

Environmental, Social and Governance Report  
China Gold International Resources Corp. Ltd.

**环境、社会及管治报告**  
中国黄金国际资源有限公司

**2017**



## Contact Information:

Address: No. 9 An Ding Men Wai Street, Dongcheng  
District, Beijing, China

Post code: 100011

TEL: 86-56353804

Fax: 86-56353627

Website: [www.chinagoldintl.com](http://www.chinagoldintl.com)

Email: [info@chinagoldintl.com](mailto:info@chinagoldintl.com)

Address: Suite 660, One Bentall Centre, 505 Burrard  
Street, Box 27 Vancouver, BC Canada V7X 1M4

TEL: +1.604-609-0598

Fax: +1.604-688-0598

Website: [www.chinagoldintl.com](http://www.chinagoldintl.com)

Email: [info@chinagoldintl.com](mailto:info@chinagoldintl.com)

## Notice

This report is the eighth corporate social responsibility 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".

### Basis of Preparation

This report is prepared based on the 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"), the Environmental, Social and Governance Reporting Guide issued by Hong Kong Stock Exchange and the Guide on Preparation of Corporate Social Responsibility Reports of Chinese Enterprises (CASS-CSR 3.0) published by the Research Center for Corporate Social Responsibility, Economics Division, Chinese Academy of Social Sciences with reference to the practices of the Company.

### Time Period

This report mainly covers the calendar year 2017, and may refer to major events in our history where appropriate.

### Subject Scope

This report covers head quarter of the Company, 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.

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## Message From The Chairman



**Mr. Song Xin**  
Chairman and Executive Director

In 2017, with the philosophy of innovation, coordination, environmentally-friendly green initiatives and open and shared development, all members of China Gold International firmly grasped the working principle of "seeking truth in stability, seeking improvement in stability, seeking excellence in stability and efficiency coming first", and developed a new management method. We have founded the Technical Advisory Committee, built crucial projects and broadened development space, so as to enhance management and technical level as well as lay a solid foundation for the rapid development of our Company. With the theme of enhancing the Company's ability of cost control and core competitiveness, we made efforts to advance quality and efficiency, explore potential in production and management, optimize production process, encourage innovation in technology and management, promote equipment efficiency, and reduce procurement cost and staff. We completed the annual production target and made great progress in cost control and management, continuously making efforts to achieve the strategic objective of being the leading mining company in the world.

We, as a state-owned company, always strive to uphold the concept of "build a mine to green the community; develop the economy to make the locals rich; promote the community harmony to build a monument". We keep the Company's mission in mind, take active responsibility, adhere to business development and social responsibility, create value for shareholders, protect shareholders' rights and interests, take care of our employees, protect the environment, increase the social responsibility management, and try to achieve the harmony of enterprise development and social environment.

Since 2008, we have won nearly 100 awards, honors and recognitions issued by Chinese and Canadian government and non-government organizations. The Company places significant emphasis on its environmental protection, employment and human rights practices. Our employees, including the management, are from different countries, such as China, Canada, USA and Ghana. We respect every employee.

We successfully hosted the "China Gold Night" in Vancouver for the implementation of corporate social responsibility (CSR). This is the sixth year since 2012 to implement social responsibility activities in Canada,

making the China Gold activity maintain a continuation and reflecting the professionalism as a mining company.

In 2018, with the support and concern from the government and shareholders, and also with the unremitting efforts of all employees, we will continue to practice our social responsibilities, devote all efforts to practices such as production, work safety, environmental protection and harmonious co-construction, to actively benefit the local, achieve harmonious and win-win cooperation between the Company and the local people, and yield fruitful returns for all shareholders and all relevant stakeholders.

I hereby express my appreciation to all our employees, directors and the management team who have contributed to the Company's business development, and also to the community and shareholders, who we are expecting to grow together.

**Mr. Song Xin**  
Chairman and Executive Director

## Message From The CEO



**Mr. Liu Bing**  
CEO and Executive Director

The year of 2017 is an important year in which China Gold International made stronger. Looking back 2017, we carried out practices in accordance with the requirements from the Board of Directors and China National Gold Group Co., Ltd. (hereinafter referred to as "China Gold" "the Group" or "CNG"). Centering on implementing the new development strategy and concept of the Group, we have successfully completed the annual production and operation target by overcoming many setbacks, strengthening internal control, confronting realistic problems, and steadily advancing various work, which

advances the Company, and created new value for shareholders, employees and the community in which we operate. We produced 234,667 ounces of gold and 79.02 million pounds of copper in total in the whole year, with a sales income of 411 million USD and a profit of 64.35 million USD, successfully completing its guidance target announced to the capital market. *2016 Environmental, Social and Governance Report of China Gold International Resources Corp. Ltd.*, which was prepared according to new regulations and requirements of Hong Kong Stock Exchange, has been awarded as an excellent report of



4.5star by the Chinese Academy of Social Sciences. It marks that we have taken a more solid step in fulfilling our social responsibilities, integrating our social environment and standardizing our operation. It is of great significance to enhance our fame worldwide. Following the issuance of its first overseas US dollar bond in 2014, we also issued three-year overseas bonds of US \$500 million in 2017, which strongly proves that we have diversified capability to finance globally and realize the global growth strategy through overseas M&A and endogenous growth. CSH Mine was selected as a high-tech enterprise of autonomous region level. So far, CSH Mine and Jiama Mine, the subsidiaries of China Gold International, are high-tech enterprises. In addition, China Gold International has been once again selected as the top 100 listed company in BC, Canada, ranking at 37<sup>th</sup>.

We are committed to raising red-line consciousness and adhering to the three bottom lines of "safety, environmental protection and community stability". We have put the safety, eco protection and occupational health in the first place, continuously increased the investment in safety and eco protection, comprehensively optimized the safety management system, strictly implemented the responsibilities and improved the ability of intrinsic safety in accordance with the safety and eco protection requirements of China and the Company. We have also striven for the management of grass-roots team, made all efforts to strengthen staff training and reward and punishment, improved the bottom-line consciousness of grassroot staff, comprehensively enhanced safety management, adhered to resources saving and eco protecting equally, and carried out eco project well. We have always fulfilled our social responsibilities well and made mine green and harmonious with all efforts, with an investment of RMB 2,600million in the green mine construction. We also invested a total of more than RMB 90million to improve the community infrastructure as well as to assist students. We have regarded it as a priority to recruit and train local talents. Currently, the local Tibetan employees account for 34% of the Jiama Mine staff while the local minority employees of CSH Mine account for 12% of its total employees. Jiama Mine, as a model of harmonious mining company, has gained the honor of "Corporate Social Responsibility Demonstration Base" from the Chinese Academy of Social Sciences and "Model Staff Home" from the ACFTU (All-China Federation of Trade Unions). CSH Mine has also won "Enterprise with Best Social Responsibility" in the Inner Mongolia Autonomous Region.

The company has attached great importance to scientific and technological innovation, which is the source of profits and benefits. The construction of key laboratories and technical centers has been constantly strengthened in Jiama Mine, and the laboratory has successfully passed the CNAS certification. Meanwhile,

Jiama Mine has made efforts to create two innovative brands: *Xiezhao Labor Model Innovation Workshop* and *Mineral Processing Technology Innovation Workshop*. And it has also encouraged the initiative for innovation among employees. Through cooperation with Changchun Gold Research Institute, the technical index of copper-molybdenum separation has been improved. The construction of digital mine has entered a new stage. At present, more than 30 sub-systems of digital mine have been completed, and the framework of digital mine has been built up. Jiama Mine has gained three scientific and technological achievements and one invention patent. In terms of CSH Mine, the project of impurity ions reduction in lean liquid has entered the commissioning stage, which remains in good condition. CSH Mine has obtained one scientific and technological achievement and 14 practical patents in total.

Facing with fierce market competition, China Gold International has realized that the optimization of "Five Rates" (loss rate, dilution rate, recovery rate, equipment rate and labor productivity rate), cost reduction and benefit improvement along with cost control are the fundamental initiatives to enhance competitiveness and respond to fluctuations of gold and copper price. Proceeding from our Company, we explore the potential, encourage technological innovation, cultivate frugality to establish the long-term mechanism. Following the working concept of "cost control over whole process plus scientific and technological advance" and "cost control over whole process plus reform and innovation," Jiama Mine seeks new breakthrough from the aspects of geology, mining, processing, equipment, energy, supplies and so on. Jiama Mine registered 93.14 million RMB in cost reduction through network cost management. With preferential tax policies of high-tech enterprises, Jiama Mine has reduced its tax rate from 15% to 9%, saving 21.66 million RMB. It also has applied for enjoying the preferential on intergrown and associated mineral resources, saving 22.49 million RMB of tax in the whole year. CSH Mine recorded a total of 47.98 million yuan in cost reduction and benefit improvement in the whole year through taking effective measures, such as repairing, optimizing the organization, and streamlining the staff.

The year of 2018 will be an important year in which we make great achievements. We will make unremitting efforts to strive for excellence. While completing the annual production target, we will actively practice our social responsibilities to realize the aspiration for "13th Five-year Plan" of China Gold International so as to bring more benefits to employees and create greater value for shareholders.

**Mr. Liu Bing**  
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 properties 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. CSH commenced its commercial production in July 1st 2007. And the Company holds 100% interest in the Jiama Mine. Jiama hosts a large-scale copper-gold polymetallic deposit consisting of copper, gold, molybdenum, silver, lead and zinc. Phase I of the Jiama Mine commenced commercial production in September 2010, and its design capacity reached 6000 ton per day in early 2011. The Jiama Phase II expansion project includes two operation series, each of which has a processing capacity of 22,000 tons per day. The Series I reached commercial production at the end of 2017. The ore processing capacity of Jiama Mine has been increased from 6,000 tons per day to 28,000 tons per day. It is expected that Series II will be commercialized by mid-2019, raising 22,000 tons per day in ore processing.

China Gold International is listed on the main board of the Toronto Stock Exchange ("TSX") and the Stock Exchange of Hong Kong Limited ("HKSE") under the stock code CGG and 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

	Unit	2017	2016	2015	2014	2013
<b>Total Revenue</b>	Million USD	412	339	340	278	303
<b>Profit from continuing operations</b>	Million USD	79	34	39	73	76
<b>Net (loss) profit</b>	Million USD	64	-12	-7	42	57
<b>Basic earnings per share</b>	Cents	15.93	-3.36	-2.07	10.02	13.88
<b>Total asset</b>	Million USD	3,230	2,967	2,781	3,013	2,219
<b>Total non-current liabilities</b>	Million USD	1,324	737	971	850	431

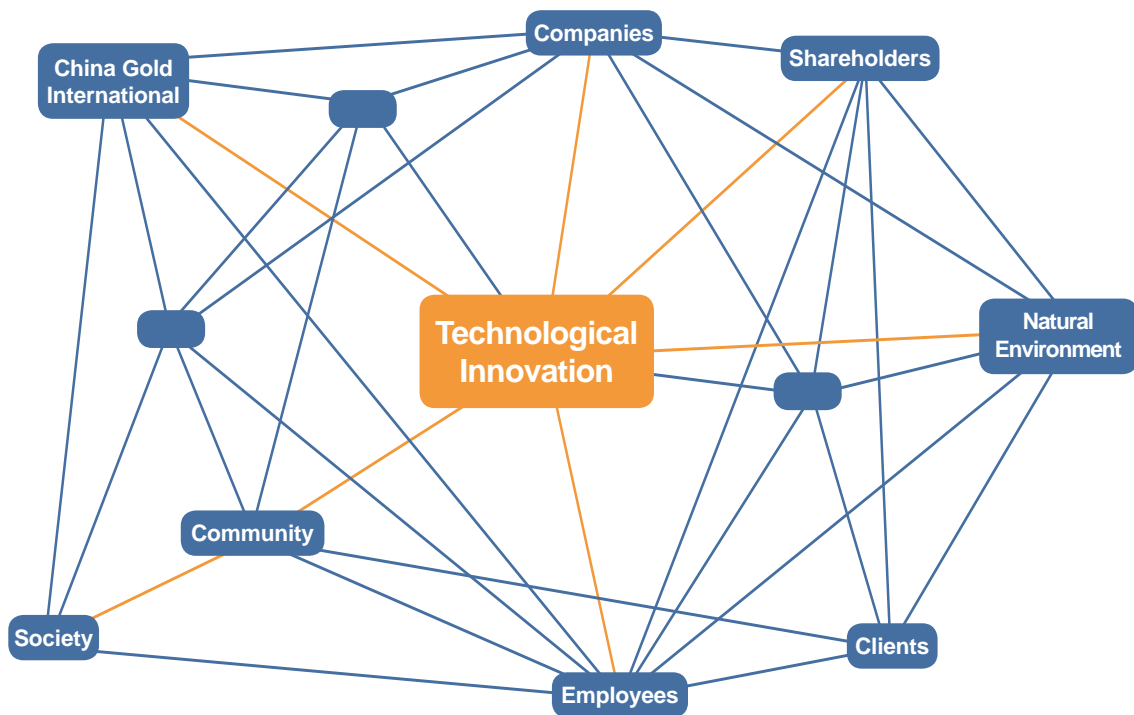


# Social Responsibility Philosophy



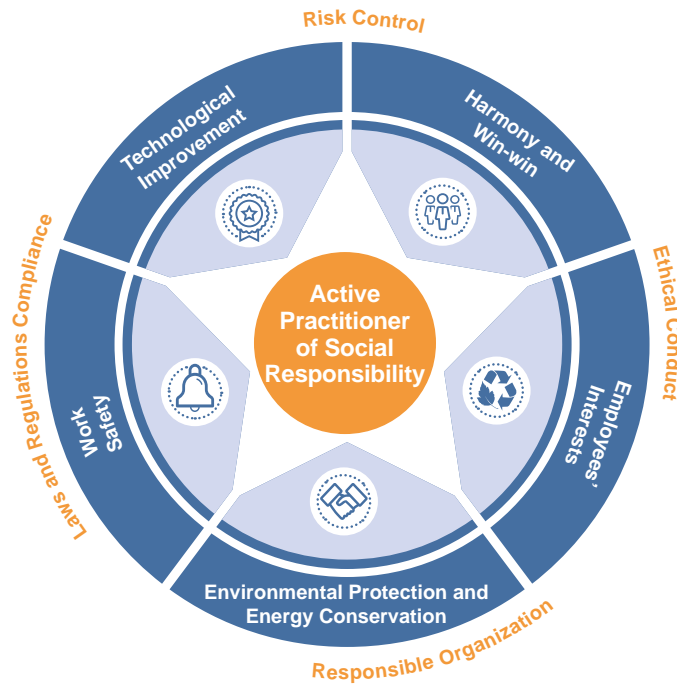
## Social Responsibility Vision

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.



## 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.

## Social Responsibility Values

1 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.

2 Never carry out gold production wherever compromising ecological environment.

3 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.

1

2

3





## Core Responsibilities



# 1

### Environmental protection and energy conservation

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.



# 2

### Work safety

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.



# 3

### Employees' interests

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.



# 4

### Technological progress

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.









# 5

### Harmony and win-win

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.

## Social Responsibility Performance Scorecard

Scope of responsibilities	Social responsibility targets for 2017	Completeness of target
 <b>Responsibility management</b>	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
 <b>Economic performance</b>	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
 <b>Safety performance</b>	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, effectively 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
	Accelerate safety-oriented technological renovations in processes and equipment, strengthen R&D, and leverage technological innovations to achieve safety management.	A
 <b>Caring to employees</b>	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
	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
 <b>Environmental performance</b>	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
 <b>Social performance</b>	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

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



# Responsibility Management



## Responsible System

### 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.

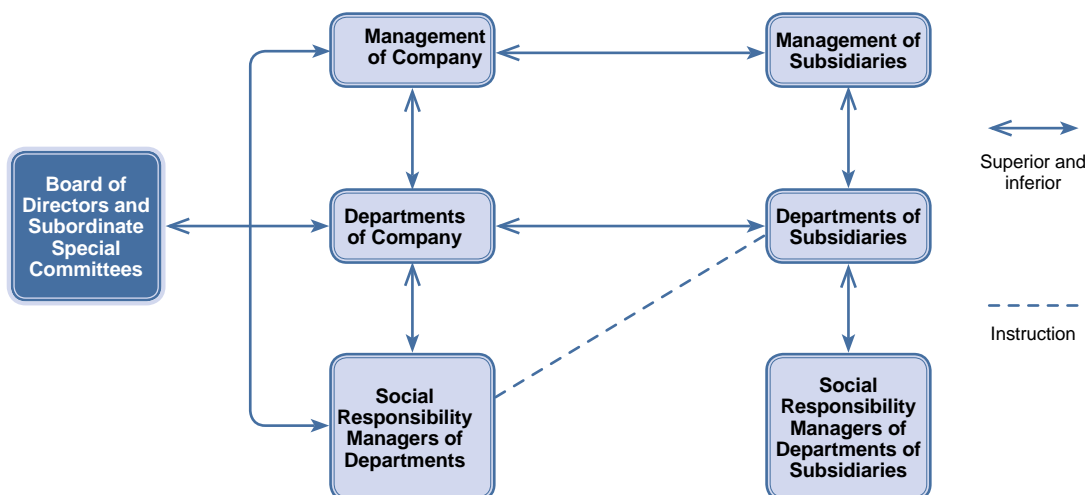
Social responsibility team, including major management from the subsidiaries, is responsible for decision-making and management of their social responsibility issues.

### Daily management bodies

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

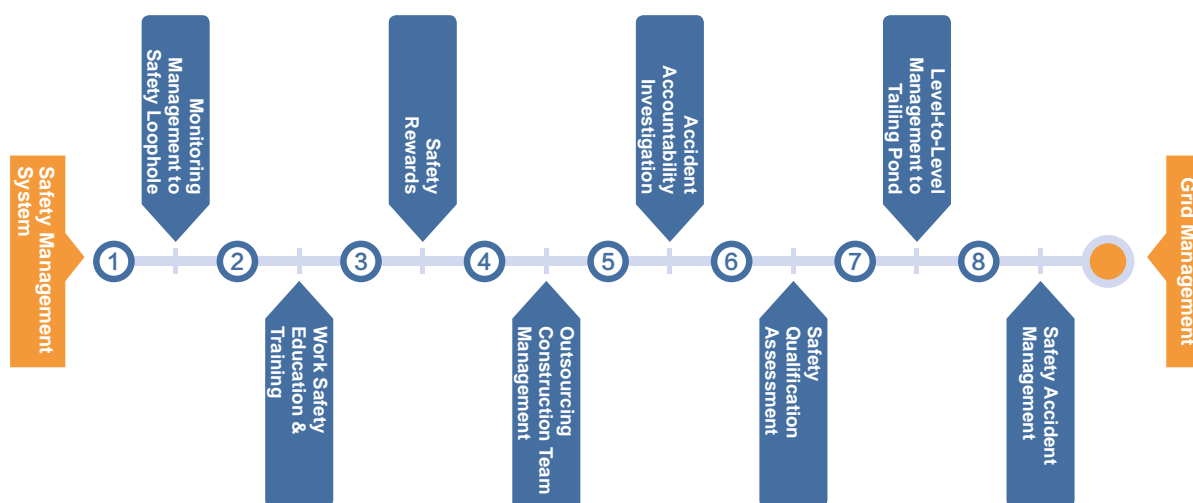
The Board Secretary Department is responsible for disclosure of corporate social responsibility information, as well as responses to enquiries of investors, regulatory authorities and other stakeholders on corporate social responsibility issues.

### Organization structure



## ❖ 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 2017, 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.



## ❖ 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.

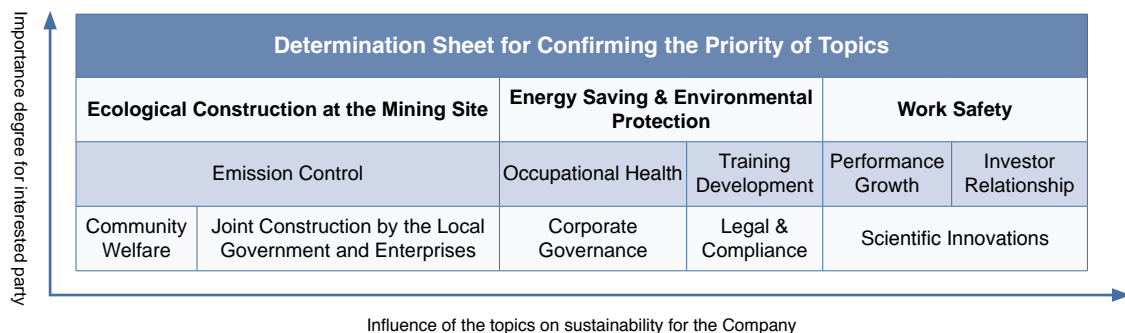
### Process to identify social responsibility topics

**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 party and the influence of the topics on development of 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

### List of social responsibility topics

Category of responsibilities	Social responsibility topics
<b>Responsibility performance</b>	Concept establishment, organization setting, strategic planning, the integration of concept into operations, communications and surveys in respect of social responsibility.
<b>Market performance</b>	Financial performance, investor relations management, customer relationship management, product quality management, responsibility for procurement, business integrity and fair competition.
<b>Social performance</b>	Compliance with laws and regulations, implementation of national policies, protection of employees' interests, equal employment, occupational health management, employee training and development, work safety, localized operations, charity and public welfare, volunteer activities.
<b>Environmental performance</b>	Environmental management system, responses to climate change, development and application of environmental technologies and equipment, energy and water conservation, development of circular economy, remnant ore recovery, emission reduction of waste gas, water and slag, tailings treatment and ecological protection at mining area, conservation of land resources, reduction of waste emission.



## 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.

1

### 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.

2

### 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.

3

### 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

Interested Parties	Description	To the expectation of Company	Communication means	Key indicators
 <b>Governments</b>	Chinese and local governments	Proactively implement the state's macro control, promote consolidation under the national industrial reviving plan, strengthen supervision on work safety, protect the environment	Plans and proposals, meetings, special reports, statistic statements and visits	Total tax, headcount
 <b>SASAC</b>	An investor on behalf of the state	Achieve preservation and addition of state-owned assets, improve corporate governance, focus on principal business, uplift competitiveness, proactively implement the state's energy conservation and emission reduction policies, achieve green operations	Rules and regulations, business targets, assessment criterions, work reports, statistic statements	Principal operating revenue, total profit, return on net assets, preservation and addition ratios of state-owned assets
 <b>Employees</b>	All members in the Company's organizational structure	Protect employees' interests, assure stable employment opportunities and compensation, improve career path, provide safe and healthy work environment	Labor unions at various levels, regular employee representative conferences, smooth internal communication channels	Employment contract signing ratio, social insurance coverage ratio, employee loss ratio, training investment, number of proposals at employee representative conferences
 <b>Customers</b>	Customers that purchase products or services	Keep promise, provide cost-efficient products and quality services, achieve mutual benefits	Close communications with customers, strict execution of contracts, extensive information about products and services	Rating from customers, customer satisfaction
 <b>Business partners</b>	Suppliers, contractors, financial institutions, research institutions, consulting agencies, etc.	Observe business ethics and laws and regulations, establish long-term cooperation to achieve mutual benefit and win-win	Negotiations on strategic cooperation, high-level meetings, biddings, day-to-day business relationship, regular visits	Execution of contracts and agreements
 <b>Investors and creditors</b>	Holders of shares and bonds of the Company and its subsidiaries	Continuously enhance corporate value, reduce risk, continue as a going concern, satisfy debt service as scheduled, pay dividends	Accurate and timely information disclosure, regular visits, annual reports, general meetings	Credit rating, minority interests
 <b>Community and the public</b>	Local society where we operate	Promote sustainable development of community economy, support public welfare, protect the community's environment, achieve common prosperity	Agreement on co-development, participation in community projects, regular communications, joint celebration events	Investment in community development, total donation to community welfare
 <b>Non-government organizations</b>	International organizations, industry associations and local groups	Support social groups and organizations, fulfill the charters, improve disclosure of operational information, support environmental and other public welfare undertakings	Active participation in meetings, continuous improvements, advice and suggestions	Attendance to relevant meetings, investment in public welfare

## 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, the Chairman and Secretary of CPC of the Group, and Liu Bing, the General Manager and Deputy Party Secretary of the Group, were inspecting Jiama Mine



Song Xin, the Chairman and Secretary of CPC of the Group, was inspecting CSH Mine

## External communication

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



The State Council Assessment Group for Poverty Alleviation was inspecting and instructing the work in Jiama Mine



Baima Wangdui, the Party Committee member of the Tibet Autonomous Region, secretary of CPC of Lhasa City, was visiting Jiama Mine for research





Outsider Board members of the Group were visiting CSH Mine



Zhuo Xiaojing, Deputy Director of Anhui Gold Administration Bureau, was visiting CSH Mine for study

## 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.



Jiama Mine was awarded as High-tech Enterprise



CSH Mine won the honor of Excellent Collective of the 6th Five-Year Plan of Law Popularity in the Wulate Middle Banner

## Honors for China Gold International from 2015 to 2017

Company	Year	Honors	Granting unit
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.	Business in Vancouver
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
China Gold International	2015	Top 100 Most Profitable Companies (Ranked No. 32) Note: Rankings are based on the net income in 2014.	Business in Vancouver
China Gold International	2015	Fastest-Growing Companies in British Columbia (Ranked No. 41)	Business in Vancouver
China Gold International	2015	One of 40 Best Manufacturers in Canada (ranked 40) Note: Rankings are based on the net income in 2014.	Canadian Mining Journal
China Gold International	2015	Largest Companies in British Columbia (Ranked No. 95) Note: Based on 2014 Revenues	BC Business Magazine
China Gold International	2015	Top 100 Public Companies in British Columbia (Ranked No. 41) Note: Based on 2014 Revenues	Business in Vancouver
China Gold International	2015	Biggest Mining Companies in British Columbia (Ranked No. 14) Note: Based on 2014 Revenues	Business in Vancouver
China Gold International	2014	Biggest Mining Companies in British Columbia (Ranked No. 10)	Business in Vancouver
China Gold International	2014	Top 100 Public Companies in British Columbia (Ranked No. 34)	Business in Vancouver
China Gold International	2014	Fastest-Growing Companies in British Columbia (Ranked No. 26)	Business in Vancouver
Huatailong	2017	Excellent Collective for Supporting and Helping Village (community) Labor Unions in Lhasa city in 2016	Trade Union of Lhasa City
Huatailong	2017	Worker Pioneer	Trade Union of Lhasa City
Huatailong	2017	Second Prize of Innovation Achievement Award in the 23rd National Enterprise Management Modernization	National Enterprise Management Modernization Innovation Results Review Committee Office
Huatailong	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
Huatailong	2016	First Prize of 2016 Good News of Enterprise Press in China Gold Industry	China Gold News

Company	Year	Honors	Granting unit
Huatailong	2016	Third Prize of Scientific and Technological Award (application of solar heating to plateau and alpine mining areas)	China Gold Association
Huatailong	2016	Second Prize of Economic Model and Optimizing S&T in Hornfel Orebody of Jiama Copper Polymetallic Mine	China Gold Association
Huatailong	2016	Second Prize of Automation Design and Applied Science and Technology of Jima 40,000 tons Processing in High Altitude	China Gold Association
Huatailong	2016	First Prize of Safety Knowledge Contest in Maizhokunggar County	Trade Union of Maizhokunggar County, Administration of Work Safety Supervision of Maizhokunggar County
Huatailong	2016	Outstanding Management in National Integration of Industrialization and IT Application	National Federation of Integration of Industrialization and IT Application
Huatailong	2016	Nomination Award of Third Moral Model in Lhasa City	The Committee of Civilization in Lhasa City
Huatailong	2016	National Model Family	All-China Federation of Trade Unions
Huatailong	2016	Management Innovation of State-enterprise of China (2016) Level: Second	The Chinese Institute of Business Administration, Editorial Board of State Enterprise Management
Huatailong	2016	Outstanding Contribution Unit for the 25 Anniversary of China Gold News	China Gold News
Huatailong	2016	Advanced Grassroot CPC Organization among Central Enterprises	Party Committee of SASAC of State Council
Huatailong	2016	The Advanced Group in Science and Technology of China Gold Industry during 12th Five-year Plan	China Gold Association
Huatailong	2016	The Advanced Group in Science and Technology of China Gold Industry during 12th Five-year Plan	China Gold Association
Huatailong	2016	First Prize of Science and Technology Award	China Gold Association
Huatailong	2016	First Prize of Equipment Management	China Association of Plant Engineering
Huatailong	2016	First Prize of Science and Technology Award	China Non-Ferrous Metals Industry Association
Huatailong	2015	Outstanding contributions to public welfare	Lhasa Charity Federation of Trade Unions
Huatailong	2015	Ankang Cup Winning Unit	All China Federation of Trade Unions
Huatailong	2015	The May 4th Red Flag Youth League Committee	Lhasa Municipal Committee of Communist Youth League
Huatailong	2015	Social Responsibility Demonstration Base	Chinese Academy of Social Sciences
Huatailong	2015	National Advanced Equipment Management Unit	Chinese Association of Plant Engineering
Huatailong	2015	New high-tech enterprise	Department of Science and Technology, Department of Finance, the State Administration of Taxation of Tibet Autonomous Region
Huatailong	2015	"Advanced Village-based Work Team for strengthening the base and benefiting the people" in the Autonomous Region	CPC Committee and People's Government of Tibet Autonomous Region
Huatailong	2015	"Excellent Organization Unit for strengthening the base and benefiting the people" Autonomous Region	CPC Committee and People's Government of Tibet Autonomous Region

Company	Year	Honors	Granting unit
Huatailong	2015	"Advanced Village-based Work Team for strengthening the base and benefiting the people" in Gyangze County	People's Government, CPC Committee of Gyangze County
Huatailong	2015	2012--2015 Annual "Four Industries Construction" Advanced Group in Lhasa	Lhasa Municipal People's Government
Inner Mongolia Pacific	2017	2011-2015 Excellent Collective for Law Popularity and Governance by Law	Urad Zhongqi Committee of the Communist Party, The Urad Government
Inner Mongolia Pacific	2017	High-tech Enterprise	Department of Science and Technology, Department of Finance, National Taxation Bureau and Local Taxation Bureau of Inner Mongolia Autonomous Region
Inner Mongolia Pacific	2017	Two Integration Management System Assessment Certificate	Beijing Grand Honour Certification Co., Ltd.
Inner Mongolia Pacific	2016	Best Development Award of 2016 China Gold Congress	Committee of China Gold Congress
Inner Mongolia Pacific	2016	2015 Top 10 Mines of Gold Production	China Gold Association
Inner Mongolia Pacific	2016	2016 Employee Innovation Workshop of Urad Middle Banner	Trade Union of Urad Middle Banner County
Inner Mongolia Pacific	2016	Model Unit of Safety Production	Safety Production Committee of Bayannaer City
Inner Mongolia Pacific	2016	Best Service Award	China National Gold Group Co., Ltd
Inner Mongolia Pacific	2016	Water-saving Enterprise	Leading Group of Water-saving of Urad Middle Banner
Inner Mongolia Pacific	2016	Enterprise with Best Social Responsibility in the Second Session in Inner Mongolia Autonomous Region	Autonomous Region Committee Propaganda Department, the Federation of Trade Unions, Chamber of Industry and Commerce, State-owned Assets Supervision and Administration Commission
Inner Mongolia Pacific	2015	2015 Advanced Collective of National Unity and Progress in Wulate Middle Banner	Wulate Middle Banner committee, the Government
Inner Mongolia Pacific	2015	The 14th National Professional Workers Ethics Advanced Unit	Guidance and Coordination Team of National Staff's Professional Ethics Construction Guidance (composed of the National Federation of Trade Unions, the Propaganda Department of the Central Committee of the CPC, the Central Civilization Office, Ministry of Industry and Information Technology (MIIT), SASAC)
Inner Mongolia Pacific	2015	2014 Top Ten Mines of China Gold Economic Performance	China Gold Association
Inner Mongolia Pacific	2015	2014 Top Ten Mines of China Gold Production	China Gold Association
Inner Mongolia Pacific	2015	Youth League Branch of May 4 Red Flag	Youth League of Bayannaer City Committee



## 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 2017, the Company invested a total of RMB 284 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 2017, the chemical oxygen demand and sulfur dioxide emission of Company were respectively 11.06 tons and 30.99 tons, a decrease of 3.52% and 2.40% respectively compared with that in the previous year. 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 study

Energy saving and emission reduction to a low-carbon economy is a relentless pursuit for mining companies. Jiama Mine has carried out for multiple times technical transformations based on the characteristics of the company's stope, electrification of the plant's electricity distribution equipment, and long-term LV transmission lines. It has successively integrated the mine lines into three 10KV HV transmission lines, rationally allocated power loads, and improved the power grid, and eliminated unnecessary lines and transformers to reduce losses. After the completion of the second phase of the project, the mine lines were reconnected to the 110KV substation in the stope, further achieving optimization. Meanwhile, the reactive power compensation of the power grid system was optimized to form three types of reactive power compensation measures in parallel as centralized compensation, grouped compensation, and single motor compensation. Specifically, to install parallel capacitor bank for centralized compensation in high and low voltage distribution lines, and to install shunt compensation capacitors for group compensation in concentrated areas of small electric appliances. For some large-scale equipment that requires long distances for LV transmission distances, to install capacitors next to the electric equipment to perform on-site compensation. Through these measures, the power supply capacity of the power supply network is fully utilized, which effectively reduces the line loss of LV power transmission. Moreover, the power factor of the company's factories and mines can reach or exceed 0.95, the loss rate drops by 2%, and saves 5 million yuan in the annual electricity cost, and 9 million yuan in the capacity electricity cost. It sets a good example for energy conservation and emission reduction and protection of the Tibetan ecological environment.

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 the 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 will use tailings for downhole filling project to recycle the wastes, decrease filling costs and reduce discharge of tailings. The completed infrastructure of this project is under commissioning. Two ways, cemented filling with full tailings and non-cemented filling with full tailings will be adopted for the filling system. The annual processing capacity of the Phase-II processing plant of Jiama Mine is around 16.5 million tons, so that the annual tailings discharge amount is about 6.5 million cubic meters under normal operation. After the filling system is established, more than 2.3 million cubic meters of tailings will be recycled for filling the down-hole worked-out areas, thereby reducing the tailings discharged to 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. Through the feasibility study jointly carried out by the company and Beijing General Research Institute of Mining & Metallurgy on the tailings filling technology in plateau areas, the filling methods adopted are able to effectively control the ground pressure activities and ground pressure disaster accidents, reduce the filling costs and decrease the discharge of tailings. Designed by Changchun Gold Design Institute and constructed by China Non-ferrous Metals Industry's 12th Metallurgical Construction Co., Ltd. and China Feiyi LLC., the down-hole filling project, which is the first above an altitude of 4,800m in Tibet region, has been completed within 11 months only, with a total investment of nearly RMB 100 million.



Backfill station at Jiama Mine



There is a certain amount of hazardous wastes produced by Jiama Mine. 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	2017	2016	2015	2014	2013
Medical wastes (ton)	0.24	0.22	0.21	0.21	0.20
Used lubricants (ton)	19.00	3.00	3.00	3.00	3.00
Containers of chemical agents (ton)	0.50	0.50	0.45	0.42	0.40

There was no environmental pollution accident in 2017. However, in view of the possible environmental pollution accidents, Jiama Mine has taken the measures, such as building environmental protection dam and laying separate sewage and clean water pipes, in the mining area to prevent overtopping of tailings ponds, leakage of tailings pipeline and other accidents. In addition, the company has revised and filed the contingency plan for environmental emergencies, analyzed those links that may cause environmental pollution, prepared the emergency measures and organized emergency drills on yearly basis to enhance the disposal ability in case of any environmental emergency.

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.

In 2017, the total amount of hazardous wastes generated was about 20 tons, mainly including the used lubricants from the ball milling systems of the Phase-I and Phase-II processing plants. The lubricants of the ball milling system of the Phase-I processing plant are replaced once a year, generating 3 tons of used lubricants each time, and 2 tons of used lubricants are generated by the ball milling system of Phase-II processing plant monthly. Due to the equipment commissioning in 2017, less amount of used lubricants was generated from the Phase-II processing plant.

In 2017, a total of 2,265,981 tons of tailings were discharged from the Phase-I and Phase-II tailings ponds of Jiama Mine, of which about 1.8 million tons were from the Phase-I.

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.

Based on the National Hazardous Waste Inventory, the company's hazardous wastes are the used lubricates replaced from the crushing and ore-dressing equipment. Since the amount of used mineral oil generated by the company is less than that of the China Railway 19 Bureau Group Co., Ltd. which is the mining construction company, CSH Mine has authorized China Railway 19 Bureau Group Co., Ltd. to help store and transfer the used lubricants produced by the company and strictly implemented the *Measures for Administration of the Hazardous Waste Transfer Duplicates*.

The mining waste rock of CSH Mine belongs to Class-I general industrial solid waste. The company stores the waste rocks in the refuse dump as per specifications and carries out timely and regular watering to prevent dust generated in the dump. After the service period of the dump is expired, it will be sealed and covered with soil to restore the vegetation by sowing grass seeds.

CSH Mine has adopted effective measures to avoid discharge of pollutants during the production and achieved significant results.

#### **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 desulphurization). 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 desulphurization 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.

Environmental Protection Performance Table of CSH Mine

Indicator	2017	2016	2015	2014	2013
Carbon dioxide emission (ton)	17,540	17,682	19,456	20,708	23,523
Carbon dioxide of raw ore (kg/ton)	0.89	0.79	0.92	0.90	1.62
Ashes and cinders(ton)	2,028	1,458	1,180	854	1,270
Ashes and cinders per ton ore (kg/ton)	0.103	0.065	0.056	0.037	0.087
Waste rock (10,000 tons)	9,138	9,269	9,633	9,377	7,787
Waste rock of raw ore (ton/ton)	4.60	4.10	4.50	4.10	5.30

**Prevention and control of solid wastes:**

A total of 6.3 tons of used mineral oil were produced by CSH Mine in 2017, 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	2017	2016	2015	2014	2013
Waste mineral oil (ton)	6.30	6.46	6.25	6.62	6.45
Wastes per ton ore (g/ton)	0.320	0.289	0.295	0.286	0.443

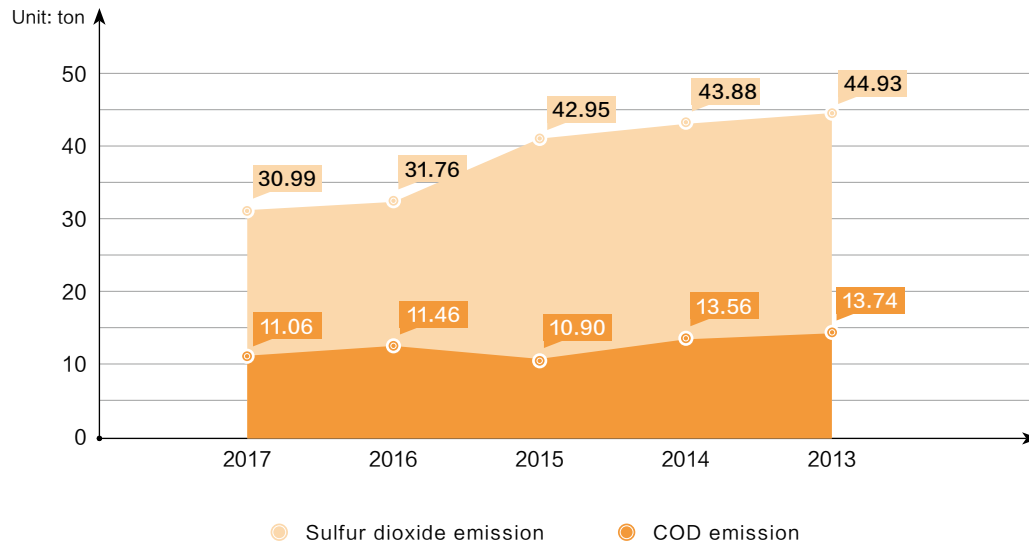
Non-hazardous waste at CSH Mine is mainly mining waste rock, all of which are stored in waste rock yard according to the plan. Those waste rocks are used to build the flood intercepting trenches to prevent water and soil loss. At present, the company is further deepening the mining depth, which reduces 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.

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.

Non-hazardous wastes at CSH Mine have waste rock, ashes and cinders by boilers. Domestic wastes are stored in landfill, so statistics are not available.

## Environmental performance of China Gold International



### ✦ Extensive adoption of advanced equipment and technology

Both of the Company's mines were developed a few years ago, following the principle of "high standard, high starting point and strict requirements", and each mine has adopted the most advanced equipment and technologies nowadays to realize high efficiency of energy conservation and emission reduction.



Jiama Mine lays 15,000m<sup>2</sup> of solar energy to build a smoke-free mining area

### Case study

For the problem of excessive dust emission during the unloading of gyratory crusher at the No. 2 crusher workshop, CSH Mine re-arranged the sprinkler, lengthened the discharge port, added a dust collector to the idle discharge port, ensuring that the water jet was used to remove dust from the top of the discharge port, and dust was effectively suppressed after the transformation.

At the same time, the company, according to the environmental protection requirements of production workshop dust exclusion, selected Q235B plates, purchased aluminum shutters, and made three bellows in flanges. The crew of the mechanics installed the bellows and solved the problem of dust emission in No. 2 workshop. In order to better control fine material spilling and dusting at the lower loading port of the crushing workshop, a wind-proof dust-reduction door was installed for all the feeding ports; meanwhile, technological transformation of the material-feeding port and the installation of a telescoping tube were conducted, reducing the problem of dust caused by high discharge drop.



### Case study

Through more than one year's cooperation and efforts with first-class scientific research institutions and technical experts at home, Jiama Mine has achieved three major breakthroughs in copper-molybdenum separation technology: simple process, stable indicators and green environmental protection, realizing industrial production. At the same time, the production line is equipped with high-efficiency energy-saving equipment. All kinds of fans and pump equipment are adjusted by frequency converter and are compensated by capacitor in the workshops of ore crushing, grinding and floating, saving more than 30% of energy and increasing power factor to over 0.95, respectively.



Jiama Mine's newly-built equipment



## 🌟 Awareness campaigns for energy conservation and emission reduction

Responding to the energy conservation calls of the government and its parent, the Company staged its campaign with a slogan of "Save our energy in a low-carbon lifestyle", to carry forward the company-wide energy conservation goals. The practical energy conservation technologies were earnestly promoted to carry out the Company's energy conservation and emission reduction.

### Case study

In 2017, Jiama Mine accurately measured each spot of electricity consumption, installed metering facilities, and drew a company-wide supply network map and electricity measurement map. They developed and issued detailed documents, such as Energy Management System and Administrative Measures for the Use of Illegal Electricity and other documents. The company urged power-using departments to strictly implement the above requirements, conduct energy analysis and cost control. Jiama defined responsibilities, arranged specific personnel, ensuring that their responsibilities were fully implemented. Irregular inspections were carried out in accordance with regulations to prevent electricity leakage, saving more than 800,000 yuan.

## Recycling of Water Resource

### Case study

In CSH Mine Smelting and Metallurgy Workshop, the old and barren solution upper reactor has been equipped with 4 pumps, of which 3 pumps works with full-frequency, one automatic start-stop pump (starting and stopping according to liquid level). In July, the metallurgical plant arranged electro-mechanical personnel to carry out thorough overhaul on the 4 old pumps in the workshop, and thoroughly cleaned the debris inside the pumps. After the inspection was completed, 3 pumps were able to meet the flow rate of barren solution in the winter. Subsequently, the electrical team changed automatic start-stop to centrally control and used as standby pumps. On one hand, the working efficiency of the pumps was improved, and on the other hand, the cost of electricity was saved. It was estimated that by the end of the year, 237,600 yuan would be saved (the motor power of the pump was 220kw).



The 3 old and pregnant solution pumps set in the workshop of the Smelting and Metallurgy Workshop would affect the flow of precious liquid during maintenance. In order to ensure the flow of precious liquid, the metallurgical plant added a standby pump to the old and pregnant solution pool in June 2017. Three old and pregnant solution pumps and standby pumps can be used interchangeably. On the one hand, the flow of pregnant solution can be guaranteed, and on the other hand, the barren solution pumps could be maintained.

The No. 2 Smelting and Metallurgy Workshop formally used 4 pregnant solution pumps, which failed to meet the demand for use at full frequency. In order to maintain the balance of pregnant and barren solution in No. 2 workshop, the newly added pipelines of No. 5 and No. 6 pregnant solution pumps were connected into No. 2 workshop as a standby pump in it after retrofitting. The 5# and 6# pregnant solution pumps can not only transfer the pregnant solution from the No. 2 workshop and the 2C section to No. 1 workshop, but also can be used as the standby pump of No. 2 workshop.



Indicator		2017	2016	2015	2014	2013
Water consumption	Newly added water (in 10,000 ton)	272.56	208.63	156.76	184.44	129.8
	Circulating water (in 10,000 ton)	7,086	6,974	8,602	4,355	3,416
Water consumption per RMB10,000 output		22.84	26.33	27.63	37.83	37.53
Water consumption per ton ore (ton)		0.31	0.24	0.25	0.28	0.42

### Case study

Adhering to the guiding principle that headstream control and end-of-pipe treatment, with the help of Changchun Gold Research, Jiama Mine has dedicated great human and material resources to building domestic sewage plant for one year, with the investment of 6million RMB. The domestic sewage project adopts the "original treatment facility + BAF + filtration + disinfection" process (including maintenance of original treatment facilities, BAF treatment system for sewage, sewage filtration treatment system, and sludge concentration and transportation processing system) with a treatment capacity of 20m<sup>3</sup>/h, ensuring that all domestic sewage is treated throughout the year. The treated reclaimed water quality meets the first-grade discharge standard of Integrated Wastewater Discharge Standard (GB8978-1996) and is used for greening and watering in the mining area.



Jiama Mine invested 72 million yuan in constructing the sedimentation tank for iron removal of Sibü acidic spring water treatment plant

## 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 Mine intensifies eco remediation work and strictly implements eco protection "three simultaneous" systems and environmental monitoring systems. Solid waste, industrial wastewater, dust, noise, which is strictly supervised as per relevant regulations, has improved a lot. The company carries out greening projects. It has introduced energy-saving irrigation technology (drip irrigation system and dust reduction system) from Xinjiang Tianye company, with a total investment of 4.251 million yuan. It is used for the irrigation of the green belt with 57,500 m<sup>2</sup> of tailings connecting road and road dust reduction. Great efforts have been made in planting trees and soil and water conservation. Since 2008, it has invested 98.91 million yuan for water and soil conservation and environmental governance, of which the investment in greening is 52 million yuan. A total of 1 million plants such as sea buckthorn and willow have been planted, and 12,000 kg of grass seeds have been sowed. At present, the greening area is about 230,000 m<sup>2</sup> with the coverage rate over 85%.

CSH Mine Mining has always carried out institutional reform of ecological environment and building wild China, put forward at 19<sup>th</sup> National Congress meeting, stuck to ecological protection and implemented green development while upholding that lucid waters and lush mountains are invaluable assets. In 2017, in line with the principle of protection while mining, the company launched geological environment restoration activities, including greening and landscaping, through which covering 11 hectares waste dump, thus to build a green company that achieving harmony between development of mining industry and environmental protection.



Jiama Mine' s garden mine

## 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.

## 🌟 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.

### Case study

CSH Mine launched the 16<sup>th</sup> Month of Work Safety activities. Through hanging banners and posters, carrying out recitation, watching educational films and holding seminars in terms of work safety and environmental protection, the company constantly makes public work safety and environmental protection, improves employees' awareness and creates a sound and green atmosphere.



Work Safety Day

## 🌟 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 study

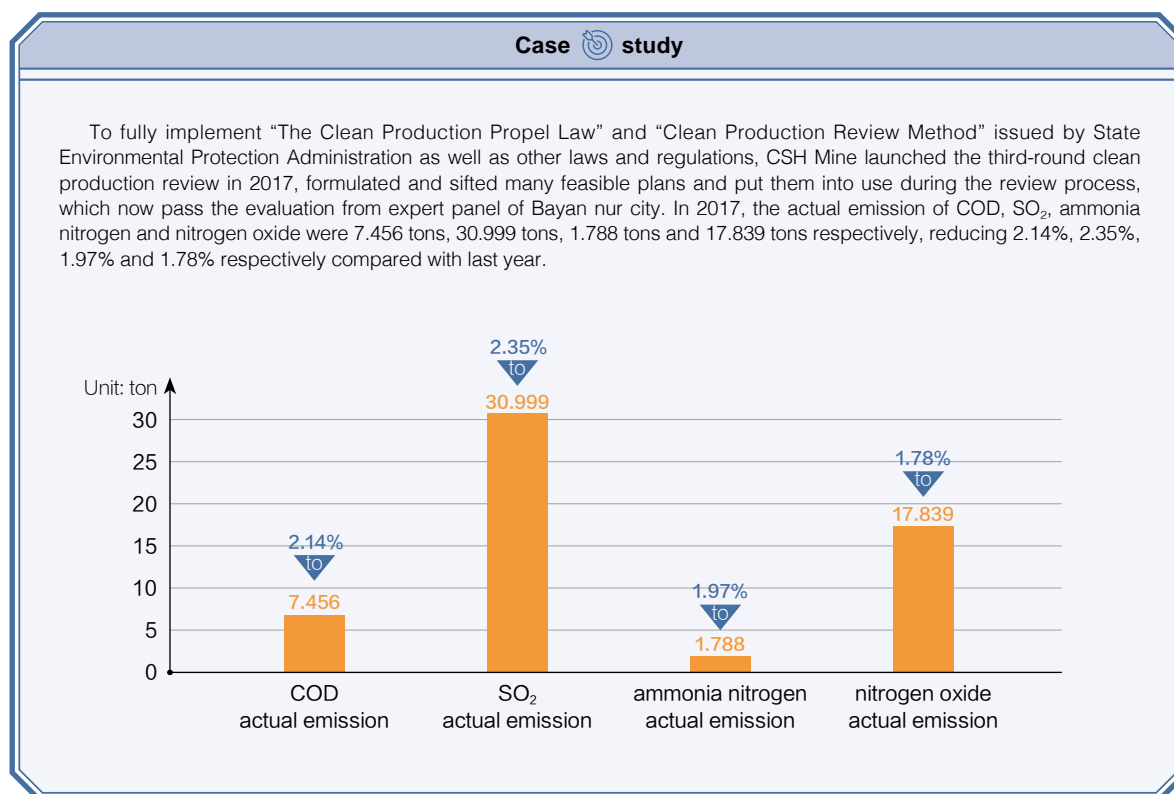
CSH Mine attaches great importance to scientific and technological innovation and insists on the benefits out of science and technology. The Research on Reduction of Impurity Ions in Heap Leaching Recirculating Fluids began its industrial expansion test in May 2017. The special heavy metal selective adsorbent used in the project can effectively remove heavy metal impurity ions such as copper, iron, and nickel in the heap leachate circulating liquid without interfering with the recovery of precious metals. The removal process is carried out under alkaline conditions, which ensures safety and environment-friendly. The product from industrial expansion test is a copper-containing sludge with a copper content of 15%-18%. The project has invested a total of more than 5 million yuan and is expected to officially go into operation in 2018. The successful operation of the project will provide strong technical support for the heap leachate circulating fluid treatment, heap leaching, and raising the gold recovery rate.



Recovery equipment of heavy metal in Inner Mongolia

## Green and environmental operation

The Company actively promotes the green office campaign. Given its cross-region operations, internal office system and teleconference system 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.



## 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.

## 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 2017, the Company made a provision of a total of RMB 1.19 million for rehabilitation. The Company has zero environmental pollution accident since its establishment.



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 eco environmental protection at their station. In 2017, the League committee of the company encouraged all youths and employees afforesting waste dump spontaneously, which curbed the raise dust and restored vegetation.



Jiama Mine launched China Gold public project at Jiama town



Afforested dumping site in CSH Mine

## 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.

In accordance with the Party Central Committee and the State Council's decision-making and deployment on the development of Tibetan advantageous mineral resources, with the strong support of the party committees and governments at all levels of the Tibet Autonomous Region, the integration of complex mineral rights relations between 8 mineral rights holders and 15 contractors involving 4 mining rights and 5 exploration rights in a total of 144 km<sup>2</sup> in Jiama were completed in July 2008. In accordance with the Trinity Exploration Concept of "scientific research, collage and production", Jiama Mine coordinated the technical power of the entire group and organized well-known scientific research institutes such as the Chinese Academy of Geological Sciences and Chengdu University of Technology as well as famous domestic geologists and academicians such as Chen Yuchuan, Duoji, and Ye Tianzhu. A dedicated research team has conducted in-depth studies on the geological conditions, metallogenic mechanism, ore-controlling structure and distribution of ore belts in Jiama mine, and proposed the porphyry-skarn metallogenic theory. Through prospecting and verification, a total of geological reserves were proven: 7.52 million tons of copper, 700,000 tons of molybdenum, 175 tons of gold, 10,900 tons of silver, 1.11 million tons of lead, and 640,000 tons of zinc, equivalent to nearly 20 million tons of equivalent copper. With an increase of 20 times, it is expected to become a world-class mine. The scientific research achievements have won the National Science and Technology Progress Special Award. The integration of resources development and exploration has won the Best Development Award of China Mining International Cooperation.

Resources are the lifeblood of mines, and the conservation and rational use of resources is the foundation of green mines. Since its establishment, Jiama 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.



Ye Tianzhu, former director of China Geological Survey was conducting work at Jiama Mine

## 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 has set up an environmental monitoring station to strengthen environmental monitoring work and do 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 Sugdong Gold Mine Plant Area. The monitoring results and evaluation conclusions show that the company's production and operation has not brought any impact on the surrounding environment, and all indicators are in compliance with national standards.



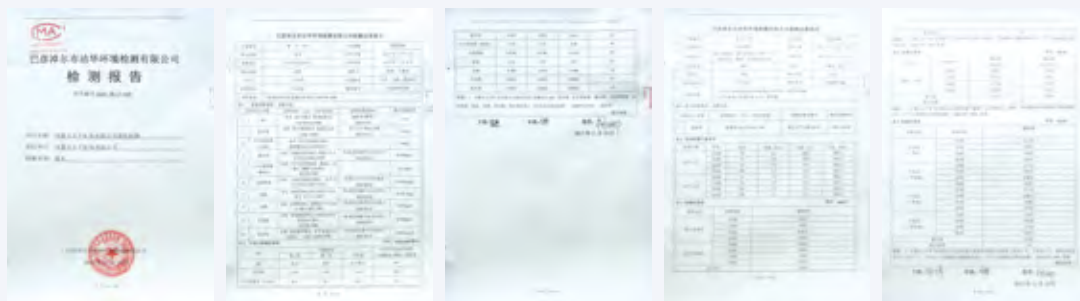
Laboratory bench for environmental monitoring station in CSH

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





# Production Safety

Fully aware of the long-term, arduous and complex nature of work safety, we adhere to the safety development concepts of "No unavoidable accidents" and "Human-oriented and safety-based development" 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 engineering, starting with employee education, 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.

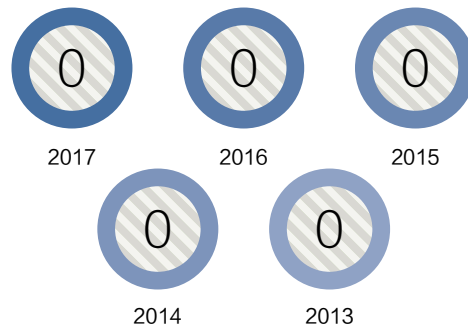


Liu Bing, CEO of China Gold International, led a team to CSH Mine for work safety inspection



## Safety Investment and Performance

In 2017, the Company invested a total of RMB 62.34 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.



Fatality rate for million-ton production  
China Gold International



## Safety Supervision

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

### Case study

CSH Mine has continuously increased its investment in work safety. In the whole year of 2017, it invested a total of more than RMB 30 million in production safety. The company also introduced a slope radar monitoring equipment to improve its safety technology and equipment levels and prevent landslide accidents. The two slopes radar monitors the entire slope of the pit, and has successfully monitored the landslide of the slope for eight times so far. Due to the timely warning of the slope landslide area and timely evacuation of personnel and equipment in the relevant area, the loss that is potentially caused by the landslide is greatly reduced. It effectively exerts the safety warning function of the slope monitoring radar in the open stope, and further enhances the company's intrinsic safety by increasing the safety production investment.

In 2017, Jiama Mine requested that the responsible of construction team should lead the team to go down to the well no less than three times a week. Otherwise 2,000 yuan would be fined. Jiama checks and reports the situation under the well every week, so that the construction team can pay more attention to safety. Further to regulate flow of the shift meeting, Jiama requires all attendant check at the pre-shift meeting. The shift leader or project manager shall describe problems and rectification in respect of operation spot. The shift dispatcher shall tell the requirements during work safety.

Safety management of plant branches arrange the shift in line with requirement. Records should be made while leader of external construction team and safety personnel illustrate incidents. Each dispatch room is installed with electronic screens, broadcasting safety warning before and after dispatching. Besides, safety management conducts random inspections over operation procedure, which aims to make operators more familiar with safety priorities, shift the awareness from "safety requirement" to "safety initiative".



Slope monitoring radar of open-pit of the CSH Mine

In 2017, the Company strictly implemented the system of leader on duty and the safety deposit system as well as introduced management systems for identification of safety risk sources and analysis of near safety accidents, and in the meantime further perfected the Standard of Punishment for the Illegal Disciplinary on the Production Site, Management System of Civil Explosives, Management Methods on the Extraction and Use of the Safety Measures Costs, Implementation Plan for Safety Deposit I the Production for all Staff, Leader on Duty System, Security Responsibility Management System for Team leaders, Management System of Potential Safety Hazard Checking and Controlling, Safety Management System of Sodium Cyanide, Safety Confirmation System of Working Site, Regulations on Non-Smoking Outdoor and other management systems, to further strengthen the basic work of occupational health and safety production management for the Company.

### 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.

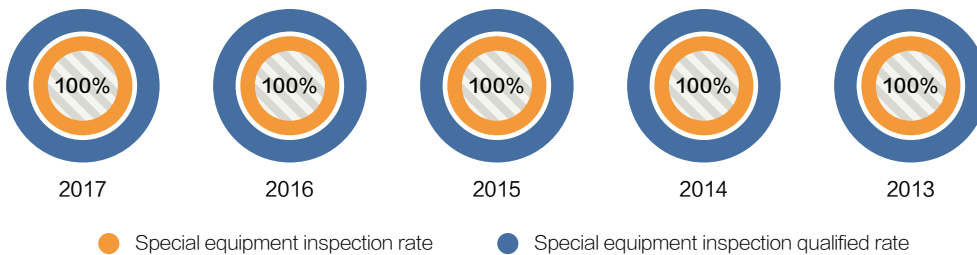
### Administrative penalties

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 2017, our special equipment inspection rate and qualified rate both reached 100%, sustaining the high level of safe operations.



1

Inspect on the fulfillment of work safety responsibilities

2

Inspect on major potential hazards, progress of rectifications, issues outstanding and the responses to emergency.

3

Inspect on the investment in work safety and the availability of funding for rectifications to potential hazards.

4

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.

### Contents of safety inspection

## Case study

Based upon practical experience in work, Jiama Mine has established a sound investigation system of potential hazards, covering routine inspection by the Work Safety Department, spot check by duty managers, monthly safety examination by Jiama Mine and special checks on a regular basis, all of which effectively control every production process to ensure zero hazard.

In the year of 2017, Jiama Mine inspected 390 of routine safety hazards. Jiama Mine examined 127 potential hazards during 12 special examinations, 399 safety hazards during 12 checks, all of which has been improved so far.

CSH Mine kept improving occupational health and environmental protection management system, strengthened on-site management and increased penalties for those occupational safety loopholes. In 2017, the company organized 59 times inspection on occupational health and environmental protection, excluded 507 items potential risks, all of which has been improved so far.



Jiama Mine conducted danger removal inspection on pumice stone



## 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 2017, the Company recorded zero loss or serious spill accident of explosives and hazardous chemicals.

## Case study

Jiama Mine regulates dangerous chemicals strictly and sets management system of dangerous chemicals, operation procedures and emergency treatment procedures at warehouses, laboratories and preparative workshops related to dangerous chemicals. In 2017, the company's quality inspection department set up an all-round monitoring system without a blind angle in hazardous chemicals warehouses and places of use to further strengthen the tracking and management of dangerous chemicals, improve the ledger records of various types of management records for hazardous chemicals, and further clarify relevant responsible persons of the management and use of warehouses, implement responsibility systems at all levels and strictly control dangerous chemicals and achieve good results. The quality inspection department carefully sorted out the hidden dangers and loopholes in the management of dangerous chemicals, completed the waterproofing and ventilation of the warehouse, and increased the investment in fire prevention facilities. In respect of hazardous waste disposal, the quality inspection department and the supplier's supply and marketing department signed a hazardous waste treatment contract with suppliers and handled them in a unified manner. In front of the management, it strengthened the training of all operators who were exposed to hazardous chemicals, conducted regular studies on the management of dangerous chemicals, improved the understanding of employees through copying management system post operating procedures, etc., carried out emergency drills for dangerous chemicals spills, technical contests, etc., achieving good effect. Through learning, the quality inspection department laboratory introduced automated equipment to reduce human exposure to dangerous chemicals, introduced efficient kitchen equipment and spray towers for supporting equipment, creating a good laboratory work environment and avoiding environmental pollution, and invested more than 200,000 yuan to modify the laboratory to fully meet the CNAS accreditation criteria and obtained CNAS certification.



## Case study

CSH Mine enhanced emergency response mechanism and improved emergency rescue abilities. The company kept improving their safety emergency management system, increasing input of rescue money, and equipped advanced monitoring instruments. The company carried out emergency drill in a large scale, with 13 emergency relief rehearsals in 2017, through which to publicize, prepare in advance, polish, examine, and exercise team. Meanwhile, company reinforced their emergency guard and safety inspection to improve their emergency management system.



CSH Mine carried out fire emergency rescue drill



## Safety Culture

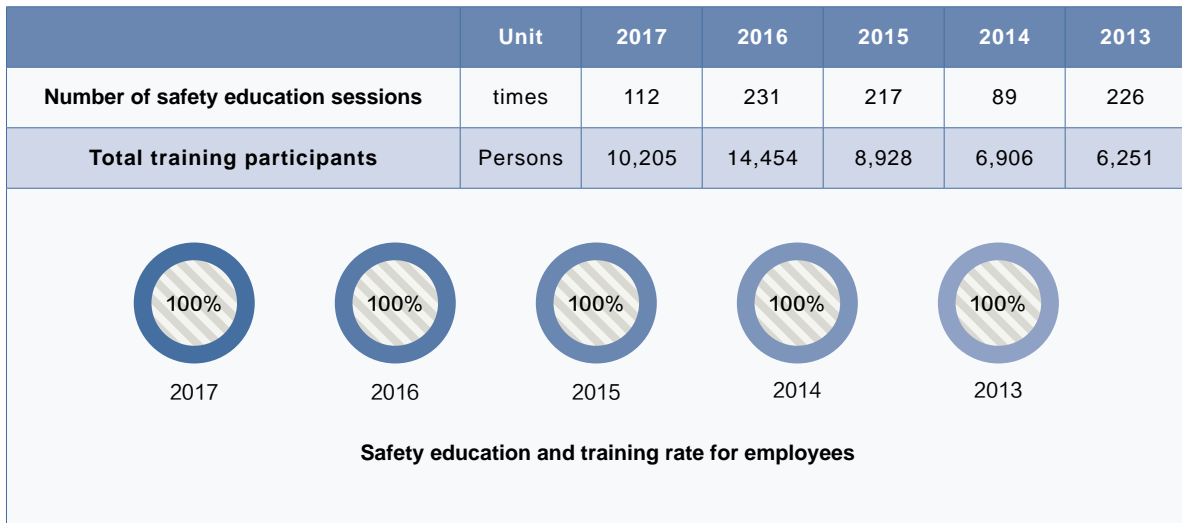
Safety culture is highly valued in the Company. Through safety education, training and propaganda, we seek to shift the awareness of "safety requirement" to "safety initiative". We take efforts to foster a sound cultural atmosphere featuring "safety production by us", "safety for production and production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

### 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).

In 2017, the Company and its subsidiaries carried out 112 safety education and training sessions, with total participants of 10,205 persons. In 2017, the safety education and training rate for the Company's employees reached 100%.





Note: Total training participants include contractors

### Case study

In 2017, safety training organized by Jiama Mine made the new employees realize the importance of safety through multimedia, for instance, watching accidents surveillance videos. And multimedia teaching makes the visual and audio central system of employees in an excited status, which helps them to be impressed with the knowledge about the safety with coal mines. The company is rather strict to the usage of self-rescuer by employees of construction units and checks their operating ability one by one. During the evaluation, the Company requires that new employees describe the safety confirmation procedure and their own post operation procedure proficiently. The Company strictly implements the three-level safety education and training system, strictly controls the education and training, and resolutely refuses to hire the unqualified personnel. Strictly implement the Company's three-level safety education and training, and guarantee the review of new recruits from the source, and eliminate hidden accidents. According to the requirements of the CNG, the Guizhou Jinfeng Safety Training Mode is vigorously promoted, the traditional infusion safety training methods have been changed, and theoretical self-study and on-site teaching modes are implemented. The Safety Training Materials have been improved. At present, a total of 3,889 workers have been trained in construction units and 285 new employees have been trained. The Company has a total of 126 professional and part-time safety management personnel. 84 full-time and part-time safety management personnel of the company and 214 external construction units have all passed safety education and training, and have transferred or dismissed personnel who are not suitable for safety positions. The technical personnel and management personnel, such as surveying and mining were organized to study the Safety Regulations for Metal-Non-Metallic Mines and make assessment, aiming to improve the basic safety knowledge of the technicians and grasp the essential safety from the design source.

In 2017, CSH Mine strengthened its safety training and continuously enhanced its safety awareness. Members of the team carried out safety education and training in conjunction with their duties and taught all employees. It carried out 1,309 times of three-level safety education and training in 2017, making 4,043 staff receive full-time safety re-education trainings, in which 784 persons were above team leaders. Through safety education and training, the basic work of the company's safety has been strengthened and safety production work has been consolidated. On March 9th, 2017, CSH Mine held a one-week 2017 safety training course for all employees, representing the beginning of a series of safety education and training for the company in 2017 with 1,540 employees attending the training. The safety education and training were mainly conducted in the classroom lecture method, slide show, accident case law, etc. The instructors were the Company's registered safety engineers, safety management personnel, and external construction safety management personnel. The main contents of safety education were: national security laws and regulations, occupational health and safety environmental protection documents, rules and regulations, penalty standards, safety risk of open-air operations, fire safety knowledge, major occupational hazards of open-air operations, emergency plan learning, accident case review, warning education, etc. Through safety education, the awareness of safety production laws and regulations of all employees and compliance with safety production laws, regulations, and systems were further enhanced, and the employees were clearly identified with the risk factors and preventive measures existing in their posts, playing a positive role to raise awareness and safety of all employees in work safety and laying a solid foundation for the Company to perform good, achieve excellent results in the first quarter and complete the annual production and management tasks.



Zhang Lisheng, Chairman of CSH Mine, was teaching safety production lesson to management personnel



Safety training to Jiama Mine processing plant II staff

### 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.

### Case study

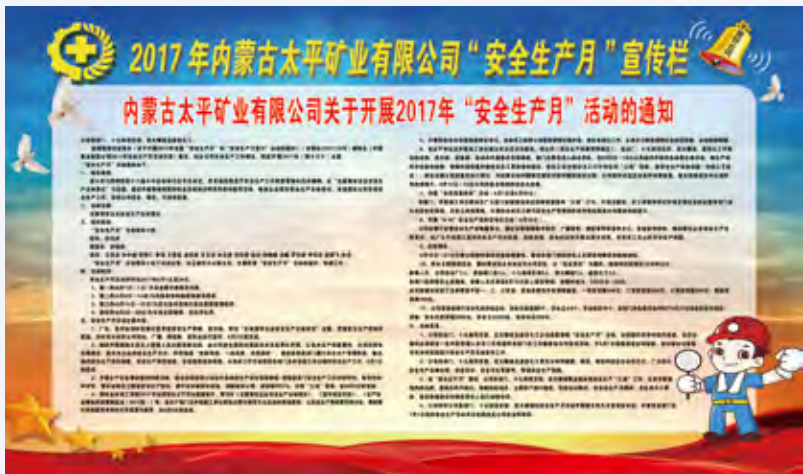
In June 2017, Jiama Mine organized the month-based activities themed with Month of Work Safety, set up specific safety leading group. Through social media such as OA, QQ group, WeChat, the employees took initiatives to participate in this activity, which is beneficial to improve the safety quality of all employees. During this activity, Jiama Mine launched safety knowledge competition to evaluate performance of safety and production managers. In total, 29 safety slogans were suspended. Besides, Safety Supervision Bureau of Maizhokunggar county launched movies about preventing occupational diseases. 800 brochures and 15 bulletin boards were made public.



Safety knowledge contest organized by Jiama Mine

### Case study

CSH Mine proactively holds safety-themed meeting, safety warning education propaganda, "Snapshot hidden dangers among us", potential risks eliminating, emergency drill, the sixth "Ankang Cup" knowledge contest, 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.



Bulletin board of CSH Mine during Month of Work Safety



# Employees' Interests

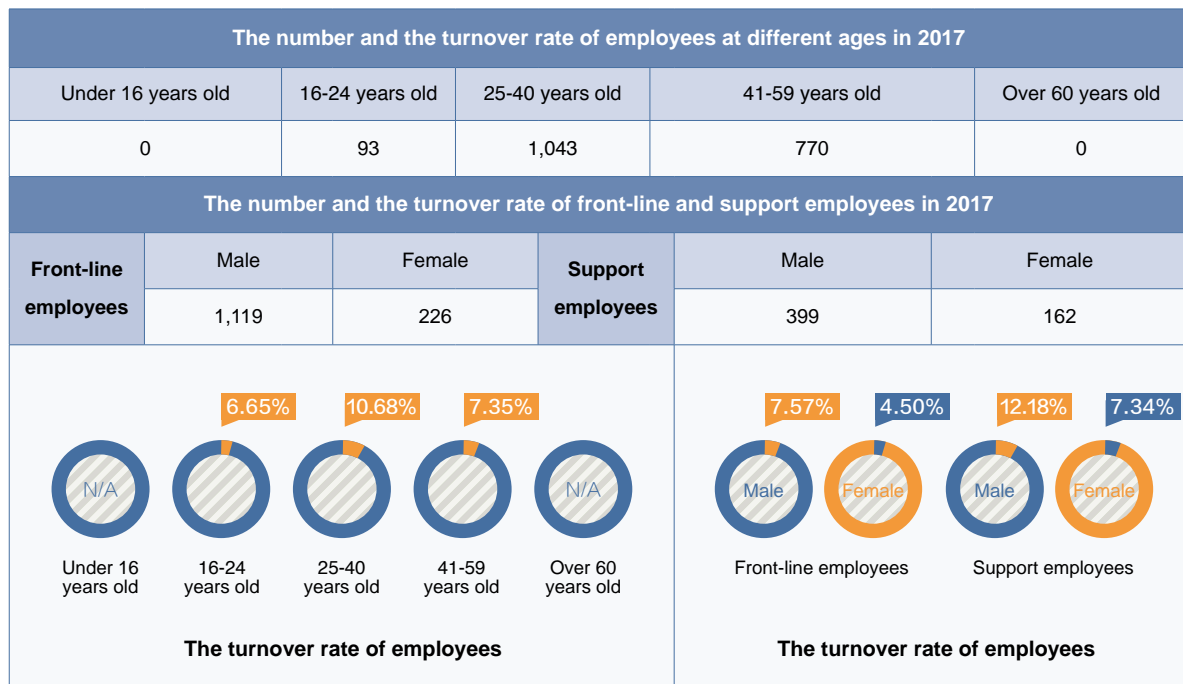
The talent development concept of "Talents are the primary resource" has been firmly established in the Company. We adhere to the human-oriented philosophy, taking employees' growth, provision of equal development opportunities and mutual growths between employees and the Company as an integral part 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.



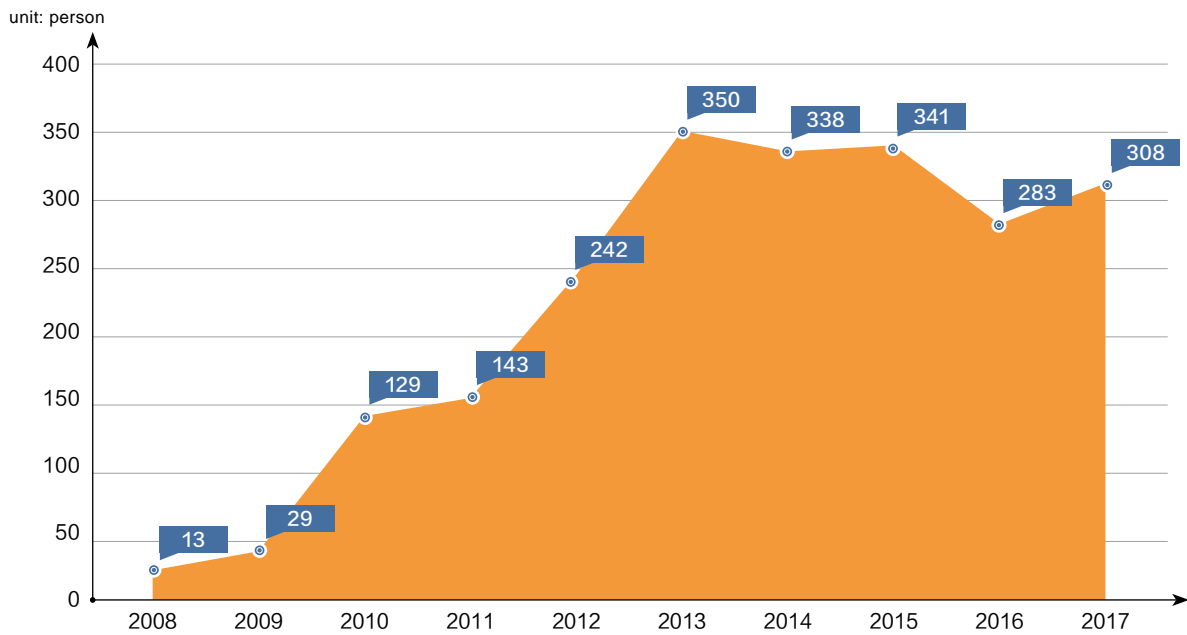
## Employees' Interests

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.

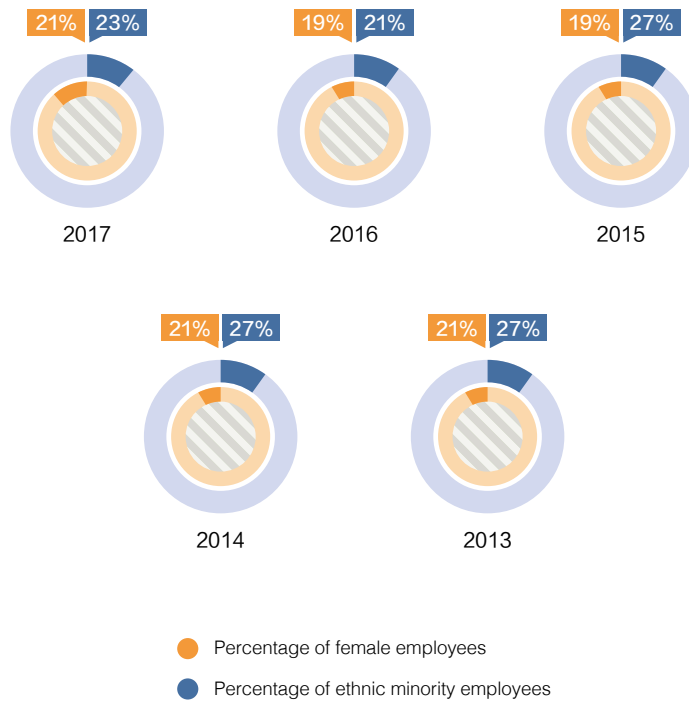
### Profile of employees



### Local Tibetan employees recruited and settled by Jiama Mine from 2008 to 2017



As of 2017, a total of the Company employees has been 2028, including 425 female workers and 465 ethnic minority workers. And there are 381 primary, intermediate and senior managements, including 68 female managements.



● Percentage of female employees  
● Percentage of ethnic minority employees



## 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, constantly improve the employment system, and pay full attention to employees' right to know, so as to protect their legitimate rights and interests. In 2017, both the employment contract signing ratio and the social insurance coverage ratio of the Company reached 100%.

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. Thus, we have built up sound democracy organizations, with various forms for transparency of plant affairs as well as smooth channels for reasonable proposals. The labor unions at all levels vigorously stage employee democratic participation and democratic management activities to seek real benefits for employees.

### Case study

Jiama Mine adopts the concentrated holiday mode for employees, which means that the employees of offices and logistics department can have one-day off per week or a 30-day holiday at a time after consecutively working for three months. The employees of the frontline production unit can have a 38-day holiday at a time after consecutively working for three months. During the holiday, the employees can also enjoy 30% of the plateau allowance and get the holiday round-trip expenses reimbursed twice a year. The company implements a compensation policy for those resigned employees who are unable to continue working at the plateau due to illness or other non-personal reasons, and makes certain economic compensation based on their years of service in the company, so as to fully protect the employees' rights and interests. The company also pays a three-month holiday salary to those support personnel from inland gold mining companies after they come back and reimburse their physical examination fees within five years, which shows the company's responsibility for employees to the greatest extent.

### Case study

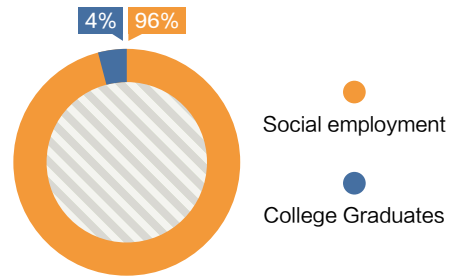
Regarding the attendance management for the employees working in offices, logistics department and auxiliary production unit during daytime (called "office employees"), CSH Mine executes the standard working hours system, with the working time no longer than eight hours per day and 40 hours per week averagely. The office employees work from 8:00 a.m. to 11:30 a.m. in the morning and 14:00 p.m. to 17:30 p.m. in the afternoon from Mondays to Fridays, and enjoy a 2 - day statutory public holiday per week and other statutory holidays based on the relevant holiday notices. As to the attendance management for non-office employees, including the staff in crushing plant, processing plant, machine repair factory and quality control department, the samplers of production technology department as well as the site management & security department), the company implements the integrated working hours calculation system, with the average daily and weekly working time no longer than the legal standard working time. Non-office employees perform the three-shift working system, with the attendance checked according to the legal attendance days. The working time of each shift is: 00:00—8:00, 8:00—16:00 and 16:00—24:00, switched every Monday. All the shifts enjoy a statutory public holiday of 2 days a week and work according to the production schedule. In case of any statutory holiday, the non-office personnel shall take the holiday according to the relevant notice. The company implements the concentrated holiday mode for the 2-day statutory public holiday per week, which means that the non-office employees can have a holiday of 17-26 days at a time after consecutively working for 2-3 months. Where the labor contract cancellation or termination between the company and any employee conforms to the circumstances specified in Article 46 of the *Law of People's Republic of China on Employment Contracts*, the company shall make economic compensation for that employee according to law. The company purchases special disease insurance (commercial insurance) for all employees. The Labor Union of the company, on behalf of the employees, signs the collective contract and special collective wage contract after negotiation with the administration party of the company each year. Furthermore, the company provides high-temperature subsidies for some posts, reimburses the family-visiting round-trip expenses of employees twice a year, arranges physical examination for employees at least once a year and gynecological disease screening for female employees every two years. It has established the labor union funds emergency assistance and salvation mechanism to fully protect the rights and interests of employees and reflect the company's responsibility for them.

## 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.

### 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 2017, 297 persons were recruited by the Company through social recruitment, including 13 fresh graduates and 284 experienced hires.



### Case study

CSH Mine kept strengthening introduction of graduates, enhancing cooperation between company and Sanmenxia Vocational School. Through connections between annual appraisal and position salary, the company encouraged technicians to improve their crafts and abilities. Over 3 years, the company has launched 3 times appraisals to technicians and skilled workers each year and 254 skilled employees were tested in terms of their position, which create learning opportunities both inner and outside for talents to make them better adapted to development requirements.



CSH conducted comprehensive assessment to engineers and technicians

## 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 2017, the Company provided training to 1,319 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.

## Case study

On July 10<sup>th</sup>, 2017, the Communist training class organized by the Party school of CNG was unveiled at CSH Mine. The Party members, potential members and activists participated in the opening ceremony and training. The class lasted 1.5 days and the teachers were veteran experts and professors who have years of experience in Party building. The class included glorious journey and great achievements of the Communist Party of China, Party member, a waving flag, and interpretation of constitutions, rules and disciplines of the Party. Party members and cadres reinforced their belief in Party building and leading role through this training.



CSH Mine was organizing training for CPC members

## Case study

Jiama Mine ensures their facilities operators are familiar with the operating procedure, master the principle of equipment structure and fully understand the content of the three-level maintenance system through training of equipment management. Operators of each workshop can make better use of operating procedure and become the master of equipment. The Company also allows the operators to acquire Three Excellence and Four Abilities gradually when using the equipment, which lies a theoretical foundation, meanwhile, by the form of questioning and answering and doing selective spot, the Company ensures the participants can go to work with legal certifications. The training of equipment management improved the operators' skills of using and maintaining effectively, which supplies solid assurance for the safe and stable production.

### 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, technical professional and 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 2017, 85 employees received professional titles at various levels.

公司职称评审变化数据表

Year	Engineering series			Social series			Political series		
	Senior	Intermediate	Primary	Senior	Intermediate	Primary	Senior	Intermediate	Primary
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

Note: In 2013, the number of primary workers of political working series decreased by one because of resignation; one and four employees were left from the intermediate and primary post of social series in 2014. In 2016, four and one were reduced from the primary levels of social series and political working series respectively. In 2017, three were reduced from the senior level due to resignation.





The third skill competition on maintenance at Jiama Mine



The third skill competition at Jiama Mine

### Caring for employees

We highly value and care for our employees, especially 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.





CSH Mine launched 1 Hour Reading Per Day activities

### Case study

On Jan. 24th, 2017, Nipan, Deputy Chairman of labor union of Maizhokunggar County, and Duoji, Principal Staff on behalf of labor union visited Jiama Mine to appreciate the needy workers who still on their position during the Spring Festival and expressed their wishes and greetings of holiday. Yu Miwen, the Vice Manager of the enterprise accompanied. In meeting room, touched by workers who gave up being with their families and chose to contribute on their position, Nipan said affectionately that as a pillar industry of the county, Jiama Mine has cultivated excellent personnel, promoted local employment, facilitated local economic development, and everyone in the company is outstanding. Then, Nipan presented everyone the white hada and compensation to every needy employee and encouraged them to take good care of themselves thus to make more contributions to company and local economy.



Leaders from labor union of Maizhokunggar County were visiting needy workers of Jiama Mine

### Case study

At the end of 2017, CSH Mine hosted a symposium to know living and work condition of needy employees, and put forward assistant measures accordingly. After the meeting, the company granted compensation to employees. It has been 10 years and fully demonstrated that CSH Mine has been stuck to the philosophy of people oriented and harmonious development.

### 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.

### Case study

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.



Tug of war game at CSH Mine

## Case study

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.



The fourth group wedding at Jiama Mine

## 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 2017, the Company recorded zero occupational disease case, a good track record of no additional occupational disease cases since its establishment.

### 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.



## Case study

According to the requirements of Occupational Disease Prevention Law, Jiama's occupational health management has always been a part of the safety management. The "Three Simultaneous" of safety project also contains occupational health. In respect of safety and environment department, full-time and responsible administrator and personnel were positioned. The department is responsible for the main work of occupational health; the health institute is responsible for the physical examination and the health archives management and puts forward the preventive advice according to the results of the inspection. The company has formulated the occupational health management system, including the "Three Simultaneous" system of occupational health and the system of harm prevention and control. In 2017, the company monitored occupational hazards in the mining area, and commissioned the Beijing Zhongzhi Ankang Technology Co., Ltd. to carry out a monitor, totaling 140,000 yuan, including the total dust, dust, noise and individual noise detection.

### 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.



Occupational health publicity at Jiama Mine



CSH Mine provides regular health examination for employees

## Case study

In order to improve the quality of physical examination, through the comparison of the medical institutions in Tibet, Jiama Mine specially commissioned the health physical examination center of the Armed Police Tibet Border Troops hospital to carry out a medical examination diagnosis. In 2017, 1,201 people were received physical examination, making the staff feel the quality service of the professional physical examination institutions from the army, which was highly praised and recognized by employees.



西藏华泰龙公司组织员工体检

## 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.

 中国黄金  
China Gold

### 民用爆炸物品仓库火灾、爆炸应急处置措施

- 1、民用爆炸物品仓库发生火灾、爆炸事故，必须立即报告，及时通知、组织周边人员撤离危险区域。
- 2、采取隔离和疏散措施，封锁事故现场和危险区域，设置警示标志，避免无关人员进入事故发生区域，并合理布置消防和救援力量。
- 3、处置原则：先救人后救火，先活后死，先重伤后轻伤，先易后难。防止火灾、爆炸扩大。
- 4、在抢救人员和消防队员到达事故现场之前，现场负责人组织自救和灭火工作，同时做好火灾现场的人员撤离。在烟雾弥漫中，要用湿毛巾掩鼻，低头弯腰逃离火场。人员撤离应远离爆炸后烟雾波及的方向及区域，以避免中毒事故发生。
- 5、抢救伤员时，首先要了解遇险人员的人数和大体位置。尽快将伤员脱离火源、热源，缩短烧伤时间，将其转移到安全地带。如有人员受到伤害，立即组织医务室进行医疗救治。
- 6、利用就近的消防栓、灭火器等灭火设施和器材进行灭火。救火时要避开下风侧。
- 7、进行自救灭火，疏导人员、抢救物资、抢救伤员等救援行动时，应注意自身安全。
- 8、当火灾、爆炸失控，危及人员生命安全时，应立即指挥现场全部人员撤离至安全区域。

内蒙古太平矿业有限公司应急指挥中心 24 小时应急受理电话：15104780606 内蒙古太平矿业有限公司医务室 24 小时联系电话：15804780269

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



### Case study

CSH Mine, in accordance with the requirements of the Occupational Disease Prevention Law, formulated the annual occupational disease prevention and implementation program, and carried out occupational hazard prevention and control work as planned. Strengthen dust detection work of open-pit stope and crushing plant, implement regular detection in accordance with the detection frequency, and guide the scene of dust fall and dust suppression work in accordance with the test results. The employees of the supervision company and the external construction unit who are exposed to occupational hazards all perform occupational health examinations before, during, and after leaving the post, and reorganize and improve the occupational health files according to the Occupational Health Records Management Regulations. Equip all employees with the necessary labor protection supplies and supervise their correct wearing during the operation.

## Training of occupational health

### Case study

Jiama Mine invited the Tibet Autonomous Region and Lhasa City Center for Disease Control and Prevention to the company to conduct occupational disease-related knowledge classes. The Tibet Autonomous Region Health Department inspector Yang Zhen and the district CDC experts went to the company's comprehensive restaurant to promote occupational health protection and occupational disease prevention, and over 1,000 volumes of occupational disease prevention data were distributed on the same day. Company leaders, all departments except for those on duty, and construction workers absent from the workforce all participated in the General Assembly, and more than 700 people participated in the conference.



华泰龙公司开展职业病健康宣传

### Case study

CSH Mine invited the experts of Inner Mongolia North Heavy Industry Hospital to have special lectures of occupational health for employees. A total of 600 workers attended this lecture including employees at the mines and external construction workers contracted by CSH Mine. Professor Wei Chuncheng, director of Inner Mongolia North Heavy Industry Hospital, was responsible for this lecture. With more than 30 years of clinical experiences, he delivered lessons of identifying, preventing and treating common diseases occurred in mines as well as of taking measures in the case of emergencies such as cardiovascular disease.



# 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 2017, China Gold International Resources Corp. Ltd. actively declared 33 science and technology awards, published 11 scientific papers and newly obtained 23 patents, which laid a technological foundation for sound and rapid corporate development.

In 2017, 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 2017, Jiama Mine had obtained 9 authorized patents, including 1 patent for invention, 9 applications for patents which include 5 invention patents and 4 utility model patents; accumulatively published 11 provincial and ministerial-level scientific papers; developed 4 criteria on Digital Workshop for the Gold Production Industry; Digital Mining Management for High-elevation Complex Geological Mine won the second prize of the 23<sup>rd</sup> National Enterprise Management Modernization Innovation Management Award, and won 1 item of the second prize of the State-owned Enterprise Management Innovation Achievement Award, 1 item of science and technology prize of Tibet Autonomous Region and 4 items of science and technology prize of 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.

Scientific achievements of China Gold International in 2017

Project Name	Level of Award	Note
Digital Mining Management for Altitude Complex Geological Mine	Second prize (National level)	Domestic leading level
Research and Application of Optimization of Mineral Processing Technology in Jiama Mine Mining Development Co., Ltd.	Third prize	International leading level
Development and Application of LIMS System in Large Cold Copper and Polymetallic Mines with Alpine and Altitude	Second prize	Domestic leading level
Application Research of Composite Wear-resistant Materials in Jiama Mineral Processing Plant	Third prize	International leading level
Application Research of Steel-rubber Composite Liner in Primary Grinding in Jiama Concentrator	Third prize	Domestic leading level
Digital Mine Planning and Construction with Altitude Complex Geological Conditions of Jiama Mine, Tibet	Third prize	Domestic leading level



## Achievements in Technological Innovation

### ✦ 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. We maintain a leading position in tackling technologic difficulties in processing and refining low-grade gold ore, which has greatly increased the exploitable gold resource reserve.

#### Case study

CSH Mine attaches great importance to scientific and technological innovation and insists on the benefits from science and technology. The Research on Reduction of Impurity Ions in Heap Leaching Recirculating Fluids began its industrial expansion test in May 2017. The special heavy metal selective adsorbent used in the project can effectively remove heavy metal impurity ions such as copper, iron, and nickel in the heap leachate circulating liquid without interfering with the recovery of precious metals. The removal process is completely carried out under alkaline conditions and no cyanide gas is produced. The industrial expansion test product is a copper-containing sludge with a copper content of 15%-18%. The project has invested a total of more than 5 million yuan, which is expected to officially go into operation by 2018. The successful operation of the project will provide strong technical support for the heap leachate circulating fluid treatment, heap leaching, and raising the gold recovery rate.



At the beginning of 2017, CSH Mine started the declaration and confirmation of high-tech enterprises. 14 useful patents were recognized by the State Intellectual Property Office, passed the review by expert group organized by the Science and Technology Department of Inner Mongolia Autonomous Region and received high and new technology enterprise certificate issued by the Science and Technology Department, the Finance Department, the Treasury Department and the Local Tax Bureau of the Inner Mongolia Autonomous Region on November 9<sup>th</sup>, 2017.

### ✦ Separation of polymetallic ore

Jiama is a copper polymetallic mine hosting six metals including copper, lead, zinc, gold, silver and molybdenum, with vast resource reserve and a good exploitation outlook. However, the comprehensive recovery of polymetallic ore has been a challenge, with rare success even in the international industry. In 2017, through the hard work of Jiama Mine scientific and technological researchers, Jiama Phase I cu-mo separation technology has been applied to commercial test and gained significant breakthrough, with all technical indexes being comprehensively enhanced.

## Case study

Jiama Mine insists that science and technology are the first productive forces. In real production, company has trained a scientific and technological innovation team that are "full of vigor, seeking truth and being pragmatic and with excellent skills". They are industrious, brave, and worked hard to press ahead. The concentrate grade of the separation of copper and molybdenum in processing plant I has reached 45.85%; with the content of copper metal below 0.8%, the recovery rate of over 70.2%, and achieved the continuous production of copper and molybdenum separation, which successfully completed the scientific and technological breakthrough and transformed test into production. To carry forward the spirit of science, July 28th is set as Jiama Mine Technology Day to ensure sustainable mining development of Jiama Mine at high altitude plateau.

Nine programs have been listed as key technological projects in 2017, including study on mining technology of complex thick orebody in the Jiama mines safely and effectively, study on optimization of the support of broken and fragile rock lanes in Jiama mines, study on process mineralogy of Jiama polymetallic ore, study on prevention of freezing-thawing disaster and freezing damage of the field facilities in alpine high altitude mining areas, application and study on flotation automation closed loop control system of Jiama phase II, study on key technology and industrial experiment of recycling complex, refractory and low-grade lead ores of copper oxide, study on beneficiation experiment of lead-zinc ore of copper oxide, study on beneficiation experiment of copper-molybdenum ore, industrial experiment of separating copper and molybdenum in phase I.



Certificate of scientific and technological award of Jiama Mine



Jiama Mine was honored with the State-owned Enterprise Innovation Award (second prize)

## 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 study

On May 2017, the integration of IT application and industrialization management system assessment and audit group of Beijing Grand Honour Certification Co., Ltd. went to CSH Mine Mining to company to assess on site, through training, checking related documents, recording, interviewing and field observation to improve the integration. On September 2017, the company obtained evaluation certificates of integrated management system.



Certificate of integration of industrialization and IT application obtained by CSH Mine



# Harmony and Win-win

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. 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. The Company has fulfilled its responsibilities as a capital contributor to its subsidiaries according to laws.

Currently, the Company has established the Audit Committee, Nominating and Corporate Governance Committee, Compensation and Benefits Committee, and Health, Safety and Environmental Committee. In 2017, four Board meetings, four Audit Committee meetings, one Nominating and Corporate Governance Committee meeting, one Compensation and Benefits Committee meeting, two Health, Safety and Environmental Committee meeting and three meetings of the Independent Director.



Board meeting of China Gold International



Attendance by the directors at the Board and Board committee meetings in 2017 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	
Attendance / Frequency of Meeting	<b>Executive Director</b>						
	Song Xin (Chairman)	4 / 4	N/A	N/A	N/A	N/A	0 / 1
	Liu Bing	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
	Jiang Xiangdong	4 / 4	N/A	N/A	N/A	N/A	0 / 1
	<b>Non-executive director</b>						
	Sun Lianzhong	2 / 4	N/A	N/A	N/A	N/A	0 / 1
	<b>Independent non-executive director</b>						
	Ian He	4 / 4	4 / 4	1 / 1	1 / 1	2 / 2	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



## 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.

### 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 2017, the headquarters recorded a 100% contract execution rate, and the subsidiaries also recorded a 100% major contract execution rate.

### 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 was organizing activity of law popularization of Seventh Five Year Plan



2017 Livelihood project of Maizhokunggar county

### 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 2017, the Company has prepared internal audit reports for ten years in a row, all indicating that there is no weakness in all material aspects.



Independent directors of China Gold International visited CSH Mine

### 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.

## Case study

On March 6<sup>th</sup>, 2017, CSH Mine held a conference on anti-corruption work. The leaders of the leading group of the company, the middle level cadres and staff representatives from various departments attended the meeting. The meeting conveyed the spirit of the seventh plenary session of the eighteenth Central Committee of the Discipline Commission, the party conduct anti-corruption meetings. Zhang Lisheng, the Secretary of the Party Committee and Chairman of the company, pointed out that anti-corruption work is a long-term work. The majority of Party members and cadres should unite closely around the Central Party Committee with Comrade Xi Jinping as the core, strengthen political belief, grasp the political direction, remain true to the Party and keep pressing ahead, and stick to strengthen Party self-governance, strive to create a new situation to combat corruption, thus to provide a strong political guarantee for the continued healthy and stable development of the company and pave the way for the 19<sup>th</sup> National Party Congress with outstanding achievements. Zhang Lisheng pointed out that the following works need to do in the future.



CSH Mine was convening conference of anti-corruption

### 1 Probrity and self-disciplined education

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.

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.

Promote the construction of a probity culture across enterprises.

## Investor Relations

### 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 2017, 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 and Phase II expansion for CSH Gold 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 2017, the Company issued a total of 53 announcements and press releases.



### Investor relations

The Company kept active and candid communications on an ongoing basis in 2017 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.





2017 performance roadshow of China Gold International

## Dividend policy

The Company has not paid any dividends its incorporation and 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.



## 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 2017, sales revenue from the top five customers of the Company totaled RMB 3.001 billion, accounting for 99.31% of the total revenue.





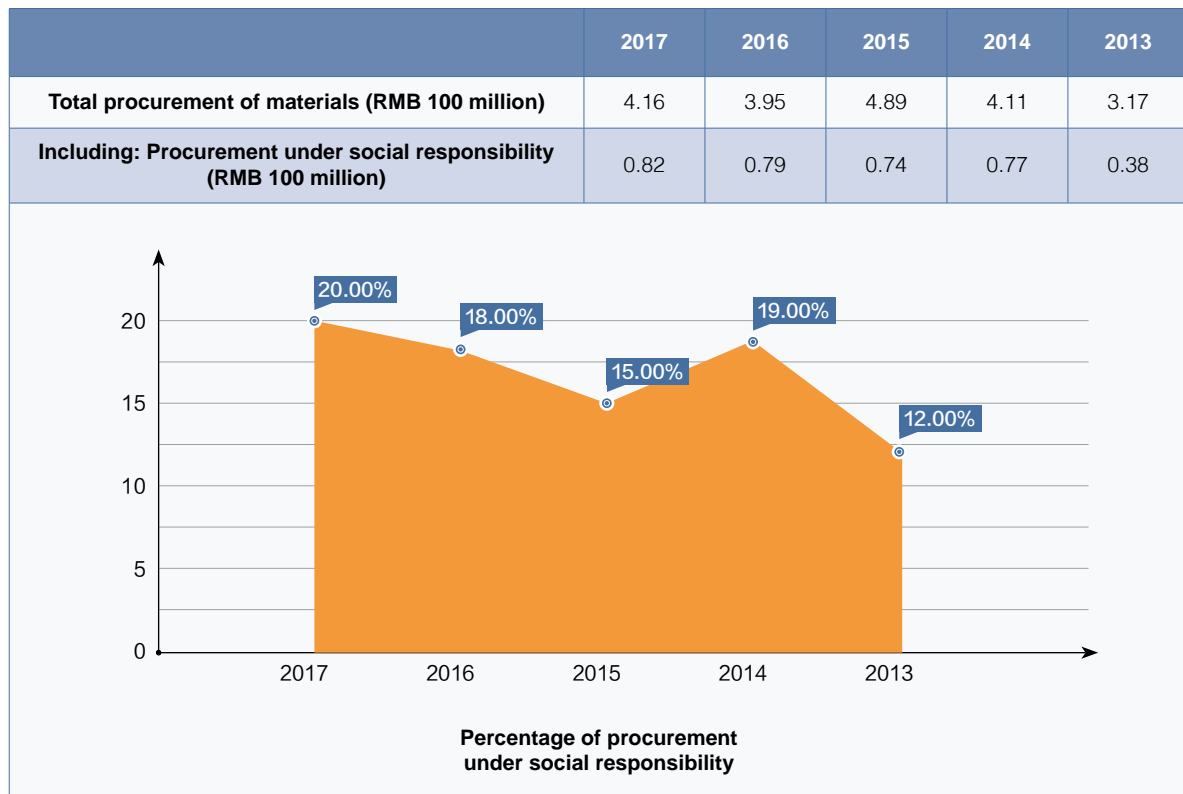
## Supplier Relationship

### Strict management for suppliers

Corporate social responsibility comprises such elements as the relationship with key stakeholders, values, compliance, respect for people, and the policies and practices of an enterprise relating to the community and environment. Aiming at a harmonious business environment, economic and social benefits, the Company earnestly fulfills their social responsibility when purchasing their supplies. The Company actively implements the Opinions on Government Procurement of Environmentally Labeled Products of the PRC to prioritize environmentally labeled products in its procurement and select manufacturers with leading environmental protection and energy conservation technologies as its major equipment suppliers, aiming to minimize pollution from the source.

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 2017 amounted to RMB 416 million, of which RMB 81.98 million or 19.7% was procurement under social responsibility.



### 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.

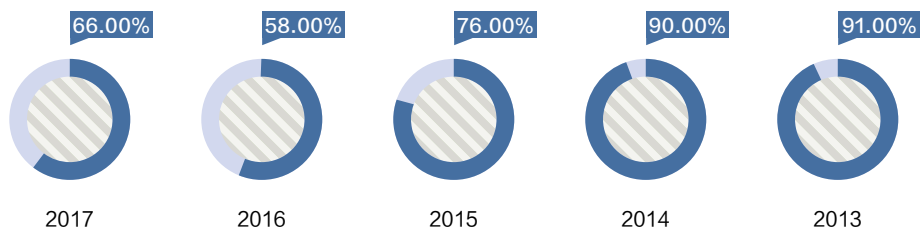
## Case study

In 2017, CSH Mine reached 47.9755 million RMB in cost reduction and efficiency increasing, 128.43% of the whole year's 37.3533 million RMB. It 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 2017, the debt repayable to the top five creditors accounted for 66% 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.



Percentage of debt repayable to the top five creditors in total debt

## Passion for Excellence

According to the general goal of "Promote scientific development and social harmony, serve the people, and strengthen the building of the Party's primary organizations", the Company focuses on the key task of building a world-class mining company to extend its passion for excellence based on the theme of deepening the Party's mass line and "Three Strictness and Three Steadies" education practices.

CSH Mine has studied the spirit of the Nineteenth National Congress of the Communist Party of China and the socialist ideology of Chinese socialism in a new era led by President Xi Jinping. It carried out the normalization and institutionalization of the study and education of "two learning and one action", and promoted "doing" with "learning". The party branch organization worked with the trade union to carry out the essays recitals, which passed positive energy and cultivated sentiments. The Party branch of dressing and smelting organized electricians and forklift mechanics to carry out skills competitions, giving full play to the leading role of the Party members. The Party branch of safety compulsory designated labor responsibility areas, giving full play to the Communist Party members' vanguard and exemplary role. The Party branch of the Ministry of Production and Technology organized a calligraphy competition to "commemorate the 96th anniversary of the founding of the party", inspiring majority of Party members and cadres to love the Party and our country. A good atmosphere has been formed in the whole company to make contributions based on posts.



Reading beautiful essays at CSH Mine



Jiama Mine organized recreational activities for employees with the theme of celebrating the New Year



## 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.

## Case study

The signing ceremony of the strategic cooperation agreement between Jiama Mine and Kunming University of Science and Technology was held at Jiama Mine Company. Professor Li Bo, Party Secretary of Kunming University of Science and Technology attended this ceremony. So did the Wang Ping, General Manager of Jiama Mine and other company leaders. At the signing ceremony, Wang Ping and Li Bo signed at the agreement of strategic cooperation, which symbolizes that Jiama Mine attaches great importance to the cultivation of talents and takes a crucial step of promoting the integration of industry, university and research.



## Community Welfare

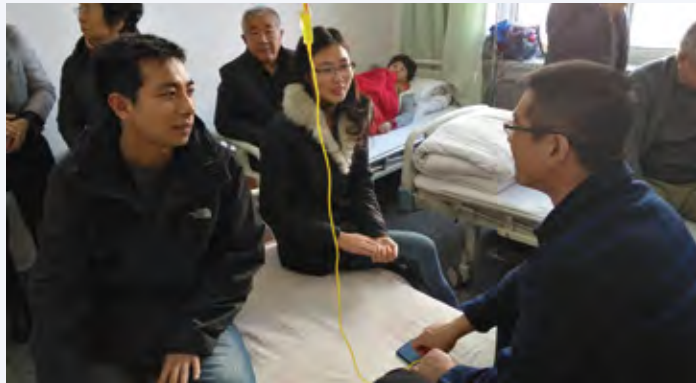
With a commitment to "Harmonious mutual development to benefit the local community", we extend active presence in public welfare undertakings, advocate integrity and impartiality by own actions and root ourselves in the masses for return to the community and the benefit of our offspring, aiming at harmonious 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 2017, the Company donated a total of RMB 236,400, mainly for supporting local infrastructure, helping impoverished families and students and other programs. In 2017, the Company offered assistances to 744 persons from impoverished families and students.

	Unit	2017	2016	2015	2014	2013
<b>Total tax</b>	RMB 100 million	3.17	2.22	2.39	2.26	3.61
<b>Total donation</b>	RMB 10 thousand	24	25	161	188	201

### Case study

The Party committee of Jiama Mine has been focusing on caring for the needy workers and solving difficulties for them. Wang Yujie, a worker in mine processing I who has been diligent and hardworking has been well received by leaders and colleagues. Unfortunately, on August 2017, he was diagnosed terminal stage of intestinal cancer and lung cancer. After hearing this, his colleagues came to his home. Knowing that his wife's unemployed and their child was in university. Mr. Wang was the main support of his family. This disease was no doubt a heavy blow to his poor family, which worried his wife. Therefore, the workers offered help to him, with the donation of over forty thousand yuan in a few days. In terms of insurance, the labor union and HR department of the company communicated with the Lasha Autonomous Region Insurance Company to provide biggest insurance for his further treatment. On November 19<sup>th</sup>, a representative from the Party committee of the company went to this family to offer compensation, premium and donation, which solved financial problem of his family.



Party committee and Human Resources of Jiama Mine paid visit to employees in poverty

### Case study

In February 2017, a ruthless snowstorm hit the central and western part of Inner Mongolia, causing a serious snow disaster to the CSH Mine and its district of Wulate Middle Banner. For a while, all roads in the Wulate Middle Banner government were interrupted due to snow, and the roads in its district of Sumu and Gacha village were frozen severely. The herdsmen were blocked and daily necessities of herdsmen and forages for livestock cannot be transported because the traffic was interrupted, bringing great impact on the normal production and life of the herdsmen.

Just as the local Party committee, government and the massive herdsmen were worried, CSH Mine actively dispatched large-scale machinery equipment like forklift and manpower to help the herdsmen clear snow and open roads, meeting the urgent need for the district herdsmen. Through everyone's joint efforts, the snow and ice on the roads was basically cleared, and all the rural roads leading to Gacha and Sumu village were opened again as well as the provincial roads leading to the Wulate Middle Banner government from Sumu village were smoothly restored to traffic, clearing the roads of "lifeline channel" connecting the vast number of herdsmen with the outside of the village, and being available to needed daily necessities and various materials for the herdsmen timely.



CSH Mine helped herdsmen clear the road



## ⚙️ 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 2017, the Company paid RMB 317 million in tax.

### Case study

Before the Spring Festival, there was a festive atmosphere everywhere in the Jiama Mining Area. The heads and middle-level leaders of the company provided couplet-assistance to the families in poverty and extended the best wishes of the Spring Festival on and after January 20th so as to make more than 60 families celebrate a happy New Year.

Getting into each family, the heads and middle-level leaders of the company gave rice, flour, cooking oil and other comfort items to them, and sat down and talked with them about their life. The leaders encouraged them to face their life positively and take good care of their health. They also said the life would be better with the help of the Party and the government. In Chikang village Jiama town, Guan Shiliang, the secretary of Party committee and Chairman of the Jiama Mine, sent his care to a local old man named A Gong, being pleased to know that his life is better than ever before and his body has become stronger. "Take good care of yourself, and please come to Jiama Mine to contact me when you have any difficulties. In Jiama Mine, I am your friend, and in Chikang village, you are my friend." Guan Shiliang said, holding the old man's hands. The old man said graciously, "Thanks to the Party and government. Thank Jiama Mine. You are very kind to us. Jiama Mine, ah Gundu!" (It means good in Chinese)



Guan Shiliang, the Chairman of Jiama Mine, expressed care to the families in poverty

## 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 2017, ethnic minority employees accounted for 12% and 26% respectively in the CSH Mine and Jiama Mine.

### Case study

With the theme of unity and common prosperity, Jiama Mine takes initiative to advance the employment localization and actively solve employment problems of local farmers and herdsmen. Jiama Mine has become a central enterprise where the ethnic minority makes up majority of all employees. There are 1,309 employees in total at Jiama Mine, including 346 minorities, about 26% of all employees. Taking into account the actual production, Jiama Mine has established a temporary employment mechanism to hire the local residents in a reasonable way. At present, the company has employed 96,384 employees in total, paying the salary of 7.8473 million RMB. Jiama Mine has been leading the residents to become rich and strive for a relatively comfortable life, which effectively promotes harmonious development of Jiama mine and won widespread acclaim from all walks of life.

## Localized procurement

In purchasing materials, the Company adheres to prioritizing local suppliers to support local economy, building up a stronger community of interests with the local society for mutual development.

## Poverty-relief assistance

The Company actively participates in poverty-relief programs in the community, winning positive responses from the local society.

### Case study

On August 17<sup>th</sup>, 2017, the donation ceremony of "Dream University" was held in Wulate Middle Banner. On behalf of all the benevolent companies, CSH Mine delivered a speech and donated 1000 yuan to each of the 18 college students in Sumu. The assisted student representative said in his speech that they would not live up to the ones that have ever helped them. They would study hard and make sacrifices for their hometown after graduation.



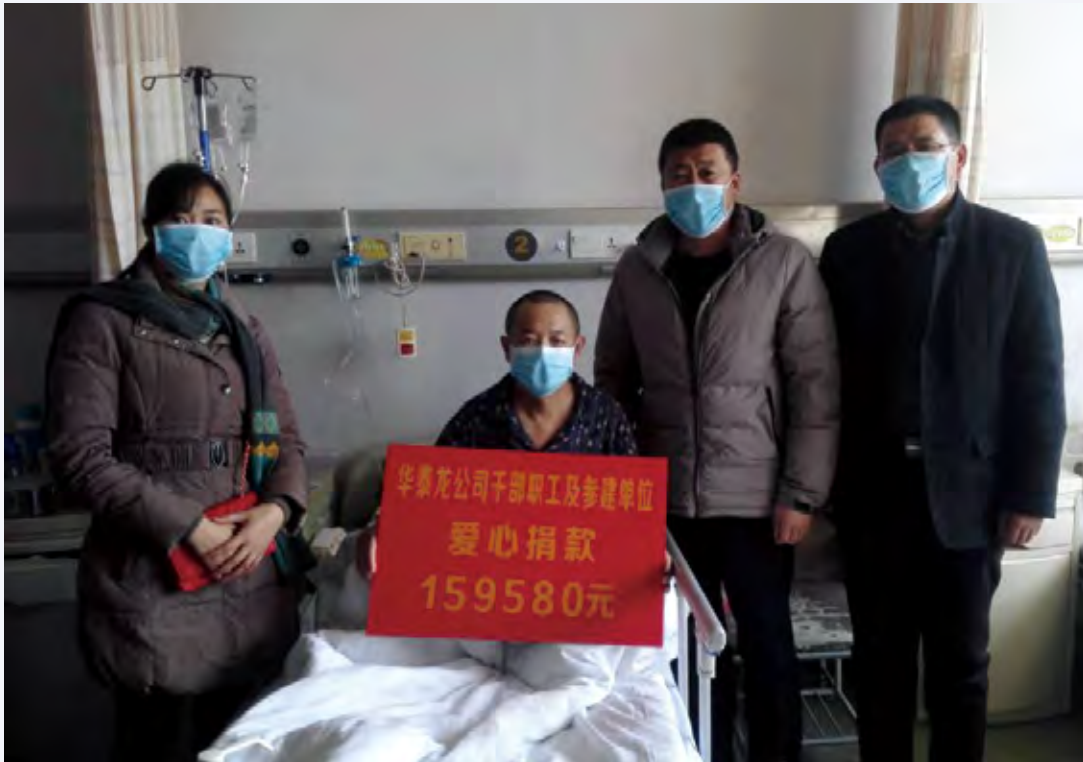
CSH Mine attended the donation ceremony

## Case study

In recent years, many touching stories occurred in this snowy plateau conveyed to us what is "Love is boundless", including Ga Luo, who subsidized the students in need; Luo Bu, who saved a drowning child regardless of his own life; Awang Zhuoga, who sacrificed himself for his work; Danzeng Qunpei, who never abandoned his sick adopted father and treated him as his natural father. These impressive Tibetan stories show the core values of socialism and vividly illustrate the Chinese dream of great rejuvenation. Jiama Mine has been famous for helping the poor since its establishment, such as donations to Zhu Fuchang, the company's logistics chef who was diagnosed the late liver cancer in 2000, to Tudan Ciren and Qiongda, the employees of processing plant I who died in a car accident and was seriously injured in 2011, to Xu Jin, employee of processing plant I whose house was destroyed by debris flow in the Yaan earthquake in 2013, to Li Fengjiang, a worker of Jiama Mine. In Jiama Mine, which lies in the snowy plateau with more than 4,000 meters above, the friendship and brotherhood has been in the mind. Helping him in need has become part of Jiama Mine.

The great love connects everyone in Jiama Mine and warms the community in winter. The snowfield plateau is both the holy place of Buddhism and the land full of great love and kindness. It is said that since Li Fengjiang was in hospital, his off-duty colleagues visited him every day. His colleagues also called him to send their wishes and to encourage him to live with confidence.

"To be honest, I have been touched by everyone. Nobody can imagine how busy my phone was these days. And my colleagues Deji Yangzong and Liao Hui helped me to organized this donation. We were too busy to have meals and some donated by WeChat red packet in the midnight." Liu Hongmei said, vice chairman of the company's trade union who was in charge of the donation.



Li Fengjiang received donation from Jiama Mine

## ✦ Promoting the development in ethnic areas

The Company places great emphasis on maintaining national unity with a goal to develop a mine to support local economy for local harmony, sparing no efforts in supporting the economy of ethnic areas when carrying out resource development there.

### Case study

Jiama Mine was awarded as the Social Responsibility Demonstration Base by the Chinese Academy of Social Sciences. The company was honored with the 2016 State-owned Enterprise Innovation Award (second prize) by means of Building a New Model of Social Responsibility and Innovative Management Mine Enterprise on the plateau. Its case of targeted poverty alleviation, honored with Targeted Poverty Alleviation award, was included into 2016 Social Responsibility Almanac. Jiama actively responded to the Responsibility in China activity for research and survey to show its responsibility practices.



Research group of Responsibility in China visited Jiama Mine

### Case study

The activities, such as visits in the Tibetan New Year and to the poor households, were organized and launched by Jiama Mine. On the eve of the Tibetan New Year in 2017, the leaders of Jiama Mine, along with the members of the labor department, provided for 20 households in Jiama and Trashigang county washing machines, rice, rapeseed oil and brick tea, with a total amount of 29,400 yuan.



Leaders of Jiama Mine distributed daily necessities for the villagers

### Case study

On January 11th, 2017, CSH Mine launched the "Celebrate the Spring Festival and send warmth", which aimed to express regards to the 23 of local farmers and herdsmen. They gave out rice, flour, oil and other necessities needed in winter. "Appreciation for your concern and care from CSH Mine as a state-owned enterprise. You have done great in responsibility work. We will give our full support to you. I wish the company a promising future." The secretary of Moren Gacha and the herdsmen said. Over the past few years, the company has actively worked together with the local government through being engaged in many public welfare undertakings, such as the local economy building, drought and disaster relief, poverty reduction, assistance to students, medical donation, water drinking of the herdsmen. It has also created 235 jobs for the local farmers and herdsmen, accounting for 38.9% of the whole company. The company has also been engaged in various folk-custom activities, such as supporting the local Ao bao-worshipping, expressing wishes to the local soldiers on China's Army Day, donating money to the severely ill college students, and helping the farmers and herdsmen build roads, jointly establishing harmonious community. The company has been helping the locals for straight nine years and been in close relationship with them, shaping a good image as a central enterprise among the community, which are highly recognized and acclaimed by many farmers and herdsmen. That shows the concept of people-oriented and harmony between the enterprise and local.



Jiama Mine has been in line with the requirements of “taking targeted measures to help people lift themselves out of poverty”. Jiama Mine provided 674 uniforms to students of two primary schools in Shigatse and Gyangze County where the company situated in and two schools (Central Primary School and its Affiliated Kindergarten) in Jiama township on Children’s Day, with the total amount of 44,484 yuan.



School uniforms from Jiama Mine



CSH Mine visited farmers and herdsmen in poverty before spring festival



## ✦ 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.

### Case study

At the end of December 2009, Jiama Mine invested 19 million yuan to purchase the original loose and unconscionable fleet in Jiama township. It funded and organized 3850 agro-pastoralists from 655 households in the township to invest in the establishment of Jiama Industry & Trade Co., Ltd., and worked with Jiama Mine to carry out cooperation in various fields such as engineering, transportation, greening, environmental protection, labor service, greenhouse cultivation and other fields.

Jiama Mine supports the development of Jiama Industry & Trade Co., Ltd. in all aspects. It provides pre-post training and employee quality education to employees of Jiama Industry and Trade Co., Ltd., adapting them to the new changes in corporate management from legal awareness, ideas, safety production knowledge, organizational discipline, and work methods. The development of traffic laws, work safety regulations, labor laws, corporate rules and regulations, vehicle maintenance and maintenance courses and military training are conducted irregularly to help all employees gradually realize identity change from farmers and herdsmen, self-employed to corporate employees.

Currently, Jiama Industry and Trade Co., Ltd. has 275 vehicles. By the end of 2017, in addition to the fixed income of employees of the company, the cash paid to individual vehicles was 202.5685 million yuan, which greatly increased the income of people in Jiama township. In 2017, the company realized operating income of 57.2 million yuan and profit of 5.88 million yuan, a slight increase over the previous year. The practice of "Relying on superior resources and building a community of interests" not only builds a platform for the local people to become rich, but also creates a new platform for the central enterprises to fulfill their social, political, economic and party building responsibilities, and sets up a solid barrier to enrich the people in the border areas of ethnic groups. It has created a tripartite win-win model of "enterprises strive for development, local economy moves forward, and the masses of the people gain benefits".

Zi Zara, deputy secretary of CPC committee of Tibet Autonomous Region and head of Lahsa People's Government, praised twice and recognized Jiama Industry & Trade Co., Ltd for the achievements in mine transportation, environmental protection, and national unity at the 2012 Celebration of National Unity and Progress. As a result, the company has become the pilot for the Tibetan plateau to lead the masses towards a all-wealthy, well-off, and harmonious road. It has established a model and benchmark for the harmonious co-construction of high-altitude mining, and has been widely promoted as typical experience in highland local enterprises.



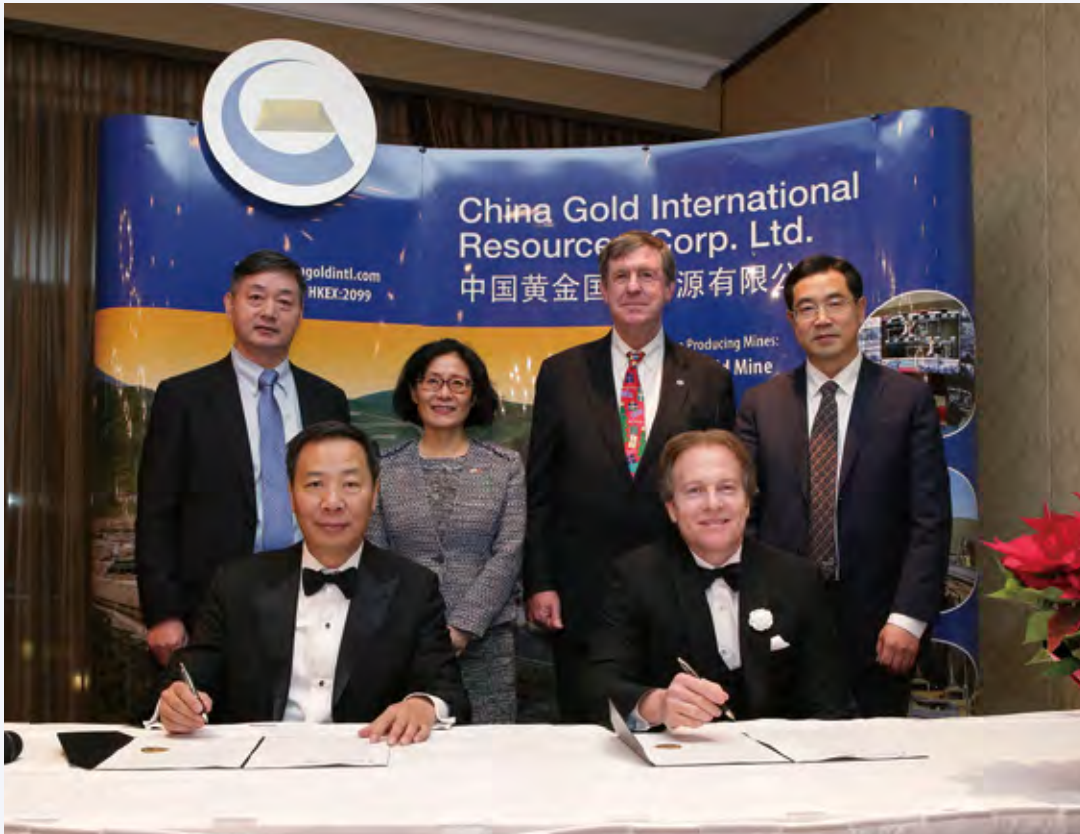
The ninth dividend of Jiama Industry & Trade Co., Ltd.

## ✦ Actively integrating in overseas markets

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.

### Case study

On December 6, 2017, China Gold International successfully hosted the “China Gold Night” in Vancouver for the implementation of corporate social responsibility (CSR). This is the sixth year since 2012 to implement social responsibility activities in Canada. Different from previous years, the company extended the scope of social responsibility practice to the field of mining eco protection and supported the two gold mine environmental projects University of British Columbia (UBC) (sewage treatment in manual gold mining and bio-utilization of mercury in cyanide research project, the arsenic release of environmental protection R&D project from arsenic-containing minerals), and supported two cancer control projects at UBC University (Hematological cancer research and pancreatic cancer treatment project), making the Chinese gold activity maintain a continuation, but also reflect the professionalism of the mining company. China Gold International's continuous return to society and its emphasis on the environmental protection of the mining industry has won the recognition and appreciation of the mainstream society of Canada and the Chinese diplomatic envoys in Canada. The new Consul General Tong Xiaoling and Commercial Counselor Yu Shanjun led the team to participate in the event. The third-tier Canadian government delivered a congratulatory letter and sent representatives to attend the event. All parties highly affirmed Chinese gold's efforts in social responsibility.



Xie Quan, vice president of China Gold International and Professor Marshall signed the Cooperation Document for UBC Environmental Protection Research

## Appendix I

### Supporting Sustainable Development Goals of the United Nations

Sustainable Development Goals		Framework for Action
Goal 1	<b>End poverty in all its forms everywhere</b>	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.
Goal 2	<b>End hunger, achieve food security and improved nutrition and promote sustainable agriculture</b>	Co-found Jiama Industry& 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.
Goal 3	<b>Ensure healthy lives and promote well-being for all at all ages</b>	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, respirable dust, noise and individual noise to enhance labor protection.
Goal 4	<b>Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</b>	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.
Goal 5	<b>Achieve gender equality and empower all women and girls</b>	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.
Goal 6	<b>Ensure availability and sustainable management of water and sanitation for all</b>	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.
Goal 7	<b>Ensure access to affordable, reliable, sustainable and modern energy for all</b>	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.
Goal 8	<b>Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</b>	Safeguard employees' various interests, increase investment in salaries and welfare of employees and their working and living conditions to enhance Company culture development.
Goal 9	<b>Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</b>	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.
Goal 10	<b>Reduce inequality within and among countries</b>	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.

Sustainable Development Goals		Framework for Action
Goal 11	<b>Make cities and human settlements inclusive, safe, resilient and sustainable</b>	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.
Goal 12	<b>Ensure sustainable consumption and production patterns</b>	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.
Goal 13	<b>Take urgent action to combat climate change and its impacts</b>	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.
Goal 14	<b>Conserve and sustainably use the oceans, seas and marine resources for sustainable development</b>	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.
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</b>	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.
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</b>	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 anticorruption work; safeguard interests and proposal of employees to build a harmonious enterprise.
Goal 17	<b>Strengthen the means of implementation and revitalize the global partnership for sustainable development</b>	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.

**Appendix II**  
**ESG Reporting Guide Content Index**

Subject Area	Aspects	KPI	Disclosure level
<b>A. Environmental</b>	<b>A1: Emissions</b>	General Disclosure: 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 (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
	<b>A2 Use of Resources</b>	General Disclosure: 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
	<b>A3 The Environmental and Natural Resources</b>	General Disclosure: 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



Subject Area	Aspects	KPI	Disclosure level
<b>B. Social</b>	<b>B1 Employment and Labor Practices</b>	General Disclosure: 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
	<b>B2 Health and Safety</b>	General Disclosure: 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
	<b>B3 Development and Training</b>	General Disclosure: 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
	<b>B4 Labor Standards</b>	General disclosure: 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
	<b>B5 Supply Chain Management</b>	General disclosure: Policies on managing environmental and social risks of the supply chain	Reported
B5.1 Number of suppliers by geographical region		Reported	

Subject Area	Aspects	KPI	Disclosure level	
<b>B. Social</b>		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	
	<b>B6 Product Responsibility</b>	General disclosure: 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 police; 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
	<b>B7 Anti-corruption</b>	General disclosure: 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
	<b>B8 Community Investment</b>	General Disclosure: Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.		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	2017	2016	2015	2014	2013
<b>Honest Operation</b>						
<b>Asset</b>	Million USD	3230	2966	2780	3013	2219
<b>Revenue</b>	Million USD	412	339	340	278	303
<b>Profit</b>	Million USD	79	34	39	99	102
<b>Net profit</b>	Million USD	64	-12	-7	42	57
<b>Product qualification ratio</b>	%	100	100	100	100	100
<b>Head office contract performance rate</b>	%	100	100	100	100	100
<b>Subsidiary contract performance rate</b>	%	100	100	100	100	100
<b>Total sales income to top five customers</b>	Million USD	412	339	340	278	303
<b>Proportion of total sales income to top five customers to all operating income</b>	%	100	100	100	100	100
<b>Proportion of debts to top five creditors to total debts of the Company</b>	%	67	58	76	90	91
<b>Asset-liability ratio</b>	%	53	52	48	51	35
<b>Environmental protection and energy conservation</b>						
<b>Input in energy conservation and emission reduction</b>	Thousand RMB	618	769	1,429.8	246.6	2,096.8
<b>Sulphur dioxide emission</b>	Ton	17.839	18.163	27.620	26.196	26.554
<b>Carbon dioxide emission</b>	Ton	17540.8	17,682.1	25,381.7	20,104.4	26,003.5
<b>Carbon dioxide emission per ton of ore</b>	Kg/ton	0.89	0.79	0.92	0.90	1.62
<b>Soot volume</b>	Ton	14.955	15.294	17.567	17.041	17.346
<b>Diesel consumption</b>	Liter	746864.44	778,801.28	77,2920.66	722,647.07	736,127.61
<b>Diesel consumption per ton of ore</b>	Liter/ton	0.03	0.03	0.04	0.03	0.05
<b>Coal consumption</b>	Ton	7327	7005	9088	8299	9881
<b>Coal consumption per ton of ore</b>	Kg/ton	0.37	0.33	0.38	0.36	0.68
<b>Vehicle mileage</b>	Km	2,123,830	1,688,525	1,519,269	1,501,969	1,498,866
<b>Vehicle mileage per ton of ore</b>	Km/ton	0.09	0.10	0.07	0.12	0.10
<b>Vehicle fuel consumption</b>	Ton	324.15	243.15	235.91	213.21	90.61
<b>Vehicle fuel consumption per ton of ore</b>	Liter/ton	0.017	0.017	0.013	0.020	0.007
<b>Natural gas consumption</b>	m <sup>3</sup>	0	0	0	0	0

	Unit	2017	2016	2015	2014	2013
<b>Planted trees</b>	Number	321,820	200,300	601,446	2,450	2,007,769
<b>Harmful waste</b>	Ton	26.04	10.18	9.91	10.25	10.05
<b>Harmful waste per ton of ore</b>	G/ton	1.18	0.61	0.46	0.84	0.70
<b>Harmless waste</b>	Ton	91,383,879	9,269,1570	98,497,461	93,775,838	77,870,618
<b>Harmless waste per ton of ore</b>	Ton/ton	4.6	4.1	4.5	4.1	5.3
<b>Sewage emission</b>	ton	0	0	0	0	0
<b>Annual office electricity consumption per capita annually</b>	Degree per capita	1,606.14	1,554.26	1,604.03	1,799.09	1,915.68
<b>Annual water consumption per capita</b>	Ton per capita	22	23.46	24.41	20.98	22.42
<b>Annual paper consumption per capita</b>	Kg per capita	6.92	6.02	5.89	6.32	6.28
<b>Total investment of environmental protection</b>	Million RMB	37.28	17.22	241	225	252
<b>COD (chemical oxygen demand) emission</b>	Ton	11.056	11.459	10.9	13.56	13.74
<b>Sulfur dioxide emission</b>	Ton	30.999	31.745	42.95	43.88	44.93
<b>Production power consumption of the mining area</b>	10,000 kW/h	28,493	21,219	17,338	14,394	12,498
<b>Comprehensive energy consumption per ton for mineral processing</b>	Kwh/ton	11.56	8.59	9.87	9.4	13.11
<b>Newly added water</b>	10,000 tons	272.561	208.629	156.76	184.44	129.8
<b>Circulating water</b>	10,000 tons	7,086	6,974	8,602	4,355	3,416
<b>Water consumption per RMB10,000 output</b>	Ton per ten thousand RMB	22.84	26.33	27.63	37.83	37.53
<b>Water consumption per ton of ore</b>	Ton/Ton	0.31	0.24	0.25	0.28	0.42
<b>Provision for reclamation costs</b>	Thousand RMB	1192	2810	1200	1200	1200
<b>Number of environmental pollution accidents</b>	Number of times	0	0	0	0	0
<b>Environmental protection training coverage ratio</b>	%	93	93	100	100	100
<b>Work safety</b>						
<b>Safety investment</b>	Thousand RMB	62,340	97,960	75,500	56,250	56,570
<b>Death toll of employees in production</b>	Person	0	2 (casualties of external contractor)	0	0	0
<b>Fatality rate for million-ton production</b>	Person/million ton	0	0	0	0	0

	Unit	2017	2016	2015	2014	2013
<b>Major equipment accidents</b>	Number of times	0	0	0	0	0
<b>Major fire and explosion accidents</b>	Number of times	0	0	0	0	0
<b>Major traffic accidents</b>	Number of times	0	0	0	0	0
<b>Special equipment inspection rate</b>	%	100	100	100	100	100
<b>Special equipment inspection qualified rate</b>	%	100	100	100	100	100
<b>Loss accidents of explosives and hazardous chemicals</b>	Number of times	0	0	0	0	0
<b>Serious spill accidents of explosives and hazardous chemicals</b>	Number of times	0	0	0	0	0
<b>Employees with safety management certificate</b>	person	252	120	100	101	100
<b>Certified safety engineer</b>	person	15	13	11	8	7
<b>Safety education and training sessions</b>	Number of times	112	231	217	89	226
<b>Safety education and training participants</b>	Number of times	10,205	14,454	8,928	6,906	6,251
<b>Safety education and training rate for employees</b>	%	100	100	100	100	100
<b>Employees' interests</b>						
<b>Total employees</b>	Person	2028	1,737	1,803	1,746	1,644
<b>Female employees</b>	Person	425	337	344	331	327
<b>Ethnic minority employees</b>	Person	465	357	479	480	445
<b>Employees at primary managerial positions and above</b>	Person	381	311	290	250	264
<b>Including: Female employees</b>	Person	68	41	35	38	40
<b>Employment of the disabled</b>	Person	11	9	11	9	7
<b>Labor contract signing rate</b>	%	100	100	100	100	100
<b>Social insurance coverage ratio</b>	%	100	100	100	100	100
<b>Proportion of workers joining in the Trade Union</b>	%	99	99	100	100	100
<b>Annual recruits through open recruitment</b>	Person	297	216	111	175	396
<b>Including: Hires newly graduated from universities and colleges</b>	Person	13	31	18	32	14
<b>Social Recruitment</b>	Person	284	185	93	143	283
<b>Proportion of localized employment</b>	%	32	26	24	40	43



	Unit	2017	2016	2015	2014	2013
<b>Annual person-time of staff training in total</b>	Headcount	1,319	1,288	1,701	1,836	1,238
<b>Annual promotions in professional titles</b>	Headcount	85	76	72	59	75
<b>Annual promotions to expert-level senior engineers</b>	Headcount	1	2	4	4	0
<b>Physical checkup and health file coverage ratio</b>	%	100	100	100	100	100
<b>Occupational disease cases at year end</b>	Case	0	0	0	0	0
<b>Additional occupational disease cases in the year</b>	Case	0	0	0	0	0
<b>Proportion of employees in the Career, Health and Safety Committee</b>	%	3.1	3.5	0	0	0
<b>Per capita paid vacation days</b>	Day	24	19	17	15	17
<b>Staff satisfaction</b>	%	97	100	96	97	96
<b>Staff turnover</b>	%	10.2	8.5	11	24	15
<b>Technological progress</b>						
<b>Total input in scientific research</b>	Thousand RMB	96,700	15,880	78,840	69,700	68,900
<b>Number of new patents</b>	item	23	13	3	3	3
<b>Scientific and technological achievements</b>	item	18	32	23	6	27
<b>Scientific research programs undertaken</b>	item	12	24	12	9	9
<b>Harmony and win-win</b>						
<b>Total tax</b>	Million RMB	317	222	239	226	361
<b>Total procurement of materials</b>	Million RMB	416	395	489	411	317
<b>Including: Procurement under social responsibility</b>	Million RMB	82	445	74	77	38
<b>Proportion of procurement under social responsibility</b>	%	20	17.75	15.13	18.73	11.99
<b>Proportion of localized procurement</b>	%	44.87	6.19	24.5	50.60	30.60
<b>Total donation</b>	Thousand RMB	236.4	255.4	1610	1880	2010
<b>Assistances to impoverished families and students</b>	Headcount	744	784	638	388	332

Note: 1. Water consumption per RMB 10,000 output: data of Jiama Mine have been calculated into it since 2012.

2. Safety education and training participants include employees of contractors.

3. Annual recruits through open recruitment exclude internal construction support from CNG.

## Rating Report on 2017 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 2017 Environmental, Social and Governance Report of China Gold International Resources Corp. Ltd (hereinafter referred to as the Report).

### I. Rating Basis

CASS-CSR 3.0 for General Mining Industry and Rating Standards for Corporate Social Responsibility Report of Chinese Enterprises (2018)

### II. Rating Procedure

- 1.The process-oriented panel for assessing the Report interviews the main writers and reviews the related documents;
- 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 rating report is submitted to the vice president of the Chinese Expert Committee on Corporate Social Responsibility Report Rating and the supervisor of the panel for signatures.

### III. Rating conclusion

#### Process (★★★★☆)

The group for report preparation, mainly led by the production and technical department, has been organized. The senior management is responsible for making important decisions during report presentation and final review. From management, brand value, compliance and etc., the preparation group has identified function and value design to prepare full version and bilingual report. With reference to mining industry guidance, ESG guidance from HKSE, corporate strategy and national policies, the Report has confirmed essential topics. This Report is released on the official website of the Company and be presented with electronic version, printing version and Chinese-English version. The Report takes the lead in process.

#### Substantiality (★★★★★)

The Report systematically discloses the key issues of general mining industry, such as the implementation of micro-policy, construction of digital mine, management of occupational health, assurance of work safety, system of environmental management, environmental technology, R&D and application of equipment, resources reserve, 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 90.6% of core indicators of general mining industry from “responsibility management” “environmental protection and energy conservation” “work safety” “employees’ interest”, “technological innovation”, “harmony and win-win”. and it performs very well in integrity.

#### Balance (★★★★☆)

The Report discloses the negative information, such as emission of hazardous wastes, medical waste, lubricant waste, chemical containers, hazardous wastes per ton ore, environmental pollution accidents and major accidents of equipment. Besides, the Report gives a brief description of handling and improvement done by the Company on emission of hazardous wastes. It takes the lead in balance performance.

**Comparability (★★★★★)**

The Report discloses 107 key performance indicators for more than 3 years, such as total asset, emission of carbon dioxide, investment in safe production, total employees, employment contract rate, scientific investment, total tax. And it makes a horizontal comparison in terms of company size, such as 500 Canadian companies and companies of British Columbia. It has a great comparability performance.

**Readability (★★★★★)**

The Report inherits from style of 2016 ESG report in primary color and simple format. The report cover presents main business, which improves recognizability. It is clear in framework and rich in content by means of words and pictures, enhancing readability. It performs excellently in readability.

**Innovativeness (★★★★☆)**

The Report responds to the SDGs as well as the responsibility philosophy and practices, which highlights its global vision. From 2017 Social Responsibility Performance Scorecard, this Report clearly presents excellent performance in responsibility practices, displaying its sense of responsibility. During preparation work, China Gold International Resources has formulated Management Method for Preparing China Gold International Resources Corp. Ltd Social Responsibility Report and Regulation for Preparing China Gold International Resources Corp. Ltd Social Responsibility Report. The Company has detailed work and duties, which strengthens participation depth and width. It possesses excellent innovative performance.

**Overall ranking (★★★★☆)**

Evaluated by the rating panel, 2017 ESG 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**

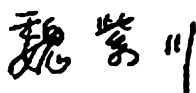
Improve form of key data presentation to enhance readability.

**Rating Panel**

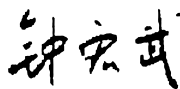
Head: Zhong Hongwu, Director of Corporate Social Responsibility Research Center, Economics Department of Chinese Academy of Social Sciences

Members: Han Bin, Deputy Director of Employers' Department, China Enterprise Federation

Wang Zhimin, Dong Kaihan, Process assessor



Vice President of the  
Expert Committee



Head of Rating  
Panel



Scan the QR to check  
the file of rating report

June 22<sup>th</sup>, 2018

## Feedback

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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.

**1. 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? ( )

**2. In your opinion, which parts/aspects are you most satisfied with?**

**3. In your opinion, which kind of information you want to know is not reflected in this report?**

**4. 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:

**Contact us**

Correspondence address: No. 9 An Ding Men Wai Street, Dongcheng District, Beijing, China  
Postal code: 100011                      Tel: 86-10-56353804                      Fax: 86-10-56353627  
Email: info@chinagoldintl.com                      Website: www.chinagoldintl.com



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