



愛德新能源投資控股集團有限公司

Add New Energy Investment Holdings Group Limited

(incorporated in the Cayman Islands with limited liability)

Stock Code: 2623

ENVIRONMENTAL, SOCIAL
AND GOVERNANCE REPORT

2023

CONTENTS

About This Report	2
APPROACH TO SUSTAINABILITY	4
Materiality Themes	5
Our Stakeholder Engagements	6
ABOUT OUR BUSINESS	7
Business Perspective	7
Environmental and Social Expenditures	8
Environmental and Safety Licenses	8
INTERNAL AND EXTERNAL GOVERNANCE	9
Supply Chain Management	10
Product Responsibility	11
Technology and Intellectual Property	12
Privacy Protection	13
HARMONY WITH PEOPLE	14
Safety and Health	14
Employment Relations	16
Training and Development	20
Community Engagement	23
HARMONY WITH ENVIRONMENT	24
Responding to Climate Change	24
Resource Management	25
Biodiversity and Land Use	35

About This Report



Blossoming Flowers (Yangzhuang Iron Mine)

Reporting Standard

Add New Energy Investment Holdings Limited (the “Company”) and its subsidiaries (collectively the “Group” or “we”) are pleased to present our Environmental, Social and Governance (“ESG”) Report (the “Report”) to our stakeholders. The contents of the Report comply with Appendix C2 - Guidelines on Environmental, Social and Governance Reporting (the “ESG Reporting Guide”) of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the “Stock Exchange”). Our sustainability approach emphasises workplace health and safety, environmental protection and building harmonious relationships with the communities in which we operate, and we hope to inspire the industry to join in the movement towards greener mines.

Reporting Scope

The information covered in the Report reflects the sustainable development performance of the Group’s Yangzhuang Iron Mine and Zhuge Shangyu Ilmenite Mine in Shandong Province, the PRC, from 1 January 2023 to 31 December 2023 (the “Reporting Year”), unless otherwise stated. Since the exploration, blasting and mining work at Yangzhuang Iron Mine is undertaken by outsourced contractors and is therefore excluded from the reporting scope of the Report. In addition, the Qinjiazhuang Ilmenite Mine and Gaozhuang Shangyu Ilmenite Mine owned by the Group had no production operation during the Reporting Year, therefore are excluded in the reporting boundary of the Report.

About This Report

Reporting Principles

In preparation of the Report, due diligence has been taken to adhere to the Reporting Principles stipulated in the ESG Reporting Guide:

- “Materiality” – The materiality assessment detailed has ensured that the Report addresses the most material ESG topics pertaining to our businesses.
- “Quantitative” – The Report strives to disclose quantitative metrics and related targets whenever possible, to demonstrate our impact. The Report will disclose both the data of the Reporting Year and the previous reporting year to facilitate data comparison.
- “Balance” – The Report presents an unbiased representation of our ESG management approach and performance. It avoids misleading omissions and presentation.
- “Consistency” – Whenever deemed material, the Report details the standards, tools, assumptions and/or source of conversion factors used, as well as explanations of any inconsistencies to previous reports.

For more information about our social and environmental responsibility, please refer to the Group’s official website: addnewenergy.com.hk

Confirmation and Approval

The information contained in the Report has been obtained from official documents, statistics and management operating information collected by the Group. The Report was approved by the Board of Directors (the “Board”) of the Company on 27 March 2024.

Opinion and Feedback

The Group values the opinions of its stakeholders. If any stakeholder has any feedback or suggestions on the Report, please send them to the Group’s principal place of business in Hong Kong at Room 3105, 31st Floor, Tower 6, Gateway House, Harbour City, 9 Canton Road, Tsim Sha Tsui, Kowloon, Hong Kong. Your feedback or suggestions will greatly assist the Group in continuously improving its ESG performance.

Approach to Sustainability

Our Management Approach

The Board has overall responsibility for overseeing the Group's ESG issues, including policies, practices, performance and risks. The Board holds regular board meetings to assess and review ESG issues promptly. In addition, the Board closely monitors and keeps abreast of the latest ESG related laws and regulations so that the Board is aware of any changes in such laws and regulations and updates its own ESG measures to ensure that we comply with the latest regulatory requirements. To ensure compliance with the ESG requirements of the Stock Exchange, the Board will oversee the preparation of the ESG report and review the content and quality of the ESG report.

Our Sustainability Mission

The Group's management integrates the concept of sustainable development into its corporate operation and daily operation, and actively responds to the carbon neutrality target set out in the 14th Five-Year Plan of China. In 2021, the Group joined the Greater Bay Area Carbon Neutrality Association as a founding member. During the Reporting Year, we will continue to actively develop the new energy industry, fully implement the corporate mission of clean energy construction and operation, and strive for the green transformation of the region and the country.

Our Achievement

The Group was awarded the InnoESG Care Prize in 2021 as a recognition of the Group's ESG performance. The InnoESG Prize is organised by a consortium of companies, including the SocietyNext Foundation, and is designed to encourage companies to innovate and transform their core business by adapting to, or incorporating, the sustainability/ ESG dimension. The Group has been committed to achieving sustainable development for many years. The Group was recognised by the judging panel for its efforts over the years in realising a sustainable society, working with stakeholders to create a sustainable future through Corporate Social Responsibility (CSR) programmes and a range of environmental initiatives.



Add New Energy is one of the Founding Members of GBA Carbon Neutrality Association



Add New Energy was awarded the InnoESG Care Prize 2021

Approach to Sustainability

Materiality Themes

In order to identify the material themes to be disclosed in the Report, we conducted stakeholder engagements. These engagements aim to understand our stakeholders' concerns, prioritise the material topics, and decide the material themes. We conducted surveys and workshops during this process, especially by engaging with our employees and department heads. Four material themes with prioritised topics are confirmed: About Our Business, Internal and External Governance, Harmony with People and Harmony with the Environment.

ESG aspects set out in the ESG Reporting Guide		Material Themes
A. Environmental	A1: Emission	Harmony with the Environment
	A2: Use of Resources	
	A3: The Environment and Natural Resources	
	A4: Climate Change	
B. Social	B1: Employment	Harmony with People
	B2: Health and Safety	
	B3: Development and Training	
	B4: Labour Standards	
	B5: Supply Chain Management	Internal and External Governance
	B6: Product Responsibility	
	B7: Anti-corruption	
	B8: Community Investment	Harmony with People

Approach to Sustainability

Our Stakeholder Engagements

We value the advice of our internal and external stakeholders. In this regard, we are striving to improve the channels of communication and engagement with our stakeholders, and to understand in more ways the perspectives of our stakeholders, including investors, customers, suppliers, employees and the community, on our business in order to help us become a sustainable business. During the Reporting Year, we continued to communicate with our stakeholders through the following channels:

Stakeholders	Stakeholder Category	Communication Channels/Methods
Investors	Shareholder	Meeting of Shareholders Performance Report Online media and roadshows
Customers	Steel manufacturers	Service hotline Online media
Suppliers and Contractors	Facility supplier Contractors	Supplier questionnaire Site visits to suppliers
Employees	Frontline workers Administrative staffs Senior managers Directors	Vocational training and development of employees Launching of staff activities Satisfaction survey
Community and Non-governmental Organizations	Neighbouring counties	Community public welfare project Organise employees to participate in volunteer activities
Research Institutes and Associations	Academic institutions Industry associations	Research collaborations Research investments Participate in industry associations and forums
Government and Regulatory Agencies	Local governments	Thematic presentations Disclosure of information

About our Business

Business Perspective

We are the largest privately-owned producer of ilmenite in Shandong Province, the People's Republic of China (the "PRC"). The mines currently owned by us include Yangzhuang Iron Ore Mine, Zhuge Shangyu Ilmenite Mine, Qinjiazhuang Ilmenite Mine and Gaozhuang Shangyu Ilmenite Mine. We are principally engaged in the exploration, mining and processing of iron ore and ilmenite, with a focus on the production and sale of iron ore concentrates and the development of the business of titanium concentrates. Our iron and titanium concentrate products are primarily sold to producers of iron ore and steel.



Shandong Province, PRC

Yangzhuang Iron Mine,
Zhuge Shangyu Ilmenite Mine,
Qinjiazhuang Ilmenite Mine,
and Gaozhuang Shangyu Ilmenite Mine

During the Reporting Year, our principal operations were focused on the Yangzhuang Iron Mine and the Shangyu Ilmenite Mine in Zhuge. In order to further safeguard the operation of our mines, we seized the favourable opportunity to make full use of our existing resources and intensified the trading of foreign mines. During the Reporting Year, we processed 1.22 million tonnes of iron ore concentrates on behalf of our customers, and the Yangzhuang and Shangyu plants processed 1.83 million tonnes of Brazilian ore and produced 1.19 million tonnes of iron ore concentrates. Yangzhuang Iron Mine processed 200,000 tonnes of ore and produced 30,000 tonnes of iron ore concentrate.

About our Business

Environmental and Social Expenditures

At all stages of the project, from planning to completion, we have managed well the positive and negative impacts of our mine projects (please refer to the sections on “Harmony with People” and “Harmony with the Environment” for further details). During the Reporting Year, in order to fulfill our commitment to sustainable development, we have cumulatively invested over RMB8.01 million in conserving natural resources and rebuilding ecological systems.

Our environmental contributions include, but are not limited to:

- Cooperation with scientific and research institutions to improve ore processing techniques and preserve mineral resources;
- Innovation of patented tailing dry discharge system saves water resources and minimizes the risk of tailing dam break;
- Afforestation to offset greenhouse gas (“GHG”) emissions; and
- Reclamation of fields to improve soil fertility.

Our social contributions include, but are not limited to:

- Environmental stewardship for the surrounding community; and
- Poverty alleviation, education system construction and sponsorship for community activities.

Environmental and Safety Licenses

Our applications for new and renewal of existing exploration and mining rights are subject to approval by the relevant local government authorities, including the passing of environmental impact assessments and the issuance of production safety permits. In addition to confirming our compliance with relevant laws and regulations, the application process provides us with an opportunity to reaffirm our corporate responsibility and commitment to sustainable development.

We currently own the exploration and mining rights of the Yangzhuang Iron Mine, which has an annual mining capacity of 2.3 million tonnes.

The mining license for Yangzhuang Iron Mine has been successfully obtained, while the process for the safety production permit is currently underway. Therefore, there were no mining operations conducted during the Reporting Year.

According to the relevant laws and regulations, our third-party contractors currently have permits for mine blasting work and can legally carry out blasting work at the Yangzhuang Iron Mine.

Internal and External Governance

Ethics and Conduct

We believe that honesty, integrity and justice are valuable assets for our long-term development. All staff should consciously safeguard the Group's reputation and overall interests, and are strictly prohibited from bribery, extortion, fraud, money laundering, disloyalty and corruption. To this end, we have formulated the "Integrity Pledge", "Integrity Agreement" and "Disciplinary Regulations" to prevent, monitor and report any disciplinary offences occurring in the daily operation of the Group. Once an employee is found to have violated any employee duties, we will immediately investigate and dismiss them by the Group's management system; if any employee is suspected of committing a crime, they will be transferred to the judicial authorities to pursue criminal liability; if any employee has caused any economic loss to the Group, they should bear all the compensation responsibilities under the Group's regulations.

The Board is committed to regularly monitoring and reviewing the Group's anti-corruption programme and ensuring that all anti-corruption controls are working effectively. During the Reporting Year, the Board participated in a training programme on anti-corruption topics for listed companies, and we also conducted anti-corruption training for our general staff to enhance their awareness and knowledge of anti-corruption.

Since the foundation of the Group and under good internal governance, we have not received any report or complaint case of malpractice against the Group or its staff.

0 Legal Cases

Our Complaints Hotline is open to the public at all times, and stakeholders are welcome to feedback their suggestions or complaints through our hotline, email or letter. We are fair and responsive to all suggestions and complaints, and all personal information will be treated in the strictest confidence.

Internal and External Governance

Supply Chain Management

As one of our most important stakeholders, suppliers are the cornerstone of our sustainable development. Since the activities of our suppliers will indirectly affect our environmental and social performance, we have formulated corresponding supplier management policies and management practices, such as the “Procurement Management Regulations”, “Supplier Management Regulations”, “Contractor Management Regulations” and “Qualified Supplier Evaluation Form”, to ensure that the activities of our suppliers comply with the requirements of the local regulatory authorities as well as our supplier selection criteria. The principal supplier management practices include supplier questionnaire surveys and site visits to suppliers’ factories, thereby ensuring that our suppliers are responsible for the quality management of their products, for the environment and their employees, and for the development of the community. At the same time, we are committed to building a transparent supply chain by requiring all suppliers and contractors to sign an “Integrity Agreement” and to comply with the “Disciplinary Management Requirements” in the course of cooperation.

We are committed to decreasing the environmental impact of our suppliers, an example of which is our focus on reducing the carbon dioxide emissions generated by the vehicles used by our suppliers to transport their products to us, with 80% and 91% of our production equipment suppliers and office facility suppliers currently coming from within Shandong Province, respectively, thereby enabling us to avoid unnecessary indirect greenhouse gas emissions.

Besides our facility suppliers, we also care for our contractors. Blasting and mining contractors, as one of our most important suppliers, they are responsible for blasting and mining works at Yangzhuang Iron Mine. We regularly hold safety meetings with our blasting contractors and mining contractors every ten days to ensure that they operate safely and to enhance the emergency response capabilities of our workers in the event of a sudden emergency.

Number of suppliers by geographical region

Mainland China	146
Other regions	0

Internal and External Governance

Product Responsibility

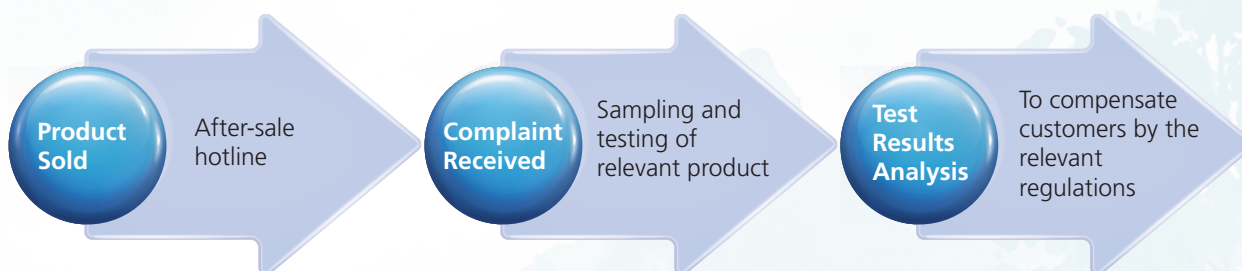
Production Quality Assurance

Producing quality products brings confidence to our stakeholders and is our ultimate goal. Based on the cornerstone of internal governance and external supply chain management, we implement a stringent quality assurance management system to further improve the quality of our products. We firstly ensure that production activities are carried out in a disciplined manner by our employees, and secondly, we carry out daily inspections and regularly overhaul and upgrade our production equipment. In addition, we provide our employees with job skills training to further enhance their vocational skills and their awareness of quality control throughout the process. Through the above quality assurance methods, we can eliminate the sale of any substandard products to our customers. All of our products comply with the regulations and rules of the relevant regulatory authorities and fully meet the needs of our customers.

After-sales Service

To improve our after-sales service, we formulate relevant complaint and monitoring mechanisms for our customers and regulatory bodies respectively. For our customers, to establish a long-term harmonious and stable relationship, we adopt a responsible and proactive attitude and endeavour to solve any problems related to product quality. When a product quality problem arises, we will take samples of the problematic product and test it, and if the quality problem is caused by our company, we will assume the responsibility according to the relevant system and compensate for the loss caused to the customer.

Under the above management system, during the Reporting Year, we did not receive any complaints or returns regarding the quality of our products, nor did we recall any of our sold products due to any safety or health concerns.



Internal and External Governance

Technology and Intellectual Property

Technology Innovation

To improve the quality of ilmenite concentrates and further strengthen the competitiveness of the industry, we maintain close research co-operation with the Institute of Process Engineering of the Chinese Academy of Sciences, and at the same time introduce the latest ore processing technology from the Siberian Branch of the Russian Academy of Sciences. We are investing in processing technology that not only improves end-product quality and value, but also reduces processing costs.

Protection of Intellectual Property Right

In order to strengthen the protection of intellectual property rights and regulate the management of intellectual property rights, we have established an intellectual property management department and related internal policies. Our intellectual property rights include:

- Patent rights and technical secrets;
- Trademark right and know-how;
- Copyright (including computer software and programmes); and
- Other intellectual property rights listed in relevant national laws and regulations.

In particular, we were awarded a national patent in China for our tailings dry-drainage system, which greatly enhances our efficient use of water and mineral resources.

During the Reporting Year, the Group received:

- **18** utility model patents were granted;
- **7** computer software copyrights were registered and;
- **2** invention patents were obtained.

We encourage our employees to realize their subjective initiative and creative power, and promote the application of scientific and technological achievements in their daily work. All of our employees are expected to raise awareness of IP management within their areas of responsibility.

During the Reporting Year, the Group did not experience any breach of intellectual property rights.

Internal and External Governance

Privacy Protection

Customer Privacy

In order to protect the privacy of our clients, we have formulated a personal information management system following the regulations on file management and confidentiality, and our clients' files are managed and encrypted by dedicated personnel.

When handling confidential information, we require our staff to comply with the Group's "Staff Responsibility for Integrity and Self-discipline Statement" and applicable laws and regulations. To maintain confidentiality, we only collect and retain information about our business partners and customers that is necessary for our business activities. We obtain informed consent from relevant stakeholders before collecting data to ensure that they understand the purpose of data collection and how it will be used.

Harmony With People

“Harmony with people” is one of the core values of the Group, we always pay attention to and protect the rights of employees, constantly improve the employee welfare system, and strengthen the management of employee health and safety. We are committed to creating a fair, open, harmonious and inclusive working environment for our employees, thus enhancing their sense of belonging to the Group.

Safety and Health

We deeply understand the inherent dangers of the mining industry, so we put the safety and health of our employees in the first place. Based on the characteristics of our work, we have consolidated the possible risks to the safety and health of our personnel, and have formulated relevant safety management policies such as the “Safety Inspection Work Management Regulations” and the “Labour Protective Equipment Issuance and Management System”. We believe that by strengthening various forms of safety management, we can protect the occupational safety and health of our employees, avoid and minimise the occurrence of safety accidents, improve the safety of the Group’s property, and prevent and control the hazards of occupational diseases.



Fire Fighting Skills Competition



Work Safety Meeting



Production Safety Lectures

0

Number of deaths due to work in the past three years including the Reporting Year

0

Number of working days lost due to work injury

Harmony With People

Adhering to the core production safety policy of “Safety First, Prevention First, Comprehensive Management”, the Group has established a responsibility system for production safety at all levels of leadership, functional departments, engineers and technicians, and post operators in the production process. Under this production safety responsibility system, we conduct regular inspections of the overall production process to eliminate major accidents. If any responsible person is found to be in dereliction of duty, he or she will be held accountable.

The Group’s approach to the implementation of our employee safety policy to ensure the occupational safety of our employees is detailed below:

- Developing emergency rescue plans and regularly holding exercises;
- Holding regular safety meetings;
- Providing education and training for employees;
- Holding safety meetings regularly with our blasting and mining contractors;
- Organising physical examinations on occupational hazards for employees before, during and after operations;
- Setting up emergency sheltering system, monitoring and inspection system, personnel location system (PLS), communication system, water and air supply system for the underground personnel;
- Maintaining underground drainage system from the dangers of underground water flooding;
- Establishing a publicity room and publicity corridor for safety education; and
- Recording the distribution and condition of personal protective equipment (PPE).

We not only focus on the physical health of our employees by providing them with a safe working environment, but also their mental health by providing them with mental health management, which includes regular communication with our employees and organising health seminars. Under our comprehensive health management system, we did not have any work-related injuries or absences from work during the Reporting Year, and our employees were able to maintain good physical and mental health.

Harmony With People

Employment Relations

We place great importance on the human resource management of the Group, which is embodied in our people-oriented management concept. In order to regulate the staff recruitment and hiring system, avoid unfair recruitment problems and enhance the core competitiveness of the Group, we have formulated stringent recruitment and hiring procedures and complied with relevant recruitment management regulations such as the "Recruitment Management Regulations", "Salary Management Regulations" and "Training Management Regulations", etc. The Group mainly adopts an open recruitment mode, with recruitment being conducted by the Human Resources Department and supervised by the Supervisory Department. If any recruitment irregularities are detected, including the employment of minors under the age of 16, forced labour and illegal labour, the human resources department and the supervisory department will jointly investigate, implement and deal with the matter seriously by the regulations.

To further establish a harmonious relationship with employees, we provide equal career development and promotion opportunities to our employees, and treat employees of different genders, ages, regions and cultural backgrounds fairly and equitably. At the same time, in order to improve the enthusiasm and creativity of all employees, the Group encourages employees to give full play to their potential. And set up a reward mechanism to reward employees according to the completion of their performance.

To protect the legitimate rights and interests of all employees and provide them with work efficiency, we strictly comply with the international labour laws and the labour standards of the regions where we are located, and have formulated several internal system documents, such as the "Employee Welfare Management Regulations", "Attendance Management Regulations", "Performance Management Measures", "Incentive and Merit Assessment Management Regulations", etc., to standardise our management.

During the Reporting Year, the Group has not experienced any incidents of labour discrimination, harassment, child labour, forced labour and other violations of labour employment regulations.

Harmony With People

Employee Activities

In order to create a more favourable working atmosphere, to balance the daily work and life of the staff. The Group regularly holds a series of activities for employees, such as the Women's Day, Qingming Festival, Labour Day and National Day and other staff activities. We hope that through different types of staff activities, we can promote the interaction and communication between employees, improve the ability to collaborate with each other, so as to enhance the cohesion of all employees.



Celebration of Women's Day



Lucky Draw during the Dragon Boat Festival

Harmony With People



Parent-child Activity



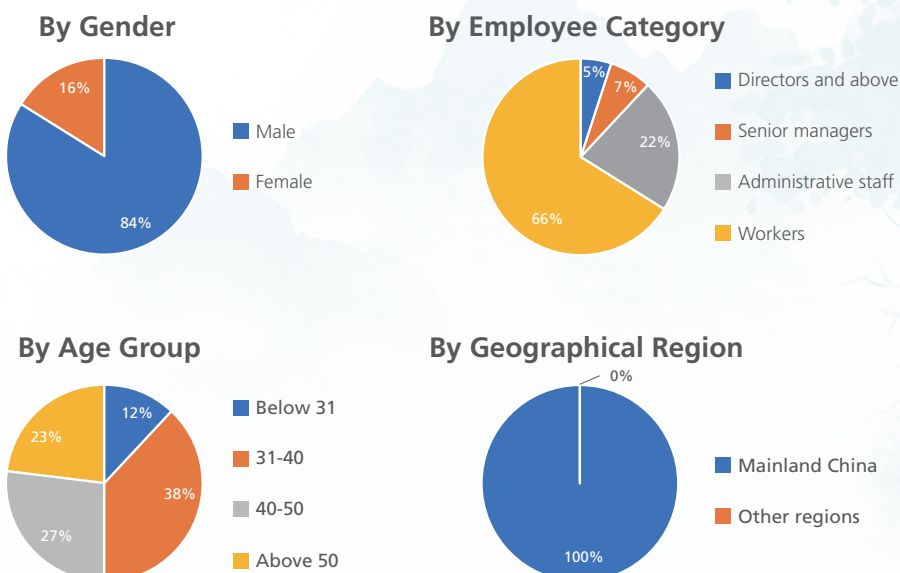
Business Knowledge Competition

Harmony With People

By the end of the Reporting Year, we had a total of 147 active employees (excluding contractors), the distribution of which is characterised below:

Key Performance

	2023	2022
Total	147	199
By Gender		
Male	124	173
Female	23	26
By Employee Category		
Directors and above	7	7
Senior Managers	11	13
Administrative Staff	32	16
Workers	97	163
By Age Group		
Below 31	17	16
Between 31-40	56	55
Between 41-50	40	57
Above 50	34	71
By Geographical Region		
Mainland China	147	190
Other regions	-	9



Harmony With People

Turnover Rate

By the end of the Reporting Year, our turnover rate was 35.37%

Turnover Rate (%)	2023	2022
Total	35.4%	9%
By Gender		
Male	31.5%	9.2%
Female	56.52%	7.7%
By Age		
Below 31		12.5%
Between 31-40	3.6%	10.9%
Between 41-50	30.0%	10.5%
Above 50	52.78%	7.0%
By Geographical Region		
Mainland China	52.0%	9.0%
Other regions	0%	0%

The HR department of the Group organises seminars, communications and distributes employee satisfaction surveys to employees annually, and collects, analyses, discusses and summarises the results of the surveys in order to formulate and implement targeted improvement plans. The survey questionnaire included employees' satisfaction with the Group's management, policies, culture, welfare benefits and environmental atmosphere. Communication through staff seminars and anonymous staff surveys helps the management to better understand its staff, thereby reducing staff turnover.

Training and Development

We encourage our employees to continue their education and enhance their professionalism after joining our company, therefore, we continue to improve our employee training system. Each year, we update and improve our staff training programmes based on our overall business planning, business development needs and feedback from staff surveys. In the Reporting Year, we elaborated our staff training system and launched specialised training courses for different types of talents, in order to enhance the Group's competitiveness in terms of talent and ultimately promote the sustainable development of the enterprise. For the purpose of fully supporting the sustainable development of our employees, during the Reporting Year, we continued to improve our internal staff training system by revising the "Staff Training Management Regulations" and providing a diversified range of staff training programmes.

Harmony With People



New employee Employee Orientation



Emergency Skills and Knowledge Training

Harmony With People

During the Reporting Year, the coverage rate of staff participation in occupational training was 100%, and the average number of hours of occupational training was 114.36 hours. We have implemented our policy of equal treatment of staff and there is no gender discrimination.

During the Reporting Year, the Group achieved the following staff development and training targets.

	Percentage of staff that received training		Average training hours completed per employee (Hours)	
	2023	2022	2023	2022
By Gender				
Male	100%	100%	2.097	9.316
Female	100%	100%	10.435	1.476
By Employee Category				
Directors and above	100%	100%	7	–
Senior Managers	100%	100%	11	227.750
Administrative Staff	100%	100%	32	29.600
Workers	100%	100%	97	9.642

Harmony With People

Community Engagement

We continue to pay attention to community development issues and always regard social responsibility as an important part of our corporate development strategy. In order to establish a good partnership with local communities, we are committed to creating a win-win situation, building a green and harmonious mining environment, and at the same time promoting the sustainable development of the local environment, society and economy. In the Reporting Year, the Group's donations to community assistance and education support projects total RMB85,000, benefiting approximately 78,000 people.

Supporting the development of education

The Group established a joint primary school for the community in Yishui County near the Yangzhuang Iron Mine and made cumulative donations of RMB121,000 for education. In addition, we also made social contributions to poverty families by providing them with relief funds, giving scholarships to outstanding community families who have passed the university entrance exams, and donating RMB1.2 million to university students.

Providing employment opportunities for villages around the mines

The Group has actively provided employment opportunities to the villages surrounding the mines in which it is located, including a cumulative total of approximately 160 jobs and opportunities in Qinjiazhuang, 50 in Shuiniu, 38 in Gongdan Mountain and 120 in other villages, totalling approximately 400 jobs and opportunities. This demonstrates that in the course of the Group's development, we will give priority consideration to the rehousing of people in the surrounding communities.

Creating a favourable environment for sustainable development

We have invested over RMB120,000 in the environmental management of the neighbouring communities. We not only make comprehensive use of our by-products for mine rehabilitation and then provide free self-grown fruits and vegetables to the neighbouring villagers, but also carry out greening of barren mountains, environmental management of villages and towns, and provide anti-haze and disaster relief for the neighbouring communities respectively.

Helping the Poor and the Widows and the Elderly

We donated a total of RMB443,500, which was used for comforting the widows and orphans and constructing community facilities.

To further contribute to the community, benefit the public and build up a positive reputation and social image, we sponsored community activities and actively participated in it, contributing a total of more than RMB700,000 in funds.

Harmony With Environment

Responding to Climate Change

We actively respond to international and domestic policies such as the Paris Agreement and the “Chinese government’s National Climate Change Adaptation Strategy 2035”, in order to achieve the goals of “carbon peaking” and “carbon neutrality”. Meanwhile, we have initiated a comprehensive risk assessment and management programme across the Group with reference to the disclosure framework recommended by the Task Force on Climate-related Financial Disclosure (TCFD).

Governance

We integrate ESG governance into the Group’s strategic development, with each department head regularly reviewing and updating the Group’s development plans, activities, targets and objectives.

Strategy

In response to the trend of global climate change, the Group understands that the mutual balance between energy utilisation and world climate change is of great significance to our long-term sustainable development. Therefore, we co-operate with scientific research institutes to enhance the processing technology of ore resources and the efficiency of energy utilisation, so as to adapt to the transformation of a low-carbon economy and slow down the pace of climate change.

Risk Management

We recognise that climate change may affect the Group’s operations and business. Climate change can lead to a higher frequency of extreme weather events, which may affect the safety and health of our employees and our daily operations. To address the challenges of climate change, we will endeavour to improve energy efficiency and enhance resource recycling to reduce emissions. We will consider developing climate-related policies to identify risks and opportunities in the low-carbon transition, including physical risks and transformation risks. In addition, we will keep abreast of the latest policies and standards to ensure that the Group’s business meets the relevant requirements.

Metrics and Targets

We have compiled and disclosed statistics on emissions of air pollutants, greenhouse gases, energy consumption, water consumption and waste generation in the Reporting Year. In the future, we will continue to improve the collection and analysis of relevant data to demonstrate our concerns on climate change-related issues more comprehensively.

Harmony With Environment

Resource Management



Flowers blossom in the Spring Season (Yuanzhuang Iron Mine)

The natural environment is our fundamental basis for survival and development. In the process of company development, we adhere to the concept of “protection in development, protection in development”, and carry out environmental management for production processes with potential environmental impacts to maintain a good surrounding ecological environment. To provide a green working environment for our employees, a green living environment for our neighbouring communities, and to enhance the international competitiveness of our industry, we have proactively initiated environmental management work within the Group and in the neighbouring communities. During the Reporting Year, the Group did not find any major environmental-related incidents of non-compliance.

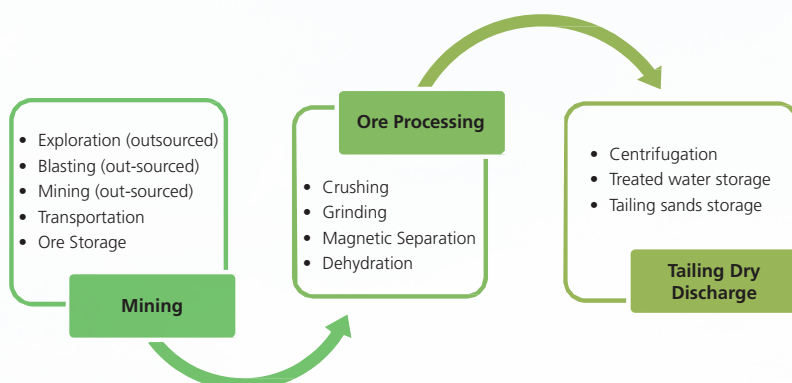
To minimise energy consumption, we strictly comply with the Energy Conservation Law of the People’s Republic of China and other relevant laws and regulations in the places where we operate, and have accordingly formulated the “Energy Management Measures” and set up an energy control organisation and an energy conservation leading group to establish and improve the Group’s management organisations and management network, and to manage and supervise the rational use of energy by the enterprise.

Harmony With Environment





During the Reporting Year, Yangzhuang Iron Mine improved the utilisation rate of mineral resources by recovering part of the open pit ores and processing iron ore concentrate in the process of environmental management. Besides, equipment with outdated production capacity was eliminated and new equipment such as high gradient magnetic separators, cyclones and filters were installed, which improved work efficiency and reduced energy consumption. This measure improved efficiency and reduced energy consumption, resulting in a reduction in electricity consumption of approximately 5.5 million kilowatt-hours during the Reporting Year. Meanwhile, the Group used advanced mine processing equipment to process imported Brazilian ores. The Yangzhuang and Shangyu plants processed 1.83 million tonnes of Brazilian ores and produced 1.19 million tonnes of iron ore concentrates.

Resource Consumption and Intensity	Units	2023	2022
Water (<i>mining, processing, municipal use</i>)	m ³	499,775.000	399,594.000
Water intensity (<i>per tonne output</i>)	m ³ /tonne	0.410	0.254
Electricity (<i>mining, processing, municipal use</i>)	kWh	19,144,172.000	19,133,846.000
Electricity intensity (<i>per tonne output</i>)	kWh/tonne	15.720	12.141
Petrol (<i>transportation use</i>)	GJ	814.164	1,898.967
Petrol intensity (<i>per tonne output</i>)	GJ/tonne	0.001	0.001
Diesel (<i>transportation use</i>)	GJ	15,235.762	23,155.400
Diesel intensity (<i>per tonne output</i>)	GJ/tonne	0.013	0.015
Total Energy	GJ	16,049.926	25,054.367
Total Energy Intensity	GJ/tonne	0.013	0.016

Harmony With Environment



Our production activities, which primarily consist of mining, ore processing and tailings dry drainage management, are associated with a variety of potential environmental impacts.

<p>Potential impacts on air quality</p>  <p>Carbon dioxide</p>	<ul style="list-style-type: none"> • Particulate matters (PM) produced and emitted during mining and ore processing stages period. • GHG produced and emitted in all operation stages period. • Air pollutants produced and released during blasting and ore transport.
<p>Potential impacts on water resources</p>  <p>Water</p>	<ul style="list-style-type: none"> • Reduction of groundwater content during exploration and blasting. • Change of surface and groundwater dynamics during exploration and blasting. • Degradation of the quality of water resources during ore processing.
<p>Potential impacts on land</p>  <p>Soil</p>	<ul style="list-style-type: none"> • Land area occupied by treated water and tailings storage. • Change in geological structure during exploration and blasting.
<p>Potential impacts on ecosystem</p>  <p>Biodiversity</p>	<ul style="list-style-type: none"> • Loss of flora and fauna habitat within and outside the mine area • Decreased abundance and diversity of flora and fauna, and declining populations. • Ecosystem fragmentation.

We have taken effective measures to avoid and minimise the above potential environmental impacts, which are described in the following sections.

Harmony With Environment

Water Resources Management



Spring lake (Yangzhuang Iron Mine)

Zero sewage discharge – As one of the first licensed green mines in China, this reflects our basic principle of “conserving water and using water for multiple purposes”. Zero sewage release refers to the wastewater from the ore production process and domestic sewage, which are fully collected and treated in our tailings dry discharge system and domestic sewage treatment facilities respectively.

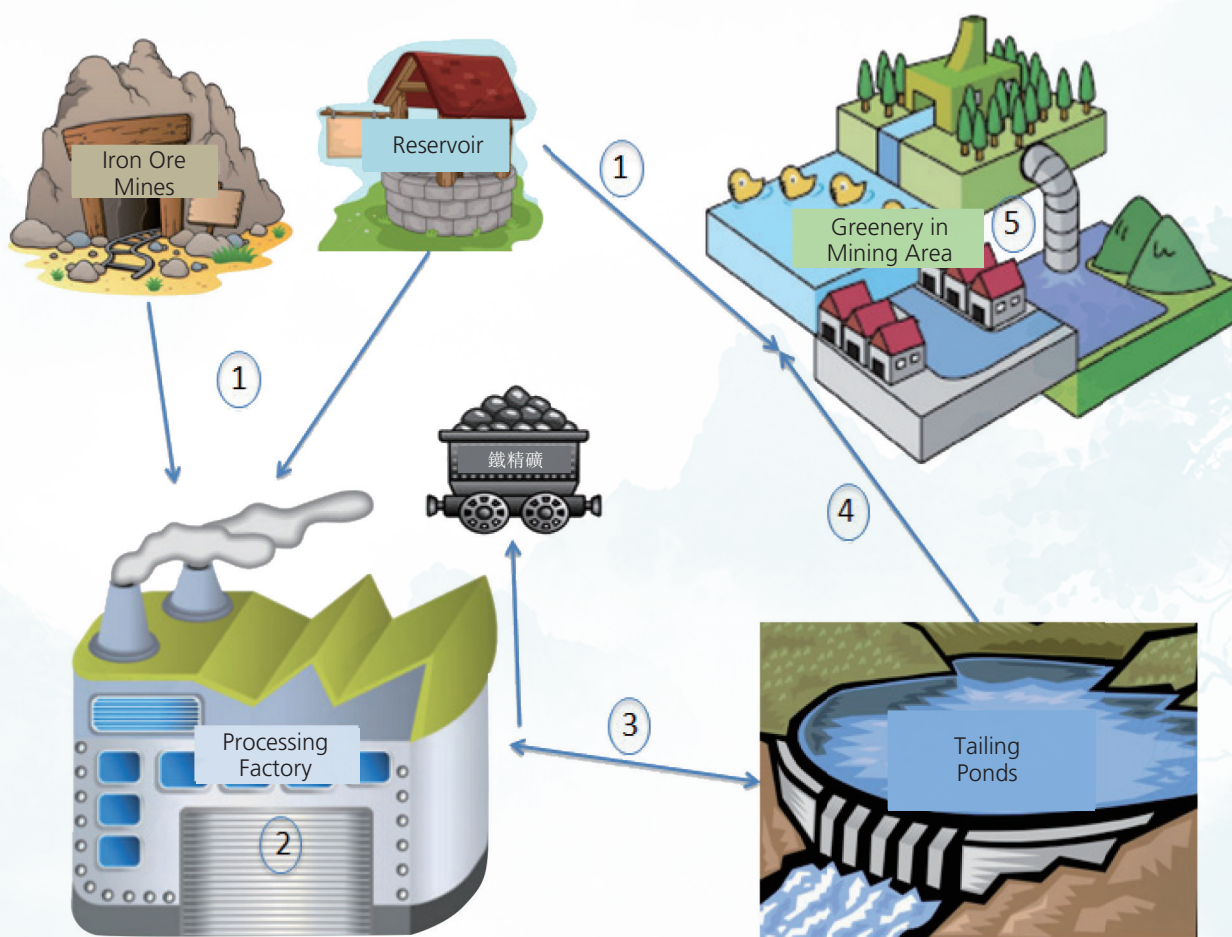
We strictly comply with all local regulations regarding wastewater discharges. During the Reporting Year, the sewage compliance discharge and disposal rate was 100%, and no major incidents of non-compliance related to wastewater discharges were detected.

Harmony With Environment

We do not have a problem with water abstraction. We aim to improve water efficiency and reduce water consumption by implementing the following directional objectives:

- Using reclaimed water in daily operations;
- Reducing water consumption by increasing the use of water saving devices;
- Maintaining water intensity levels by increasing the proportion of water saving devices;
- Using closed-circuit water, the plant achieves zero wastewater discharge, which greatly saves water.

Our production process uses physical processing methods to minimise any impacts that may be caused by chemical processing methods. We have invented a tailings dry drainage treatment system to help us achieve zero wastewater discharge and maximise the use of tailings sand. Our water recycling is shown in the diagram below:



Harmony With Environment

1. Collecting groundwater, rainwater and reservoir water generated by the underground mining process for use as mining water and spraying water to reduce dust, and part of the well water is used for domestic purposes;
2. Collecting water is mainly used in the ore processing workshop, and ore processing wastewater will be collected in the water recycling equipment;
3. Using the tailings dry drainage system to treat the wastewater collected in the ore processing workshop, separating the water from the tailings sand and storing the water in the reuse pond for recycling in the ore processing;
4. Part of the water from the reuse basin will be used in the artificial lake;
5. Furthermore, domestic sewage is treated in our own treatment facilities and then used for greening and irrigation in the mine area.



Our tailings dry drainage system has not only obtained a national patent, but also has a treatment capacity that fully meets our daily production needs, enabling us to fully utilise recycled water for production. Our natural water resources and treated recycled water meet the relevant national standards and can be used for production, domestic and greening purposes.

Harmony With Environment

Energy Management

Resources Utilisation

We aim to increase our operational recovery rates by selecting shallow hole retention and segmented room mining methods for mining, which allow us to maximise the efficiency of utilising proven iron ore and extend the life of the mine.

Energy Utilisation

We are deeply conscious of the key role that business plays in reducing global greenhouse gas emissions. We are therefore committed to reducing our own greenhouse gas emissions and encouraging our stakeholders to participate. Our main approaches to reducing GHG emissions are described below:

- We pre-screen the iron ore we mine to remove waste rock and reduce our mill throughput. Ore pre-sorting helps us to reduce our energy and electricity consumption, as well as our direct GHG emissions and air pollutants.
- We improved our processing steps to reduce the size of the ore fed into the mill by using more crushing and less grinding. This improvement also helps us to reduce energy and electricity consumption, with a corresponding reduction in greenhouse gas emissions, while the smaller ore size helps to improve the operational efficiency of the magnetic separation process and the quality of the final iron ore concentrate.
- As one of the first licensed green mines in China, we planted a large number of selected flora within the mine area, laying the groundwork for the implementation of carbon offsets to offset our greenhouse gas emissions. For more information on greening and afforestation, please refer to “Biodiversity and Land Use”.

We are reducing the Group’s emissions and energy consumption by setting the following directional targets:

- Maintaining (or reducing) the level of energy consumption compared to last year;
- Using cleaner fuels to replace conventional fossil fuels;
- Increasing the proportion of renewable energy used; and
- Optimising mining and iron ore processing processes to reduce electricity consumption.

Harmony With Environment



Almond flowers white like clouds (Yangzhuang Iron Mine)

GHG Emissions ¹	Units	2023	2022
Direct GHG emissions (Scope 1)	Tonnes of CO ₂ e	1,087.793	1,729.552
Energy indirect GHG emissions (Scope 2)	Tonnes of CO ₂	12,659.084	18,022.170
Total GHG emissions	Tonnes of CO ₂ e	13,746.877	19,751.722
Total GHG emissions intensity (per tonne output)	Tonnes of CO ₂ e/tonnes	0.011	0.013

Depending on the current type of energy consumption, we will consider the possibility of replacing part of our energy needs with renewable electricity (e.g. wind power). During the Reporting Year, the Group did not identify any major non-compliance incidents related to emissions.

¹ The scope of data does not include exploration and blasting works outsourced to our contractors.

Harmony With Environment



Tree-lined road (Yangzhuang Iron Mine)

OTHER EMISSION

Air Pollutants

The suspended particles generated mainly from mining and open storage of ores, the plant mainly adopts regular water spraying measures to reduce dust. The suspended particles generated during the processing of ore-dressing are firstly reduced by water spraying, and then emitted into the atmosphere after being dusted by dust removal towers, the emission concentration complies with the standards of the Law of the People's Republic of China on Prevention and Control of Air Pollution. Our owned vehicles, which are minimal in number and equipped with exhaust gas cleaning devices, produce minimal levels of SO_x and NO_x which are not disclosed at this stage. For exploration, blasting and mining work outsourced to contractors is also not disclosed in the Reporting Year.

Harmony With Environment

Non-hazardous Emissions

Our non-hazardous emissions consist mainly of domestic waste.

We use waste rock from our mines for paving, tailings sand and tailings mud cake for cement production and land backfilling. These measures eliminate the need for tailings dams and significantly reduce the area of land occupied and the risk of dam breaks.

During the Reporting Year, the Board attended the training on “Paperless Listing and Subscription Mechanism, Online Document Display and Guidance Materials on Reducing the Types of Documents to be Displayed” which advocates the reduction of paper consumption. Therefore, the Report will continue to be published in electronic format, which will help to reduce resource consumption and waste generation.

We are committed to creating a low-waste environment and will minimise adverse environmental impacts by implementing the following targeted objectives.

- Upgrading raw materials from substandard products or wastes;
- Reusing raw materials from the mining process to reduce waste; and
- Maintaining (or reducing) the intensity of generation of non-hazardous waste compared to last year.



Due to our business nature, packaging materials are not a material issue to our operations. Therefore, we do not disclose them in the Report.

Harmony With Environment

Biodiversity and Land Use

We recognise that mining activities can cause a certain degree of surface damage and that the Group's principal activities may have an impact on the local physical environment, which in turn influences its biotic environment. Without proper management systems, local ecosystems may become unbalanced, causing irreversible environmental impacts. Therefore, we focus on protecting our land and ecosystems through prevention, control, mitigation and compensation. In recent years, we have invested more than RMB52 million in natural resource conservation and ecological construction, including resource conservation covering water and mineral resources.

- 100% green coverage of the greensable area;
- 100% of the recycled water treated in the tailings dry drainage system was utilised as production water during the Reporting Year;
- High recovery rate of magnetised iron, increasing the utilisation of mineral resources;
- Over 200,000 trees and other plants were actively planted;
- Geographical remediation and afforestation to Gong Dan Mountain, including slope preparation of about 9,500 m², crack treatment of about 1,280 metres, blasting of about 15,425 m³ of dangerous rocks, earth backfilling of about 3,900 m³, and grassland greening of about 10,479 m²; and
- Landscaping of the damaged hills on both sides of the highway will be carried out comprehensively afforested.

Case Study

For open-pit mines and tailings dams used prior to the establishment of the Group, we minimise the possibility of tailings dams collapsing by greening mining areas and cutting slopes, widening and stabilising tailings dams, as well as greening the tailings dams. With the witness of the local government and neighbouring communities, we achieved effective results in environmental management and eventually became one of the first batch of national green mines jointly certified by the Ministry of Land and Resources and China Mining Association, one of the five iron ore mines certified. In 2016, the Group was awarded the 2015 top 10 most influential green eco-environmental enterprises in Shandong Province.

During the Reporting Year, the Group promoted green mines and garden-style mine construction, in order to restore the ecosystem, we planted a large number of trees in the Yangzhuang iron ore mine area, and constructed the artificial lake attraction.



Harmony With Environment



Mining Area Greening Achievements (Yangzhuang Iron Mine)