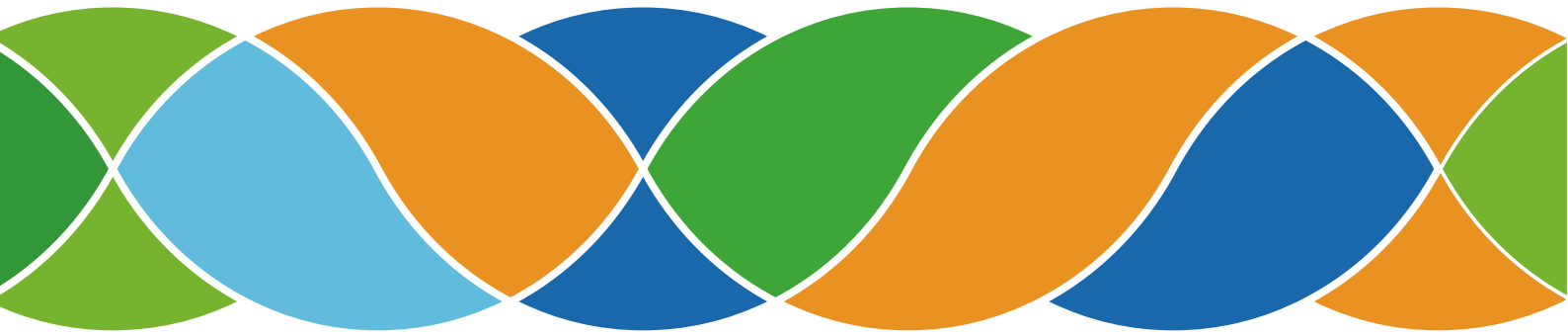


**Feedback of interested party** assess the implementation effect of the planning through internal and external communication

**Summary and improvement** summarize the experiences and improve continuously

### 2. List of social responsibility topics





## ○ Responsibility Enhancement

Effective social responsibility management is a cornerstone for corporate sustainable, steady and harmonious development. To proactively improve its social responsibility enhancement management system, China Gold International communicates with the stakeholders through a range of means to continuously improve its social responsibility performance.

### ▲ Formulating management system

With the system, regulations and processes for corporate social responsibility management in place, the Company has established a longstanding mechanism for corporate social responsibility management and practices. Preparation and publishing of annual reports on corporate social responsibility have effectively ensured the implementation of our social responsibility work. Through preparing and publishing this report, we deepened our understanding of social responsibility indicator system based on better comparison of information and statistics, and the identification of “weakness” in social responsibility management will play a vital role in improving our social responsibility management system and capabilities.

### ▲ Launching specific training programs

The Company continues to enhance training for its employees on safety, legal issues and human rights and environmental management, laying a solid foundation for specific social responsibility management.

### ▲ Upgrading specific work

Pushing ahead its social responsibility management, the Company seeks to focus on thematic practices as a breakthrough, where appropriate, to infiltrate the social responsibility concept into all functions and business units for upgrading and optimization of the existing working model.

## Communications on Responsibilities

### Participation of Interested Parties

The Company conducts in-depth research on stakeholder concerns, attaches great importance to communication with stakeholders, and translates relevant claims into corporate social responsibility actions and objectives. And we effectively strengthen our capacity building, disseminate the Company's responsibility concept and practice to stakeholders through various channels, and strive to meet expectations of interested parties.





## Internal communication

To promote internal communication on social responsibility, the Company has identified liaisons in its subsidiaries to keep informed of and provide timely feedbacks of social responsibility progress as an effective bridge for information communication.



Song Xin, chairman and Party secretary of China Gold, chairman of the Board of China Gold International, along with Hao Peng, Secretary Party Committee of SASAC, paid visit to Jiama Mine for inspection



Liu Bing, the general manager of China Gold inspected Jiama Mine



Jiang Liangyou, deputy general manager of China Gold, Party secretary, deputy general manager of China Gold Hong Kong and CEO of China Gold International inspected CSH Mine



1



2

## External communication

The Company effectively communicates with its stakeholders through many ways to satisfy their needs for information disclosure.

1. Hao Peng, Party Secretary of SASAC, instructed work for Jiama Mine
2. Independent directors of China Gold International visited CSH Mine
3. Qizha La, deputy Party secretary and chairman of the Government of the Tibet Autonomous Region, inspected Jiama Mine
4. Jiama Mine held the conference for releasing 2017 social responsibility report of China Gold
5. On September 4, 2018, social responsibility report of Jiama Mine was released as the first Tibetan social responsibility report



3



4



5

## Social Recognitions

While creating economic benefits, China Gold International continues to deepen its understanding of its social responsibility and earnestly fulfills its corporate social responsibility, and has received positive recognition from the public.

### Honors for China Gold International from 2016 to 2018

Company	Year	Honors	Granting unit
China Gold International	2018	Canada's 100 Biggest Companies (Ranked No. 31) Note: Ranking is based on the revenue in 2017.	Business in Vancouver
China Gold International	2018	Biggest Companies in British Columbia (Ranked No. 9) Note: Ranking is based on the revenue in 2017.	Business in Vancouver
China Gold International	2018	British Columbia's 100 Biggest Companies (Ranked No. 72) Note: Ranking is based on the revenue in 2017.	British Columbia Magazine
China Gold International	2018	Fast Growing Companies in British Columbia (Ranked No. 80) Note: Ranking is based on the revenue from 2013 to 2017.	Business in Vancouver
China Gold International	2018	British Columbia's 100 Most Profitable Business (Ranked No. 28) Note: Ranking is based on the net profit in 2017.	Business in Vancouver
China Gold International	2018	Biggest Debt-market Deal in 2017 (Ranked No. 5)	Business in Vancouver
China Gold International	2017	Canada's 500 Biggest Companies (Ranked No. 466)	Financial Post
China Gold International	2017	Biggest Companies in British Columbia (Ranked No. 84) Note: Ranking is based on the revenue in 2016.	British Columbia Magazine
China Gold International	2017	Canada's 40 Best Mining Companies (Ranked No. 31) Note: Ranking is based on the revenue in 2016.	Canadian Mining Journal
China Gold International	2016	Biggest Mining Companies in British Columbia (Ranked No. 13) Note: Ranking is based on the revenue in 2015.	Business in Vancouver
China Gold International	2016	Fast Growing Companies in British Columbia (Ranked No. 100)	Business in Vancouver
China Gold International	2016	Canada's 500 Biggest Companies (Ranked No. 478)	Financial Post
China Gold International	2016	Biggest Companies in British Columbia (Ranked No. 80) Note: Ranking is based on the revenue in 2015.	Business in Vancouver
China Gold International	2016	Canada's 40 Best Mining Companies (Ranked No. 37)	Canadian Mining Journal
Jiama Mine	2018	Research and application of key technology for efficient utilization of complex low-grade copper ores First Prize of Science and Technology Award	China Non-Ferrous Metals Industry Association
Jiama Mine	2018	Key technology and industrialization considering the comprehensive utilization of complicated copper ore First Prize of Science and Technology Award	China Association of Circular Economy
Jiama Mine	2018	Research and application of simultaneous shaft-sinking with medium-length hole in plateau mine First Prize of Scientific and Technological Achievements for Frontline Workers	China Gold Association
Jiama Mine	2018	Application of self-made slag removal of ore pulp First Prize of Scientific and Technological Achievements for Frontline Workers	China Gold Association
Jiama Mine	2018	Innovation on sealing and dust prevention of flotation cell	China Gold Association
Jiama Mine	2018	Second prize for the SOE Management and Innovation Achievements of State-owned Enterprises (2018)	China Enterprise Management Research Institute, China Institute of Fiscal Science Innovation World Weekly, State-owned Enterprises Management Committee
Jiama Mine	2018	The 11th National Advanced Equipment Management Unit	Chinese Association of Plant Engineering
Jiama Mine	2018	Pilot Demonstration Enterprise of Intelligent Manufacturing by Ministry of Industry and Information Technology (2018)	Ministry of Industry and Information Technology
Jiama Mine	2017	Excellent Collective for Supporting and Helping Village (community) Labor Unions in Lhasa city in 2016	Trade Union of Lhasa City
Jiama Mine	2017	Worker Pioneer	Trade Union of Lhasa City

Company	Year	Honors	Granting unit
Jiama Mine	2017	Second Prize of Innovation Achievement Award in the 23rd National Enterprise Management Modernization	National Enterprise Management Modernization Innovation Results Review Committee Office
Jiama Mine	2017	Second prize for the SOE Management and Innovation Achievements of State-owned Enterprises (2017)	China Enterprise Management Research Institute, China Institute of Fiscal Science Innovation World Weekly State-owned Enterprises Management Committee
Jiama Mine	2016	First Prize of 2016 Good News of Enterprise Press in China Gold Industry	China Gold News
Jiama Mine	2016	Third Prize of Scientific and Technological Award (application of solar heating to plateau and alpine mining areas)	China Gold Association
Jiama Mine	2016	Second Prize of Economic Model and Optimizing S&T in Hornfel Orebody of Jiama Copper Polymetallic Mine	China Gold Association
Jiama Mine	2016	Second Prize of Automation Design and Applied Science and Technology of Jima 40,000 tons Processing in High Altitude	China Gold Association
Jiama Mine	2016	First Prize of Safety Knowledge Contest in Maizhokunggar County	Trade Union of Maizhokunggar County Administration of Work Safety Supervision of Maizhokunggar County
Jiama Mine	2016	Outstanding Management in National Integration of Industrialization and IT Application	National Federation of Integration of Industrialization and IT Application
Jiama Mine	2016	Nomination Award of Third Moral Model in Lhasa City	The Committee of Civilization in Lhasa City
Jiama Mine	2016	National Model Family	All-China Federation of Trade Unions
Jiama Mine	2016	Management Innovation of State-enterprise of China (2016) Level: Second	The Chinese Institute of Business Administration, Editorial Board of State Enterprise Management
Jiama Mine	2016	Outstanding Contribution Unit for the 25 Anniversary of China Gold News	China Gold News
Jiama Mine	2016	Advanced Grassroot CPC Organization among Central Enterprises	Party Committee of SASAC of State Council
Jiama Mine	2016	The Advanced Group in Science and Technology of China Gold Industry during 12th Five-year Plan	China Gold Association
Jiama Mine	2016	First Prize of Science and Technology Award	China Gold Association
Jiama Mine	2016	First Prize of Equipment Management	China Association of Plant Engineering
Jiama Mine	2016	First Prize of Science and Technology Award	China Non-Ferrous Metals Industry Association
CSH Mine	2018	First Team Prize of "Ankang Cup" Work Safety Knowledge Contest	Labor Union of Urat Zhongqi County
CSH Mine	2018	2018 Advanced Enterprise for Fighting Against Drought	People's Government of Bayannur City
CSH Mine	2018	May Fourth Red-banner Youth League	Communist Youth League of Urat Zhongqi County
CSH Mine	2018	2017 Advanced Enterprise for Work Safety	Administration of Worker Safety of Bayannur City
CSH Mine	2018	2017 Advanced Workshop for Work Safety (processing and smelting plant)	Administration of Worker Safety of Bayannur City
CSH Mine	2017	2011-2015 Excellent Collective for Law Popularity and Governance by Law	Urat Zhongqi Committee of the Communist Party The Urat Government
CSH Mine	2017	High-tech Enterprise	Department of Science and Technology Department of Finance National Taxation Bureau and Local Taxation Bureau of Inner Mongolia Autonomous Region
CSH Mine	2017	Two Integration Management System Assessment Certificate	Beijing Grand Honour Certification Co., Ltd.
CSH Mine	2016	Best Development Award of 2016 China Gold Congress	Committee of China Gold Congress
CSH Mine	2016	2015 Top 10 Mines of Gold Production	China Gold Association
CSH Mine	2016	2016 Employee Innovation Workshop of Urat Zhongqi County	Trade Union of Urat Zhongqi County

Company	Year	Honors	Granting unit
CSH Mine	2016	Model Group of Work Safety	Work Safety Committee of Bayannur City
CSH Mine	2016	Best Service Award	China National Gold Group Co., Ltd
CSH Mine	2016	Water-saving Enterprise	Leading Group of Water-saving of Urat Zhongqi County

## Case

## Jiama Mine was awarded as High-tech Enterprise

Jiama has been recognized as one of the national high-tech enterprises since 2015. Three years later, with the approval of the National High-tech Enterprises Management Group Office, Jiama was accredited the honor once again in 2018, becoming the first group of high-tech enterprises of Tibet Autonomous Region. The qualification is an important intangible asset for the company in that it is good for establishing a sound brand image and representing its technical strength. It plays a key role in the company's financing, M&A, and listing. It is conducive to enhancing its innovation capacity and expanding global markets and it is an important indicator and prerequisite to applying for special fund targeted at national science and technology innovation.

In 2018, the number of core intellectual property patents independently developed by Jiama has increased from zero to 12. Besides that, more than 20 scientific papers have been published on CNKI, with an increase of 120% over the previous year. Jiama declared 47 awards in 2018, with a 228.57% year-on-year growth.



Jiama Mine was awarded as High-tech Enterprise

## Case

## Jiama was honored as the national innovation demonstration enterprise

State-level technology innovation demonstration enterprises are jointly approved by Ministry of Industry and Information Technology (MIIT) and the Ministry of Finance. The innovation enterprise must possess core competitiveness, capability of continuous innovation, and R&D investment; having industry-driven impact, and independent brand; having strong profit-making capacity and high management level; having ability to effectively apply new technologies; having innovative development strategy and innovative culture. After being recognized as an innovation demonstration enterprise, the company's reputation will be significantly enhanced.

Jiama has been awarded as one of the 68 national innovation demonstration enterprises by Ministry of Industry and Information Technology and Ministry of Finance.



Jiama was honored as the national innovation demonstration enterprise by Ministry of Industry and Information Technology and Ministry of Finance.

## 02

Environmental Protection  
and Energy Conservation

With a commitment to safety-based, clean, conservation-oriented and harmonious development, the Company insists on pursuing mutual development between environmental protection and economic growth. We dedicate ourselves in environmental protection and treatment activities, focusing on treatment of waste gas, water and slag, energy conservation and emission reduction, greening and landscaping. Great efforts have been taken in promoting low-carbon economy under a green development model featuring low energy consumption, pollution and emissions. In 2018, the Company invested a total of RMB 78 million in tailings treatment, dust removal, sewage treatment, eco monitoring and land rehabilitation.

### Energy Conservation and Emission Reduction

Global climate change has become an important concern worldwide. The Company actively responds to the country's calls to fulfill its corporate social responsibility. Targeting "low consumption, low emissions and high efficiency", the Company leverages technological innovations to vigorously develop circular economy and improve development and utilization of resources in a scientific and efficient manner, seeking to maximize the benefits from resource consumption.

In 2018, the chemical oxygen demand and sulfur dioxide emission of Company were respectively 22.03 tons and 29.8 tons. The pollutant discharge control continuously stands to be in the leading place in the same industry in China. In addition, there is no packaging for our product and we ensure its quality. All products are valued at the metal content. The mining waste rocks are all stored in the waste rock field according to the plan with the aim to build the field to cut off the ditches and drain water, which are effective to prevent soil and water erosion.

#### Case Jiama solar heating system

Energy saving and emission reduction to a low-carbon economy is a relentless pursuit for mining companies. By upgrading and applying solar heating system, Jiama has made solid progress in reducing dust, harmful gases, and greenhouse gas emissions. Solar system can directly leads to the decrease of air pollution and reduction of greenhouse effect. By using solar heating system, the annual reduction of dust emission per 100 square meters of solar heaters is 2.5 tons, while sulfur dioxide is 0.25 tons, and carbon dioxide is 0.9 tons, which produces significant environmental benefits. Besides, the annual emission of



Jiama solar heating system

carbon dioxide and harmful gases can be reduced by about 2500 tons, saving RMB12 million. Providing that the service life of the heat collector is 15 years, we can save RMB 180 million in total.





## Case

**CSH built up new coal sheds to reduce dust**

CSH has invested more than RMB 970,000 in building coal sheds for boilers both at living zone and production area in 2018, so as to reduce the diffusion of raw coal put aside. The coal sheds has been built up and put into service in August 2018, eliminating the environmental impact of dust generated by burning raw coal.



CSH built up new coal sheds to reduce dust

## Case

**CSH reduced dust of the crusher workshop**

In order to reduce the dust diffusion from feed opening in crusher workshops, CSH has invested more than RMB300,000 in 2018 to reduce disordered dusts through installing new dust removal pipe in high-rack warehouses, lengthening discharge port, eliminate the number of cars on road, hardening road surface, installing dust-proof doors.



CSH reduced dust of the crusher workshop

Environmental Protection Performance Table of CSH Mine

Indicator	2018	2017	2016	2015	2014
Carbon dioxide emission (ton)	19,626.1	17,540.8	17,682.1	19,456.1	20,708.1
Carbon dioxide of raw ore (kg/ton)	1.95	0.89	0.79	0.92	0.90
Ashes and cinders(ton)	2,157	2,028	1,458	1,180	854
Ashes and cinders per ton ore (kg/ton)	0.215	0.103	0.065	0.056	0.037
Waste rock (10,000 tons)	6,785	9,138	9,269	9,633	9,377
Waste rock of raw ore (ton/ton)	6.75	4.60	4.10	4.50	4.10

**01.Prevention and control of solid wastes:**

A total of 6.4 tons of used mineral oil were produced by CSH Mine in 2018, which were stored and transferred by China Railway 19 Bureau Group Co., Ltd. as authorized by the company. Owing to the reduced mining volume and the number of equipment at present, the volume of used mineral oil produced by the company will gradually decline.

## Hazardous Wastes at CSH Mine

Waste	2018	2017	2016	2015	2014
Waste mineral oil (ton)	6.4	6.30	6.46	6.25	6.62
Wastes per ton ore (g/ton)	0.640	0.320	0.289	0.295	0.286

Non-hazardous waste at CSH Mine is mainly mining waste rock, all of which are stored in waste rock yard according to the plan. Those waste rocks are used to build the flood intercepting trenches to prevent water and soil loss. At present, the company is further deepening the mining depth, which reduces the amount of ore mining, and the technical department is optimizing and adjusting the stripping ratio, so that the amount of waste rocks will also be reduced.

All the domestic garbage of the company is stored in the refuse landfill, with anti-seepage treatment by using the plastic film, so as to prevent the garbage from penetrating into the ground and contaminating the soil and water. The refuse landfill is still within its service period and will be collected and disposed by local environmental sanitation department after its service period is expired.



Jiama held acceptance meeting of conservation project of Phase II program

On January 26, Jiama held acceptance meeting of conservation project of Phase II expansion program (mineral processing). The meeting sets up an acceptance group headed by Wang Ping, general manager of Jiama Mine. In addition, it also formed an acceptance team with seven experts, including Tian Xi, professorate senior engineer and vice president of Sichuan Province Academy of Industrial Environmental Monitoring, Liang Gang, an expert from the Evaluation Center of the Ministry of Ecology and Environment of the People's Republic of China, and Wu Yan, a researcher from Chengdu Institute of Biology, Chinese Academy of Science.

These experts reviewed the eco facilities and came to conclusion that the eco project was in line with acceptance. According to *Regulations on Environmental Protection of Construction Projects, and Interim Regulations on the Investigation Report for the Acceptance of Environmental Project of Construction Projects (No. 4 Environmental Evaluation File [2017])* and other relevant requirements, the experts all agreed that the environmental project of Jiama Mine Phase II Expansion (processing) met the evaluation criteria.

In September 6, 2018, China Environmental Tour Group visited Jiama Mine for inspecting eco work of Phase I program. It is estimated that Jiama has invested RMB32 million in the afforestation of 121,000 square meters



### Progress in green mine and eco protection made by Jiama was highly recognized

On March 12, Chao Zhexiong, deputy director of the Department of Environmental Protection in Tibet Autonomous Region, along with Liao Bo, deputy mayor and secretary general of Lhasa city, visited Jiama for inspection. They went to storage site for land reclamation, dumping site, 5300 Party branch, Phase I tailing dam. And Wang Ping, along with other manager of Jiama, gave work reports about improvement of eco facilities at Niumatang dumping site, building of Phase I tailing dam and green enhancement. Progress in green mine and eco protection made by Jiama was highly recognized by Mr. Chao Zhexiong.



China Environmental Tour Group visited Jiama



Officers from Environmental Protection Department of the Tibet Autonomous Region went to Jiama for inspection and guidance

## 02.Awareness campaigns for energy conservation and emission reduction

In June 5, 2018, an activity themed with “Act for Wild China” was held by the Ministry of Ecology and Environment of the People's Republic of China.

Jiama Mine and CSH Mine raised awareness campaigns for energy conservation and emission reduction by carrying out various activities, performing the responsibilities with actions.



### Jiama held activities for the World Environment Day

Jiama, along with Mozhugongka County, jointly held activities for the 47th World Environment Day. Employees were encouraged to be volunteers in the eco activities. Besides, Suolang Dorji, deputy governor of Mozhugongka County, together with Wang Ping, general manager of Jiama and other leaders attended the event and delivered speeches.

On the activity spot, the Health and Environmental Department of Jiama, in cooperation with the Environmental Protection Bureau Mozhugongka County, made the public eco protection throughout hanging banners and posters, handing out pamphlets and eco-friendly shopping bags. In addition, the volunteers proactively fulfilled the concept of “Lucid waters and lush mountains are invaluable assets” by earnestly explained environmental knowledge to employees of Jiama.



Jiama held activities for the World Environment Day



CSH held activities for the World Environment Day



In 2018, CSH seized the opportunity during the World Environment Day and Energy Conservation and Emissions Reduction Publicity Week to carry out the publicity work. CSH made the eco posters and handed out pamphlets to all staff to further raise employees' eco awareness.

## Recycling of Water Resource

Indicator		2018	2017	2016	2015	2014
Water consumption	Newly added water (in 10,000 ton)	169.06	272.56	208.63	156.76	184.44
	Circulating water (in 10,000 ton)	6,871	7,086	6,974	8,602	4,355
Water consumption per RMB10,000 output		27.09	22.84	26.33	27.63	37.83
Water consumption per ton ore (ton)		0.08	0.31	0.24	0.25	0.28

### 案例

## Jiama Mine has realized zero discharge of domestic wastewater



Irrigating with reclaimed water in Jiama

Jiama Mine has realized zero discharge of domestic wastewater, which reduces environmental impact and creates economic benefits. At present, its daily processing capacity has reached 480 tons. The content of COD and ammonia nitrogen in the treated water has been greatly decreased, meeting the national primary standard and the treated water is used for daily plants maintenance. Thus, 2018 has witnessed a saving of nearly 60 tons of water in plants irrigation.

## Environmental Protection

Given the profound impact that global climate changes have had on human in recent years, the Company, as a responsible corporate citizen, has an in-depth understanding of the challenging and urgent issue of environmental concerns. Therefore, the Company takes initiatives to push forth the environmental information and promote green operations, seeking to minimize the negative environmental impact from its operations.



## Jiama increased the greening to provide more comfortable and beautiful working surroundings for the employees

Jiama strives to establish a green mine based on local conditions and step-by-step measures. With the current greening, the company focuses more on land reclamation of key areas to ensure the survival rate of shrubs throughout digging pits, replacing the soil, watering plants by burying pipes. Jiama is committed to building a “back garden” to provide more comfortable and beautiful working surroundings for the employees. In 2018, there has planted 300 willows, 1.15 million sea buckthorns and seeding more than 15,500 kilograms, greening 180,000 square meters, making green coverage rate of mines reached more than 90%.



Jiama increased the greening by seeding.



## CSH afforested the waste dump to protect environment

Over the years, CSH has been committed to “build a mine to green the community” through afforesting the waste dump to both develop mines and protect environment. In April 2018, the company has invested more than 400,000 RMB in afforesting the slope of temporary demolished crushing and screening fields by seeding 500 kilograms, with the restoration area reaching 35000 square meters.



Land reclamation in CSH Mine

## 01. Implement level-to-level administration for environmental protection

The Company implements level-to-level administration for environmental protection. We seek to improve environmental management system and establish Department of Eco Protection as a governing body which is responsible for inspecting and managing eco work. All departments of the Company, according to respective duties, take charge of environmental protection by division of labor. The subsidiaries take charge of the environmental problems in the area where it operates. The eco protection work of the company is managed uniformly.

## 02. Strengthen the environmental awareness

The Company attaches great importance to environmental awareness, formulating and implementing annual environmental initiatives and training programs to publicize environmental knowledge and advocate the environmental culture. Through such initiatives and training programs, the Company strives to improve the environmental awareness, work ethic and methodology of the heads of subsidiaries and branches, standardize environmental management, fulfill environmental responsibilities of corporate undertakers, and play its leading role in the micro environmental management.



Jiama encouraged volunteers to pick up the garbage

## Case

## CSH Mine held Work Safety Month Activity

CSH Mine attaches great importance to "Work Safety Month" activity (17th) in 2018, and set up an activity group with Zhang Weibin, the chairman as the group leader and Shu Yanglai, deputy general manager (for safety work) as the vice-group leader. And on May 28, the company issued the Notice on CSH Mine Hold 2018 Work Safety Month, which introduced the guiding principle, theme, organization structure, date, form and requirements for this activity.



CSH Mine held Work Safety Month Activity

## 03.Environmental technology innovation

The Company places priority on environmental research. Therefore, the environmental innovation and system integration provides a technical support for pollution prevention and eco management.

## Case

## Recovery equipment of heavy metal in CSH Mine

CSH Mine attaches great importance to scientific and technological innovation and insists on the benefits out of science and technology. The Research on Reduction of Impurity Ions in Heap Leaching Recirculating Fluids had conducted industrial expansion test since 2014.

From 2017 to 2018, CSH Mine guided by China Gold, launched 150m<sup>3</sup>/h Project for Recycling Copper Removal Process, which was applied into mining production, realizing selective absorbent of special heavy metal. The special heavy metal selective adsorbent can effectively remove heavy metal impurity ions without damaging gold recycling



Recovery equipment of heavy metal in CSH Mine

system, and recycle copper in alkaline environment. As of 2018, CSH has recycled 28 tons of copper mud containing impurities, 4.5 tons of pure copper, reducing impurity ions in the heap leaching recirculating fluids, which achieved economic benefits.

## 04.Green and environmental operation

The Company actively promotes the green office campaign. Given its cross-region operations, messaging tools such as OA, teleconference system and WeChat are widely used in the Company's routine to improve efficiency of green office. Actively promoting clean production, the Company places emphasis on environmental management across the entire production process, aiming to continuously improving onsite clean production performance.

**Case****CSH Mine pass the third-round clean production review**

To fully implement “The Clean Production Propel Law” and “Clean Production Review Method” issued by State Environmental Protection Administration as well as other laws and regulations, CSH Mine formulated and sifted many feasible plans and put them into use during the review process, which passed the evaluation from expert panel of Bayannur city in 2018.

**Case****Emission of COD was reduced compared with last year**

In 2018, the actual emission of COD, sulfur dioxide and nitrogen oxide were 7.297 tons, 29.814 tons, 17.42 tons respectively, reducing 2.13%, 3.82% and 2.35% respectively compared with last year.

**05.Green procurement**

The Company actively implements the *Opinions on Government Procurement of Environmentally Labeled Products of the PRC* to prioritize environmentally labeled products, and select manufacturers with leading technologies of environmental protection and energy conservation as its major equipment suppliers, aiming to minimize pollution from the source.

**06.Protection of regional ecological environment**

In strict compliance with the Exploitation and Utilization Scheme for Mineral Resources, the Environmental Protection and Restoration Scheme for Geological Environment of Mines and the Land Reclamation Scheme for Mines, the Company insists on the basic environmental protection principle of “people-oriented, environmental, prevention-oriented, clean production, energy conservation and emission reduction”. The Company adheres to “paralleled mining and reclamation” across the design and mining processes for mineral resource development, seeking to restore vegetation continually, prevent soil erosion and preserve biological diversity.

The Company strictly complies with the national environmental laws and regulations. The new investment projects recorded 100% fulfillment rate for both “environmental impact assessment” and the “three simultaneous” requirement, thus strengthening environmental management on new projects from the source. In 2018, the Company made a provision of a total of RMB6.1621 million for rehabilitation, increased by 4.97 million yuan compared with last year. The Company has zero environmental pollution accident since its establishment.

**Case****Jiama Mine and CSH Mine attached great importance on environmental protection**

While developing mineral resources, Jiama Mine has successively carried out prevention and control measures for mudslides in mining areas, open-pit interception trench works, ground subsidence treatment works, open-pit slope monitoring, and high-slope rock unloading treatment works, and implemented with quality guaranteed. The company has invested a total of more than 40 million yuan, and the green area of reclaimed land in the mining area is about 160,000 km<sup>2</sup>, with a coverage rate of over 85%. The maximum amount of surface soil for each project is kept for recycling.

CSH Mine attached great importance on environmental protection and invested more than 3 million yuan each year in community eco protection. In 2018, the League committee of the company encouraged all youths and employees afforesting waste dump spontaneously, which curbed the raise dust and restored vegetation.



Afforested dumping site in CSH Mine



## 07.Green business

The Company has firmly upheld the concept of "building an enterprise into an environment keeper", adhering to the principles of "spur the environmental protection during pursuing development and promote economic growth while working for the environment" and "rely on the scientific and technological progress, develop the circular economy and construct the green mines". The Company has afforested the mines to improve the ecological environment so as to better promote the mining development and environmental protection.

### Case

#### Jiama Mine hosted symposium on green development

On September 3, symposium on green development, hosted by China Gold News and Jiama Mine, was held at Lhasa by China National Gold Group Co, Ltd (China Gold). This symposium showed the way to make traditional mines transform into sustainable green mines, which produced positive impact on green growth of mining industry.



Jiama Mine hosted symposium on green development of China Gold

### Case

#### CSH Mine began in exploring deep mineral resources

Resources are the lifeblood of mines, and the conservation and rational use of resources is the foundation of green mines. Since its establishment, CSH Mine has saved and effectively utilized resources on the production process, and optimized the methods of mining and processing, which reduces the depletion rate and loss rate of ore and increases recovery rate of processing and mining, realizing the comprehensive utilization of resources.



CSH Mine held a meeting for exploring deep mineral resources

## 08. Monitoring of regional ecological environment

According to the requirements of environmental monitoring work, China Gold International actively entrusts the relevant monitoring units to carry out the environmental monitoring work of the mining area. The monitoring items include groundwater, surface water, domestic sewage, climate, noise, efficiency of dust removal of the plants. The internal monitoring is conducted by quality inspection center of the Company in accordance with the monitoring program on time.

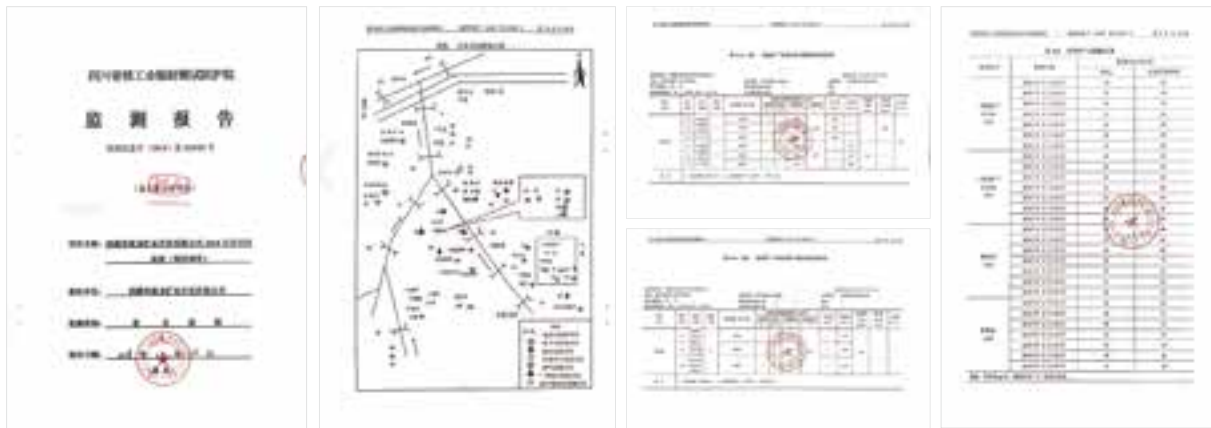


### CSH Mine strengthened environmental monitoring work in compliance with national standards

CSH Mine has set up an environmental monitoring station to strengthen environmental monitoring work and done a good job of monitoring ledgers. All types of monitoring data are in compliance with national standards. At the same time, the company has commissioned a qualified third-party environmental service agency to monitor the status of environmental quality near the factory site (monitoring projects include drinking water, groundwater, boiler waste gas, domestic wastewater, noise, surrounding wells, river ditch), and issued Report on the Evaluation Results of the Surrounding Monitoring of the Haoyao' erhudong Gold Mine Plant Area. The monitoring results and evaluation conclusions show that the company's operation has not brought any impact on the surrounding environment, and all indicators are in compliance with national standards.

Two subsidiaries of China Gold International monitored domestic sewage and exhaust gas, and all results reached standards in line with national laws and regulations.

Test report of Jiama Mine:



Test report of CSH Mine:





## Jiama Mine attaches importance to environmental protection

### Jiama Mine

Production power consumption

**302,130,000** kW/h

Comprehensive energy consumption  
per ton for mineral processing

**28.96** kW/h

Annual newly added water

**0.41** million tons

Water consumption  
per RMB 10,000 output

**0.039**

### CSH Mine

Production power consumption

**88,480,000** kW/h

Comprehensive energy consumption  
per ton for mineral processing

**7.87** kW/h

Annual newly added water

**1.28** million tons

Water consumption  
per RMB 10,000 output

**0.127**

Jiama Mine performs the following laws and regulations: Environmental Protection Law of the People's Republic of China, Environmental Protection Regulations of the Tibet Autonomous Region (2003), Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, Law of the People's Republic of China on Prevention and Control of Water Pollution, Law of the People's Republic of China on the Prevention and Control of Pollution from Environmental Noise, Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste, Law of People's Republic of China on Prevention and Control of Radioactive Contamination, Integrated Wastewater Discharge Standard, Emission Standard for Industrial Enterprise Noise at Boundary etc., and has specific rules on control and management of various pollutants, requiring that facilities for prevention and control of noise and solid wastes shall be installed, which have been accepted by the Environmental Protection Department of Tibet Autonomous Region, and discharge of relevant atmospheric and water pollutants shall meet the standards.

The company has been following the above laws and regulations. Currently, the air pollutant refers to the dust discharged out of the exhaust funnels of the processing plant, which is discharged organically after the treatment of three pulse bag dust collectors installed at the crushing section. Based on the environmental monitoring of Sichuan Radiation Detection & Protection Institute of Nuclear Industry as authorized, the dust discharged meets the standards, without any pollution problem; as for the greenhouse gases, there is no organized emission of such gases based on the Greenhouse Gas Inventory. The oil-fired boilers installed in Phase I for heating of the office and factory areas have been dismantled in consideration of the pollution and costs, and solar energy is being used for heating of the whole area, without any emission of greenhouse gases like carbon dioxide.

The topsoil and vegetation taken out during the production and construction are piled and preserved in the company's reclamation back-up soil storage site and vegetation preservation area; noise reduction measures are taken strictly in accordance with the environmental impact assessment requirements, without any noise pollution generated; the solid wastes mainly consist of the domestic garbage, which is transported to Maizhokunggar County Refuse Landfill by the company's garbage trucks on daily basis and disposed under the agreement signed with the Refuse Landfill; the waste rocks are piled in the outdoor dump, and the tailings are stored in the tailings ponds.

Jiama Mine has always been aiming to "develop a mine without any harm to the environment" and taking reduction of discharge of mine production wastes, mainly the tailings, as the top priority. In order to maximize the recovery of underground mineral resources and achieve safe, environmental-friendly and high-efficiency mining while reducing the solid waste discharge and saving land acquisition costs and harmless treatment costs, two ways, cemented filling with full tailings and non-cemented filling with full tailings will be adopted for the filling system.

Beijing General Research Institute of Mining & Metallurgy updated four slurry filling systems and cement blanking, which has greatly improved filling quality, efficiency and stability. Backfill area has reached about 10,000 cubic meters. Based on the National Hazardous Waste Inventory, the major hazardous wastes of the company include the used lubricants from the processing plant and machine repair workshops, the medical wastes from the clinic and the containers of acid substances from the laboratory and processing plants, of which all the medical wastes and the containers of acid substances are recycled by a third party under the relevant agreement signed; the used lubricants are separately stored at the temporary waste oil storage site with proper anti-seepage measures. In the meantime, the company is dealing with Lhasa Municipal Environmental Protection Bureau, Lhasa Municipal Hazardous Waste Disposal Center and Gaozheng Hazardous Waste Transportation Co., Ltd. with regard to the waste oil transportation and disposal procedures.

**Hazardous Waste Discharge Amount of Jiama Mine**

Hazardous waste	2018	2017	2016	2015	2014
Medical wastes (ton)	0.25	0.24	0.22	0.21	0.21
Used lubricants (ton)	15.00	19.00	3.00	3.00	3.00
Containers of chemical agents (ton)	3.46	0.50	0.50	0.45	0.42
In total (ton)	18.71	19.74	3.72	3.66	3.63
Harmful waste per ton of ore(g/ton)	1.79	1.89	0.35	0.35	0.35

Note: Jiama Mine has carried out copper and molybdenum separation projects. In 2018, a total of 176,200 samples were collected, a significant increase compared with the previous year.

Jiama Mine produces the solid wastes, mainly the domestic garbage. Therefore, the company signed an agreement with a landfill company of Mozhugongka County to transport these solid wastes daily with garbage trucks for treatment. The waste rocks are piled up in the open dump. And the tailings piled up at the tailing pond, are then backfilled to the underground through filling system. The filling system adopts two methods: cemented full tailing backfilling and non-cemented full tailing backfilling.

In 2018, Jiama Mine produced 10.2625 million tons of harmless wastes, including 1,460 tons of domestic garbages, 9.9155 million tons of tailings, 345,600 tons of waste rocks, and 0.984 harmless wastes per ton of ore.

The emissions of Jiama Mine can be classified as air pollutant and water pollutant. For the former one, it is the dust discharged organically under the normal operation of the processing plants, with the emission meeting the standards at present; for the latter one, it includes the ammonia nitrogen, COD and suspended solids in domestic sewage. After the processing of the company's domestic sewage treatment station with a daily processing capacity of 480 cubic meters, all the water is used for greening irrigation and watering for dust reduction. According to the monitoring report, all these pollutants have met the standards. Since Jiama Mine does not use coal-fired or oil-fired equipment like boiler, there is no carbon dioxide and other greenhouse gases generated and emitted. Meanwhile, Jiama Mine has built a tank collecting background water, sedimentation tank and pump house. The collected and precipitated background water is pumped from the pump house to the Plant II for industrial production. The industrial wastewater of the ore-dressing plant is fully recycled while the domestic wastewater is treated into reclaimed water by the sewage treatment plant for irrigating vegetation. The vehicle roads are hardened with asphalt in the mining area with the hardening distance is about 6.6km. And the roads are sprayed with water to reduce dust.

Item	Unit	2018	2017	2016	2015	2014
<b>Total energy consumption</b>	Ton of coal equivalent	57053.8	29379.6	14008.6	14213.7	11865.4
Sewage emission	Ton	58,400	58,400	32,850	32,850	32,850
COD (chemical oxygen demand) emission	Ton	14.732	3.6	3.84	3.097	13.56
Newly added water	10,000 tons	41.057	40.561	38.629	38.067	184.4428
Circulating water	10,000 tons	358.065	399.646	418.628	443.746	4354.7927
COD emission reduction	Ton	0.2	0.2	0.2	0.2	0.2
Residue emission	10,000 tons	772	172.98	172.98	172.98	172.98

## Case CSH Mine environmental protection cases

Strictly in accordance with the Environmental Protection Law of the People's Republic of China, Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, Law of the People's Republic of China on Prevention and Control of Water Pollution, Law of the People's Republic of China on the Prevention and Control of Pollution from Environmental Noise, Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste, Law of The People's Republic of China on Water and Soil Conservation, Grassland Law of the People's Republic of China, Mineral Resources Law of the People's Republic of China, Law of the People's Republic of China on the Prevention and Control of Sand, Law of the People's Republic of China on Land Administration, Law of the People's Republic of China on the Protection of Wildlife, Law of the People's Republic of China on Promoting Clean Production, Measures for Administration of Environmental Protection Acceptance of Completed Construction Project, Integrated Wastewater Discharge Standard, Integrated Emission Standard of Air Pollutants, Standard of Environmental Noise of Urban Area and Emission Standard of Air Pollutants for Boiler, CSH Mine has authorized Bayannur Jiehua Environmental Test Company to carry out monitoring for domestic sewage, underground water, boiler fume, soil, TSP and noise at boundary every quarter, so as to strictly control the emission of pollutants and meet the standards.

### Sewage treatment:

The water for production of the company is mainly the water used for dripping on the dump leaching site, through which all the electrolytic washing water in the gold smelting workshop can be collected and recycled, without any wastewater generated and discharged during the production.

At the same time, the company has invested more than RMB 1.5 million to build an underground domestic sewage treatment station, with a daily capacity of 720 cubic meters, for disposing the water by contact oxidation method. The company assigns specialized personnel to carry out inspection, repair and maintenance on a regular basis and add pharmaceuticals to ensure the normal operation of the sewage treatment facilities. The water quality after treatment complies with the Grade II of the Integrated Wastewater Discharge Standard, which can be used for watering for road dust reduction or plant greening.

### Prevention and control of air pollution:

During the mining operation, measures such as dust collection and wet-type dust reduction are taken for dust control and reduction of drilling equipment; compression and pre-splitting blasting is adopted to reduce dust; 16 sprinklers are used for 24-hour watering to control the dust on the transportation road, so as to meet the relevant requirements.

Each link in the crushing workshop is closed. 16 composite bag dust collection systems, 29 sintered plate dust collectors and 27 watering points are installed, with specialized personnel assigned for maintenance and repair of the dust collectors and watering points to ensure their normal operation. All the dust gathered by the collectors is transported by a screw conveyor to the belt and returned to the process, which will not be discharged out.

All the boilers in the production area are equipped with XTD-10 ceramic multi-cyclone dust collectors and wet-type desulfurization dust collectors (automatically adding whitewash for desulfurization). Each shift adds sodium hydroxide on time based on the pH value of the doctor solution. Inspection and maintenance will be carried out for the boilers every year after heating is stopped to make sure normal operation of boilers and dust collectors as well as standard emission of pollutants such as SO<sub>2</sub> and fume.

The boilers in the living area are equipped with XTD-4 ceramic multi-cyclone dust collectors and wet-type desulfurization dust collectors; the pollutants produced by the company include: sulfur dioxide, nitrogen oxides, fume, carbon dioxide and industrial dust. Only carbon dioxide is a kind of greenhouse gas, and there is no methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. In order to meet the provisions of the Emission Standard of Air Pollutants for Boiler (GB13271-2014), the company carried out desulfurization modification for the boilers in the living area in 2015, additionally installing desulfurization facilities for 4 boilers in that area, after which the discharge of all the pollutants meet the standards as monitored by the Bayannur Environmental Monitoring Station.

Boilers at CSH Mine produces about 2,000 tons of ashes and cinders annually, all of which are used as building materials or for paving. The company will strictly control coal consumption, purchase coal with low ash content to reduce ashes and cinders.



# 03

## Work Safety



China Gold International is committed to improving intrinsic safety through assigning personal responsibilities and pushing ahead safety confirmation system. Also, we hold safety training and emergency rehearsal to promote all employees' awareness that everyone is a safety officer.

Fully aware of the long-term, arduous and complex nature of work safety, we adhere to the safety concepts of "No unavoidable accidents" and "Human-oriented and safety-based operation" which are closely aligned with our strategic transformation. In accordance with the approach of "safety foremost, prevention first and comprehensive management", we press ahead with safety system, starting with employee training, software improvement and hardware upgrading, so as to upgrade the fundamental and intrinsic safety capabilities of the Company as a whole to lay a solid ground for safe and harmonious mines.

zero fatality rate for million-ton production  
zero major equipment accident rate  
zero major fire and explosion accident  
zero major traffic accident

### Safety Investment and Performance

In 2018, the Company invested a total of RMB 176.43 million in safety, focusing on onsite management and system construction, to ensure its operation. The Company recorded zero fatality rate for million-ton production, zero major equipment accident rate, zero major fire and explosion accident rate, and zero major traffic accident rate, demonstrating sound performance of safe and stable operations. Our safety capability takes the lead in the gold industry in the PRC.



### Safety Supervision

The Company has participated in the development of Interim Provisions on Work Safety Accident Accountability of China Gold and has strictly complied with it. And we have established safety system to strengthen management and carry out accountability.

**Case****Jiama Mine is built into an automatic, intelligent and digital mine**

In order to improve intrinsic safety, Jiama Mine has invested more than RMB80 million in automatic and intelligent equipment in recent years, which greatly enhances work efficiency. As of 2018, Jiama Mine finished a total of more than 20 programs of replacing manpower with mechanization and automation, reducing labor intensity and improving working environment.

In the 4400 and 4450 areas of underground mine, Jiama Mine built panel managing turnouts at track transports to operate the remote control installed in the motor vehicles. Auto-separation of underground turnouts can be realized through air pump and PLC automatic control system, which significantly replaces the traditional manual labor.

Meanwhile, underground mine of Jiama introduced Atlas 281 drill jumbo and 1354 deep-hole trolley and anchor jumb drill, ensuring both safety and working efficiency.

Underground supporting realizes automation with anchor jumb drill operated by 2 workers. In this case, 12 persons for every shift are freed to reduce labor intensity and increase safety.

Jiama Mine has upgraded the intelligent dispatch system, building a comprehensive visual and transparent dispatch system. With this dispatch system, underground safety, real-time operation, workers' location and intensity of carbon dioxide can be seen from the screen at any time, which provides references for instructions.

At present, Jiama Mine has built a “three-dimensional digital management platform” for scene simulation, real-time parameter generation and live dynamic presentation. Through the dispatch center, all equipment can be accurately controlled at fully-mechanized mining face, connecting massive data with underground working face monitoring center and production command center. Auto-control can be remotely achieved in mining to ensure work safety.



Dispatch center of Jiama Mine



### Jiama Mine strengthened vehicle management

Jiama Mine strengthened the vehicle management, carried out the special inspection on vehicles of the company and construction unit, and scrapped a batch of vehicles which did not meet the requirements in the aspect of vehicle conditions; provided training for the drivers of company's vehicles, and issued the internal driver's license to the drivers who passed the assessment; the company conducted the mobile speed measurement at the junction and in the section of downhill, turn and accident-prone section, implemented the provision that the vehicle speed in the mine area should not exceed 30 km/hour, announced the speeding, overload, overcrowding, drunk driving and other violations of regulation and gave economic penalty, and controlled the occurrence of vehicle accident effectively. At present, total ten announcements for vehicle violation of regulation and rules have been issued, and the total amount of penalty is 146,100 Yuan (including penalty for the company). At present, the company is planning to update and construct 10 sets of fixed HD (radar) speed measurement devices and a piece of large LED display on the new ore handling road for exposure of speeding and overcrowding vehicles in Jiama Mine Area.



Fixed HD speed measurement devices at on the ore handling road



### CSH Mine continued to strengthen control of open mining pit side slope

After the open mining pits in the northeast and southwest of CSH Mine entering the deep mining gradually, many areas occurred landslide and instability phenomenon in different scales to affect the safety of production operation of open pit mining and implementation of long-term plan. The company contacted with Changchun Gold Design Institute actively to study, discuss and cooperate with design changes of open mining pit based on this research result, and adjusted the angle of bench slope to about 56 degrees and adjusted the height of bench to 12 m for the special single step failure mode of side slope of CHS Gold Mine combined with the successful experience of construction of change of boundary of original Phase 4-1 of east mining pit. Since implementation of the project, the side slope of open mining pit has been always stable relatively.



CSH Mine continuing to strengthen control of open mining pit side slope



#### Remuneration - linked

The number of fatal accidents and casualties are linked to performance-based annual bonus of executives of the enterprises, 20% of which, upon final evaluation, are subject to the results of safety management assessment.



#### Administrative penalties

The "veto for one vote" mechanism is adopted for work safety issues, including accidents, non-compliance with laws or regulations or policies on safety production, delay in safety production activities, weak rectification to significant potential safety hazards. For any business unit being a subject of the veto, all its annual general honorary titles and individual awards will be revoked, and the head, dedicated executive, relevant manager and the person with directly responsibility will lose their qualifications for any recognition, selection and promotion in the year.

## Identification of Potential Hazards

Throughout its management over safety, the Company always gives the highest priority to major hazard sources, key areas and key processes. Under a strengthened framework, the Company reinforces specific inspections, supervisions and rectifications to preclude any accidents. In 2018, our special equipment inspection rate and qualified rate both reached 100%, sustaining the high level of safe operations.



Electromechanical Workers of Jiama underground mine branch was checking the track transport

	2018	2017	2016	2015	2014
Special equipment inspection rate	100%	100%	100%	100%	100%
Special equipment inspection qualified rate	100%	100%	100%	100%	100%



## Tibet Jiama Mine carried out check and control of potential safety hazard

In 2018, Jiama Mine rearranged and formulated the Responsibility System for Safe Production of Tibet Jiama Mine, Rules for Assessment of Safe Production Responsibility of Tibet Jiama Mine, Management Measures for Rewards and Penalties of Safe Production of Tibet Jiama Mine and total 42 safety management systems, and further improved the safety management system of Jiama Mine to make various types of safety check relying on the evidences and complying with the rules. In 2018, Jiama Mine issued 160 notices of rectification of daily potential safety hazard, discovered 434 potential safety hazards



Jiama Mine held the potential safety hazard checking and controlling meeting

during daily safety check, carried out special inspection for 12 times, issued 99 notices of rectification of special potential safety hazard, and discovered 331 potential hazards during special safety inspection. The company carried out major safety check and holiday safety check for 12 times, issued 118 notices of rectification of potential hazards, and through tracking and reviewing, the qualification rate of rectification of various potential safety hazards reached 100% to prevent occurrence of production safety accidents effectively.



## Contents of safety inspection

- 01 Inspect on the fulfillment of work safety responsibilities.
- 02 Inspect on major potential hazards, progress of rectifications, issues outstanding and the responses to emergency.
- 03 Inspect on the investment in work safety and the availability of funding for rectifications to potential hazards.
- 04 Inspect on safety management of construction teams. Inspection focuses: blasting operations, open pit mining, safety exits at underground mines, hoisting and transportation systems, power distribution system and electric management, drainage system, ventilation system, gob area management, stope roof management, abandoned mine management, implementation of emergency response plan, tailings pond, hazardous (toxic) chemicals, etc.

Jiama Mine strengthened the field work and field safety confirmation, implemented classified management system for the roof, revised the original safety confirmation system, and implemented the “Confirmation Plate” confirmation management, and insisted on the principle of “production is not allowed without confirmation, and the production is not allowed if it is not qualified through confirmation”. For “formality” of conformation work, the company gave punishment according to the system strictly. In addition, promote the classified management system for the roof of mining engineering vigorously, realized the transformation from the habitual management relying on experience to technical management, and avoided the occurrence of roof fall and rail falling effectively.

In order to ensure effective implementation of safety confirmation work, the company equipped with 160 professional safety management employees to conduct field safety management for the underground, open mine, selection of site, tailing reservoir and other operation areas. 101 professional safety employees of underground mine branch tracked, supervised and managed the operation in the mining pit together with the professional safety employees of construction team to ensure safe production. The company equipped with 150 sets of Gas Alert Micro Clip XT, 173 compressed oxygen self-rescuers and 4 anemometers to improve the security of working environment.



Jiama Mine's safety officer was filling the safety confirmation card



Jiama Mine organized the workshop for construction of double prevention mechanisms

In 2018, Jiama Mine completed and carried out the construction of double prevention mechanisms to ensure safe, continuous and stable production, promoted the risk classification management by level comprehensively, improved the management system for identification of potential hazards, put the safety risk management and control in front of potential hazards, put the management of identification of potential hazards in front of the accident, and improved the safety risk prevention and control level as well as management level of identification of potential hazards.

## Management of Hazardous Chemicals

The Company's hazardous chemicals mainly include explosives, sodium cyanide, sulfuric acid, etc. To ensure safety, stringent protective measures are developed in the storage, transportation, application and other processes. As of 2018, the Company recorded zero loss or serious spill accident of explosives and hazardous chemicals.

### Case

#### Jiama Mine prepared safety status assessment report

In May 2018, Jiama Mine prepared the Safety Status Assessment Report for Civil Explosive Warehouse of Tibet Jiama Mine, and submitted it to the superior safety supervision department timely. The dump truck is prohibited from carrying the explosive and blasting materials during transportation, when the construction team receives the explosives and blasting materials, they should be transported separately, and the company's Safe Production Department should check the use, record and return of hazardous chemicals received by the construction team every month.



Cover of Safety Status Assessment Report



## Case

**Jiama Mine organized fire emergency drill**

On April 27, 28, 30, 2018, Jiama Mine organized and carried out the fire emergency drill in the area near the explosive warehouse and explosive devices warehouse separately, through the fire drill, checked the ability of personnel of construction team to control and remediation measures for the fire systematically, verified the feasibility and operability of emergency drill plan, meanwhile enhanced the personnel's awareness of fire safety and ability to evacuation, escape, rescue and other aspects.



Jiama Mine organized fire emergency drill

## Case

**CSH Mine carried out sodium cyanide poisoning accident rescue drill**

In order to strengthen construction of emergency rescue system, improve the staff's ability to self-help and mutual help as well as accident disposal in emergency circumstance, check the job responsibility of the department, unit and personnel related to emergency management, and coordinate the cooperation ability, emergency management and emergency disposal technology, CSH Mine formulated the detailed Emergency Drill Plan in 2018, instructed each department and construction unit to carry out the emergency rescue drill every month, and the company carried out 8 emergency plan and field disposal plan drills, including micro fire fighting truck and fire



CSH Mine carried out sodium cyanide poisoning accident rescue drill

station, cyanide poisoning accident, flood disaster accident, storage yard landslip and blasting accident, collapse and landslip of stope, vehicle injury, etc. in the whole year.

## **Safety Culture**

Safety culture is highly valued in the Company. Through safety education, training and propaganda, we seek to shift the awareness of "safety requirement" to "safety initiative". We take efforts to foster a sound cultural atmosphere featuring "safety production by us", "safety for production and production upon safety" and so on.

## Case

**Jiama Mine improved safety culture system**

Jiama Mine used the advanced safety culture concept to establish and improve the safety culture system. In 2018, the company invested 7.52 million Yuan to cooperate with Zhong Gang-Jin Bang (Beijing) International Culture Consulting Co., Ltd. to introduce "Jinchuan Security Mode" and establish a characterized safety culture system adapting to long-term safe production requirements of Jiama Mine. The company completed the safety concept system, visual design of office and living quarter, scheduling specification for production unit shift team, management and control 22 classes of red zones in the mining pit, and formulated the 249 articles for survive terms and zero injury terms, prepared the safety management behaviors to standardize the leaders of professional department and unit, amended the safe production responsibility system, safe production management measures, provisions for production safety accident accountability management and total 42 systems, reformulated contents of safety target responsibility commitment, and established and improved the safe production responsibility assessment system of the company.



Ore crushing shift team scheduling



## 01.Safety education and training

The Company proactively carries out safety education and training, conscientiously implementing the Notice on Further Strengthening Safety Production of Enterprises issued by the State Council ([2010] No. 23) and the Provisions on Safety Training of Production and Business Units (State Administration of Work Safety, Order No. 3).

Our subsidiaries actively participate in training sessions with regard to managers, safety deputy managers, technicians and mine managers, which are held by China Gold. In 2018, the Company and its subsidiaries carried out 126 safety education and training sessions, with total participants of 7,901 persons. In 2018, the safety education and training rate for the Company's employees reached 100%.

	Unit	2018	2017	2016	2015	2014
Number of safety education sessions	times	126	89	231	217	89
Total training participants	Persons	7,901	10,205	14,454	8,928	6,906
Safety education and training rate for employees	%	100	100	100	100	100

Note: Total training participants include contractors

### Case Jiama Mine organized safety training

In 2018, Jiama Mine carried out the safety education training carefully to enhance the awareness of the staff, convey the spirit and requirements of the superior document and implement the national laws and regulations carefully. The company implemented the three-level safety education training system strictly, controlled the education training strictly, and refused the unqualified personnel by training resolutely. The company implemented the MAJG (2018) No.23 File of Safe Production Supervision Administration of Maizhokunggar County, refused the practitioners under 18 years old and above 50 (including 50) years old, implemented strictly the three-level safety education training of the company, and controlled the audit of new employees from the source to eliminate the potential accidents.

In 2018, total 3965 employees of construction unit accepted the training, and 559 new employees of the company accepted the training. The company arranged total 249 full-time (part-time) safety management personnel, including 57 full-time (part-time) safety management personnel of the company and 192 safety management personnel of external construction unit, who passed the safety education training, and the company adjusted the post and resigned the personnel who were not suitable for safety post.



Jiama Mine organized safety training

### Case Jiama Mine's workflow for standardizing construction unit

In order to further standardize the flow of cave mouth pre-shift meeting and dispatching meeting of construction unit, Jiama Mine requested all dispatched personnel participating in pre-shift meeting to sign for roll call on site; the shift leader or project manager should explain the existing problems and rectification requirements of the previous shift in each operation aspect; the dispatching personnel should state the production and safety requirements for each shift in each operation aspect; the safety management personnel of expansion field should dispatch task for the safety precautions of this shift; the leader and safety management personnel of appointed construction unit should state the accident cases; the record personnel should make records for the dispatched contents; each dispatching room should be equipped with the electronic screen to play the safety alert education film repeatedly before and after dispatching; the safety management personnel of expansion field should conduct random inspection on safety operation procedures of workers and so on to make the workers understand and be familiar with key safe production work, enhance the safety awareness of the staff, and make the workers changing the awareness of "Make me safe" to "I want to be safe" and "I can be safe" .



Sign and roll call of the staff in mining pit of Jiama Mine on site

CSH Mine prepared the company's Safety Education Training Plan in 2018 according to the actual situations of safety management, and organized and carried out various safety education training by the training plan. Total 3936 employees accepted training in the whole year, including 735 new employees who accepted three-level safety education training and were qualified through examination for working; in 2018, 944 employees accepted further safety education training; 84 safety management personnel and special operation personnel were trained and obtained work permit; 1325 employees watched the safe production alert education film centrally in 2018; 116 shift leaders and the management personnel conducted the theme publicity and education in the safe production month; the 12 full-time safety management personnel accepted the training about Law of Safe Production and Law of Prevention and Control Measures Against Occupational Hazards; 720 employees participated in, watched and learned various emergency drills. In 2018, the employees who had outstanding work performance in safe production work were awarded as 79250 Yuan according to the provisions of safe production positive incentive mechanism to motivate fully the initiative of the front-line staff in the aspect of safe production work through clear reward and punishment mechanism and control the "Three Violations" phenomena on production site effectively.

## 02.Public awareness of work safety

The Company took initiatives to participate in a wide array of activities jointly organized by the State Administration of Work Safety and other authorities, including "Work Safety Month", "Work Safety Year", "Safety Knowledge Contest", and won excellent recognitions.



Jiama Mine held Safety Month activity



### Jiama Mine established the safety activity leading team

During the safety month in June every year, iama Mine established the safety activity leading team, drew up "Safety Monthly Activity Program in 2018", and held the "Launching Ceremony for Jiama Mine Safe Production Month and Safety Culture System Construction" that the company's President and General Manager participate in person on June 6, and the President and General Manager made different requirements separately at the launching ceremony. "Zhong Gang-Jin Bang" Company was hired by our company to instruct and participate in safety culture construction for two years. The company organized the "Identification of potential hazards, and making suggestions" activity, drew up the implementation program for this activity and implement the program strictly, carried out the practical emergency drill of "Vehicle Injury Accident", "Electric Shock Accident", "Roof Caving and Rail Falling Accident", "Blasting Fume Poisoning Accident" and "Collapse and Landslip Accident" separately in several construction units and mineral processing plants, implemented these activities strictly according to the procedure of emergency plan, and evaluated the defective items after the end of drill to improve the practicability and feasibility of plan and improve our company's ability to emergency management greatly. The staff's awareness of safe production responsibility was further enhanced through "Competition of Safety Knowledge". During the safety month, the company played total 7 safety education films, hung 13 banners and distributed 99 volumes of Safety Manual. During the safety activity month in 2018, various types of safety activities achieved the ideal effect.

## Case

## CSH Mine carried out series of safety theme activity

CSH Mine proactively holds safety-themed meeting, safety warning education propaganda, “Snapshot hidden dangers among us”, potential risks eliminating, emergency drill, safety APP quiz, safety advanced classes, security guards, safety model selecting; some production units carry out “Work Safety Month” activities such as “Safety Promise”. All these activities enhanced the “Three Basics” work, popularized the safety knowledge, strengthened the responsibility implementation, improved the safe quality of employees and promoted the safety culture. The company holds fast to the Red Line, implements responsibility of safety production and forms the long-term mechanism about the safety production to realize the harmonious and safe development of the company.



CSH held “Ankang Cup” safety knowledge contest



CSH held safety recitation contest

In 2018, No.1 Mineral Processing Plant of Jiama Mine transformed C110 Jaw Crusher of coarse crushing workshop independently, and changed the previous field operation and control to the remote monitoring, operation and control system. Through transformation, the staff's working environment was improved, and the staff was protected from harm of the dust, noise and other environmental factors to ensure the safety of the staff intrinsically, reduce the labor intensity of the staff, create the healthy and comfortable work for the staff, and achieve the purpose of efficient safe production.



The employee of Jiama Mine was operating C110 remote operating system

## Case

## Jiama Mine applied for the key research and development plan project of the national 13th Five-Year Plan

Jiama Mine and Beijing General Research Institute of Mining and Metallurgy Technology Group applied for Key Technology Research & Development and Demonstration Project of Large-scale Unmanned Mining of Underground Metal Mine of special “Exploration and Mining of Deep Resources” of key research and development plan of the national 13th Five-Year Plan combined with Shenyang Institute of Automation of Chinese Academy of Sciences, University of Science and Technology Beijing, Central China University, Northeastern University, Hefei University of Technology, Wuhan University of Technology and Total 5 universities as well as 3 mine enterprises including Shandong Gold, China Gold Lingnan.

Jiama Mine undertook the task of research and development of 13 sets of core equipment and system, including the stope structure space-time characteristics sensing device, trackless equipment environment information sensing device and autonomous travelling control system, unmanned driving system of electric locomotive, unmanned control system for charging operation, unmanned intelligent operating system of fixed crusher, cluster control system of intelligent equipment for unmanned mining and shoveling, loading and transportation collaboration system for unmanned mining, etc.; developed 8 sets of software system, including the remote control explosion management system, intelligent design system of continuous mining technology system, integrated control platform of production and operation for unmanned mining, etc. Applied 28 patents of invention, 8 software copyrights, published 75 academic papers publicly, including 20 SCI/EI retrieval papers, cultivated more than 50 Master Degree candidates and Doctoral Degree candidates, formulated and amended 2 national/industrial standards related to unmanned mining (draft for approval), and conducted total three research and demonstration tasks.

## 04 Employees' Interests



The talent development concept of "Talents are the primary resource" has been firmly established in the Company. We adhere to the human-oriented philosophy, taking employees' growth, provision of equal development opportunities and mutual growths between employees and the Company as an integral part of our corporate social responsibility. We take efforts in improving talent structure, quality of talent and incentives for talents to build harmonious employment relationship, aiming to build up a professional team of talents with integrity and caliber, reasonable structure, team spirit and aspiration and a high sense of responsibilities. The Company adheres to the "human-oriented and grow-to-potential" concept to fully protect employees' interests and provide them a good platform for growth, striving to inspire their enthusiasm and creativity. The Company has been following the "human-oriented" concept for employment, paying respect to employees, safeguarding their interests and seeking to create desirable working and living conditions for them. Financial resources have been increased to improve the compensation packages as well as the production and living conditions for employees. We are committed to building corporate culture.

### The number and the turnover rate of employees at different ages in 2018

	Under 16 years old	16-24 years old	25-40 years old	41-59 years old	Over 60 years old
The number of employees	0	73	1,180	871	0
The turnover rate of employees	N/A	22.07%	7.58%	9.13%	N/A

### The number and the turnover rate of front-line and support employees in 2018

	Front-line employees		Support employees	
	Male	Female	Male	Female
The number of employees	1,147	245	510	222
The turnover rate of employees	10.36%	5.68%	6.52%	11.15%

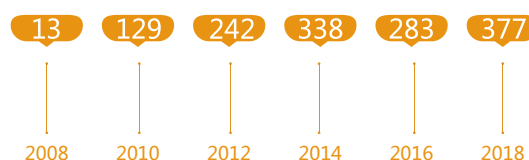
## Profile of employees

As of 2018, a total of the Company employees has been 2,124, including 468 female workers and 437 ethnic minority workers. And there are 441 primary, intermediate and senior managements, including 116 female managements.

Item	2018	2017	2016	2015	2014
Percentage of female employees	25%	21%	19%	19%	21%
Percentage of ethnic minority employees	26%	22%	21%	27%	27%



Local Tibetan employees recruited and settled by Jiama Mine from 2008 to 2018 (unit: person)



## Protection of employees' interests

In strict compliance with national labor laws and regulations, we adhere to business ethics to strengthen the management on employment contracts, follow equal employment system, and pay full attention to employees' right to know, so as to protect their legitimate rights and interests. In 2018, both the employment contract signing ratio and the social insurance coverage ratio of the Company reached 100%.

With the concept of respecting and protecting our employees, our subsidiaries strictly protect employees' privacy. Therefore, we have built sound system of privacy protection and file management which is in the charge of full-time staff. In accordance with the regulations, we dismiss those who violate the rules and those who cause serious consequence are held responsible for legal laws.

We adhere to equal pay for equal work to men and women, decent work, non-discrimination on race, gender, age or any other factors, prohibition of child labor, and fighting against forced labor.

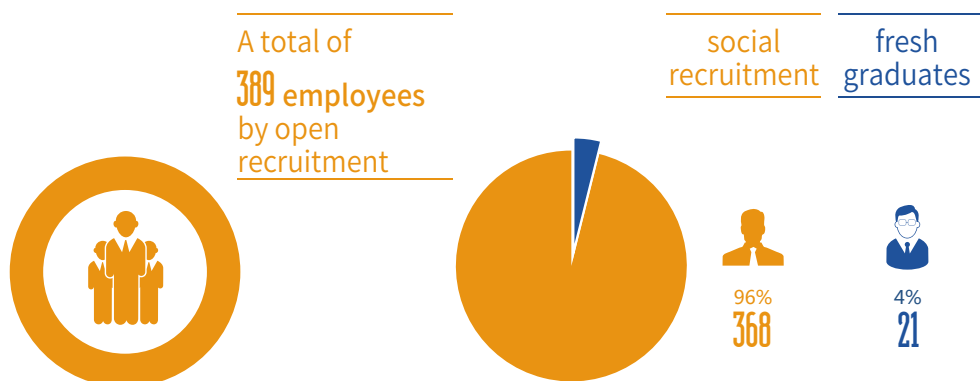
We give full play to the role of employees in democratic management and supervision, setting up labor unions at all levels under the primary democracy system including employee representative conference and transparency of plant affairs. We adhere to the leadership team, the middle-level cadres' debriefing and democratic appraisal system, and give full play to the employees' awareness of democratic participation. As employee representative, the trade union negotiates with the Company on labor remuneration, working hours, vacation, labor safety and health, and social insurance concerned to all employees.

## Promoting of employee development

We treat new and old employees in an equal manner in light of the process of "recruitment, training, selection, incentives, fostering, and promotion". We seek to improve the staff's caliber through multi-dimensional and multilevel training, provide them equal career opportunities and diversified career paths under a well-established talent identification and appointment mechanism, and increase their sense of belonging and cohesion through improving corporate culture development, with an aim at mutual growths between the Company and its employees.

### 01. Recruitment

Under a recruitment model of "unified platform, rational authorization, tiered management", we adhere to the open recruitment principle to provide equal opportunities for all candidates. In 2018, 389 persons were recruited by the Company through social recruitment, including 21 fresh graduates and 368 experienced hires.







## Case CSH Mine actively carried out open recruitment

The Party leaders, Human Resources Department of CSH Mine gave suggestions actively, looked for the breakthrough, expanded the recruitment channel by the way of Internet plus, participated in two-way selection meeting of university and local employment agency's job fair, started internal shunting and placement in the China Gold, made efforts to attract the talents and improve the competitiveness of recruitment, and solved the local labor and employment pressure effectively. Meanwhile, they cooperated with the Group to arrange and dispose the shunting staff with work difficulty properly, share the re-employment pressure of laid-off workers of difficult enterprises, and the company arranged 6 shunting employees and recruited 78 employees in 2018.



CSH Mine attended local job fair for returned migrant workers

## 02.Training for employees

With the concept of "Train to improve the quality for development", the Company has established a clearly structured and categorized training system supported by competent instructors and effective contents, to proceed with the quality enhancement program for the staff. In 2018, the Company provided training to 1,697 employees in total.

### For business and management personnel

We established the training development mechanism based on the competency model and covering three levels namely leaders, senior executives and reserve talent, while encouraging the executives of regional subsidiaries to participate in training in rotation.

### For technical professionals

We focused on improving business capabilities and comprehensive quality of key technical professionals mainly in ecology, survey, mining and processing.

### For skilled workers in production

We proactively carried out pre-service training for skilled workers in newly constructed projects, certification of professional skill levels and rotated training for team and group heads, thus effectively uplifting the overall quality and capability of employees.

CSH Mine has increased investment in employee training. Base on its reality, the company drew up annual training plan and encourage employees to study so as to build CSH into a learning company. In 2018, CSH held 74 training sessions with more than 900 attendances, including training in Party affairs, company management, professional skills, fire fighting, official document writing, workplace etiquette and photography. All trainings centers on improving employees' comprehensive capacity to propel company growth and enhance overall competitiveness. In 2018, training investment increased to RMB 433700, compared with the previous year.



CSH Mine held training for Party members



CSH Mine held training for shift-leaders' ability enhancement





## CSH Mine invited Dong Chao, the Vice President of Urat Zhongqi Party school to provide Party class training



CSH Mine invited Dong Chao, the Vice President of Urat Zhongqi Party school, to provide Party class training

CSH Mine held the special training on August 14, 2018 to further implement the spirit of the 18th Congress of the League. In this training, Dong Chao, the Vice President of Urat Middle Banner Party School, was invited specially to give a League Class titled “Flying the dream of youth by the east wind of new era”. Dong Chao analyzed and explained the spirit of “7.2” Important Speech of the General Secretary of Xi Jinping and new ideas, new views and new requirements of the 18th Congress of the League in details for everyone, and made suggestions for the Youth League cadres and members on how to implement the spirit of report combined with the practical work and how to construct the league organization better and other problems. He also stated his short story about pursuing the dream of youth in plain language combined with his own living and working experiences, and won the support of everyone.

### 03.Incentive and restraint mechanism

With a commitment to corporate performance improvement and strategy fulfillment, the Company vigorously presses ahead with performance assessment activities under an assessment framework based on the Management Requirements on Performance of Employees. The performance assessment activities were carried out to inspire employees' enthusiasm to plan, act and succeed.

In light of its features and helping employees grow their potential, the Company grades the posts in accordance with the management talent, technician and skilled worker, and formulate remuneration system, defines employee promotion channel so as to motivate the morale and achieve the harmony between the Company and employees.

The Company carries out professional title appraisals every year. In 2018, 67 employees received professional titles at various levels.



CSH Mine encouraged volunteer activity

Data sheet of professional title appraisals									
Engineering series			Social series			Political series			
Year	Senior	Intermediate	Primary	Senior	Intermediate	Primary	Senior	Intermediate	Primary
2018	8	26	28	1	4	9	0	3	6
2017	-3	26	21	0	8	5	1	0	2
2016	16	45	42	2	2	-4	0	3	-1
2015	1	5	14	0	1	0	0	0	0
2014	4	10	8	0	-1	-4	0	0	3
2013	8	26	44	1	2	6	0	0	-1
2012	3	4	44	0	0	7	0	1	1
2011	8	36	72	2	11	19	3	0	4
2010	9	79	50	0	1	12	2	0	2



#### 04. Caring for employees

We highly value our employees' career development, compensation & benefit, working environment, physical and mental health and family life. We also care for female, young and retired employees, and actively help the employees in need to overcome difficulties. In Spring Festival holidays each year, we pay wish visits and provide assistance to employees in need, to help them pull through the difficulties. Meanwhile, the Company keeps a close eye on the growth of youth employees, pressing on the training to them and seeking to provide them a development platform and growth potential.

#### 05. Promoting corporate culture

The Company actively carried out positive, healthy, entertaining and educational cultural activities to promote corporate culture, which enriched employees' cultural life and enhanced the cohesion across the Company.



Jiama Mine enriched themselves to study professional knowledge



Jiama Mine provided household oxygen generator for employees



### Jiama Mine and CSH Mine attached great importance to the staff's leisure

Jiama Mine has launched a variety of activities with the theme of “respecting local customs, strengthening national unity, and promoting project construction” every year, such as group wedding, Tibetan new year celebration and calligraphy competition. All these activities have cultivated profound and extensive plateau mining culture, which is deeply casted into vitality, cohesiveness and creativity of Jiama.

Over the years, CSH Mine has attached great importance to the staff's leisure. The company has held ball games for five years in a row. The competition item includes volleyball, basketball, badminton and table tennis. The passion for work and the love for company makes the competition friendly. The ball games have been an important part of the company to carry out the educational practice of "learning the General Secretary's speech and to be qualified Communist Youth League members". The various sports events have cultivated the cooperation and cohesiveness of the young employees, and enriched employees' leisure life.



CSH Mine held the first e-sports game



CSH Mine organized employees to play basketball game held by China Gold





- 01 Jiaia Mine held party to celebrate the New Year
- 02 Jiaia Mine organized blind dates for young employees
- 03 CSH Mine held first ping-pong games for employees
- 04 Jiaia Mine held tug-of-war contest
- 05 Jiaia Mine made dumpling to celebrate the Chinese New Year
- 06 Jiaia Mine held birthday party for employees



## Occupational Health

In light of the firmly established concept of "human-oriented", the Company incorporates the aims to protect employees' health with sound occupational health supports and to pursue sustainable corporate development. As of 2018, the Company recorded zero occupational disease case, a good track record of no additional occupational disease cases since its establishment.

### 01. Occupational health management

Occupational safety and health work is included into the production and operation of subsidiaries, where targets and measures are defined including appointing a dedicated executive responsible for their respective efforts in occupational safety and health. Dedicated management functions with professional management personnel are established to, with reference to actual conditions of each enterprise, reinforce the monitoring, inspection and supervision on occupational hazards of the workplace, in order to effectively prevent and reduce occupational hazards. With the gradually increasing insurance coverage, improving working environment and sound labor protection, the enterprises carried out prevention of occupational diseases, healthcare, inspection and treatment activities under the fortified organization and leadership for employees' safety and health. The Company requires all employees wear and use labor supplies properly, which is daily inspected by safety officers.

### 02. Physical examination and health records

Spiritual needs and mental health of employees should be a focus for enterprises and the society as well. The Company vigorously popularizes the knowledge of mental health, with smooth information channels to keep informed of the expectations and dynamics of employees. The psychological team provides mental health counseling to relevant employees in a timely manner, and helps them to adjust their ideas and enhance their mental regulation ability, which mirrors our human-oriented caring and satisfies the multi-level needs of employees. According to its industry characteristics, the Company arranges regular physical examinations and has established health records for employees. The company's annual physical examination and health record coverage rate is 100%.



Jiama Mine provided physical examination for employees

### Case Female health examination of CSH Mine

In accordance with Provisions on the Labor Protection of Women Employees, CSH Mine provided female physical examination to improve their physical fitness and health.

### 03.Labor protection

The Company has established standard safety management systems, including the management system for labor protection supplies. The subsidiaries are required to follow such rules to provide all workers with work conditions and strict labor protection measures in accordance with national standards. The subsidiaries provide workers with labor protection supplies in strict compliance with the management system for their distribution and use, while superintending and instructing the workers for proper use.



Female health examination of CSH Mine

### Case CSH Mine strengthened management of flammable and explosive products

CSH Mine standardized year by year and strengthened continuously the warehousing, transportation and management of flammable and explosive products. The company set up the dedicated warehouse by classification for the civil blasting materials, chemicals, ore-dressing reagent and other hazardous articles, and performed strictly the “Double-people and Double-lock” system in the storage, receiving and other links daily to ensure safe management of hazardous articles. In the link of transportation of civil blasting materials, oxygen acetylene and other hazardous articles, the supplier with professional qualification was responsible for implementing the specific security work to ensure the security of hazardous articles during transportation in the aspect of professional security. For the abandoned hazardous articles, the company established the temporary management center for storage of abandoned hazardous articles by classification, and signed the recovery and treatment agreement with the local provincial and municipal units with qualification.



CSH Mine's notice with emergency measures in warehouse of explosives for civil use in the case of explosion and fire

### 04.Training of occupational health

#### Case Jiama organized learning occupational health

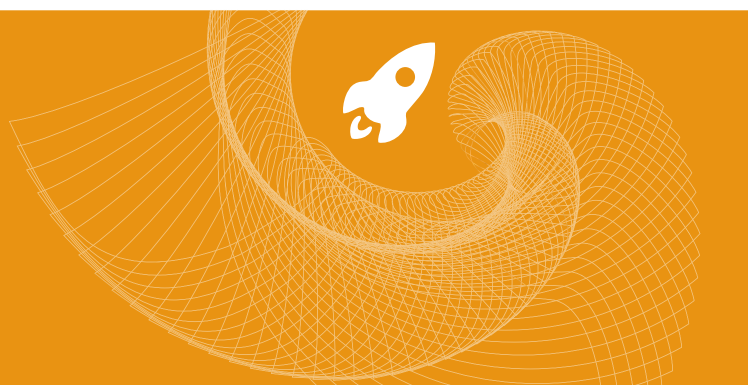
Jiama Mine took the company's occupational health management work as a part of safety management according to the requirements of national Law of Prevention and Cure of Occupational Diseases, a part of contents of occupational health was included in the safety “Three Simultaneous” project, and the company also arranged the dedicated managements personnel to take charge of that and equipped with the relevant personnel in the Safety, Health and Environmental Protection Department; the Safety, Health and Environmental Protection Department was responsible for the main sanitary work; the health clinic was responsible for management of physical examination and health record, and gave the prevention suggestion on the inspection results. The company formulated the occupational health management system, including the occupational health “Three Simultaneous” system, hazards prevention and control system, etc. In 2018, the company monitored the occupational hazard factors of 2018 in the mining area, and entrusted Tibet Occupational Safety and Health Technology Institute Co., Ltd. to detect the mining area, including the total dust detection, respirable dust detection, noise detection, personal noise detection, with the total cost of 198,000 Yuan.



Jiama organized learning occupational health

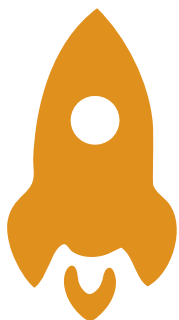


## 05 Technological Innovation



Adhering to the concepts of "Science and technology are primary productive forces" and "Leveraging the leading technologies to serve the country", the Company actively participates in the national researches on the difficulties in processing and refining of gold and complex polymetallic ore. The Company actively makes industrialization attempts to secure its leading position in tackling technologic difficulties in processing and refining low-grade gold ore, which helps to increase the utilization efficiency of gold and nonferrous resources.

### Investment in Technological Innovation



Aiming at a series of technical problems, the Company has actively carried out technical research. In 2018, China Gold International Resources Corp. Ltd. actively declared 19 science and technology awards, published 11 scientific papers and newly obtained 4 patents, which laid a technological foundation for sound and rapid corporate development.

In 2018, Jiama Mine closely centered around the strategic objectives of the Group's development, relied on scientific and technological innovation, combined with the needs of mine construction and production, and focused on key and difficult technical issues, overcame difficulties, and achieved fruitful results in technological innovation. By the end of 2018, Jiama Mine had obtained 2 authorized patents. Development and Application of LIMS System in Large Cold Copper and Polymetallic Mines with Alpine and Altitude won first prize for the SOE Management and Innovation Achievements of State-owned Enterprises; Efficient Utilization of Key Technology and Application of Low-grade Complex Copper Ore Resources won first prize of science and technology award by China Non-Ferrous Metals Industry Association; Integrated Utilization of Key Technology and Industrialization of Complex and Refractory Copper Ore won first prize of science and technology award by China Association of Circular Economy; 16 science and technology awards were honored by China Gold Association. The application of these scientific and technological achievements will provide strong technical support for the green, ecological, environmental protection, technology, and comprehensive utilization of highland mineral resources, lay a foundation for building Jiama Mine into a technological innovation and benchmarking company and to inject impetus to the scientific development of the group company.

#### Some Scientific achievements of China Gold International in 2018

Project Name	Level of Award	Note
Efficient utilization of key technology and application of low-grade complex copper ore resources	First prize	Domestic leading level
Integrated utilization of key technology and industrialization of complex and refractory copper ore	First prize	Domestic leading level
Application and study of Well Drilling Technology Once for medium and deep hole in plateau mine	First prize	Domestic leading level
Application of self-developed ore pulp deslagging rotating screen in production	First prize	Domestic leading level
Transformation of flotation device for sealing and dust proof	First prize	Domestic leading level
Optimization of temporary drainage system of skip shaft	Second prize	Domestic leading level
Application of medium and deep hole blasting combined with YGZ-90 guide rail slewing drilling machine orbital drilling machine	Third prize	Domestic leading level

## **Achievements in Technological Innovation**

### 01. Exploitation and utilization of low-grade ore

Given the scarcity, small reserve and low yield of global gold resources, the Company leverages technological progress and scale operation to fully tap on limited resources and enhance its sustainable development capacity. Centering on quality and benefits, the Company continues to carry out fine management, especially on the cost control. We help our subsidiaries solve short-board problems affecting enterprise growth, raise the awareness of cost control and find out the issues and potentials in company production to develop mineral resources, which improves overall competitiveness of the Company.

#### Case

#### CSH Mine's low-grade ore heap leaching technology

CSH Mine's production technology uses open mining and large-scale heap leaching gold extraction technology. The average gold grade of heap leaching ore is 0.54 g/ton, the daily capacity of processing ore is 50000 tons, the annual output of the gold is 50000 tons, and it is the largest gold heap leaching mine in the Northern China. In the heap leaching technology, the mine uses the pipe-burying drip technology to realize obvious water-saving effect and small environmental impact to ensure all-weather production and operation in the whole year of the mine in the high-altitude and arid areas in the north. The mine uses the unique activated carbon powder control and recovery technology to recover the carbon powder of above 45 micrometers and reach the international advanced level. The pregnant solution covering technology and full-closed circulation recycling technology used by the mine fill the domestic blank, reduce the evaporation and waste of water, realize zero drainage of production waste water, and become a model of water conservation and environmental protection in mine industry. The application of pipe-burying drip technology in the mine is awarded as the First Prize of Scientific and Technological Prize of China Gold Association, and CSH Mine also creates a precedent for development and utilization of domestic low-grade gold ore deposit.



CSH Mine's heap leaching field

#### Case

#### Jiama Mine's transformation of copper - molybdenum separation technology made a breakthrough

Under the continuous research of Jiama Mine together with the research group of Changchun Institute, the copper - molybdenum separation transformation of No.1 Mineral Processing Plant of Jiama Mine achieved success, under the conditions of grade of mixed molybdenum concentrate of 0.48% and grade of copper of 19.96%, the good objectives of grade of molybdenum concentrate of 47.37%, content of copper in molybdenum concentrate of 1.00%, and recovery rate of molybdenum operation of 70.06% were achieved. This solved the technical difficulties troubling the enterprise for many years effectively. Only No.1 Plant increased the profit of 27.3095 million Yuan for the enterprise every year, meanwhile laid a solid foundation for integrated utilization of larger-scale copper and molybdenum resources, and also provided success model for efficient utilization of copper and molybdenum mineral resources at the same attitude.



The improved thickener

## 02. Construction of digitized mines

When it comes to the Company's mines, a comprehensive data-centered system covering production management and fundamental automation has been established under a production management model for modern enterprises, which incorporates real time data across all production processes and the production management information into the integrated PCS (process control system). According to the production processes, the systems is divided into specific parts including coarse crushing, grinding selection, flotation separation and pressurized filtering, tailings, etc., where data monitoring, data collection, equipment process control and data analysis are completed for the entire mine system. Thus, the automation control is achieved throughout the production process.

### Case Jiama Mine organized the review meeting for integration of information technology and industrialization

Since implementing integration of information technology and industrialization work in 2014, Jiama Mine carried out implementation work of integration of information technology and industrialization actively, established a leading team and appointed the General Manager Wang Ping as the top management and Yang Hua as the management representative, built the quantitative integration management activity related to construction of "Meticulous Mining Capacity of Mineral Resources" and "Large-scale Automatic Mineral Processing Capability", formulated the management manual, procedure document for management of integration of information technology and industrialization and some original records and accounts to support two new capabilities, and completed the current situation investigation, assessment and system planning, release of document and audit of system successively through teamwork for more than two years. In July 2018, the management system of integration of information technology and industrialization passed the second supervision and audit smoothly, in December 2018, re-assessment renewal work of the management system of integration of information technology and industrialization was completed, and the company organized to carry out changing the version of GB/T23001-2017 Requirements for Management System of Integration of Information Technology and Industrialization.



Jiama Mine organized the review meeting for integration of information technology and industrialization

### Case CSH Mine's Certificate for Integration of Information Technology and Industrialization

In July 2015, CSH Mine Co., Ltd. Became one of 600 pilot enterprises which implemented the standard of management system of integration of information technology and industrialization selected by the State Ministry of Industry and Information Technology. All levels of leaders of the company paid high attention to that, and carried out actively implementation of standard of management system of integration of information technology and industrialization.

On May 11, 2017, the review group of Beijing Grand Honour Certification Co., Ltd. Conducted the assessment audit of the first phase on our company, on May 13-14, the review group conducted the assessment audit of the second phase, and finally CSH Mine Co., Ltd. Passed the assessment audit of review group on the management system of integration of information technology and industrialization, and was recommended to the assessment agency, i.e. Beijing Grand Honour Certification Co., Ltd.

On September 20, 2017, the company obtained the Assessment Certificate of Management System of Integration of Information Technology and Industrialization, in April 2018, the company completed version change of integration of information technology and industrialization (GB/T23001-2017), and passed the external supervision and audit in August.



CSH Mine's Certificate for Integration of Information Technology and Industrialization



In light of the concept of "business integrity for win-win and multi-win" and the principle of equality and mutual benefit, the Company actively promotes extensive cooperation with the stakeholders. We continuously improve customer services, strengthen supplier management, and carry forward strategic cooperation with local government, suppliers, creditors, enterprises and public sectors and other entities, striving to achieve win-win with the stakeholders.

## Corporate Governance

According to the applicable listing rules and its Articles, the Company has established a company governance structure comprising general meeting, the Board and its special committees and senior management which fulfill their respective duties in rational operations. The Company has fulfilled its responsibilities as a capital contributor to its subsidiaries according to laws. Focusing on system construction and standard decision-making process, the Company strictly follows the procedures to make decisions on its affairs. When it comes to the subsidiaries, standard company governance structure is also established in accordance with relevant laws and regulations.



Board meeting of China Gold International

In 2018, four Board meetings, four Audit Committee meetings, two Nominating and Corporate Governance Committee meetings, two Compensation and Benefits Committee meetings, and four Health, Safety and Environmental Committee meetings.

### Attendance by the directors at the Board and Board committee meetings in 2018 was as follows

Attendance	Board	Audit Committee	Nominating and Corporate Governance Committee	Compensation and Benefits Committee	Health, Safety and Environmental Committee	2017 Annual and Special Meeting
<b>Executive Director</b>						
Song Xin (Chairman)	4 / 4	N/A	N/A	N/A	N/A	0 / 1
Jiang Liangyou	4 / 4	N/A	N/A	N/A	N/A	0 / 1
<b>Non-executive director</b>						
Teng Yongqing	1/1	N/A	N/A	N/A	N/A	-
Kang Fuzhen	1/1	N/A	N/A	N/A	N/A	-
Jiang Xiangdong	4 / 4	N/A	N/A	N/A	N/A	0 / 1
<b>Independent non-executive director</b>						
Ian He	4 / 4	4/4(chair)	1/1(chair)	1/1(chair)	2/2(chair)	1 / 1
Chen Yunfei	4 / 4	4 / 4	1 / 1	1 / 1	2 / 2	0 / 1
Gregory Hall	4 / 4	4 / 4	1 / 1	1 / 1	2 / 2	0 / 1
John King Burns	4 / 4	4 / 4	1 / 1	1 / 1	2 / 2	1 / 1

The 2018 Annual and Special Meeting was held June 27, 2018, no other general meeting was held during the Reporting Period.

#### Notes:

(1) Mr. Teng was appointed as a director November 13, 2018.

(2) Ms. Kang was appointed as a director November 13, 2018.

## Compliance with Laws and Regulations

In strict compliance with the national policies and laws and the local government requirements in its operations, the Company pushes on anti-corruption education and the audit and supervision to ensure healthy and smooth production and business activities.



CSH Mine held the Employees' Representative Conference

### 01.Contract management

Contracts of subsidiaries are vertically managed and reviewed by dedicated officers in a centralized manner under the Methods for Contract Management and the Interim Provisions on Review of Contracts and other methods. In 2018, the headquarters recorded a 100% contract execution rate, and the subsidiaries also recorded a 100% major contract execution rate.



## 02. Legal education

Regarding actual conditions of enterprises, the Company focuses on publicizing legal knowledge to employees, including the propaganda and training on Chinese Constitution, the Contract Law, the Company Law, the Mineral Resources Law, the Work Safety Law, etc. Legal experts and lawyers are invited to stage law forums, together with knowledge contests, legal essay collection and other means to motivate the enthusiasm of employees to study and apply laws. The training sessions are provided in centralized and decentralized manners to cater for the Company's geographically fragmented business presence.



CSH Mine organized all employees to study the Chinese Constitution

## 03. Internal audit

As a company incorporated in British Columbia, Canada and listed on the TSX and the HKSE, the Company has established an effective internal audit system in strict compliance with the laws and regulations governing the jurisdictions where it is listed and its business is operated. Internal audits are carried out rigorously by engaging external auditors to participate in. By 2018, the Company has prepared internal audit reports for eleven years in a row, all indicating that there is no weakness in all material aspects.



CSH Mine held education activity of "seeing Party self-governance exercised fully and with rigor to build a clean Party governance"

## 04. Anti-corruption and anti-commercial bribery

In light of the policy of "Addressing symptoms and root causes, comprehensive governance, paralleled punishment and prevention, and focus on prevention", the Company aggressively pushes forth anti-corruption and anticommercial bribery to lay a cornerstone for its reform and growth. In accordance with the law, the Company has formulated rules and regulations, including anti-fraud management system, anti-commercial bribery rules, code of business ethics and regulation of anti-money laundering. Bribery, corruption and other misconducts are prohibited and those who are in violation of the rules and regulations will be transferred to the judicial authority. The Company has established channels of anti-fraud complaints, such as setting up hot-line phone, e-mail, which are announced to the public. The information of employee who report those misconducts shall be kept secret to prevent retaliation and discrimination.



CSH Mine held education activity of building a clean governance



## Probity and self- disciplined education

1

- > Provide the training on compliance of listed companies for the Company's directors and senior management; provide the training on internal control mechanism at various levels.

2

- > Conduct the education on compliance, focusing on probity of key personnel in charge of human, financial and physical resources.

3

- > Promote the construction of a probity culture across enterprises.

## Investor Relations

### 01.Information disclosure

The Company attaches great importance to information disclosure in a timely, accurate and complete manner, addressing different informational needs and habits of investors internationally, specifically in Canada and Hong Kong in strict accordance with the regulatory requirements at the listing places. Means are adopted to improve and ensure the effectiveness of information disclosure on capital market.

In 2018, the Company completed its annual report, interim report and quarterly reports as required. In addition to results announcements made pursuant to the rules, the Company takes initiatives to publish announcements and press releases in Toronto and Hong Kong where its shares are listed, covering various operation and management issues. The information mainly includes: production & operation for CSH Mine and Jiama Mine, updates about major exploration projects and key operational data, aiming to help investors keep informed of the Company's production and management dynamics; and the announcements of resolutions passed at Board meetings and general meetings and extraordinary announcements of connected transactions that are published pursuant to regulatory requirements. In 2018, the Company issued a total of 52 announcements and press releases (in both English and Chinese language).



2010-2018 annual report

## 02. Investor relations

The Company kept active and candid communications on an ongoing basis in 2018 with investors and analysts through investor presentations, press conferences, industry conferences, trading and non-trading road shows, seeking to fully showcase its current situation and growth potential to investors. The efforts have been positively appreciated by our investors.

## 03. Dividend policy

The Company does not have a fixed dividend policy. The directors will determine future dividend policy based on, among other things, the results of operations, cash flows and financial conditions, operating and capital requirements, the amount of distributable profits and other relevant factors.

The Company is incorporated in British Columbia, Canada. Subject to the British Columbia Business Corporations Act, the directors may from time to time declare and authorize payment of such dividends as they may deem advisable, including the amount thereof and the time and method of payment (provided that the record date for determining shareholders entitled to receive payment of the dividend must not precede the date on which the dividend is to be paid by more than two months).

As a fast-growing international emerging mining player, the Company will continue to press forward its business and management to achieve rapid and sustainable development and create more value for shareholders.



2018 performance roadshow of China Gold International



### The Company became a constituent stock on the Hang Seng Composite with our shares being eligible for Southbound Trading under the Schenzhen-Hong Kong Stock Connect

On March, 5, 2018, the Company became a constituent stock on the Hang Seng Composite with our shares being eligible for Southbound Trading under the Schenzhen-Hong Kong Stock Connect through which Chinese mainland investors are able to trade the stock of China Gold International. Therefore, the diversified investors and optimized shareholder structure have improved the stock trade activity, market value and valuation, which gives full play to its strength as an overseas capital platform and ensures the maintenance and appreciation of its state-owned assets.

## Customer Relationship

Adhering to the concept of "business integrity and customer satisfaction" in its operations, the Company views integrity as a close linkage to its customers and a cornerstone for its development as well as keeping on improving its service capabilities to provide quality services to customers. The Company highly values long-term cooperation with customers, seeking to establish longstanding relationship and promote win-win situations with customers and thus uplift the Company's industry position and image. In 2018, sales revenue from the top five customers of the Company totaled RMB 571 million, accounting for 100% of the total revenue.

## Supplier Relationship

### 01. The Company has established Supplier CSR Management mechanism

1. The Company encourages suppliers to improve their responsibility performance by cooperating with excellent suppliers instead of those that do not meet our CSR standards.
  2. Before cooperation, we examine the suppliers' compliances with local labor laws and regulations, as well as SA8000 standard. With regard to non-compliance, we require suppliers to correct within time limit. Otherwise, those suppliers have to submit bids.
  3. We regularly review supplier's CSR performance, which is recorded to follow up its improvement measures. The issues are to be reviewed including child labor, forced labor, work safety, discrimination, environmental protection, energy conservation, emission reduction, and related policies and documentation. Once there exists non-compliance, we will ask the supplier to draw up a corrective plan and rectify within a time limit. We terminate the partnership with suppliers that are still unqualified after rectification.
  4. Suppliers who have passed the on-site audit are included in the CSR Qualified Supplier List and be given incentives.
- Meanwhile, in light of the principle of negotiations on an equal footing for mutual benefits, the Company insists on building up long-term strategic partnership with the suppliers with proven qualifications, reputation and quality products and services. The Company's total procurement of materials in 2018 amounted to RMB 719 million, of which RMB 229 million or 32% was procurement under social responsibility.

	2018	2017	2016	2015	2014	2013
Total procurement of materials (RMB 100 million)	7.19	4.16	3.95	4.89	4.11	3.17
Including: Procurement under social responsibility (RMB 100 million)	2.29	0.82	0.70	0.74	0.77	0.38
Percentage of procurement under social responsibility	32%	20%	18%	15%	19%	12%

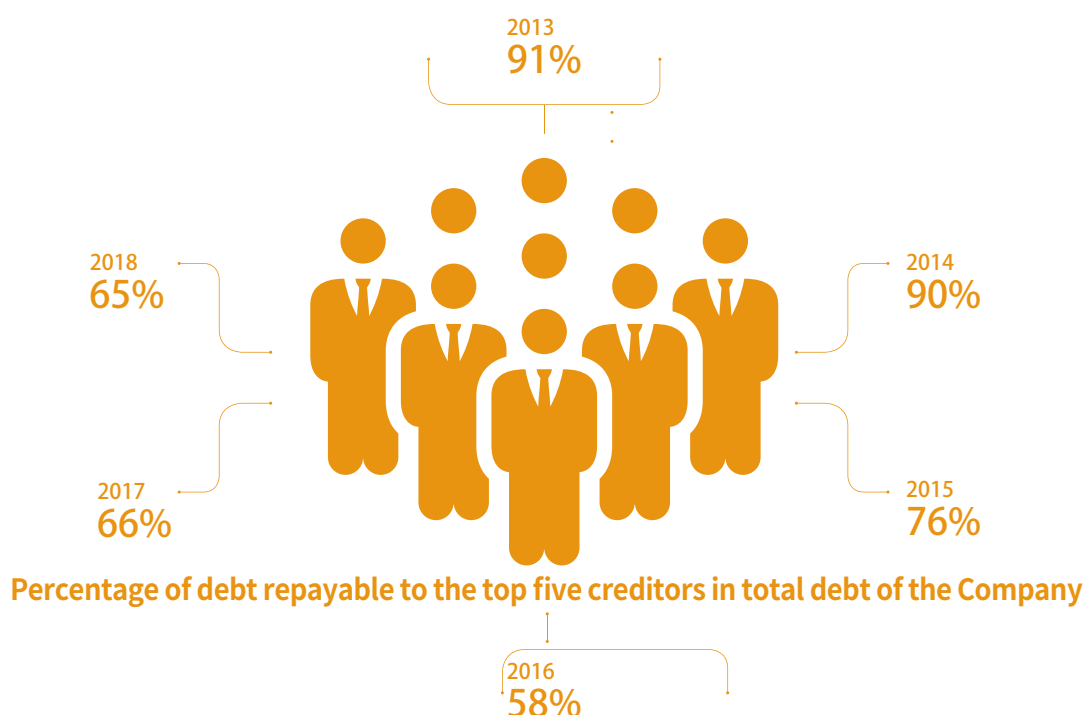
### 02. Promoting localized equipment procurement

The Company strives to cooperate with local suppliers in its proximity to steadily push forward localized equipment procurement. Materials and equipment featuring mature technologies in local production, reliable product quality and notable price advantages are prioritized. Such policies, while reducing procurement cost, have effectively promoted the manufacturing upgrades where the Company operates and thus achieved win-win for the Company and the local community.

Based on its reality, Jiama Mine has drawn up Measures on Equipment and Spare Parts Procurement Management (revised version) to standardize the procurement. In accordance with the Measure, procurement Jiama cooperated with excellent suppliers instead of unqualified onese to achieve win-win. Adhering to the concept of "lower price, higher efficiency, better quality and service", the mechanical power department of Jiama signed 96 contracts of equipment procurement and 360 contracts of spare parts procurement, with a contract execution rate of 100% in 2018. And there was none refusing to sign or perform the contract without any justifiable reasons, no falsification in winning the bids. Besides and no major safety accident caused by quality problems.

CSH Mine doubled efforts to improve overall labor productivity, reduce labor costs, decrease depletion rates, improve resource integration, optimize the rock transport distance of dumping sites and the design of southwest mining pits by streamlining institutions and optimizing staffing. The bulk materials were bided for centralized procurement, fuel materials and spare parts and other materials for direct supply. The company adjusted the operation status of equipment in line with ore capacity, adopted power multilateral trading and low-voltage reactive power compensation, reduced management and financial expenses, increased safety and environmental assessment and other means. CSH actively promoted the entire process of cost management and control, and continuously reduced the cost of business operations in hopes of ensuring the smooth completion of the annual cost reduction and efficiency goals.

## ● Creditor Relationship

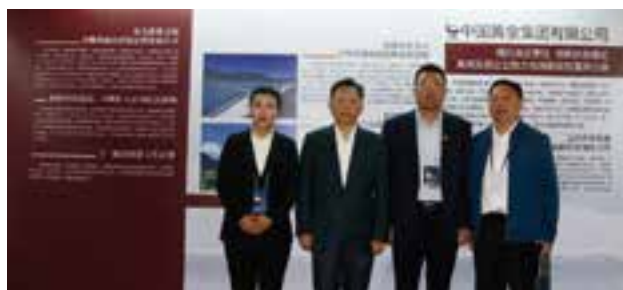


Based on sound financial structure and adequate cash flows, the Company employs financial leverage to maximize the value for shareholders. The Company's major creditors are banks. In 2018, the debt repayable to the top five creditors accounted for 65% of the total debt.

The Company has been placing emphasis on cooperation with banks, seeking to establish a diversified financing system with competitive advantages. By entering cooperation agreements and facility-based borrowing contracts with major financial institutions, the Company reinforced the indirect financing channels which secured its production and operation funding at relatively favorable financing costs. Loans were provided by the banks as scheduled, with full confidence in the Company's financial structure and sound operation. Satisfying its debt service on a timely basis, the Company has established long-term friendly cooperation with the banks based on mutual trust.

## ● Communication and Cooperation

Considering the concept of "win-win and all-win", the Company seeks to balance the interest relationship with the local community and the stakeholders in a legal and rational manner, building up extensive cooperation with local governments, financial institutions, research institutions, large enterprises, international and economic organizations. As a result, the Company has firmly established in the community a sound image as an adept resource integrator which is able to leverage positive factors with strong comprehensive strength.



Jiama Mine participated in the "Central Enterprise in Tibet" activity



## Jiama Mine signed cooperation framework agreement with Kunming University of Science and Technology

Jiama Mine signed cooperation framework agreement with Kunming University of Science and Technology in Beijing. Peng Jinhui, president of Kunming University of Science and Technology, attended this meeting. Guan Shiliang, secretary of CPC and chairman of Jiama Mine, signed the agreement with Shu Hongchun, vice president of the University. Guan Shiliang said that the cooperation between Jiama Mine and Kunming University of Science and Technology has overcome a number of technical difficulties, which improved the core competitiveness and scientific impacts. Responding to the call of the 19th CPC National Congress for "strengthening school-enterprise cooperation", the two parties will give full play to the respective strengths to achieve complementary advantages, contributing to realizing the two centenary goals.



Jiama Mine signed cooperation framework agreement with Kunming University of Science and Technology

## Community Welfare

With a commitment to "Harmonious mutual development to benefit the local community", we extend active presence in public welfare undertakings, advocate integrity and impartiality by own actions and root ourselves in the masses for return to the community and the benefit of our offspring, aiming at harmonious development with multi-win among employees, the enterprises and the society. In recent years, the Company joined the efforts of local governments for mutual development, actively participating in public welfare undertakings including local economic development, construction of new pastoral areas, environmental improvement, drought relief, poverty-relief assistance, caring for education, medical donations and tackling the difficulties in employment and potable water of herdsmen. The efforts in jointly building up "Harmonious mine area" and "Harmonious society" have been fully recognized by local governments at all levels and the public.

In 2018, the Company donated a total of RMB1.5691 million, mainly for supporting local infrastructure, helping impoverished families and students and other programs. In 2018, the Company offered assistances to 124 persons from impoverished families and students.

	Unit	2018	2017	2016	2015	2014
Total tax	RMB 100 million	4.27	3.17	2.22	2.39	2.26
Total donation	RMB 100 million	156.91	24	25	161	188



## CSH Mine donated for drought relief

In 2018, Urat plain in Bayan Nur city, Inner Mongolia Autonomous Region, suffered a drought which was rarely seen in the past 40 years, especially in pastoral areas and mountainous arid areas where grass and pastures are generally affected. The vegetation on the grassland withered widely while grass and feeds in the worst-hit areas was in severe lack, causing the higher feeding cost. At the same time, humans and animals in some areas had difficulty in drinking water, resulting in farmers and herdsmen in trouble. Hearing the news, the Party committee of CSH Mine, guided by the China Gold, donated 50,000 kg of corns to the Sumu and CNY 1 million to the Red Cross of Urat Zhongqi for drought relief.



Zhang Weibin, secretary of CPC, chairman and general manager of CSH Mine on behalf of the company, donated CNY 1,000,000 to the Red Cross of Urat Zhongqi for drought relief



## Case

**Jiama Mine provided necessities for the people in poverty**

We highly values welfare system which consists of many aspects. For instance, we pay social insurance and housing fund for our employees, encourage vocation with pay and provide professional skill training. Upholding the concept of “build a mine to develop the economy and promote the community harmony” , Jiama Mine visited the locals in poverty and gave them money and necessities in 2018.



Jiama Mine provided necessities for the people in poverty

**01.Fueling the community development**

The Company adheres to the win-win concept for the enterprise and the local society, considering local interests when developing its mines and supporting local economic and social development in terms of environmental protection, employment, taxation. In 2018, the Company paid RMB 427 million in tax.

## Case

**Jiama Mine provided couplet-assistance to the families in poverty**

8 grassroot Party branches of Jiama Mine and 3 villages in Jiama town have made joint efforts to carry out “one helps one” pairing project with two Party branches helping one village. All the managers and senior managements actively participated in the pairing and networking activities. In 2018, Jiama solved more than 180 practical difficulties for the local people and sent them gifts valued more than RMB150,000.



Household survey by Jiama Mine for assistance

**02.Employment localization**

The Company recruited and arranged employment for a lot of local labor in and Inner Mongolia Autonomous Region and Tibet Autonomous Region, which actively supported and promoted local economic development. As of 2018, ethnic minority employees accounted for 10% and 36% respectively in the CSH Mine and Jiama Mine.



## Employee localization conducted by Jiama Mine to continuously improve the sense of participation of farmers and herdsman

Jiama Mine always adheres to the concept of talent construction with “Employee Localization”, while actively solving the employment of the surrounding farmers and herdsmen, Jiama Mine promote the transformation and upgrading of local talents by means of industry-driven and educational guidance. In 2008, the company selected 80 children from poor families to go to the Sanmenxia Gold Technical School for vocational education training. After graduation, they were all placed in the company for employment. At present, the company has one Tibetan university student who has become a company executive, 6 people have become the company's middle management cadres, 23 people have become the company's main professional and technical talents, and 17 people have become the company's technical experts, which has driven the surrounding people to realize the fundamental transformation from farmers and herdsmen to industrial workers, and has made positive contributions to the transformation and upgrading of talents in Tibet.

By 2018, the company employed 377 Tibetan employees, which accounts for 36% of the total number of employees; the average annual income of local employees is RMB 68,000. If only one person in each family works in the company, the whole family can



Induction training for Tibetan employees carried out by Jiama Mine

achieve poverty alleviation; in the critical period of Lhasa's implementation of “two years of poverty alleviation, three years of consolidation” precise poverty alleviation, the company actively took the initiative to provide 22 jobs for local poor families, which helped 22 poor families to achieve basic poverty alleviation.



## Jiama Mine expanded the scope of poverty alleviation and continuously enhanced the company's social influence

The company has appointed seven batches of personnel (72 team members) to go to work in the village of Jiangmu, Shigatse, and they are affectionately called “the most beautiful golden man” by the local people. In the past few years, the accumulated investment has been about RMB 15 million, and 12 projects involving people's livelihood have been completed. The amount valued RMB 13.8 million was invested to help Yuzhuo Village to build a vegetable greenhouse, and the company has started to invest more than RMB 200,000 to establish a wool processing factory in Kawu Village. It will lead poor families out of poverty and become rich in the way of characteristic industries, and the current progress of the project is good. In order to improve the cultural quality of party members and cadres, more than 60 cultural night schools have been set up in three villages to provide intellectual and talent reserves for poverty alleviation.



Vegetable greenhouse and vegetable base funded by Jiama Mine



## Jiama Mine actively participated in the construction of local aid for Tibet project



Jiama Mine participates in the groundbreaking ceremony of the Mozhugongka County Aid Project

On March 8th, the groundbreaking ceremony for 100 projects & aid projects in 2018 in Mozhugongka County, Lhasa City, Tibet Autonomous Region were held in the county seat. At the invitation of the county party committee and the county government, Jiama Mine appointed more than 40 employees led by Lurong Yixin, the deputy general manager and the chairman of the labor union to attend the groundbreaking ceremony. Lurong Yixin represented the party secretary of the company, Chairman Guan Shiliang, General Manager Wang Ping to congratulate the start of construction. He also stated that Jiama Mine will continue to fulfill the duties of the central enterprise, do a good job in the company's daily work, and contribute to promote the local economic development and the common prosperity of farmers and herdsmen.



## CSH Mine organized the “New Year Welcoming, Warmth Sending” activity

On New Year's Eve, Liu Jiubo, the chairman of the Labor Union and deputy general manager of CSH Mine, visited the neighboring poor villagers and sent greetings and blessings to them with assistance team, conveyed the condolences and concerns of Inner Mongolia Taiping Mining Co., Ltd., and sent rice, noodles, oil and other commodities to them.

Over the years, CSH Mine has actively helped surrounding farmers and herdsmen to improve production and living conditions while reforming and developing enterprise. A total of 235 local employees were hired by CSH Mine. During the Spring Festival, we conveyed the condolences for the herdsmen, assisted the children of the surrounding herdsmen to attend school and get education, helped the herdsmen who suffer the seriously illness, helped Gacha to mend a road in order to let the herdsmen be convenient, and regularly participated in national festivals

such as Jiaobao Festival to jointly build a “harmonious community”. CSH Mine has established good relations with local governments and surrounding farmers and herdsmen, made due contributions to the development of local economy and harmony, and demonstrated the image of first-class central enterprise and won high praise from local party committees, governments and all walks of life.



CSH Mine greeted the poor farmers and herdsmen on the eve of the Spring Festival



## Case

## Jiama Mine carries out poverty alleviation, donation for education “love showing, support sending” activities

In accordance with the relevant requirements of precision poverty alleviation in autonomous regions, cities, counties and townships, Jiama Mine conducts poverty alleviation, donation for education, and actively carries out “love showing, support sending” activity. On the Children's Day, we donate 674 sets of school uniforms (valued RMB 44,484) to two primary schools (Kadui Township Complete Primary School and Rixing Township Complete Primary School) where the working team of this company locates.

Jiama Mine actively carries out “love showing, support sending” activity, on the Children's Day, we donated 696 sets of school uniforms (valued RMB 48,720) to 5 schools (Cuobuxi Township Complete Primary School, Zhaxigang Township, Sibü Village Kindergarten, Renqinglin Kindergarten, Jiama Central Primary School and Bilingual Kindergarten affiliated to Jiama Central Primary School) where working team of the company locates.



Jiama Mine donated school uniforms and other materials to the primary school students where the working team located during the Children's Day.



### 03. Taking targeted measures to help people lift themselves out of poverty

With the guidance of “Building a harmonious community to benefit the local”, the China Gold International is committed to developing gold industry for the people and consolidating the Tibetan regions for the benefit of local. We have adopted the strategy of industry-driven business to shake off poverty so as to share resources, results and protecting the border. The Company takes initiatives to perform the social responsibility and political responsibility, building up a positive image as a central enterprise.

- ① On the occasion of the Spring Festival and the Tibetan New Year, Jiama Mine visited the villagers in Jiama Township and Zhaxigang Township
- ② Leaders of Jiama Mine visited the families in difficulty
- ③ Jiama Mine carried out “Love showing, Warmth sending” activity
- ④ Labor Union of Jiama Mine conducted partner assistance with Sibü Village in Zhaxigang Township.







## Jiama Mine built a “hematopoietic machine” for the Tibetan employees to become rich



Hao Peng, secretary of the Party Committee of SASA has a cordial conversation with Tibetan employees at the dividend site of Jiama Industrial and Trading Company

In order to build a “hematopoietic machine” for the Tibetan compatriots in Jiama Township, in December 2009, Jiama Mine launched an “enterprise + farmer” model. After investing RMB 19 million to acquire the original fleet of Jiama Township, the company also paid the advance fund and organized 655 households and 3,850 farmers and herdsmen to buy a share and establish Jiama Industry and Trade Company, which undertakes mine transportation, environmental protection and greening, labor dispatch, etc. Up to now, Jiama Industry and Trade Company has paid dividends 9 times, which amounts to more than RMB 12.5 million, and the average gaining of each



household exceeded RMB 15,000. In addition, 47 employees of Jiama Industry and Trade Company are all Tibetans, with an average monthly income of more than RMB 4,500; More than 300 vehicles from Jiama Township participated in the mine operation through leasing, and now they have received more than RMB 200 million from the industry and trade company, which has innovated the operation mode of poverty alleviation work in plateau minority areas. At the same time, the company actively supports the development of local township enterprises, and introduces civil construction companies, gas stations, and property companies to participate in mine construction, so as to better drive local farmers and herdsmen to become rich and well-off. This kind of industrial poverty alleviation model that leads the local people to get rich together is called the “Jiama Model” by the Party Committee Government of the Tibet Autonomous Region and has become a model for the harmonious construction of the Tibetan areas.

The people in the other counties are envious of Mozhugongka County, and the people in Mozhugongka County are more envious of people in Jiama Township. Gesang, who was recruited into Jiama Mine in 2008 and is now an assistant manager of Mass Work Department, said that he was recruited into the company after a public examination in 2008. At that time, the whole family (eight people) shared the house with a total of only 50 to 60 square meters. The light bulb is an electrical appliance, they planted 26 acres of farmland, and the annual income was about RMB 4,000. Now, two younger brothers of Gesang have been recruited into Jiama Mine and the family condition has been greatly improved. “There are 4 households, and the annual income has increased several times. The improvement of life cannot be separated from Jiama Mine,” he said emotionally. The action that relies on superior resources to build a community of interests not only builds a platform for local people to get rich, but also creates a new platform for central enterprise to fulfill their political, social, economic and party building responsibilities, and builds a strong barrier for the country's frontiers to strengthen the border and enrich the people.

## 04. Actively integrating in overseas markets

Mr. Song Xin, Chairman of China Gold, Chairman of Board of Directors of the Board of China Gold International always propels the Company to go global. He highlights that China Gold International must attach importance to its social responsibilities including environmental protection, community harmony and etc., building a sound company image in the international community. Therefore, he sets a high standard for China Gold International.

As a flagship of developing overseas business of CNG and international company registered in Canada, the rapid development enables China Gold International to win widespread recognitions from all walks of society. With the strong support of China National Gold Group, China Gold International Resources Corp. Ltd. actively fulfills its social responsibility, participating in public welfare charity and making donations to the Canadian Anti-Cancer Association every year; therefore, it has built a favorable image for the Chinese companies in the field of global mining industry.



### China Gold International held Fenghua Qunying Glorious Night 2018



Song Xin, chairman of China Gold, presented a congratulation video to the event.

On November 23, 2018, China Gold International worked with Canada Finance & Investment Institute Society to jointly host the social charity event aimed at fulfilling the social responsibility - Fenghua Qunying Glorious Night 2018. The event was themed on the research and development of environmental protection technology for the Chinese and Canadian mining industries, the relationship between mining development and community development and aboriginal health program. The event was proactively supported by the President Song Xin who presented a congratulation video in English from Beijing to express sincere appreciation to governmental representatives of Canadian Confederation, provinces and municipalities, leaders of Chinese Consulate General in Vancouver, representatives of Hong Kong Economic Office in Vancouver and experts and professors from the academic community in Canada, media personnel and investors in mining finance and investment industry for their long-term care and support to China Gold International and to show expectation and confidence to the company for its development in Canada.

The professors of UBC led a scientific research team to report the staged achievements of the mining environmental protection project funded by CGIRC. Such achievements have been published at the scientific technology forum held twice in Canada this year. The aboriginal health program initiated by the world-famous medical professor Grant Stewart well known as the Canadian Bethune will also win support from CGIRC.

The Senator of Canadian Confederation Hu Yuanbao came from the capital city Ottawa to participate in the event. He said that he was very pleased to personally witness China Gold International's proactive fulfillment of its social responsibility over many years and involvement in charity activities and expressed his recognition and strong support. The Member of Congress of Secretary of Defense of Canadian Confederation Shi Jun and the Governor of British Columbia He Jin also sent a congratulation letter to highly appreciate positive influence of the event in the Chinese community in Canada and joint efforts of multiple Chinese institutions and China Gold International.

Doctor Huangchen Xiaoping who is the Member of Congress and Vice Chairman of Canada-China Legislative Association and Senior Senator of British Columbia and the former minister of Ministry of Asia Pacific Affairs Qu Jiebing and the chief commissioner of Hong Kong in Vancouver Yuanhuang Jieling addressed speeches to encourage CGIRC's positive acts of fulfilling social responsibility.

## Appendix I

Supporting Sustainable Development Goals of the United Nations	
Sustainable Development Goals	Framework for Action
<b>Goal 1</b> End poverty in all its forms everywhere	<ul style="list-style-type: none"> <li>Actively employ Tibetans to alleviate local surplus labor, which solved the poverty problems from the root in Tibetan area. Send village team of China Gold International to lift out poverty and provide assistance to seven towns.</li> </ul>
<b>Goal 2</b> End hunger, achieve food security and improved nutrition and promote sustainable agriculture	<ul style="list-style-type: none"> <li>Co-found Jiama Industry&amp; Trade company with the local people to improve their living standard with the aim to promote the sustainable development in Jiama. Organize greenhouse vegetables project, plant grain and vegetables adapted to local condition to increase farmers' income.</li> </ul>
<b>Goal 3</b> Ensure healthy lives and promote well-being for all at all ages	<ul style="list-style-type: none"> <li>Provide support for the rural medical and health infrastructure to improve medical conditions. Formulate occupational health management system, including "Three simultaneous" system, hazard prevention system. Monitor mining area in terms of total dust, respiratory dust, noise and individual noise to enhance labor protection.</li> </ul>
<b>Goal 4</b> Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	<ul style="list-style-type: none"> <li>Attach great importance to education through building local schools, establishing scholarships, funding college students, to provide more opportunities for students in remote areas. Launch various training activities to advance employees' further education.</li> </ul>
<b>Goal 5</b> Achieve gender equality and empower all women and girls	<ul style="list-style-type: none"> <li>Elevate gender equality to Company's strategic level and improve social security system. Adhere to the principle of "Men and women enjoy equal pay for equal work"; help develop the career of female employees; organize career training and health lectures for female employees; care for them in pregnancy or lactation.</li> </ul>
<b>Goal 6</b> Ensure availability and sustainable management of water and sanitation for all	<ul style="list-style-type: none"> <li>Adopt advanced equipment and technology. Place priority to water resources. Promote sustainable development of water resources through building recycling water facilities and using solar energy in processing plants to construct smoke free mining.</li> </ul>
<b>Goal 7</b> Ensure access to affordable, reliable, sustainable and modern energy for all	<ul style="list-style-type: none"> <li>Pursue green development mode, uphold sustainable development vision of environmental protection and energy saving, devote to energy conservation and emission reduction. Cut greenhouse gas emission and reduce air pollution through effective usage of solar heating system.</li> </ul>
<b>Goal 8</b> Ensure availability and sustainable management of water and sanitation for all	<ul style="list-style-type: none"> <li>Adopt advanced equipment and technology. Place priority to water resources. Promote sustainable development of water resources through building recycling water facilities and using solar energy in processing plants to construct smoke free mining.</li> </ul>
<b>Goal 9</b> Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	<ul style="list-style-type: none"> <li>Increase more investment in research, innovation and application of key technology through independent research, cooperation of production, research and college, and international exchanges. Tackle scientific and technologic problems in geology, mining, processing, energy conservation, eco protection and other areas, and yield fruitful results.</li> </ul>
<b>Goal 10</b> Reduce inequality within and among countries	<ul style="list-style-type: none"> <li>Encourage pairing assistance and helping-out activities to support the sustainable development of the local economy. Strengthen support on public welfare, launch poverty reduction program like villages team and other ways to realize sustainable development in poor areas.</li> </ul>

## Appendix I

Supporting Sustainable Development Goals of the United Nations	
Sustainable Development Goals	Framework for Action
<b>Goal 11</b> Make cities and human settlements inclusive, safe, resilient and sustainable	<ul style="list-style-type: none"> <li>Use energy in a rational way and develop new energy. Fuel the career of science, education and culture; protect local environment and enhance sustainable capacity of the community.</li> </ul>
<b>Goal 12</b> Ensure sustainable consumption and production patterns	<ul style="list-style-type: none"> <li>Promote clean manufacture proactively, enhance environmental protection in whole process, reduce pollution starting with the source and achieve sustainable development by green procurement and environmental friendly performance. Establish the base for publicizing energy saving and environmental protection; spread the concept of low carbon and make the common sense of low carbon public.</li> </ul>
<b>Goal 13</b> Take urgent action to combat climate change and its impacts	<ul style="list-style-type: none"> <li>Intensify efforts on environment monitoring and inspection, reinforce awareness of environmental protection, advance green and environmental friendly performance, reduce negative influence of company performance on environment thus to realize green development. Enhance energy efficiency; fuel the industrial and architectural energy saving as well as green development; reduce the emission of greenhouse gas such as carbon dioxide.</li> </ul>
<b>Goal 14</b> Conserve and sustainably use the oceans, seas and marine resources for sustainable development	<ul style="list-style-type: none"> <li>Strengthen environmental protection in mining area, reduce air and water pollution. Support conservation of marine eco environment, attach importance to utilization of marine renewable energy and promote sustainable development of marine resources.</li> </ul>
<b>Goal 15</b> Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	<ul style="list-style-type: none"> <li>Committed to technology trails on soil fertilization in ecologically fragile area, launch water and soil conservation, drip irrigation, plant experiment, and trees, grass and flowers plantation. Carry out the business of ecological rehabilitation to promote the treatment of heavy metal pollution; increase ecological investment in engineering construction to protect biological diversity. Implement level-to-level eco management to maintain eco environment of the community.</li> </ul>
<b>Goal 16</b> Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	<ul style="list-style-type: none"> <li>Stick to Company moral standards, enhance labor contract management, improve labor employment system, appreciate employees' right to know, protect their rightful interests. Exert employees' role in democratic management and supervision, establish democratic management system in primary level. Regularly disclose financial and non-financial information to enhance transparency; further strengthen the building of clean Party and government as well as the anti-corruption work; safeguard interests and proposal of employees to build a harmonious enterprise.</li> </ul>
<b>Goal 17</b> Strengthen the means of implementation and revitalize the global partnership for sustainable development	<ul style="list-style-type: none"> <li>With the cooperation of Chinese government, enterprises, financial institutions, universities and international organizations, we introduce and export technologies in environmental protection; establish long-term strategic cooperation and carry out comprehensive and in-depth cooperation.</li> </ul>

## Appendix II

ESG Reporting Guide Content Index			
Subject Area	Aspects	KPI	Disclosure level
Environmental	A1 Emissions	<b>General Disclosure:</b> relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. Information on:	Reported
		(a) the policies; and	Reported
		(b) compliance with relevant laws and regulations that have a significant impact on the issuer	Reported
		A1.1 The types of emissions and respective emissions data.	Reported
		A1.2 Greenhouse gas emissions in total (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	Reported
		A1.3 Total hazardous waste produced (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Reported
		A1.4 Total non-hazardous waste produced (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Reported
		A1.5 Description of measures to mitigate emissions and results achieved	Reported
		A1.6 Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	Reported
	A2 Use of Resources	<b>General Disclosure:</b> Policies on the efficient use of resources, including energy, water and other raw materials.	Reported
		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)	Reported
		A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Reported
		A2.3 Description of energy use efficiency initiatives and results achieved.	Reported
		A2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	Reported
		A2.5 Total packaging material used for finished products (in tons) and, if applicable, with reference to per unit produced.	Inapplicable
	A3 The Environmental and Natural Resources	<b>General Disclosure:</b> Policies on minimizing the issuer's significant impact on the environment and natural resources.	Reported
		A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Reported
Social	B1 Employment and Labor Practices	<b>General Disclosure:</b> relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare. Information on:	Reported
		(a) the policies; and	Reported
		(b) compliance with relevant laws and regulations that have a significant impact on the issuer	Reported
		B1.1 Total workforce by gender, employment type, age group and geographical region.	Reported
		B1.2 Employee turnover rate by gender, age group and geographical region.	Reported
	B2 Health and Safety	<b>General Disclosure:</b> relating to providing a safe working environmental and protecting employees from occupational hazards. Information on:	Reported
		(a) the policies; and	Reported
		(b) compliance with relevant laws and regulations that have a significant impact on the issuer	Reported
		B2.1 Number and rate of work-related fatalities.	Reported
		B2.2 Lost days due to work injury.	Reported
		B2.3 Description of occupational health and safety measures adopted, how they are implemented and monitored.	Reported



## Appendix II

ESG Reporting Guide Content Index			
Subject Area	Aspects	KPI	Disclosure level
Social	B3 Development and Training	<b>General Disclosure:</b> Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. Information on:	Reported
		B3.1 The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Reported
		B3.2 The average training hours completed per employee by gender and employee category.	Reported
	B4 Labor Standards	<b>General disclosure:</b> relating to preventing child and forced labor. Information on:	Reported
		(a) the policies; and	Reported
		(b) compliance with relevant laws and regulations that have a significant impact on the issuer	Reported
		B4.1 Description of measures to review employment practices to avoid child and forced labor.	Reported
		B4.2 Description of steps taken to eliminate such practices when discovered.	Inapplicable
	B5 Supply Chain Management	<b>General disclosure:</b> Policies on managing environmental and social risks of the supply chain	Reported
		B5.1 Number of suppliers by geographical region	Reported
		B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	Reported
	B6 Product Responsibility	<b>General disclosure:</b> relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress. Information on:	Inapplicable
		(a) the policies; and	Inapplicable
		(b) compliance with relevant laws and regulations that have a significant impact on the issuer	Inapplicable
		B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Inapplicable
		B6.2 Number of products and service related complaints received and how they are dealt with.	Inapplicable
		B6.3 Description of practices relating to observing and protecting intellectual property rights.	Inapplicable
		B6.4 Description of quality assurance process and recall procedures.	Inapplicable
		B6.5 Description of consumer data protection and privacy policies, how they are implemented and monitored.	Inapplicable
	B7 Anti-corruption	<b>General disclosure:</b> relating to bribery, extortion, fraud and money laundering. Information on:	Reported
		(a) the policies; and	Reported
		(b) compliance with relevant laws and regulations that have a significant impact on the issuer	Reported
		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.	Not reported
		B7.2 Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	Reported
	B8 Community Investment	<b>General Disclosure:</b> 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.	Reported
		B8.1 Focus on areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	Reported
		B8.2 Resources contributed (e.g. money or time) to the focus are.	Reported

## Appendix III

Social Responsibility KPI of the China Gold International						
	Unit	2018	2017	2016	2015	2014
Credit management						
Asset	Million USD	3,216	3,230	2,966	2,780	3,013
Revenue	Million USD	517	412	339	340	278
Profit	Million USD	43	79	34	39	99
Net profit	Million USD	(4.2)	64	(12)	(7)	42
Product qualification ratio	%	100	100	100	100	100
Head office contract performance rate	%	100	100	100	100	100
Subsidiary contract performance rate	%	100	100	100	100	100
Total sales income to top five customers	Million USD	571	412	339	340	278
Proportion of total sales income to top five customers to all operating income	%	100	100	100	100	100
Proportion of debts to top five creditors to total debts of the Company	%	64.57	66.53	58.39	76	90
Asset-liability ratio	%	53.69	53.26	52.13	48	51
Environmental protection and energy conservation						
Input in energy conservation and emission reduction	Ten Thousand RMB	209	61.8	76.9	142.98	24.66
Nitrogen oxides emission	Ton	17,420	17,839	18,163	27,6204	26,196
Carbon dioxide emission	Ton	19,626.01	17,540.8	17,682.1	25,381.696	20,104.405
Carbon dioxide emission per ton of ore	Kg/ton	0.96	0.89	0.79	0.92	0.9
Soot volume	Ton	14,580	14,955	15,294	17,567	17,041
Diesel consumption	Liter	382,823.00	746,864.44	778,801.28	772,920.66	722,647.07
Diesel consumption per ton of ore	Liter/ton	0.02	0.03	0.03	0.04	0.03
Coal consumption	Ton	8,198	7,327	7,005	9,088	8,299
Coal consumption per ton of ore	Kg/ton	0.40	0.37	0.33	0.38	0.36
Total energy consumption	Ton of coal equivalent	76,654.99	51,956.42	36,058.6	36,853.7	33,675.4
Vehicle mileage	Km	2,930,065	2,123,830	1,688,525	1,519,269	1,501,969
Vehicle mileage per ton of ore	Km/ton	0.14	0.09	0.1	0.07	0.12
Vehicle fuel consumption	Ton	433.71	324.15	243.15	235.91	213.21
Vehicle fuel consumption per ton of ore	Liter/ton	0.021	0.017	0.017	0.013	0.02
Natural gas consumption	m <sup>3</sup>	0	0	0	0	0
Planted trees	Number	1,150,070	321,820	200,300	60,1446	2,450
Harmful waste	Ton	25.11	0	0	0	0
Harmful waste per ton of ore	G/ton	1.23	1.18	0.61	0.46	0.84
Harmless waste	Ton	78,120,687	91,383,879	92,691,570	98,497,461	93,775,838
Harmless waste per ton of ore	Ton/ton	3.8	4.6	4.1	4.5	4.1
Sewage emission	Ton	0	0	0	0	0
Annual office electricity consumption per capita annually	Degree per capita	1,075.45	1,606.14	1,554.26	1,604.03	1,799.09
Annual water consumption per capita	Ton	26.94	22	23.46	24.41	20.98
Annual paper consumption per capita	Kg per capita	13.48	6.92	6.02	5.89	6.32

## Appendix III

### Social Responsibility KPI of the China Gold International

	Unit	2018	2017	2016	2015	2014
Total investment of environmental protection	Million RMB	78.19	37.28	17.22	241	225
COD (chemical oxygen demand) emission	Ton	22.029	11.056	11.459	10.9	13.56
Sulfur dioxide emission	Ton	29.814	30.999	31.745	42.95	43.88
Production power consumption of the mining area	10,000 kW/h	39,061.48	28,493	21,219	17,338	14,394
Comprehensive energy consumption per ton for mineral processing	Kwh/ton	19.07	11.56	8.59	9.87	9.4
Newly added water	10,000 tons	169.057	272.561	208.629	156.76	184.44
Circulating water	10,000 tons	6,871.065	7,086.646	6,974.628	8,602	4,355
Water consumption per RMB10,000 output	Ton per ten thousand RMB	27.09	22.84	26.33	27.63	37.83
Water consumption per ton of ore	Ton/Ton	0.08	0.31	0.24	0.25	0.28
Provision for reclamation costs	Ten thousand RMB	616.21	119.2	281.2	120	120
Number of environmental pollution accidents	Number of times	0	0	0	0	0
Environmental protection training coverage ratio	%	100	93	93	100	100
Work safety						
Safety investment	Ten thousand RMB	17,644	6,234	9,795.85	7,550	5,625
Death toll of employees in production	Person	0	0	2 (minor injury)	0	0
Fatality rate for million-ton production	Person/million ton	0	0	0	0	0
Major equipment accidents	Number of times	0	0	0	0	0
Major fire and explosion accidents	Number of times	0	0	0	0	0
Major traffic accidents	Number of times	0	0	0	0	0
Special equipment inspection rate	%	100	100	100	100	100
Special equipment inspection qualified rate	%	100	100	100	100	100
Loss accidents of explosives and hazardous chemicals	Number of times	0	0	0	0	0
Serious spill accidents of explosives and hazardous chemicals	Number of times	0	0	0	0	0
Employees with safety management certificate	person	157	252	120	100	101
Certified safety engineer	person	25	15	13	11	8
Safety education and training sessions	Number of times	126	89	231	217	89
Safety education and training participants	Number of times	7,901	10,205	14,454	8,928	6,906
Safety education and training rate for employees	%	100	100	100	100	100
Employees' interests						
Total employees	Person	2,124	2,028	1,737	1,803	1,746
Female employees	Person	468	425	337	344	331
Ethnic minority employees	Person	437	446	357	479	480
Employees at primary managerial positions and above	Person	441	381	311	290	250
Including: Female employees	Person	116	68	41	35	38
Employment of the disabled	Person	2	11	9	11	9
Labor contract signing rate	%	100	100	100	100	100
Social insurance coverage ratio	%	100	100	100	100	100
Proportion of workers joining in the Trade Union	%	71	99	99	100	100
Annual recruits through open recruitment	Person	389	297	216	111	175

## Appendix III

Social Responsibility KPI of the China Gold International						
	Unit	2018	2017	2016	2015	2014
Including: Hires newly graduated from universities and colleges	Person	21	13	31	18	32
Social Recruitment	Person	368	284	185	93	143
Proportion of localized employment	%	24	32	26	24	40
Annual person-time of staff training in total	Headcount	1,697	1,319	1,288	1,701	1,836
Annual promotions in professional titles	Headcount	85	85	76	72	59
Annual promotions to expert-level senior engineers	Headcount	5	1	2	4	4
Physical checkup and healthfile coverage ratio	%	100	100	100	100	100
Occupational disease cases at year end	Case	0	0	0	0	0
Additional occupational disease cases in the year	Case	0	0	0	0	0
Proportion of employees in the Career, Health and Safety Committee	%	17.6	3.1	3.5	0	0
Per capita paid vacation days	Day	16	24	19	17	15
Staff satisfaction	%	99	97	100	96	97
Staff turnover	%	8.8	10.2	8.5	11	24
Technological progress						
Total input in scientific research	Ten thousand RMB	14,437	9,670	1,588	7,884	6,970
Number of new patents	item	3	23	13	3	3
Scientific and technological achievements	item	19	18	32	23	6
Scientific research programs undertaken	item	7	12	24	12	9
Harmony and win-win						
Total tax	Million RMB	427	317	222	239	226
Total procurement of materials	Million RMB	719	416	395	489	411
Including: Procurement under social responsibility	Million RMB	229	82	445	74	77
Proportion of procurement under social responsibility	%	31.85	19.71	17.75	15.13	18.73
Proportion of localized procurement	%	19.19	44.87	6.19	24.5	50.6
Total donation	Ten thousand RMB	156.91	23.64	25.54	161	188
Assistances to impoverished families and students	Headcount	124	744	784	638	388
Employee volunteers	Person	367	239	225	187	150

## Rating Report on 2018 Environmental, Social and Governance Report of China Gold International Resources Corp. Ltd

Authorized by China Gold International Resources Corp. Ltd., the Chinese Expert Committee on Corporate Social Responsibility Report Rating selected experts to organize a rating panel for Rating Report on 2018 Environmental, Social and Governance Report of China Gold International Resources Corp. Ltd (hereinafter referred to as the Report).

### I. Rating Basis

CASS-CSR 4.0 for General Mining Industry by Chinese Academy of Social Sciences and Rating Standards for CSR Report of Chinese Enterprises (2019) by the Chinese Expert Committee on CSR Report Rating.

### II. Rating Procedure

1. The rating panel reviews Process-oriented Confirmation Letter for CSR Report and confirms related supporting materials submitted by the writers;
2. The rating panel makes comments on the compilation process of the Report and the disclosure information as well as draws up the rating report;
3. The vice president of the Chinese Expert Committee on CSR Report Rating, the supervisor and experts of the panel examine and sign the rating report.

### III. Rating conclusion

#### Process (★★★★☆)

The group for report preparation, mainly led by Strategic Investment and Business Management Department, has been organized. CEO is responsible for the final review. Manager and deputy manager of the leading Department takes in charge of overall control and timeline. The Company has regarded the Report as an important tool for disclosing compliance information, improving responsibility management, enhancing corporate image and communicating with stakeholders, constituting a multi-form reporting system. The Company plans to publish reports on the official website and the Hong Kong Stock Exchange website. And the Report will be presented in electronic form, printed copy, H5 version, etc. The Report takes the lead in process.

#### Substantiality (★★★★★)

The Report systematically discloses the key issues of general mining industry, such as the implementation of macro-policy, construction of digital mine, management of occupational health, assurance of work safety, system of environmental management, R&D and application of environmental technology and equipment, conservation of land resources, reduction of “three wastes” emission, recovery of residual ore, conservation of mining area, disposal of tailings and protection of eco-environment in mines. The Report is detailed and sufficient in description, and it has an outstanding substantive performance.

#### Integrity (★★★★★)

The Report discloses 90.27% of core indicators of general mining industry from “environmental protection and energy conservation” “work safety” “employees’ interests” “technological innovation” “harmony and win-win”. And it performs very well in integrity.

#### Balance (★★★★☆)

The Report discloses the negative information, such as staff turnover, death toll of employees in production, fatality rate for million-ton production, major equipment accident, serious spill accidents of hazardous chemicals, number of environmental pollution accidents. It takes the lead in balance performance.

#### Comparability (★★★★★)

The Report discloses 123 key performance indicators for more than 3 years, such as net profit, product qualification ratio, scientific investment, total investment in environmental protection, comprehensive energy consumption per ton for mineral processing, provision for reclamation costs, investment in work safety, the employment of the disabled and total tax. And it makes a horizontal comparison in terms of company size, such as British Columbia’s 100 Most Profitable Business and British Columbia’s 100 Biggest Companies. It has a great comparability performance.



#### Readability (★★★★☆)

The Report systematically discloses responsibility performance of the key issues including responsibility management, eco protection and energy conservation, work safety, employees' interests, technological innovation and harmony community. It is clear in framework and prominent in key issues, demonstrating that the Company has deep understanding of fulfilling its social responsibility. The Report cover presents main business, which highlights features of mining industry and improves recognizability. And it is simple in style and complements words with pictures, enhancing readability. It performs excellently in readability.

#### Innovativeness (★★★★☆)

The Report responds to the SDGs and shows the Company's responsibility practices, which highlights the Report advancing with the times and its leading responsibility performance. And the Report focuses on responsibility performance by answering to the current affairs including targeted poverty alleviation, demonstrating the Company's accountability to comply with macro-policy. The Company innovates the mode of transmission by issuing H5 ESG report, which improves communication effects. It possesses excellent innovative performance.

#### Overall ranking (★★★★☆)

Evaluated by the rating panel, 2018 Environmental, Social and Governance Report of China Gold International Resources Corp. Ltd gets 4.5 stars, and this Report takes the lead among other reports.

## IV. Suggestions for improvement

1. Add disclosure on cases of assuming responsibility to enhance balance performance.
2. Appropriately strengthen the Report framework advancing with times to enhance its innovativeness.

魏紫川

Vice President of the Expert Committee

钟宏武

Head of rating panel    Expert of rating panel

Process assessor    Ren Jiaojiao, Dong Deshang

June 20th, 2019



Scan the QR to check the file of rating report

## Feedback

### Dear readers:

Thank you for taking time to read this report. To improve our practices and capabilities in fulfilling corporate social responsibility, we sincerely invite you to take some time to evaluate this report and to provide your valuable comments and suggestions, so as to support its continuous improvements. Please kindly complete the following questionnaire and send the feedback to us.

#### 01. Overall evaluation of the report (please mark "√" in appropriate position)

- (1) Does it give a complete and accurate view of the status of Company's corporate social responsibility work? (    )
- (2) Does it address and disclose the issues of concern of the stakeholders? (    )
- (3) Does it disclose clearly organized, accurate and complete information and data? (    )
- (4) How about its readability, namely the logic of main line, content structuring, wording and layout design? (    )

#### 02. In your opinion, which parts/aspects are you most satisfied with?

#### 03. In your opinion, which parts/aspects are you most satisfied with?

#### 04. Do you have any suggestions on our social responsibility report and its issuing in the future?

#### If convenient, please leave your contact information.

Name:                      Occupation:                      Employer:                      Contact address:  
 Post code:                      Tel:                      Fax:                      E-Mail:

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