



# 2021

## CORPORATE SOCIAL RESPONSIBILITY REPORT



 浙江华友钴业股份有限公司  
ZHEJIANG HUAYOU COBALT COMPANY LIMITED

## About the Report

### Scope of the Report

This report is the seventh report released by Zhejiang Huayou Cobalt Co., Ltd. (Group). The information and data in this report mainly cover various practical activities related to corporate social responsibility carried out by the Company from January 1, 2021 to December 31, 2021. Based on the continuity and contrast of the report, some data and information are not limited to the year of 2021. The scope, aspects and boundaries of this report have not changed significantly from the sixth report released in May 2021.

### Compilation principles

This report is compiled with reference to the GRI standard of the Global Reporting Initiative (GRI), the Environmental, Social and Governance (ESG) Reporting Guidelines, in combination with the United Nations Sustainable Development Goals (UN SDGs) and ISO26000/GB/T36000-2015 (Guidelines for Social Responsibility). At the same time, this report meets the relevant requirements of the Notice on Strengthening to Undertake the Social Responsibility by the Listed Companies and Issuing the Guidelines for Environmental Information Disclosure of Listed Companies of Shanghai Stock Exchange issued by Shanghai Stock Exchange.

### Content selection

During the compilation of this report, the Company follows the principles of stakeholder participation, sustainable development background, materiality, integrity, balance, comparability, accuracy, timeliness, clarity and reliability of the GRI Standard, makes statements from three aspects: economy, society and environment, and also follows the principles of importance, quantification, balance and consistence of the ESG Reporting Guidelines, discloses the relevant contents required in Part A, Part B and Part C, and focuses on the efforts and positive impact of the Company on substantive issues involved in economy, environment and society in 2021. The data and information collection of this report has been carried out according to the processes required by the GRI Standard and the ESG Reporting Guidelines and the existing work processes of the Company.

### Release manner

The report is released once a year in printed version and online version. The online version can be found on our website (website: [www.huayou.com](http://www.huayou.com)). The report is written in Chinese and English languages. In case of any ambiguity in the understanding of the two texts, the Chinese version shall prevail.

### Reference notes



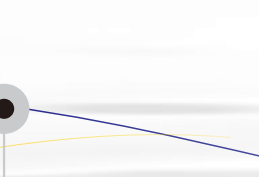
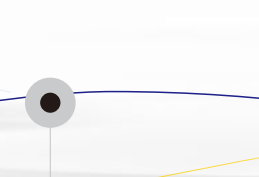
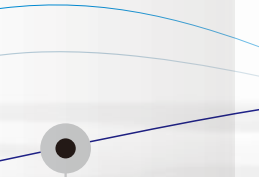
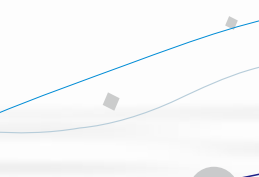
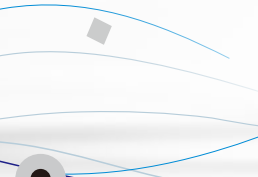

In this report, Zhejiang Huayou Cobalt Co., Ltd. is referred to as "Huayou Cobalt Company" or "the Company", which can refer to the whole group, which can refer to Tongxiang factory when the production indicators are involved; Quzhou Huayou Cobalt New Material Co., Ltd. is referred to as "Cobalt New Material Company"; Quzhou Huayou Resource Recycling Technology Co., Ltd. is referred to as "Resource Recycling Company"; Huayou New Energy Technology (Quzhou) Co., Ltd. is referred to as "New Energy Technology Company"; Congo Dongfang International Mining Sprl is referred to as "CDM"; La Miniere De Kasombo SAS is referred to as "MIKAS"; Huajin New Energy Materials (Quzhou) Co., Ltd. is referred to as "Huajin Company"; Zhejiang Huayou POSCO New Energy Materials Co., Ltd. is referred to as "Huayou POSCO Company"; PT. HUAYUE NICKEL COBALT is referred to as "Huayue Company"; Tianjin B&M Science and Technology Co., Ltd. is referred to as "Tianjin B&M"; Chendu B&M Science and Technology Co., Ltd. is referred to as "Chengdu B&M"; Other references not mentioned herein shall be subject to the description in the text.

### Copyright notice

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## Chairman's Speech



The year of 2022 marks the 20th anniversary of the founding of Huayou Company, and this is a year of great significance in the development history of Huayou Company. We shall sum up the past and draw strength from history, look forward to the future and strengthen the confidence of struggle in development. We shall carry forward Huayou Company's spirit of self-improvement and the pursuit of excellence, forge ahead in the "14th five-year-plan" journey, make contributions to high-quality development, and present the 20th anniversary of the Company with excellent achievements.

The year of 2021 marks the 100th anniversary of the founding of the Communist Party of China. With great respect, we paid tribute to the Red Boat on Nanhu Lake, reviewed the oath of joining the Party, salute the Party's history, thank the Party's leadership, and bless the Party's new journey of the second century. Our faith in always following the Party becomes much firmer.

In this year, we adhered to transformation and upgrading, opening-up and cooperation and driving innovation, focused on the three mainstreams, paid close attention to the three concerns, improved the three elements, based on the domestic cycle, expanded the international market, implemented the business philosophy of market first, scientific and technological support, stable production line and strong guarantee, prevented business risks, promoted mechanism reform, improved management ability, inherited the past and ushered in the future, strived to create a new situation of high-quality development in the 14th five-year-plan.

In this year, we achieved the synchronous growth of output, sales volume and economic benefits, continued to increase the market share of cobalt products, precursors and cathode materials, and achieved a good start in the 14th five-year-plan with the best performance in history. We have promoted the synchronous construction of domestic parks and foreign projects. The Huayue project at Indonesia, which has attracted much attention from the industry, has been successfully completed. Projects of Huafei and Huake have been vigorously promoted, and industrial parks in Zhejiang and Guangxi have been carried out in an orderly manner. With strong development, we have taken a firm step towards the completion of the ten-year task in five years.

In this year, we fully fulfilled our social responsibilities. The Company was selected into the list of "green supply chain management enterprises", the list of "green design products" and the list of green manufacturing of the Ministry of Industry and Information Technology, and was listed as a green low-carbon factory in Zhejiang Province and a green manufacturing demonstration unit in Sichuan Province. Overcoming the impact of the COVID-19, we successfully held the 6th China Huayou International Annual Conference. The Company has formulated and released the Action Guide for High-quality Development of Huayou Cobalt Company and Promoting Common Prosperity. More than 1000 key employees have received restricted stock incentives. The Company's employee income keeps leading in the region and industry.

The year of 2022 is a key year for Huayou Company to accelerate transformation, make high-quality development and complete ten-year task in five years. The beginning determines the overall situation, and the start determines the future trend. On the basis of the good start of the 14th five-year-plan and the completion of the ten-year task in five years, we are confident to create better business performance and have the

ability to continue the strong development momentum.

In 2022, we will coordinate the epidemic prevention and control, production and operation, construction and development, implement the business ideas of safety supreme, quality first, driving innovation and industrial coordination, strengthen the business pattern of overseas resources, domestic manufacturing and global market, create value for customers and contribute to the industry, and make great strides in the journey of completing the ten-year task in five years.

In 2022, we will adhere to the business essence of taking customers as the center and creating value for customers, pay close attention to three concerns, focus on three mainstreams and improve three elements, vigorously implement competition strategy of the product leading and cost leading, and become a safe and reliable stable force in the lithium battery material supply chain with high product quality, efficient product research and development, upstream and downstream industrial coordination and large-scale supply guarantee, boost the healthy development of new energy lithium battery material industry.

In 2022, we shall base ourselves on the new development stage, implement the new development concept, integrate into the new development pattern, firmly adhere to the "new energy lithium battery materials and cobalt new materials; high end products, industrial integration and internationalization of operation", practice the "industrial clusters arranged in the industrial agglomeration area, and the high-level and in-depth combination of informatization and industrialization", promote the "integration of grid, informatization, socialization, popularization, legalization and refinement", and continue to write a new chapter of the Company's high-quality development with safe development, coordinated development, strong development, innovative development and common development.

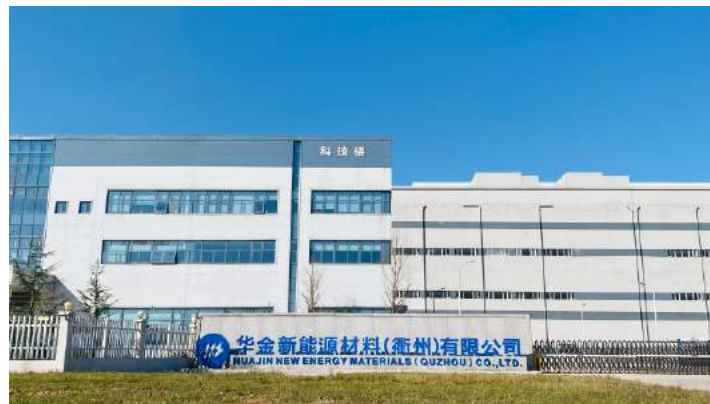
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## About Huayou



Zhejiang Huayou Cobalt Company Limited was founded in 2002, focuses on the R & D and manufacturing of new energy lithium battery materials and cobalt new materials and is committed to becoming a global leader in new energy lithium battery materials. With the mission of creating value for the customers and leading industrial development, the Company is committed to the transformation route of controlling resources in upstream, expanding market in downstream and improving capacity in mid-stream. The Company adheres to the development strategy of new energy lithium battery materials and cobalt new materials; high end products, industrial integration and internationalization of operation.



The Company is headquartered in the Economic Development Zone of Tongxiang City, Zhejiang Province. The Company has worked deeply in China, and has set up production and manufacturing bases in Tongxiang City and Quzhou City of Zhejiang, Yulin City of Guangxi, Tianjin and Chengdu, actively expands overseas resources: copper and cobalt resources development in Africa, nickel resources development in Indonesia, lithium resources development in Argentina and Africa. In 2021, the Company successfully acquired Tianjin B & M Science and Technology Co., Ltd. and B & M Science and Technology Co., Ltd. (the leading cathode material manufacturers in China), and just accelerates the penetration into the cathode chain.



With development of 20 years, the Company has completed the spatial layout with its headquarter in Tongxiang, oversea resource guarantee, manufacturing base in China and market in the world. The Company has formed a business segment of resources, new materials, new energy and recycling, and created a new energy lithium battery industry ecology covering the development and smelting of cobalt and nickel resources, the deep processing of lithium battery cathode materials and the recycling of resources. At present, the production capacity of cobalt products of the Company ranks first in the world.



## List of some honors won in 2021

Award winner	Honorable title	Awarder
Huayou Cobalt Company	Snowball annual gold list—a value focus listed company in 2021	Snowball
Huayou Cobalt Company	One of top 100 enterprises in Zhejiang Province	Zhejiang Enterprise Federation; Zhejiang Entrepreneurs Association; Zhejiang Federation of Industrial Economics
Huayou Cobalt Company	Ranking the 303rd place among China's top 500 manufacturing private enterprises in 2021	All China Federation of Industry and Commerce
Huayou Cobalt Company	Action sample of ESG listed companies at the Fifth Board Secretary Summit of Chinese Listed Companies in 2021	National Business Daily
Huayou Cobalt Company	List of innovative enterprises of new energy vehicles in China	CBINSIGHTS CHINA
Huayou Cobalt Company	Advanced group for combating COVID-19 in Tongxiang	Tongxiang Municipal People's Government
Cobalt New Material Company	Advanced group of quality management in Zhejiang Province in 2021	China Quality Association
Cobalt New Material Company	AEO customs advanced certification certificate	Hangzhou Customs of the People's Republic of China
New Energy Technology Company	A national high-tech enterprise	Department of Science and Technology of Zhejiang Province
New Energy Technology Company	One of the third batch of specialized and new "little giant" enterprises	Bureau of Small and Medium-sized Enterprises of the Ministry of Industry and Information Technology
New Energy Technology Company 华金	A green low carbon factory of Zhejiang Province in 2021	Department of Economy and Information Technology of Zhejiang Province
Huajin Company	A award of commerce and trade star of the special award by Quzhou Municipal Government in 2021	Quzhou Municipal People's Government
Chengdu B & M	One of top 100 manufacturing enterprises in Sichuan in 2021	Sichuan Enterprise Federation and Sichuan Entrepreneurs Association
Tianjin B & M	Ranking the 45th place among the top 100 manufacturing enterprises in Tianjin in 2021	Tianjin Enterprise Federation and Tianjin Entrepreneurs Association
Resource Recycling Company	The best green material enterprise in 2020-2021	China Electronic Energy Saving Technology Association



# Management Approach



## 01 Organizational governance

Good corporate governance is the internal driving force for enterprises to achieve sustainable development. In recent years, the Company has continuously promoted the organic combination of internal governance and production and operation. In 2021, the Company followed the capable and efficient principle, adjusted and optimized the Company's organizational structure, improved the Company's management and control system, and ensured the healthy operation of the Company's production and operation and other business activities, improved the corporate governance structure and standardized the operation of the Company.

The Company continuously optimizes and improves the corporate social responsibility system, practices the concept of "cooperation, co-building and win-win for future", and promotes the sustainable and healthy development of the Company more scientifically and efficiently. The Company has established the social responsibility office of the Group and the African social responsibility office to effectively implement the work deployment of the corporate social responsibility executive committee, and set up the social responsibility working groups in key subsidiaries to cooperate with the work of the social responsibility office.

## 02 Adhere to compliance operation

Compliance management is an important cornerstone of modern enterprise management, an inevitable requirement for the international development of enterprises, an important guarantee for the sustainable development of the Company, and the bottom line and red line of the Company's operation. Huayou Company requires all Huayou people to establish compliance concept, practice compliance requirements, carry forward compliance culture and strictly prevent compliance risks. Huayou Company also hopes to work with business partners to create a clean and positive business environment.

In 2021, Huayou Company clarified the compliance concept of "compliance for all employees, senior management as the leading force, legal compliance and making steady progress" in the form of system, to guide the Company's employees to "know awe, have guard and fear and abide by the bottom line", strictly implement the compliance requirements, resolutely resist violations, promote the organization's compliance operation, business compliance operation and individual compliance act, and ensure the stability and long-term development of the Company.

In 2021, Huayou Company ensured the effective implementation of various requirements of compliance management by formulating a series of compliance systems such as the Compliance Management Manual of Zhejiang Huayou Cobalt Co., Ltd. (G09107), the Regulations on Compliance Management of Zhejiang Huayou Cobalt Co., Ltd. (G01224), and the Regulations on Compliance Evaluation and Assessment (G09302). The Company requires that the operation and management of the Company and all employees shall comply with laws, regulations, rules and other normative documents, industry norms, basic requirements and codes of conduct in business activities, exchanges with other organizations, professional ethics and social responsibility.

## 03 Anti-corruption and anti-commercial bribery

Integrity and honesty are the essence of Huayou people and the cornerstone of Huayou Company's success. Huayou Company holds a zero tolerance attitude towards any corruption; as long as it is found that the corruption will be severely punished.

Huayou Cobalt Company has always resisted any commercial bribery and corruption, because a fair and honest external image is an important reason for Huayou Cobalt Company to maintain a leading industry position and enjoy a good reputation, and it is also an important cornerstone for our customers and business partners to trust us for a long time. Huayou Cobalt Company holds a "zero tolerance" attitude towards any commercial bribery and corruption, does not provide any form of support for commercial bribery and corruption, and ensures that its anti-commercial bribery and anti-corruption policies comply with the requirements of anti overseas corruption and anti-commercial bribery laws and regulations of China and other countries where the Company operates.

Huayou Company provides complaint and reporting channels, and encourages the person knowing the situation to report violations. Huayou Company requires all employees to learn, sign and comply with the Integrity Statement for employment. Meanwhile, Huayou Company transmits relevant requirements on anti-commercial bribery to partners, and requires partners to learn, sign and comply with the Letter of Commitment for No Relationship of Relatives, Friends or Business Interests. In the audit of the implementation of the system of the Regulations on Banning Business Cooperation with Units Having Relationship of Relatives, Friends or Commercial Interests with the Company's Cadres in 2021, through the inspection of contracts, agreements, supplier

accounts and other relevant original materials of the Group's procurement center, no relationship in violation of the Company's system and regulations was found, and the random inspection of suppliers can meet the requirements of the Company's system and regulations.

Huayou Cobalt Company has formulated and promulgated the Anti-commercial bribery and Anti Overseas Corruption Compliance Manual of Huayou Cobalt Company as the code of conduct guide for employees' daily work. Any violation of the Manual is contrary to the Company's core values and will face internal punishment or legal punishment.



## 04 Continue to strengthen building of cleanness and compliance management system of Huayou Company

Huayou Company abides by all applicable laws and regulations in the countries and regions where the Company carries out operation and relevant international conventions, carries out cleanness and compliance process building and system building under the Company's guiding principles, and has taken a series of measures to fully implement cleanness and compliance practice in all subsidiaries around the world. On this basis, Huayou Company continues to strengthen building of cleanness and compliance management system in combination with its own business characteristics:

**System building:** Huayou Company attaches importance to building of cleanness and compliance management system. On the premise of complying with all applicable laws and regulations in the countries and regions where the Company carries out operation and relevant international conventions, and in combination with its own business characteristics, Huayou Company has formulated the Code of Business Ethics and Behavior (G00005), the Regulations on Business Entertainment and Gift Reimbursement (G01344), the Regulations on Gifts (G01609), the Regulations on Cash Gifts and Gifts Received by Employees (G01450), the Regulations on Reporting (G01201), the Regulations on Supervision (G01202) and the Regulations on Banning Business Cooperation with Units Having Relationship of Relatives, Friends or Commercial Interests with the Company's Cadres (G01613). Relevant systems are publicized to all employees through OA platform to standardize their behaviors, require employees to establish the awareness of integrity and abiding by discipline, implement such systems in all links of work, and strengthen the building of cleanness and compliance culture and business ethics.

**Cultural building:** The Company continuously promotes building of the cleanness and compliance culture through management statements, integrity training for employees and partners, and notification of punishment for violations that have occurred. In the report of the sixth international annual conference of China Huayou Company in 2021, the Chairman of the Board of Directors commented that "integrity and cleanness are the essence of Huayou people and the

cornerstone of Huayou Company's success. Huayou Company holds a zero tolerance attitude towards any corruption, as long as it is found that the corruption will be severely punished". In 2021, "integrity education" became a compulsory course for the Group's "striving Huayou Company" newcomer training camp. During the sixth international annual conference of China Huayou Company, the theme training of "integrity Huayou Company" was carried out for partners. At the same time, Huayou Company reported the punishment results of violations through various channels.

**Compliance management:** The Company traces and reviews the operation of the compliance management system according to the risk control points, and continuously optimizes the cleanness and compliance management system. The Company regularly carries out compliance risk assessment, formulates corresponding control strategies, implements such strategies into the process system, finds violations through internal control and audit, and deals with such violations according to relevant management regulations. In 2021, the audit and supervision center completed 24 special audits, found 166 problem points, put forward 187 rectification suggestions, completed 32 rectification instructions output by the audit supervision office, completed 30 rectifications and completed 1 off-office audit. 23 complaints have been received (including 6 cases involving corrupt practice), which have been handled.

**External exchanges:** Huayou Company actively carries out cleanness and compliance exchanges with the industry and industry companies, partners, non-governmental organizations, etc., clarifies Huayou Company's stance and attitude towards cleanness and compliance, and ensures that relevant stakeholders have a clear understanding of Huayou Company's compliance management system and policies. In 2021, Huayou Company repeatedly invited external experts to conduct integrity lectures and maintained effective business exchanges with non-governmental organizations such as Zhejiang Economic Crime Investigation and Prevention Association, Enterprise Anti-fraud Alliance and Sunshine Integrity Alliance.

## 05 Complaint/report channels

In order to maintain the corporate integrity culture of Huayou Cobalt Company and protect the legitimate interests of enterprises and employees, the public complaint hotline, e-mail and mailing address are listed as follows:



**Hotline: 0573—88589103**



**Report e-mail: report@huayou.com**



**Mailing address: Audit and Supervision Center of  
Zhejiang Huayou Cobalt Co., Ltd. (principal)**

The Center promises that the Audit and Supervision Center is subordinate to the Department directly under the President, timely handles all complaints and reports, strictly keeps confidential the sources of reports, and takes special measures to protect the interests of informants who may suffer from reporting. The Audit and Supervision Department insists that complaints must be investigated, mistakes must be corrected, corruption must be punished and responsibility must be held accountable.

## 06 Grievance channel:

### China

Tel.: 0573—88589950

E-mail: CSR@huayou.com

Address: Huayou Cobalt Company (Social Responsibility Office),  
No.18, Wuzhen East Road, Tongxiang City

### Congo (DRC)

Tel.: +243841206837

E-mail: RSE@huayou.com

Address: CDM (Social Responsibility Office), Likasi Road, Ruosit Block, Anakos District,  
Lubumbashi, Haut-Katanga

The Company clearly stipulates that all reported or appealed information shall be kept strictly confidential, anonymous reporting or appeal is allowed, and behaviors such as disclosure, obstruction of investigation and retaliation shall be severely punished. After verification, the informer or claimant shall be rewarded according to the infringed value, and their personal information shall not be disclosed without the permission of the informer or claimant.

## 07 Responsible product management

**Quality management system:** In 2021, Huayou New Materials Industry Group continued to promote the customer-oriented quality policy, steadily promoted the ISO9001 quality management system, introduced and implemented the IATF16949:2016 management system, carried out quality assurance design and optimization for the product realization process, guaranteed the quality of the whole process from raw materials to process, output and delivery, and achieved customer satisfaction. During the process, the Company implements strict, systematic and comprehensive quality control for each link, solidly carries out various quality work, and implements key monitoring and testing for key processes and key links affecting product quality to ensure that each link can be effectively monitored. The calibration of "systematization, accuracy, informatization and implementation" of quality management is completed, and the overall continuous improvement is promoted through organization design and process control.

**Supplier and quality management:** According to the supply of incoming materials and the needs of users, the Company outputs the annual supplier audit plan. In 2021, the Company completed 26 supplier on-site audits, and comprehensively evaluated the supplier's quality assurance ability from the aspects of system operation, anomaly management, change identification, process monitoring and measurement, laboratory management, feeding, warehousing, production process, finished product delivery control, etc. A total of 26 suppliers passed the audit. The Company implements the elimination system management for suppliers according to the Regulations on Access and Periodic Evaluation of Raw and Auxiliary Packaging Materials, and carries out special topics to evaluate and improve the exclusive monopoly of suppliers. Four exclusive supply improvements have been completed in 2021.

**Incoming quality management:** According to the purchase standards of raw materials, auxiliary materials, packaging materials and other materials, the Company implements the Sampling Procedures for Auxiliary Materials, the Regulations on Acceptance of Raw and Auxiliary Materials, Packaging Materials and Trade Products, the Control Procedures for Nonconforming Products, etc., conducts acceptance for the incoming materials and effectively monitors the quality of the incoming materials.

**SPC management:** The Company fully introduces SPC management to realize SPC management in the whole process of raw and auxiliary materials, process indicators, finished products and delivery, makes continuous extension and includes process parameters, realizes accurate control of the process, ensures stable output and delivery of products, and finally achieves customer satisfaction. Relying on building of SPC Software Platform, the Company realizes the systematic arrangement of detection, data integration and import, differentiation, analysis and disposal, and realizes the closed-loop and continuous improvement of abnormal problems in combination with quality process supervision, analysis and improvement.

**Foreign matter management:** In 2021, based on the continuous changes of internal and external needs, the internal requirements for process management and control were continuously improved. From the 5M1E multi-dimensional standardized foreign matter management specification, through the establishment of "management manual" and through the forms of awareness education and re-education of all staff, the foreign matter management requirements and awareness were transmitted to all staff. The Company deepens the dimension of foreign matter management. On the basis of strengthening the "magnetic foreign matter", the control of copper and zinc single substance, fiber foreign matter and metal particle foreign matter has also been continuously strengthened, a complete set of management methods and requirements has been formed. With the form of "building a model and setting a benchmark" in process, the management experience is summarized, this is taken as the model level. Through the "material metal map" identification of the whole equipment of the production system, the Company identifies the system risks, carries out centralized rectification and prevention, and eliminates the hidden dangers in the process. At the same time, the Company summarizes the output process PFMEA and CP to make continuous improvement and reduce risks. In 2021, the results of the key indicator "magnetic foreign matter" have made continuous improvement.

**Change management:** In 2021, the Company deepened change management, integrated process change management into performance management, comprehensively and deeply introduced process change risk identification, and considered multi-dimensional risk assessment such as safety, environment, equipment, capacity and delivery on the basis of quality risk assessment. At the same time, the Company comprehensively evaluated the needs and responses of customers and interested parties, assessed risks and formulated responding control measures to realize the orderly operation of change management.

**Product quality and delivery management:** The Company continuously improves and optimizes the enterprise's internal control standards in combination with external needs, and uses SAP system to manage the products in and out of the warehouse. In terms of product quality improvement, the Company implements SPC management of key index process, output and delivery. The Company uses SPC, MSA, FMEA and other quality statistics and control tools to improve the stability and consistency of products. The qualified rate of delivery of multiple products to the customers is 100% continuously. In 2021, we continued to grasp the continuous improvement needs of customers and transmitted these needs accordingly, and transformed these needs into internal control requirements. The Company carried out special improvement in the form of internal team (QCC, etc.) for key indicators, continuously improved the control level, and realized the further improvement of CpK of key products and key indicators. Combined with the internal and external detection deviation, the Company carried out deviation analysis, promoted the improvement of internal and external



detection consistency through the normalization management of detection benchmarking and quality control samples, so as to evaluate the internal delivery risk and deviation, adjusted the delivery control and achieved customer satisfaction. The products delivered in 2021 were mainly cobalt trioxide, cobalt sulfate, nickel sulfate, cobalt chloride, cobalt hydroxide, electrolytic copper, electrolytic cobalt, etc.

#### Customer complaint and satisfaction management:

Based on the requirements of the Regulations on Customer Quality Information Processing, the Company actively identifies the explicit and implicit needs of customers through multiple channels such as customer visit, satisfaction survey and internal weight, and continuously improves and enhances with customers through industry communication. The Company analyzes and improves customer feedback, and re-verifies and re-confirms the effectiveness and continuous operation of improvement measures through return visit and effectiveness confirmation, so as to confirm the long-term and effective operation of improvement measures. The Company conducts in-depth analysis of customer feedback concerns, and identifies customer implicit requirements (such as consistency needs, continuous improvement services, etc.) for carrying out input of internal management improvement. For after-sales products, the Company tracks the use of customers through customer satisfaction survey, daily communication and site visit, timely investigates the causes of abnormal product complaints reported by customers, and replies to the rectification report on time. The Company understands and identifies the potential expectations and needs of customers and surprises customers to continuously improve customer satisfaction. The customer satisfaction in 2021 was 89.3 points, which was continuously improved compared with that in 2020.

**RoHS/reach regulation:** According to the characteristics of industrial products and the regulatory requirements of customers for RoHS/REACH/halogen and other hazardous substances, the Company signs hazardous substance management agreements for downstream customers, and carries out internal supervision and outsourcing testing of raw materials, processes and packaging materials in accordance with the requirements of the Regulations on Hazardous Substances. For upstream suppliers, the instructions and requirements of customers and interested parties are transmitted level by level. All kinds of products delivered externally (such as tricovalent tetraoxide, nickel sulfate, cobalt chloride, etc.) are tested by qualified third-party testing institutions and testing reports are output. For REACH SVHC, with the continuous supplement of the list of highly hazardous substances, the internal third-party testing and updating are also carried out every year to meet the needs of the market and customers.

**Quality spring thunder action:** The Company continuously creates a quality culture atmosphere of the whole company, mobilizes all staff to participate in quality building, normalizes the standardized management of production site, and makes concerted efforts to solve quality and production problems. The year of 2021 is defined as the "quality year" for continuously carrying out the fourth quality "spring thunder action" of Huayou New Materials Industry Group. It is also a quality culture creation activity led by the quality management department and participated by quality management units at all levels. Throughout the year, a series of activities such as QCC subject improvement, quality knowledge competition, packaging room management improvement competition, SPC operation effectiveness competition, mutual watching and mutual learning were carried out. A series of quality knowledge training (IATF16949:2016, internal procedures, six sigma, etc.) were carried out to enhance the basic knowledge of quality control of the Company's employees. Combined with the quality knowledge competition to verify the training effect, the Company strengthens the quality awareness of the Company's employees and improves the Company's quality control ability.

**Through the establishment of the "QCC team", the Company made concerted efforts to solve the problems encountered in production and management. The "QCC subject improvement activity" in 2021 lasted 10 months, with 68 approved projects, 54 completed and released projects. Four of them were submitted to industry associations for results release and sharing. This effectively promotes the common progress of management. The Company internally promotes intangible achievements such as process standard optimization, product stability improvement and customer evaluation improvement, which can greatly help and promote the Company save production costs, improve product quality and optimize management processes.**

## 08 R&D achievements and intellectual property rights protection

### Lithium cathode, precursor process technology and products:

1. Development of 4.48V high voltage tricovalent tetraoxide large particle products and generation IV aluminum doping uniformity technology: The controllable uniform growth and one-stage burning technology have been developed to overcome the problems of ring delamination and cracking pain points that are easy to occur in high aluminum doping particles. The generation IV aluminum doping process technology has achieved "ring-free" effect, and the technology is at the leading level in China. This technology has successfully matched mass production on the production line, entered the head battery supply chain to consolidate the high-end customer market.

2. Development and industrialization of high voltage and small particle size 300A & 300A7 series of tricovalent tetraoxide new products: The high density wet material sintering technology is developed, and the homogeneous nucleation-directional growth technology is adopted to construct the crystal form and eliminate the holes in the core. It has realized the mass production of 4.45/4.48V small particle size products, entered the supply chain of downstream mainstream battery factories to seize the market of high-voltage products and improve the competitiveness of products.

3. Process development of partial proportion NCM6 series of precursor: The partial proportion NCM6 ternary precursor for high-capacity power battery has been developed to optimize the product structure and lay a solid foundation for the Company to enter the fields of high-energy automobile power battery and energy storage battery. The technology is at the leading level in China.

4. High temperature long cycle 80E precursor process: The developed high temperature long cycle 80E ternary precursor products and corresponding mass production technology have solved the high capacity density requirements put forward by domestic high-end customers and reached the same level as international precursor manufacturers.

5. New products of single crystal high nickel NCM8 ternary precursor for cathode materials: Through continuous optimization of structural design and process, the industrialization of single crystal high nickel NCM8 ternary precursor is finally realized. The micro morphology of the material is primary fiber insert loose structure, which is conducive to improvement of electrochemical performance of lithium battery. The product technology is at the international advanced level.

6. New technology of Semi-Continuous two-step synthesis for high nickel NCM8 ternary precursor: High nickel

NCM8 ternary precursor is prepared by using Semi-Continuous two-step synthesis process and accurately regulating liquid metal flow and ammonia value. The product has the characteristics of compact structure and low hollowing rate. It has made innovations in seed crystal synthesis and crystal growth control technology, and the technology is at the leading level in China.

7. Research and application of key technologies of high nickel oxide materials for high specific energy power batteries: The dynamics induced (thermally assisted) lattice oxygen fixed doping technology has been independently developed, which realizes the atomic mixing of doped elements and bulk elements in high nickel oxide materials, promotes the redox reaction of nickel, and makes the specific capacity of high nickel oxide cathode materials exceed 220mAh/g. The research and development of temperature field and gas field staged coupling solid-phase baking synthesis technology has improved the oxidation degree of Ni in high nickel oxide, inhibited the mixed discharge of cations, and significantly improved the stability and cycle life of products. The integrated technology for the production of high nickel oxide materials has been developed to take the lead in realizing intelligent production in China, break the technical blockade of Japan, South Korea and other countries, and the specific capacity and stability of products are better than those of Japan JFE, Japan Toda and other international top material manufacturers. The project has reached the international leading level in dynamics induced lattice oxygen fixed doping control technology and large-scale intelligent manufacturing of high nickel materials.

8. Research on the development and industrialization of high nickel cathode materials for high-capacity lithium-ion batteries: Aiming at the key technical difficulties such as difficult processing of high nickel oxide and mixed discharge of cations, key technologies such as in-situ bulk doping, surface coating and structural gradient are adopted in the process through the design of multi-physical field coupling such as temperature field and gas field and dynamics induced lattice oxygen fixation, a high nickel oxide cathode material with excellent electrochemical performance and high-quality processing performance has been prepared. The main technical indexes of the product have been tested by a qualified third-party testing organization and can meet the relevant index requirements. Domestication of the products produced has been realized to break the monopoly of Japan and South Korea, such products have been applied to the power batteries of leading enterprises in the new energy industry to support high-performance new energy vehicles.



### New green smelting process technology:

1. Green process technology for cobalt smelting: The high-efficiency leaching and iron removal technology of multi-form cobalt resources under atmospheric pressure and oxygen pressure has been pioneered, realizing "zero" discharge of iron removal slag under atmospheric pressure and reducing the three-phase slag of copper extraction by more than 80%. Advanced rotary kiln incineration technology is adopted to realize harmless, reduction and resource self-disposal of general solid waste residue. A combined process of "multi effect evaporation + cooling crystallization" has been developed to realize the regularization, productization and benefit of chloride ions in high-impurity and chlorine-contained ammonium sulfate solution. At the same time, the general solid waste self-disposal production line has been built to realize harmless, reduction and resource self-disposal of general solid waste residue, which has greatly improved the Company's green manufacturing capacity.

2. Research and industrialization of nickel recovery process for high-efficiency separation of nickel and magnesium waste liquid by extraction method: A new nickel extraction system has been constructed to realize the breakthrough of resource utilization of valuable metal Ni in complex nickel and magnesium solution from "0" to "1", and 17000m<sup>3</sup> of waste water has been treated in total. A new nickel extraction process with low cost and short process was developed, which effectively reduced the process cost by 70% and the nickel cobalt sulfate mixture can be prepared as a resource. Revenue of 30tNi/m has been achieved, which provides an effective solution for the treatment of ammonium nickel precipitation recycled materials of the Company.

3. Key integration technologies for improving production, quality and efficiency of alloy system: The successful development and implementation of the key integration technologies of the project makes deep use of the advantages of industrial synergy, effectively responds to the Company's business plan, supports the production capacity of differentiated white alloy raw materials to increase by 50%, Ge yield to increase by 12%, and to realize iron slag productization, and provide strong technical support for the realization of low-cost green manufacturing of the Company.

4. Process technology for reducing the uranium specific activity of cobalt hydroxide products by iron uranium co-precipitation open circuit method: Through transformation of iron uranium co-precipitation open circuit and reducing the reuse of waste water in tailings pond, separate storage after passing the iron uranium co-precipitation open circuit production system, it has effectively reduced the radioactivity specific activity of cobalt hydroxide products of MIKAS Company; The radiation value of cobalt hydroxide products has decreased from 2000Bq/kg normalized before implementation to about 500Bq/kg, with an effective decrease of more than 75%. It is more than 37.5% lower than the product standard stipulated in the radiation management system in Africa.

Building of recovery system for decommissioned power batteries:

In 2021, Quzhou Huayou Resource Recycling Technology Co., Ltd. obtained the certification certificate of "Construction and Operation Management System of Power Battery Recycling Service Network" issued by CATARC Certification, and has become the first certified centralized storage recycling service network in China.

1. Development of lithium battery product operation platform: For the existing lithium battery products, Huayou Company has independently developed a big data platform. All battery products at the production end and rental business end have been connected to the platform, which can better manage and supervise the operation status and traceability of echelon products, ensure the safe application of echelon products, and continuously collect the operation data of decommissioned batteries in various echelon utilization scenarios.

2. Breakthroughs in key technologies of echelon utilization: Through research, development and exploration, breakthroughs in key technologies such as simple judgment and SWEEP system technology, full time domain active equalization BMS, boost protection board, energy storage heterogeneous compatibility technology and big data platform development have been achieved to solve problems of echelon batteries, such as poor consistency, heterogeneous incompatibility and mismatch of application scenarios of large capacity cells and so on, and remarkable achievements have been made in prolonging the service life of echelon products, reducing costs and guaranteeing safety.

### Equipment improvement:

Development and industrialization of automatic disassembly process and equipment of BMW G08 module: The fully automatic disassembly process and equipment of large square aluminum shell cell module has been developed to realize the breakthrough of automatic disassembly of mainstream modules in this market from "0" to "1", which is the first in China. The module disposal capacity reaches 2187 tons/year, which improves the battery disassembly efficiency and the qualification rate of disassembled cells, and ensures the safety performance of echelon utilization of cells.

### Intellectual property rights protection:

1. In 2021, the Group applied for 84 patents, added 54 authorized patents (23 invention patents and 31 utility models), and accumulated 251 valid authorized patents (156 invention patents and 95 utility model patents).

2. In 2021, three patents applied for international patents (two in South Korea and one in Indonesia).

3. In 2021, Zhejiang Huayou Cobalt Co., Ltd., Huayou New Energy Technology (Quzhou) Co., Ltd. and Tianjin B&M Science and Technology Co., Ltd. passed the re-certification audit of intellectual property rights management system; Chengdu B&M Science and Technology Co., Ltd. passed the first certification audit of intellectual property rights system; Quzhou Huayou Cobalt New Material Co., Ltd. has passed the supervision and audit of intellectual property rights management system, and the intellectual property rights management system of each company is fully, effectively and appropriately operated.

4. The Company organized to carry out the patent technology panoramic analysis project of "removal process and equipment of organic matter in metallurgical high salt wastewater", guide the patent layout and protection for technical R & D personnel, and support technological innovation and R & D.

5. In 2021, Quzhou Huayou Cobalt New Material Co., Ltd. and Huayou New Energy Technology (Quzhou) Co., Ltd. organized to apply for intellectual property rights demonstration enterprises in Zhejiang Province.

A patent management system has been established to implement the fine management of the whole life cycle of patents.

### Scientific and technological innovation achievements:

1. "A method for preparing cobalt oxide, nickel oxide and copper oxide" of Zhejiang Huayou Cobalt Co., Ltd. won the 22nd China Patent Excellence Award; "Tricobalt tetraoxide" product won the single champion product of the manufacturing industry of the Ministry of Industry and Information Technology;

2. Quzhou Huayou Cobalt New Material Company won the national advanced collective award in nonferrous metal industry, the green design demonstration enterprise of the Ministry of Industry and Information Technology, the green supply chain management enterprise of the Ministry of Industry and Information Technology, the credit management demonstration enterprise of Zhejiang Province and other enterprise honors. The project of "key technology and application of tricobalt tetraoxide (a high voltage lithium battery precursor)" has won the first prize of scientific and technological progress in nonferrous metal industry in 2021;

3. Huayou New Energy Technology (Quzhou) Co., Ltd. was approved as one of the third batch of national "specialized, fine, special and new" small giant enterprises and green low-carbon factories in Zhejiang Province, and was listed in the future factory cultivation plan of Zhejiang Province; 65F and 65F1 products have been recognized as green products by the Ministry of Industry and Information Technology; NCM811A was rated as an excellent industrial product of Zhejiang Province.

4. Huajin New Energy Materials (Quzhou) Co., Ltd. was approved to build a foreign expert workstation in Zhejiang Province;

5. Quzhou Huayou Resource Recycling Technology Co., Ltd. was rated as Quzhou municipal enterprise technology center and Quzhou green low-carbon factory; "Technology and application of efficient separation and recycling of valuable components of ternary materials for decommissioned power lithium-ion batteries" won the first prize of scientific and technological progress in non-ferrous metal industry in 2021.



# Stakeholder participation and substantive analysis



In order to effectively communicate with stakeholders, we will realize such effective communication through OA, telephone, e-mail, meetings, international annual conferences, international forums, industry exchanges, visits and so on.



Chen Xuehua, Chairman of the Group, was invited to attend the green financial product press conference of "focusing on low-carbon development and enabling green finance" by China Minsheng Bank



Lu Shan, Vice Governor of Zhejiang Province, visited Huayou Quzhou Industrial Park for investigation and guidance



Luhut, Minister of Indonesian Ministry of Maritime Affairs and Investment Planning, visited the Huayue nickel cobalt wet process project at IMP for inspection and guidance

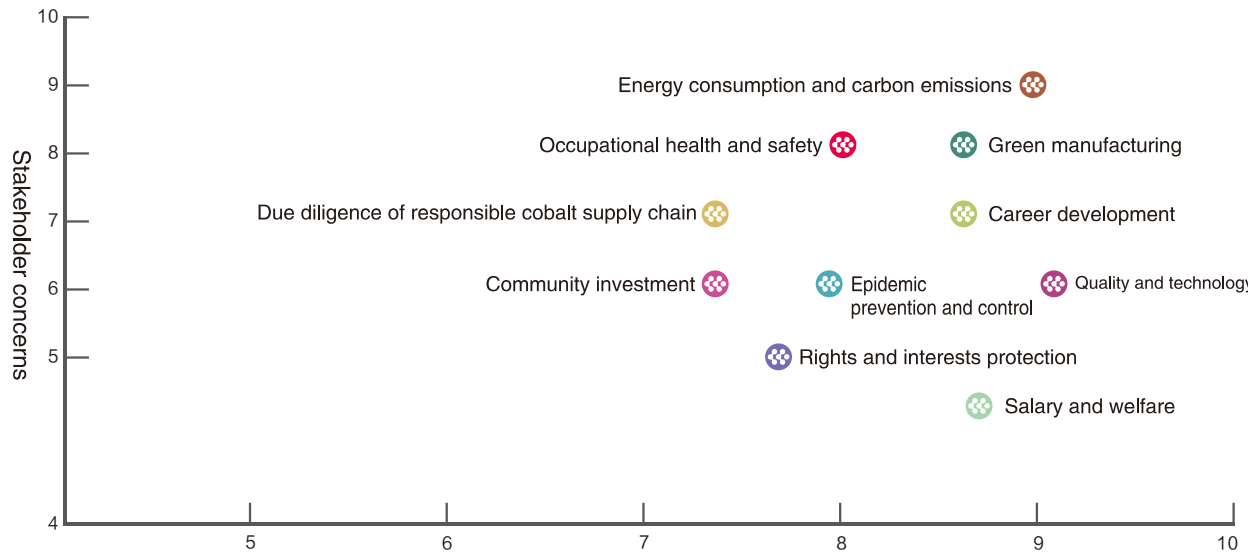


Chen Liang, Secretary of the Party Group and Director of the Department of Ecological Environment of Guangxi Zhuang Autonomous Region, and his team visited Guangxi Huayou Company for investigation and guidance

Stakeholders	Issues of concern	Communication mode
Employees	Salary and welfare, career development, rights and interests protection, occupational health and safety	OA, e-mail, bulletin board, annual cadre meeting, official website
Clients	Energy consumption and carbon emissions, due diligence of responsible cobalt supply chain, green manufacturing, occupational health and safety, quality and technology	E-mail, telephone, site visit, telephone/video conference, audit, questionnaire survey, international annual conference, official website
Shareholders and investors	Energy consumption and carbon emissions, green manufacturing, occupational health and safety, rights and interests protection, epidemic prevention and control	Financial report and general meeting of shareholders
Government and regulatory authorities	Energy consumption and carbon emissions, green manufacturing, occupational health and safety, rights and interests protection, epidemic prevention and control, quality and technology	Telephone, e-mail, meeting, document, inspection, official website
Suppliers and contractors	Energy consumption and carbon emissions, green manufacturing, occupational health and safety, rights and interests protection	Supplier conference, international annual conference, telephone, e-mail, official website
Industry associations/initiatives	Energy consumption and carbon emissions, green manufacturing, occupational health and safety	Telephone, e-mail, conference, industry summit, online conference
Communities	Community investment, green manufacturing	Telephone, interview and investigation

The Company comprehensively considers the substantive issues concerned by stakeholders and itself, and integrates all substantive issues into an issue matrix, which is reflected in the impact on stakeholder evaluation and decision-making (vertical priority) and the impact on Huayou Company's business and external systems (horizontal priority).

## Analysis Matrix of Substantive Issues



Labor

01

Employee diversity

With the deepening internationalization of Huayou Company' s business, the composition of employees is more diversified. The Company adheres to the employment principle of "equality, fairness and justice" and provides employment opportunities for people of different nationalities, skin colors, nations, genders and ages. 14643 employees from 7 countries, with different skin colors and of 31 nations have worked hard in their respective posts and made contributions to the long-term cause of Huayou Company. The excellent and diversified staff team has effectively supported the sustainable development of the Company.

The Company respects and upholds international human rights law, strictly abides by national and local laws and regulations, and establishes a standardized employment system.

02

Free choice of employment

The Company objectively introduces the recruitment information, including the Company's basic information, salary and benefits, working environment and labor protection, basic conditions of employment, etc., so that job seekers can have an objective and true understanding of the Company and choose freely. The Company does not charge any application fees and deposits, nor detain the original ID card or passport, academic certificate, etc. The Company signs labor contracts with all employees within the specified time and issues one copy to employees. During the employment process, there is no restriction on employees' basic actions (such as freedom of action during non working hours, time and frequency of going to the toilet and drinking water at work). The Company also fully respects the career changes of employees.

03

Equal employment

There are equal opportunities and there is no discrimination. When selecting job seekers, they can be given equal opportunities as long as they meet the labor and employment conditions stipulated by the State. In any process of selecting and employing personnel, there will be no differential treatment due to the nationality (7 countries), race, color, nation, religion, age, disability (there is a disable employee in the Company), gender, marital status, sexual orientation, discriminatory medical examination, membership of labor unions or political parties. In 2021, the Company did not have any discrimination complaints or incidents.

04

Legal employment

It is strictly prohibited to employ child labor, and various effective measures are taken to prevent the misuse of child labor (such as checking identity documents and age verification). The use of debt (including debt bondage), slavery, prison or indentured labor is strictly prohibited. Human trafficking is resolutely resisted. There was no misuse of child labor in the Company in 2021.

05

Standardized management

The Company continues to improve and optimize the human resource management system, guarantee the legitimate rights and interests of employees, protect the health and safety of employees, and oppose forced labor and occupational discrimination.

The Company has issued the labor practice and human rights policy, reviews the policy every year, continuously improves and optimizes the relevant policies, promises to respect the labor rights and human rights of all employees, and requires our suppliers to respect the labor rights and human rights of all their employees. Specifically, the Company has made clear statements in terms of free choice of employment and equal employment, legal employment, standardized management and no forced labor, working hours, salary and benefits, communication and appeal, free association and collective negotiation.

In terms of management culture diversification, the Company has formulated management systems and processes such as the Standard for Local Employees' Welfare, the Christmas Welfare for Local Employees and the Education Allowance for Congo Employees based on local conditions and according to different regulatory requirements and social and cultural characteristics of overseas companies, so as to effectively protect the legitimate rights and interests of overseas employees.

Statistics of human resources in 2021

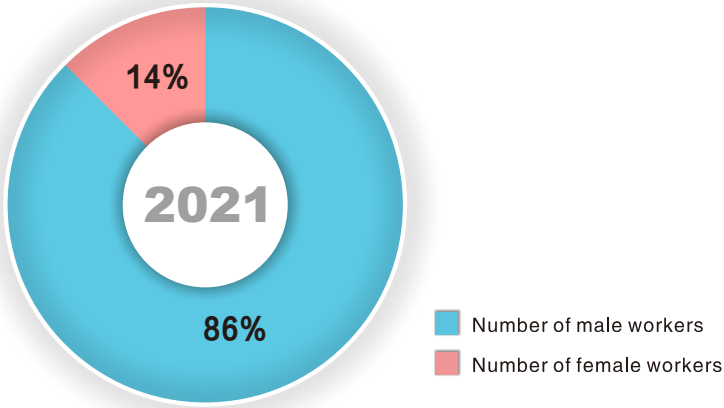
Item	The year of 2021
Total number of employees (person)	14643
Number of male employees (person)	12564
Number of female employees (person)	2079
Percentage of R &D personnel	7.66% (1121 persons)
Age structure analysis (under 30/30-39/40-49/over 50)	6035/4965/2714/929
Number of ethnic minorities in Chinese enterprises	31
Localization rate of overseas employees (Congo employees/total of number of employees in Africa region)	80.57% ( 2496/3098 )
Number of countries covered	7
Percentage of female managers in middle and above management	97:705
Percentage of personnel with different academic backgrounds (doctor/master/undergraduate/junior college/high school and below)	2.46%/33.94%/224.10%/173.26%/566.24%
Percentage of disabled persons	1:14643
Percentage of foreign employees	4852:14643
Number of new employees	6975

Proportion of in-service employees' educational background in 2021

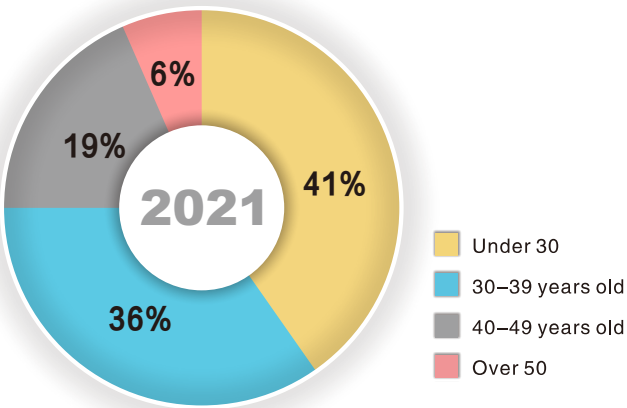
Educational background	Number of people
Doctor	36
Master	497
Undergraduate	3281
Junior college	2537
High school and below	8292



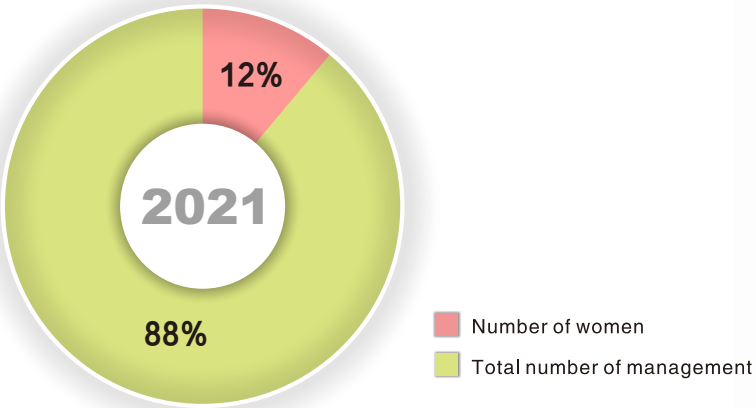
Gender ratio of employees in 2021



Employee age structure in 2021



Female managers in middle level and above management in 2021



06

Employees’ development and care for employees

Huayou Company Management College, as the cradle of talent cultivation in the Group, undertakes the important functions of the Group talent cultivation, cultural inheritance, knowledge creation and sharing and management research. The College has made full use of the training resources of the College, industrial group and Group functional departments, established a talent cultivation system covering all employees, and cultivated and built a professional and technical team and a cadre team that are loyal to the Company, united and striving for victory. The College will follow the tide of the times in the future, and build itself into an enterprise university with certain influence and popularity in the new material industry.

Statistics of 2019-2021 training performance data

Item	2019	2020	2021
Employee training hours (H)	116214	99767	168244
Employee training investment (10000 yuan)	145.4	250.6	521.3
Types of training courses (types)	1677	2876	4883
Percentage of employees receiving performance and career development appraisal (%)	100%	100%	100%

In 2021, Huayou Company increased the investment of training funds, with a total of 5.213 million yuan in the whole year. All kinds of training programs have been carried out in an all-round way. Represented by the "strong team plan" cadre training program, all kinds of personnel training have been carried out, including cadre empowerment training program, team management ability empowerment program for grassroots construction, basic work and basic skill training, "Striving Huayou People" new employee training camp program, gold medal interviewer training program, chief talent officer empowerment program, TTT internal lecturer training program, etc. With diversified forms of training and learning activities such as classroom instruction, seminar, action learning, outward bound training, coach guidance, it aims to create a good learning atmosphere, involving 4883 courses, 464000 person times of training and 31000 hours of training hours. The Company organized special trainings to promote the regular teaching and textbook preparation by the management cadres and excellent business backbones. The whole Company has developed 95 courses and trained 35 internal lecturers, this gives full play to their role of "transmitting, helping and leading" and establishes a learning organization. The combination of online and offline training via credit system management provides a strong guarantee for training resources, this implements the educational concept of common growth and common development between the Company and employees. A total of 59920 credits were recognized throughout the year.



Huayou Company strong team strategic reserve training camp—the second camp



"Chief talent officer" training



"Striving Huayou People" new employee training camp



"Gold medal interviewer" training

01

## Career development of employees

In 2021, in order to encourage most excellent technical talents to stand out, the Company strengthens the building of professional and technical talents team, provides more career development opportunities for employees, and continuously promotes the building of post qualification system. Based on the ability improvement and skill identification, the Company continuously improves the ability improvement path of professional and technical personnel, opens up the career development channel of technical personnel. The employees can be fully aware of their own gap and improvement direction, also clarify the future role positioning. This effectively leads the development of employees' professional ability.

### Ability growth of employees:

In terms of external professional titles, the Company organized external professional title application for 64 persons, including 36 assistant engineers, 18 engineers, 10 senior engineers and 1 senior economist; in terms of internal professional titles, the Company organized professional title application for 601 persons, and 442 of these persons passed the review (including 6 persons with senior professional title, 51 persons with senior-intermediate professional title, 76 persons with intermediate professional title and 309 persons with assistant professional title); in terms of position and rank promotion, 342 applicants passed the position and rank review, their positions and income have been improved.

### Ability growth of employees:

#### 1. Post skill standard implementation:

The Company has continued to optimize the standard building and implementation for skilled personnel in front-line posts, further improved the career development channels and position qualification standards of front-line posts, standardized the assessment and evaluation mechanism of skill level for front-line posts, and also strengthened the standard implementation training to promote the steady growth of skilled personnel.

In 2021, 1941 persons have applied for standard implementation and 1927 persons have passed the examination and certification (including 761 persons for junior level, 979 persons for intermediate level, 171 persons for senior level, 11 persons for technician and 5 persons for senior technician).

#### 2. Skill competition:

Through six years of practical exploration, the Company has established a platform for employees to exchange skills, communicate technology and display skills, helped skilled talents to upgrade their external skills, created a learning atmosphere of rival and surpassing, and continuously built a craftsman team.

In 2021, a total of 375 employees from 10 competition areas have participated in the skill competition, these competitions can comprehensively test the skill level of employees, and the Company will gradually improve the internal competition system and mechanism.



Forklift skills competition



Maintenance skills competition



Forklift skills competition

### Huayou Company's university/college students management:

According to the requirements of Huayou Company's 14th five-year-plan, it is expected to recruit more than 2000 every year. At present, a model of systematic design, standardized management and normalized training has been formed. According to the training concept of "training, guidance and practice", through diversified training modes such as school care, military training and intensive training, front-line job rotation, fixed post learning, on-the-job counseling, professional training, stage assessment, discussion and exchange, regular team building and so on, help university/college students "learn at work and become talents in their posts", provide a continuous reserve force for the high-quality and rapid development of Huayou Company, and help university/college students integrate into Huayou Company, take root in Tongxiang, and contribute to society.



Symposium of university/college students' representatives

### Build a cadre team:

In 2021, under the grand strategic background of Huayou Company's "completing ten-year task in five years", the number of employees and cadres will increase significantly. Therefore, the Company launches the human resource planning and talent inventory consulting project, defines the Company's demand for talent quantity and quality in the next 3-5 years, and establishes a reserve cadre echelon for key positions.

In 2021, the strong team plan (phase I) project was successfully completed and won the first prize of the Company's management project. The retention rate of 194 strong team students was 93.3% and the promotion rate was 60%. It has basically completed the work objectives set at the beginning of the year, and precipitated a set of talent training mode for management cadres. The Company advocated that cadres shall be cultivated in flow, and new post opportunities shall be continuously created in practice for the cadre growth.

In 2021, the Company focused on the assessment and evaluation of cadres and put forward the talent management policy of "talents used in best way". Therefore, the cadre management department launched the "core values behavior database and assessment project" and "cadre evaluation system optimization project", which defined the evaluation standards and processes in various scenarios such as recruitment, promotion and employment confirmation, laying a foundation for comprehensive evaluation of cadres and accurate identification of cadres.

Through the internal promotion mechanism, the Group selected 12 senior management and above cadres, 112 middle-level cadres and 230 grass-roots cadres, and transferred 354 management talents to all levels, so as to ensure talents for the Company's business development. All newly promoted cadres shall be included in the term management assessment and evaluation.



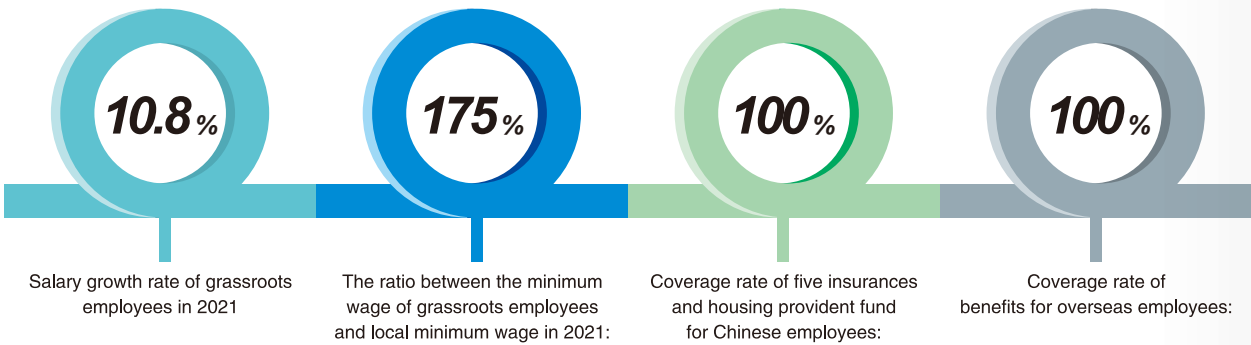
Graduation defense of strong team plan strategic reserve team



08

Employees’ salary and benefits of the Group (Company)

Salary and benefits is the material guarantee of employees' right to survival and development. Huayou Company insists that the salary level is competitive in the same industry and the region, continuously improves the salary level of employees, and ensures that the salary is paid on time every month, so that employees can live a dignified life. In accordance with the requirements of laws and regulations,



Data statistics of employees’ salary and benefits performance

Item	2019	2020	2021
Salary growth rate of grassroots employees (%) (excluding employees of Congo)	10.60%	4.5%	10.80%
Basic salary ratio between men and women for the same position	1:1	1:1	1:1
Labor contract signing rate of employees (%)	100%	100%	100%
Coverage rate of five insurances and housing provident fund for Chinese employees (%)	100%	100%	100%
Coverage rate of benefits for Congo employees (%)	100%	100%	100%



Staff fitness activities

The Company implements a comprehensive working hour system for grass-roots employees and a standard working hour system for management and technical personnel, strict controls of overtime hours, and protects employees' rest rights and interests. The Company shall pay overtime fee in accordance with the law when the employees work overtime on holidays and weekends, and gives priority to compensatory leave for employees working at weekends. The Company provides employees with social welfare security consisting of "five insurances and housing provident fund". The Company establishes a reasonable salary structure, including post salary, performance salary, skill allowance, management allowance, overtime pay, post allowance, night shift allowance, monthly performance bonus, annual performance salary and other subsidies. It not only reflects the reasonable return for employees' labor, but also encourages employees to continuously improve their professional ability, and it reflects the cultural concepts of "high performance and high income; enterprise efficiency improvement and growth of employees' income". In 2021, the Company further promotes the reform of salary structure and strengthens performance appraisal, so as to activate talents, drive strategy and guide employees and enterprises to develop and grow together.

In 2021, the Company conscientiously implemented the Population and Family Planning Law of the People's Republic of China, adjusted the Regulations on Attendance and Leave, increased the number of maternity leave for female employees, gave special care and subsidies to families with three children, and added parental leave and parental care leave.

The Company also provides a variety of special benefits, such as: providing employees with sympathy and solicitude for significant events, talent apartments, rental subsidies, transportation subsidies, commercial medical insurance and other benefits. These reflect the Company's implementing the care for employees and can enhance the employees’ sense of belonging.



Flower arrangement activities on "March 8th" Women's Day



On the first day of the Lunar New Year, the leaders of the Company paid tribute to the first-line production employees

09

## Huayou Company's resources

### Africa region:

#### Establish social responsibility and compliance management system

Initially establish a social responsibility and compliance management system, and earnestly implement and continuously improve it. At present, the social responsibility system involves employment, training and development opportunities, employment compliance, health, safety, epidemic prevention and control, cultural communication, anti-discrimination and so on.

#### Training and education

Carry out safety and environmental protection training and improve employees' awareness of work safety: In June and December 2021, Africa region organized two safety and environmental protection training activities respectively, which were carried out by watching "safety production accident warning film" and "safety and environmental protection speech competition". Based on the Company's work requirements of "complete ten-year task in five years", the safety and environmental protection training activities focus on the risk points of safety and environmental protection, aim to improve the ideological understanding of all employees, firmly establish the concept of "supreme safety and environmental protection", and adhere to the bottom line and red line of safety and environmental protection.



"100-day kick-off" launch meeting in Africa region



Africa region organized safety and environmental protection speech competition

#### Introduction of post qualification system, employee career development channel and learning platform

The Company pays attention to the localization building work, pays attention to the use and training of local employees in the Congo (DRC), and gives full play to the role of local management and key employees in the Company's operation and management. Combined with the characteristics of overseas human resources, the Company further improves the Guidance Manual for Chinese Employees to Get Along with Local Employees, the Regulations on Employee Communication and Feedback and building of Congo employee management system, sorts out the information of existing Congo cadres, promotes competitive employment for existing cadres, improves the construction of relevant assessment systems, provides channels for employee's career development and post promotion, and enables employees to focus more on their future development and work hard for it. At the same time, the Company recruits Chinese students studying abroad to join. These measures further promote the process of localization of company management, and achieve good economic and social benefits.

The Company pays attention to cadre management and continuously improves the comprehensive quality of cadres. In 2021, the Company successively carried out the empowerment training of Chinese team leaders, section level cadres and ministerial level cadres. The Company organizes new employees to carry out a series of local language training courses, provides a learning platform for employees, and promotes them to continuously innovate at their posts, broaden their thinking and achieve high-quality performance.

### Cultivation of university/college students

In 2021, 15 new university/college students became employees in Africa region of Huayou Company. According to the university/college students training plan formulated by the Group's human resources department and combined with the management characteristics of Africa region, the Report Plan for University/college Students in Africa Region and the Follow-up Management Plan for University/college Students in Africa Region in Probation Period have been formulated. Each department formulates the university/college students training plan and objectives. The Company organized a teacher worship ceremony in Africa, and helped university/college students pass the transplanting period through one-to-one training guidance of business instructors and empowerment training with a series of courses.

The human resources department of the management headquarters in Africa region pays close attention to the progress and status of university/college students' learning and growth, makes sincere talks on a weekly basis, prepares a monthly university/college students' management report, and organizes the mid-term evaluation and to-be-formal employee defense in three and six months after university/college students' entry. All university/college students successfully passed the to-be-formal employee defense. At present, through the training guidance and targeted burden during the probation period, the 2021 university/college students have completed the transformation from students to workers, and have better adapted to and completed the phased objectives of their respective posts.

In order to create a passionate atmosphere of "taking the factory as the home and being warm in a foreign land", enrich the cultural and entertainment life of overseas employees, and enhance the cohesion and sense of belonging of employees, the Africa region headquarters and CDM headquarters organized interesting activities such as lantern riddle guessing, ring toss, rope skipping and so on from 16:00 to 18:00 on September 19. During the activity, employees actively participated in the activity and the atmosphere was harmonious, laying the foundation for the Company to create good labor relations.



Symposium by university/college students on-boarding in 2021 for Lunar New Year



## Indonesia region:

### 1. Employee diversity

Based on the principle of employee diversity and equal opportunities, Huayue Project in Indonesia employs a large number of local employees to solve the employment problem of more than 3000 local people.

### 2. Training and education



The Company continues to strengthen the safety education and training and on-the-job operation training of production operators, so as to lay a solid foundation for the rapid provision of qualified operators for formal production.

Production process operation and on-the-job training is important means to improve the production efficiency, quality and safety of workshop employees. As the project gradually enters the production stage, all departments and workshops continue to organize and carry out employee safety education and on-the-job operation training, so as to lay a solid foundation for the rapid provision of qualified operators for formal production.



### 3. Cultivation of university/college students

According to the development needs of the Company, Huayue Company cooperated with well-known universities and colleges in Indonesia to recruit the first batch of fresh university/college students. In terms of the cultivation of Indonesian university/college students, Huayue Company adheres to the unified requirements of the park, regularly organizes university/college students to carry out summary exchanges, tracks their learning and growth status, and provides timely guidance, so that they can quickly integrate into the development of the Company and contribute to the development of the Company.

According to the training plan for university/college students, Huayue Company has assigned tutors to train

university/college students individually in combination with personality characteristics of these students, followed up the learning and growth of university/college students in time, and organized periodic assessments, including assessment at the third month and to-be-formal-employee assessment. On the basis of summing up and using for reference, university/college students can further clarify the direction of their future efforts and work goals, and shine brilliantly on the main battlefield of Huayou Company's second business development with great vigor.

### 4. Self-reliance and self-cultivation of special technical talents

Due to the shortage of some special technical talents in the local talent market, in order to meet the needs of project construction and production, Huayue Company has trained 33 qualified forklift drivers and 24 qualified automobile repair technicians through independent training, which has made up



for the shortage of market supply and timely met the needs of project construction and production, provided a human foundation for the guarantee of project construction progress and the rapid realization of the goal of reaching the standard and production capacity.

### 5. With brainstorming + experience sharing, continuously improve the management level of localized employees

In order to improve the management level of Indonesian employees, Huayue Company regularly organizes Indonesian deputy squad leader and above managers, excellent co managers (translators) and general managers to exchange experience through brainstorming + experience sharing, learn from each other, discuss with typical cases in daily work, develop everyone's management ideas by brainstorming, learn mutually, improve together, and constantly improve the overall quality and management level of the management team.

### 6. Vigorously train and select local employees and accelerate the localization of personnel

Personnel localization is a major measure for Huayue Project

to deeply cultivate Indonesia. Huayue Company has established the concept of "Indonesians as managers for Indonesians" to reduce the operation cost of the project. Each department, workshop and team selected about 30 Indonesians with strong sense of responsibility, management potential, loyalty to the Company and recognition of the Company culture as team leaders, department directors and even department managers to manage the local employees, this effectively improves the communication efficiency, reduces the difficulty of management and promotes the continuous development of the project.

### 7. Introduction to salary and benefits management process and system for local employees

The Company continues to improve the salary and benefits management system and continuously improves the salary standard and benefits treatment for local employees. The Company adjusts the basic salary of local employees according to the local minimum wage standard every year. In addition, local employees enjoy housing subsidies, telephone subsidies, family allowances, performance bonuses, etc. The

Company purchases various social insurances for employees and bears the personal income tax of employees in full, which greatly improves the income level of employees. The Company has formulated the corresponding benefits of paid home leave and paid annual leave for local employees of different ranks, so as to reduce the economic burden of employees by that the Company bears the round-trip transportation expenses or vacation travel subsidies.

### 8. Employees' medical and health security

The physical and mental health and medical and health security of employees have always been one of the continuous and key concerns of the Company. Huayue Company regularly conducts free physical examination for Indonesian employees every year and bears the medical expenses of Indonesian employees in the park clinic. With the outbreak and intensification of the epidemic, Huayue Company has distributed epidemic masks and other materials to employees free of charge, and 100% of employees have been vaccinated, this provides a strong guarantee for employees' life and health.





## Safety and Environmental Protection



Huayou Cobalt Company always adheres to the concept of "supreme safety and environmental protection", fully implements the development concept of safety first, people-oriented and supreme life, strengthens the awareness of the red line and bottom line, strictly implements the subject responsibility of safety production and the "dual responsibilities for one post of leading cadres", always puts the physical and mental health and safety production of employees first, constantly improves the quality of safety management of the Company, and escorts the high-quality development of the Company with high-level safety services.

Improve the system of dual responsibilities for one post, and implement the main subject responsibility of safety production

In accordance with the requirements of "industry management must include safety, business management must include safety, and production and operation management must include safety", the Company has continuously improved the safety and environment dual responsibility for one post system of leading cadres, strictly implemented the requirements of the new Law of Production Safety, issued the Notice on Establishing and Improving the EHS Responsibility System of all Employees, and organized all units to establish and improve the safety production responsibility system of all employees.

The Company successfully held the summary meeting of the three key battles of safety, environmental protection and fire control in 2021, signed the letter of responsibility for safety and environment work objectives, and compacted the responsibilities layer by layer.



The Company formulated the safety and environmental protection plan during the celebration of the 100th anniversary of the founding of the Party, actively carried out the "100-day battle" of safety and environmental protection, focused on controlling major risks, continuously strengthened training and education, increased safety investment, strengthened the investigation and treatment of hidden dangers, strengthened the standardization of safety production, fulfilled the responsibility of guarding the safety, being responsible for guarding the safety and duty for guarding the safety, and strictly implemented the subject responsibility of safety production.

Carry out all staff anti three violations activities to curb safety accidents

In order to effectively stop people's unsafe behaviors, eliminate habitual violations, prevent and reduce accidents and protect employees' life, health and safety, in 2021, the Company vigorously carried out all staff anti three violations activities in all units of the Group, issued the Plan on Comprehensively Strengthening Safety and



Environmental Inspection and Severely Punishing Three Safety and Environmental Violations and Accident Punishment, established the anti three violations control mechanism and formulated internal three violations standards, adhered to the work requirements of "high-pressure patrol, strict punishment and one punishment to the end", created an anti three violations atmosphere, mobilized all staff to carry out three violations patrol, check and correct each other, and a total of 10769 three violations have been investigated and dealt with. Employees' safety awareness has been steadily improved, personal injury accidents have been effectively controlled, and work safety accidents have decreased by 24.1% year-on-year, effectively ensuring the safety of employees' lives and property.

Strengthen the investigation and treatment of hidden dangers and improve the ability of risk prevention

All units of the Company have extensively carried out safety risk identification and hidden danger investigation and treatment, established hazard source identification and risk control list, and organized various forms of safety inspection, such as mutual inspection and correction, mutual comparison and mutual viewing, and random shooting of hidden dangers. In 2021, the Company investigated and remedied 12946 accident hidden dangers.

Strengthen safety training and education and create a good safety atmosphere

Safety training and education is an effective means to

improve employees' safety awareness. The Company has always been committed to creating a good safety atmosphere, strengthened the construction of safety culture, and deeply implemented the concept of "supreme safety and environmental protection". In 2021, the Company adopted various forms and methods to carry out safety training, education, publicity and implementation, actively carried out the theme publicity activities of "safety production month" and "fire protection day", prepared the Compilation of Cases of Safety Production Accidents in Similar Production Lines and Operations to carry out accident warning lessons, organized various safety knowledge competitions, fire fighting skill competitions, safety speech competitions and other activities, and New Energy Technology Company issued the Safety Culture Manual, established the concept of safe development and created a strong safety atmosphere.

Strengthen emergency support and enhance emergency rescue capacity

In order to improve the ability to deal with emergencies and improve the risk early warning and emergency response mechanism, in 2021, the Company continued to strengthen the building of emergency rescue system, improved the emergency plan and strengthened the building of full-time and part-time emergency rescue teams. The full-time fire brigade in Quzhou Park was selected as the "fine chemical fire fighting and rescue professional team of Quzhou fire rescue detachment". All production workshops set up part-time emergency rescue



implements the 24-hour emergency duty system for key posts and the duty system for leading cadres on holidays, carries out night inspections, and improves the ability of all-weather and all-time emergency support.

Improve the level of occupational disease prevention and create a healthy working environment

The Company's production and operation site involves a variety of occupational disease hazards, which has a great impact on the health of employees. The prevention and control of occupational diseases has always been the top priority of the Company's management and control. In 2021, in order to improve the management level of occupational disease prevention and control, the Company invited external experts to carry out special lectures on occupational disease prevention and control, vigorously carried out occupational hazard training and publicity,

invited third-party testing institutions to carry out occupational hazard factor testing, comprehensively carried out pre-job, on-the-job, off-the-job and post transfer occupational health examination, implemented the legal responsibility of occupational health monitoring (the physical examination rate of employees in posts exposed to occupational hazards was 100%), established occupational health monitoring files for employees, timely distributed personal labor protection articles, formulated occupational health operation procedures, and guided employees to implement occupational hazard prevention measures. At the same time, the Company actively improves the on-site working environment, implements control measures such as noise reduction, dust prevention and poison prevention, and strives to create a clean, tidy and comfortable working environment.

Do a good job in normalized epidemic prevention and jointly build a strong epidemic defense line

In 2021, the global COVID-19 is still at a high level, new variants continue to appear, domestic epidemics are sporadic and there are local outbreaks, and foreign epidemics continue to be prevalent and fluctuate in multiple rounds, threatening the health of employees at home and abroad. The prevention and control situation is severe and complex. The Company always adheres to the principle of safety first and life first, puts the life safety and health of employees first, and strictly implements the epidemic prevention policies of country and region where the Company carries out business, implements the normalized prevention and control. The Company actively organizes and advocates the vaccination of employees. Chinese employees shall be vaccinated as possible, and shall actively help foreign employees to vaccinate. 14340 people have been vaccinated, and the vaccination rate has reached 95.78%, so as to jointly build an epidemic prevention barrier. The Africa region actively supported the "spring seedling action", which was highly praised by the embassy, Chinese mining enterprises and Chinese enterprises. The Africa region was awarded the honorary title of "excellent collective of spring seedling action" and "excellent volunteer" by the embassy. The Indonesia region urgently purchased 1000 medical oxygen generators and donated these generators to the Indonesian government, actively supported and cooperated with the anti epidemic action of relevant departments of the local government, and practiced the concept of building a community with a shared future for mankind with practical actions, and contributed to the fight against COVID-19.





Occupational health and safety indexes for 2019-2021

Indexes	2019	2020	2021
Number of work loss accidents (times/year)	33	29	22
Death caused by work (person/year)	0	1	2
Number of occupational diseases (times/year)	0	0	0
Annual lost working hours by accident (hours/year)	30668	56184.5	97678
Serious rate of work loss per million working hours (total lost working hours/actual total working hours) × 1,000,000	Cobalt New Material Company: 6355.36 New Energy Technology Company: 420.60 Huajin Company: 0 Huayou Posco: 0 Huayou Cobalt Company: 2488.72 Resource Recycling Company: 1194.18 CDM: 131.50 MIKAS: 220.52	Cobalt New Material Company: 929.6 New Energy Technology Company: 378.2 Huajin Company: 1880.88 Huayou Posco: 2610.43 Huayou Cobalt Company: 59.37 Resource Recycling Company: 1353.3 CDM: 7951.9 MIKAS: 52.78	Cobalt New Material Company: 577.83 New Energy Technology Company: 406.15 Huajin Company: 363.15 Huayou Posco: 0 Huayou Cobalt Company: 293.56 Resource Recycling Company: 968.14 CDM: 7589.82 MIKAS: 15958 Huayue Company: 0 Tianjin B&M: 0 Chengdu B&M: 13.33
Injury accident rate per million working hours (number of lost working hour accidents/actual total working hours) × 1,000,000	Cobalt New Material Company: 3.16 New Energy Technology Company: 2.64 Huajin Company: 0 Huayou Posco: 0 Huayou Cobalt Company: 5.1 Resource Recycling Company: 9.46 CDM: 0.67 MIKAS: 0.29	Cobalt New Material Company: 2.24 New Energy Technology Company: 1.9 Huajin Company: 9.70 Huayou Posco: 6.04 Huayou Cobalt Company: 0.53 Resource Recycling Company: 3.23 CDM: 0.82 MIKAS: 0.35	Cobalt New Material Company: 0.92 New Energy Technology Company: 0.80 Huajin Company: 1.82 Huayou Posco: 0 Huayou Cobalt Company: 0.79 Resource Recycling Company: 3.43 CDM: 0.34 MIKAS: 0.70 Indonesia Huayue Company: 0 Tianjin B&M: 0 Chengdu B&M: 0.56
Physical examination coverage rate of occupational disease posts (%)	100	100	100
Total safety investment (10000 yuan/year)	4484.09	5620	9846
Government safety fines (times/year)/amount of (yuan/year)	0	0	0



Green manufacturing is the common ideal of Huayou Company and the solemn commitment and practical action of Huayou Company as a social citizen and a citizen of the world. Huayou Company adheres to the development concept of "green hills are treasure", puts the concept of sustainable development through production activities and daily management, strengthens the construction of environmental protection facilities and the compliance disposal of "three wastes", and constantly achieves new results in environmental management.

System building and implementation

In order to improve the standardized management of each operation site, Huayou Company has actively implemented ISO14001 environmental management system certification throughout the Company, actively carried out clean production and actively promoted green manufacturing. Up to the reporting period, eight companies including Huayou Company Cobalt, Cobalt New Material Company, New Energy Technology Company, Resource Recycling Company, Huajin Company, Huayou Posco, Chengdu B&M, Tianjin B&M have passed the environmental management system certification. At the same time, according to the requirements of relevant standards, the Company establishes a series of environmental protection related systems, such as "three wastes" (waste water, waste gas, solid waste) pollution control management and control procedure documents, identifies the environmental impact factors within the scope of the Company, formulates corresponding control measures, clarifies the regulations and requirements of the Company's environmental management work, ensures the discharge of three wastes up to standard. During the reporting period, the standard discharge rate of three wastes of the whole Group was 100% in 2021, and no environmental protection accidents occurred.



Carbon emissions

The Group set up a carbon emission project team to carry out carbon emission accounting and carbon emission reduction planning research, formulate the action plan of "carbon peaking and carbon neutralization":

Organization of training: Training on two major standards (ISO14064: 2018 greenhouse gas verification and ISO14044: 2006 life cycle assessment) has been organized to train and reserve internal audit and system operation, implementation and maintenance personnel, and make such personnel obtain the certificate of greenhouse gas internal inspector.

Carbon emission verification and certification: 8 legal entity companies that have been put into operation (Huayou Company Cobalt, Cobalt New Material Company, New Energy Technology Company, Huayou Posco, Huajin Company, Resource Recycling Company, CDM and MIKAS) have completed the ISO14064 inventory report and preparation of the report, on-site audit conclusion was issued and ISO14064 declaration certificate (certification) was awarded; two legal entities in the construction stage (Huayue Company and Huake Nickel Indonesia Co., Ltd.) have completed the carbon emission verification report; for one precursor and two tricoalt tetraoxide products, the preparation of product life cycle verification report have been completed, the on-site audit conclusion of three products have been issued and ISO14064 declaration certificate has been issued.

Overall carbon emission planning: On the basis of mastering the marginal emission reduction cost of the Company, the Company has completed the low-carbon strategic planning at the Group level under the background of coping with climate change and "double carbon" policy. The Company deduces the planning objectives of carbon emission of cathode materials in the future, and puts forward forward-looking and operational suggestions and measures. The Company formulates emission reduction strategies in line with economic rules, as well as medium and long-term scientific carbon reduction targets and measures.

Measures at the subsidiary level: In order to strengthen the management of carbon emissions, Cobalt New Material Company issued the Greenhouse Gas Inventory Procedure and the Regulations on Supervision of Greenhouse Gas Emissions, and timely monitored the total carbon emissions of the Company through the construction project of the Company's smart energy management and control system and combined with MES digital chemical plant; Huayou Posco Company issued the Greenhouse Gas Inventory Control Procedure of Huayou Posco Company and implemented planned energy conservation in power consumption; Huajin Company has carried out energy conservation and consumption reduction activities from three aspects of electricity, water and office supplies, saving about 338400KWH of power consumption throughout the year; The Africa region (CDM, MIKAS) has further optimized the production process, eliminated backward production equipment, adopted energy-saving motors, strengthened the Company's energy management, improved employees' awareness of energy conservation, strengthened employees' skill training, reduced equipment failures, improved equipment operation rate and reduced energy consumption.

Highlights of environmental protection management

Cleaner production: Huayou Cobalt Company has adjusted and upgraded the sedimentation process of the sewage station, using sodium carbonate instead of hydrated lime as raw material in the manganese precipitation process, so that the whole sewage sedimentation process will no longer produce sewage residue, and the sewage residue will be reduced by about 4000 tons from the source every year; New Cobalt Material Company focuses on cleaner production, improves new processes such as Fenton COD removal of various discharged wastewater, vigorously promotes the reduction and recycling of waste slag, and completes the R & D project of recycling white alloy iron slag, so as to achieve 70% reduction of atmospheric pressure iron slag and 98% recycling of white alloy iron; New Energy Technology Company saves energy and reduces consumption through measures such as washing water reuse.

Construction of environmental protection projects: A 100000T/year solid waste residue resource treatment plant has been built up and put into use in 2021, which greatly improves the self disposal capacity of general solid waste, achieves the reduction and recycling of waste residue, and greatly improves the Company's green manufacturing capacity; The existing hazardous waste incineration disposal device has been expanded. After completion, the self disposal capacity of hazardous waste will be further improved to achieve the purpose of harmless hazardous waste.

Green development: Cobalt New Material Company was selected into the list of "green supply chain management enterprises" of the Ministry of Industry and Information Technology. New Energy Technology Company was selected into the list of "green design products" of the Ministry of Industry and Information Technology, and was listed as a green low-carbon factory in Zhejiang Province in 2021. Chengdu B&M was selected into the list of national green manufacturing in 2021 and was identified as a "provincial green manufacturing demonstration unit in 2021" by Sichuan Province.

Biodiversity and aboriginal protection

Mining areas and smelters disclose the control of biodiversity, aboriginal protection and other issues according to the actual situation. In Africa:

Biodiversity: Regular water quality tests were conducted for drinking water, groundwater and monitoring well water, and no water source pollution was found; for noisy equipment and facilities, silencers and silencing cotton were installed and other noise reduction measures were taken; No environmental pollution incidents occurred throughout the year. The total number and density of species were observed, and no decline and other abnormal ecological changes were found. The ecological environment within the Company was normal.

Aboriginal protection: The Project Document on Free, Prior and Informed Consent of Affected Indigenous Peoples in the DRC has been prepared to respect the free, voluntary and prior informed rights of local indigenous peoples.

Environmental indexes for 2019-2021

Environmental indexes	2019	2020	2021
Purchased power consumption (KWH /year)	648022665.5	738476207.84	1370391471.9
Consumption of purchased steam (KJ/year)	1840370566800	1628902095041	284152616100
Natural gas consumption (NM3/year)	6631258	6473499.27	9729649
Consumption of ore raw materials (T/year)	2372498	3843015.01	1910694
Water consumption (T/year)	8049077.63	7816040.45	8892422
Water resource reuse (T/year)	4843467.11	1949192	6641016
Wastewater discharge (T/year)	4111766.36	4033560	5873399
Quantity of recycled materials (T/year)	19171.22	16008	15298
Greenhouse gas emissions (T/year)	549345.02	439736.65	
Total emission of waste gas pollutants (T/year)	88.4113	114.27	104.83
Comprehensive utilization rate of waste (T/year)	38791.05	93814.86	140136.09
Discharge and treatment capacity of hazardous waste (T/year)	4102.815	3936.78	7946.87
Number of chemical leakage accident(s) (times/year)	11	1	0
Investment amount for environmental protection (10000yuan/year)	18832.50	22770.27	79368.17
Environmental screening rate of investment projects (%)	/	100	100
Discharge rate of sewage treatment up to standard (%)	100	100	100
Emission rate of waste gas up to standard (%)	100	100	100
Energy-saving data(not due to production reduction)	/	588 tce	32492817000 ( kj)
Number/amount of government environmental protection fine(s)	0	0	0
Total slag produced (T/year)	/	/	5909623
Waste stone volume (T/year)	/	/	12466269
Tailings volume (T/year)	/	/	3736629
Total NOX emission (T/year)	/	/	10.93
Total SOX emission (T/year)	/	/	29.79
Total PM emission (T/year)	/	/	31.12
Total discharge of hazardous waste (T/year)	/	/	7374.22
Total discharge of harmless waste (T/year)	/	/	85584.51
Reduced energy consumption (KJ/year)	/	/	32492817000



Environmental data	Huayou Cobalt Company	Cobalt New Material Company	New Energy Technology Company
Greenhouse gas emissions (T/year)	Total emissions in 2020: 40554.79t; Scope 1: 2629.43t; Scope 2: 32696.99t; Scope 3: 5228.37t.	Total emissions in 2020: 398210t; Scope 1: 19399.5t; Scope 2: 316617.66t; Scope 3: 62193.29t.	Total emissions in 2020: 165417.71t Scope 1: 0t; Scope 2: 165417.71t; Scope 3: 0t.
Energy intensity data (ton of standard coal/10000 yuan)	0.0325	0.092	0.12

Environmental data	Resource Recycling Company	Huajin Company	Huayou Posco
Greenhouse gas emissions (T/year)	Total emissions in 2020: 38858.9t; Scope 1: 1073.39t; Scope 2: 37785.51t; Scope 3: 0t; Total emissions in 2021: 61004.37t; Scope 1: 1235.37t; Scope 2: 59769t; Scope 3: 0t.	Total emissions in 2020: 89919.21t; Scope 1: 849.72t; Scope 2: 23649.15t; Scope 3: 65420.33t.	Total emissions in 2020: 55726.67t; Scope 1: 155.89t; Scope 2: 14758.28t; Scope 3: 40812.5t.
Energy intensity data (ton of standard coal/10000 yuan)	0.0325	0.092	0.12

Environmental data	Chengdu B&M	Tianjin B&M	CDM
Greenhouse gas emissions (T/year)	Total emissions in 2020: 499386.68t; Scope 1: 1817.78t; Scope 2: 7278.19t; Scope 3: 490290.71t; Total emissions in 2021: 1281270t; Scope 1: 4189t; Scope 2: 88073t; Scope 3: 1192939t.	Total emissions in 2021: 36595.15t; Scope 1: 0t; Scope 2: 36595.15t; Scope 3: 0t.	Total emissions in 2020: 180491.8t Scope 1: 29272.27t; Scope 2: 807.49t; Scope 3: 150412.04t.
Energy intensity data (ton of standard coal/10000 yuan)	0.0726	0.02472	0.228

Environmental data	MIKAS	Huayue Company	
Greenhouse gas emissions (T/year)	Total emissions in 2020: 137177.65t Scope 1: 63043.97t; Scope 2: 400.42t; Scope 3: 73733.26t. Total emissions in 2021: 180388.61t Scope 1: 82902.82t; Scope 2: 526.55t; Scope 3: 96959.24t.	Commissioning started since November 2021 Scope 1: 7358.64t; Scope 2: 26450t; Scope 3: 0t.	
Energy intensity data (ton of standard coal/10000 yuan)	0.0325	0.092	

## Due Diligence of Responsible Cobalt Supply Chain



According to OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (ECD Guidelines) and Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains (Chinese Guidelines), there are risks caused by fairly high and negative impacts in mineral mining, trading and processing activities, such as human rights risks in the mining process or risks of fuelling and aggravating conflicts such as financing conflicts. The minerals supply chains of enterprises are linked and interconnected. Therefore, the minerals supply chains of enterprises may face various risks. Even if the production links of the supply chain are scattered and the enterprise is located in an independent position, it is still impossible to completely avoid the direct or indirect negative impact on all links of the mineral industry. Therefore, enterprises shall take reasonable measures and strive to carry out due diligence management, so as to identify, prevent or mitigate any negative impact risks related to mineral mining conditions and supplier relations in conflict-affected or high-risk areas.

As an important participant in the new energy lithium battery material industry, the Company adheres to the development concept of innovation, coordination, green, openness and sharing, attaches great importance to corporate social responsibility governance and sustainable development, and also attaches great importance to the due diligence of responsible minerals supply chain. The Company starts with building its own corporate social responsibility management system, and constantly improves the requirements for mineral cooperative suppliers. From the transmission of basic documents such as basic minerals supply chain policies and supplier code of conduct, the filling of corporate social responsibility checklist to the on-site audit of key and core suppliers, the Company has gradually improved the corporate social responsibility management system of minerals supply chain in order to contribute to the sustainable development of the industry.

The Company's due diligent of responsible minerals supply chain takes cobalt products as the starting point. As one of the important metal materials in the production of lithium batteries, cobalt occupies a very important position in the process of global green transformation. Congo (DRC) owns more than two-thirds of the global cobalt resources, highlighting the importance of this country as a source of cobalt ore. However, due to the backwardness of politics and economy, human rights risks and poverty are widespread in Congo (DRC). Whether the purity and sustainability of the Company's cobalt supply chain can be guaranteed is crucial to the sustainable development of the whole industrial chain and

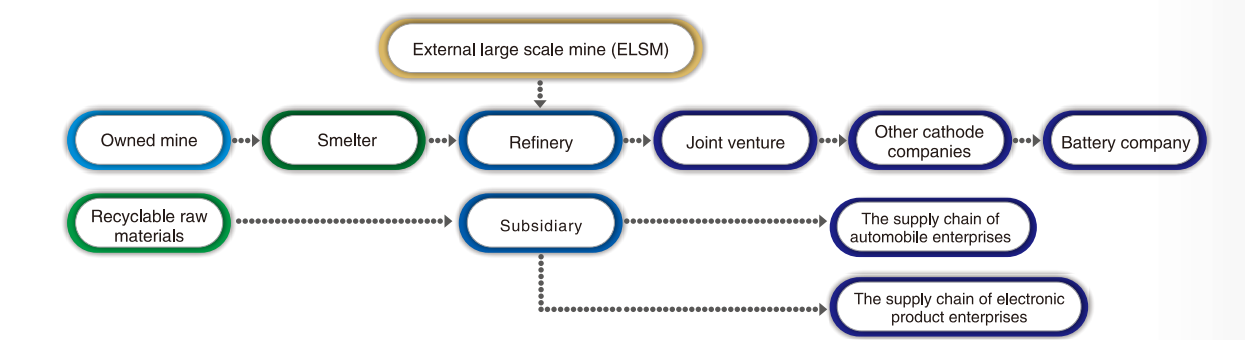
winning the trust of customers.

Since the beginning of 2016, the international community, including non-governmental organizations and well-known media, has continuously reported on the human rights risks in the global cobalt supply chain, especially the human rights violations such as child labor in the process of cobalt manual mining in the Katanga Province of the Democratic Republic of the Congo, which has attracted worldwide attention to the cobalt supply chain. Therefore, in 2016, the Company began to actively participate in the learning, introduction and implementation of due diligence of responsible cobalt supply chain, and established the industry's first due diligence of responsible cobalt supply chain system and relevant procedure documents in accordance with the requirements of OECD Guidelines and Chinese Guidelines and with reference to the five-step management framework, including the Policies for Responsible Global Cobalt Supply Chain from High-risk Areas, the Supplier Code of Conduct, the Standard for Supplier of Responsible Cobalt Procurement, etc. At the same time, the social responsibility office directly under the President was established, and the Corporate Social Responsibility Executive Committee at the Group level (hereinafter referred to as the "Committee") was established. The Committee organized the mapping, risk identification and assessment, risk mitigation plan development of Huayou Company' s cobalt supply chain.

In 2021, Huayou Cobalt Company continued to carry out due diligence of responsible cobalt supply chain in accordance with the due diligence management procedures, and the building of responsible cobalt supply chain has moved forward steadily. The corporate social responsibility office cooperates with the procurement management department to carry out mineral product awareness education for suppliers and convey due diligence management policies and requirements. At the same time, the Company's quality control department, raw material procurement department and other departments cooperate with the colleagues of the social responsibility office and other relevant departments to conduct site evaluation on key suppliers. The Company evaluates and analyzes the information collected by Know Your Supplier (KYS) and network platforms, evaluates the risk with the supplier risk evaluation form, communicates the corresponding risk situation with the supplier, jointly establishes practical improvement actions, and then reports the risk and risk mitigation plan to the Company's leaders for approval.



In 2021, the cobalt supply chain map of Huayou Cobalt Company is roughly described as follows:



Risk identification and mitigation are mainly carried out from two aspects: internal identification and external audit:

1) Internal identification: The suppliers of Huayou Cobalt Company mainly include large scale mines (LSMs) and traders. In addition, there are some peer procurement, entrusted processing and recycled materials.

Throughout the whole process of due diligence management, the Company has carried out due diligence management on LSMs, international traders, domestic traders and recycled materials. The main risks are identified as follows:

Supplier	Origin	Risk identification
Traders	LSM	The lack of information provided by traders on the regulatory chain makes it difficult for the traceability of the supply chain
Refinery/smelter	LSM	The manufacturer's own due diligence management materials are not perfect, and some of them have not carried out supply chain audit
Recycled materials	Source of raw materials Waste batteries, leftover materials and nonconforming products	The risk is small, and there may be inaccurate sources of raw materials (basically identified as LSM sources)

LSM generally owns its own mines and mines mineral materials through mechanized means. It has its own policies and management in terms of human rights, occupational health and safety, environment and so on. The risks of child labor and human rights violations are small.

The Company's direct suppliers mainly come from China and pass through countries such as the Democratic Republic of the Congo, Zambia and Zimbabwe. For these areas, the Company mainly carries out CAHRAs identification, carries out enhanced due diligence management for suppliers in CAHRAs, pays attention to local policies and the operation of the Company, and solves problems by identifying problems. In addition, the grievance mailbox is published to encourage stakeholders to report or provide relevant information to Huayou Cobalt Company.

Traders include international traders and domestic traders. International traders mainly purchase mineral materials from LSMs. They have their own policies and management on human rights, occupational health and safety, environment and other aspects, and the risk is relatively small. Some domestic traders come from LSMs and some from smelters. For domestic traders, it is mainly to know the source of mineral materials and ensure that there are no relevant risks. For suppliers who are unwilling to feed back information and refuse to cooperate with the audit (such supplier is information-opaque supplier), Huayou Cobalt Company will communicate with them and give them an examination period of 3 to 6 months. If they still do not cooperate, the cooperation will be suspended. Huayou Cobalt Company will terminate its cooperation with the suppliers that have significant risks and fail to improve as expected within the specified period.

2) External audit:

In May and November 2021, the Company accepted the due diligence of responsible cobalt supply chain audit of RCS, the third-party audit unit entrusted by the customer. With the gradual improvement of the Company's due diligence management system of cobalt supply chain, the non-conformity points recorded by the audit organization are gradually reduced, and the non-conformity points mainly exist as industrial problems, that is, all participants in the enterprise's supply chain need to conduct independent third-party audit. At the same time, the Company actively followed up the rectification plan of non-conformities audited by RMI. In November 2021, the Company officially passed the RMI audit and was incorporated into the list of RMI qualified smelters. Huayou Cobalt Company can pass RMI, this has greatly promoted the whole industry; the raw materials are in the seller's market, and the upper upstream does not cooperate with RMI audit. Huayou Company has striven forward, carried out joint efforts from top to bottom of the supply chain, overcome various difficulties during the epidemic, and finally made a breakthrough and was recognized by the audit organization.

At the same time, for the supply chain work, the Company has formulated an annual work supervision form, made overall plans and arrangements for the supplier list, suppliers review, mine rectification records, organization of stakeholder training, risk mitigation according to the audit requirements of downstream customers and foreign parties, and continuously urged the raw material procurement department and mining cooperatives to carry out their work in accordance with the supply chain work record form of CDM in 2021 and regularly feed back the records, so as to ensure the procedural implementation of the due diligence of the responsible minerals supply chain. The Company continuously rectifies the mining area according to the CAP corrective measures issued by better cobalt.

The Company completed the CERA Volkswagen certification test audit, and conducted a preliminary review of supply chain due diligence documents in August. In September, the review of CERA Volkswagen certification documents and site visits were completed, and PE527 plant area, Luiswishi mining area and Lukuni tailings pond were visited. In October, the Company completed the visit of the DMT audit party of CERA Volkswagen certification. The specific schedule was: on October 18, the first meeting was held with the trade department, the safety and environmental protection department, the human resources department and the wet process plant to know the operation of the Company; On October 19, visited the concentrator, knew the production process of Lukuni wet process plant, and visited the quality control department; On October 20, Luiswishi mine pit, Lukuni mine pit and tailings dam were

inspected; On October 21, the waste classification and treatment in the plant, public welfare display and community visit, and meeting with the labor union; On October 22, checked the production water and water resources circulation system.

While carrying out due diligence of responsible cobalt supply chain within the Company, the Company actively carries out communication and exchange on due diligence management with external units, downstream enterprises, industry institutions and other stakeholders, so as to promote the full implementation of due diligence of responsible supply chain.

As the deputy director unit of the Council of RCI, Huayou Cobalt Company actively participates in and promotes the work of the initiative, participates in RCI teleconference, discusses the activities of the working group (implemented project), discusses the audit standard of due diligence management (RMI audit standard), etc.

The Company's due diligence of responsible cobalt supply chain system is becoming more and more mature. In 2022, the Company will continue to maintain and promote due diligence of responsible nickel supply chain. In addition, due to the increasing proportion of nickel in new energy lithium battery materials, international new energy vehicle enterprises pay more and more attention to the nickel supply chain. With the vigorous promotion of the Company's Indonesian nickel project, the Company is about to start the due diligence of responsible nickel supply chain, which can increase the due diligence of responsible nickel supply chain on the basis of the Company's due diligence of responsible cobalt supply chain. The Company's due diligence of responsible mineral supply chain controls the risks brought by the supply chain and ensures the stability and sustainability of the Company's operation and management. At the same time, we hope that Chinese mining enterprises and other partners involved in the supply chain will actively promote the full implementation of due diligence of responsible supply chain, mitigate and eliminate the risks in the supply chain, and lay a solid foundation and guarantee for the sustainable and vigorous development of China's mining industry!





## Community Investment



The Company adheres to practical public welfare, faces the community, serves the people, effectively solves the hot and difficult problems concerned by the community people, and truly implements the Company's responsible investment philosophy. Africa region has provided more than 460000US dollars for the improvement of infrastructure, people's living and health conditions in the community where the Company is located.

People's livelihood is the concern of the masses. The Company adheres to its ability and spares no effort to solve the problems of people's livelihood for the villagers, takes the people's livelihood project as the focus of assistance, resolutely does not lower the standard, delay the construction period and reduce the quality, and continues to do good things for the people's livelihood and do real things for the people.



On "June 1st" Children's Day, went to primary schools for caring activities



Comforted poor workers

Drinking water has been a major problem that has plagued the people of surrounding villages and communities for a long time. However, due to the contradiction between the high cost of drilling wells and the general poverty of villagers, only a few hand-operated wells are in disrepair for a long time, there are hidden dangers of well collapse at any time, and the water intake efficiency is low and time-consuming, it is difficult to ensure the water demand of villagers. The water problem has become a problem that the villagers want to solve but can not solve. In order to solve the difficulties of the villagers, the Company has continuously assigned special funds to dig wells for the villagers.

For each donated well, the Company will conduct two water quality tests, one test before construction and one test after completion, and conduct acceptance after the completion of the project to ensure that the well will be handed over to KAWAMA and KAMATETE villagers after reaching the standard, so that the villagers can drink safe and healthy water. At the same time, the villagers do not need to take water by hand, which greatly improves the water use efficiency and alleviates the water problem.

In 2021, the Africa region promoted the surrounding community water well project to alleviate the difficulty of drinking water in the community. In September, the Company invested US \$60000 to build three solar water wells for KAWAMA and KAMATETE villagers and Lukuni welfare home.

There are many residents near the CDM plant area. However, the road extending to LIKASI Avenue is rugged and raises dust in dry season, which is very unfavorable to travel and the health of surrounding residents. The district head also sent a letter asking the Company to help them repair the road. With the cooperation of the engineering construction department, this road section was repaired. The road renovation has greatly facilitated the travel of surrounding residents. The district head also sent a letter of thanks to the Company for its contribution to KASAPA community. At the same time, the Company is equipped with a sprinkler to spray water and reduce dust on the road all year round, improve the road environment and ensure the safe passage of villagers.

Education is the foundation of development. Starting from education, the department continues to carry out various donations to help schools run education and help students



The water wells are handed over to the surrounding security departments



Africa region donates solar water wells to the surrounding communities

have a good classroom. The Company adheres to both material support and spiritual encouragement, lets teachers and students feel the love of the Company, and establishes the confidence of overcoming difficulties and inspirational education.

The Company sets up CDM grants to screen students from surrounding schools every year, subsidizes their admission fees, helps them alleviate their school difficulties and encourages them to continue to study hard. On September 26, the Company donated a batch of living materials to the Lukuni orphanage center.

The impact of the epidemic has disturbed the original peace of the world, but CDM Company has not stopped the

pace of public welfare in this special period. True love is not limited to words, but also must be reflected in practical actions.

On March 29, 2021, the Company actively responded to the government's initiative and provided funding for the connection of medium voltage power to Lukuni welfare home. The project was officially put into use in June this year, which further alleviates the power consumption problems of surrounding communities and is unanimously praised by local villagers.

In line with the concept of benefiting the surrounding communities, the Company provides medical help to the villagers in need, promotes the development of good relations with the surrounding residents, actively promotes the



development of social undertakings and the progress of people's livelihood in KAWAMA Village, and held a free clinic in KAWAMA Village in cooperation with MOM clinic, a non-governmental organization.

Accompanied and joined by the doctors from China and Congo and in CDM, the free clinic was carried out smoothly. The main examination items included malaria and typhoid fever, and relevant therapeutic drugs were distributed. After the free clinic, return visits were paid to the patients receiving treatment. The doctors of MOM clinic presented CDM employees certificate on behalf of KAWAMA villagers to show recognition and gratitude.

The epidemic affects people's hearts, and the safety is man-made. In the face of the fierce epidemic, we are a community of common destiny and a community of responsibility. Ability has size, care has no distance. The ceremony of donating US \$1 million from the Association of Chinese Funded Mining Enterprises in DRC ( "the Association" ) to the government of Haut Katanga Province was held in the Provincial Government. The governor of Haut Katanga Province, head of the Department of Provincial Health, and the President of the Association and the representatives of the member units of the Association attended the ceremony.

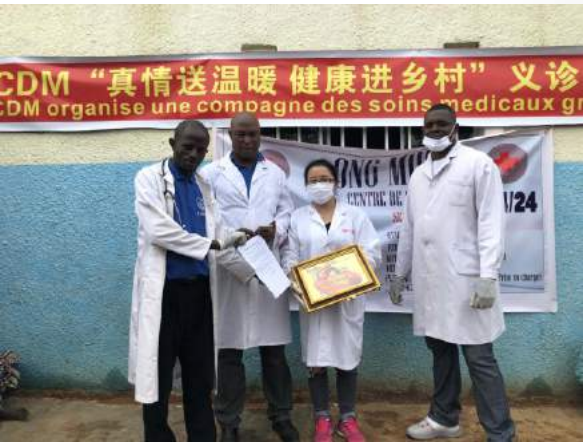
At the critical moment of fighting the epidemic in Haut Katanga Province, the Association of Chinese Mining Enterprises showed strong support for the epidemic prevention work in the Province. Under the call of the Association on epidemic prevention donation, the Company responded positively, strengthened the cooperation between enterprises and the government, helped the local government



Donating a batch of desks and chairs to the Lukuni orphan center



Donate epidemic prevention materials to MOM clinic, a local non-governmental organization



Group photo of doctors from China and Congo and in CDM with MOM clinic

prevent the epidemic, and made due contributions to local epidemic prevention and economic development. CDM and MIKAS donated US \$100000 and US \$50000 respectively to support this Province to do a good job in epidemic prevention and anti epidemic work and tide over the difficulties together.

In addition, the residents in the communities around the Company are generally poor and lack the conditions for independent epidemic prevention and resistance under the changing epidemic situation. The Company regularly donates epidemic prevention materials, including disposable masks, disposable gloves, alcohol, etc.



Some funded students





# Readers’ Feedback

Dear readers,

Hello! Thank you very much for reading the CSR Report 2021 of Zhejiang Huayou Cobalt Co., Ltd. If you have any ideas and suggestions on this report, please fill in the feedback form below and give us feedback by letter, telephone or email. For your valuable advice, we would like to express our deep gratitude!

Name: \_\_\_\_\_ Tel: \_\_\_\_\_ E-mail: \_\_\_\_\_

## 01/ Which chapters do you think provide you with important information?

- ☐ About Huayou
- ☐ Management Approach
- ☐ Laborer
- ☐ Safety and Environmental Protection
- ☐ Due Diligence of Responsible Cobalt Supply Chain
- ☐ Community Investment

## 02/ How do you evaluate this report?

- |                    |                               |                                   |                               |
|--------------------|-------------------------------|-----------------------------------|-------------------------------|
| Readability        | <input type="checkbox"/> Good | <input type="checkbox"/> Ordinary | <input type="checkbox"/> Poor |
| Completeness       | <input type="checkbox"/> Good | <input type="checkbox"/> Ordinary | <input type="checkbox"/> Poor |
| Balance            | <input type="checkbox"/> Good | <input type="checkbox"/> Ordinary | <input type="checkbox"/> Poor |
| Typesetting design | <input type="checkbox"/> Good | <input type="checkbox"/> Ordinary | <input type="checkbox"/> Poor |
| Overall impression | <input type="checkbox"/> Good | <input type="checkbox"/> Ordinary | <input type="checkbox"/> Poor |

## 03/ What are your suggestions for our next annual report?

## 04/ Contact us:

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