



# SHANDONG GOLD ECOLOGICAL MINING

## 2022 SOCIAL RESPONSIBILITY REPORT

# 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 also expressed as "Shandong Gold", the "Company", "it/its", "we", "our" or "us", and Shandong Gold Group Co., Ltd. is also expressed as the "Group".

Please refer to the following for abbreviations of some subordinate companies of Shandong Gold:

Shandong Gold Mining (Laizhou) Co., Ltd. Sanshandao Gold Mine (referred to as "Sanshandao Gold Mine")

Shandong Gold Mining (Laizhou) Co., Ltd. Jiaojia Gold Mine (referred to as "Jiaojia Gold Mine")

Shandong Gold Mining Co., Ltd. Xincheng Gold Mine (referred to as "Xincheng Gold Mine")

Shandong Gold Mining (Linglong) Co., Ltd. (referred to as "Linglong Gold Mine")

Shandong Gold Mining (Yinan) Co., Ltd. (referred to as "Yinan Gold Mine")

Chifeng Chaihulanzi Gold Mining Co., Ltd. (referred to as "Chifeng-chai Mining Company")

Shandong Gold Guilaizhuang Mining Co., Ltd. (referred to as "Guilaizhuang Company")

SDG Heavy Industry Co., Ltd. (referred to as "SDG Heavy Industry")

Shandong Gold Smelting Co., Ltd. (referred to as "Gold Smelting Company")

Shandong Gold Mining (Xinhui) Co., Ltd. (referred to as "Xinhui Company")

Shandong Jinzhou Mining Group Co., Ltd. (referred to as "Jinzhou Company")

Xinjiang Jinchuan Mining Co., Ltd. (referred to as "Xinjiang Jinchuan Company")

Shandong Gold Mining (Laixi) Co., Ltd. (referred to as "Laixi Company")

Fujian Zhenghe Yuanxin Mining Co., Ltd. (referred to as "Fujian Yuanxin Company")

Shanjin Futures Co., Ltd. (referred to as "Futures Company")

Shanjin Jinkung (Shenzhen) Gold Investment Development Co., Ltd. (referred to as "Jinkung SZ")

Argentina Veladero Gold Mine Co., Ltd. (referred to as "Veladero Gold Mine")

## Time horizon

From January 1, 2022 to December 31, 2022. 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 are 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, *Report on Companies' Fulfillment of Social Responsibility* by the Shanghai Stock Exchange, notice of the 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 *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

This 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 of Hong Kong Limited. 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. For some indicators, the performance data of three consecutive years are 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 this 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 Mining Co., Ltd., <http://www.sdhjgf.com.cn/>.

## Feedback and contact information

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# Statement of the Board of Directors

The Board of Directors of Shandong Gold undertakes to strictly follow disclosures requirements stipulated in the ESG report published by the exchange where it is listed. The Board of Directors, as the highest responsible and decision-making body of ESG matters, 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 a Strategic Committee, where Chairman of the Company acts as Chairman. The Strategic Committee takes charge of business planning of sustainable development strategies and strategic planning, regulates the commitment on and performance of critical ESG issues. It also reports to the Board of Directors and promotes the integration of ESG philosophy with the Company's strategy.

The Board of Directors of Shandong Gold periodically reviews the critical ESG issues, discusses and determines the Company's ESG risks and opportunities and monitors management and performance of these issues. At the same time, the Company organizes functional departments to study and discuss implementation of sustainable development strategies and key issues on a regular basis, so as to continuously improve sustainability governance abilities.

In 2022, the Board of Directors continuously promoted the Company to improve its ESG management systems, analyzed the substantial issues having a significant impact on the Company, and determined the priorities in its sustainable development. It also guided the Company's subordinate companies to set and perfect medium- and long-term objectives regarding critical ESG issues including pollutant emission and energy consumption, and constantly checked the schedule to ensure the fulfillment of objectives.

This Report has disclosed in detail the progress and effectiveness of ESG work of Shandong Gold in 2022. It was approved and adopted by thirty-sixth Meeting of the 6<sup>th</sup> Board of Directors on March 29, 2023. 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



“ We firmly acted on the belief that lucid waters and lush mountains are invaluable assets, followed ecological conservation and green development, and integrated green and low-carbon concept into the entire process of developing and utilizing mineral resources, thus shouldering our responsibilities to this vast land. ”

In 2022, in the face of difficulties and challenges such as turbulent international environment, more intertwined constraints, and fierce competition brought by industry peers, Shandong Gold adhered to guiding principles of the 20th National Congress of the Communist Party of China and focused on the annual objective of stabilizing international market while expanding domestic market to reach record highs. Thanks to concerted efforts and hard work, Shandong Gold accomplished all annual objectives and tasks, consolidated upward development momentum, and delivered excellent results through solid work and responsible attitude.

**Building ecological mining to shoulder responsibilities of protecting lucid waters and lush mountains.** Guided by Xi Jinping Thought on Ecological Civilization, we firmly acted on the belief that lucid waters and lush mountains are invaluable assets, followed ecological conservation and green development, and integrated green and low-carbon concept into the entire process of developing and utilizing mineral resources, thus shouldering our responsibilities to this vast land. We worked actively yet prudently to peak carbon dioxide emissions and achieve carbon neutrality, completed carbon emission verification in our subordinate companies, popularized clean energies including solar and geothermal resources, and advanced the transformation and upgrading of energy structure. We transformed and upgraded pollution prevention and control facilities, and coordinated the prevention and control of waste gas, waste water and solid wastes, as well as the ecological restoration. As a result, we saw ecological improvement of the mining areas, continuous reduction in emissions of major pollutants, and significant enhancement of our prevention and control ability in pollution and environmental risks. All these contributed to the green development of Shandong Gold.

**Practicing social responsibilities to improve social well-being while maintaining innovation and progress.** We put safety first and utilized sciences and technologies to ensure safety and create a smart mine, so as to secure intrinsic safety and promote product quality. Over the past year, we invested RMB 683 million in safety-related projects and RMB 651 million in research and development, striving to achieve the breakthrough from zero accident to zero hazard. We continued to optimize the production and living environment of our

employees and established a large labor union working system to expand the development space of both employees and the enterprise, thus showing our respect to employees. Over the past year, we helped 1,024 employees in need and input a relief amount of more than RMB 5.94 million, which continuously enhanced their sense of gain and belonging. Moreover, in regions where we operate, we assumed our responsibilities to promote employment, increase taxes, revitalize rural areas and improve people's livelihood so that we can benefit as many people as possible and as wide region as possible. All these helped Shandong Gold build an image as a righteous and responsible state-owned enterprise.

**Improving corporate governance to set multiple new records through coordinated operation.** We fully implemented General Secretary Xi Jinping's important instructions that we must practice the important political principle for state-owned enterprises (SOEs) to follow leadership of the CPC and the direction of SOEs reform to build a modern enterprise system. We also gave full play to the leadership of the Party Committee during the continuous optimization of our corporate governance structure, and ensured the correct orientation of enterprise reform. We integrated ESG awareness into our development strategies and daily operation, such as strengthening procurement, improving lean management, deepening cost reduction and efficiency improvement, and holding fast to a series of bottom lines including work safety, ecological conservation and operational risk guarding. Therefore, a number of key results that were better-than-expected and outperformed the same period were delivered, setting new records. For example, our annual gold output was 38.67 tons, up 56.06% year on year. Our operation revenue was RMB 50.3 billion, up 48.24% year on year. In addition, Shandong Gold was selected into the *ESG Excellent Practice Cases of Listed Companies (2022)* and won the China ESG Golden Awards - Annual Excellent Enterprise of Sustainable Development. All these facilitated to spread Shandong Golds safe, ecological, vigorous and humanistic brand image.

Only those enterprising can stand out in the fierce market competition. In 2023, we will fully implement the decisions and plans of the CPC Central Committee, Shandong Provincial Party Committee and Shandong Provincial Peoples Government, strive for high quality development with firm confidence and at one fling, and stride forward towards becoming a world-class mining enterprise with global competitiveness!

Li Hang

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 listed on the Shanghai Stock Exchange on August 28, 2003. On September 28, 2018, it was listed on the main Board of the Hong Kong Stock Exchange. Since then, Shandong Gold has been listed on the A+H stock markets. The Company's main business is gold exploitation. Its affiliated mining enterprises are distributed in Shandong, Fujian, Inner Mongolia, Gansu, Xinjiang and other provinces in China, as well as Argentina in South America, Ghana in Africa and other places in the world. At present, it has formed a complete industry chain incorporating gold exploration, mining, beneficiation, smelting (refining), and deep processing & sales of gold products, and production & sales of mining equipment and materials, and built a technical research & development system appropriate for the chain.

Subordinate companies of Shandong Gold, i.e., 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. Since Xincheng Gold Mine had an accumulative gold output of over 100 tons on February 10, 2022, so far, the Company is the only Chinese enterprise that has four mines with an accumulative gold output over 100 tons. At present, the Company speeds up accelerating the building of a world-class gold base in Jiaodong region where mining rights including Jiaojia, Xincheng and Sanshandao resource belts are resource bases. Veladero Gold Mine, co-operated by the Company and Barrick Gold Corporation with 50%-50% stock right, is the largest gold mine in South America. Gold Smelting Company, a subordinate company of Shandong Gold, is one of the first batches of national ten Enterprises Able to Provide Standard Gold Bullions certified by Shanghai Gold Exchange and the first batch of gold bullion brand registered enterprises by the Shanghai Futures Exchange. Shandong Gold Smelting Co., Ltd. has also been listed in the Top Ten Gold Melting Enterprises in China for many consecutive

years. Stock of Shandong Gold has been selected as the sample stock of SSE 50 Index, SSE 180 Equal Weight Index and CSI300 Index, and the sample stock of three international indices, namely, MSCI, FTSE Russell, and S&P Dow Jones Indices for many times.

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 and development with the acquisition of cutting-edge and core technologies of mining industry as a core, and strives to drive its development through scientific and 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.

By the end of 2022

Registered capital of RMB

**4.47** billion

Total assets of RMB

**91.22** billion

Total equity of RMB

**36.80** billion



## New highs

### In terms of production and operation indicators

The Company's gold output was **38.67** tons, a year-on-year increase of **56.06%**.

The Company's operation revenue was RMB **50.306** billion, a year-on-year growth of **48.24%**.

The gold output of Jiaojia Gold Mine exceeded **10** tons, enabling the mine to **rank first** in China in terms of gold output.

Xincheng Gold Mine became a gold producer with a cumulative output of more than **100** tons, ranking sixth in China's gold players and fourth among Shandong Golds affiliated enterprises.

### In terms of the construction of key projects

The integration project of Jiaojia and Xincheng gold mines was the **first batch** approved by Shandong Development and Reform Commission, and its production capacity was boosted enormously.

The Open Skip-cage Combination Shaft Project of Jiaojia Gold Mine completed a **211.6** m well in a single month, the fastest one to set a new record in terms of shaft excavation and construction within the Company.

The Auxiliary Shaft Project of Sanshandao Gold Mine, the Deepest Shaft Project in Asia with a depth of **1,915** m, achieved more than **100** m shaft excavation and construction for **4** consecutive months, with a total completion depth of **758** m.

### In terms of reform and innovation

The Company's research and development investment was RMB **651** million, a year-on-year growth of **32.91%**.

The Company obtained **234** patents last year.

Gold Smelting Company decreased its comprehensive cyanide residue of gold by **6%**.

Jiaojia Gold Mine adopted a full-process mechanized cluster operation of mining, excavation and support, accounting for **43%**.



### In terms of brand reputation

The Company won Level- **A** (the highest level) in Information Disclosure Evaluation by the Shanghai Stock Exchange for **5** consecutive years.

The Company won China ESG Golden Awards 2022 - annual

**Excellent Enterprise of Sustainable Development.**

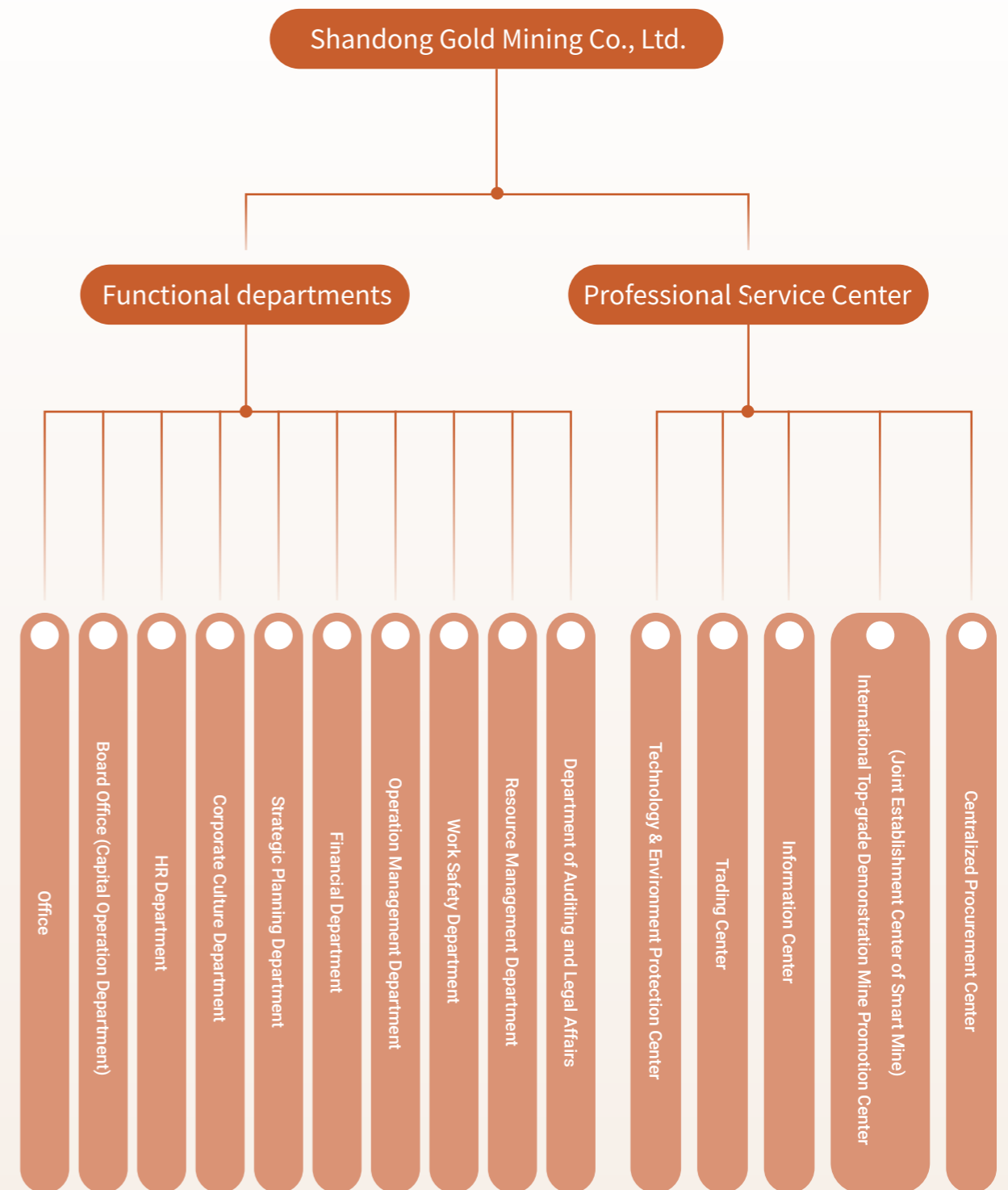
The Company won 2022 GoldenBee CSR China Honor Roll — **Influential Leading Enterprise.**



# 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, benefit first, innovation centered
- 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 Peoples Government, had a clear positioning in the Eight Development Strategies for the whole province. It focused on the principles of building a safe, ecological, energetic and human-friendly Shandong Gold. In addition, it clearly put forward the three-year progressive development plan, namely, Stabilizing External Development, Expanding Internal Development, Making New Records in 2022, and Integrating Internal and External Resources for Leapfrog Development in 2023 and Striving to be at the Forefront and Sparing No Efforts in 2024, 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, merger & acquisition, and 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.



# Awards and honors

Year	Name of award and honor	Organizer
April 2022	The 17 <sup>th</sup> Gold Prize of Round Table of Chinese Boards of Listed Company - Special Contribution Award for Corporate Governance	Directors & Boards
July 2022	The 17 <sup>th</sup> International CSR Forum and 2022 GoldenBee CSR China Honor Roll - Influential Leading Enterprise	China Sustainability Tribune
August 2022	Level-A (the highest level) in Information Disclosure Evaluation in 2021-2022	Shanghai Stock Exchange
October 2022	ESG Excellent Practice Cases of Listed Companies (2022)	China Association for Public Companies
October 2022	Best Practice Cases for Board of Supervisors of Listed Companies in 2022 - Aggressive Award for Board of Supervisors of Listed Companies	China Association for Public Companies
December 2022	Best Practice Cases at the Performance Presentations of Chinese Listed Companies in 2021	China Association for Public Companies
December 2022	China ESG Golden Awards 2022 - Annual Excellent Enterprise of Sustainable Development	Sina Finance
December 2022	The 20 <sup>th</sup> China Business Top 100 Forum - China Top 100 Best Management and Operation Award	Organization Committee of China Business Top 100 Forum and Warton Economic Institute
January 2023	Best Enterprising IR Team	Comein Finance



▲ Awards and honors of Shandong Gold in 2022



# Creating Ecological Mining through Green Development and Environmental Protection

Shandong Gold always followed the guidance of Xi Jinping's thought on ecological civilization, firmly upheld the development concept that lucid waters and lush mountains are invaluable assets, and insisted on the basic state policy of resource conservation and environment protection. It coordinated protection and development, and was determined to win the battle for protecting blue sky, clear water and clean land. It also actively and steadily advanced the goals for peaking carbon dioxide emissions and achieving carbon neutrality, and promoted the green, low-carbon, and high-quality development of the mining industry.



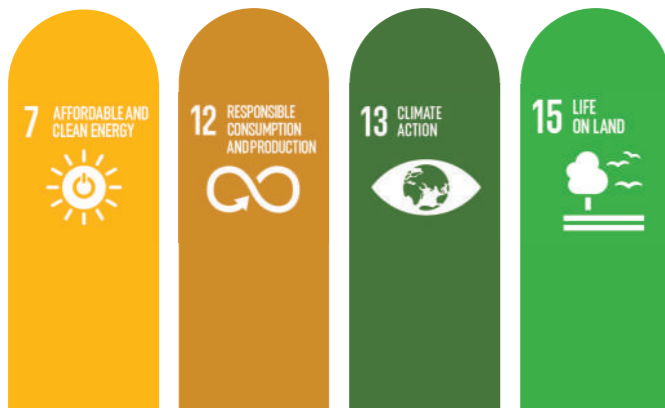
## Core Issues

- Improving environmental management
- Reducing pollutant emissions
- Increasing resource utilization efficiency
- Building a green mine
- Combating climate change

## Key Performance

- Investing RMB **168** million in environmental protection.
- Realizing **100%** up-to-standard discharge rate of "the three wastes" in the Company and its subordinate companies.
- Achieving **84.5%** of comprehensive utilization ratio of common industrial solid wastes.

## The U.N. Sustainable Development Goals and Us



# Pollutant Emission

Shandong Gold strictly abided by laws and regulations such as the *Environmental Protection Law of the People's Republic of China*, the *Law of the People's Republic of China on the Prevention and Control of Solid Waste Pollution*, and industry standards such as the *Technical Specification for Pollution Control of Cyanide Leaching Residue in the Gold Industry*. It required its subordinate companies to comply with relevant provisions on pollutant emission permits, and strictly control and reduce pollutant emissions. At the same time, it actively adopted new processes and technologies to comprehensively treat the "three wastes" generated, and continuously increased the comprehensive utilization ratio of solid waste. In 2022, the main pollutant emissions of all its subordinate companies continued to decrease while meeting national and local emission standards, and their ability to prevent pollution and environmental risks was further improved.



▲ Waste mineral oil depot



▲ Sewage treatment plant

The emissions from Shandong Gold mainly come from the production process of its subordinate mining enterprises. Organized waste gas emissions mainly include particulate matters generated during beneficiation of coarse crushing and fine crushing/screening processes, as well as acidic gases and nitrogen oxides generated during smelting and production processes. Unorganized waste gas emissions mainly include dust generated from the ore yard, tailing ponds and transportation roads, etc. Wastewater mainly includes mine water, beneficiation wastewater and domestic sewage generated from office sites. Solid wastes mainly include waste rocks generated during the excavation process, tailings generated during the beneficiation process, and domestic garbage. Hazardous wastes mainly include tailings from cyaniding and waste engine oil.

We continuously strengthened the pollutant control and the management of emission reduction targets, formulated hazardous waste management plans in accordance with regulations, and managed pollutant emission permits in a standardized manner, so as to enhance the enthusiasm and emphasis of our subordinate companies for energy conservation and emission reduction with mandatory target management. For example, Gold Smelting Company prepared the *Hazardous Waste Management Plan*, which specified relevant requirements such as annual control objectives, predicted amount of hazardous waste generated, hazardous waste management system, classified management, accident prevention measures and environment monitoring measures.



We strictly implemented the water pollution prevention measures. The mine water would be first recycled for production, and the rest would be discharged according to standard after treatment. All beneficiation wastewater would be recycled in the dressing plant after sedimentation treatment. The domestic sewage after treatment would be used for office toilet flushing and plant greening. All of these were to achieve comprehensive utilization of wastewater.

**Typical practice** Chifengchai Mining Company built a 500 m<sup>3</sup> leachate tank downstream of the tailing pond. The tank collected leachate in the tailing pond and reused it for beneficiation, and achieved full recycling of production wastewater. At the same time, a domestic sewage station was constructed. The treated domestic sewage was used for sprinkling water and suppressing dust in the mining area, greening and irrigation, and supplementing new water for beneficiation. In conclusion, it achieved comprehensive utilization of all production and domestic sewage.



We strictly implemented the air pollution control measures. The organized waste gas emissions generated during the beneficiation process were collected together and treated with efficient dust removal facilities, after which it reached the standard for emission. All ore transportation vehicles were equipped with closed tarpaulins. Water was sprinkled and dust was suppressed for underground mine drilling, shovel loading and transportation routes. The bare ground was greened or covered with a dust screen to suppress the generation of dust.

**Typical practice** Jiaojia Gold Mine promoted the use of electric Load-Haul-Dump (LHD) to improve the air quality of mine laneway. Wet drilling operation was adopted underground, and spraying for dust control was implemented after blasting. The water source heat pump system and drinking water purification system were adopted, and all heating and hot water boilers were removed, greatly reducing the generation of major waste gas pollutants.



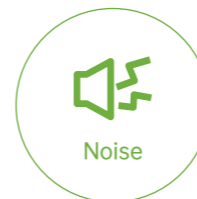
We carried out the comprehensive utilization and disposal of solid wastes. Some of the waste rock from the excavation process was directly used for underground filling, and the rest was processed and used as construction materials. The tailings debris was used for filling of the underground mined-out area or for producing construction materials. On the premise that the relevant national requirements were met, cyanide-containing tailings were stored in the tailing pond or utilized and disposed of by the outsourced qualified institutions. Domestic waste was uniformly collected and treated by professional environmental protection companies.

**Typical practice** After cyclone classification of the beneficiation tailings debris of Laixi Company at the filling station, the coarse tailings debris were filled to the underground mined-out area, and the fine tailings debris were sent back to the tailing ponds for storage. Environmental protection measures such as seepage prevention, flood interception and water sprinkling for dust suppression were taken for building the tailing ponds. Domestic wastes were collected and transported to qualified companies for unified treatment. Therefore, it had 100% comprehensive disposal rate of general solid wastes.



We standardized the whole process management of hazardous wastes, established standardized storage facilities for hazardous wastes, and stored hazardous wastes by categories and zones. We also kept records for hazardous waste management, entrusted qualified companies to regularly dispose of hazardous wastes, and ensured compliant and legal storage, transportation, utilization and disposal.

**Typical practice** Xinjiang Jinchuan Company placed all heap leaching slags in the heap leaching site, and temporarily stored all the sludge and carbon dust in the hazardous waste warehouse, and the waste engine oil in the waste engine oil warehouse. It entrusted qualified companies for legal disposal. At the same time, the waste engine oil warehouse and waste carbon warehouse were renovated, damaged and washed-out warning signs replaced, cofferdams strengthened, seepage prevention facilities repaired, and the volume of the emergency pools increased.



We strictly controlled and reduced noise pollution, and took measures such as noise elimination, vibration reduction and sound insulation to reduce the noise of major noisy equipment. For blasting noise, we arranged the blasting cycle and time in a science-based way to reduce the impact of noise on the surrounding environment.

**Typical practice** Jiaojia Gold Mine took noise reduction measures for major noise sources, including sound insulation, noise elimination and vibration reduction, and assigned full-time testing staff to test the noise periodically, so as to ensure that the plant noise meets the relevant standards.

## Data of emissions

Indicator	2022
Total greenhouse gas emissions (10,000 t)	129.5
Greenhouse gas emission intensity (t/100,000 yuan)	25.74
Category I: Greenhouse gas emissions (10,000 t) include emissions from use of coal, natural gas, gasoline and diesel	16.83
Category II: Greenhouse gas emissions (10,000 t) include emissions from purchased electricity	112.68
Nitrogen oxide (t)	20.12
Sulphur dioxide (t)	14.35
Smoke dust (boiler emissions only) (t)	2.26
Particulate matters (production process emissions) (t)	63.63
Wastewater discharge (10,000 t)	2,919.82
Wastewater discharge intensity (t/RMB million)	580.41
Total chemical oxygen demand (COD) emissions (t)	233.88
Total ammonia nitrogen emissions (t)	11.4
Safely treated hazardous waste (waste engine oil) (t)	138.45
Third-party disposal amount of cyanide residue (10,000 t)	49.95
Disposal amount of cyanide residue tailings pond (10,000 t)	110.7
Inventory of heap leaching slag muck (10,000 t)	513.14
Production intensity of safely disposed hazardous wastes (t/RMB million)	133.94
Amount of general solid waste produced (underground mines) (10,000 t)	1,125.78
Production intensity of general solid waste (t/RMB million)	223.79
Comprehensive utilization ratio of general solid waste (mainly including tailings, waste rock, etc.) (%)	84.5
Amount of waste rock produced in open pit mines (10,000 t)	2,145.4

Notes: 1.Data in the table are statistical ones of domestic enterprises; 2.Comprehensive utilization ratio of general solid wastes (such as tailings, waste rocks) does not cover data of open-pit mines.

## Use of resources

Shandong Gold continued to deepen the construction of the energy management system, gradually optimized and adjusted the energy structure, and actively promoted the application of new technologies, processes, equipment and materials for energy conservation, so as to increase resource utilization rate. At the same time, it used the lightweight product packaging and green & environmentally friendly materials to reduce environmental pollution and build a resource-saving and environment-friendly enterprise.

## Resource use data

Indicator	2022
Total energy consumption (GW)	1,690.13
Energy consumption intensity (MWh/RMB million)	33.60
Petrol consumption (t)	492.76
Diesel consumption (t)	21,725.96
Coal consumption (t)	12,891.41
Natural gas consumption (10,000 m <sup>3</sup> )	185.65
Purchased power (MWh)	1,317,739.33
Total water use amount (10,000 t)	663.98
Water intensity(t/RMB million)	131.99
Total packaging materials for finished products (t)	7
Amount of packaging materials per production unit (g)	0.25



## Use of water resources

The Company continued to strengthen the management and use of water resources, conducted the renovation and cyclic utilization of sewage treatment equipment, and enhanced the routine water resource inspection and supervision. It also developed water-saving equipment, publicized water conservation and created a water-saving enterprise.

The Company actively promoted its subordinate companies to set targets for water resource utilization efficiency and strengthened water resource utilization management on such basis. For example, Chifengchai Mining Company developed systems such as *Water Use Management System*, *Work Post Responsibility System for Water Conservation* and *Water Quota Management System*, and established a three-level water-saving management network, and defined water quota targets. It also assessed water use on a regular basis to ensure the achievement of water-saving goals.

### Case ••• Building large rainwater collection tanks to recycle water resources

SDG Heavy Industry built two large rainwater collection tanks under the ground of the No. 1 and No. 2 parking lots, with a total storage capacity of about 1,500 m<sup>3</sup>. In rainy and snowy weather, precipitation can be collected and stored in these tanks. While contributing to flood control and drainage, these tanks can collect rainwater for irrigation of green land and landscape in the plant area. Under the full-load water storage state, these tanks can meet two rounds of water consumption for 56,000 m<sup>2</sup> of green area in the entire plant at one time.



▲ Plant area of sdg heavy industry

### Case ••• New technologies help achieve win-win results in water conservation and economic benefits

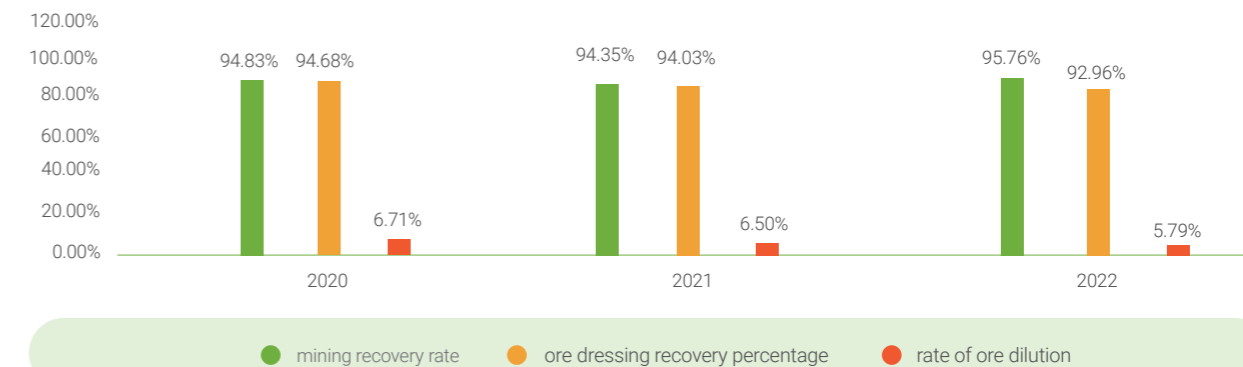
Jinzhou Company used water source heat pumps for winter heating to fully utilize underground mine drainage. In addition to heating the office area, living area and production area of the beneficiation workshop, these heat pumps returned the low-temperature water after heat exchange to the production process, saving 144,000 m<sup>3</sup> of water annually. In 2022, the underground mine drainage volume of Jinzhou Company was 1.4844 million m<sup>3</sup>, about 90% of which was fully recycled, with an annual economic benefit of RMB 1.038 million.



▲ Water source heat pumps

## Use of mineral resources

The Company integrated the green and low-carbon concept into the whole process of mineral resources development and utilization, continuously optimized the mining process, and strictly controlled production process parameters. It also increased the ore dressing recovery percentage, and strengthened on-site mining technology management to reduce mining loss rate. Besides, it arranged holes strictly according to the design requirements, timely demarcated the mining recovery boundary, avoided the destruction of the filling body, and reduced the mixing of surrounding rock and the ore dilution rate so as to improve ore mining quality, and comprehensive utilization efficiency of mineral resources. In 2022, the Company had 485,400 tons of recovered residual ore with a mining loss rate of 5.18%.



Note: Statistical range of data in the above figure covers the underground mines of Shandong Gold, excluding open-pit mines.

### Case ••• Sanshandao Gold Mine takes comprehensive measures to increase ore dressing recovery percentage

Sanshandao Gold Mine implemented lean management of beneficiation process, and strictly practiced the system requirements such as the *Regulations on Beneficiation Management of Sanshandao Gold Mine*. It achieved the goal of "reducing tailings and increasing concentrate" by irregularly sampling tailings for external inspection, optimizing beneficiation process and parameters, and improving automated management of beneficiation process. These practices maximized the recovery and utilization of mineral resources, and increased gold production and economic benefits while reducing waste of resources.



▲ Ore beneficiation equipment

## Use of energy

The Company continued to improve the energy management system, and implemented energy consumption management responsibilities. It also focused on green-oriented energy transformation, actively transformed energy-saving technologies, and promoted adjustment of energy consumption structure and application of new technologies. At the same time, it strengthened the management of key energy-consuming equipment, monitored and regularly inspected major energy-consuming equipment, and extended the service life of the equipment and improved energy utilization efficiency to the maximum extent.

The Company actively promoted its subordinate companies to set goals related to energy use efficiency. Jiaojia Gold Mine required that the power factor of generators in each mining area reached 0.94 or above, and regularly assessed the relevant indexes in each mining area every year. Fujian Yuanxin Company accurately set energy consumption targets for key projects in 2022, and fulfilled responsibilities at different levels to ensure the achievement of energy conservation goals.

### Case • • • Improving systems to promote refined energy management



Guilaizhuang Company attached great importance to energy conservation and actively promoted the effective implementation of energy conservation and consumption reduction measures. It established the Energy Management Committee with its General Manager as Director. A steering group of energy management that is composed of principals of each department (unit), energy metering administrators and others was set under the committee. At the same time, Guilaizhuang Company revised and issued a series of systems such as the *Energy Management System* and *Assessment Methods for Energy Management*, which gradually refined the allocation of indexes, promoted refined energy management, and laid an organizational and institutional foundation for achieving the goal of energy conservation and consumption reduction.

## Use of other resources

The Company focused on integrating low-carbon and environmental protection concepts into all phases of the use of packaging materials to achieve green packaging. In the design phase, it comprehensively considered the packaging volume, layers and usage scenarios to improve the packaging utilization rate. In the procurement phase, it purchased green materials, reduced packaging thickness and weight. In the product delivery phase, it encouraged logistics partners to use reusable express packaging. In the consumption phase, it guided consumers to choose ordinary packaging or even give up packaging through certain discounts.

The Company strictly complied with the relevant provisions of the *Regulations on the Control over Safety of Dangerous Chemicals*, strictly managed hazardous chemicals, and specified the safety and environmental protection requirements for hazardous chemicals during the storage, packaging, transportation, loading and unloading, and destruction processes. At the same time, it carried out regular emergency drills for hazardous chemical accidents to improve the emergency management ability and precaution consciousness of employees.

## The environment and natural resources

Shandong Gold followed the principle of “placing equal emphasis on resource development and environmental protection”, integrated the concept of green development into the whole process of management, production and operation, and continuously improved the environmental management system. It also attached great importance to mine restoration, built beautiful, green mines, and established a long-term mechanism for ecological and environmental protection to achieve coordinated economic, ecological and social benefits of resource development.

## Environmental management

The Company strictly complied with laws and regulations such as the *Environmental Protection Law of the People's Republic of China* and *Law of the People's Republic of China on Environmental Impact Assessment*, as well as relevant policies for energy conservation and emission reduction. Besides, it developed and revised environmental management systems such as the *Responsibility System for Ecological Environment Protection* and *Specifications for the Construction of Green Mines*, gradually improved the environmental management system, and strictly promoted the handling of “three simultaneousness” formalities for environmental protection of projects. It continued to follow up the remediation of environmental issues, and urged its subordinate mining enterprises to assess environmental impacts, signed the letter of responsibility for ecological and environmental protection, and conducted in-depth self-inspection and investigation of environmental issues, so as to improve environmental management. In 2022, with regard to environmental management, the Company achieved good results of “fully passing the inspection, smoothly advancing the warrant and establishing a more complete system”, made zero mistakes in environmental supervision, and continuously consolidated its brand image of “Shandong Gold, Ecological Mining”.

## Training on environmental protection

The Company vigorously advocated green and low-carbon life, organized various forms of publicity activities themed on environmental protection, and promoted green consumption, travel and life. At the same time, it regularly carried out environmental compliance trainings and emergency drills for environmental emergencies, and combined theory with practice to embed the concept of “Ecological Shandong Gold” in everyone's heart.



## Green office

The Company promoted the green office philosophy internally, and integrated the concept of saving resources and reducing energy consumption into daily office work. It regularly made statistics and summarized vehicle fuel consumption and mileage details, defined the scope and process for use of official vehicles and their repair and maintenance, and promoted energy conservation and emission reduction of official vehicles. It also developed the energy conservation and consumption reduction plan, and specified the service time and control measures of lighting, elevator and air-conditioning systems. In addition, it advocated paperless office work, used electronic devices to convey information as much as possible, and adopted double-sided printing when necessary. It reduced the carbon footprint of the office with measures such as saving electricity, water and paper.

## Building a green mine

The Company deeply promoted the construction of green mines, continued to consolidate and improve benchmarking construction of its subordinate companies, and increased efforts in mine appearance management. It also carried out special construction, rectification and supervision activities to a large extent, and fulfilled the responsibility for building a green mine. At the same time, it made every effort to develop key technologies of green mines, vigorously promoted the construction experience of green mines, coordinated the integrated protection and systematic management of mountains, rivers, forests, fields, lakes, grass and sand, and carried out ecological restoration in accordance with local conditions.



▲ Construction of green mines by Laixi Company



▲ Construction of green mines by Yinan Gold Mine

### Case • • • Backfilling slopes to promote ecological restoration in the mining area

Xinjiang Jinchuan Company upheld the core concept of "restoring while mining", used the earthwork excavated from road construction in the mining area to backfill slopes, optimized the dumping plan, and reduced adverse impacts on the ecological environment. At the same time, it carried out special environmental remediation of the mining area, planting 10,000 tree seedlings in the mining area, restoring 152,000 m<sup>2</sup> of vegetation on some slopes, and promoting ecological restoration with practical actions.



▲ Slope greening by Xinjiang Jinchuan Company

## Combating climate change

Shandong Gold deeply analyzed the opportunities and challenges brought by climate change to the mining industry, organized its subordinate companies to investigate the "base number" of carbon emission, and prepared greenhouse gas emission reports, laying the foundation for setting "carbon dioxide peaking and carbon neutrality" goals. Meanwhile, it promoted the utilization of clean energy in its subordinate companies in different fields such as geothermal energy, photovoltaic power, waste heat recovery and air source heat pumps. Besides, it vigorously promoted the concept of green, low-carbon and sustainable development, publicized achievements of energy-saving and low-carbon technologies, encouraged its employees to use energy-saving and low-carbon innovative products, and took positive actions to improve its adaptability to climate risks.

### Case • • • Photovoltaic power generation turns electricity "green"

SDG Heavy Industry fully utilized over 41,000 m<sup>2</sup> of the idle factory roof in the plant area to build the distributed photovoltaic power generation system, and installed a total of 7,200 photovoltaic modules, generating green electricity, letting the electricity demand "follow the light" and contributing to cost reduction and efficiency increase. As of the end of June 2022, it had provided approximately 1.48 GWh of green and clean electricity, saving over 400 tons of standard coal, and reducing carbon dioxide emissions by over 1,300 tons.



### Case • • • Exploring multiple power generation methods to help enterprises reduce costs and increase efficiency

Veladero Gold Mine is committed to reducing carbon dioxide emissions. It installed wind turbines to provide electricity for production. It invested USD 54 million in the Chile electricity diversion project to convert diesel power generation to grid power supply. The project was put into operation in December 2022, and was expected to reduce carbon dioxide emissions by 100,000 tons every year. While reducing the electricity cost of the enterprise, the project will also contribute to energy conservation and emission reduction, benefiting local communities.



▲ Wind power generation by Veladero Gold Mine



# Contributing the Value of Shandong Gold through Innovation and Entrepreneurship

Shandong Gold continued to provide safe and high-quality products for the society, strengthened communication with employees and communities, and fully protected the basic rights and interests of employees. It also focused on the public welfare, strengthened support for local communities to comprehensively build its image of a responsible state-owned enterprise.

## Core Issues

- Fulfillment of responsibilities for products
- Implementation of labor standards
- Employee development and training
- Employee health and safety
- Investments in communities

## Key Performance

- Investing RMB **683** million in safety.
- Investing RMB **651** million in research & development.
- **234** patents have been authorized.
- Helped **1,024** employees in need.
- Total charitable donations reached over RMB **3.2** million.

## The U.N. Sustainable Development Goals and Us



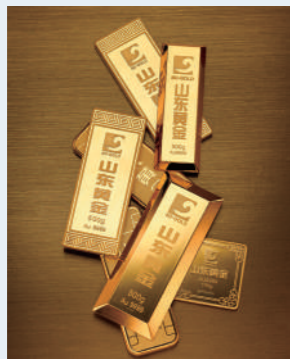
# Product Responsibility

Shandong Gold repaid customers' trust with the complete product quality management system and high-quality services, promoted development through technological innovation, and continuously provided high-quality products for the public.

## Improving product quality

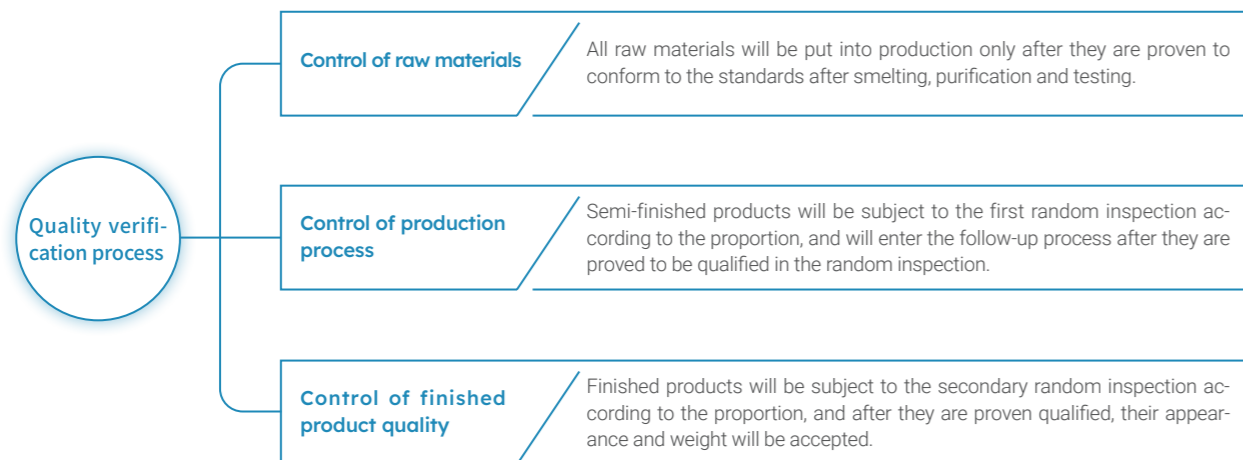
The Company continued to improve its quality management system, offered high-quality gold products to the society, and established a complete after-sales service system so as to provide customers with the best service experience, and protected their legitimate rights and interests.

### Strengthening quality management



We continuously strengthened our focus on product quality. Our subordinate company - Gold Smelting Company has been rated as "Enterprises Able to Provide Standard Gold Bullions" for many years, and has passed the accreditation of GB/T 19001-2016 quality management system, SGE and LBMA quality accreditation, and relevant accreditation by China National Accreditation Service for Conformity Assessment (CNAS). Since the Company's Mount Tai® standard gold and Shandong Gold® products were launched to the market, both the product percentage of pass and customer satisfaction rate have been 100%.

We strengthened quality control in all links of the product production process, strived to achieve controllable quality of raw materials, controllable quality of production process and high-quality finished products, and prevented unqualified products from flowing to the market.



▲ Quality verification process

## Providing high-quality services

We continued to provide high-quality services. In case of complaints about product quality, we would recall the products according to the procedures and guarantee the after-sales service quality. In 2022, we upgraded Shenzhen Refueling Center to a comprehensive business center integrating sales, purchasing and refueling, and established an "online shopping mall" to further expand the scope of product sales and customer service channels.

In 2022

Received customer complaints

0



▲ Product recovery process

We fully guaranteed the security of customer information, assigned special personnel to manage customer information, regularly kept it archived and confidential except for inspection by national government agencies. We protected the legitimate rights and interests of customers, ensured the safety of product transportation, and continuously strengthened customer satisfaction surveys and tracking. We also responded to customer suggestions, and handled customer complaints and feedback in time. In addition, our products and services generally have no bad impacts on customers' health and safety.




## Driving development by innovation

Innovation is the primary driving force for development. Shandong Gold actively implemented the innovation-driven development strategy, optimized innovation management, tackled hard-nut problems in science and technology, and strengthened the application of scientific & technological innovation achievements. It also protected intellectual property rights, worked to build an international top-grade demonstration mine, and enhanced its core competitiveness for sustainable development.

### Strengthening technology innovation


We followed the enterprise spirit of "innovation and entrepreneurship", and upheld the management concept of whole-chain technology innovation that "enterprise raises demand, platform allocates resources and collaborative efforts promote technology innovation". We also aligned with the *Administrative Measures of Shandong Gold on Science and Technology Awards* and other technology management systems, and built the provincial research and development platform. We increased scientific and technological investment, encouraged all employees to conduct innovation activities, and jointly tackle industry challenges. In 2022, the *Key Technologies and Equipment for Intelligent Mining of Coastal Deep Metallic Mineral Resources* declared by Sanshandao Gold Mine won the first prize of Shandong Provincial Science and Technology Progress Award, and the Research and Application of *Key Technologies for Safe, Green and Intelligent Mining of Deep, Gently Inclined, Thick Gold Deposits* declared by Jiaojia Gold Mine won the second prize of Shandong Provincial Science and Technology Progress Award.

- 

**Building innovation platforms**

We built an academican workstation led by Deng Jun, academican of the Chinese Academy of Sciences, academican of the Russian Academy of Engineering, and former president of China University of Geosciences (Beijing). This workstation was a breakthrough in building a provincial research and development platform by Shandong Gold. We also undertook the construction of the "Key Laboratory of National Mine Safety Administration for Monitoring and Early Warning of Safety Risks in Non-Coal Mines" and "Technology Innovation Center for Deep Gold Mine Exploration and Mining of the Ministry of Natural Resources" jointly declared by the Group and multiple scientific research institutes.
- 

**Cultivating innovative talents**

We organized activities such as "Technology Innovation Month", technical exchanges and technology trainings, and conducted internal technology reviews to stimulate employees' enthusiasm for innovation. We created incentives for scientific research contributions and enhanced scientific research capabilities.
- 

**Tackling problems in key technologies**

We followed the general policy of "national key technology research as the guide, basic professional research as the prospect, research topics on high geostress, high ground temperature, high osmotic pressure and strong mining disturbance as the main clues, and intelligent, green mining as the direction", and polled scientific research efforts to tackle key technical bottlenecks.

In 2022	
Investment in research & development: RMB	Science and technology awards from the China Non-Ferrous Metals Industry Association
<b>651</b> million	<b>4</b>
Shandong Provincial Science and Technology Progress Award	Science and technology awards from the China Gold Association <b>31</b> , including <b>10</b> first prizes
<b>1</b> first prize	
<b>1</b> second prize	

## Case • • • Shandong Gold undertakes the national key research and development project research & development and demonstration of key technologies for green mining of deep metal mines



Deep metal mining inevitably disturbs the Earth's environment, generates waste and produces resource loss, aggravating the contradiction between resource development and ecological environmental protection. To solve this problem, Shandong Gold conducted research on low waste and high efficiency mining technology for deep metal mines, tackled problems in control technologies and equipment for thickening of full tailings with low energy consumption and deep well high-pressure head conveying, and made breakthroughs in key technologies for resource utilization and ecological harmless disposal of full tailings. It also supported the establishment of 1,000 m-deep ultra large green mining demonstration mines, and provided the green development model for deep metal mines of the Company in the future. It is conducive to improving the overall recovery level of resources in China and achieving the coordinated development of deep metal mining and ecological environment.


### Protecting intellectual property

We complied with laws and regulations such as the *Patent Law of the People's Republic of China* and relevant requirements of industry associations, attached great importance to protecting our own intellectual property rights, and ensured no infringement upon others' intellectual property rights. By improving the relevant intellectual property rights system and organizing training on protecting intellectual property, we enhanced our intellectual property creation and application capabilities, and enhanced our patent awareness.

In 2022

Authorized patents

**234**




▲ Technical exchange meeting on new mining equipment



### Strengthening digital transformation

Enterprise informatization is conducive to optimized decision and rational allocation of resources. Shandong Gold regarded data quality as the foundation of informatization, took the institutional system as the basis, and continued to improve information management systems and standards. It also ensured the network information security, developed special implementation plans for digital transformation, speeded up the process of digital transformation, and promoted its high-quality development.

<b>Enterprise informatization</b>	We managed normalized data and shared cross-business data to increase the coverage of enterprise informatization.
<b>Transparent procurement</b>	We explored adaptable procurement management methods, planned and built a resilient, transparent, flexible and secure large supply chain system, and carried out responsible procurement.
<b>Intelligent production</b>	We focused on the transformation of production systems, and consolidated the foundation of production informatization. We also built smart mines, created intelligent mining demonstration areas of Sanshandao Gold Mine and Jiaojia Gold Mine, and gradually promoted our company to move towards the goal of building a world-class mining enterprise.

#### Progress in smart mine construction

<b>Sanshandao Gold Mine</b> Relying on 5G technology, it built a comprehensive management and control system to achieve integrated management and control of 5G+UWB voice communication, personnel positioning and signal light control on ramps.	<b>Jiaojia Gold Mine</b> It successfully carried out the trial operation of the first underground remote control Load-Haul-Dump (LHD) based on Wi-Fi6Mesh network in China, and built the centralized control system for air compressor, remote control system for power transformation & distribution, emergency evacuation signal system and monitoring system for material level in ore bin.
<b>Xincheng Gold Mine</b> It built the UWB-based personnel positioning and pedestrian-vehicle collision prevention system on ramps.	<b>Linglong Gold Mine</b> It completed upgrading of centralized control system and 5G-based automation system renovation.
<b>Xinhui Company</b> It completed the construction of automated drainage system and automated air pressure system and other systems.	




## Employment and labor standards

Shandong Gold followed the principle of equal employment, and abided by international labor standards and labor laws and regulations in the place of operation. To be specific, it effectively protected the rights and interests of employees and built harmonious labor relations through a fair and open recruitment mechanism, standardized employment systems and smooth communication channels.

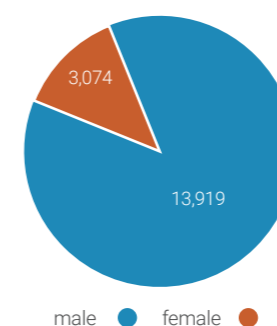
### Equal employment

We strictly abided by the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China* and other laws and regulations, provided equal employment opportunities for employees of different genders, religions, ethnic groups, and cultural backgrounds and persons with disabilities, and rejected discrimination and ensured equal pay for equal work. We prohibited the use of child labor and forced labor, and clearly stipulated that employees can report to the labor union or submit to labor arbitration for any forced labor. Neither violations of human rights nor any use of child labor or forced labor by Shandong Gold was found during the reporting period.

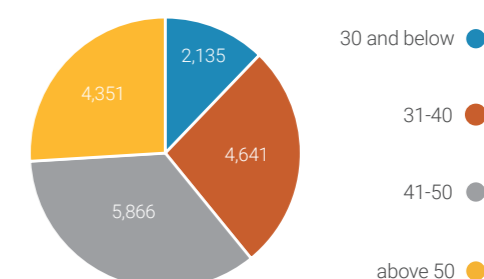


### Composition of employees

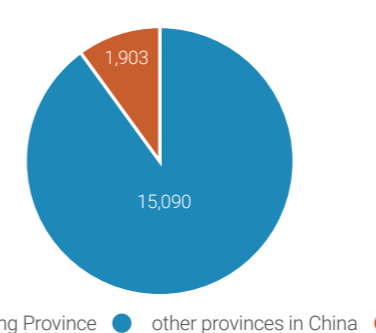
Number of employees by gender (people)



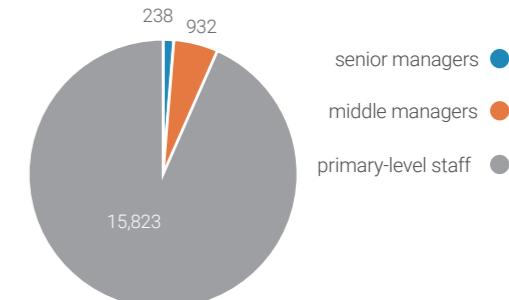
Number of employees by age group (people)



Number of employees by region (people)



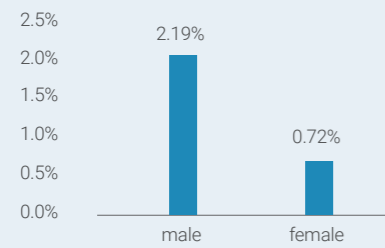
Number of employees by hierarchy (people)



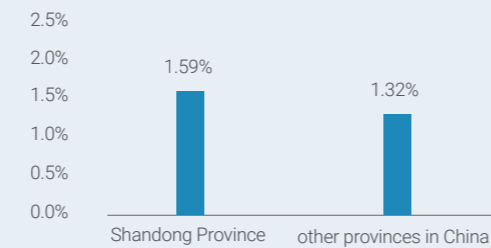
Shandong Province ● other provinces in China ●

### Employee turnover rate

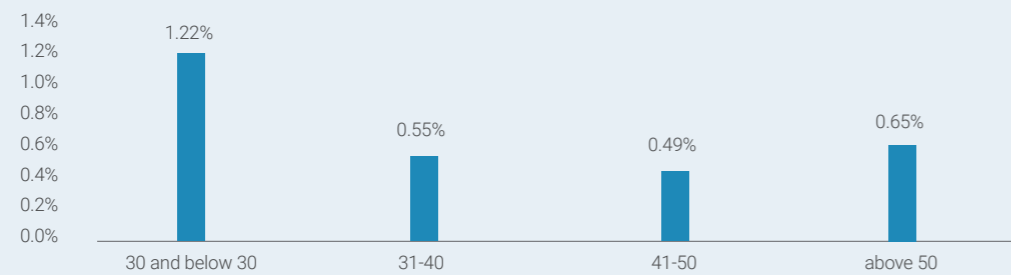
Turnover rate according to genders (%)



Turnover rate according to regions (%)



Turnover rate according to ages (%)



## Salary and benefits

The Company continued to improve the salary and benefits system, paid five social insurances and one housing fund for employees in full according to law, and established the enterprise annuity system. It fully protected employees' rights to rest and vacation, and provided maternity leave, breastfeeding leave and other benefits for female employees. It also continued to strengthen the salary incentive system, optimized salary distribution plans, and gradually narrowed the gap between each salary grade. In addition, it standardized the distribution of allowances, subsidies and benefits, and continuously enhanced employees' sense of belonging and gain.



## Democratic management

The Company established the "big trade union" system, requiring its subordinate companies to establish trade unions and the enterprise democratic management system represented by worker's congress. It emphasized the role of employees in democratic management, participation and supervision, opened the channels for employees to express their opinions, and enhanced their sense of ownership. Besides, it cared about their lives, helped them solve difficulties, and served employees wholeheartedly.

### Signing collective contracts

- Sanshandao Gold Mine signed collective contracts with employees to allow them to participate in the daily negotiation of company affairs
- Jinzhou Company signed special collective contract with female employees to protect their legitimate rights and interests

### Expanding communication channels

- Gold Smelting Company understood employees' demands from multiple perspectives through various forms such as "face-to-face" exchanges and discussions with frontline employees
- Laixi Company conducted "reception day" activities every month to open communication channels for employees

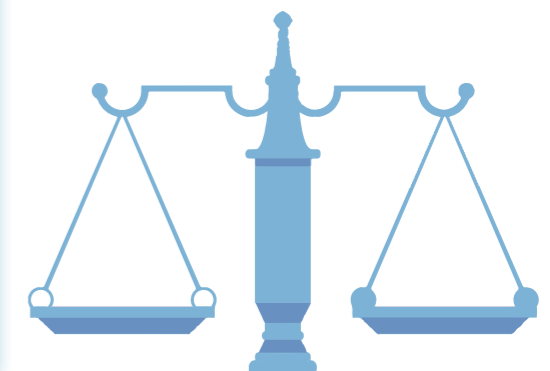
▲ Measures taken by some subordinate companies to strengthen democratic management



▲ 6<sup>th</sup> Session of the 8<sup>th</sup> Workers' Congress of Jinzhou Company



▲ Representative Leaders' Meeting of Workers' Congress of Sanshandao Gold Mine



# Development and training

Shandong Gold followed the rules of talent development, established a hierarchical and classified talent cultivation system, and continuously improved employee development channels. It also fully respected employees' willingness to learn and grow, provided employees with a platform to realize their own value, and expanded the space for employees and enterprises to grow together.

In 2022

Training sessions for employees were held

131

Investment in employee training

RMB 39.0083 million

## Innovative employee training

The Company developed and implemented the 2022 Annual Training Plan according to 14th Five-Year Plan, carried out digital training and developed the "Cloud Training Platform of Shandong Gold Training Center" to achieve simultaneous implementation of "online+offline" training. It strengthened industry-university-research cooperation, and established 5 off-campus training bases to improve the quality and efficiency of talent cultivation. It also relied on the Shandong Gold Training Center to build an integrated training system of "corporate culture+work safety+professional theory + operational skills", combined theory with practice and enriched knowledge of the underground mining team. In 2022, 58 employees won the title of "2022 Technical Expert in the Gold Industry of Shandong Province", and 25 employees won the title of "2022 Excellent Coach in the Vocational Skill Competition of the Gold Industry of Shandong Province".

### Training for management personnel

- The training focuses on production and operation, human resources, engineering management, financial audit, Party building and discipline inspection, and aims to enhance the job-performing ability and comprehensive quality of management personnel and improve operation and maintenance management.
- We held 31 training sessions for management personnel in 2022.

### Training for technical personnel

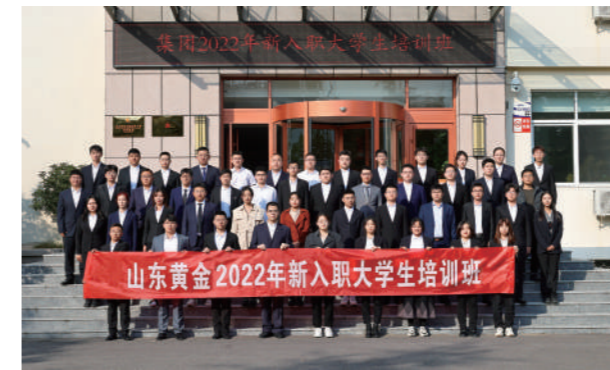
- The training focuses on cultivating a team of professional and technical talents. This training includes continuing education for technical personnel in geology, mining, surveying and other disciplines, and training and learning for professional expert committees.
- We held 28 training sessions for technical personnel in 2022.

### Training for skilled personnel

- We carried out pre-job training, continuing education and independent evaluation of skilled personnel, and successfully held the Skills Competition of Shandong Gold Industry to improve the skills and technical abilities of skilled personnel.
- We held 36 training sessions for skilled personnel in 2022.

## Measures and effectiveness of classified training for employees

Classification of training for employees		Average training hours per person (hours)	Percentage (%)
Average training hours per person (by gender)	Male	15.43	54.35
	Female	12.96	45.65
Average training hours per person (by employee level)	Senior managers	24.33	41.51
	Middle managers	18.56	31.67
	Grass-roots employees	15.72	26.82



▲ Induction training for college students



▲ Training for welding technicians



▲ Our employees participated in the Skills Competition of Shandong Province



## Opening promotion channels

The Company improved the employee promotion channels. The headquarters set up a three-level position system of assistant director, supervisor and specialist, and built the promotion channels for management, technical and skilled personnel to meet different needs of employees for realizing their own value.

### Promotion channels for management personnel

- We strictly standardized the procedures for selecting and appointing officials, developed a practical manual for selecting and appointing leading officials, and focused on youth and professionalism to optimize the leadership at all levels
- In 2022, the promoted leading officials born in 1980s accounted for 50% of newly promoted leading officials

### Promotion channels for technical personnel

- We improved the system of engineering professional and technical posts, and promoted the construction of professional and technical talent teams
- We evaluated the junior and intermediate professional titles in gold engineering and the Group's chief technicians
- In 2022, 88 employees obtained the title of Engineer, 9, title of Assistant Engineer, and 4, title of the Group's Chief Technician

### Promotion channels for skilled personnel

- We carried out independent evaluation of "three-level and six-grade" vocational skills for special job types in gold mining
- Jointly organized the Vocational Skill Competition of the Gold Industry of Shandong Province together with the Shandong Provincial Department of Human Resources and Social Security
- In 2022, 231 employees obtained professional qualifications, and our contestants ranked among the top 10 in all types of work in the vocational skill competition

# Health and safety

Shandong Gold always followed the safety management concept that "life is paramount to everything and safety comes first", continuously optimized the production and living environment of employees, and safeguarded occupational health of employees, promoting development with safety and safeguarding safety with development.

## Building a safe Shandong Gold

The Company attached great importance to work safety, continuously improved the management system related to work safety, and optimized the work safety management system of all participating units. It required its mining enterprises to obtain relevant licenses of work safety according to law, improved the safety supervision and management system, strengthened the investigation of safety risks, and strictly observed the red line of safety, to ensure the safety and stability of mine construction.

### Hazard identification and elimination

We revised the *Measures for Identifying and Eliminating Work Safety Hazards in Shandong Gold (Trial)*, formulated and issued the assessment indexes for punishment of hazards identified in 2022, and further increased rewards and punishments.

### Special actions to ensure work safety

We revised the management regulations on rewards and punishments for work safety, continued to promote the three-year actions for work safety, and implemented a one-vote veto against enterprises that failed to pass the safety assessment. In 2022, we invested RMB 683 million in safety-related projects.

### Construction of emergency response mechanisms

We formulated the *Emergency Plan for Work Safety Accidents of Shandong Gold Mining Co., Ltd. (2022 Edition)*, which included comprehensive emergency plans, special emergency plans and on-site disposal plans. We also carried out comprehensive and special emergency drills, and improved emergency response, guarantee and disposal capabilities.

### Creation of a safety climate

We developed a training plan for work safety, promoted centralized action of "learning, training and examination" on work safety, and organized 4 sessions of all staff training and safety knowledge competitions in the Work Safety Month, so as to raise the sense of responsibility for work safety and build a strong defense line for work safety.



▲ Special emergency drill at the heap leaching site of Xinjiang Jinchuan Company



▲ Emergency drill for dam break of tailings pond in Linglong Gold Mine

## Protecting occupational health

Shandong Gold abided by laws and regulations such as the *Law of the People's Republic of China on Prevention and Control of Occupational Diseases* and *Law of the People's Republic of China on Work Safety*. To be specific, it improved the infrastructure construction for work safety, strictly monitored and managed the health hazards in the workplace, and regularly carried out publicity and learning activities on the *Law of the People's Republic of China on Prevention and Control of Occupational Diseases*. It also speeded up the promotion and application of key technologies and equipment for preventing and controlling occupational diseases, and established the occupational health examination systems and healthy enterprises as much as possible. In addition, it purchased supplementary medical insurance and group accident insurance for employees, organized annual physical examinations for employees, and gave psychological lectures to fully protect their physical and mental health.

In 2022, Shandong Gold revised the occupational health management plan during the 14th Five-Year Plan period, improved the occupational health management system, and focused on dust control to protect occupational health. It also continued to promote the "one-belt wearing" of positioning cards, self-rescuers and miner's lamps, and strengthened the management of basic files and health monitoring for outsourced construction teams, with an annual physical examination rate of 100%. The physical examination for female employees of Gold Smelting Company added the HPV testing item to regular items, upgrading the humanistic care for female employees, raising disease prevention awareness and improving health conditions.

Occupational health of employees				
Indicator	Unit	2020	2021	2022
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	445	230	0

## Caring for the life of employees

We focused on balancing the work and life of our employees, organizing various forms of leisure-time activities, and creating a human-friendly Shandong Gold. At the same time, we paid great attention to the female employees and organized activities to care for female employees. We improved the assistance system of labor unions, helped employees in difficulties, and continuously enhanced employees' sense of happiness and gain.



▲ Fun sports meeting by Jiaojia Gold Mine



▲ Basketball match by Sanshandao Gold Mine



▲ Activity themed on Women's Day by Xincheng Gold Mine



▲ Collection of calligraphy, painting, photography and paper-cutting works from employees by Jinzhou Company



▲ Cross-country race for employees by Laixi Company

## Community investment

Shandong Gold bore the country's most fundamental interests in mind, fulfilled its social responsibilities, participated in public welfare undertakings, and enhanced humanistic care, benefiting as many individuals and wide ranges as possible from Shandong Gold.

### Enthusiasm for public charity

Shandong Gold actively engaged in public welfare undertakings, made charity a habit and a fashion through voluntary services, public welfare activities and charitable donations, and contributed to building a harmonious and happy society.



**Case ••• Xinjiang Jinchuan Company won the honorary title of “Student Support Enterprise” issued by Yining County Charity Federation**



In 2022, Xinjiang Jinchuan Company donated RMB 1 million to Yining County Charity Federation to support the development of local education undertakings. It also donated 10,000 books and a charity package to the assisted schools, helping children learn and grow through practical actions and establishing a good image of state-owned enterprises. Xinjiang Jinchuan Company won the honorary title of “Student Support Enterprise” issued by Yining County Charity Federation for recognizing its enthusiasm for educational public welfare undertakings and actions for fulfilling social responsibilities.

▲ Student aid activity by Xinjiang Jinchuan Company

**Case ••• Guilaizhuang Company organizes the Spring Festival visiting activity themed on “protecting orphaned and needy children with love”**



On January 11, 2022, Guilaizhuang Company organized the Spring Festival visiting activity themed on “Protecting Orphaned and Needy Children with Love”, sending cotton-padded clothes, jackets and shoes to the children. This activity not only brought material sympathy to the families of orphaned and needy children, but also provided them with spiritual care and encouragement, making them feel the warmth of being in a big social family. Guilaizhuang Company will continue to normalize child-caring activities, effectively undertaking the responsibility as a state-owned enterprise.

▲ Spring Festival visits

**Revitalizing beautiful countryside**

Shandong Gold continued to guide its subordinate companies to invest in rural construction, consolidate the achievements of poverty alleviation, and contribute to rural revitalization. In 2022, the Labor Union of Fujian Yuanxin Company organized its employees to donate RMB 50,000 for building local bridges and rural roads, contributing to rural development. Laixi Company launched a 5-day activity themed on “I Do Practical Things for People”, and built access roads for local communities. Futures Company signed agreements on assistance to rural revitalization with Shili Town (in Xihe County, Gansu Province), and Fuhe Town (in Baarin Left Banner, Inner Mongolia), respectively, and donated RMB 200,000 of industrial assistance funds and RMB 40,000 of educational aid funds to support local development.



▲ Access road built by Laixi Company for Qingshan Community

**Fulfilling overseas responsibilities**

Shandong Gold accelerated its pace of international development, actively integrated into the Belt and Road Initiative, and jointly invigorated the gold industry with global partners. During overseas operation, we took the initiative to fulfill our responsibilities as a corporate citizen, and improved the lives of local residents by localized operations and employment.

**Veladero Gold Mine**

It jointly developed waste tire disposal methods with contractors, and processed tires of large-scale ore cars into building granular materials to fulfill its commitments to environmental protection. It also opened skill training schools, and improved educational facilities. It improved local medical and health services that benefited more than 90% of community residents. In addition, it increased localized recruitment and procurement to drive local economic development.

**Cartino Resources Limited**

It actively communicated with the government and stakeholders, relocated and resettled community residents within the scope of mining rights, and completed the construction and relocation of resettlement villages. It also supported the community's livelihood, hired local residents, and helped former artisanal miners obtain sources of income. On April 1, 2022, it donated USD 50,000 of support fund to the community affected by the explosion accident for emergency disaster relief.



# Achieving Excellent Governance to Consolidate Our Development Foundation

Shandong Gold kept improving the corporate governance system and governance capacity, boosting management innovation and perfecting its governance structure and management system. Focusing on the compliance management and risk control in key areas, it reinforced its development foundation by building a governance system with perfect governance, compliance operation, prescriptive management, law observation and integrity.

## Core Issues

- Corporate governance
- Party building leadership
- Responsibility management
- Supply and industry chains
- Anti-corruption

## Key Performance

- Shandong Gold obtained level-A (the highest level) in information disclosure evaluation by Shanghai Stock Exchange for **5** consecutive years.
- Its suppliers are **100** % local ones.
- Its Party organizations at all levels gave over **500** Party classes.

## The U.N. Sustainable Development Goals and Us





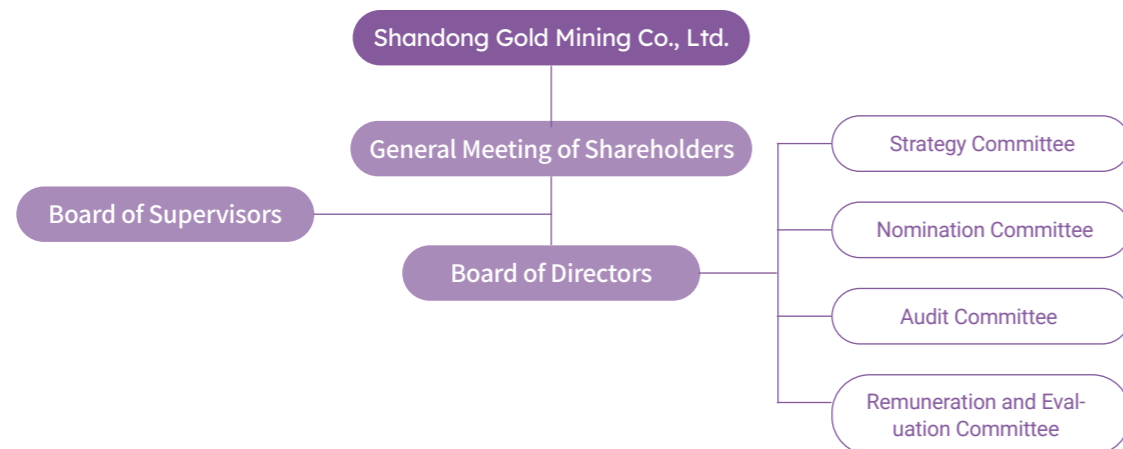
# Corporate governance

As a strict follower of the country's guidelines and policies, Shandong Gold abided by the listing regulation rules. In addition to sticking to law-abiding and compliance operation, the Company kept optimizing its governance structure and improving its risk management mechanism, for the purpose of laying a solid basis for its sustainable development.

## Governance framework

Shandong Gold made long-term efforts to enhance corporate governance capability and improve the governance framework which consists of General Meeting of Shareholders, the Board of Directors, the Board of Supervisors and the Management, as well as governance systems. To raise efficiency of the corporate governance mechanism, the Company sorted out 24 systems relating to corporate governance (19 of which were revised), and worked out the *Implementation Rules of Information Disclosure Affairs* in 2022.

Shandong Gold aims to achieve sustainable and high-quality development with high governance capability under efficient leadership, and to reward the public and shareholders with good performance. The Company has set up the Audit Committee, Strategy Committee, Nomination Committee, and Remuneration and Evaluation Committee under the Board of Directors. All these committees are responsible to the Board of Directors, perform their duties under the Articles of Association of the Company and the authorization of the Board of Directors, and submit their proposals to the Board of Directors for deliberation and decision. Members of these committees are all made up of directors. Independent non-executive directors account for the majority of the Audit Committee, Nomination Committee, Remuneration and Evaluation Committee and serve as conveners.



Shandong Gold company governance system

### In 2022

Our Board of Directors consisted of **9** directors, including **3** independent non-executive directors

We held a total of **14** board meetings with **79** proposals deliberated

We held a total of **5** shareholders meetings with **31** proposals deliberated

We held **8** meetings of the Board of Supervisors with **34** proposals deliberated

## Law observation and compliance

The Company adhered to compliance operation according to law and improved the compliance work mechanism. Additionally, it reinforced the foundation for preventing and controlling compliance risks, tightened process control and fostered compliance culture, thus to provide a sound basis of compliance for all aspects, all systems and all coverage. The Company paid close attention to relevant laws and regulations of the country and the industry. On December 30, 2022, the Company put forward feedback and suggestions for revising laws and regulations to the Standing Committee of the National People's Congress, while the latter was collecting opinions from the public about the *Company Law of the People's Republic of China (Second Draft Revision for Review)*.

### Compliance team construction

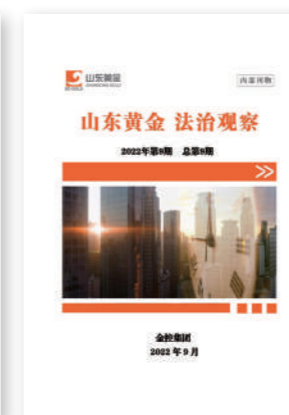
A law-based compliance management mechanism was established. The Department of Auditing and Legal Affairs was responsible for effectively identifying and controlling the compliance risks faced by Shandong Gold, and the persons in charge of each branch or subsidiary enterprise under Shandong Gold bore primary responsibility for the compliance of their business activities. The Company comprehensively improved the general counsel system and lawyer team management, revised and issued the *Administrative Procedures for the General Counsel of Shandong Gold and the Administrative Procedures for Lawyers of Shandong Gold (Trial Implementation)*.

### Information-based compliance management

The Company built an information-based platform on legal dispute management and adopted electronic signature and electronic contracts. Moreover, it set up an electronic reporting system for contracts to prevent and control contract risks at an earlier time.

### Enhancement of compliance awareness

The Company held law popularization and publicity activities on a regular basis. It also made efforts to intensify training on legal affairs and compliance. In addition, it established *The Rule of Law Observation* to innovate the methods of law publicity, and devoted greater efforts to raise the staff awareness of compliance.



▲ *The Rule of Law Observation* as a channel to popularize knowledge of laws



▲ Special training session on corporate compliance and legal practice

## Risk prevention and control

Shandong Gold established a risk prevention and control system. By strengthening leadership and team building, it clarified the risk management responsibilities of each department and position at the Board of Directors and the Management, and developed an all-round, whole-process and whole-system risk prevention and control mechanism covering all staff. In 2022, the Company revised and modified the *Measures for Overall Risk Management*, adding some details including the reporting of major operational risk events and a quarterly monitoring mechanism for major and important risks. The revision focused on processes such as information collection, risk assessment, risk response, supervision & improvement and risk reporting, enabling the overall risk management mechanism to work orderly and efficiently and improving the Company's ability to prevent and resolve risks.

### Reinforcing strategic forecasting and risk early warning

The Company improved its abilities to identify risks and discover blind spots. It also detected hidden perils, and fully assessed various possibilities to make sufficient preparation.

### Enhancing risk resolving capability

The Company set up an evaluation mechanism for major issues to assess specific risks on issues such as significant investment, major merger & acquisition, and major restructuring & reorganization.

### Building overall risk prevention and control mechanism

It managed risks at the very beginning, and conducted risk prevention and control during the entire business process. It also paid special attention to daily control over key areas including work safety, green & environmental protection, compliance operation and investment management, thus to improve the effectiveness of internal control system.

## Investor communication

In 2022

The Company held nearly **50** investor meetings

Received **1,000** investors

Released **222** documents for H-share information disclosure

Released **86** A-share provisional announcements

Released **83** other information disclosure documents

Following the requirements of protecting investors proposed by administrative authorities, Shandong Gold communicated with investors in good faith and with a responsible attitude, listened to investors suggestions and patiently replied to their inquiries. Besides, it actively interacted with investors via performance presentations, investor meetings, e-interactive platforms, information disclosure and other channels, thus to promote investors' understanding of and their confidence in the Company. Compared with 2021, the rating of Shandong Gold was generally overweight in the capital market due to a growing trend in its performance, and Shandong Gold saw significant increases in its market value, shareholder base and industrial competitiveness in the capital market.

In 2022, after comprehensive appraisal by Shanghai Stock Exchange (SSE), Shandong Gold was once again rated Level-A (the highest level) in Information Disclosure Evaluation by Shanghai Stock Exchange in 2021-2022, owing to its profound foundation of compliance, complete information disclosure and standard corporate operation. It has been one of the only four listed companies in Shandong that won this honor for 5 consecutive years since 2017.

In 2022, Shandong Gold took the initiative to observe relevant regulatory policies formulated by Shandong Securities Regulatory Bureau. As required by regulatory authorities, the Company held an event on March 15 (known as the World Consumer Rights Day) with the theme of Learning the Market and Investing Rationally, and an event themed Caring Investors and Working Together on May 15 to celebrate the National Investor Protection Publicity Day. What's more, it actively coordinated in the 2022 World Investor Week and attended the online group reception event for investors in Shandong. It regularly organized directors, supervisors and senior managers to take courses about new laws, new regulations and warning cases, and took the initiative to put regulatory policies into practice.

## Party building leadership

Adhering to the leadership of the Party, Shandong Gold passed on the tradition of revolution throughout its development. By adopting the 365 Party building mechanism, the Company kept reinforcing Party building at all times. Party building empowered the Company to advance and instructed its transformation and upgrading.

### Shandong Gold 365 Party building mechanism

**3 goals:** Keep in mind, consolidate the foundation and improve capabilities

**6 supports:** Education & training system, decision & governance system, responsibility fulfillment system, organizational network system, guarantee & incentive system, supervision & coordination system

**5 practical requirements:** Focus on Party building; concentrate on main points; integrate Party building with main tasks; be down-to-earth; highlight unique measures

### Accumulatively, by the end of 2022

Created nearly **200** Party members to play their roles

Established nearly **50** of Party building

Our Party organizations at all levels had opened over **500** Party classes

Platforms for **200**

Grassroots brands **50**

**500** Party classes



▲ Party building activity of Shandong Gold

# Responsibility management

With core values of openness, inclusivity, loyalty, responsibility, Shandong Gold continuously improved its ability and level of responsibility management, thus building itself a world-class gold mining enterprise that develops sustainably.

## ESG management

Shandong Gold kept optimizing ESG management structure to promote the full integration of ESG governance into its corporate governance system, and instructed and helped all functional departments and subordinate enterprises to constantly improve the management of sustainable development and elevate the effectiveness of ESG management.

### Board of Directors and Strategy Committee

Review the Company's ESG governance strategies, ESG management systems, ESG management goals and annual ESG reports, as well as identification & application of materiality issues, and relevant ESG risks & opportunities of the Company. In addition, they monitored and inspected the identification, assessment and management process of ESG management related matters and progress of relevant ESG goals.

### All functional departments, branches and subsidiary enterprises

Implement tasks assigned by the Board of Directors and Strategy Committee, collected data and reported ESG performance of their own departments. They also discussed the implementation of sustainable development strategies and key issues, with the aim of improving the governance capacity for sustainable development.

## 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; Work Safety Department; Resource Management Department; Trading Center; Each subsidiary & branch
Technology innovation	Technology & Environment Protection Center; Information Center; International Top-grade Demonstration Mine Promotion Center; Each subsidiary & branch
Safety & environmental protection	Work Safety Department; Operation Management Department; Office; Technology & Environment Protection Center; 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 substantive issues

We sorted out the issues of concern to internal and external stakeholders pursuant to the identification process of substantive issues provided in the *Environmental, Social and Governance Reporting Guide* by The Stock Exchange of Hong Kong Limited, taking into consideration sustainable development trends of the industry, corporate development strategies, peer benchmarking data as well as interviews with internal and external stakeholders. Such issues were ranked based on their materiality in the Company's development and to stakeholders, and then, the top issues in ESG management and information disclosure were determined. The analysis results of substantive issues were deliberated by the Board of Directors, and all issues were disclosed in detail in relevant chapters of this Report.



## Communication with stakeholders

Type of stakeholders	ESG issues of most concern	Communication channels/ feedback methods
Governments and regulatory authorities	Emissions Use of resources The environment and natural resources Climate change Employment Labor codes Product liability Anti-corruption and community investment	Special report Field research Policy consultation Information disclosure Correspondence of official documents Participation in meetings held by government agencies
Investors and shareholders	Employment Anti-corruption and product liability	Shareholders meeting Investors meeting Business conference Official website
Employees	Employment Labor codes	Communication meeting Performance appraisal interview Democratic research
Suppliers, contractors and intermediaries	Product liability Supply chain management Anti-corruption	Market research Supplier inspection Supplier conference
Press and non-governmental organizations	Emissions Use of resources The environment and natural resources Climate change Health and safety Employment Labor codes Community investment	Official website News report Social media Idea-exchanging meeting
People in the community	Emissions Use of resources The environment and natural resources Health and safety Community investment	Field research Public welfare activities Social media

## Supply chain management

Shandong Gold endeavored to create an open, transparent and fair basis for its cooperation with suppliers, and required its suppliers to operate business in a responsible way. Moreover, it tried every means to reduce supply chain risks and foster sustainable development by continuously optimizing the management mechanism, improving management methods and establishing a digital procurement platform.

### Supplier management system

To clarify the division of responsibilities for sustainable development management in procurement, Shandong Gold established a supplier management structure, including the Planning and Tendering Team, Procurement Team of Equipment Spare Parts, Materials Procurement Team, Contracts and Suppliers Management Team and Centralized Storage Management Team. Additionally, it formulated the *Measures of Shandong Gold on the Management of Material Suppliers* and related implementation rules, and reinforced supplier management in many aspects such as supplier admission, assessment and appraisal, responsibility traceability and elimination. It also managed relevant qualifications of suppliers dynamically, so as to help them operate business in a responsible way and in line with business ethics.

#### Supplier selection criteria

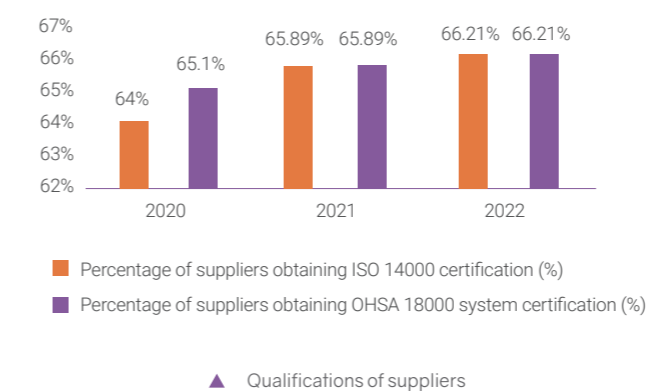
Select suppliers with legitimate business qualifications, good business reputation, sophisticated quality assurance systems, adequate ability to fulfill contracts and perfect after-sales service system. Under the same conditions, preference shall be given to suppliers that have been accredited with ISO 14000 environmental management system as well as OHSAS18000 occupational health and safety management system.

#### Supplier assessment and appraisal

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

#### Supplier blacklisting or elimination

Those suppliers who fail to have complete qualifications or certificates, provide fake bidding materials, suffer significant risks during production and operation, or run into any behavior that may affect the performance of the contracts, shall be shunned or deleted as the case may be.



There were suppliers under the mode of centralized procurement

1,252

The localization ratio of suppliers reached

100%

In 2022

## Environmental and social risk management along the supply chain

Pursuant to the *Measures of Shandong Gold on the Management of Material Suppliers*, we conducted an overall appraisal on the environmental and social risks of suppliers before their admission into the directory of suppliers. We required suppliers to provide basic qualifications, relevant ISO certifications and national compulsory certification qualifications, and implemented dynamic management on the efficacy of such qualifications via the supplier management system. Meanwhile, to eliminate or reduce environmental and social risks along the supply chain from the source, we inspected the suppliers scale, production capacity, production technology, employee quality, corporate innovation and standardization of enterprise related management system. In 2022, Shandong Gold revised some management systems such as the *Centralized Procurement List of Bulk Materials of Shandong Gold in 2022 (Provisional Implementation)* and the *Implementation Rules of Shandong Gold for Handling Improper Behaviors of Materials Suppliers (Trial Implementation)*, covering the entire process of supply chain management and making it possible to control risks along the whole chain.

## Responsible procurement

Shandong Gold was dedicated to developing a unified, open, fair and impartial procurement mechanism, expanding the fields of centralized procurement and enhancing procurement quality while lowering procurement costs. In 2022, Shandong Gold directly purchased mine equipment from manufacturing enterprises, which reduced intermediate links and terminated any low-quality and low-price competition arising from bidding. Direct procurement not only opened up new purchasing channels for the application of first-class equipment, but achieved a win-win situation between the Company and suppliers.

### System construction

To control the whole process of bidding, the Company prepared instructions in a systematic way, covering the registration operation manual, tips for tender documents and instructions to judges.

### Staff training

In order to standardize procurement, the Company organized training on procurement systems, e-commerce procurement, bidding and purchasing practice, with accumulatively 1,600 trainees.

### Construction of procurement platform

The Company implemented all-sided procurement via e-commerce platforms, which improved the quality of purchased MRO products and maximized the procurement efficiency.

### Innovation of procurement modes

The Company procured cable, steel parts and some materials through tender in a dynamic pricing mode, reducing the impacts from market price fluctuations. It solicited bids to procure labor protection appliances according to regional delivered prices and procured the same material in different regions. For commonly used bulk materials, it invited bids in a rolling pattern on a periodical basis.



▲ Field inspection to a supplier

## Industrial chain management

Focusing on its gold business, Shandong Gold extended its industrial chain and strengthened weak links. Apart from deepening internal coordination, it actively opened up new markets and fields, built an enterprise ecosystem and an industrial chain led by the gold business and supplemented by many business forms, in hopes of creating more profit growth points, forging more industrial competitive advantages and contributing to the sustainable development of the industry.

In 2022

Futures Company's classification rating rose to Class **BBB** in Category **B**.

Jinkung SZ **ranked first** in terms of silver trading volume among general members of Shanghai Gold Exchange.

Sales price of self-produced gold in the exchange center was **2.43** yuan/g higher than the average gold price of Shanghai Stock Exchange.

To promote mutual benefits and win-win cooperation, Shandong Gold continuously established cooperation and shared with the government, enterprises in the same industry, universities or research institutions. In 2022, we actively participated in industrial events such as China (Boao) International Gold Market Annual Conference and the Annual Conference of National Gold Standardization Technical Committee, thus to share ideas in accelerating the establishment of gold industry standards and promoting the development of the gold industry.

Name of industry organizations	Role of Shandong Gold
China Association for Public Companies	Vice Chairman Unit Standing Director Unit
China Gold Association	Standing Director Unit
The Listed Company Association of Shandong	Chairman Unit
Shandong Gold Association	Standing Director Unit



# Anti-corruption

Shandong Gold strictly observed laws and regulations relating to anti-corruption. To be specific, it improved Party conduct, upheld integrity and combated corruption, and followed the anti-corruption regulations and commitments of the Company itself and business partners. Besides, it carried out anti-corruption training for board members and all employees, with the aim of keeping an honest, fair and mutually respectful partnership with all stakeholders.

## Strengthening anti-corruption supervision

The Company conducted daily supervision on a long-term basis and built a 1+N supervision pattern. It realized precise special supervision by conducting special supervision in fields including material procurement, bidding & tendering, project acceptance & settlement. Additionally, it realized joint supervision by advocating a three-in-one mechanism (risk control, internal control and incorruptness control), and improved the prevention and control mechanism of corruption risks.

## Ensuring officials dare not to be corrupt

The Company set up an internal mechanism of complaints and reports as well as a reporting platform through correspondence, E-mails, faxes, phone calls, visits, with all complaints and reports events submitted and handled. It also compiled *Typical Cases for Further Rectification and Improvement* and *Scheme for Building the Mechanism of Dare Not, Can Not and Do Not Want to Be Corrupt*. It made efforts to strengthen anti-corruption training, built an incorrupt culture system and created an incorruptness-themed Cloud Exhibition Hall, aiming to raise the incorruptibility of all employees.

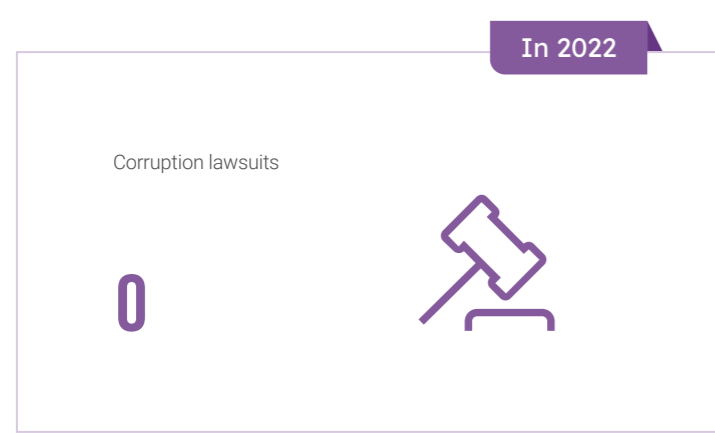
Meanwhile, for any supplier or customer in transactions, the Company identified and supervised the legitimacy of their gold sources or funds sources by stipulating relevant systems, thus to prevent corruption, money laundering and other behaviors.

Fighting against corruption with suppliers

The Company added all raw materials involving money laundering, bribery, fraud, corruption or other issues to its High Risk List, and conducted due diligence investigation along the supply chain. Besides, it standardized the acquisition business of alloyed gold and traced the source of all raw materials. Moreover, it established supplier portfolios, and signed Supplier Commitments with suppliers to ensure legal and compliant source of raw materials.

Fighting against money laundering with customers

The Company worked out the *Measures for Anti-Money Laundering and Anti-Terrorism Financing, defining specific work procedures*. It signed the Compliance Commitments of Gold Product Procurement with customers, investigated the data sources and product whereabouts of customers, and terminated the transaction involving any money laundering or terrorist financing.



# Future Prospects

Keeping the original aspiration, Shandong Gold is fulfilling the mission and ushering in a new era. As the start for fully implementing the guiding principles of the 20th National People's Congress, 2023 is not only a transitional year for implementing the 14th Five-Year Plan, but a key period for comprehensively building a modern socialist country. Following Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, Shandong Gold will thoroughly implement the guiding principles of the 20th National People's Congress, Central Economic Working Conference and economic work conferences of Shandong Provincial Party Committee. By seeking progress in stability and improving quality in process, the Company will closely stick to the annual goal of "Integrating Internal and External Resources for Leapfrog Development", and achieve progress in environmental preservation, scientific and technological innovation, staff development, community contribution, corporate governance and other aspects. In conclusion, Shandong Gold will spare no effort to build itself into a world-class gold mining enterprise with global competitiveness.



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**SHANDONG GOLD ECOLOGICAL MINING**

**2022 SOCIAL RESPONSIBILITY REPORT**

SHANDONG GOLD MINING CO., LTD.