



SD-GOLD

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2021

Corporate Social Responsibility Report

Shandong Gold, Ecological Mining



SHANDONG GOLD MINING CO., LTD.

About this Report

Scope of report

Shandong Gold Mining Co., Ltd. and its affiliates. Some contents are related to Shandong Gold Group Co., Ltd., the parent company of Shandong Gold Mining Co., Ltd.

About company name

For the convenience of expression, in this Report, Shandong Gold Mining Co., Ltd. is expressed as "Shandong Gold", "the Company" or "we", and Shandong Gold Group Co., Ltd. is also expressed as "the Group".

Time horizon

From January 1, 2021 to December 31, 2021. Some events may happen beyond the above-mentioned time horizon.

Reporting period

This Report is an annual report.

Data description

If there are differences between the financial data disclosed in this Report and the data disclosed in the annual report, the annual report shall prevail. Other data were from the Company's internal statistics. Unless otherwise specified, the currency concerned herein is RMB.

Compilation basis

This Report is prepared by reference to the preparation guidance of the *Environmental, Social and Governance Reporting Guide* by The Stock Exchange of Hong Kong Limited (the "Hong Kong Stock Exchange"), *Report on Companies' Fulfillment of Social Responsibility* by Shanghai Stock Exchange, notice of Shanghai Stock Exchange on strengthening listed companies' fulfillment of social responsibilities and releasing the *Guideline of Shanghai Stock Exchange for Listed Companies' Disclosure of Environmental Information*, as well as the *GRI Sustainability Reporting Standards (GRI Standards)*, *Guidance on Social Responsibility Reporting (GB/T 36001-2015)*, and *Guidance on Corporate Social Responsibility Reporting in China 4.0-Common Mining Industry* by Chinese Academy of Social Sciences. In the meanwhile, this Report also highlights the characteristics of Shandong Gold Mining Co., Ltd. and of this industry.

Reporting principles

The Report is made based on the following principles:

Importance: The ESG factors concerned by the stakeholders are identified through a communication with internal and external stakeholders by reference to the way for defining important issues specified in the *Environmental, Social and Governance Reporting Guide* by the Stock Exchange. Based on these factors, the scope of reporting is determined.

Quantification: The Report discloses the quantified objective and performance data of environmental and social indicators in detail. The statistical range or mode of calculation of all indicators has been clearly defined. For some indicators, the performance data of three consecutive years were disclosed to make the data more comparable.

Consistency: The statistics and disclosure methods of the report issued in the previous year are adopted in this Report. In case of any change, an explanation will be provided in the Report.

Release of report

This Report will be publicized in simplified Chinese, traditional Chinese and English. In case of any ambiguity, the simplified Chinese version shall prevail. Both printed and electronic versions of this Report will be provided. You can download the electronic version of this Report at the official website of Shandong Gold <http://www.sdhjgf.com.cn/>.

Feedback and contact information

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Statement of the Board of Directors

Shandong Gold has fully realized the importance of good corporate governance and risk management process (including the management of ESG matters) which are critical to the Company's sustainable development.

The Board of Directors of Shandong Gold is the highest responsible and decision-making body of ESG matters. It bears full liability for the Company's ESG strategies and reporting, and monitors the ESG matters that may affect the Company's business or operation, and the rights and interests of shareholders and other stakeholders. The Board of Directors has set up the Strategy Committee to be responsible for regulating the commitment on and performance of critical ESG issues and ensuring the integration of ESG philosophy with the Company's strategies.

The Board of Directors of Shandong Gold periodically reviews the critical ESG issues, and discusses and determines the Company's ESG risks and opportunities based on the external social economic environment and the Company's development strategy. It takes the management and improvement of key issues as the strategic ESG work in the year, incorporates them into the Company's general strategy, and supervises the management and performance of the issues.

In 2021, the Board of Directors analyzed the substantial issues that have a significant impact on the Company, and determined the priorities in the Company's sustainable development. It also gave full play to the role of regulation according to the objectives of critical ESG issues including safety, environment, and commercial morality, and constantly checked the schedule to ensure the fulfillment of objectives.

This Report has disclosed in detail the progress and effect of ESG work of Shandong Gold in 2021. It was approved and adopted by the 20th meeting of the 6th session Board of Directors on March 28, 2022. The Board of Directors and all directors of Shandong Gold guarantee that this Report has no false or misleading statements or material misstatements, and that they will bear the joint and several liability for the authenticity, accuracy and integrity of its contents.

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Message from Chairman



The year 2021 was a very special, challenging and unordinary year in the development of Shandong Gold. With Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era as the guidance, we faced squarely up to the problems and challenges, took multi-pronged measures and made breakthroughs in an all-round way under the correct leadership of Shandong Provincial Party Committee, Shandong Provincial People's Government, and Shandong Provincial State-owned Assets Supervision and Administration Commission. As a whole, we maintained a good momentum of steady growth. The quality and performance of enterprise development reached a new level, and the fulfillment of corporate social responsibility has been further strengthened.

Strengthening cohesion by Party building, setting up a new climate by optimizing governance. We organized the activities to celebrate the 100th anniversary of the founding of the CPC, and made steady progress in ensuring the overall capability of community organizations. We strengthened clean governance management, improved Party conduct, built a clean government, and formed a healthy political atmosphere of integrity. We also defined the strategic objectives during the 14th Five-year Plan period, and developed safe, ecological, energetic and human-friendly Shandong Gold with a focus on the main business of gold mining. Besides, we continuously optimized the corporate governance, and integrated ESG management into our corporate strategy and daily operation adequately. Our information disclosure work obtained an evaluation result of Level A (the highest level) by the Shanghai Stock Exchange for four consecutive years. We strengthened the resumption of work with all of our strength. In the whole year, we produced 24.781 tons of gold and registered an operation revenue of RMB 33.935 billion, and consolidated the Company's resource advantage through mergers and acquisitions, we successfully fulfilled our annual operation objectives.

Strictly adhering to work safety, strengthening development through innovation. Following the principles of respecting life and safety first, we strengthened work safety management and safety education and training for all staff, and further identified and eliminated the hazards. We invested RMB 580 million in work safety to ensure steady and safe production. We insisted on scientific and technological self-reliance, and scientific and technological innovation in various fields. We have made significant progress in reducing cost and increasing efficiency. Our international top-grade demonstration mine passed the acceptance, and it is now being promoted. We invested RMB 500 million in research & development in the whole year, made more than 400 technical renovation achievements, and

obtained 26 rewards above the provincial and ministerial level, 24 scientific and technological achievements have been popularized in the Company. Shandong province-level new R&D institution obtained an "Excellent" in the initial evaluation. We provided high-quality gold products with meeting customers' requirements as the central task. As a result, its customer satisfaction rate reached 100%, and the product quality of Shandong Gold was highly recognized by customers.

Persisting with objectives, pursuing green development. We made continual improvements to the natural environment management system, deepen energy conservation and emission reduction, developed green mines, and forged ahead with a strong determination to realize green, environmental-friendly and sustainable development. We have finished the basic investigation of carbon emission in our affiliates, and laid a good foundation for establishing a carbon dioxide emission peaking and carbon neutrality program. We have made greater efforts for pollution control and ecologic renovation & governance, and have steadily consolidated our achievements in building a green mine. Sanshandao Gold Mine, as a demonstration project of green mine development in Shandong Province, received the financial award from the Department of Natural Resources of Shandong Province. "Shandong Gold, Ecological Mining" has become a bright name card of the enterprise.

Making progress jointly to benefit the society and create a beautiful future. We insisted on the company tenets of "Benefiting employees, repaying shareholders, benefiting society and contributing to a powerful country". We upheld equal employment, provided opportunities to ensure employees' development, protected their occupational health and safety, and stimulated employees' vitality. We had 1 person winning the National May 1st Labour Medal, 6 persons winning the title of National Technical Expert, and 14 persons winning the title of National Technical Expert in the Gold Industry. We insisted on transparent procurement, create a responsible supply chain, and stuck to the principle of responsible gold exploitation to boost the sustainable development of this industry. We bore social responsibility actively, worked hard to facilitate rural revitalization, and strengthened the cooperation between the enterprise and the local government. We have made a charitable contribution of more than RMB 2.12 million in total. We have provided services and made contributions to the society with actual actions, and embodied our sense of responsibility as a state-owned enterprise.

Striving for promising future, realizing all our goals. In 2022, with a focus on the annual general objective of "Stabilizing External Development, Expanding Internal Development, and Making New Records", we will follow the general principles of pursuing stable performance and making new progress, and coordinate our work in an all-around way in Party building, production and operation, cost reduction and efficiency increase, scientific & technological innovation, safety & environmental protection, employee development, and involvement of communities. We will stride forward on the journey of "forging a world first class mining enterprise with international competitiveness", strive to write a new chapter of Shandong Gold reform and development.

Li Guohong, Chairman



About us

Company profile

Shandong Gold Mining Co., Ltd. is a listed company controlled by Shandong Gold Group Co., Ltd. It was established in January 2000, and was listed on the Shanghai Stock Exchange on August 28, 2003. On September 28, 2018, it was listed on the Main Board at the Hong Kong Stock Exchange. On October 19, 2018, H shares of Shandong Gold were included in the list of stocks under the Hong Kong Stock Connect. Since then, Shandong Gold has been listed on the A+H stock markets.

The Company's main business is gold exploitation. It has a complete industry chain incorporating exploration, mining, beneficiation, smelting (refining), and deep processing and sales of gold products, and also has a technical research & development system appropriate for the chain. Its gold output, resource reserve, economic benefit, technology level and competence of talents are all in a leading position in the gold industry in China. Its mining enterprises are distributed in Shandong, Fujian, Inner Mongolia, Gansu, Xinjiang and other provinces (autonomous regions) in China, as well as Argentina in South America, Ghana in Africa and other places in the world. On February 10, 2022, its affiliate company Xincheng Gold Mine had an accumulative gold output of over 100 tons. The Company has become the only Chinese enterprise possessing four mines with an accumulative gold output over 100 tons. Among them, Sanshandao Gold Mine, Jiaojia Gold Mine, Xincheng Gold Mine and Linglong Gold Mine figured in the list of Top Ten Gold Mines in China for many consecutive years. Veladero, co-operated by the Company and Barrick Gold Corporation with 50%-50% stock right, is the second largest gold mine in South America. Its subsidiary, Shandong Gold Smelting Co., Ltd. is one of the first ten enterprises recognized by Shanghai Gold Exchange as "enterprises eligible to supply standard gold bullion" and one of the first batch of enterprises that have registered for bullion brands on the Shanghai Futures Exchange. Besides, it has been on the list of Top Ten Gold Smelting Enterprises in China for many consecutive years. Its stock has successively been selected as the sample stock of SSE 50 Index, and of three international indices, namely, MSCI, FTSE Russell, and S&P Dow Jones Indices. By the end of 2021, it recorded a registered capital of RMB 4.473 billion, total assets of RMB 78.308 billion, and net assets of RMB 31.783 billion.

With a tight focus on the cultural concept of safe, ecological, energetic and human-friendly Shandong Gold, the Company continues increasing its investment in scientific research & development with the acquisition of cutting-edge and core technologies of mining industry as a core, and strives to drive its development through scientific & technological innovation. It is committed to building a safe and green mine, and constantly consolidates its achievements in building a green mine; as a result, it has established its brand image of "Shandong Gold, Ecological Mining". It cares about its employees, strives to build a harmonious community, actively assumes social responsibilities, and takes an active part in public welfare activities. It puts great efforts to affect and serve the society with actual deeds, which has produced great economic, environmental and social benefits.

The Company will develop itself into a world first-class gold mining enterprise with international competitiveness, and repay its shareholders for their trust with better operating performance by taking promotion of its high-quality development as the underlying guideline and reform & innovation as the basic driving force to.

Corporate culture

Enterprise spirit	Pursuit of excellence, innovation, and entrepreneurship
Core values	Openness, inclusivity, loyalty, responsibility
Brand image	Shandong Gold, Ecological Mining
Ideal target	To make more individuals and more places benefit from Shandong Gold
Strategic vision	To become a world first-class sustainable gold mining enterprise with excellent technology and management
Company tenet	Benefiting employees, repaying shareholders, benefiting society and contributing to a powerful country
Management philosophy	Resource focused, efficiency first, innovation centered
Cooperation philosophy	Respect, integration, mutual benefit, sharing
Safety & environmental protection philosophy	"Zero accident" in both safety and environmental protection
Talent philosophy	To select capable and high-caliber talents with both moral integrity and professional competence
Party building philosophy	Sticking to our revolutionary heritage, keeping in mind our original aspiration and missions
Philosophy of integrity	Honesty, simplicity, and integrity
Care philosophy	"Three Yeses" and "Three Nos" commitment



Organizational structure



Development strategy

Shandong Gold, in strict accordance with the decisions and plans of Shandong Provincial Party Committee and Shandong Provincial People's Government, has a clear positioning in the Eight Development Strategies for the whole province. Focusing on the principles of building a safe, ecological, energetic and human-friendly Shandong Gold, we clearly put forward the three-year progressive development plan, namely, "Consolidating Bases and Striving for Better Development" in 2021, "Stabilizing External Development, Expanding Internal Development, Making New Records" in 2022, and "Integrating Internal and External Resources for Leapfrog Development" in 2023, as well as the strategic objective of accelerating the building of a world first-class sustainable gold mining enterprise with excellent technology and management.



Core sectors and positioning

"Stabilizing external development and expanding internal development to be stronger and everlasting" for the gold sector; "strengthening coordination for practical and stable development" for the industry chain financial sector



Four development directions

Technology development, resource exploration, merge & acquisition, industry chain expansion



Six key tasks

Project development, operation management, reform deepening, technology innovation, improvement of people's livelihood, safety & environmental protection



Ten key strategic measures

Strengthening Party building, improving operation management, being integrated into the new development paradigm, guaranteeing work safety, deepening state-owned enterprise reform, improving organization efficiency, strengthening important projects, accelerating transition to smart development, stimulating vitality in innovation, and fostering characteristic cultures

Figures in 2021



RMB **33.935** billion

Operating revenue



RMB **500** million

Investment in research & development



more than **400**

Technical renovation achievements



RMB **22.4614** million

Total profit



24.781 tons

Gold production



26

Rewards at the provincial and ministerial level and above



RMB **580** million

Investment in safety



RMB **78.308** billion

Total assets



RMB **31.783** billion

Net assets



12,586 person-time

Employee training



more than RMB **2.12** million

Total charitable contribution



Corporate governance

In 2021

9 Members of the Board of Directors

3 including independent non-executive directors

18 Organized board meetings

60 deliberated resolutions

4 Organized shareholders' meetings

25 deliberated resolutions

8 Organized meetings of the Board of Supervisors

24 deliberated resolutions



Special Training on Mining Compliance and Legal Practice in Enterprises

Shandong Gold has established the *Articles of Association of Shandong Gold Mining Co., Ltd.*, which clearly specify relevant systems for the operation objectives, share issuance and transfer, General Meeting of Shareholders, Board of Directors, Board of Supervisors, and financial accounting, and revised these Articles according to actual conditions. We have established a modern corporate governance structure, in which the Party Committee, General Meeting of Shareholders, Board of Directors, Board of Supervisors, and management assume their respective responsibilities with effective checks and balance, to standardize our operation and improve the corporate governance.



Shandong Gold company governance system

Compliance management

Shandong Gold strictly abides by the relevant laws and regulations of the State, and complies with market economy ethics consciously. It improves the awareness of laws of all employees, and forges a powerful defense in the operation in accordance with laws and regulations.

Conducting compliance training

We have organized the *Special Training on Mining Compliance and Legal Practice in Enterprises*, which is conducted from four aspects, namely, legal risk prevention & control and settlement of disputes in construction project management; research on the legal supervision, trend and compliance of mining; new solid waste pollution control method and enterprise environment risk prevention & control; warranty system in accordance with the *Civil Code*. We also publicized and organized trainings on the *Civil Code* in subordinate companies to raise the awareness of compliance of all employees and to ensure honest operation in accordance with laws and regulations, and promote the healthy corporate development.

Training compliance talents

The Department of Justice of Shandong Province approved the establishment of corporation lawyers in Shandong Gold. The Company organized appropriate personnel with legal professional qualifications to attend pre-job training. The first 21 trainees all passed the examination and obtained the qualification. These corporation lawyers will provide legal support for the Company in the critical decisions as well as operation in accordance with laws and regulations. The Company's compliance management is ensured by these professional talents.

Studying mining laws and policies

We pay close attention to and study the relevant laws and regulations released by the State, and collect the suggestions on revision of relevant exposure draft about hot legal issues in mining enterprises, including the royalty payment system, revision of the mining law, transfer-out of net mining rights, regulation of non-coal mines, regulation of mining outsourcing, etc. We have attended the seminars on mining laws and industry forums for several times, and made our own contributions to mining legislation and compliance exchanges in this industry.

Risk prevention & control

Shandong Gold remains mindful of worst-case scenarios, and combines the process management of comprehensive risk with the key management of special risk. We pay close attention to the prevention and control of major risks, and strengthen our guidance and supervision of serious and major risks in subordinate companies, thereby improving the risk study and judgment ability, and preventing and eliminating major risks.

We deeply identify and analyze the possible risks, and establish response plans. We also take detailed management measures, specify the management responsibilities and posts, and nail down the time of completion to deal with all risks precisely.

At the end of each quarter, we make a conclusion of each subordinate company's response and management of major and serious risks at the beginning of the year. We also conduct dynamic evaluations to the major and serious risks that newly occur in each quarter, and strengthen risk management and control.



We conduct special risk evaluations to matters relating to significant investments, major merger and acquisition, and important restructuring and reorganization, and take preventive measures for risk management & control in investments to ensure the operation of important investment projects in strict accordance with laws and regulations.

We actively strengthen the audit in all subordinate companies to prevent operational risks. The audit items cover all important stages, including procurement and warehousing, sinking and driving engineering, sales, and settlement.

Exchange of investors

Shandong Gold adequately protects the lawful rights and interests of investors. Within the scope of the information disclosure rules allow, we answer investors' questions about its position in the industry and its development strategy, financial position, operating performance and other concerns of the investors by means of hotline calls, E-interaction platform, on-line investor reception and other activities, realizing good interactions. We also make unremitting improvements to the information disclosure mechanism, and timely and precisely disclose our production and management information to the shareholders and investors according to their requirements to win the trust and support of investors. Our information disclosure has obtained an evaluation result of Level A (the highest level) by Shanghai Stock Exchange for four consecutive years.

In 2021, we held two performance presentations and were selected as "Excellent Practice Cases" of annual performance presentations organized by China Association of Listed Companies. We also held "high-quality development exchange meetings of Shandong Gold". We held virtual meetings and invited investors to "walk into the mine" to investigate. We also took the initiative to release a *Written Proposal* jointly prepared by the listed company and investment institution to promote the sound and stable development of the capital market.



High-quality development exchange meeting of Shandong Gold

Responsibility management

ESG management

Shandong Gold continuously improves the ESG management structure, and integrates ESG governance into the corporate governance system sufficiently. It aims to achieve the high-quality sustainable development, so that more individuals and more places can benefit from the Company.

The Company's Board of Directors was set up the Strategy Committee with the Board Chairman acting as chairman of the committee. The committee is responsible for the business planning and strategic planning of the sustainable development. The committee also needs to identify the sustainable development opportunities and risks, and enhance the sustainable development ability. The Company includes ESG into the corporate strategy, and defines the social responsibility objectives of the strategic planning during the 14th Five-year Plan. Meanwhile, the Company also organizes the Operation Management Department, Science and Technology Center, Safety & Environmental Protection Department, Centralized Procurement Center, HR Department and Corporate Culture Department to discuss the implementation of the sustainable development strategies and other important matters, with an aim to improve the governance capabilities in sustainable development continuously.

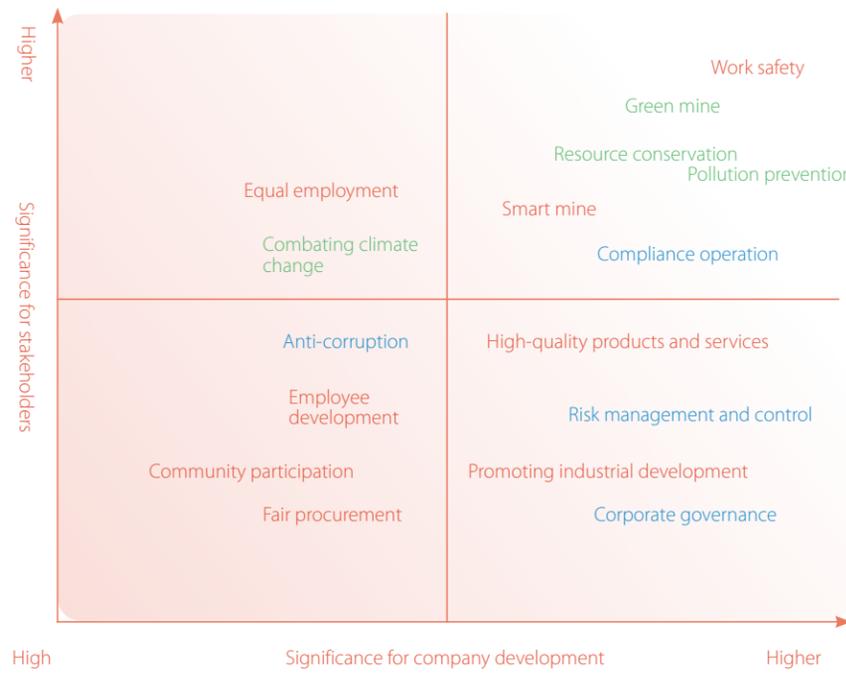
The Company was established a Social Responsibility Committee, sets up an ESG management organization network covering all business units and functional departments, appoints the responsible persons and nails down their roles, responsibilities and rights. The Company has established a characteristic ESG indicator system according to its actual situations and relevant requirements of the Hong Kong Stock Exchange and Shanghai Stock Exchange for ESG management to integrate ESG management into enterprise production or business operation, so that the system can be smoothly carried out and continuously improved.

Integration of ESG management into the daily operation of the enterprise

Responsibilities	Responsible departments
Corporate governance	Board Office; Strategic Planning Department; Office
Compliance operation	Department of Auditing and Legal Affairs; Operation Management Department; Safety and Environmental Protection Department; Resource Management Department; Trading Center; each subsidiary & branch
Technology innovation	Science and Technology Center; Information Center; International Top-grade Demonstration Mine Promotion Center; each subsidiary & branch
Safety & environmental protection	Safety and Environmental Protection Department; Operation Management Department; each subsidiary & branch
Employees' rights and interests	HR Department; Corporate Culture Department; each subsidiary & branch
Charitable activities in communities	Corporate Culture Department; Financial Department; each subsidiary & branch
Supply chain management	Centralized Procurement Center

Identification of substantial issues

According to the process to define the substantial issues specified in the *Environmental, Social and Governance Reporting Guide* by the Hong Kong Stock Exchange, as well as the sustainable development trend in this industry, benchmarking results of fellow traders, and investigations and interviews of internal and external stakeholders. The Company has sorted out the issues concerned, also prioritized the issues according to their importance for company development and stakeholders, and defined the key points in company management and information disclosure, thereby responding to the appeals of all stakeholders better. The analysis result of substantial issues has been examined by the Board of Directors.



Matrix of substantial issues

Communication with stakeholders

Stakeholders	Main issues concerned	Communication channels / feedback methods
Government and regulatory authority	Compliance operation Lawful tax payment Promoting economic development and transformation	Special report Information disclosure Communication of official documents Participation in government agencies' meetings
Investors and shareholders	Perfecting corporate governance Improving operation performance	General Meeting of Shareholders Meeting with investors Performance presentation Information disclosure
Employee	Respecting and protecting the basic rights and interests Competitive salary system Favorable career development channel Comfortable and safe work environment	Democratic communication meeting Interview of performance appraisal
Customer	Guaranteeing product and service quality	Commercial communication Customer satisfaction investigation
Environment	Pollution prevention Energy conservation and emission reduction Combating climate change	Report of environmental information Information disclosure
Supplier, contractor and intermediary	Compliance operation Integrity and reciprocity Cooperation and mutual benefit	Market research Supplier meeting Responsible procurement
Press and non-governmental organizations	Information disclosure and transparency	Official website News report Media interview
People in the community	Caring about community development Promoting local employment Participating in public benefit activities	Community building Employment Public charity

CSR Feature

Shandong Gold's achievements for the 100th anniversary of the Party

Shandong Gold, guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, insists on the organizational principle of the Party in the new era, and is steadfast in following the leadership of the Party. It insists on the revolutionary heritage of "sending 130,000 taels of gold to Yan'an", and continuously improves the Party building. With Party building as the focus, it continuously promotes the enterprise transformation and upgrading, and provides extraordinary historical achievements as a present for the 100th Anniversary of the Party.

Strengthening Party building, consolidating bases

Shandong Gold opens a special class for the education on Party building and Party history to improve employees' political awareness and raise their consciousness of responsibility. With a tight focus on the Company's overall strategic development and central tasks, we constantly improve Party building, and steadily push forward the learning and education of Party history to provide powerful supports for opening a new stage of high-quality development.

In 2021

28

Selected five-star Party branches

47

Set up Party branch demonstration sites

934

Solved problems of grass-roots people

21,000 persons

Linglong Revolutionary History Education Base received

Strengthening Party building

We take the following actions for this purpose: incorporate Party building into our Articles of Association; carry out the activities in celebration of the 100th anniversary of the Party; set up the primary-level Party member responsibility zone, Party member pioneer post and Party member commando, during which, many excellent and exemplary workers are emerging; establish a "three-level" reporting system and a sound Party building system across all levels of the enterprise.

Strengthening the learning and education of Party history

We make efforts to build Linglong Revolutionary History Education Base into China's first revolutionary history education base in the gold industry, the Party history education base and the first patriotism education base of province-owned company in Shandong. We also combine the learning and education of Party history with serving the society and benefiting the people, and carry out the activity of "helping the people solve problems" and other voluntary services.



Learning and Education of Party History by Shandong Gold Mining

Combating corruption and upholding integrity

Shandong Gold continues to strengthen Party disciplines and works harder to improve Party conduct and combat corruption. It strengthens the "Three Rejections" mechanism comprehensively, facilitates whistle-blowing and strengthens corruption risk prevention & control and education on integrity, with an aim to prevent corruption risks and build a Clean and Honest Shandong Gold in an all-around way.

In 2021

340

Organized educational activities on improving Party conduct and combating corruption

19,458 persons

Participated in the education on improving Party conduct and combating corruption

340 hours

Spent in total on education and training on improving Party conduct and combating corruption

0 Number

Corruption prosecutions

Improving the supervision system

We have established the work group for improving Party conduct, upholding integrity and fighting against corruption, and formulate the *Opinions on Further Strengthening Political Supervision*, *Method for Strengthening the Supervision of Heads and Leadership Teams*, and *Work Plan for Implementing the Central Party Leadership's Eight-point Decision on Conduct and Taking Stern Action against Formalism, Bureaucratism, Hedonism and Extravagance*. We establish a "six-in-one" supervision system, popularize the "3+X" supervision model and explore the ERP "smart supervision" to comprehensively strengthen Party discipline.

Facilitating reporting

We have set up an internal reporting mechanism, and build a platform for employees to report by "writing letters, paying visits, online reporting and dialing hotlines". The Discipline Inspection Commission has set up an organization to receive information, and conducts reviews and investigations in accordance with regulations, disciplines and laws.

Advocating the culture of clean governance

We have conversations about clean governance before the employment of staff; build a Clean Governance Culture Demonstration Unit; hold competitions with a theme of noble morality and honesty; organize staff to watch educational films, micro-videos on clean governance; organize the Board of Directors and employees to receive the training on anti-corruption and clean governance to further strengthen the building of a Clean and Honest Shandong Gold.

Case

Laixi Company establishes a smart cloud supervision system for discipline inspection to improve the supervision quality and effectiveness

Laixi Company, an affiliate of Shandong Gold, established an inclusive, intelligent and efficient smart cloud supervision system for discipline inspection. The system mainly includes 12 supervision modules, including production and operation anomalies, recording of relevant matters of Party members and officials, material price, supply quality, vehicle maintenance, vehicle oil consumption, equipment maintenance, etc. This platform can give warnings and manage and control illegal and non-compliant procedures by collecting the operating procedures and data of key jobs on line in real time, and integrate information technology and digital information with discipline inspection and monitoring deeply. After this platform is used, it effectively improves the quality and effectiveness of discipline inspection and corruption prevention, and improves the work efficiency in improving Party conduct, upholding integrity and fighting against corruption.

 CSR Stories

Shandong Gold in my eyes

Safe Shandong Gold: A long journey of safety in 39 years



Wang Xianliang from Jiaojia Gold Mine

In 1982, 18-year-old Wang Xianliang joined Jiaojia Gold Mine, becoming an ordinary contractual peasant-worker. Nine years later, one year before the expiration of his contract, he was enrolled as a regular worker. He was evaluated as an Advanced Worker by the Department of Mines for 7 consecutive years, and was rated as the Exemplary Worker twice. In 1992, he won the honorary title of Province-level Exemplary Worker. Speaking of him, many monitors and workers from contractual construction teams all thought that he was too stubborn. His coworkers played jokes with him and called him Stubborn Wang. His coworkers said he had a pet phrase that "work safety must not be perfunctory".

In 2015, Wang Xianliang was appointed as Safety Director of Sizhuang Branch Mine, being responsible for the safety management for more than 120 sites in about 20 midsections of more than 20 types of work both above and under the ground. The work was complicated and the responsibilities were heavy. Wang Xianliang became more and more "picky" in his work.

Wang Xianliang stayed at the operation site every day during the standardization of work safety. He never missed any details. He required the workers to comply with the standards strictly in carrying out each detailed work such as pipeline installation, erection of cables, and even the installation of an energy saving lamp or sign board. With his stringent requirements, the standardization project under his charge won the praise of the Department of Mines, and was taken as an "exemplary project" to be learnt by other mines.

As the Safety Director, Wang Xianliang's "picky attitude" was fully demonstrated. When Wang Xianliang went down for a check with several group leaders, he found a floating stone in the main entry. Actually, he could ask a worker on duty to deal with it, but he found a crowbar and pried it away directly. "If other workers can't deal with it timely, it may cause personal injuries. Everything would be too late," he said. Wang Xianliang's high sense of responsibility and serious attitude to work have deeply affected his coworkers.

On April 28, 2015, Wang Xianliang was received by the leaders of the Party and the State at the Great Hall of the People as a National Exemplary Worker. From 18 to 57 years old, from a contractual peasant-worker to a National Exemplary Worker, in 39 years, Wang Xianliang had always been engaged in front-line work under the ground. He safeguarded the work safety firmly, conducted onsite management and carried out special safety campaigns strictly, and made his own contributions to the building of a "safe Shandong Gold". Supposing he walked for 9-10 km each day underground, now he has walked for more than 100,000 km, equivalent to the length of four Long Marches. However, Wang Xianliang reacted calmly to all of these. He said, "I'm just an ordinary miner. I just do my best in my work. Although the underground work is dirty and tiring, I love it. I enjoy the pleasure to be a miner."

To build a "safe, ecological, energetic and humanistic Shandong Gold" is the unremitting pursuance of all Shandong Gold employees. The sustainable development goals of Shandong Gold can't be fulfilled without the steady and hard work, tireless pursuit and perseverance of all Shandong Gold employees.

Ecological Shandong Gold: the Iron Triangle for the scientific research on the filling of the mine without exhaust and waste



The Iron Triangle of filling research

For quite some time, exploring a new way for the comprehensive utilization of solid waste in mines has always been a problem needing prompt solutions in this industry. The success of the mining project without discharge of exhaust and waste of Shandong Gold Mining (Xinhui) Co., Ltd. would not have been possible without the hard work of the "Iron Triangle" composed of Wu Zaihai, Wang Yuliang, and Guo Jiaren, who are in the scientific research team of Xinhui Project Department, Filling Engineering Laboratory, as well as other front line workers.

The project was advanced in severe winter. In order to verify the reliability of test data, "the Iron Triangle" lived at the construction site. They adopted the "5+2" work model with day and night shifts, so there were persons on duty 24 hours a day. The "Iron Triangle" controlled each stage of the filling process strictly, for fear that one little fault might affect the overall system. They took the trouble to conduct tests and make revisions again and again to solve the problems in the test such as failure of cyclic utilization owing to the mudflow of overflow water, low strength of the filler caused owing to the low underflow concentration, etc. In order to catch up with the construction schedule, the Iron Triangle worked together with all workers on the 20m high sand silo, equipment installation platform, and pipe installation bracket despite the chilliness and bad weather.

After three years of laboratory research and three months of field tests, as well as countless debugging, the "Iron Triangle" finally confirmed the parameters to ensure the stable underflow concentration, and launched six innovative scientific and technological achievements about exhaust-free mines through independent R&D. Through the intelligent work in the laboratory, they have worked out a filling plan for Shandong Gold Mining, and successfully realized the development of exhaust-free mines. The formal implementation of the mining project without exhaust and waste discharge has realized the comprehensive utilization of solid waste in mines, and integrated and extended the mining industry chain. It can increase the economic benefit by RMB 32 million each year on average. Thanks to the zero discharge of tails, there is no need to build new tailing ponds, which has reduced the occupation of surrounding land resources, eliminated the safety & environmental hazards caused by the tailing ponds, and created huge ecological and social benefits.

With the research staff like the Iron Triangle, through technical accumulation and verification by lab tests, pilot-plant tests and industrial tests, the Filling Engineering Laboratory took the initiative to put forward the new filling model with filling of fine particle tailings and comprehensive utilization of coarse tailings, which properly demonstrated the meanings of ecological Shandong Gold to society.

Energetic Shandong Gold: "innovation talent" with a well-deserved reputation



Liu Changxiang from Xihe Zhongbao Mining Co., Ltd.

Liu Changxiang has joined the development team of Shandong Gold for more than 9 years. He once won the honorary titles of "Technical Model Worker" and "Employee Invention Star" in Gansu, and "Innovation Studio Innovator", "Advanced Worker" of Shandong Gold Group. In this sense, he is an innovation talent with a well-deserved reputation in Xihe Zhongbao Mining Co., Ltd.

"Along with the updates of electromechanical equipment, difficult problems keep emerging. The professional knowledge learnt before can no longer meet the production requirements, so we need to learn more and ensure the better completion of production tasks." Liu Changxiang said this repeatedly to his coworkers. He was also strict with himself in doing this.

The mine shaft hoisting system is an important passageway for transporting mine workers, materials, and equipment, while the safety protection function of the car stopper in cage mine is the number one priority in the shaft hoisting system. Liu Changxiang led the shaft maintenance staff to conduct research on this issue. After multiple tests and improvements, they successfully developed the safety interlock mechanism between the car stopper and the lifter. This achievement won the 10th Excellence Award of Employee Technological Innovation in Gansu, and obtained the national utility patent. It has been widely used in Shandong Gold.

There were many inclined shafts in Xihe Zhongbao Mining Co., Ltd., and transport of people in inclined shafts could not be

effectively controlled. The artificial operation of hoistmen and mixed transport of inclined shaft staff and mine cars brought great potential hazards. After repeated thinking and research, Liu Changxiang successfully developed a safety interlock mechanism for transporting workers in the inclined shaft, which completely solved this problem.

The light screen type safety device against slack rope is a mature protection technology against slack rope, but it still has weaknesses. For example, it's easily disturbed, and the wire rope can't be monitored in real time. In response to these weaknesses, Liu Changxiang's thoughts were not limited by its products already developed. He considered the problem reversely, and developed the offline light screen safety device against slack rope, which can monitor the wire rope in real time. It has a good preventive effect since it solves the problem of disturbance and avoids unnecessary emergency stops of the lifter. Besides, it can reduce the impacts of emergency stop on the lifter owing to the disturbance and improve the production efficiency.

The Improvement and Innovation Studio, with Liu Changxiang as the leader, finished more than 20 innovation projects and small-scale reform projects, obtained 9 utility patents, and published 6 papers. The studio was awarded with the title of Innovative Team by Longnan Federation of Trade Unions and Gansu Federation of Trade Unions, and the title of Standard Innovation Studio by Shandong Gold Group. With his arduous efforts, a progressive and fearless team full of vigor was established.

Human-friendly Shandong Gold: A responsible pioneer in South America



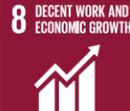
Wang Daqing from Representative Office in Argentina

In May 2005, Wang Daqing joined Shandong Gold, becoming a member of the Venezuela project. As a new employee of Shandong Gold in his twenties, Wang Daqing was fully devoted to the front-line work in the mine. He, then the onsite dispatcher and interpreter, was asked to cooperate with the leader for onsite production and management in the mine. As a member of the enterprise reception team when the state leaders visited Venezuela, he once attended the summit meetings between the Chinese government and Venezuelan government many times. This special experience made him more confident and open-minded. He deeply realized that he should seize the rare opportunities to give full play to the strengths of a state-owned enterprise, carry forward the spirit of dedication of overseas employees, and make contributions to the local community, enterprise and our country.

In 2017, Wang Daqing was assigned to Veladero Gold Mine in Argentina as one of the first developers. Despite the harsh environment, Wang Daqing overcame the difficulties and urged himself to keep learning. He learned advanced technologies to constantly improve his professional skills and comprehensive quality. Through competitions, in 2018, Wang Daqing was selected to participate in the reception of state leaders during their presentation at the Argentina G20 summit and their state visit to Argentina. Owing to his excellent performance, China's embassy in Argentina sent a letter of appreciation to Shandong Gold. After receiving the written commendation, he was determined to work harder and strive for the best performance.

In 2020 and 2021, faced with the sudden attack of COVID-19, the Representative Office in Argentina strictly followed the important instructions of General Secretary Xi Jinping and the COVID-19 prevention and control requirements of overseas enterprises, and established a sound prevention and control system, which ensured the stable project production. Because of his work, Wang Daqing worked continuously at the front line to fight against the epidemic for more than 300 days in the project in Argentina. In the overseas battleground, Wang Daqing, together with all team members, became the bravest defenders. They prevented and controlled the spreading of the epidemic, guaranteed the production, and donated anti-epidemic supplies organized by the China-invested Enterprise Association in Argentina. During the epidemic, he took advantage of his language to publicize the effective methods and advanced events of state-owned enterprises and employees in COVID-19 prevention and control in the overseas country. He combined COVID-19 prevention and control, culture promotion and mine production together, and publicized the stories of the state-owned enterprise, which fully demonstrated the humanistic sensibilities and responsibilities as an employee of Shandong Gold.

Although he stayed far from the motherland and his family, Wang Daqing, together with all overseas employees of Shandong Gold, forged ahead with determination and cautiousness to strive for the overseas achievements of Shandong Gold. He made great contributions in his best age to the fulfillment of the Company's globalization objective and the development of the local community in his own way.



Safe Shandong Gold: working at efficient operation

Shandong Gold works hard to guarantee the work safety, strengthens the leading role of innovation, and improves the product and service quality to build a world first-class mine. Besides, it continuously improves the value creation ability, builds a safe Shandong Gold and promotes the safe and stable development of the enterprise.

Core issues

- Guaranteeing work safety
- Providing the best quality
- Strengthening the leading role of innovation

Key performance

- Investing RMB **508** million in safety
- Investing RMB **500** million in research & development
- 222** patents have been applied

Guaranteeing work safety

Shandong Gold firmly upholds the philosophy of people first and life first, and takes work safety the top priority in doing everything. It firmly insists on the objective of "zero accident" in both safety and environmental protection to promote the transition of safety management from zero accident to zero hazard, promotes the steady building of an intrinsically safe mine, and ensures the stable situation of work safety.

Work safety management

We have established and improved the safety management system and mechanism, and formulated relevant rules and regulations. We have also increased the special investment in ensuring work safety, obtained relevant licenses of work safety timely, and strengthened the "three simultaneousness" in work safety. These have helped us consolidate the foundation of safety management and improve the intrinsic safety level.



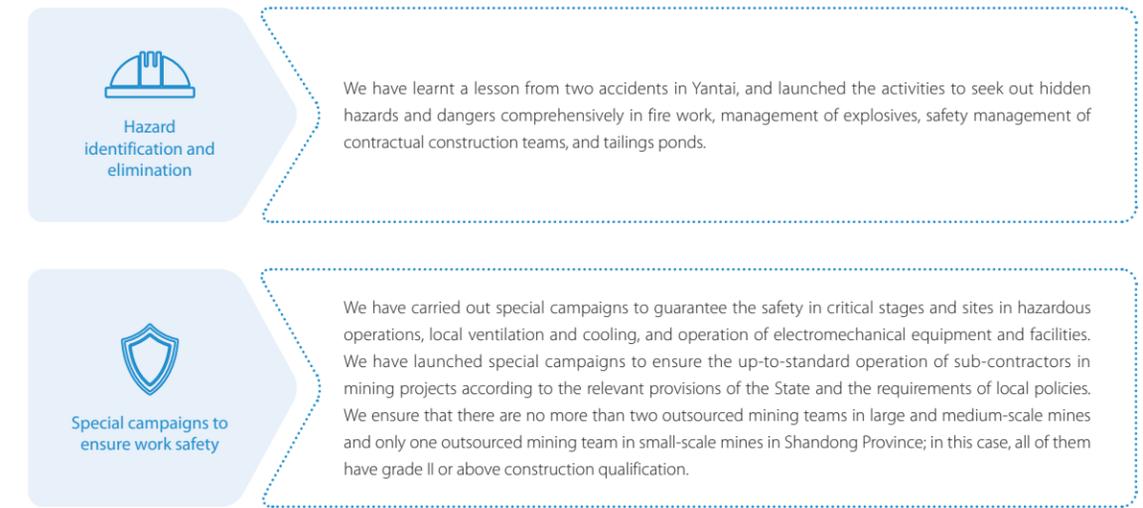
Chairman Li Guohong investigated work safety at the premise of Xihe Zhongbao Mining Co., Ltd.



Regular meeting about safety & environmental protection of Veladero Gold Mine in 2021

Safety risk management & control

By launching centralized and special campaigns to strengthen work safety and increasing the investigations of potential hazards, Shandong Gold has promoted the constant improvements of the work safety level. It will make every effort to prevent accidents, and promote its safe and high-quality development.



Case

Xinjiang Jinchuan Co., Ltd. strengthens safety risk management & control

In 2021, Xinjiang Jinchuan Co., Ltd. which just merged into Shandong Gold established the leading group for hierarchical management of risks and hazard investigation and treatment, with Party Committee Secretary, Chairman, and General Manager as the group leader. The leading group established the *Safety Inspection System, Hazard Treatment System, Management System for the Identification and Hierarchical Management & Control of Safety Risks, and Management Regulations for the Rewards and Punishments of Work Safety (Trial)*. The group carried out safety management and control in an all-around way by means of comprehensive inspections, special inspections, seasonal inspections, inspections in festivals and holidays, and daily inspections, to seek out and deal with hazards, eliminate operating risks and guarantee work safety.



Fire protection inspection by Xinjiang Jinchuan Co., Ltd.

Building of safety culture

All subordinate companies of Shandong Gold have established the safety training plans and follow up their implementation, and actively organize the publicity and education on work safety, emergency safety drills and training on work safety to create a dense safety atmosphere, enhance the safety awareness and ability of all employees, and guarantee its stable development.

In 2021

more than **700** persons

The training and examination for a certificate of qualification on work safety knowledge and management ability covered more than in the Shandong Gold headquarters and subordinate companies, including main responsible persons and safety managers

more than **300** persons

Held 4 centralized training courses on "one law and two regulations" and accident cases, which covered more than in the subordinate companies, including responsible persons and employees of all disciplines



Emergency drill on production halt and evacuation of employees of Jiaojia Gold Mine

Case

Jinzhou Company launches the Work Safety Month activity

In June 2021, Jinzhou Company launched the activity of Work Safety Month. During this month, it established the *Implementation Plan of Jinzhou Company for the "Work Safety Month" Activity in 2021*. It also defined the key jobs, and publicized the relevant contents through the morning meeting, pre-shift meeting, electronic screen, and banner, and launched work safety inspections and trainings. In order to create a strong atmosphere of work safety, Jinzhou Company also pasted more than 50 slogans at main traffic routes and in workshops, and organized the safety knowledge contest about the Work Safety Month, so that the philosophy of work safety would take root among the employees. This has greatly improved the safety awareness and ability of all of its staff and workers.



Safety inspection in the Work Safety Month of Jinzhou Company

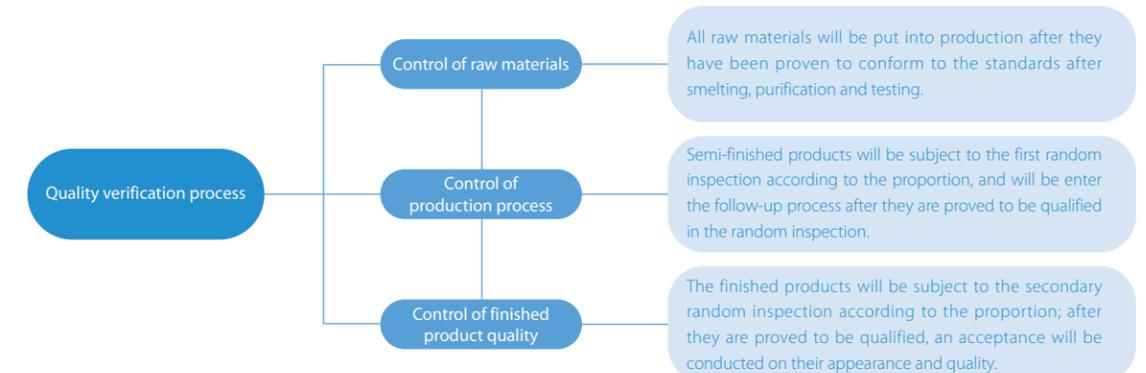
Providing Shandong Gold quality

We actively explore new models of enterprise quality management, continuously establish and improve the product quality control system and guarantee the product quality. Taking customer demands as a center, we work continuously to optimize the customer service system, make every effort to provide customers with high quality products and services, and protect customers' lawful rights and interests.

Improving quality management

Shandong Gold attaches high priority to quality management. It has established a quality management system according to the requirements of GB/T19001-2016, and strengthens the quality accreditation of products to make the products more reputable and gain more popularity. Its subordinate company, Shandong Gold Smelting Company has won the honorary title of Advanced Enterprise Able to Provide Standard Gold Bullions issued by Shanghai Gold Exchange for many consecutive years. It has passed the accreditation of GB/T19001-2016 quality management system, LBMA quality accreditation, and relevant accreditation by China National Accreditation Service for Conformity Assessment (CNAS). Its Mount Tai® standard gold and Shandong Gold® products have been highly recognized for their good quality since they were launched to the market, with both 100% in the product percent of pass and the customer satisfaction rate.

During production, the Company strengthens the quality control in each stage to ensure that quality of raw materials and in production is controllable and that only quality finished products are put into market.



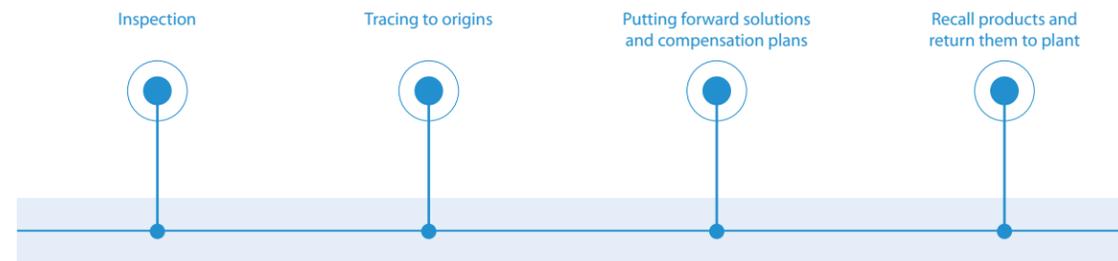
Product quality control process



Gold bars produced by Shandong Gold

Providing quality services

The Company works hard to provide high quality services, protects customers' rights and interests and improves customer satisfaction. If there are complaints about product quality, it will recall the products according to the test result of National Center of Quality Inspection and Testing on Gold-silver Products, and put forward solutions and compensation plans to customers to protect the customers' rights and interests and guarantee the after-sales service quality. In 2021, it put the forgery prevention QR Code of Mount Tai standard gold products into use, which provided an effective basis for customers to distinguish the true from the false. It also put the on-line sales and buy-back platform into use to provide more convenient, safer and more efficient services for customers.



Complainants and Shandong Gold Smelting Company submit the products to National Center of Quality Inspection and Testing on Gold-silver Products for inspection respectively.

For non-conforming products, we will trace to the source according to the production batch.

Make a statement on recovery and provide solutions and compensation plans for the customer.

Non-conforming products will be smelted and purified as raw materials after they are returned to the plant to be processed again.

Product recovery process

In 2021

0

Received customer complaint

We always take customers as the center, strictly abide by the laws and regulations such as the *Advertising Law of the People's Republic of China* and *Interim Measures for the Administration of Internet Advertisements*. We set different approval procedures for different advertising according to their levels and contents, and strictly prohibit false and deceiving publicity. Besides, we require our employees to strictly abide by our secrecy system and keep a strict secret of customer information and business secrets. We resolutely guarantee customers' rights and interests, timely handle customers' complaints and feedback, and ensure to deal with them properly to make the customers satisfied. Our products and services basically have no bad impacts on customers' health and safety.



Strengthening the leading role of innovation

Shandong Gold constantly improves its innovative management system, tackles hard-nut problems in science and technology, and strengthens the application of scientific & technological innovation results to production. It works hard to protect its intellectual property, builds an international top-grade demonstration mine, and promotes the increase in quality and efficiency in its production and operation through innovative and profitable measures.

Strengthening technology innovation

Shandong Gold insists on scientific and technological self-reliance and accelerates the building of an innovation platform. It increases investment in science and technology, carries out technical exchange and cooperation, and constantly improves its staff' innovation ability. It also makes every effort to tackle the key and common problems in the industry and obtains the leading strategic position in scientific & technological innovation to provide powerful technical supports for its sustainable development. In 2021, the achievements in its Research on Rock Mechanics and Engineering Application of Deep Mining in Zhaolai Gold Mine Belt won the Special Prize of Science and Technology released by China Gold Association.



Launch ceremony of Joint Innovation and Study Base for Reutilization of Gold Tailings

In 2021

309

Carried out research projects

more than 400

The Innovation Studio made achievements in innovation on average



Creating an innovation platform

We have strengthened the building of the technological innovation platform. The Deep Mining Laboratory, Filling Engineering Laboratory, and Beneficiation Laboratory have conducted many researches on scientific bottlenecks relating to mining, and will further improve the research & development abilities with higher standards. In the first onsite assessment, Shandong New R&D Institution which was newly approved in 2021, obtained an "Excellence" and the government financing support of RMB millions.



Stimulating the innovation vitality

Taking the "Scientific & Technological Innovation Month" as a chance, we have organized all employees to conduct innovation activities, and display the innovative achievements and technologies. We have organized evaluation of the Innovation Studio to promote its quality and upgrading. We also have organized the internal evaluation of innovation achievements to enhance the sense of honor of technologists.



Strengthening exchanges of innovation

We have strengthened the in-depth cooperation with Huawei and China Mobile Group Shandong Company Limited, and had many exchanges about the overall architecture of intelligent mine, big data platform, "Harmony OS-Powered Cockpit" (an operating system) and the 5G-powered World-class Laizhou Gold Base Construction Project to promote the building of the intelligent mine.

Protecting intellectual property

The Company pays special attention to the protection of innovation achievements. It strictly abides by the *Patent Law of the People's Republic of China* and other laws and regulations as well as relevant requirements of the industry association, and organizes education and training on the protection of intellectual property to improve employees' innovation ability and intellectual property protection awareness, and protect the innovation achievements.

Case

Shandong Gold organizes training courses on the protection of enterprise intellectual property

In May 2021, Shandong Gold organized the training course on the protection of enterprise intellectual property. Many intellectual property experts were invited to give a lesson to introduce in detail the process of standard implementation and review & accreditation of enterprise intellectual property. These experts also shared the whole life cycle management model and standard as well as their experience in the application and standard implementation of intellectual property for the enterprises with strengths in intellectual property. This training has helped the technical managers widen their horizon, and enhanced their intellectual property protection awareness and ability.



Training course on the protection of enterprise intellectual property

Case

Developing a full set of intelligent equipment for high-concentration filling of tailings, and building a mine without exhaust discharge

In order to solve the two technical problems concerning tailings concentration and homogeneous mixing of filling pulp during the filling of fine particle high concentration tailings, SD-GOLD Heavy Industry Co., Ltd. and Filling Engineering Laboratory cooperated with each other to carry out research on technical bottlenecks. They developed the whole set of intelligent equipment for high-concentration filling of tailings, and controlled the whole process flow of high-concentration filling of tailings intelligently. Research & development of this set of equipment has filled in the gap in the field of filling equipment and technology of fine particle high concentration tailings in China. This set of equipment has obtained 15 patents with proprietary intellectual property rights, including the "Thickener Pulp-generation System Based on Wind and Hydraulic Power and the Method for Positioning Damaged Nozzles Based on This System." At present, the patents have been applied in the tailings filling project of Changsha Institute of Mining Research, Xincheng Gold Mine, Xinhui Company, Jiaojia Gold Mine, and Yi'nan Gold Mine, which provides mature technology and experience for the building of mines without exhaust discharge and green mines in the gold industry.



Application of the whole set of intelligent equipment for high-concentration filling of tailings in Xincheng Gold Mine

Building an international top-grade demonstration mine

With Sanshandao Gold Mine as a pilot area, Shandong Gold has developed an intrinsically safe, intelligent, green, harmonious, and profitable international top-grade demonstration mine, and created a new model for the mining enterprises to develop intelligent mines and ecological mining. In 2021, the international top-grade demonstration mine project of Shandong Gold passed the review and acceptance. Many domestic academicians and experts thought that it had "basically reached a leading level in the world". Seizing on the opportunity provided by this, Shandong Gold established the *Work Plan for the Promotion of Intelligent and Smart Mine* to spread the experience in building an international top-grade mine. It has created examples for others to follow and promoted the further spreading of the experience.

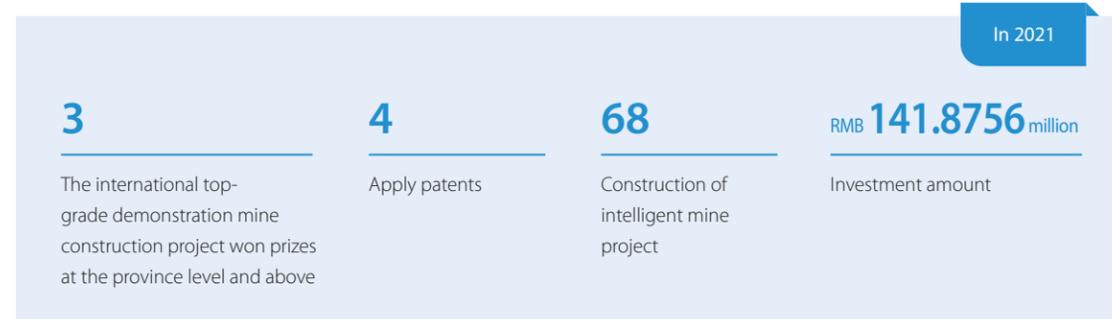
Case

The international top-grade demonstration mine of Shandong Gold is completed and passes the acceptance

On March 19, 2021, the evaluation meeting on the construction of international top-grade demonstration mine of Shandong Gold was held in Yantai City, Shandong Province. Participants watched the special film about the construction of the international top-grade demonstration mine and watched the construction achievements onsite. In the dispatching center set up at the meeting place, the participants could dispatch and control the operation site of Sanshandao Gold Mine remotely, and have a comprehensive understanding of the achievements made in terms of big data, 5G communication, and remote centralized control. The expert panel believed that the construction of the international top-grade demonstration mine had facilitated the formation of a series of construction standards that could then be replicated and applied in other areas, including the general requirements for the construction of intelligent mines, data standard for top-grade demonstration mines, general requirements for the construction of ecological mines, and evaluation criteria for the construction of ecological mines, which had laid a solid foundation for the spreading of construction achievements and experience of an "international top-grade demonstration mine". The project achievement has basically reached a world leading level.



Sanshandao mine dispatching hall



Case

5G+Cloud+AI-powered World-class Gold Base project wins two prizes

Centered around four areas, namely, "safe mining, intelligent beneficiation, green smelting and smart decision-making", the 5G-powered World-class Laizhou Gold Base Construction Project of Shandong Gold is deeply integrated with the traditional mining industry via the help of cutting-edge information technologies such as 5G and big data, which greatly improves the intrinsic safety of mines and helps enterprises to improve the quality and efficiency. The implementation of this project is involved with 36 application scenarios, 24 project programs and 61 universal products. In November 2021, the "5G+Cloud+AI-powered World-class Gold Base" project won two province-level prizes, namely, the silver award of the 4th "Blossom Cup" 5G Application Competition, and the first prize of the first China New Smart City Innovation & Application Competition.



The project wins the silver award of the 4th "Blossom Cup"

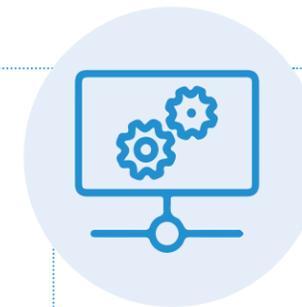


Strengthening digital transformation

Shandong Gold attaches high priority to the digitalization campaign. It helps the enterprise to improve the management efficiency, reduce the management cost, and improve the comprehensive competitiveness through digitalization in four aspects, namely, "cost reduction, efficiency increase, management & control, and innovation".

Carrying out construction of digital projects

We have finished establishing the standards for 17 master data items of 8 categories, including HR, finance, materials, equipment, project, production, and general-purpose data. We have formulated the *Digital Transformation Plan of Shandong Gold during the 14th Five-year Plan Period*, and finished the establishment of the Enterprise Resource Planning (ERP) platform.



Deepening the construction of the intelligent system

We constantly spread and upgrade Shandong Gold Cloud system, and have established the electronic stamp system and the unified statement analysis platform to improve the management and operation level through intelligent and digital means. Shandong Gold Cloud project have won 2021 Best Application Award released by Shandong Information Association.

Strengthening information security

We have finished the installation & debugging, strategy configuration and distribution of 25 firewalls in 24 organizations, as well as the version upgrading of 47 firewalls to maintain the stable network operation environment and ensure information security in an all-around way.

Case

ERP project of Shandong Gold is put into operation

The Enterprise Resource Planning (ERP) platform can provide dynamic and real-time statistics and analysis of all elements throughout the whole process of all businesses, giving a powerful data support to an enterprise's operating decisions. On December 8, 2021, the ERP platform of Shandong Gold was put into operation, which enabled all the employees to have access to core human affairs and remuneration in the whole company, and realized the handling of finance, materials, production, procurement and sales in pilot units. It can help the Company boost the management efficiency, reduce the management cost, and improve the comprehensive competitiveness through digital means. On the first day when the system was put into operation, more than 2,500 orders were finished, and all service modules performed well, which laid a good foundation for its promotion in the future.



Ecological Shandong Gold: demonstrating beauty of the environment

Shandong Gold thoroughly applies Xi Jinping's thought on ecological civilization. It believes in the development principle that green mountains and lucid waters are indeed mountains of gold and silver, insists on the basic state policy of resource conservation and environment protection, and advances the fight to prevent and control pollution. It works hard to improve the resource utilization efficiency, reduce energy consumption and pollutant emission, and further synergize the reduction of pollution and carbon emissions. This has consolidated the achievements of green mines and contributed to the green, low carbon, and high-quality development of the society.

Core issues

- Improving environmental management
- Insisting on energy conservation and emission reduction
- Building a green mine
- Combating climate change

Key performance

- Investing RMB **106** million in environmental protection
- Realizing **100** % up-to-standard discharge rate of "the three wastes" in the Company and its subordinate companies
- Reaching above **85** % comprehensive utilization ratio for common industrial solid wastes

Strengthening environmental management

Shandong Gold strictly abides by relevant laws and regulations and works continuously to improve the environmental management system. It strengthens the management of hazardous chemicals, actively organizes training on environmental protection, works harder to promote green office, and integrates the green development philosophy into the whole process of production and operation to promote enterprise green development.

Environmental governance

We strictly follow the *Environmental Protection Law of the People's Republic of China*, *Law of the People's Republic of China on Environmental Impact Assessment*, and other relevant laws and regulations on energy conservation and emission reduction. We work continuously to improve the environmental protection management system, including the *Responsibility System for Ecological Environment Protection*, and perfect the long-lasting management system for environmental protection, so as to standardize the environmental protection work of the Company and its subordinate companies. We will go on assuming the primary responsibility for environmental protection and promote the enterprise to realize sound, sustainable and green development.



Progress in environmental management of subordinate companies in 2021

Management of hazardous chemicals

We have clearly put forward the safety and environmental protection requirements for hazardous chemicals during the packaging, transport, loading & unloading, etc. according to the *Regulations on the Control over Safety of Dangerous Chemicals* and other relevant management regulations, and will strictly standardize the management of purchase, storage, procurement and use of hazardous chemicals. We have established contingency plans for sudden environmental incidents of hazardous chemicals and will organize emergency drills periodically to prevent hazardous chemical accidents resolutely.

Case

Organizing emergency drills to improve the environmental emergency response ability

On June 10, 2021, Xinhui Company, which is affiliated to Shandong Gold, organized the Safe Production Department and workshop for extraction of gold by cyanidation to carry out the table-top exercise on the emergency rescue plan for cyanide poisoning and leakage accidents, and conducted the emergency rescue drills. All these actions were to improve its emergency rescue ability in cyanide poisoning and leakage, and increase employee's environmental emergency protection awareness and self-protection ability.

Training on environmental protection

Shandong Gold attaches high priority to the development and improvement of employees' environmental awareness and ability. It has organized diversified and colorful training on environmental protection and conducts various activities to promote environmental protection, and raise employees' environmental awareness.



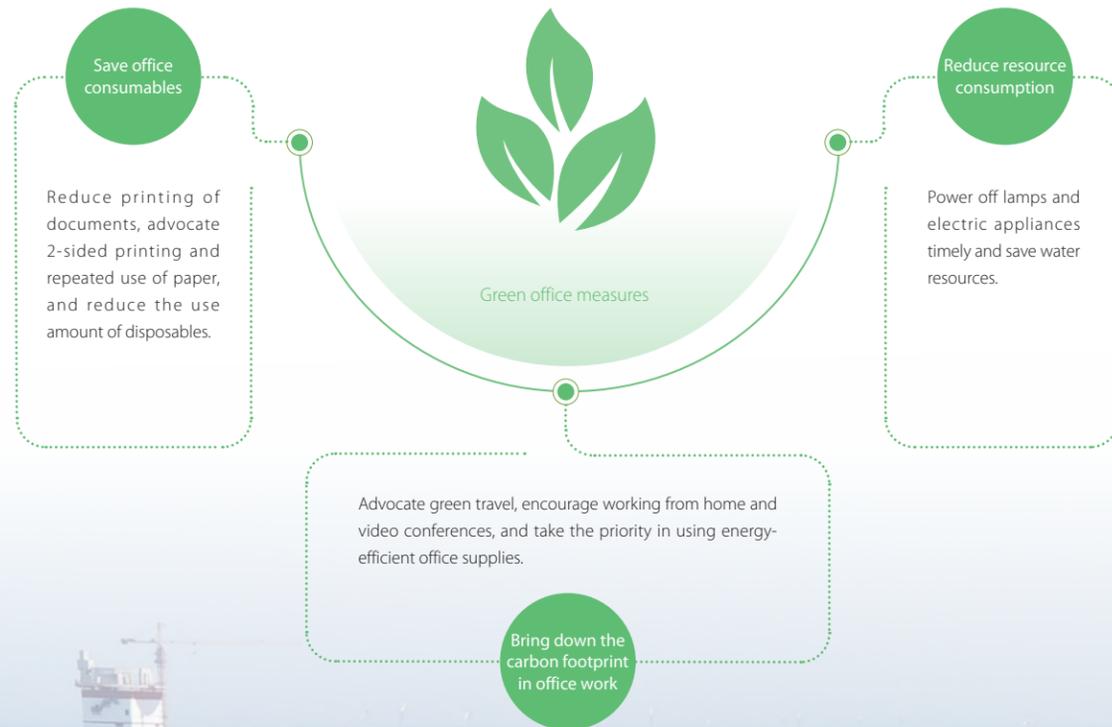
Case

Taking multi-pronged measures to raise employees' environmental awareness

In June 2021, focusing on the theme of the World Environment Day, Jiaojia Gold Mine carried out environmental protection activities, including hanging slogans, pasting picture posters, organizing special trainings, and cleaning white "white pollutants" to publicize the environmental protection philosophy. It also held the "Activity for Collecting Environmental Protection Calligraphy Works and Cartoons". a total of 9 calligraphic works, and 86 paper-cut works and cartoons were collected in aggregate. Some excellent works were displayed in public areas in the Company. Through these activities, employees can enjoy the pleasure in environmental protection, and their enthusiasm for environmental protection will be steadily increased.

Green office

We firmly uphold the green office philosophy, actively promote paperless office work, advocate video conferences and reduce the frequency of business travels. We adopt 2-sided printing to reduce the use amount of papers. We also adopt energy-saving lights, timely turn the power off, and reduce the consumption of water resources. Meanwhile, we promote the classified collection of waste and reduce the generation and emissions of pollutants to the greatest extent. We also reduce the energy consumption in office work rationally, and integrate the green philosophy into each part of office work to make our own contributions to environmental protection.



Insisting on energy conservation and emission reduction

Shandong Gold strictly implements the rules for management of waste gas, waste water, solid waste and hazardous chemicals and strengthens the governance of pollutant emission to reduce the environmental impacts. In the meanwhile, it also strengthens energy utilization management, constantly optimizes the energy use structure, encourages the use of clean energy and improves the resource use efficiency, so as to promote the green development of the enterprise.

Pollutant emission

Waste gases generated during the production and operation of Shandong Gold mainly include the dust, acid gas and nitrogen oxide generated during mining, beneficiation, smelting, transport and stockpiling. Waste water mainly includes domestic sewage, mine water and industrial waste water. Non-hazardous solid waste mainly includes the waste rock, tailings and domestic garbage generated during production. Hazardous waste mainly includes tailings from cyaniding and waste engine oil.

We constantly strengthen the management of pollutant emission in strict accordance with state and local relevant regulations, and take further steps to prevent and control pollution. We strengthen monitoring of pollutant emission, seek out hazards and dangers of pollutants, and ensure that the pollutant emission meets the emission standard. In the meanwhile, we also increase the investment in environmental protection equipment, and make the most of energy-saving and environmental protection technology to improve the comprehensive utilization ratio of waste water and solid waste, reduce the pollutant emission and reach the goal of emission reduction. In 2021, the up-to-standard emission ratio of "the three wastes" of the Company and its subordinate companies reached 100%, and the comprehensive utilization ratio of common industrial solid wastes (waste rock and tailings debris) was above 85%.



Waste water

We implement the water pollution prevention measures. The mine water is used for supplementing the production techniques with priority, and the rest will be discharged according to standard after treatment. Concentrated water from beneficiation and backwater from tailings will be recycled in the concentration plant. Domestic sewage will be used in production or for greening and irrigation in the plant area after being treated in the Waste Water Treatment Plant.

Practice: The underground gushing water of Jiaojia Gold Mine is used for mining and sprinkling dust suppression; the rest is transported to the concentration plant for beneficiation, and there is no waste water discharged. A 1,000 m³/d domestic sewage treatment station has been built. All the water after the treatment will be used for irrigation, so that no domestic sewage will be discharged, i.e., the sewage treatment ratio is 100%.

Waste gas

We implement the air pollution control measures and strengthen the prevention and control of wind-borne dust. Ore and relevant materials are piled and transported in a closed space. All transport vehicles are covered, and roads are sprinkled and cleaned. In beneficiation, crushing, and sieving stages, dust is collected and will then be treated using the high-efficiency bag-type dust removers and discharged after the relevant standards are reached. The emission of waste gas must meet relevant emission standard. Our mining companies in Shandong Province have stricter waste gas emission standard than the national standards and local standards in Shandong.

Practice: Xincheng Gold Mine upgrades bag-type dust removers in the filling workshop to ensure that the waste gas is discharged according to standards after treatment. Spray and dust suppression devices are installed at the discharge port, charging port and other dust producing points, roads and other sites to prevent wind-borne dust. In the meanwhile, flushers are installed to clean all transport vehicles and reduce more dust caused by vehicles.

Solid waste

We treat solid waste in strict accordance with relevant requirements. Waste rock dumps, tailings ponds and other non-hazardous solid waste shall conform to the requirements of the *Standard for Pollution Control on the Non-hazardous Industrial Solid Waste Storage and Landfill*. The waste rock generated from underground boring will not be transported out; instead, it will be used for backfill of the worked-out sections and damming of the tailings pond. We promote the comprehensive utilization of tailings by using them for underground filling, transporting them out for making building materials or for adit prospecting and landfilling. Domestic garbage is collected by the environmental protection department periodically for unified treatment.

Practice: Xinhui Company sets sprayers at the places for temporary storage of waste rock. All of them have been covered using a dust screen. A shed for tailings debris, which is provided with the automatic fog gun system, is built for piling tailing debris. There are complete records and specifications. The comprehensive treatment ratio of non-hazardous solid waste reach 100%. The company classifies and collects domestic garbage and makes records of the treatment of domestic garbage. It has signed a treatment agreement with Pingdu Xinhelvjing Garbage Removal Team for the centralized treatment of domestic garbage.

Hazardous waste

We strengthen the normalized management of hazardous wastes according to the requirements of the latest *National Inventory of Hazardous Wastes*. We set up the temporary storeroom for hazardous waste according to relevant standards, and take strict measures for managing generation, storage, and transport of hazardous wastes. We review the qualifications of the hazardous waste treatment companies and entrust a qualified organization with hazardous waste treatment. We take strict measures for the normalized management of cyanide residues according to the *Technical Specification for Pollution Control of Cyanide Leaching Residue in Gold Industry*.

Practice: Chifeng Chaihulanzi Gold Mining Co., Ltd. strengthens the management of hazardous wastes in strict accordance with the *National Inventory of Hazardous Wastes*, *Standard for Pollution Control on Hazardous Waste Storage*, and other relevant laws and regulations. It establishes a hazardous waste management plan each year, and reports and registers online according to relevant specifications. It also establishes records and duplicate forms for transfer of hazardous wastes, signs contracts with enterprises with the hazardous waste treatment qualifications, and transfers the waste engine oil and other hazardous wastes periodically.

Noise

We take measures such as noise elimination, vibration reduction and sound insulation to reduce the noise of major noisy equipment, and ensure the up-to-standard emission of noise.

Practice: Jiaojia Gold Mine takes noise reduction measures for major noise sources, including sound insulation, noise elimination, and vibration reduction, and assigns full-time testing staff to test the noise periodically. The test results are recorded and publicized in prominent places. If the emission of noise is out of standard, it will issue a notice for corrections and urge relevant responsible departments to make corrections timely.

Data of emissions

Indicators	2021
Total greenhouse gas emissions (10,000 t)	96.74
Greenhouse gas emission intensity (t/RMB million)	28.51
Category I: Greenhouse gas emissions (10,000 t) include emissions from use of coal, natural gas, gasoline and diesel	11.29
Category II: Greenhouse gas emissions (10,000 t) include emissions from purchased electricity	85.45
Nitrogen oxide (t)	18.68
Sulphur dioxide (t)	25.77
Smoke dust (boiler emissions only) (t)	3.69
Particulate matters (production process emissions) (t)	62
Wastewater discharge (10,000 t)	2,892.49
Wastewater discharge intensity (t/RMB million)	852.36
Total chemical oxygen demand (COD) emissions (t)	242.05
Total ammonia nitrogen emissions (t)	10.98
Safely treated hazardous waste (waste engine oil) (t)	146
Third-party disposal amount of cyanide residue (10,000 t)	39.87
Disposal amount of cyanide residue tailings pond (10,000 t)	98.59
Inventory of heap leaching slag muck (10,000 t)	530
Production intensity of safely disposed hazardous wastes (t/RMB million)	196.99
Amount of general solid waste produced (underground mines) (10,000 t)	879.42
Production intensity of general solid waste (t/RMB million)	259.15
Comprehensive utilization ratio of general solid waste (mainly including tailings, waste rock, etc.) (%)	85.02
Amount of waste rock produced in open pit mines (10,000 t)	2,870.92

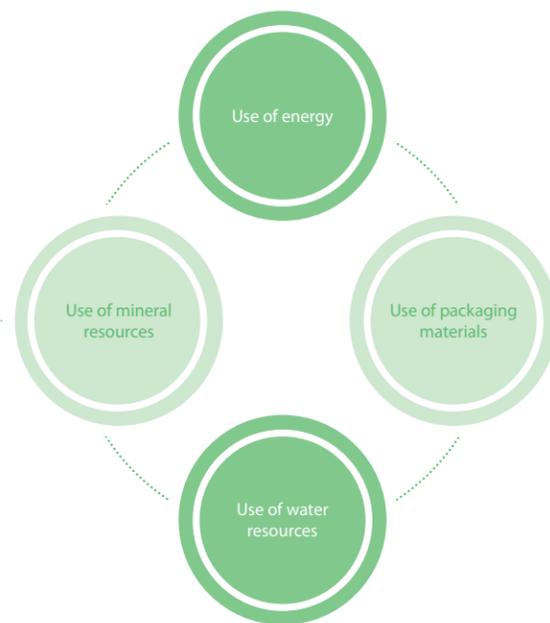
Remarks: The statistics data in the above table are the data of Shandong Gold and its domestic affiliated enterprises, excluding the data of its affiliated enterprises in overseas countries. In 2021, the Company acquired Xinjiang Jinshan Gold Mine. The gold mine uses the open-pit mining and heap leaching technique, so it has generated 5.3 million tons of new heap leaching slag. As a result, there has been an obvious increase in the generation of safely disposed hazardous wastes.

Use of resources

The Company constantly optimizes the energy use structure, takes the priority in using clean energy and reduces the use amount of fossil energy. It continuously improves the mining process and the utilization efficiency of ore resources. In the meanwhile, it simplifies the product packaging and reduces the use amount of packaging. It also strengthens water management, conducts water-saving renovation projects, actively promotes the cyclic utilization of water resources, and reduces the consumption of water resources. By doing so, it has reached the goal of resource conservation.

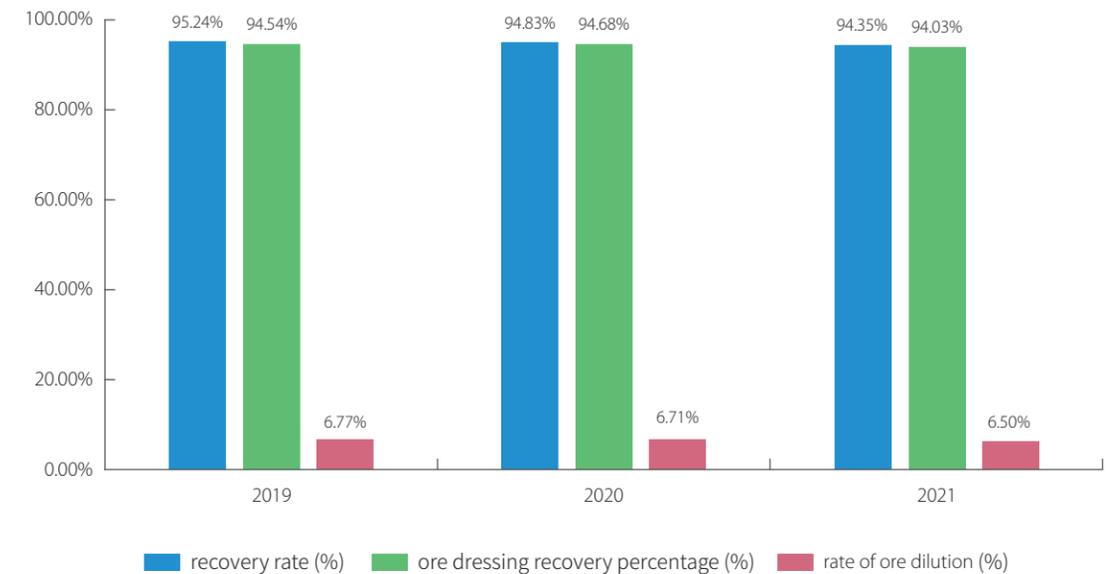
We improve the energy-saving assessment mechanism, accelerate technology upgrading and transformation, phase out outdated techniques, technologies and equipment actively, and improve the level of energy conservation. We also vigorously promote the use of geothermal energy, solar energy and other clean energy, constantly improve the energy consumption structure, and reduce the consumption of fossil energy to achieve the goal of energy conservation and efficiency increase.

We take various measures, including optimizing the mining process, improving the mining technology and ore grade, increasing the recovery of low-grade ore and preventing the mixture of waste rock and tailing debris, to reduce the loss of resources, improve the ore mining quality, and ensure the efficient use of mineral resources. In 2021, the recovery amount of residual ore was 1.0472 million tons.



We try to reduce the use of individualized packaging and wooden packing, and strengthen the use of paper packaging and degradable plastic packaging. We also adopt lighter and thinner packaging materials, and try to reduce the volume of packaging while meeting the packing requirements. In addition, we effectively control the total amount of packaging put into the market, and ensure the recycling of packaging wastes.

We promote the building of a water-saving enterprise, and tap the potential for water conservation in production and daily work. We also strengthen the renovation and cyclic utilization of sewage treatment equipment, and conduct training and other activities on water conservation to improve the water conservation awareness of all employees.



Remarks: The statistics data in the above table are the data of Shandong Gold and its affiliated domestic enterprises, excluding the data of its affiliated enterprises in overseas countries.

Resource use data

Indicator	2021
Total energy consumption (million kWh)	1,220.22
Energy consumption intensity (MWh/RMB million)	35.96
Petrol consumption (t)	420.83
Diesel consumption (t)	14,418.17
Coal consumption (t)	4,960.45
Natural gas consumption (10,000 m ³)	194.91
Purchased power (MWh)	991,817.23
Total water use amount (10,000 t)	119.60
Water intensity (t/RMB million)	35.24
Total packaging materials for finished products (t)	7
Amount of packaging materials per production unit (g)	0.3

Green mine construction

We vigorously advance the philosophy of "Shandong Gold, Ecological Mining", constantly consolidate and improve the construction achievements of green mines, and insist on the effective coordination between resource exploitation and mine development. We actively conduct the mining area greening activities, lay stress on the environment protection and restoration around the mine, and reduce the disturbance to the surrounding natural environment. Focusing on ecological restoration and plant landscaping, we take measures based on full consideration of the local situations to comprehensively improve the landform in the mining area, with an aim to build a garden-like mine with "flowers in three seasons and green trees in four seasons", and make progress in both the mining environment protection and the economic development. In 2021, our subordinate companies in Shandong Province passed the on-site verification of green mines conducted by the Department of Natural Resources of Shandong Province. Now, our subordinate enterprises are constantly strengthening the consolidation and improvement of the green mine, trying to push the construction of a green mine to a new level.

Case

Building a green mine, protecting the natural environment in the mining area

Chifeng Chaihulanzi Gold Mining Co., Ltd. has been working continually to strengthen the building of a green mine. It compiles the *Green Mine Building Plan 2021 and the Self-evaluation Report for Country-level Green Mine*, establishes a plan for green mine upgrade and strengthens the greening around the mining area. It covers the abandoned quarry pits and dumping sites on the ground with soil and takes measures for greening, and strengths ecological restoration and governance of slopes. It also carries out comprehensive treatment of dust in the mining area, and assigns special water wagons to sprinkle water and suppress dust in the mining area periodically. It has built a 933.6 m² ore shed on the ore yard of the beneficiation workshop to prevent the dust generated from ore transfer. This has effectively protected the natural environment in the mining area.

Combating climate change

As the goal of "carbon dioxide peaking and carbon neutrality" has become a global consensus, the mining industry also faces many challenges and difficulties, including increase in the policy risks, environmental and social restraints and product cost. Shandong Gold responds actively to the state strategy of peaking carbon dioxide emissions and achieving carbon neutrality, and tackles the risks and challenges caused by climate change. It vigorously promotes the use of clean energy and reduces the consumption of fossil energy to achieve energy conservation and emission reduction by comprehensively promoting the low-carbon transition in mining production and energy consumption. It strengthens the research & development and application of energy-saving technologies in energy-saving motors and energy-saving air compressors to improve the energy efficiency. It also insists on circular economy, improves the resource utilization efficiency, increases pollution control and synergizes the reduction of pollution and carbon emissions. In the meanwhile, it also continuously advances the ecological restoration and landscaping in the mining area, and improves the carbon sink capacity of our ecosystems. In 2021, the Company conducted an investigation of the base number of carbon emission. After figuring out the base number of carbon emission of subordinate enterprises, the Company gradually finds an effective way for carbon emission abatement, which lays a foundation for establishing the action plan for achieving carbon neutrality.

Case

Making innovation in technical application to conserve energy and reduce consumption

Shandong Gold Mining (Yi'nan) Co., Ltd. actively adopts the ground source heat pump technology to promote energy conservation and consumption reduction. In the whole year, it can save coal by about 3,000 tons, and reduce the carbon dioxide emissions, sulphur dioxide emissions and nitrogen oxide emissions by about 8,000 tons, 25.5 tons and 22.2 tons respectively each year. It has made outstanding contributions to the state goals for peaking carbon dioxide emissions and achieving carbon neutrality, and greatly advocated the use of green & environmentally friendly new energy.



Energy conservation and consumption reduction via the ground source heat pump technology





Energetic Shandong Gold: working together for a better future

In addition to attaching great importance to the rights, interests and development of employees, Shandong Gold reinforces exchange and cooperation along the industry chain. It is working with its employees and industry partners for a better future.

Core issues

Growing with our employees
Contributing to the prosperity of industries

Key performance

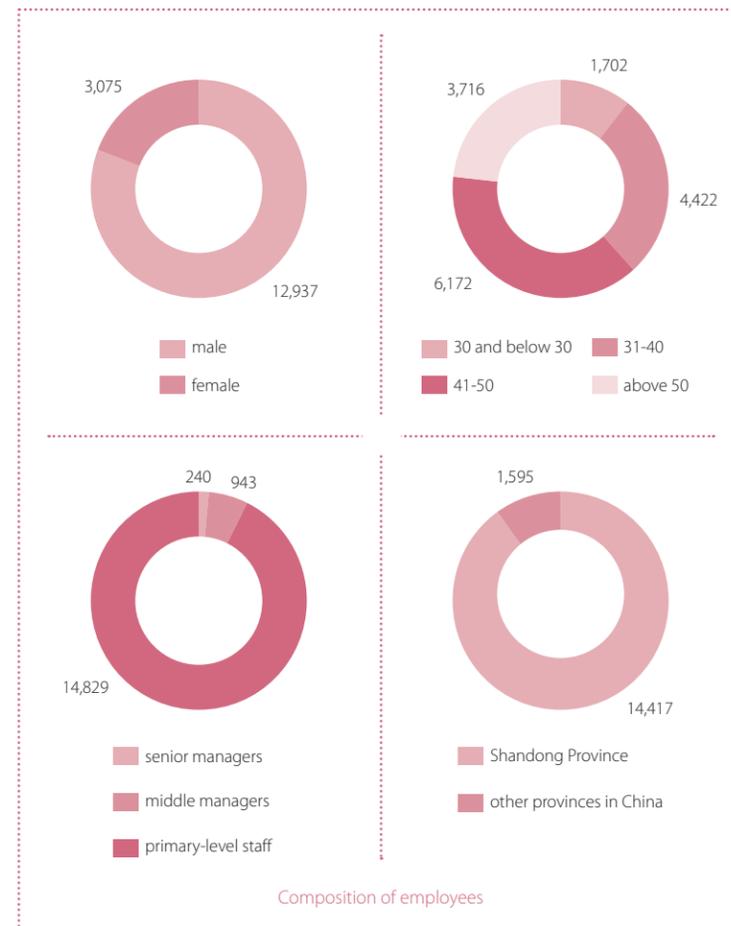
Employee social security coverage is **100%**
The average training hour is **11.6** hours for each employee
The localization ratio of suppliers reaches is **100%**

Growing with employees

Shandong Gold, as an equal opportunity employer, fully guarantees the basic rights and interests of its employees while promoting their growth and development. Moreover, it is concerned about the daily life of employees and enables them to balance work and life. Aiming to develop together with all employees, it cares about and protects the physical and mental health of employees with support and help those disadvantaged and special groups.

Safeguarding basic rights and interests

Shandong Gold strictly abides by the *Labor Law of the People's Republic of China*, *Labor Contract Law of the People's Republic of China* and other relevant laws and regulations, and fully guarantees all legal rights and interests of its employees. It sticks to the recruitment principle of transparency and equality. Not only does it reject any discrimination induced by gender, ethnic groups or belief, but it refuses to use child labor or any forms of forced labor. It keeps optimizing and improving employees' salaries and welfare benefits, pays five social insurances and one housing fund for employees in full and in time according to relevant regulations, and guarantees employees' right to rest and vacation, thus to create a diverse, equal and harmonious working environment. Shandong Gold compiled the *Recruitment Manual* in 2021, aiming to standardize the recruitment process and provide examples for reference. Neither violations of human rights nor any use of child labor or forced labor by Shandong Gold was found during the reporting period.



In 2021

100%
The coverage rate of labor contracts reached

100%
The coverage rate of social insurance reached

16,012
There were totally employees

16,012
Full-time employees

0
Part-time employees

2.23%
Employee turnover rate

Turnover status

Category	Ratio	
Turnover rate according to genders (%)	male	1.73%
	female	0.50%
Turnover rate according to ages (%)	30 and below	0.39%
	31-40	0.68%
	41-50	0.19%
	above 50	0.97%
Turnover rate according to regions (%)	Shandong Province	1.70%
	other provinces in China	0.53%

Focusing on the development of employees

Shandong Gold lays emphasis on the career development of employees and sets up a smooth career development channel for them. Meanwhile, it constantly improves its employee education and training system. At the beginning of 2021, it formulated the *Employee Training (Short-term Class) Plan 2021*, which ascertained the key training tasks, training modes, training assessment and other relevant matters, and guided subordinate enterprises to provide targeted training courses for employees of different types and levels, in hope of helping them improve their overall quality.

In 2021

158
Training sessions for employees were held

12,586
Number of trained employees

RMB 29.4977 million
Investment in employee training

• Career development

Following a concept of "determining occupational levels via accumulated points and admitting the best applicants", the Company formulates the *Notice on Further Improving the System of Engineering Professional and Technical Posts*, ameliorates its system of engineering professional and technical posts within the scope of 12 pilot specialties and sets up 12 levels of expertise. By managing the engineering and technical personnel through a points system, it not only unclogs the career development channel for its engineering professionals and technicians, but also inspires their enthusiasm and creativity. While implementing the system of engineering professional posts as a pilot project within a certain range, the Company makes some improvement and adjustment after analyzing the existing problems, and promotes the optimized system to other sectors in a timely manner.

• Employee training



It focuses on the improvement of strategic thinking and innovation ability, focuses on corporate governance, capital operation, high-quality development, basic management, first-class mine construction and other fields. There were 48 training sessions in the year of 2021, with 4,112 participants.



It focuses on the updating of knowledge structure and enhancement of innovation ability, and covers trainings in geology, surveying, mining, ore dressing, smelting, machinery, electronics, safety, construction, engineering and other fields. There were 40 training sessions throughout 2021, with 4,638 participants.



It mainly focuses on the skill training for special job types in mine, and highlights the standardization of practical application by means of skill assessments and competitions, so as to constantly improve the ability and quality of skilled personnel. In 2021, 70 training sessions of this kind were held and 3,836 employees were trained with remarkable outcomes. 1 employee won the National May 1st Labour Medal, 6 employees won the title of National Technical Expert, 14 were rated as National Technical Expert in the Gold Industry and 5 won the title of Chief Technician of Shandong Gold Group. As 215 employees became highly-skilled personnel through skill assessments, there was an increase of 7.62% in the percentage of highly-skilled talents among the Company's technicians.



Special Training on Compliance Operation and Information Disclosure of Listed Companies

Training for employees

Category	Average training hours per person (hours)	Percentage of trained employees (%)	
Average training hours per person (divided by job grades)	Senior managers	24.02	0.07%
	Middle managers	18.38	1.60%
	Primary-level staff	14.56	98.33%
Average training hours per person (divided by genders)	Male	15.21	82.4%
	Female	13.05	17.6%

Caring for the life of employees

Caring for all employees, Shandong Gold takes the initiative to balance their work and life. It helps employees relieve work pressure through organizing diversified cultural and sports activities. Moreover, it listens to and collects the complaints of employees in time, helps those employees who are in difficulties solving practical problems, and promotes the employees' sense of belonging.



Jiaojia Gold Mine gives aid to disadvantaged and special groups

Jiaojia Gold Mine constantly improves the support mechanism for disadvantaged employees. It archives the information of disadvantaged employees and their families in batches at a fix time, dynamically manages these files and follows up on them. A thorough investigation on disadvantaged employees is carried out annually, and announcements are promptly made about the grant of relief funds. Furthermore, upholding a visiting and caring system, Jiaojia Gold Mine intensively provides relief fund for disadvantaged employees and their families, and sends leaders or colleagues to visit their houses to express regards and care whenever there is a major festival, in hopes of helping them solve actual difficulties. Additionally, a system has been established and standardized to help the children of disadvantaged employees in their study. In 2021, relief and financial assistance was offered to over 190 disadvantaged employees, with relief funds exceeding RMB 900,000. In the same year, RMB 156,000 of grants in total was given to 51 children of employees during the autumn education-supporting event.



Basketball game



Tug-of-War contest



Artistic performance



Fun games

Protecting occupational health

We observe relevant stipulations in the *Law of the People's Republic of China on Prevention and Control of Occupational Diseases*, *Production Safety Law of the People's Republic of China* and *Interim Provisions on the Supervision and Administration of Occupational Health at Work Sites*. We have set up and improved our occupational health management system, arrange annual occupational health check-up for employees being exposed to occupational hazard factors and fully equip them with necessary labor protection apparatus. In addition to improving workplace conditions, we reinforce the monitoring on the working environment, and conduct special training on occupational disease prevention, thus to ensure the health and safety of employees and enhance their awareness of occupational disease prevention. Much attention is also paid to the mental health of employees. The mental health of employees is protected by establishing psychological consulting rooms and providing psychological training for staff. In 2021, Shandong Gold urged its affiliated enterprises to build themselves into "healthy enterprises", and 11 enterprises were included respectively in the provincial and municipal lists of healthy enterprises.

Occupational health of employees

Indicator	Unit	2019	2020	2021
Numbers of work-related fatalities	Person	0	0	0
Percentage of number of work-related fatalities in all employees	%	0	0	0
Lost days due to work injury	Day	4,280	445	230

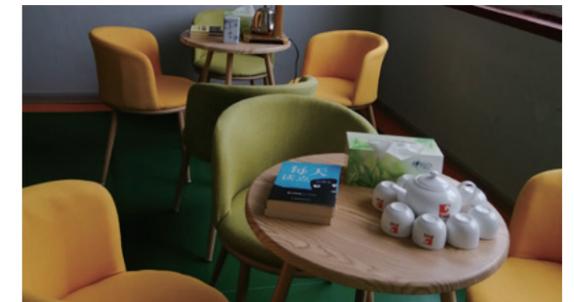
Case

Yi'nan Gold Mine holds a publicity week activity on the *Law of the People's Republic of China on Prevention and Control of Occupational Diseases*

From April 25 to May 1, 2021, Yi'nan Gold Mine held a publicity week activity on the *Law of the People's Republic of China on Prevention and Control of Occupational Diseases*, during which employees were organized to learn how to prevent, control and eliminate occupational disease hazards and how to protect the health of laborers. On the one hand, it made full use of media publicity. While conducting extensive promotion through newspapers and other traditional media, Yi'nan Gold Mine particularly publicized information on the prevention and control of occupational diseases by taking advantage of new media, for instance, through Wechat groups of employees and their families. On the other hand, it raised the employees' awareness of occupational disease prevention and control in many offline ways, including posting propaganda banners, distributing brochures and conducting special training, so as to spur more people into focusing on occupational health.



Occupational health training



Psychological counseling room



Jointly promoting industrial prosperity

Shandong Gold always endeavor to improve supplier management, devote greater effort in supplier assessment and support, and promote the construction of its responsible supply chain. Furthermore, it takes the initiative to carry out foreign exchanges and cooperation, boost the sustainable development of the industry, and contribute to the continuous prosperity of the industry chain.

Building a responsible supply chain

Thinking highly of the partnership with its suppliers, Shandong Gold insists on cooperating in a transparent and open manner. It is committed to creating a responsible supply chain and working with others for win-win development of the industry.

• Supplier management

The Company set up a centralized procurement center in 2021. It further optimized supplier management in many aspects including supplier admission, assessment and appraisal, responsibility traceability and supplier deletion pursuant to the *Measures of Shandong Gold on the Management of Material Suppliers*, with the formulation of strict standards relating to the selection, assessment and evaluation as well as blacklisting or deletion of suppliers. In addition, relevant qualifications of suppliers were dynamically managed, and emphasis was laid on the standardization level of related management mechanisms on the suppliers' scale, production capacity, production technology, employee quality, enterprise innovation and environmental protection, so as to eliminate or lower environmental and social risks of the supply chain from the source, and to help upgrade the sustainable development ability of suppliers.

In 2021

1,302

There were suppliers under the mode of centralized procurement.

100%

The localization ratio of suppliers reached.



Supplier selection criteria

We select suppliers with legitimate business qualifications, good business reputation, sophisticated quality assurance systems, and adequate ability to fulfill contracts and perfect after-sales service system. Under the same conditions, preference should be given to suppliers that have been accredited with ISO14000 environmental management system and OHS18000 occupational health and safety management system.



Supplier assessment and appraisal

We integrate daily evaluation with periodic evaluation. The evaluation results will be adopted as a basis for ranking suppliers. The evaluation scores of suppliers are divided into four grades of A, B, C and D, from high to low.

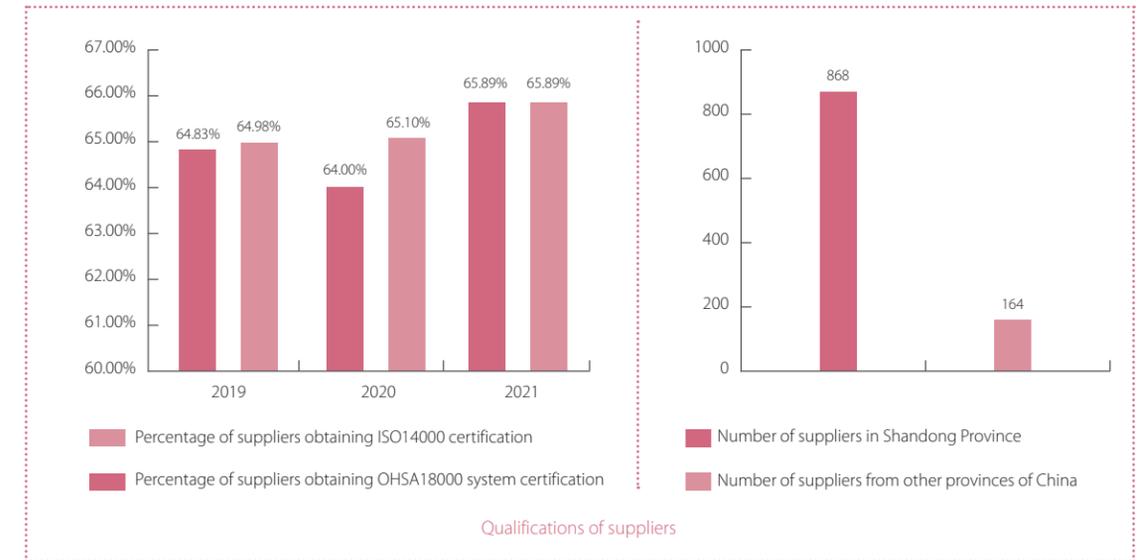


Supplier blacklisting or deletion

We shun or delete (as the case may be) suppliers with severe dishonest behaviors, including failing to obtain complete qualifications or certificates, providing fake bidding materials, failing to sign purchase contracts with users after winning the bid without proper reasons.

• Sunshine procurement

To promote open and transparent procurement, we have clarified and improved relevant procurement management systems, standardized the modes and procedures of material procurement according to the *Measures of Shandong Gold on the Management of Material Procurement*. By means of centralized management on suppliers and procurement plans, we have optimized our unified, open, fair and impartial procurement mechanism, which not only changes decentralized decision-making into centralized and open one but also makes procurement more standardized and transparent. Furthermore, efforts have been made to reinforce incorruption education, for the purpose of realizing sunshine procurement and advancing the public credibility of procurement.



Leading new industrial trends

We establish close cooperation with enterprises, industry organizations, universities and other partners on our own initiative, and actively take part in the formulation of industrial standards as well as exchange activities within the industry. These actions aim to give full play to the advantages of each party in technology, talent and resources, and facilitate high-quality development of the industry with joint efforts. We are committed to support the *Responsible Gold Mining Principles* of the World Gold Council, and mine and will mine, gold with a serious attitude and high sense of responsibility. We will also advance the work relating to our internal environment, the balance between society and governance, and make our due contribution to the sustainable development of the industry.

In 2021, we participated in the compilation of *Construction Specification for Intelligent Mine, Guidelines for Building Intelligent Mines in Non-Ferrous Metals Industry, Technical Requirements for "5G+ Industrial Internet" of Mines*, which were initiated by the Ministry of Natural Resources as well as the Ministry of Industry and Information Technology. We also took part in the compilation of the *Fourteenth Five-year Plan of Gold Industry in Shandong Province* and the revision of *Technical Specifications in Pollution Control of Cyanide Residue in Gold Industry*, providing suggestions for the transformation and development of the industry.



Shandong Gold participates in China International Mining Conference 2021

1 NO POVERTY



2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION



Human-friendly Shandong Gold: enjoying beauty of the society

As a state-owned enterprise, Shandong Gold fulfills its responsibilities and actively participates in rural vitalization. It contributes to community development by conducting community welfare events and charitable donation activities. Besides, it actively undertakes its responsibilities as a corporate citizen overseas. Through integration into local communities, it promotes win-win cooperation and makes itself known to the world.

Core issues

Contributing to rural vitalization

Conducting community welfare events

Fulfilling overseas responsibilities

Key performance

Charity donation amounted to RMB **2.12** million

There are more than **70** volunteer teams among all employees

There are over **900** employees engaging in volunteer services

Supporting rural vitalization

Responding actively to the national strategy of rural vitalization, Shandong Gold fulfills its political and social responsibilities as a state-owned enterprise. By innovating supporting measures and improving the effectiveness through counterpart assistance and pro-consumption campaign to aid poverty alleviation, it is aligning efforts to consolidate the achievements in poverty alleviation with promoting rural vitalization, thus contributing to the construction of beautiful new villages.

Case

Jinzhou Company gives counterpart assistance for rural construction

On June 23, 2021, the leader of Jinzhou Company, an affiliate of Shandong Gold, visited some poor villagers in Beizhai Village. He offered pairing-off assistance in poverty alleviation, in hopes of further providing counterpart assistance and contributing to the construction of beautiful countryside. He also sent them relief fund and wished them a speedy recovery. Later, he visited the Secretary of the village to discuss the issues relating to counterpart assistance and actions to be taken, thus to help revitalize Beizhai Village.



Jinzhou Company visited the village to which it offers pairing-off assistance near its location

Engaging in community welfare events

Shandong Gold actively participates in public welfare undertakings, encourages its employees to join voluntary services such as education support, environmental protection, pandemic prevention and control, rescue and disaster relief, with the hope of contributing to a more harmonious society.

Case

Voluntary blood donation rejuvenates our health

As the source of life, blood is a necessity in both clinical treatment and medical first aid. Shandong Gold and its affiliated companies consider voluntary blood donation as a way to fulfill social responsibilities and therefore organize employees to donate blood. Under their guidance, employees carry forward the spirit of being ready to help others, and contribute to public welfare through practical actions. It can be seen that Shandong Gold is a benevolent enterprise that supports public welfare undertakings and repays the society.



"After all, voluntary blood donation is what we should do as a member of society. For us who are from Shandong Gold, it is also our responsibility to help those in need. Our mission is to maximize the benefits of Shandong Gold to as many stakeholders as possible, isn't it?"

an employee from Shandong Gold



An employee from Shandong Gold Smelting Company was donating blood voluntarily



An event of voluntary blood donation held by Chifeng Chaihulanzi Gold Mining Co., Ltd.



An event of voluntary blood donation held by Xinhui Company

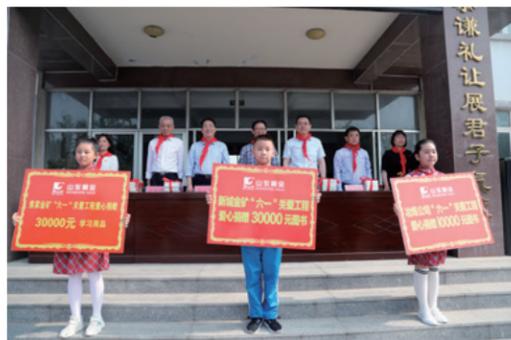


Employees of Yi'nan Gold Mine participated in voluntary blood donation

Case

Donation for children

To better care for the next generation and fulfill their social responsibility as state-owned enterprises, affiliated companies of Shandong Gold successively conducted donating activities at schools where they were located from the end of May to early June in 2021, before the 71th international Children's Day. Their charitable contributions amounted to RMB 310,000, including 12,065 books, 1,076 sets of school supplies, 150 sets of desks and chairs, computers, projectors and others. The children spent a pleasant Children's Day with blessings and love.



The event for celebrating Children's Day held by Shandong Gold Smelting Company



The event for celebrating Children's Day held by Laixi Company



Book donation activity held by Chifeng Chaihulanzi Gold Mining Co., Ltd.



Children-caring donation activity held by SD-Gold Heavy Industry Co., Ltd.



Children's Day Themed Book Donation by Guiaizhuang Gold Mine



Charity donation with the theme of "Shandong Gold cares for our future" by Gansu Xihe Zhongbao Mining Co., Ltd.

Performing overseas responsibilities

With the quickening pace of "going global", Shandong Gold actively expands overseas markets and jointly invigorates the gold industry with global partners. During overseas operation, it takes the initiative to fulfill its responsibilities as a corporate citizen, contribute to tax revenue and create jobs. What's more, it supports local development, promotes cooperation with local authorities and cross-cultural integration, contribute to the economic and social development of the places where its projects are located, and demonstrate its image as a responsible Chinese enterprise.

Confronting of Covid-19 pestilence continues worldwide, Veladero Gold Mine, an affiliate of Shandong Gold, responded in time and actively. It supported the San Juan Province (a province of Argentine) in fighting the pandemic by donating hospital beds, protective clothing, gloves, masks and other disease-resistant materials to local medical institutions. The Chinese enterprise created a good impression among local people in the special period. To thank Shandong Gold for its contribution during pandemic prevention and control, the Conference Building in San Juan Province was lit up in Chinese red, which showed the good reputation of Shandong Gold overseas.

Case

Veladero Gold Mine was awarded as Argentina's "Best Mining Company of 2021"

On December 14, 2021 (local time), Veladero Gold Mine was awarded the "Best Mining Company of 2021" at the 2021 Argentine Conference on Gold, Silver and Copper Mining in Buenos Aires. The award was the most valuable national award in the metal mining sector of Argentina, taking into account a project's development progress, reserves, infrastructure, performance and environmental protection measures. This award is a great recognition of Shandong Gold's efforts in fulfilling corporate social responsibility overseas, improving community relations, creating greater value for stakeholders, and contributing to the social and economic development of Argentina and the local community.



Veladero Gold Mine is awarded "Best Mining Company of 2021"

Outlook

Shandong Gold seizes opportunities and fulfills its responsibilities at all times. In the year of 2022, both the 20th CPC National Congress and the 12th CPC Congress of Shandong Province are to be held. It is also critical for Shandong Gold to implement transitional tasks in the Fourteenth Five-Year Plan. Under the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, Shandong Gold will always fully implement the guiding principles of the 19th CPC National Congress and all its plenary sessions as well as decisions and deployment made by the Shandong Provincial Party Committee, Shandong Provincial People's Government and Shandong Provincial State-owned Assets Supervision and Administration Commission. Focusing on the 2022 annual goal of "keeping overseas business steady, expanding domestic market and making greater progress", it will always act on the general principle of pursuing progress while ensuring stability, apply the new development philosophy in a complete, accurate and comprehensive way, serve and join in a new pattern of development. Additionally, Shandong Gold will deepen reform and innovation from all aspects and promote high-quality development. It will keep developing itself into a world-class mining enterprise with global competitiveness.

Indicator index

Environmental, Social and Governance Reporting Guide by HKEX

	Content	Page
A. Environment		
Aspect A1: Emissions	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	P43-P44
	A1.1 The types of emissions and respective emissions data.	P43, P45
	A1.2 Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P45
	A1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P45
	A1.4 Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P45
	A1.5 Description of emissions target(s) set and steps taken to achieve them.	P44
	A1.6 Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	P44
Aspect A2: Use of Resources	General disclosure Policies on the efficient use of resources, including energy, water and other raw materials.	P46
	A2.1 Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kW-h in '000s) and intensity (e.g. per unit of production volume, per facility).	P47
	A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility)	P47
	A2.3 Description of energy use efficiency target(s) set and steps taken to achieve them.	P46
	A2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	P46
	A2.5 Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	P47
	Aspect A3: The Environment and Natural Resources	General Disclosure Policies on minimising the issuer's significant impacts on the environment and natural resources.
A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.		P48
Aspect A4: Climate Change	General Disclosure Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	P49
	A4.1 Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	P49
B. Social		
Employment and Labor Practices		
Aspect B1: Employment	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	P52
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	B2.2 Lost days due to work injury.	P56
	B2.3 Description of occupational health and safety measures adopted, and how they are implemented and monitored.	P56

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Aspect B3: Development and Training	General Disclosure Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	P54
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Operating Practices		
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	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.	P21
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	B8.2 Resources contributed (e.g. money or time) to the focus area.	P61

Reader Feedback

Thanks a lot for reading the *Corporate Social Responsibility Report 2021 of Shandong Gold Mining Co., Ltd.* Please fill in the feedback form below and send it to us via mail, fax or email if you have any views or suggestions on this Report. We would like to express great gratitude for your precious suggestions.

Name: _____

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1. Which chapters do you think provide you with essential information?

- Corporate governance Responsibility management
- Special topic of responsibilities Responsibility stories
- Safe Shandong Gold: working at efficient operation
- Ecological Shandong Gold: demonstrating beauty of the environment
- Energetic Shandong Gold: working together for a better future
- Human-friendly Shandong Gold: enjoying beauty of the society

2. How do you assess this report?

- | | | | |
|--------------------|-------------------------------|----------------------------------|-------------------------------|
| Legibility | <input type="checkbox"/> Good | <input type="checkbox"/> Average | <input type="checkbox"/> Poor |
| Integrity | <input type="checkbox"/> Good | <input type="checkbox"/> Average | <input type="checkbox"/> Poor |
| Cogency | <input type="checkbox"/> Good | <input type="checkbox"/> Average | <input type="checkbox"/> Poor |
| Layout design | <input type="checkbox"/> Good | <input type="checkbox"/> Average | <input type="checkbox"/> Poor |
| General impression | <input type="checkbox"/> Good | <input type="checkbox"/> Average | <input type="checkbox"/> Poor |

3. What do you think about the quality of the information disclosed in the Report?

- Very high Comparatively High Average Comparatively low Very low

4. What are your suggestions for our next annual report?
