



兖矿能源  
YANKUANG ENERGY



2022

Environmental, Social and Governance Report

兖矿能源集团股份有限公司  
YANKUANG ENERGY GROUP COMPANY LIMITED

## Report Overview

Yankuang Energy Group Company Limited (hereinafter referred to as "Yankuang Energy", "the Company" or "we") is well aware of our social responsibility and would like to publish our Environmental, Social and Governance ("ESG") report (entitled Social Responsibility report in fiscal year 2020 and before, hereinafter referred to as "ESG report") to share with the community our performances around and commitments to ESG practices, hoping to further increase our mutual trust and cooperation and to promote the sustainable development of the Company and the society.

The Board and all directors guarantee that the report contains no false or misleading statement or major omission. They will assume individual and joint liability for the authenticity, accuracy, and completeness of the report.

### Reporting Entity

The reporting entity, Yankuang Energy and its subsidiaries, remains consistent with that disclosed in the accompanying *2022 Annual Report* (the "Annual Report").

### Reporting Period

January 1, 2022, to December 31, 2022. (Certain content of the report may extend beyond this reporting period.)

### Reporting Principles

**Materiality:** Stakeholders are invited to identify and assess related ESG material issues of the Company. The Board of Directors has reviewed the assessment results and disclosed them in this report.

**Quantitative:** This report discloses quantitative data related to the environment and society, accompanied by the standards and methodologies used for the statistics and calculation.

**Consistency:** The data disclosed in this report apply statistical methodologies consistent with those of previous years.

### Preparation Basis

The report is prepared based on the relevant requirements of *Guidelines of Shanghai Stock Exchange of Self-Regulation for Listed Companies No. 1 – Standardised Operation*, as well as the *Environmental, Social and Governance Reporting Guide ("ESG Reporting Guide")* issued by The Stock Exchange of Hong Kong ("Hong

Kong Stock Exchange" or "HKEX") and other related requirements, with reference to the *Sustainability Reporting Guidelines* of Global Reporting Initiative ("GRI") and the *Social Responsibility Guidelines (ISO 26000:2010)* of International Organisation for Standardisation, etc.

### Data Source

The financial data of 2022 involved in this report is primarily based on the 2022 Annual Report. In case of any inconsistency of the data contained therein with the Annual Report, the Annual Report shall prevail. Other major data of the Company are calculated according to national regulations or industry standards. Unless otherwise specified, the monetary amounts involved in this report are denominated in Renminbi ("RMB").

### Report Language

The report is published in simplified Chinese, traditional Chinese, and English. In case of ambiguity, the simplified Chinese version shall prevail.

### Report Release Form

The report is released in both print and electronic form. The electronic version is accessible through the websites of Shanghai Stock Exchange ([www.sse.com.cn](http://www.sse.com.cn)), the Stock Exchange of Hong Kong ([www.hkexnews.hk](http://www.hkexnews.hk)) and the Company website ([www.yanzhoucoal.com.cn](http://www.yanzhoucoal.com.cn)).

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## Message from the Chairman



Chairman Mr. Li Wei

The year of 2022 was a milestone for Yankuang Energy as we jump-started the strategic transformation and made a difference through innovation and reform. Over the past year, we shared the fate with our staff, grew with our customers, made progress with the community, and managed to achieve many fundamental, long-term, and beneficial big things. We worked together as a team and overcame difficulties to maintain a stable and positive development momentum.

**The year of 2022 saw significant improvement in the economies of scale of Yankuang Energy.** Our five leading industries were well prepared for further development. For mining sector, we constructed 5 pairs of national-level intelligent demonstration mines in the first batch under high standards. For chemical sector, we launched Yulin Energy & Chemical DMMn projects for pilot operation, and our multi-nozzle opposed semi-waste pot gasifier, first of its kind worldwide, passed on-site assessment. For the equipment manufacturing sector, we independently developed the world's first 50,000KN hydraulic support test stand. Our logistics business was capable of handling annual shipping of 300 million tonnes of freight. For new energy sector, we carried out more than 10 self-owned distributed photovoltaic and

energy storage projects, promoting the healthy development of the whole industrial chain. Our operating performance reached a new record high, coal output remained at the 100 million tonne level for the seven consecutive years, and four products were selected as the first batch of "Remarkable Shandong" high-end chemical brands. By December 31, 2022, our total assets reached RMB 308.604 billion, increasing by 2.20%, sales income recorded RMB 154.602 billion and net profit attributable to the shareholder achieved RMB 30.408 billion, 42.34% and 79.49% year-on-year, respectively. Multiple business index hit an all-time best level, fully demonstrating our commitment, wisdom, strength, and speed.

**The year of 2022 marked the drastic rise of our brand value.** We always put value creation at the core, and innovated the way we improve, inspire and present, taking a simultaneous leap in market value. Yankuang Energy's A-share market share price reaches as high as RMB 56.14 per share, capitalisation reached RMB 227.2 billion, quadrupling in two years. Yancoal Australia's market capitalisation exceeded the HK\$50 billion mark for the first time, leading the coal-listed sector in both A-share and H-share price gains. Meanwhile, we launched the second phase of share incentive programme mainly for core technicians and front-line employees. Thus, we became the only state-owned listed company in the energy industry issuing two times of share incentives. With our robust performance growth, solid operating strength and international competitiveness, Yankuang Energy gained the favour of domestic and foreign capital steadily improving performance and sustainable development. We won the Special Contribution Award of China's Top 100 Listed Companies, Best Board of Directors in the 17th Golden Roundtable Awards for Boards of Directors of Listed Companies in China, the 24th Golden Bull Business Leadership Award Management Award, the 7th China Industry Award, and many other awards and honours. We were selected as a component of the CSI 300 and SSE 180, ranked 93rd in the Fortune China 500, and among the Top 50 global mining companies.

**The year of 2022 marked the significant improvement of our quality management.** We attached great importance to risk management and internal control, performed corporate governance based on the principles of "Transparency, Accountability and Safeguarding the Rights and Interests of All Shareholders." We adhere to national laws and regulations, domestic and international regulatory requirements and

upgraded risk prevention mechanism and control measures, so as to enhance our modern corporate governance system and governance capabilities. Since we successfully passed the certification for our quality, environment and occupational health systems, promoted the establishment of the China Quality Award upon high standards, and participated in the formulation of 4 group standards such as the Quality Management System Maturity Evaluation and ESG management, our voice in the sector of quality standards became more powerful. We received the Gold Award of the International Quality Management QC Achievement Competition for the third consecutive year, provincial and ministerial awards for over 73 management innovation achievements this year, 2 awards for National Excellent QC Circle, and 10 awards for National Excellent Trustworthy Group for Quality, presenting our best performance ever. Yankuang Energy was also shortlisted as a benchmark enterprise for the improvement actions of Shandong state-owned enterprises and awarded the AAA rating for national market quality and coal industry credit rating respectively, performing as a pioneer of quality management in China's energy industry.

**The year of 2022 marked the enhancement of our harmonious working environment.** Following the principle of putting people and lives first, we strengthened the management of major disasters on all fronts to ensure safety. Pursuing the idea of green, low-carbon and high-quality development and the target of reduction of pollution and carbon emissions, we infused the concept of green governance into the whole process of production and operation. We explored and



Yankuang Energy Building

practised the coordinated development of coal resource development and ecological restoration and governance. Throughout the year, we completed 32 comprehensive management project for coal mining subsidence land, covering 31.5 thousand mu of subsidence treatment, with a 100% subsidence treatment rate. Baodian Coal Mine, Nantun Coal Mine, Dongtan Coal Mine, Xinglongzhuang Coal Mine, Zhaolou Coal Mine and Jinjitan Coal Mine were included into the *National List of Green Mines*. As we shared opportunities of growth with our employees, the "Three Channels" promotion mechanism of management, technology and skill were opened up for all personnel to realise their expectations for further development. Since we always cared for what employees wanted and required, we launched targeted inclusive and preferential programmes, under which we visited 4,650 households, and provided a number of service such as "Surrogate Support for the Elderly" and "Equal Chance of Education", fostering a caring culture of mutual assistance.

**The year of 2022 marked the reinforcement of our social influence.**

While pursuing high-quality development, we always focused on creating shared value for society. Bearing in mind our responsibility to ensure energy supply, we completed our tasks for peak seasons in summer and winter ahead of schedule, which has been reported by China Central Television, Xinhuanet.com, and other mainstream media. Relying on our rapid response mechanism for emergency, we came forward in the face of danger and accomplished social rescue and relief tasks. Following the national strategic deployment of rural revitalisation, we were carrying out heart-warming volunteering activities in the community for seven consecutive years, and donated targeted funds of RMB 93,586.19 thousand, bringing warmth to thousands of households. In this way, the social contribution and impacts of Yankuang Energy is greatly enhanced.

Looking ahead to 2023, we will follow the trend of the new era and grasp the strategic opportunities. Holding firm faith in "unity generates strength and perseverance creates greatness", we will join hands with all sectors of society towards our goals of "building a world-class and leading enterprise in sustainable clean energy", so that shareholders, customers, employees, and society can benefit from the fruits of reform and development.



## Board Statement

The Board of the Company is the highest responsible and decision-making body for ESG matters and assumes full responsibility for the Company's ESG strategy and reporting and has established a specialised Sustainable Development Committee. The Sustainable Development Committee reports to the Board of Directors and assists the Board in carrying out ESG governance and information disclosure. It is responsible for formulating and reviewing the vision, targets and strategies of its ESG management, to assess the Company's ESG management as well as risks and opportunities. The Sustainable Development Committee convenes at least once a year to discuss important ESG matters.

The Company identifies ESG topics of great significance to corporate development and assesses the importance of various ESG topics. The Board of Directors of the Company regularly reviews the importance assessment of ESG topics, discusses key areas and major opportunities for ESG risk management and control, and defines ESG management policies and strategies. The Company has set ESG targets that include reducing pollutant emissions, reducing greenhouse gas emissions, and saving energy and water. The Board of Directors regularly reviews the action plan and achievement of the target.

This report discloses the progress of the Company's ESG work in 2022 in detail and has been reviewed and approved by the Board of Directors on March 24th, 2023.



## About Yankuang Energy

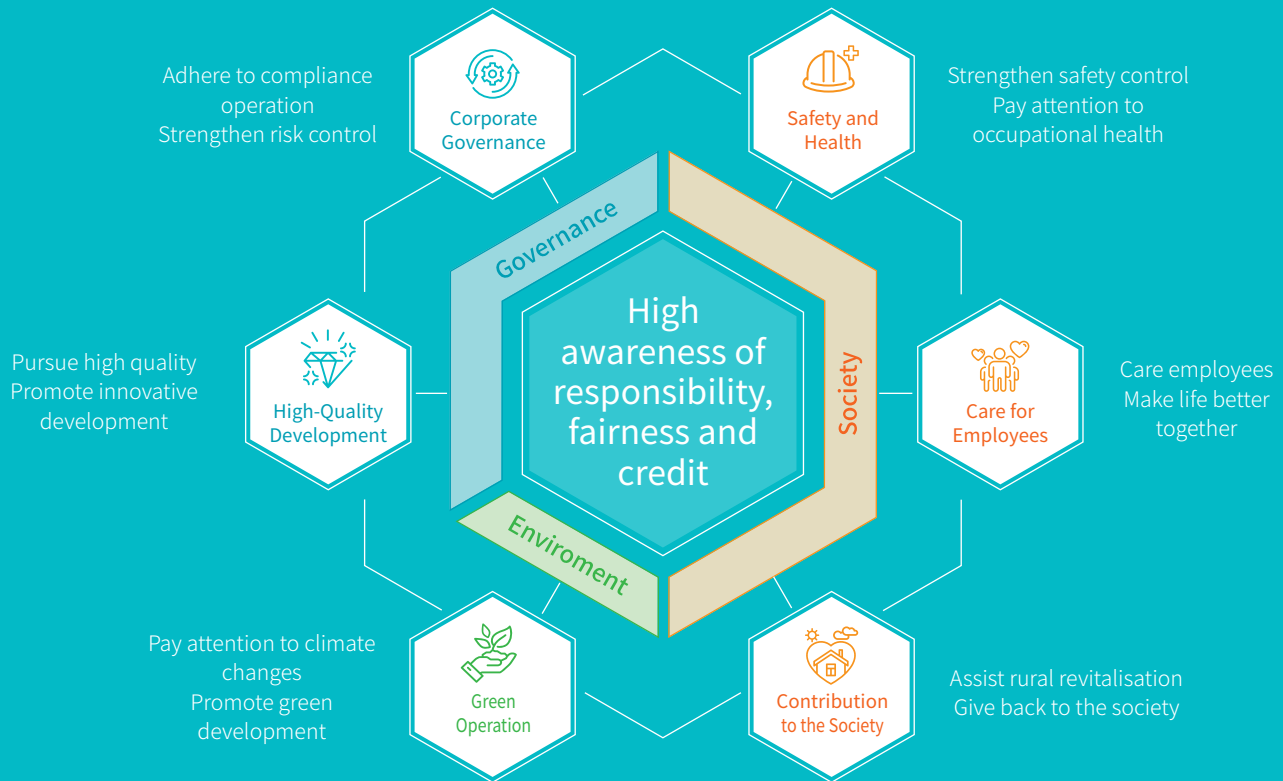
Yankuang Energy, a controlled subsidiary of Shandong Energy Group Co., Ltd., was listed in Hong Kong, New York, and Shanghai in 1998, and its overseas controlled subsidiary, Yancoal Australia Limited (Yancoal Australia), was listed on the Australian Stock Exchange and the HKSE, respectively in 2012 and 2018. It makes Yankuang Energy the only coal company in China that has been listed globally in four markets.

Driven by the mission of "creating green drivers and leading energy transformation" and in line with the globalisation of economy and capital flow, the Company has been making breakthroughs in the aspects of enterprise scale, brand strength, social status, and industry influence, witnessing great efforts in implementing industrial extension, regional deployment, and capital expansion. As of December 31, 2022, the Company's total capital stock was 4,949 million shares and its total assets were RMB 308.604 billion, with 64,279 employees.

Relying on vigorous performance growth, solid operating strength, and strong international competitiveness, the Company has been gaining favourable niche in the domestic and foreign capital markets and becoming a highly recognised blue-chip featured by strong core competitiveness, steady performance growth, and sustainable development. In 2022, the Company was listed in Forbes 2022 China ESG 50 and ranked No. 93 in the Fortune China 500. Its stock has been included in the Morgan Stanley Capital International ("MSCI") China Index, China Securities Index (CSI) 300, Shanghai Stock Exchange (SSE) constituent index 180 and Hang Seng (China A) Corporate Sustainability Index.



## Management of Sustainable Development



### Responsibility philosophy

Yankuang Energy dedicates to the vision of "to be a sustainable world-class mining conglomerate with the leading development of the clean energy", adheres to the principle of "high awareness of responsibility, fairness and credit". During the process of pursuing high-quality development, the Company puts concrete efforts in its responsibility practices in ESG, and creates shared values with shareholders, customers, employees, suppliers, partners, and stakeholders in the society.

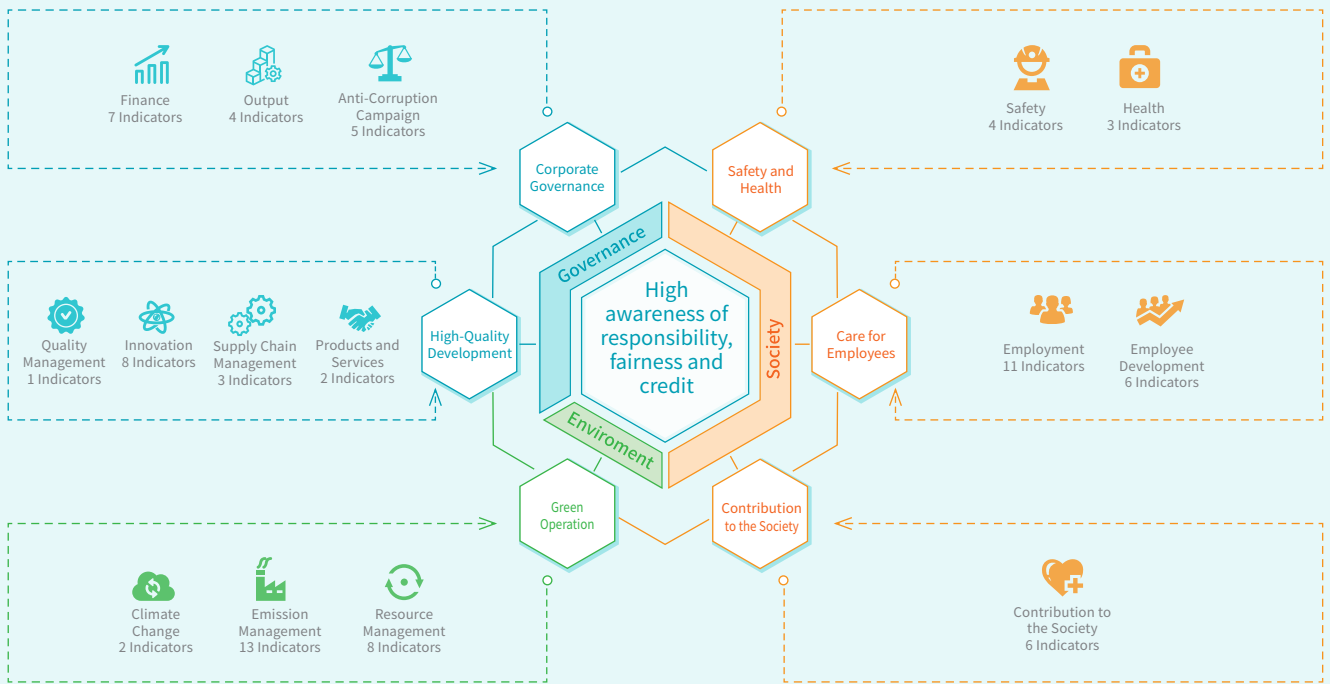
### Responsibility system

The Company's Board-level Sustainable Development Committee is responsible for formulating and reviewing the vision, targets and strategies of its ESG management, to assess the Company's ESG management as well as risks and opportunities.

#### Responsibilities of the Sustainable Development Committee

- 1 Review the Company's policies and strategies related to corporate ESG to ensure compliance with laws, regulations and standards.
- 2 Evaluate and classify risks and opportunities related to corporate ESG and make suggestions to the Board of Directors.
- 3 Review the Company's management and internal control system on corporate ESG and make suggestions to the Board of Directors on the appropriateness and effectiveness.
- 4 Review and supervise the Company's targets and its implementation related to corporate ESG and make suggestions to the Board of Directors based on the assessment.
- 5 Review the ESG reports disclosed by the Company and make suggestions to the Board of Directors.
- 6 Guide the formulation of the vision, targets, and strategies of Company's ESG management, and make suggestions to the Board of Directors.
- 7 Other responsibilities granted by the Board of Directors.





With reference to relevant guidelines and standards on ESG in China and abroad, we consider both the development status of the Company and the expectations of stakeholders. The Company has developed an ESG indicator system that covers indicators in governance, environment, and society, which are evaluated in a specific, quantitative, practical, correlated and timely manner. The establishment of the ESG indicator system is conducive to the Company's analysis of the development of corporate ESG, which promotes the coordinated advancement of various ESG tasks, thus enhancing the Company's sustainable development capability.

### Responsibility integration

Our ESG philosophy, systems, risks and opportunities are integrated into strategy, vision, development plans, operation management and performance assessment in an overall and comprehensive way, forming close-loop management that ensures ESG philosophy, systems, risks and opportunities are well fulfilled and managed while continuous improvement is made.



## Responsibility communication

### ○ Stakeholders engagement

As one of the first A+H-share listed companies which voluntarily disclose ESG reports, the Company has been disclosing its social responsibility reports for 15 consecutive years. In 2022, the Company ranked the first among the domestic coal industry in CDP rating; selected as Forbes 2022 ESG 50; and won the title of the national-level excellent model enterprise in issuing social responsibility report in the coal industry.

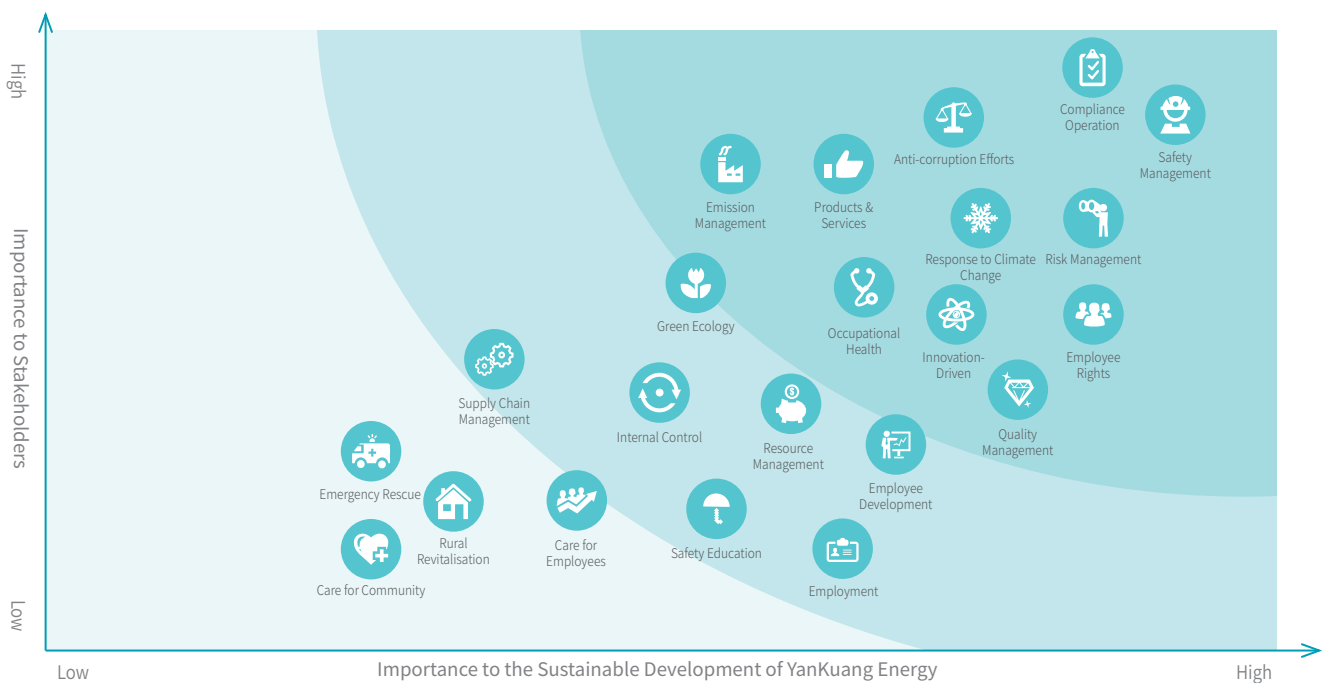
We communicate with stakeholders and listen to their voices through multiple channels, such as information disclosure, shareholders' meetings, satisfaction surveys and discussion meetings, to understand their concerns about ESG and respond with actions.

Stakeholders	Major communication channels	Matters of concern (Top 6)
Government and regulatory agencies	Relevant meetings, information submissions, work reports, supervision and review	Compliance operation, safety management, anti-corruption campaigns, revitalisation of rural areas, response to climate change, resource management
Shareholders/Investors	General meeting of shareholders, road shows, information disclosure, investor hotline	Compliance operation, safety management, risk management, anti-corruption campaigns, response to climate change, operation quality
Suppliers/Partners	Business negotiations, business exchanges, supplier assessment	Supply chain management, compliance operation, anti-corruption campaigns, risk management, technical innovation, product and service
Customers	Service hotline, seminar, visit, customer satisfaction survey	Product and service, compliance operation, safety management, anti-corruption campaigns, risk management, technical innovation
Employees	Employee congress, employee satisfaction survey, democratic life meetings	Employee rights, safety management, occupational health, talent training, care for employees, anti-corruption campaigns
Communities	Publicity activities, meetings, visits, surveys	Care for communities, revitalisation of rural areas, compliance operation, ecological protection, safety management, emergency relief

### ○ Materiality assessment

The Company identifies ESG topics based on related guidelines and standards on ESG, with consideration of communication results of the Management, industry experts, employees, and other stakeholders, as well as of macro-policy environment and heated topics of general public concern.

We carry out questionnaire surveys on material topics, which are then evaluated by applying the two-dimensional matrix, namely "importance to stakeholders" and "importance to the sustainable development of YanKuang Energy", which provides detailed guidance for the ESG management and information disclosure of the Company.



## Response to United Nations Sustainable Development Goals (SDGs)

Yankuang Energy actively responds to the UN SDGs, mapping its actions with the SDGs and fully responding to the 17 SDGs.

Sustainable Development Goals (SDGs) of the United Nations	Our actions	Indicators
 <p><b>1 NO POVERTY</b> End poverty in all its forms everywhere.</p>	We implemented rural revitalisation and donations	Total investment in public welfare projects and external donations, Total investment in poverty alleviation and rural revitalisation projects, Social contribution per share
 <p><b>2 ZERO HUNGER</b> End hunger, achieve food security, improved nutrition and promoting sustainable agriculture.</p>	We supported residents with channels to increase their income	Total investment in public welfare projects and external donations, Total investment in poverty alleviation and rural revitalization projects, Tax paid, Social contribution per share
 <p><b>3 GOOD HEALTH AND WELL-BEING</b> Ensure healthy lives and promote well-being for all at all ages.</p>	We organised training on work safety and occupational health among employees to ensure production safety	Number of work-related deaths, Rate of work-related deaths, Time lost due to work injuries, Trainings on work safety, Percentage of occupational-disease incidence, Screening rate of occupational diseases
 <p><b>4 QUALITY EDUCATION</b> Ensure quality education that is inclusive and equitable, and ensure lifelong learning opportunities for all.</p>	We provided various employee training, such as "Golden Autumn Student Aid"	Proportion of trainees, Per capita training time
 <p><b>5 GENDER EQUALITY</b> Achieve gender equality and empower all women and girls.</p>	We offered equal employment and development opportunities for female employees	Total headcount by gender, Per capita training time by gender, Proportion of trainees by gender, Voluntary turnover rate by gender
 <p><b>6 CLEAN WATER AND SANITATION</b> Ensure availability and sustainable management of water and sanitation for all.</p>	We established and improved the water conservation management system, and promoted the projects for the reuse of recycled water and mine water	Recycled water volume, Total water consumption, Density of water consumption
 <p><b>7 AFFORDABLE AND CLEAN ENERGY</b> Ensure access to affordable, reliable, sustainable and modern energy.</p>	We safeguarded the supply of energy products, provided high-quality energy products and developed the new energy business	Commercial coal output, Power generation output
 <p><b>8 DECENT WORK AND ECONOMIC GROWTH</b> Promote inclusive and sustainable economic growth, employment and decent work for all.</p>	We maintained favorable operation performance, supported legal employment, protected the rights and interests of employees, and provided talent cultivation programme	Sales income, Total employees, Voluntary turnover rate of employees, Proportion of trainees, Per capita training time, employee satisfaction
 <p><b>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</b> Build resilient infrastructure, promote sustainable industrialisation and foster innovation.</p>	We established intelligent working face and mines, implemented strategic transformation and carried out management and technology innovation	Number of quality management achievements, Number of scientific and technological achievements, Number of achievements under certification, Number of achievements up to world's leading level, Number of provincial and ministerial technical innovation awards, Number of patents authorised
 <p><b>10 REDUCED INEQUALITIES</b> Reduce inequality within and among countries.</p>	We established a fair mechanism for compensation distribution and promotion, as well as a fair system for negotiation	Employee satisfaction
 <p><b>11 SUSTAINABLE CITIES AND COMMUNITIES</b> Make cities inclusive, safe, resilient and sustainable.</p>	We carried out activities such as heart-warming volunteering, emergency relief and community care	Total investment in public welfare projects and external donations, Total investment in poverty alleviation and rural revitalisation project, Social contribution per share

Sustainable Development Goals (SDGs) of the United Nations	Our actions	Indicators
 <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p> <p>Ensure sustainable consumption and production patterns.</p>	<p>We optimised the industrial deployment, developed resources in a reasonable manner, deepened emission management, and promoted energy saving and consumption reduction</p>	<p>Sulphur dioxide (SO<sub>2</sub>) emissions, Nitrogen oxide (NO<sub>x</sub>) emissions, Volatile organic compounds (VOCs), Smoke and dust emissions, Hazardous waste generation, Density of hazardous Waste, Disposal rate of hazardous wastes in compliance, Total general solid wastes, Density of general solid wastes, Wastewater discharged, Total water consumption, Density of water Consumption, Comprehensive energy consumption, Energy consumption by category, Total energy consumption by business, Density of comprehensive energy consumption by business</p>
 <p>13 CLIMATE ACTION</p> <p>Take urgent action to combat climate change and its impacts.</p>	<p>We prepared an action plan for achieving the goals of "carbon peak and neutrality" for fossil energy reduction and mine gas control</p>	<p>Total greenhouse gas emissions, Density of greenhouse gas emissions</p>
 <p>14 LIFE BELOW WATER</p> <p>Conserve and sustainably use the oceans, seas and marine resources for sustainable development.</p>	<p>We reduced wastewater discharge and treated water pollution</p>	<p>COD emissions, Ammonia nitrogen emissions, Wastewater discharged, Hazardous waste generation, Disposal rate of hazardous wastes in compliance</p>
 <p>15 LIFE ON LAND</p> <p>Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.</p>	<p>We actively performed the obligation of subsidence area restoration, made solid efforts in building green mines and implementing ecological management, and protected the biodiversity</p>	<p>Projects of comprehensive coal mining subsidence land for reclamation, comprehensive coal mining subsidence land for reclamation over area, subsidence reclamation rate</p>
 <p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p> <p>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.</p>	<p>We worked to improve corporate governance, strengthen internal control, improve risk management, and promote anti-corruption</p>	<p>Number of concluded corruption lawsuits, Number of anti-corruption training sessions, Percentage of directors attending anti-corruption training, Percentage of staff attending anti-corruption training, Percentage of suppliers accepting anti-corruption policies, Complaint Settlement Rate</p>
 <p>17 PARTNERSHIPS FOR THE GOALS</p> <p>Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.</p>	<p>We established a smooth communication channel between the Company and interest parties, and provided industrial investments and public assistance in underdeveloped areas</p>	<p>Tax paid, Principal credit rating, Total investment in public welfare projects and external donations, Total investment in poverty alleviation and rural revitalization project, Social contribution per share, Contract fulfilment rate, Percentage of suppliers accepting anti-corruption policies, Percentage of suppliers implementing suppliers management policies, Number of valid complaints, Complaint settlement rate</p>





# Corporate Governance

Good corporate governance is the cornerstone of the Company's sustainable development and plays a vital role in enhancing the value of the Company. Focusing on corporate standard governance, risk management and internal control, Yankuang Energy, guided by the national laws and regulations and regulatory requirements, continuously improves and enhances its modern governance system and capability by strengthening system enforcement, improving sound risk prevention and control measures, and fostering integrity and ethics.

- Compliance operation
- Internal control
- Risk management
- Anti-corruption efforts



## Compliance operation

Since listing, the Company has been implementing corporate governance on the principle of "Transparency, Accountability and Safeguarding the Rights and Interests of All Shareholders", while complying with the *Company Law of the People's Republic of China* and the *Securities Law of the People's Republic of China*, and other regulatory provisions of listing bodies.

### System establishment

In accordance with the listing rules, the Company has formulated and strictly implemented a series of documents for corporate governance, including the *Articles of Association*, the *Rules of Procedure of Shareholders' Meeting*, the *Rules of Procedure of the Board of Directors*, the *Rules of Procedure of the Board of Supervisors*, the *Work System of Independent Directors*, the *Management System for Information Disclosure*, the *Insiders Registration Management System*, the *Measures for Connected Transaction Management*, the *System for Investor Relationship Management Work* and the *Code of Conduct for Senior Staff*.

### Governance structure

The Company closely monitors the updates of legalisation and standardisation of the securities market and constantly strengthens the development of corporate governance. The Company has put an orderly corporate governance structure that is well regulated through the coordinated operations by the general meeting of shareholders, the Party committee, the Board of Directors, the Board of Supervisors, and the managers. Such a governance structure further leads to a legal, transparent, coordinated governance mechanism with effective checks and balances of powers and responsibilities of the organs of control, decision-making, supervision, and. At the beginning of establishment, the Company established an independent director system with reference to international practices. The Company has set up five special committees of the Board of Directors, including a Nomination Committee, an Audit Committee, a Remuneration Committee, a Strategy and Development Committee, and a Sustainable Development Committee whose duties and obligations are clearly defined. The special committees of the Board of Directors are further defined to make sure they play a role in strategic decision and operation regulation, thereby promoting the sustainable and stable development of the Company.

### Board diversity

Recognising the importance of the Board members, the Company selects directors based on multiple factors, such as their gender, age, cultural and educational background, professional experience, skills, and years of service, along with considerations of the actual conditions and demands, so as to achieve diversification of the Board of Directors and promote the diversified and balanced points of view, experience and perspectives. The Company has also built a high-level expert think tank to improve the ability to deal with complex environments and achieve high-quality and sustainable development.

In 2022, the Company held 7 shareholders' meetings and 7 Board meetings, approving a series of significant events related to the Company's reform and development as well as standardised management. All meetings and voting procedures are in accordance with relevant laws, regulations and *Articles of Association*. All voting results are legal and valid. This work has laid a solid foundation for the Company's standardised operation and high-quality development.

The Company actively takes actions to manage investor relations. In accordance with the laws and regulations of the listing locations, the Company has developed the *System for Investor Relationship Management* to build an investor relation structure system and improve the management mechanism, which creates efficient workflow and strengthens the positive interaction with the capital market.

With the help of corporate announcements, investors hotline, SSE E-interactive platform, online conference and other channels, the Company has enhanced the engagement with the investors. In 2022, the Company issued 620 corporate announcements, held 54 online conference calls with well-known funds, important securities companies and professional analysts, and received more than 3,700 investor visits. By doing so, the Company answered investors' questions



China Top 100 Enterprise Award

and properly protected investors' legitimate rights and interests. The Company organised 2 online conferences for performance presentation, 1 Investor Day event, 2 roadshows for voting of independent shareholders, 1 reverse roadshow at the Company's headquarters and 7 offline roadshows for performance presentation. The Company's development achievements and key growth were displayed in an easy-to-understand way at those conferences and roadshows. In addition, the Company communicated with investors on trending topics, shared opinions on market focus, and enhanced the confidence of the capital market in its future development.

With the outstanding work in investor relations management, information disclosure, etc., the Company won a series of honours such as the Excellent Enterprise for Releasing Social Responsibility Reports, the 5th New Fortune Best IR Hong Kong Listed Company Award, the 17th "Golden Round Table Award" for the Best Board of Directors of Listed Chinese Companies, P5w.net Investor Relations Gold Award for

Innovation in Performance Presentation, the China Top 100 Special Contribution Enterprise Award and the Golden Bull Investor Relations Management Award of *China Securities Journal*.

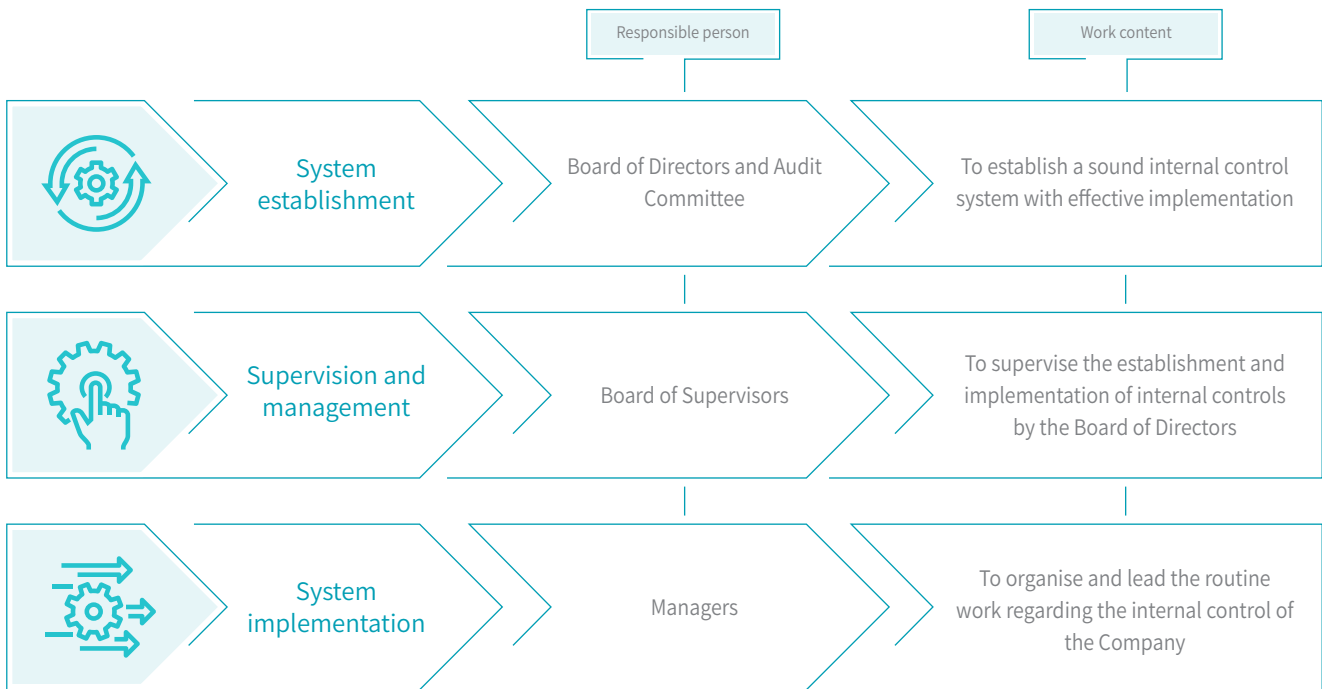


Golden Bull Investor Relations Management Award

## Internal control

The Company has always highly valued the internal control. With reference to the regulatory requirements for listing such as the *Guidance on Self-Regulation of Listed Companies of Shanghai Stock Exchange No. 1* and the *Listing Rules* of Hong Kong Stock Exchange, the Company has formulated the *Standard for Enterprise Internal Control* and the *2022 Yankuang Energy Internal Control Self-assessment Programme*, optimised a set of internal control procedures and rules, such as the *Design and Application of Internal Control System*, and improved the operation mechanism of risk-oriented internal control, establishing an internal control system that covers all businesses from the management to the production and operation of the Company.

We have clearly defined the roles and responsibilities of the Board of Directors, the Audit Committee, the Board of Supervisors, and the managers in the internal control system, and ensured the effective operation of the internal control system.



We conduct self-assessment on the establishment of the internal control system annually. We also engage independent auditors for A/H-share listed companies in China and abroad to annually audit the compliance and effectiveness of the internal control system. The self-assessment report and the annual auditor's report on internal control issued by the independent auditor are disclosed in public for the review and supervision of all stakeholders. According to the assessment, the Board of Directors regarded that our internal control system is sound and effective. There was no significant deficiency in the design or implementation of our internal control. In 2022, the annual auditor's report on internal control issued by the independent auditor concluded that we had maintained an effective internal control in all major aspects under the *Basic Standards on Internal Control of Enterprises*, the *Enterprise Internal Control Guidelines* and other related provisions released the Ministry of Finance of the People's Republic of China jointly with four other ministries.



## Risk management

### Identification and assessment

The Company has formulated the *Comprehensive Risk Management Measures* and updated the *Compliance Management Measures* and the *Comprehensive Risk Management Manual* to standardise the establishment of the risk management system and related processes. The Company uses the comprehensive risk management system to identify and assess major annual business risks and prepare the annual risk assessment and management report. In 2022, the Company identified 2 high risks, 7 medium risks, and 63 low risks in risk rating, which covered safety production, environmental protection, human resources, anti-corruption efforts, social responsibility, and other ESG-related risks.

### Response and evaluation

In response to the identified significant risks, the Company prepared the *Major Risk Response Check List in 2022*, which clearly defined the division of accountabilities and responsibilities for each of the major risks to ensure the implementation of major risk management strategies and solutions. Reports on major risk management and control were generated regularly based on the ongoing evaluation of the control status of the risks. The Company improved its management and control measures and enhanced its risk management and control capability in light of changes and deficiencies in major risk management and control.



## Anti-corruption efforts



Anti-corruption Efforts Meeting

The Company complies with the *Law of the People's Republic of China against Unfair Competition*, the *Anti-money Laundering Law of the People's Republic of China* and the *Prevention of Bribery Ordinance of HKSAR*, as well as other applicable laws, rules and regulatory requirements for listed companies. In order to further improve the anti-corruption management system, the Company has developed a series of internal control management measures, such as the *Implementation Rules for Clean Management*.

### Supervision and inspection

Enriching the forms of supervision and focusing on key areas , the Company conducts annual ethics standards monitoring and inspections in all subordinate companies. In 2022, the Company carried out 279 anti-corruption inspections. The integrity career files for over 3,400 cadres are established. The Company carried out special inspections at certain important points of time such as New Year's Day and Spring Festival. In case of problems found, 100% rectification has been implemented. The company focuses on key areas to carry out special anti-corruption governance projects, to create a integrate and positive workplace.

### Integrity education

To deepen thematic education, the Company held integrity education and the integrity commitment activities, which involves more than 34,000 party members and employees in key positions. The Company also collected 300 quotations on integrity, filmed 36 original anti-corruption micro-films, held 283 art exhibitions themed on integrity, and collected 69 theoretical essays on anti-corruption and integrity promotion.

To enhance integrity education, the Company has conducted compliance operation trainings for the Board of Directors during the Board's meeting and held warning education meetings on integrity

practice in its associated units. In 2022, the Company and subordinated units organised 29 visits to the integrity warning education exhibition hall and warning education base, and over 92 integrity warning education film exhibitions. Besides, the Company arranged education and testing on integrity-related laws, regulations and policies for more than 11,600 party members and cadres. The Company has displayed content with virtue culture at the corridor, plaza, and garden to promote integrity culture and build a cultural atmosphere of integrity. By 2022, the company's business ethics education has covered all employees, part-time employees and contractors.



Integrity Education Activity



# 2

## High-quality Development

Focusing on "five leading industries," Yankuang Energy keeps optimising its industrial structure, implements lean management throughout the Company, drives managerial and technological improvement with innovation, promotes intelligent and digitalised way of manufacturing and operation, and strengthens supply chain management. We continuously improve core competitiveness and speed up high-quality development.

- Industrial Deployment
- Innovation drivers
- Quality management
- Product and service
- Supply chain management



## Industrial Deployment



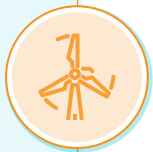
### Mining Industries

Acquiring high-quality resources and realising incremental capacity expansion; comprehensively promoting the construction of intelligent mines and completing a number of intelligent project upgrades.



### High-end Chemicals and New Materials

Extending and expanding the existing chemical industry chain, tapping into the potential of flexible production, and accelerating the formation of high-end chemicals industry clusters.



### New Energy Industry

Implementing resource integration in an orderly manner, and deploying our new energy industry according to "Wind and solar as pillars, hydrogen and energy storage as demonstration, synergies across different industries" principles.



### High-end Equipment Manufacturing Industry

Refining and optimising high-end hydraulic support products, promoting the implementation of smart manufacturing park projects, and expanding the industrial chain of intelligent equipment manufacturing.



### Intelligent Logistics Industry

Building a smart logistics network, strengthening strategic cooperation in the field of logistics, and building a national 5A-level large logistics enterprise.



## Innovation drivers

Yankuang Energy regards independent innovation as the critical element to enhance core competitiveness and achieve high-quality development. The Company always follows the guidance of "independent innovation, key leap, supporting development, and leading the future", exploring innovation in management and technologies, so as to drive the transformation of major industries and stimulate its intrinsic vitalities.

### Management innovation

To gain and promote advanced management concepts and methods, and enhance the capability of management and innovation, the Company has formulated measures for the management of innovation activities to boost the internal innovation. In 2022, benchmarking first-class enterprises and focusing on the improvement of core competitiveness, the Company deepened the integration of marketisation and lean management, with in-depth integration with Internet, big data, 5G and other new technologies, so as to 'make transition towards the pursuit of quality and efficiency of internal development. The Company organised innovative lean management improvement activities featured by "special topics + autonomous participation by all staff", establishing 89 projects and generating revenue of RMB 176 million. The Company focuses on building national intelligent demonstration mines and intelligent factories. By the end of 2022, the completed intelligent systems of the Company have achieved normal operation.

In 2022, the Company achieved good benefits and social recognition in management innovation, winning 73 provincial and ministerial awards of management innovation achievements awards.



*Intelligent Patrol and Inspection*

### Technological innovation

Aiming to optimise and upgrade its industrial structure the Company focuses on the safe and efficient development needs of leading industries and takes advantage of internal and external R&D resources to strengthen research on core technologies in major key fields and has achieved a bunch of advanced scientific and technological results that provide strong support for becoming a world-class and exemplary enterprise.

#### ○ Scientific and technological research and development

In 2022, the Company invested RMB 2.117 billion in R&D, focusing on the research and application of key technologies related to intelligent coal mining, major disaster prevention and control, clean and efficient utilisation of coal, and high-end coal machinery, and achieved a series of breakthroughs. The Company completed 83 scientific and technological achievements, among which 31 passed the technical appraisal of the superior authorities, including 20 scientific and technological achievements at the advanced international level. Meanwhile, the Company won 29 provincial and ministerial Awards, including 1 "Science and Technology Award" of Jiangsu Province, 1 "Science and Technology Advancement Award" of Shandong Province, 14 "Awards for Safety Science and Technology Progress" of the third period issued by the China Association of Work Safety, 12 "Science and Technology Awards" of China Coal Industry and 1 Metallurgical Science and Technology Award by China Iron & Steel Association and the Chinese Society for Metals.

**Breakthroughs in the R&D of high-end chemical technologies**

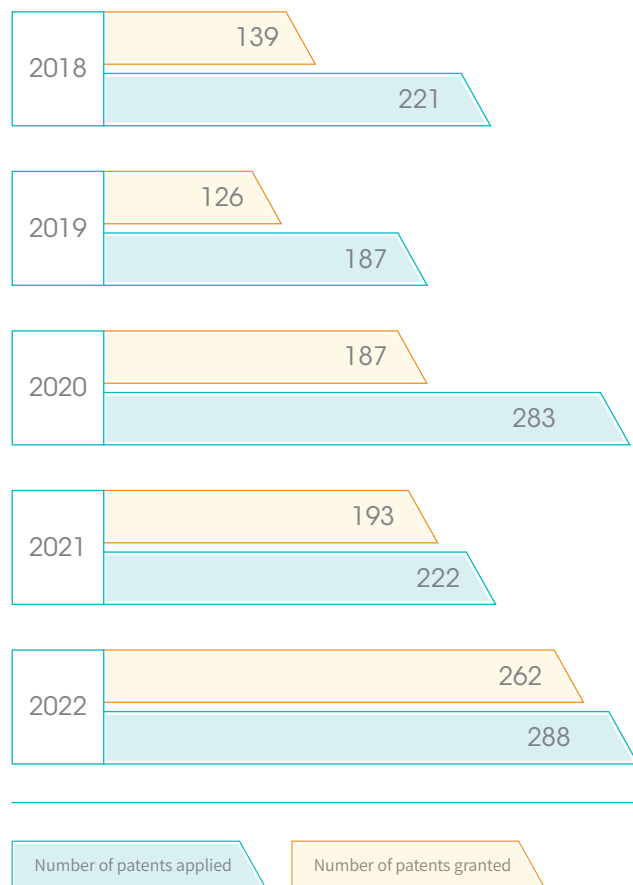
In 2022, Yankuang Energy conducted in-depth exchanges with China University of Petroleum and other renowned universities and research institutes in China, to deepen the technological R&D for the extension of the chemical industry chain and the development of pilot projects, making breakthroughs in many key technologies. This led to the successful development of the high-efficiency and energy-saving rectification process for large methanol plants, and realising the safe, stable and long-cycle optimised operation. Yankuang Energy's 4,000-tonne super-scale coal-water slurry gasifier, was successfully selected as the first (set of) major technical equipment promotion and application guide, is the largest single-furnace coal-water slurry gasifier in the world.

Yankuang Energy actively promotes the construction of R&D platforms, and strengthens collaboration with industry, academia and research in order to further enhance the quality and upgrades of R&D platforms. By the end of 2022, the Company had established 2 national R&D platforms, a National Enterprise Technology Centre and a Post-doctoral Research Station, 14 provincial and ministerial R&D platforms, and 12 high-tech enterprises.

To enforce incentive mechanisms, the Company, in accordance with the *Measures for the Management of Scientific and Technological Innovation Work* and the *Measures for Granting Science and Technology Awards*, organised the science and technology award appraisal of the first Yankuang Energy Science and Technology Conference to reward the outstanding achievements and talents in science and technology innovation, and stimulate the innovation enthusiasm of scientific and technological workers. In 2022, the Company recommended one employee to be approved as a leading talent in as "Taishan Industry-Leading Expert," one employee as "Shandong Outstanding Engineer" and one employee won Science and Technology Award of Chinese Youth in Coal Industry.

**Intellectual property**

Yankuang Energy strictly complies with the *Patent Law of the People's Republic of China* and implements national standards such as *Enterprise Intellectual Property Management*. The Company has formulated policies such as the *Patent Management Measures*, and included "trademark management and intellectual property protection" as the key content in the Company's *Legal Affairs Management Measures*, which clearly defines the responsibilities for intellectual property management, so as to actively optimise the intellectual property management measures and enhance intellectual property protection. In 2022, the Company submitted 288 patent applications, with 262 patents granted, including 26 invention patents, 233 utility model patents and 3 design patents. In addition, the Company obtained 7 software copyrights. The Company has achieved remarkable results in the development of standards, formulating 5 corporate standards, 5 industry standards and 5 local standards, and revising 2 local standards. In 2022, no intellectual property infringement occurred in the Company.



## Quality management

Both quality and management are fundamental to enterprises. Yankuang Energy values quality management, and is committed to developing first-class "standards of Yankuang" and creating excellent "quality of Yankuang", in an effort to promote high-quality development and enhance core competitiveness.



National Market Quality Credit Rating  
AAA Certificate (Customer Satisfaction  
Benchmarking Enterprise)



QC Group of Craftsmen (Gold Award) in  
the 47th International Convention on  
Quality Control Circles

### Excellent performance

The Company performs thorough implementation of the excellent performance model, which is widely recognised by all sectors of society. The Company became the only energy enterprise to win the "National Quality Award" twice, the first and the only Chinese enterprise to win the "Asian Quality Excellence Award" twice, the only Chinese coal enterprise to win the "Global Performance Excellence Award - World-Class", and the first energy enterprise to win the awards of the four categories (organisation, project, individual and team) of the "National Quality Award". In 2022, the Company was awarded the National Market Quality Credit Rating AAA Certificate (Customer Satisfaction Benchmarking Enterprise).

### Quality management system

The Company has established an integrated management system based on the quality management system. In addition, The Company has formulated a number of documents, such as the *Methods for the Management and Examination of the Recognition of Standard Implementation*. The Company has been carrying out internal audit and management review regularly, intending to ensure the effective operation of the management systems. In 2022, the Company successfully passed the certification of ISO 9001 quality management system and participated in the formulation of the group standard of *Quality Management System Maturity Evaluation* of China Association for Quality.

### Quality management capabilities

The Company organised quality management and related personnel to participate in quality knowledge training and exchange activities such as "China Quality Lecture," quality management open class on WeChat,

and knowledge competition in total quality management to guide the employees to learn and practise quality management tools and methods, so as to raise all employees' quality awareness and capabilities.

In 2022, the Company initiated preparation for the "National Quality Award". The Company organised a training course on the *Criteria for Performance Excellence*, and invited senior training and consulting experts to lecture on the model of excellent performance, the evolution of quality management, and quality management and organisational efficiency, so as to help employees understand the model of excellent performance and better promote quality management.

### Quality management improvement

The Company issued documents such as the *Implementation Opinions on Strengthening Quality Improvement Actions* and the *Measures for the Management of Innovation and Quality Management Team Activities*. The Company carried out in-depth activities for the quality control circle ("QC circle") and "trustworthy group for quality", resulting in a large number of excellent results, learnable and effective, which effectively improved work quality, reduced costs and enhanced employee capacity-building. In 2022, the Company won 1 first prize for China Quality Technical Award of China Association for Quality (9 winners nationwide), 1 QC Group of Craftsmen (Gold Award) in the 47th International Convention on Quality Control Circles, 2 awards for National Excellent QC Circle, 10 awards for National Excellent Trustworthy Group for Quality. The Company was selected as a benchmark enterprise for the improvement actions of Shandong state-owned enterprises, becoming a benchmark enterprise for quality management of the Chinese energy industry.

## Product and service

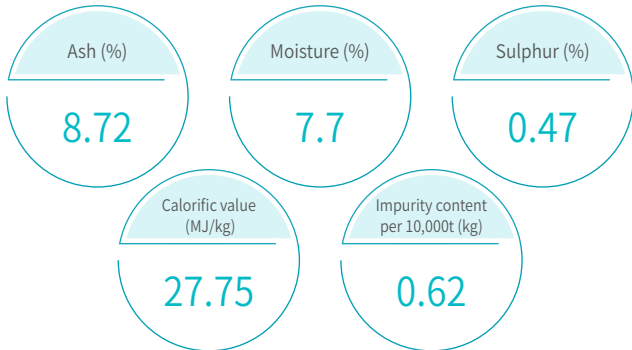
Committed to improving the quality of products and services, Yankuang Energy abides by the *Product Quality Law of the People's Republic of China* and other relevant laws, regulations and industry standards, and ensures the quality of products and services.

### Product quality

#### ○ Coal products

The Company adheres to the concept of "Coal Quality and Efficiency" and promotes the "Three Zeroes" program, namely zero complaint filing, zero accidents and zero criminal and security case. The Company has formulated a well-rounded coal quality management system, equipped with a number of policies, such as the *Measures on Coal Quality Management*. In 2022, the Company established the daily tracking and feedback mechanism for abnormal indicators of commercial coal, and organised 7 centralised theoretical and practical training sessions around equipment, intelligence, quality control and other aspects of coal preparation factories to ensure stable product quality. The Company strengthens the management system for processes and technologies with a focus on key technical indicators of renovation projects, so as to improve coal quality and efficiency. The Company's refined coal products continued to maintain an impurity-content rate of 1kg or less per tonne, with a 100% pass rate of commercial coal, and further enhancement of product brand image

#### The indexes of the Company's 2# refined coal in 2022



Coal Product

#### ○ Coal chemical products

The Company has formulated the *Product Quality Management Measures* and other coal chemical product quality management systems, established a sound raw material inspection process and product quality inspection mechanism, and strictly implemented various production process indicators to ensure that product quality is stable and up to standard. In particular, the methanol products met the advanced international standards and were awarded the "Adopting International Standard Product Mark Certification". Our generic paraformaldehyde products have gained numerous international certifications, including UL certification. In 2022, we conducted product quality benchmarking practice, equipped with advanced testing and inspection equipment, continuously optimised product structure, so as to strengthen product standardisation, improve product quality and ensure that 100% of coal chemical products were of superior quality.



Ensuring Product Quality

#### ○ Mechanical products

The Company adheres to the positioning of high-end equipment manufacturing industry. Led by technology, the Company determines the key quality control points, formulates safeguard measures, shifts quality management from "control afterwards" to "prevention beforehand", and effectively improves product quality. In 2022, in accordance with the *Measures for Management of Product Quality Assessment and Accountability* and the *Measures for Quality Accountability of Products Provided by External Parties*, the Company put more efforts in process quality control, conducted internal and external product quality assessment, and continued to implement the administrative measures of first piece verification and inspection requirements, contributing that the product qualification rate was 100%





Mechanical Products

### ○ Power generation

The Company has strengthened internal control and external coordination, organised production scientifically, and built a lean production operation system that extends to the entire industry, process, and all-around scope to promote the production system's safe, efficient, and stable operation. In 2022, the Company had no unplanned outages. A total of 6 power generating units have met the long cycle assessment standards, among which the operating cycle of 2 power generating units exceeded 100 days.

### Service quality

In accordance with the principle of "win-win cooperation", the Company has developed a number of regulations and measures, including the *Measures for Management of Customer Maintenance Services*, the *Measures for Market-oriented Operation and Management of Direct-Supply Customer Development* and the *Measures for Customer Relationship Evaluation (Trial)*. We strengthen customer relationships by strengthening coal quality control, improving professional quality, optimising business processes, strengthening coal supply guarantees, and conducting satisfaction surveys.

The Company takes the following measures to enhance customer satisfaction: launching online trading platforms to make transaction more efficient and transparent; establishing the dedicated manager system for customers to optimise the service level of the entire sales process; and improving the communication ability of sales to achieve timely response to customer complaints. In 2022, the Company engaged external third parties to conduct a customer satisfaction assessment under the national standards GB/T 19038 *Guide to Model and Methods of Customer Satisfaction Measurement* and GB/T 19039 *General Rules of Customer Satisfaction Measurement*. The

results showed that we were recognised by our customers, with the satisfaction score of 92.4 and the loyalty score of 96.8.

The Company has established a sound complaint handling process, which specifies the steps of data collection and transmission, condition determination, on-site verification and objection handling to resolve customer complaints, product quality objections and return requests. In 2022, customers lodged 3 valid complaints against the Company's products, all of which have been properly handled without product return cases.

Strictly abiding by the *Personal Information Protection Law of the People's Republic of China*, the Company ensures the safety of the business information and personal information of customers, regulates the confidentiality behaviour. Customer service employees of the Company are required to sign the *Confidentiality Agreement*, promising not to disclose customer files, contract prices or other related information of customers without authorisation. The confidential information of customers is managed by special personnel, and the storage and inspection of confidential information shall be subject to approval procedures.

The Company attaches importance to ethical operation. Aligning to our advertising campaign's fundamental principle of "Integrity, Responsibility, Positivity", we strictly prohibit misrepresentation or exaggerated advertising.

### Network and information security

In strict accordance with the principle of combining prevention and emergency disposal and the *Cybersecurity Law of the People's Republic of China* and other laws and regulations, Yankuang Energy has established information and network security systems such as the *Measures for the Administration of Information-based Work (Interim)*, the *Measures for the Administration of Network Security* and the *General Emergency Response Plan for Network Security*, set up a special team for network security, and built up a mechanism for risk and hidden danger investigation and management. We also deploy network security equipment, and continue to strengthen inspection, assessment and emergency management, so as to dynamically safeguard our network information security. In 2022, the Company held 6 network security attack and defence drills, and organised technicians from various units to attend 2 offline and 6 online training sessions on network security, engaging around 312 trainees in total, which effectively increased our information security protection capability.

## Supply chain management

Recognising the importance of supplier management, the Company strives to create an open, transparent, and fair environment for cooperation. We continuously optimise our systematic supplier management model. While ensuring our own interests, we earnestly consider the interests of suppliers and achieve win-win cooperation with suppliers.

In 2022, Yankuang Energy revised the *Supplier Management Measures* and the *Implementation Rules of Supplier Management* to further standardise the process of supplier access, evaluation and supervision and inspection for all suppliers and clarify the responsibilities of management departments. We incorporated supplier information into our master data management platform ("MDM") for management and make continuous efforts to optimise the approval process, effectively improving approval efficiency and avoiding procurement risks. Meanwhile, the Company makes full use of information technology to dynamically update and maintain MDM system information in real time. We have built up a regular appraisal mechanism for suppliers, which includes both daily dynamic evaluation and annual appraisal. With this mechanism, we carry out comprehensive appraisals on suppliers' business volume, degree of cooperation, contract fulfilment rate, delivery timeliness, product qualification rate and complaints at regular intervals every year, and put suppliers who violate relevant systems and requirements during production and operation into blacklist.

With the help of the Enterprise Resource Planning ("ERP") management platform, the Company aims to create an open, fair and just procurement environment, regulates business ethics, and prevents commercial bribery and other corrupt incidents. Besides, a complaint hotline has been set up. The Company sends an *Open Letter* to all suppliers, asks them to formally sign the reply letters and follow the Company's business ethics requirements. The Company puts suppliers in violation of relevant policies and requirements into a "blacklist". The

Company integrates the concept of social responsibility into the whole procurement process. We specify performance clauses in contracts and enter into the Social Responsibility Commitment Letter with suppliers, in a bid to supervise suppliers to fulfil their social responsibilities. The Company has entered into the *Commitment on Safety Production and Environmental Protection* with suppliers, which clearly requires suppliers to fulfil their responsibilities regarding safety production, occupational health, environmental protection and emission reduction, in order to enhance suppliers' competence in managing environmental and social risk.

The Company communicates and shares information with suppliers using multiple channels, discuss the development trend of the industry and the market, and utilise our own advantages to facilitate suppliers' progress and growth, so as to establish a harmonious and cooperative relationship with them. In addition, Yancoal Australia gave priority to purchasing raw materials from local suppliers to support the development of local supply chain. All purchases complied with the Company's standards on commercial feasibility, environment, health and safety.

The Company strictly fulfils the contracts, makes payments in accordance with the contracts in a timely manner and safeguards the legal rights and interests of suppliers. The contract performance rate of the Company headquarter in 2022 was 100%.



Number of suppliers of the Company headquarter

Total number of suppliers

1,342

556

Suppliers in Shandong

8

Overseas suppliers

778

Suppliers in other parts of China



# 3 Green Operation

Pursuing the target of green, low-carbon and high-quality development, Yankuang Energy is guided by the idea of ecological civilisation, integrates the "Green Governance" concept into the whole process of production and operation of the Company, and is committed to creating clean energy for social development and to continuously improving the performance of environmental protection. We actively deepen environmental governance, consider low-carbon development and climate change, vigorously promote energy conservation and emission reduction. All these efforts show our strong commitment to the "Dual Control" targets of energy consumption intensity and total volume and the "Dual Carbon" goals of carbon peaking and carbon neutrality, and the paths of green operations.

- Emission management
- Resource management
- Green governance
- Response to climate change



## Emission management

In strict accordance with the *Environmental Protection Law of the People's Republic of China* and other relevant laws and regulations, the Company establishes and effectively operates an environmental management system, formulates and implements *Environmental Protection Management Measures* and other relevant policies, and promotes environmental protection projects such as high-salt mine water treatment and mine water treatment in an orderly manner. We continuously improve our environmental governance capabilities and reduce pollutant emissions to reduce negative impact on the environment. In 2022, the Company's annual emissions of particulate matter, sulphur dioxide ("SO<sub>2</sub>"), nitrogen oxides ("NO<sub>x</sub>"), chemical oxygen demand ("COD"), and ammonia nitrogen reduced by 86.2%, 71.3%, 50.6%, 88.9%, and 95.7%, respectively, compared to the regulatory assessment indicators. The Company organises and conducts routine

and specialised environmental inspection and audit every year. In 2022, we carried out 159 environmental inspection and audits, covering all operating units, which strongly boosted the progress of major environmental protection projects and the elimination of environmental hazards. The Company has established a complete environmental management system in all subsidiaries and business operation units, and successfully passed the ISO 14001 environmental management system certification. All the voluntary agreements signed by the Company and the environmental protection department to improve environmental behaviour have been implemented. There was no environmental pollution incident and no major environmental protection violations. No punishment was received from the environmental protection supervision department throughout the year.

### Wastewater management

The Company's wastewater mainly derives from coal mining and coal chemical production, for which online monitoring facilities have been installed at all wastewater outfalls. The Company has built 52 sewage treatment systems with a sewage treatment capacity of 62.1 thousand tonnes per day, a sewage treatment rate of 100%, and the external drainage quality is better than the national and local discharge

standards. In 2022, the Company continued to implement the high-salt mine water treatment project. Most of the high-salt mine water was reused after treatment, realising the recycling of water resources and greatly reducing the impact of salt discharged to the environment. The Company also upgraded the domestic sewage treatment systems and strengthens the management of sewage discharge to avoid pollution of surface and underground water sources.

#### Wastewater management KPIs



Total COD emissions (tonne)  
**645.82**

Total ammonia nitrogen emissions (tonne)  
**28.86**

Wastewater discharge (10,000 m<sup>3</sup>)  
**5,567.77**





Case: Yankuang Energy's coal mines continuously promote wastewater treatment upgrade projects

In 2022, Yankuang Energy made more efforts to accelerate environmental protection renovation. The construction and commissioning operation of Nantun Mine High-Salt Wastewater Treatment Project, with a total treatment scale of 5,000 cubic metres per day, was completed in September; and the joint commissioning phase of Mine Water Expansion Project of Jinjitan Coal Mine, with a total treatment scale reaching 4,400 cubic metres per hour, was completed and followed by a trial operation phase in in November, ensuring that the wastewater is discharged up to standard after treatment.



Jinjitan Coal Mine: Mine Water Expansion Project



Nantun Coal Mine: High-Salt Wastewater Treatment Project



## Waste gas management

The Company's waste gas emissions are mainly pollutants including SO<sub>2</sub>, NO<sub>x</sub>, VOCs and particulate matters from power plants, coal chemical units and some coal mines. In strict compliance with the *Emission Standard of Air Pollutants for Thermal Power Plants* and the *Emission Standard of Air Pollutants for Boilers*, the Company has carried out air pollution management, ensuring compliance with the emission standard. In 2022, the Company improved the environmental management system, and urged all units to renew pollution discharge permits in a timely manner in accordance with the *Regulations on the Administration of Pollutant Discharge Permits (State order No. 736)*.

### Taking various measures to prevent and control air pollution

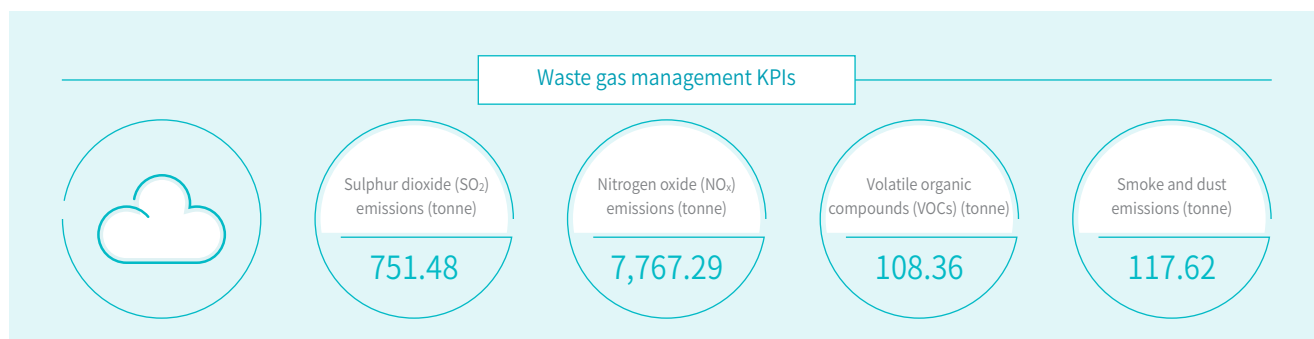
In 2022, all member units of the Company took various measures to prevent and control air pollution. Donghua Heavy Industry procured centralised smoke collection facilities to address the fume emission from the welding process. It conducted real-time monitoring of the VOCs concentration curve value in the workshop and set up sound and light alarm devices to control the emission of VOCs. Jining II Coal Mine upgraded PM<sub>10</sub> online monitoring devices, updated equipment for comprehensive dust prevention and control, and optimised inspection and dynamic control.



Donghua Heavy Industry: Smoke Collection Facilities



Donghua Heavy Industry: VOCs Monitoring System



### General solid waste

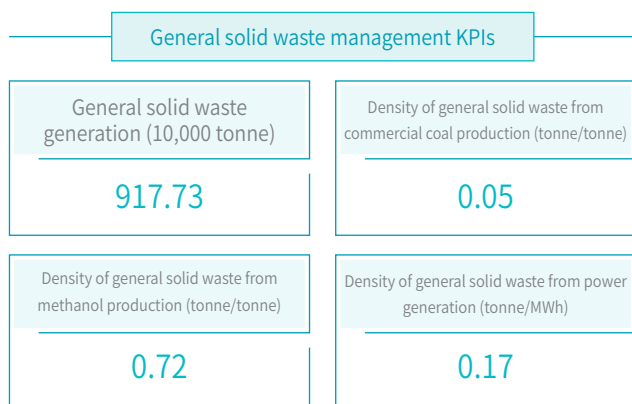
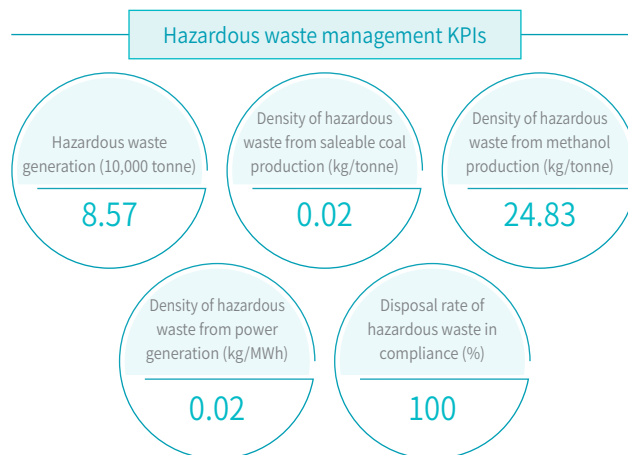
The Company's general solid waste mainly includes gangues, coal ashes and slags. The Company has carried out research and application of underground gangue separation, mining with filling to reduce gangue discharge from the very beginning. Meanwhile, gangues, coal ashes, slags are used for construction materials production, backfilling and land reclamation. In 2022, the Company's comprehensive utilisation rate of coal gangue, coal ashes and slags maintained at 100%.

### Hazardous waste

The Company's hazardous waste mainly includes waste catalysts and used oil. With a complete hazardous waste management system, the Company has built hazardous waste repositories in compliance with national standards and assigned professionals to properly record hazardous waste storage and transfer. We enter into transfer and shipment contracts with a company with hazardous waste recycling qualification. In 2022, the Company's disposal of hazardous waste was 100% in compliance with laws and regulations.

#### Comprehensive utilisation of coal gangue

In 2022, the project of comprehensive utilisation of recycled gangues was carried out in Zhuanlongwan Coal Mine. In this project, the coal gangues were used for the restoration and backfilling of reclamation areas. As of December 2022, 541 thousand tonnes of gangues were comprehensively utilised, among them, about 41 mu of forest land were restored and 7,000 trees of *Pinus sylvestris* were planted in 2022.



### Environmental emergency management

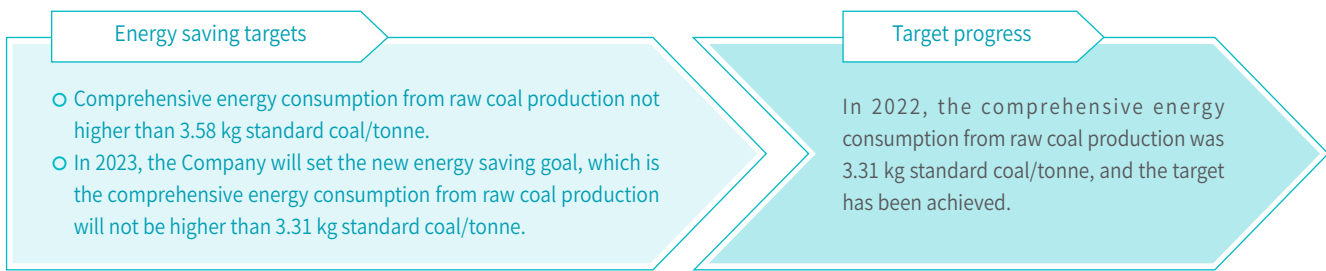
Based on risk assessment for environmental emergencies and emergency resource investigations, the Company has developed the *Environmental Emergency Plan*, filed to the local ecological and environmental authority after being reviewed by relevant experts. In 2022, the Company urged all relevant member units to follow the emergency list of emission reduction and the requirements of differentiated emergency control, to apply for qualification on transportation in case of emergency and to strictly implement various mandatory emission reduction measures, in accordance with the *Comprehensive Program for Combating Atmospheric Pollution in Autumns and Winters of 2021-2022 (Huan Da Qi [2021] No. 104)*. A total of 38 environmental emergency drills were carried out throughout the year, and no environmental vulnerabilities were identified in each unit during the heavy pollution weather emergency response.

## Resource management

In strict accordance with the national policies for energy conservation and emission reduction, the *Energy Conservation Law of the People's Republic of China* and other relevant laws and regulations, the Company has formulated the *Measures for Energy Conserving Management*, which deepens the concept of "energy saving taking consideration of safety and economic viability, through system, equipment, synergy and management". We provide great support in key projects regarding energy and water conservation, in order to promote scientific and technological innovation in energy and water conservation, improve the efficiency of resource utilisation, and accelerate the development of the resource-saving enterprise.

### Energy management

The Company continues to strengthen management and assessment, as well as rigidly promote energy conservation. In 2022, thanks to the practice on control over total energy and coal consumption, the Company's energy consumption of industrial output of headquarter mines was 0.48 tonne of standard coal/RMB 10,000, dropping by 32.91% compared with the same period in 2021. As such, all energy-saving assessment indicators were well accomplished.



#### ○ Basis of work

The Company further improves the metering system, which makes full use of information technology to analyse comprehensive energy consumption of the main mechanical and electrical systems. We allocate more resources to reinforce the energy consumption management regarding mining production, tape transport and coal washing, bring forward optimisation plans, and achieve greater energy efficiency by means of management and technology. The energy consumption indexes of the main hoisting system, ventilation system, pressurised air system and drainage system of each mine reached the national standard of Grade 2 or above.

#### ○ Energy saving projects

In 2022, the Company continued to carry out energy-saving and consumption reduction work so as to promote energy-saving project development. Among them, the low-temperature waste heat recovery and utilisation project of mine drainage from Xinglongzhuang Coal Mine is expected to save 7.96 million kWh/year of electricity after commissioning. The upgrade of the control system of the underground main transport belt in the south wing of Yangcun Coal Mine could save 123,900 kilowatt-hour of power per year. The heat recovery and pressure increase operation transformation project of Lunan Engineering shut down three compressors, and realised the electricity

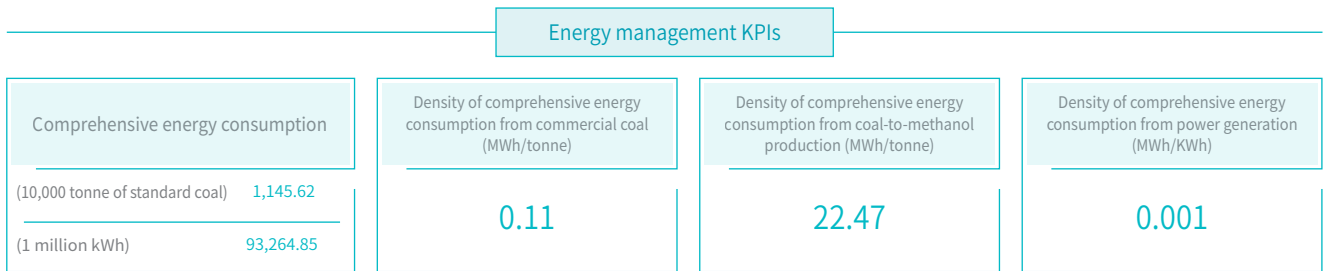
saving benefit of 28 million kilowatt-hour per year; Future Energy Coal-to-Liquid Branch completed the construction of energy-saving and water-saving projects such as the transformation of the feedwater pump of the purification and deoxidization boiler, the recovery and utilisation of the desalted water ultrafiltration backwash water, and achieved the energy-saving benefit of 1.568 million kilowatt-hour per year; the electromechanical equipment failing to meet the latest energy efficiency rating requirements identified by each primary-level unit, and the replacement and scrapping were arranged in an orderly manner.

#### ○ New projects

The Company strictly follows the *Measures for the Energy Conservation Examination of Fixed-Asset Investment Projects* issued by the National Development and Reform Commission (NRDC) and the "Three Simultaneity" system related to energy conservation in project construction. The Company also conscientiously implements the *Alternative Plan for Reducing Coal Consumption and Opinions on Energy Conservation Review* approved by the competent authorities and ensures that the construction project is legal and compliant. After the project is completed and put into operation, the indicators on coal consumption and energy consumption are superior to those approved by the competent authorities.

○ Supervision and assessment

The Company strictly carries out supervision and inspection of energy conservation work such as completion of indicators, project promotion, energy efficiency benchmarking, energy consumption status and implementation of energy consumption limit standard per unit of product. We sort out the problems found by items, implement rectification and link the inspection and assessment results with the annual operation risk collateral of operation managers.



**Water resources management**

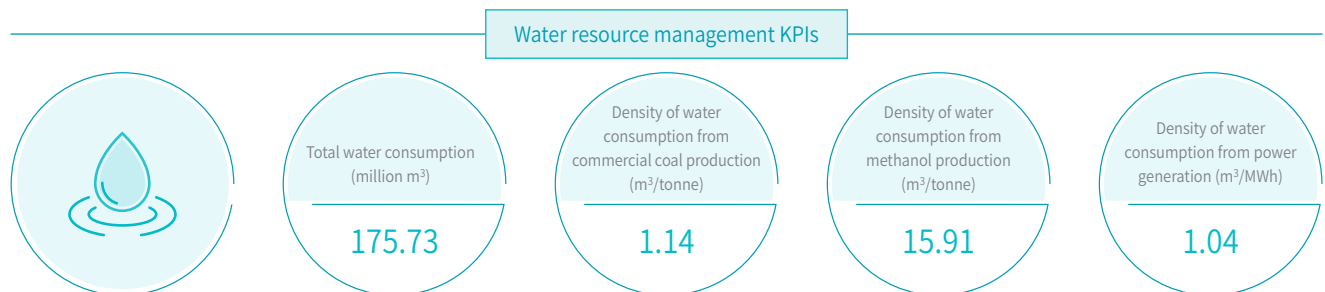
The water resources in the place where the Company operates are sufficient to meet production and living needs, and the water quality meets the corresponding standards. The Company continues to strengthen water resource management, improve water-saving management system, and promote recycling of reclaimed water and mine water. The CEO of the Company is responsible for reviewing the water resources strategy and performance every year. As such, all assessment indicators have been well accomplished in 2022.

In 2022, the Company implemented the "One Mine, One Policy" mine water reuse project, and conducted regular operational assessments for coal mines that have built underground water reuse systems and continuously optimised system operation parameters. Among them, Jining III Coal Mine has achieved 100% underground reuse of mine production water. The Company actively promotes the successful experience of Jining III Coal

Mine and encourages other mines to speed up the planning of mine water reuse system renovation in line with their own situation.

**Water supply system renovation project conducted in industrial square area of Baodian Coal Mine**

In 2022, Baodian Coal Mine invested more than RMB 3 million in the renovation of the water supply system in its industrial square area, completing the renovation of 7,620 metre of water supply pipes and setting up a centralised water supply remote monitoring platform. The project has achieved an annual saving of 300 thousand cubic metre of water resources.



## Green ecology

Yankuang Energy is committed to "creating clean energy and beautiful dreams". We integrate the concept of green governance into the whole production process, adhere to the combination of utilisation and protection, and promote ecological civilisation progress.

### Green mines

Pursuant to the *Green Mine Construction Specification*, the Company focuses on the goal of building a "green mine with recycled resources, minimum energy consumption, compliant pollution emission, clean civilisation and low carbon". We are exploring a green mine model with Yankuang Energy characteristics and promote the sustainable development of regional ecology to maximise economic and social benefits. By the end of 2022, Baodian Coal Mine, Nantun Coal Mine, Dongtan Coal Mine, Xinglongzhuang Coal Mine, Zhaolou Coal Mine and Jinjitan Coal Mine had been included into the *National List of Green Mines*.

#### Shilawusu Coal Mine accelerated green mine construction

In order to promote the ecological protection and high-quality development of the mining industry in the Yellow River Basin and beautify the mining environment, Shilawusu Coal Mine has worked hard in the transformation of green mines. In 2022, Shilawusu Coal Mine has afforested 500 mu in the Mongolian Rose Economic Industrial Park. It also maintains over 320 mu of road greenery vegetation, including 15,904 camphor pine, 3,015 mountain apricot trees and 19,825 square metres of hedges.

### Ecological protection

Following the principle of "government-leading, integration of local governments and enterprises, enterprise investment, and coordinated development" and the *Measures for the Implementation of the Regulation on Land Reclamation*, the Company actively explores and practises the coordinated development of coal resource development and ecological restoration and governance, solidly promoting the compensation and treatment of mining subsidence land. In 2022, the

Company completed a number of 32 projects of comprehensive coal mining subsidence land for reclamation over area of 50.1 thousand mu, including 31.5 thousand mu of subsidence reclamation, with a 100% subsidence reclamation rate. By the end of 2022, the Company had completed the reclamation of 227.1 thousand mu of coal mining subsidence land in Shandong Province by commissioned treatment and self-treatment.

#### Nantun Coal Mine developed integrated management of subsidence land according to local conditions

In the integrated management project for coal mining subsidence land, Nantun Coal Mine adopted such means as "layered stripping, separated backfilling and soil reconstruction" to expand arable land for those areas with less severity in subsidence and meeting the conditions for agricultural reclamation. For those subsidence areas with higher severity, it adopted such means as bulldozing the protruding areas and filling up low-lying areas, bank slope treatment and digging ditches to implement ecological management and enhance the comprehensive benefits of the project.



Green Seedlings have Grown in the Waste Dump





#### Yancoal Australia implemented a biodiversity compensation plan

Yancoal Australia has approximately 14,000 hectares of land for biodiversity compensation, setting strict standards for biodiversity. We continue to carry out the biodiversity compensation plan to improve the local ecological quality and integrity. In 2022, Yancoal Australia assessed and investigated the vegetation status of Stratford Mine to understand the impact of the company's operation on local ecology and to provide a basis for subsequent biodiversity compensation work.

## Response to climate change

The global impact of climate change has become increasingly significant, and it has reached a global consensus to promote low carbon development. As a leading energy enterprise in China, Yankuang Energy pays continuous attention to the impacts of climate changes on the Company, with reference to the recommendations of the Task Force on Climate-Related Financial Disclosures ("TCFD"). Specifically, we have established a governance structure, formulated response strategies, identified and assessed climate change impacts, and disclosed relevant targets and performance.

### Governance

Yankuang Energy has established a special committee under the Board of Directors, namely, the Sustainable Development Committee, whose main duties and responsibilities include: to formulate and review the Company's objectives and strategies related to climate change, to assess the climate-related risks and opportunities faced by the Company, to oversee the implementation of climate-related work. In doing so, the Company can ensure the climate change response strategy consistent with the company's strategic development direction, regulatory requirements of investors and stakeholder expectations.

### Strategy

Yankuang Energy pays great attention to climate change risks and opportunities, and is aware of the significant impacts they may have on business operations, finance, etc. In 2022, the Company identified risks and opportunities related to climate change and formulated countermeasures based on the comprehensive risk management system, taking into account economic policies, societal trends, environmental requirements, business nature and geographical factors.

List of climate change risks

Risk type and description		Response strategies
Transition risks	Policy	The government has formulated stricter policies and regulations to address climate change, while the "carbon peaking and carbon neutrality" goals have led to tougher measures to limit greenhouse gas emissions and increased compliance operation work of enterprises; In the gradually improved trading in China's carbon market, the price of carbon trading has increased, raising business operating costs.
	Technology	The rapid development of energy-saving technological renovation, the operating costs of high energy-consuming technologies increased.
	Business structure	Renewable energy technologies have developed rapidly, the demand for major coal products has declined.
	Brand and reputation	The failure to respond to major stakeholders' climate-related expectations including the capital market causes negative impact on the brand and reputation.
Physical risks	Acute	Increased frequency and severity of extreme weather will damage factories, office buildings and equipment, resulting in production operation disruption; Sudden natural disasters will threaten personnel safety and cause property losses.
	Chronic	The average temperature as well as sea level rises will result in higher operating costs and cause damage to equipment and facilities; Prolonged drought may result in water stress that affects business operations.

### List of climate change opportunities

Opportunity type and description		Response strategies
Resource efficiency	More energy-efficient equipment, buildings and technologies are widely used.	Actively explore the application of new technologies, equipment and processes to increase resource efficiency and reduce energy costs;
Products and services	R&D and the application of green and low-carbon products are booming.	Identify and respond to supportive government policies and low-carbon projects; Put more efforts in the R&D of low-carbon technologies to provide low-carbon solutions to energy substitution;
Market	Expanded green market demand and increased demand for renewable energy services due to shifting user preferences	Develop renewable energy projects.

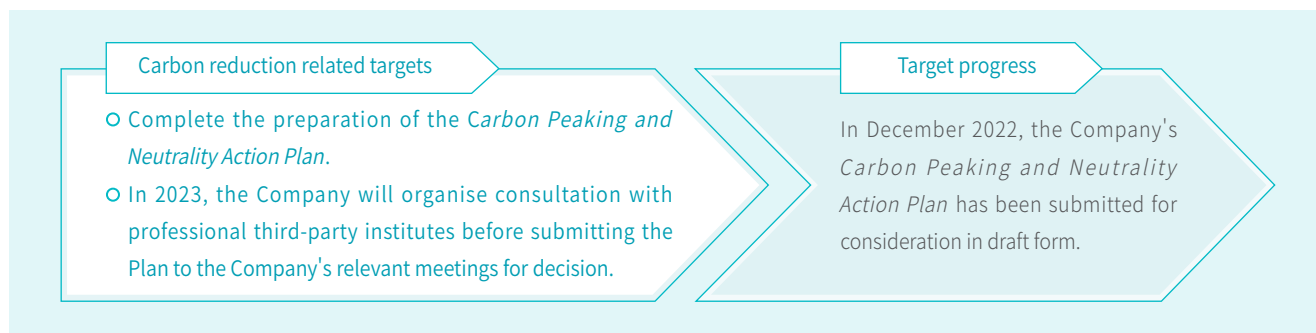
#### Risk management

Yankuang Energy incorporates climate change-related risks into its comprehensive risk management system, regularly identifying and analysing risks to comprehensively strengthen risk management.

The Company adopts qualitative analysis method to determine the types of risks related to climate change and developed a list of climate change risks and responding strategies and management plans accordingly. In the future, the Company will monitor and evaluate the status of climate -related risk management.

#### KPIs and targets

Yankuang Energy actively responds to the national goals in advancing low-carbon development. Based on documents including the *Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy* and the *Action Plan for Carbon Dioxide Peaking Before 2030*, the Company incorporates "carbon peaking, carbon neutral" into the overall business development, and timely review the progress of goals and targets.



#### Action path of dual-carbon strategy





In order to accelerate the achievement of carbon reduction related target, the Company has formulated a strategic action plan centred around energy conservation and in-depth carbon reduction, structural optimisation, technological innovation, resource circularity, and carbon neutrality demonstration and continue to carry out carbon reduction measures.

**Carbon capture and usage**

The Company's operating coal mines are mostly low-methane mines, and such coal mining generates fewer fugitive methane emissions. The Company's high-methane coal mines recycle greenhouse gases such as methane and use them for power generation, thereby reducing carbon emissions.

**Clean energy utilisation**

The company makes full use of the coal mining subsidence land in Dongtan and Xinglongzhuang coal mines and adopts the mode of "photovoltaic + ecological governance", " self-generation and self-use, surplus power to the grid", with the designed annual generation of 19.26 million kWh. In 2022, we generated 5.807 million kWh solar power, and all photovoltaic power have been consumed by coal mine production.

**Low-carbon communication**

The Company actively participates in numerous publicity activities on the National Low-Carbon Day, vigorously promotes the concept of ecological civilisation on the Environmental Day dated 5th June and conducts various publicity activities under the theme of "building a clean and beautiful world together", including energy-saving lectures, green consumption promotion and low-carbon knowledge spread, to advocate a green and low-carbon lifestyle.



Publicity Activity on the Environmental Day Dated 5th June

**Greenhouse gas management KPIs**

Total greenhouse gas emissions (Scope 1 & 2) (10,000 tonnes)

**1,630.47**

Greenhouse gas emissions (Scope 1) (10,000 tonnes)

**1,363.30**

Greenhouse gas emissions (Scope 2) (10,000 tonnes)

**267.17**

Density of comprehensive greenhouse gas emissions from commercial coal (tCO<sub>2</sub>/tonne)

**0.08**

Density of comprehensive greenhouse gas emissions from methanol production (tCO<sub>2</sub>/tonne)

**1.87**

Density of comprehensive greenhouse gas emissions from power generation (tCO<sub>2</sub>/tonne)

**0.19**

Note: 1.Please refer to page 65 for the definitions of Scope 1 and 2 emissions.



# 4 Safety and Health

Safety is the cornerstone of corporate development. Guided by the safety culture, Yankuang Energy firmly stick to our safety red-line and operation bottom-line, formulates safety development plans and work targets, formulates safety risk identification and assessment, implements risk control measures, strengthens supervision assessment and emergency management, and highly values occupational health and personnel training, so as to consolidate safety responsibilities at all levels.

- Safety culture
- Safety management
- Occupational health
- Safety education





## Safety culture

Life and safety come first. Strictly complying with the *Production Safety Law of the People's Republic of China*, the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases* and other related laws and regulations, the Company firmly puts the concept of "preventing the hidden hazards from escalating into safety incidents, and always gives top priority to ensuring safety and health of our people". Under the guidance of the overall tenet of safety "13356" (explained below), the Company consolidates the safety fundamentals, strengthens the risk control and safety training, enhances the control capacity of production safety and occupational health, so as to eliminate accidents including fatal accidents, major disaster accidents, system safety accidents, multiple person accidents, occupational hazards and incidents causing major social impact.

### Focus on 1 main task

Taking comprehensive deepening of the prevention and control of safety risks as the main task, the Company implements the "Year of Safety Foundation Improvement" campaign to strengthen source governance, conduct systematic measures, and address both the symptoms and root causes, thereby preventing and mitigating various safety risks properly.

### Improve 3 capabilities

Enhancing the ability of independent security protection, professional synergy and safety control, and safety management and control to enhance safety governance.

### Highlight 3 cruxes

Highlighting the advanced governance of major disasters, system equipment update, optimisation and improvement of management and control system, to crack the bottleneck of safety development.

### Concentrate on 5 key points

Strictly focusing on the capacity improvement of all staff, lean management on quality, management of dangerous operation, hidden engineering, and vulnerable links to enhance the essential safety level.

### Strengthen 6 mechanisms

Strengthening the dual prevention mechanism, safety evaluation mechanism, problem feedback mechanism, inspection and efficiency mechanism, emergency safeguard mechanism, and reward and punishment mechanism for safety development.



### Safety KPIs



Work-related deaths (person) **0**



Proportion of work-related deaths (%) **0**



Lost days due to work injury (day) **840**



Ceremony of the Standardised Production Safety



Safety Culture



Safety Commitment Signature



Safety Oath



Safety Publicity



## Safety management

The Company, taking "abiding by the law to protect employee health" as the production safety management policy, has built a complete management organisational structure, and continuously improved the production safety responsibility system for all employees. In 2022, the Company set up and achieved the safety management target of "eliminating fatal accidents".

### Dual prevention mechanism

The Company keeps optimising the dual prevention mechanism of classified safety risk control and hidden hazard detection and control. We analyse and predict various major risks, carry out annual risk identification assessment, special identification assessment, and job position identification assessment, formulate control and emergency plans, and hold monthly dual prevention meetings to monitor the implementation of the work. The Company comprehensively evaluates the results of risk and hidden hazard governance after its completion to ensure the compliance with relevant requirements prior to the acceptance and realise a closed-loop management. In 2022, the Company revised the *Operation Management Policy of Dual Prevention Information Management System for Coal Mines* and the *Management Policy for the Dual Prevention Mechanism of Classified Safety Risk Control and Hidden Hazard Detection and Control*, so as to improve the dual prevention information system, optimise the system interface and strengthen the system function. Besides, the Company implemented the risk and hidden danger linkage mechanism and realised the organic integration of risk classification management and hidden danger investigation and management. The effective control rate for mine risks was 100%. The effective treatment rate of hidden dangers detected was 100%.

### Major disaster prevention and control

The Company revised and issued the *Notice on Implementation of the Control Process for "Ten Major Disasters and Ten Special Operations" in Coal Mines*, which regulated the control process for ten major disasters and ten special operations in terms of overall requirements, control responsibilities and emergency response, and formulated the workflow for safety control.

In 2022, the Company established 25 major disaster management projects for the prevention of rock burst, water control, and ventilation and fire prevention, and compiled precise management plans. The Company summarised and tracked the work carried out on major risks, key hidden dangers and major disaster management projects on a weekly basis, and formed a summary report in a timely manner.

Furthermore, focusing on major disaster types, major risks and weak links in safety production, the Company conducts a precise diagnosis every six months and implements precise management. For mines with complex hydrogeological conditions and fault structures, the Company carried out special safety identification and assessment work, implemented preventive control measures and developed emergency and post-event handling procedures. The Company has built an intelligent ventilation system to achieve intelligent and precise disaster prevention and control of underground environmental system, as well as an early warning platform for major disasters to achieve early warning and reduce the probability of major disasters. In order to improve the management capability of integrated gas prevention and control, the Company has prepared training materials for disaster management, built a practical training base for integrated gas prevention and control, and provided trainings on integrated gas prevention and control for employees.

Ten major disasters	Ten special operations
Rock burst	Hot work
Roof	Working at height
Flood	Lifting (towing)
Spontaneous ignition	Power cut and transmission
Gas	Danger-breaking drilling
Dust	Airtight unsealing and gas discharge
Explosives items	Explosion
Main hoisting	Roof caving handling
Main power supply	Coal silo blocking handling
Auxiliary transportation	Rerailing

### Management of external personnel

The Company formulated and practises the *Notice on Strengthening the Construction Safety Management Regarding External Personnel*, the *Provisions on the Safety Administration of Labour Dispatch Personnel and Flexible Labour Personnel in Outsourced Construction* and other policies to regulate the safety management for external personnel regarding policy, process, responsibility and assessment. The

Company fulfils its safety responsibilities through measures including strictly reviewing the qualification of external personnel concerning construction, maintenance, overhaul and logistics, signing construction contract and production safety management agreement, safeguarding the rights of external personnel, defining management of personnel entry and exit, safety training and construction plan, requiring outsourced construction commissioners and labour dispatchers to provide safety education, protective equipment and corresponding insurance, as well as supervising the implementation of safety measures on external construction personnel.

### Safety emergency management

We have put in place the *Implementation Rules for Authorising Coal Mine Dispatchers with Ten Emergency Response Rights* and the *Plans for Emergency Response of Accidents in Coal Mines*, and improved the *Emergency Plan for Production Safety Accidents in Coal Mines of Yankuang Energy Group Company Limited*, the *Management Measures for Emergency Response of Production Safety Accidents* and the emergency response plan of all subordinate units to comply with the laws and regulations of China and meet the needs of emergency management.

We continue to improve the emergency work system that "promotes unified leadership, comprehensive coordination, classified management, hierarchical responsibility, and territorial focus", and have built a comprehensive all-disaster-type emergency rescue team with multiple abilities, ensuring on-site disposal capabilities. We also



Safety Emergency Team

actively promote the construction of emergency management system to ensure reasonable, adequate and intact emergency equipment and resources. Under the big data platform, we realise dynamic real-time monitoring of the mine personnel, equipment and environment, early warning of accidents and disasters, decision-making assisted by emergency command, and comprehensive visualised display.

Moreover, we organise emergency practice drills for flood, disastrous weather, mine power failure and mine water disaster to enhance emergency management. Focusing on key issues such as emergency power supply for mines, responses to sudden power failure and emergency responses in special periods, we provide professional personnel with emergency response improvement training, practical assessments and business quality tests. In 2022, the Company carried out 1,092 emergency drills for various scenarios with 27,929 participants.

### Emergency drills in Nantun Coal Mine

In 2022, Nantun Coal Mine carried out a comprehensive emergency drill for shutdown and evacuation in disastrous weather as well as ground flood prevention, with a total of 358 employees participating in, which enhanced the employees' emergency awareness and emergency handling capability, and improved production safety management in the mine.



Comprehensive Emergency Drill in Nantun Coal Mine

### Safety supervision assessment

The Company has developed the *Measures for Grid Management of Production Safety*, which divides the ground and underground of coal mine into several areas to be subject to differentiated unit management based on the grade of safety risk, with special personnel at different level to supervise the on-site safety operation. The Company established 13 professional assessment teams to carry out comprehensive assessment by means of on-site inspection, communication, follow-up, and reverse inspection and backtracking. Rectification with the specified time limit should be implemented for any problems identified in the inspection and evaluation with close-loop management.

A systematic and comprehensive assessment system was formed, including carrying out the monthly safety responsibility assessment and annual safety objective assessment for management team members, the safety performance assessment for functional departments, joint assessment of hidden dangers of safety accidents. These are "Five Assessments" for production safety innovation and efficiency reward.



Safety Supervision Assessment

In 2022, the Company took the following measures to strengthen safety supervision and assessment:

#### Optimising policies

The Company formulated safety assessment policies such as the *Measures for the Performance Assessment of Safety and Environmental Protection in 2022*, the *Measures for the Performance Assessment of Production Safety Management Personnel (Trial)* and the *Measures for the Management Assessment of Safety Directors (Trial)* to further standardise the safety supervision and management work.

#### Strengthening safety assessment

The Company expanded the scope of assessment, developed differentiated assessment standards, clarified the necessary KPIs of safety management-related staff assessment, and set up the reward and punishment mechanism, thus improving the awareness of safety management personnel at all levels to fulfill responsibility, and ensuring balanced and comprehensive improvement of the Company's safety management.

#### Improving safety supervision

The Company carried out an inspection every six months in an all-round way, at least one unannounced night inspection and one rock burst analysis inspection every month, as well as several professional inspections. In addition, the Company assigned safety directors to each production unit to conduct supervision and inspection of production safety, to identify potential safety hazards in a timely manner. During the year, the Company carried out 1,793 production safety related inspections.



## Occupational health

In strict accordance with the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases* and other related laws and regulations, the Company adheres to the occupational health management policy of "focusing on prevention, integrating prevention with control" and the requirements of "prevention first, source management, scientific control and stringent management". We have formulated 14 management measures to prevent and control occupational disease hazards, including the *Responsibility System for the Prevention and Control of Occupational Disease Hazards*, specifying prevention and control measures for occupational disease hazards such as dust, noise, hyperthermia, and hazardous gases, and regulating the provision and use of individual labour protection articles. During the year, the Company has successfully passed the ISO 45001 Occupational Health And Safety Management System certification, set and achieved the occupational health target of "the incidence of occupational disease per 1,000 employees is less than 0.5%".

The Company has rigorously conducted measures such as notifications of occupational disease hazards, warning signs, daily monitoring, regular reporting, and other protective measures with system measure assessment. In addition, the Company has entrusted qualified technical service agencies to identify occupational disease hazards at least once a year and assess the current occupational disease hazards at least once every three years. Meanwhile, the Company insists on declaring occupational disease hazards, standardising E-record documentation on the big data platform for occupational health, and actively organises occupational health examinations and health recuperation for underground employees. Through overall inspections, special inspections, regular inspections and random inspections, the Company reviews prevention and control effects of occupational disease hazards in workplaces, provides employees with a working environment meeting national occupational health standards, to improve prevention and control of occupational disease hazards. In 2022, the occupational health examinations and screening covers all employees, and there was no incidence of occupational disease at the Company.



Occupational Health Awareness Week

Promoting the application of new techniques and equipment for occupational disease protection



Integrated Excavator Applied for Spraying

To strengthen the prevention and control of occupational disease hazards at source, Baodian Coal Mine set up special funds for labour protection articles, purchased 46 types of labour protection equipment for more than 176 job categories, with a 100% equipping rate. At the same time, Baodian Coal Mine promoted the use of high-powered dust collectors, coal storage yard spray dust reduction systems and other equipment, and upgraded the integrated excavator for remote intelligent spraying, achieving the dust removal efficiency of more than 95% and mitigating the occupational disease risk.

## Safety education

The Company has enhanced safety training at all levels and developed the *Safety Training Management System* and the annual safety training plan. The Company gives comprehensive certification training and special training, rigorously selects qualified instructors, arranges reasonable training courses to ensure training hours. The whole process of teaching, training, exams is under the supervision by information technology to ensure the safety training is well organised. Moreover, to provide firm support to production safety, the Company has enhanced business and management capabilities of personnel at all levels through diverse channels and high-quality trainings.



Professional Safety Warning Education

### Certification training

#### Conduct certification training in accordance with laws and regulations

We provided training for a total number of 24.6 thousand participants. These trainees included personnel in charge of the three posts in mines<sup>1</sup>, underground shift heads, and general practitioners. All of the staff participated in the training with qualified learning result, and all obtained relevant certification.

#### Implement informatisation training

All the employees were organised to complete safety management knowledge learning and examinations on the "Xuexi Qiang'an" platform. The Company and the government conducted 730 and 37 random examinations, with a total of 54 thousand and 441 employees respectively, and all of them passed the examination.

#### Advance construction of safety training infrastructure

The Company has developed the "Internet+" training model, and built a multimedia electronic teaching material system and a practical operation training base to provide hardware and software support, as well as a favourable environment, for safety education and training.

1. The three posts mean the main principals of production and business units, safety management personnel and special operation personnel

### Safety training participants



Staff of three posts

2,131



Underground shift heads at coal mines

2,056



Other mine workers

19,272



Staff other than three posts at coal mines

1,111

### Special training

#### Cultivate high-level technicians

The Company organised 12 professional training sessions with 2,234 participants, along with professional skills training for 33 job categories, with a total of 2,972 participants.

#### Launch Lecture Hall for chief engineers and Carry out the Extensive Practice Training campaign for staff of all posts

The Company held 14 sessions of Lecture Hall for chief engineers and 87 sessions of practice trainings, to enhance the management capabilities of professional and technical personnel, and achieved a deep integration of theory and practice.

#### Carry out "Work Safety Month"

We diligently developed and implemented the programmes for "Work Safety Month", successfully carrying out 11 safety publicity and education activities covering 28 topics, including the "6.16 Publicity Day".

#### Provide online special training

We conducted online special training and examinations on the Shandong Energy E-learning platform, including promotion of the new *Work Safety Law*, learning from accidents, and rules for work safety, totalling 981 sessions.



# 5 Care for Employees

Adhering to the principle that "human capital is the first resource and brings the greatest advantages," Yankuang Energy fully implements the strategy of empowering the Company with talents from the perspective of overall strategic development. To this end, the Company actively recruits talents legally and compliantly, and strengthens training of talents and quality of workforce to build an excellent team. Meanwhile, the Company protects employees' rights and interests and cares for their lives, enhances their cohesiveness and cultural identity, and is committed to creating a favourable atmosphere and sharing the fruits of development with its employees.

- Employment
- Employees' rights and interests
- Employee development
- Care for employees



# Employment

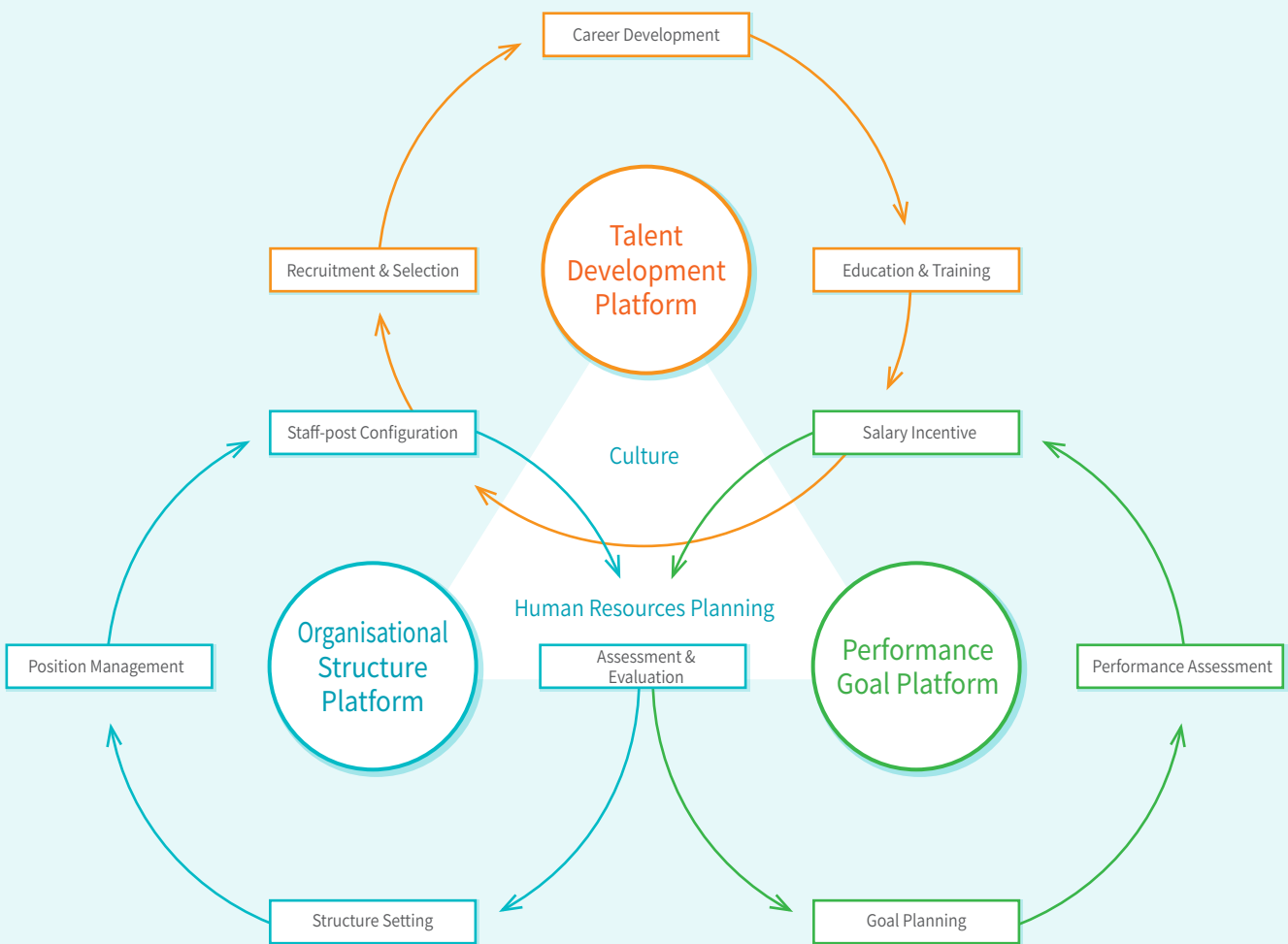
The Company strictly complies with the *Labour Law of the People's Republic of China*, the *Social Insurance Law of the People's Republic of China*, the *Law of the People's Republic of China on the Protection of the Rights and Interests of Women*, the *Provisions on Prohibition of Child Labour*, and other relevant laws and regulations. We continue to formulate and keep improving the employment management system, optimise the supervision and management system of employees' rights and interests, and establish an effective employee security system to protect their legitimate rights and interests.



Number of employees

64,279

## Human resource management system







New Employee Training Kick-off Meeting

### Recruitment

We value talents and spend great efforts on talent recruitment. The staff recruitment plan is prepared according to the employment needs, through channels such as campus recruitment, regional recruitment and internal staff adjustment. In 2022, we optimised the allocation of human resources, accepted 257 university and college graduates throughout the year, recruited 166 targeted consigned trainees from the 2022 class, appointed 203 targeted consigned trainees from the 2020 class through performance evaluation. For some positions with specific labour requirements, the Company recruited 1212 underground excavation workers; 80 railway workers were also introduced to railway transportation positions that required additional workforce.

### Contract management

The Company strictly abides by the *Labour Contract Law of the People's Republic of China* and other relevant national laws and regulations, and signs labour contracts with all employees in accordance with the principle of equality and voluntariness and consensus, specifying employment terms, such as contract period, working hours, workplace, job type, rest and vacation and remuneration and benefits. The Company signed employment contracts are submitted to local labour and employment departments for examination and record in a timely manner to ensure the legal validity of labour contracts. The Company adheres to equality and voluntariness, fully understands employee choices, and supports their development. For employees who have obtained qualification as civil servants, staffing of public institution, or postgraduates through their own efforts, the Company will help them handle the procedures related

to the handover of personnel files and the transfer of social insurance relations. In 2022, the Company's labour contract signing rate was 100%, and 100% of the labour employment records were filed.

### Labour standards

The Company strictly implements national laws and regulations, collects statistics on employment needs of associated units every year, and organises the recruitment work in a unified manner, to effectively avoid the potential labour risks of the independent recruitment of the units. In recruitment, the Company strictly reviews qualifications, focusing on the verification of valid documents such as identity cards and household registers of applicants, so as to eliminate recruitment and use of child labour from the source. No child labour or forced labour was found within the Company in 2022.

The company has developed relevant policies to avoid human rights violations such as violence, requires security personnel to abide by the Company's rules, and prohibits all violations of employees' rights and interests.

### Anti-discrimination

The Company is committed to creating an open work environment and providing equal employment opportunities. Discrimination based on gender, race, disability, age, religion, sexual orientation, national origin, or family status in employment, training, salary, promotion, and other labour affairs and daily practices is strictly prohibited. In 2022, no discriminatory incident occurred in the Company.



## Employees' rights and interests

### Compensation and benefits

The Company continues to improve its remuneration system, strictly abides by the requirements of laws, regulations and normative documents such as *Administrative Measures for Equity Incentive of Listed Companies* issued by the China Securities Regulatory Commission, and follows the internal policies such as the *Performance Appraisal and Remuneration Management for Operating Managers*, and *Wage Distribution Opinions*, and *2022 Safety and Environmental Performance Assessment Scheme*.

The Company has implemented an appraisal and incentive mechanism among its management based on combination of annual salary system, security and environmental protection risk collateral and special contribution rewards, so that the performance appraisal of the management is organically integrated with the economic efficiency and operational effectiveness of the Company. The Company directly appraises the performance of senior management in accordance with relevant operational indicators and management standards, and will honour their 2022 compensation based on the results of the appraisal. The Company adopts flexible and diversified forms of distribution such as the piece-rate salary system, hourly wage system, and market-based assessment salary system to give full play to the incentive effect of salary distribution.

The Company deepens the reform of the remuneration system and has become the first state-owned listed coal company in China that promotes the share incentive plan targeted at board directors, middle and senior management personnel, and core leading members. Starting from 14 February 2022, 436 incentive targets of the 2018 A-share stock option incentive plan had exercised their rights smoothly, with a total of 12,796,080 shares exercised. On 25 February 2022, Yankuang Energy released the *Announcement in Relation to the Results of the Grant under the Restricted A Share Incentive Scheme for 2021*, under which a total of 61.74 million and the actual number of incentive recipients totalled 1,245, making it the only state-owned listed energy company to implement equity incentives twice. Focusing more on core technical leading members, the plan enables fully mobilising the management team and cadres and strengthens the Company's market competitiveness and capabilities for sustainable development.

The Company strictly implements the national working hour system and provides paid leaves for employees in accordance with the

regulations. Employees are entitled to statutory holidays, annual leave, wedding leave, family visit leave, bereavement leave, maternity leave, sick leave, and work injury leave. The Company pays basic pension insurance, basic medical insurance, supplementary medical insurance, work injury insurance, maternity insurance, and unemployment insurance, and housing provident fund for employees in a timely and full amount, protecting welfare protection for all employees and safeguarding their legitimate rights and interests.

The Company provides various subsidies and benefits for employees, including housing allowance, high-temperature allowance in summer, night shift allowance, seniority allowance, shift head allowance, allowance for working at toxic and harmful posts, holiday allowance and consolation fund for the needy and consolation fund for the disabled families. The Company has established a safety responsibility system to ensure the smooth development of the rehabilitation and recuperation programmes. Throughout the year, 1,105 employees were covered in the rehabilitation and recuperation programmes.

At the same time, in the *Announcement on Adjusting the Company's 2021 Restricted Stock Incentive Plan* issued in 2022, the Company clarified the repurchase provisions of the restricted stock incentive, and stipulated that the repurchase was caused by the failure to meet the equity unlocking performance objectives, the failure of the performance evaluation, resignation and the termination of labor relations for personal reasons of the equity incentive object, and the Company's termination of the implementation of the equity incentive plan. The repurchase price shall not be higher than the lower of the grant price and the market price.



Yankuang Energy Women's Story Evening

### Communication channels

The Company collects employees' opinions and suggestions through multiple channels such as the employee representative assembly, the complaint and request handling office, the committee for the mediation of labour disputes among employees, and democratic life meeting, so that it can guide and encourage employees to express their demands rationally and resolve labour disputes and conflicts in a timely and effective manner. In 2022, the Company held an employee representative assembly, where member representatives fully discussed topics like the Company operation, safety production, innovative development and democratic management. Moreover, reports on wage distribution and the performance of collective contracts were deliberated and approved at the meeting. We have systems regarding affair transparency, inspection by employee representatives, democratic evaluation by employee representatives and equal consultation of Company affairs to guarantee employees' rights to know, express, participate in, negotiate, and supervise matters concerning their interests, including salary, welfare treatment, labour safety and health, and social insurance, to promote democratic decision-making in the Company. The Company continued to strengthen the labour legal supervision of the labour union, establish and improve the labour legal supervision committee of the labour union on compliance with labour laws and regulations, enhancing the quality of supervision workforce, and developing a mechanism for employees to participate in the whole process of safeguarding rights and interests. Leaders at all levels of the Company visit the grassroots employees, listen to their opinions and suggestions, and understand various demands of the employees in a timely manner, so as to improve employees' satisfaction. In 2022, the Company conducted a survey of employee satisfaction, and the overall satisfaction exceeded 90%.

### Care for female employees

The Company abides by the *Law on the Protection of Women's Rights and Interests*, *Measures for Labour Protection of Female Employees in Shandong Province* and other related laws and regulations, and signs with female employees the *Special Collective Contract for the Protection of Female Employee's Special Rights and Interests*, so as to ensure the rights and interests of female employees are effectively protected in terms of working environment, the protection for them during pregnancy and maternity, and the prevention of sexual harassment in the workplace.

#### Deepening "Yankuang Brimming Literary Atmosphere"

In 2022, the Company further maintained the "Yankuang Brimming Literary Atmosphere" and established a reading club named "A Delightful Reading Life" for female employees. The club organised more than 10 thousand members to participate in the national "Women with Literary Temperament" and "Literary 'Roses'" reading activities. In addition, the Company supported grassroots organisations in setting up 15 reading clubs and constructing 24 staff libraries and 9 electronic libraries, providing more than 380 thousand books. It is noteworthy that Taihe Reading Club was on the seventh list of National Reading Demonstration Base in Shandong Province, and another reading club, "Lotus Jining III", was selected as the excellent case of corporate culture construction in the new era in Shandong Province.



Reading Conference for Female Employees

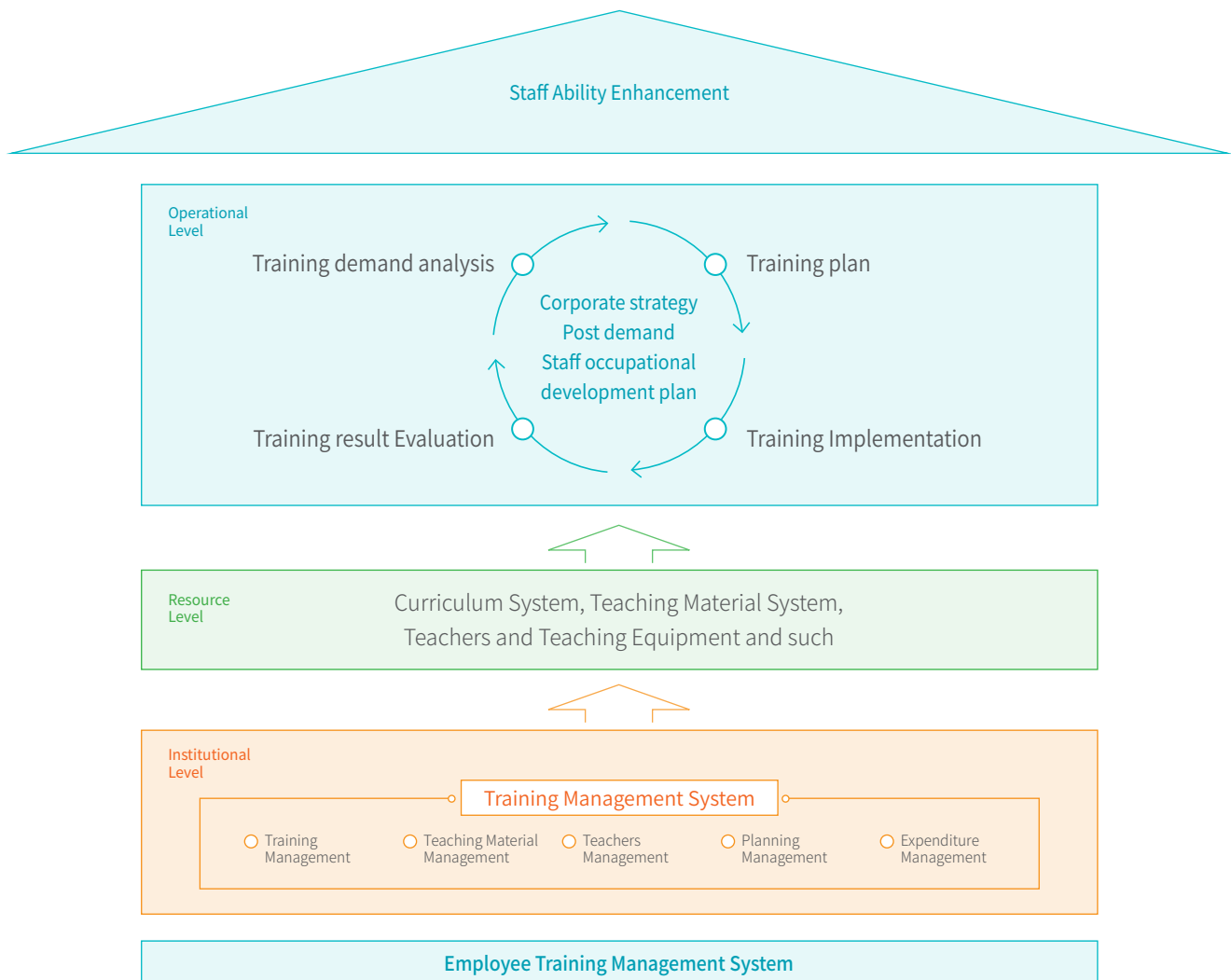
## Employee development

In 2022, Yankuang Energy improved the professional quality of employees and relevant policies specifying talent development targets, and implemented a functional mechanism for talent assessment, so as to release the vitality of talents in innovation and creativity. Moreover, the Company continued to smooth the channels for talents and spent greater efforts in all aspects to introduce, cultivate and retain more talents with higher quality.

### Employee training

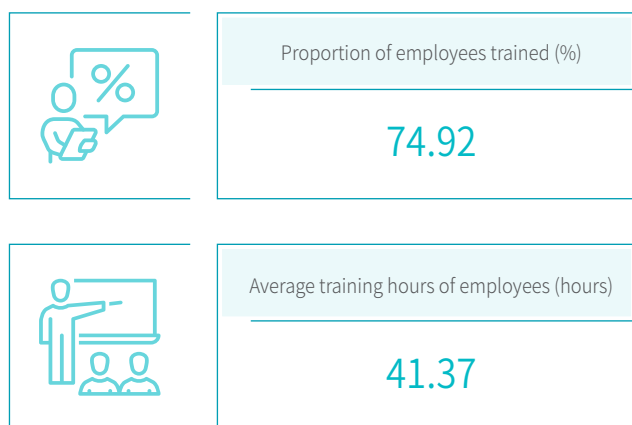
The Company pays attention to increasing employees' political knowledge by implementing the education campaign centring on the spirit of "Never Forgetting the Original Ambition and Staying with the Mission". The Company also attaches importance to cultural and ethical advancement by adopting programmes with the theme of "Responsibility Awareness, Civilised Behaviour, Positive Social Morality, and Harmonious Relation". Several public activities are carried out to promote the cultural and ethical progress of the public, and the corporate culture, vision and core values of the Company. Model units, communities, families, and sites that demonstrate cultural and ethical progress are selected or set up to stimulate all employees' ideological and moral improvement.

Adhering to the principle of fulfilling our duties and putting into practice what we've learned, the Company adopts a three-level training system that covers systems, resources and operations.



The Company prepares annual training plans and allocates a vocational education fund for staff training. As for internal training, units at all levels of the Company build training and practice bases according to their business characteristics to carry out reasonable and adaptive training, and strengthen the pooling and sharing of resources. As for outsourcing training, the Company sends middle and senior management to Zhejiang University and other high-quality training bases for training, which has improved the comprehensive quality and duty performance of the cadre team. In addition, the Company encourages employees to spend their spare time to participate in education and training activities for higher education degrees, qualifications and promotion, which can improve the comprehensive quality of the workforce. In addition, the company carries out human rights protection-related training and assessment for all employees and suppliers every year.

In 2022, Yankuang Energy gave full play to the core role of education and training in passing on corporate culture, empowering workforce and extracting knowledge as assets, with off-job training courses of various forms taken by over 70 thousand employees. All units of the Company conducted training for 220 thousand participants via online platforms such as Shandong Energy E-learning and China Coal Distance Education Network (CCDEN).



Skills Competition

### Employee promotion

The Company works to improve the young cadre selection system by introducing external talent with internal talent cultivation and building three promotion channels based on management, technology and skills. For the internal openings of management and technical posts, we select candidates through open competition and democratic recommendation. Workshop leaders who perform well can be promoted directly to management positions. Our employees can enjoy a promising prospect in career development.

The Company attaches great importance to talent cultivation and retention. Centring on its development strategy and industrial layout, the Company has built talent pools with different levels and skills in respect of related areas like engineering technology, Party member management, human resources management, accounting, legal affairs and secretary, and has improved the measures for the management, use and assessment of talent pools. The Company has innovatively carried out post-exchange training between functional departments of headquarters and grassroots subsidiaries, further broadened personnel training methods, enriched the staff's post-experience, improved the comprehensive quality of staff and cultivated a group of industry-leading talents mastering various specialised skills. In 2022, the coverage rate of the democratic and public promotion system for selecting middle-level management personnel of the Company was 100%, and the coverage rate of the competitive recruitment system for management and technical personnel reached 100%.

The Company has been actively carrying out regular activities such as skill competition, occupational skill appraisal, occupational title review, and model worker innovation studio to provide employees with rich exchanges, learning opportunities and growth platforms. The Company has focused on employees in the real industries and grassroots front-line operation positions, organised outstanding skilled talents to participate in the occupational skills competition, and 1,108 senior workers and above were recognised throughout the year, so as to inspire employees' craftsmanship spirit of fulfilling duties and striving for excellence.



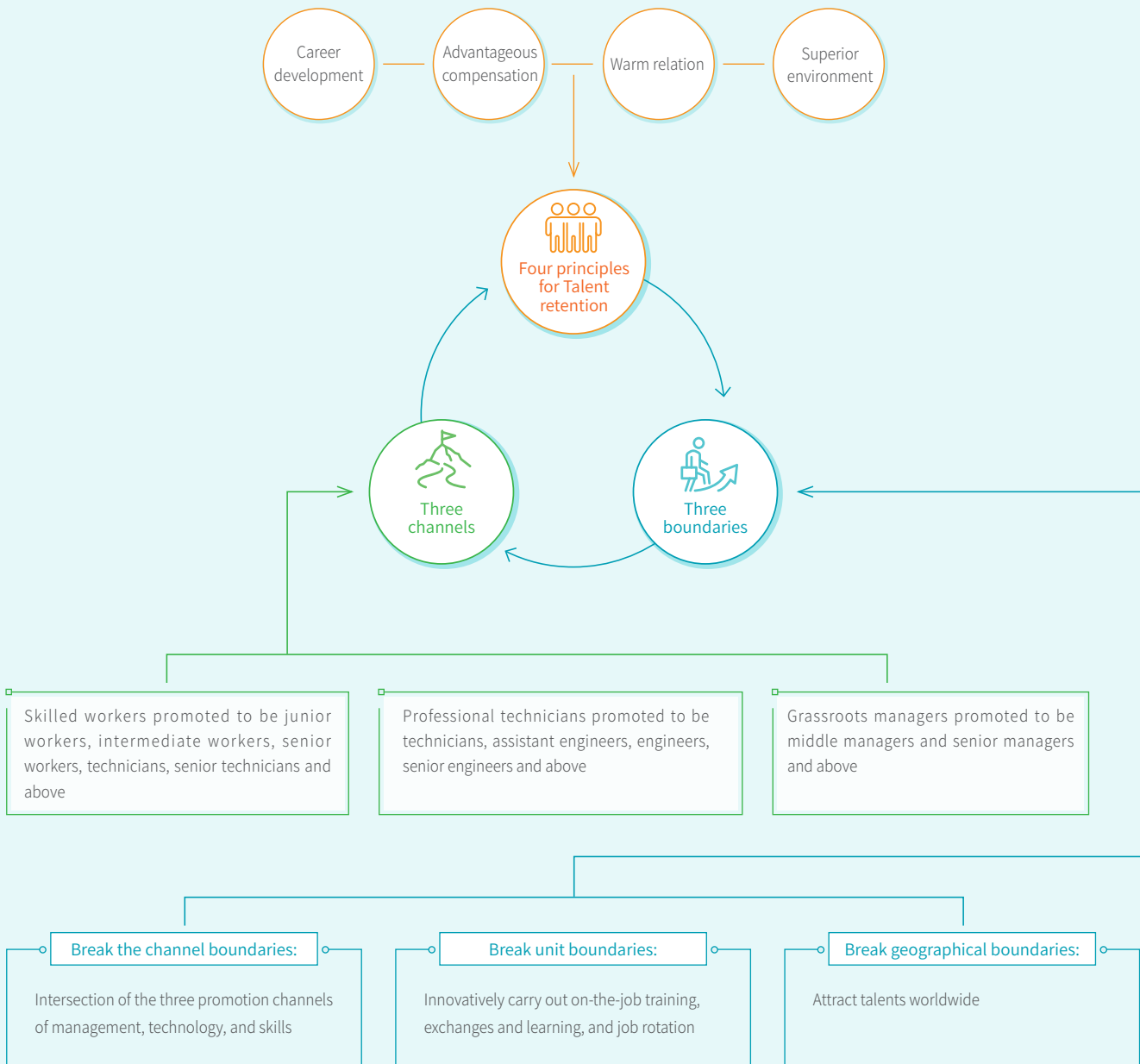
Skills Training

### National Workers' Vocational Skills Demonstration Competition in Coal Industry

In August 2022, Wang Xiaobo of Xinglongzhuang Coal Mine won the "Gold Award" for shearer drivers in the 22nd National Workers' Vocational Skills Demonstration Competition in Coal Industry jointly organised by China Energy Chemical Geology Labour Union and Chinese Workers' Technical Association. Yankuang Energy has strong technical reserves and a favourable atmosphere where talents are highly respected, which has fully stimulated the enthusiasm of employees to learn technologies.



Vocational Skills Demonstration Competition





## Care for employees

### Cultural and sports activities

The Company held the Shandong Energy Spring Festival Gala, the first employee badminton competition of Yankuang Energy, the employee painting and calligraphy exhibition with a theme of "Celebrating the 20th National Congress of the CPC and Gathering Momentum for the New Development", and the first employee sports meeting of Shandong Energy, which were highly praised by leaders at different levels and employees and their families. These diverse forms of cultural and sports activities have enhanced employees' comprehensive quality and group cohesiveness, carried forward corporate culture and met the spiritual and cultural needs of employees.



Football Game



Gongs and Drums Performance



Choreography Competition

### Care and compassion

The Company always cares for what employees think and want, and extensively carries out caring activities such as consolation to employees, serious disease aid, "Golden Autumn Student Aid", "Surrogate Support for the Elderly", "Loving Mothers", "Support for Wives of Coal Workers", and "Warm-hearted Sisters" and "Hand in Hand". In 2022, the Company launched the "Care for Employees 2022", allocating special subsidies to labour unions of grassroots units and giving nearly RMB 3.6 million to 4,650 employee families in need.



Visiting Frontline Employees



Visiting Retirees



Nuan Yang Yang Volunteer Service



Employee families in need helped

4,650



Giving nearly RMB

3.6 million





# Contribution to the Society

Yankuang Energy is committed to improving people's livelihoods and achieving common prosperity. The Company actively fulfils its social responsibility, gives full play to its advantages for rural revitalisation, and provides emergency relief and community care to bring warmth to numerous families.

- Social Responsibility
- Energy supply security
- Emergency relief
- Care for community



## Social Responsibility

The company actively fulfils its social responsibilities, makes full use of its own resources to provide the necessary financial and material assistance to the areas it helps to enhance people's well-being. Following the national strategic deployment of rural revitalisation, the Company deepened cooperation between local governments and enterprises, drove local development, consolidated and expanded the results of poverty alleviation through organisational revitalisation, industrial revitalisation, material revitalisation, cultural revitalisation, and ecological revitalisation, so as to successively push forth the development of areas that have shed poverty and promote comprehensive rural revitalisation.

### Community supporting

The Company provided affordable coals to targeted areas to ensure a warm winter for local residents.



The Company donated to targeted areas, e.g. donated to Gaozhuang Town, Mudan District, Heze City for improving road construction, service measures and village image; donated to Ejin Horo County for supporting rural revitalisation; donated to the government of Zasak Town for the construction of a secondary fire station; donated to Menkeqing Village for the construction of a nursing home; purchased agricultural products from the surrounding villages of Yulin City; donated to Yixing Town, Heshun County; donated to Damin Village, Zhanghuang Town, Jining City for the repair and operation of "Happy Canteen".



Ensuring A Warm Winter



Rural revitalisation

Organisational revitalisation

The Company sent "First Secretary", thoroughly carrying out the "Listen to the Public" initiative, and actively coordinated and solve problems reported by the community. As a result, we helped improve the engagement between CPC members and the people and between cadres and the people. In 2022, the Company donated RMB 5 million to the Shandong Foundation for Development of Poverty Alleviation for the "First Secretary" programme.

Industrial revitalisation

The Company supported the planting of commercial crops and the development of industrial projects related to or suitable for agricultural work in targeted areas including Shashatan Village, Sibukou Village of Garutu Township and other places. We purchased agricultural machinery equipment, promoted industrial cooperation, and provided income boost channels for villagers in targeted areas, laying a solid foundation for the long-term development of rural economy.

Cultural revitalisation

The Company steadily promoted rural cultural advancement and invested more in civilisation advancement in the new era, e.g., donating "care packages" to primary and middle school students and left-behind children in poor families through the public charity activity with a theme of "helping children thrive and supporting rural revitalisation", setting up the "Green Apple Book Corner" in the village neighbourhood committee and donated books to students, to encourage them to maintain noble ambitions, overcome difficulties and make contributions to the development of their hometown in the future.

Ecological revitalisation

With great concerns about the natural environment and living conditions of rural residents, the Company actively supported the construction of rural ecological civilisation and the development of green projects, and worked with local residents to create a beautiful countryside.



In addition, Yankuang Energy attaches great importance to the relationship between the local community and the Company. We worked together to establish a communication and consultation mechanism with the local community, and to complete a community impact assessment for safety and other matters. In the construction of the new village project, we fully respect the wishes of the relocated villagers, insist on one discussion and one compensation for one matter, and invite villagers to supervise the whole process, effectively safeguarding the rights and interests of the residents and achieving harmonious relocation.

## Energy supply security



Ready for Departure

In 2022, power plants throughout China experienced unprecedented pressure of insufficient coal supply, resulting in a supply shortage in heat and power generation. The Company adopted multiple measures to ensure coal supply and guarantee a safe and stable energy supply, as follows:

The Company supplied 19.75 million tonnes of coal for power generation throughout the year, and the coal delivery rate in Shandong province was 101%.

### Offering to Supply Affordable Coals for Winter Heating

In 2022, in active response to the government's call, Zhuanlongwan Coal Mine offered to supply a total of 72 thousand tonnes of affordable coals for heating in winter to heat-supply enterprises in Ejin Horo Banner and Hanggin Banner, farmers and herdsmen, and villagers around the mine, promoting the harmonious co-construction and win-win cooperation with local enterprises.

Strictly implemented safety production control, optimised production organisation, promoted intelligent coal mining, launched production plan in an orderly manner and detailed the responsibilities associated with stable production and sufficient supply.

Achieved the fulfilment of power coal contracts by adjusting the production structure and sales deployment.

Actively communicated with power plants, grasped the coal inventory situation of the plants in a timely and accurate manner, and tilted the coal shipment to power plants with heavy heating tasks, high coal consumption and low inventory to ensure a safe and stable energy supply.

Strengthened coordinated regulation and control of railroad transportation, optimised shipping plan and orderly push coal shipping and transportation to ensure coal supply.

## Emergency relief

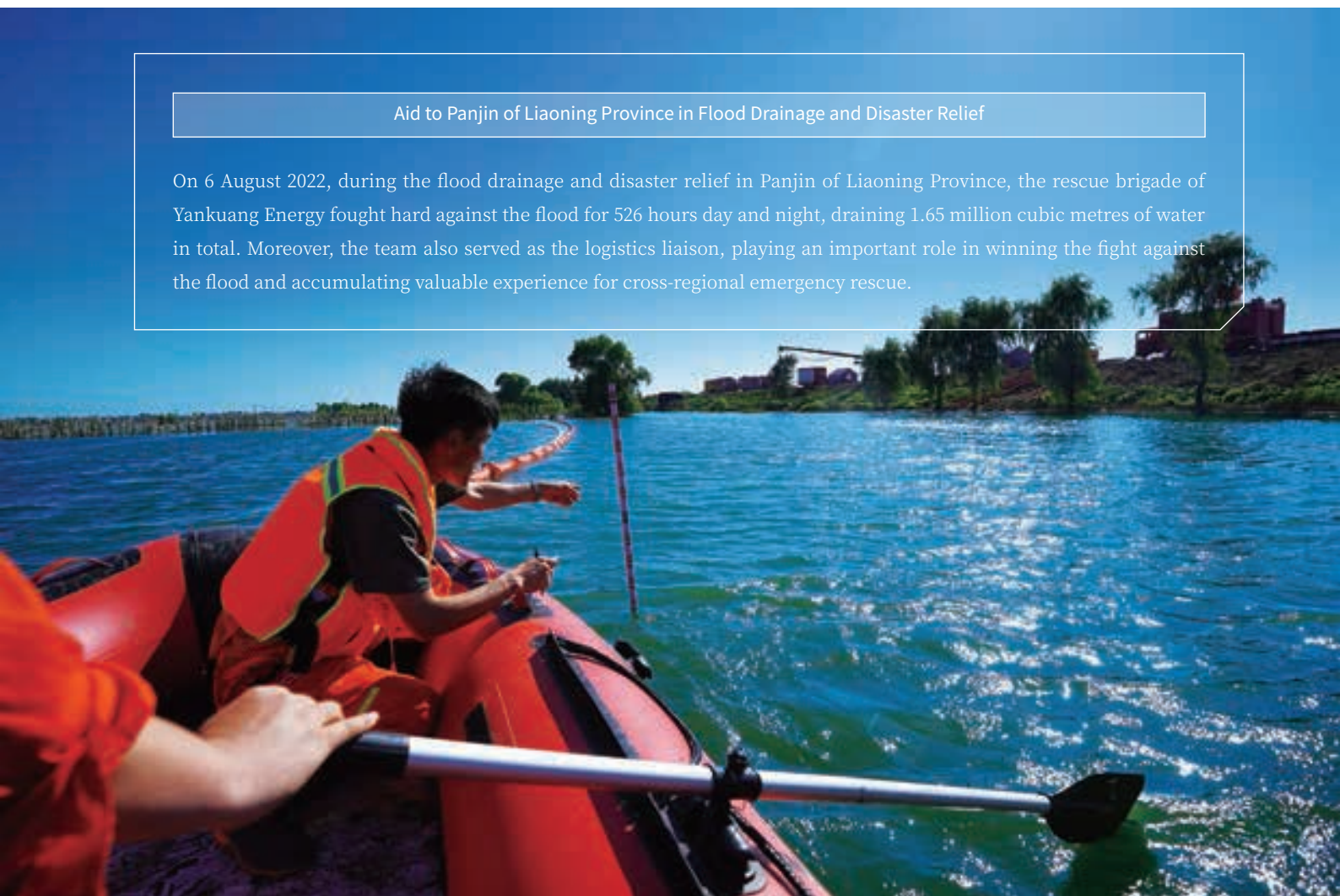
Yankuang Energy Rescue Brigade actively undertook the responsibility and mission, and carried out the emergency rescue drills. With the goal of "Training Command, Training Coordination, Training Disposal and Training Support", the Company successfully held three emergency rescue drills with the new multifunctional intelligent simulation drill roadway. The underground rescue capability was effectively improved by simulating the rescue scenarios of high-temperature and smoke, real fire rescue, passing through the high-temperature zone through the air duct, dealing with water accumulation, and vertical well climbing. The rescue brigade carefully organised the summer "Three Preventions" and office building fire emergency drills, and actively participated in the special drills for flood control and drought relief organised by the Jining High-tech Zone Emergency Bureau and the multi-stage joint emergency

drills between the government and the enterprise for the coal mine rock-burst accidents of Shandong Energy, which enhanced the team's ability to quickly deal with sudden and unexpected accidents.

After years of practice, the Company has established and formed a rapid response mechanism for emergency relief. In the face of emergencies, the Company has stepped forward to fulfil responsibilities, and completed the rescue and relief tasks excellently. In 2022, the Company participated in disaster relief and emergency rescue for 2 times, i.e. roof caving handling at Yangquan Coal Mine and flood drainage relief in Panjin, Liaoning Province, delivering outstanding performance.

### Aid to Panjin of Liaoning Province in Flood Drainage and Disaster Relief

On 6 August 2022, during the flood drainage and disaster relief in Panjin of Liaoning Province, the rescue brigade of Yankuang Energy fought hard against the flood for 526 hours day and night, draining 1.65 million cubic metres of water in total. Moreover, the team also served as the logistics liaison, playing an important role in winning the fight against the flood and accumulating valuable experience for cross-regional emergency rescue.



*The Rescue Brigade Participated in Flood Drainage and Disaster Relief*



## Care for community

In China, the Company has carried out heart-warming volunteering activities in the community for seven consecutive years, in increasingly enriched forms. Our volunteers carried out warm-hearted activities in all aspects of life in the streets, communities and families, with different themes ranging from work safety, life in the mining area, community services, sports and health, assistance for people in need, to affection care, delivering results for their well-being and sending warmth to the community.

In Australia, the Company is committed to supporting the education and development of the communities where it operates, helping to improve the education and living standards of local people. The support programme covers both company-led and third-party projects, with initiatives in line with Yankuang Energy's values and the needs of local communities.



Local Community Residents Paied A Visit to the Company

### Special Charity Fund of Yankuang Energy

The Company has pledged RMB 100 million as principal and jointly established a special charity fund with the Shandong Charity Federation and the Provincial Enterprise Branch of Shandong Charity Federation in the form of retaining the principal and paying the interest. The Company donated RMB 6.58 million in 2022 and plans to donate RMB 6.58 million in 2023, and around RMB 6.59 million in 2024.

### Baodian Coal Mine Actively Delivers Heart-warming Volunteer Services

Baodian Coal Mine carried out volunteer activities to provide residents with convenience services, e.g. raising donations of idle articles, organising 185 volunteers to donate blood, and running a heart-warming summer camp to help employees take care of their children.

In December 2022, the cultural brand of Baodian Mine of "Warm-hearted Volunteers of Baodian Mine Deliver Heart-warming Services" was recognised as the Brand Innovation Achievement of Chinese Enterprises in 2022.

### Yancoal Australia's focus on local social responsibility

- Partnering with the Clontarf Foundation to support Aboriginal and Torres Strait Islander Australians to improve their education.
- Partnering with the government to establish the Stratford Education Support Fund to assist recent graduates to learn work skills and gain work qualifications. The fund has now provided approximately \$800,000, supporting approximately 200 college graduates, 55 local businesses and 135 employees.
- Implementing a three-year Singleton Student Support Programme, which tailors courses to students of different ages and income levels. The project has been running in 11 local schools with 340 teachers and over 3,000 students.
- Supporting communities to build sculpture gardens, a project that will improve the living environment for local residents and boost tourism in the area.



Total investment in public welfare projects and external donations (RMB 10 thousand) **9,358.62**



Total investment in poverty alleviation and rural revitalisation projects (RMB 10 thousand) **7,833.76**

Social contribution per share China Accounting Standards (RMB per share) **16.62**

Social contribution per share International Financial Reporting Standards (RMB per share) **16.52**



## Key Performance Indicator

Manage Performance Indicators		Unit	2022	2021	2020	
No.	Operation Performance					
1	Total assets	RMB 100 million	3,086.04	3,019.59	2,730.09	
2	Total borrowings	RMB 100 million	761.64	1,034.00	922.92	
3	Sales income	RMB 100 million	1,546.02	1,086.16	691.23	
4	Equity attributable to shareholders of the Company	RMB 100 million	898.52	686.58	578.95	
5	Net profit attributable to shareholders of the Company	RMB 100 million	304.08	169.41	63.18	
6	Return on net assets	%	33.84	24.68	10.91	
7	Earnings per share	RMB	6.15	3.48	1.29	
No.	Yield					
1	Saleable coal output	1,000 tonne	99,528	105,025	104,041	
2	Methanol output	1,000 tonne	3,380	2,503	1,823	
3	Chemical Products output	1,000 tonne	6,813	5,794	2,090	
4	Power generation output	10,000 KWh	837,252	726,760	286,793	
No.	Anti-corruption campaigns					
1	Number of concluded corruption lawsuits	Cases	0	0	0	
2	Number of anti-corruption training sessions	Times	2	2	4	
3	Percentage of directors attending anti-corruption training	%	100	100	100	
4	Percentage of staff attending anti-corruption training	%	100	100	100	
5	Percentage of suppliers accepting anti-corruption policies	%	100	100	100	
No.	Quality control					
1	Corporate credit rating	Grade	AAA	AAA	AAA	
No.	Innovation					
1	Number of management innovation achievements	-	73	73	52	
2	Research fund	RMB 100 million	21.17	11.40	5.10	
3	Number of scientific and technological achievements	-	83	84	86	
4	Number of achievements under certification	-	31	25	36	
5	Number of achievements up to world's leading level	-	20	19	23	
6	Number of provincial and ministerial technical innovation awards	-	29	42	30	
7	Number of patents applied	-	288	193	283	
8	Number of patents approved	-	262	222	187	
No.	Product and service					
1	Number of valid complaints	Times	3	4	2	
2	Complaint settlement rate	%	100	100	100	
No.	Supply chain management					
1	Number of suppliers by geographical region	Number of suppliers in Shandong	-	556	562	513
		Number of suppliers in other parts of China	-	778	756	804
		Number of suppliers in foreign countries and regions	-	8	10	8
2	Percentage of suppliers implementing suppliers' management policies	%	100	100	100	
3	Contract fulfilment rate	%	100	100	100	

Environmental Performance Indicators		Unit	2022	2021	2020	
No.	Climate Change					
1	Total greenhouse gas emissions	Total greenhouse gas emissions <sup>(1)</sup> (scope 1 & 2)	10,000 tonne	1,630.47	1,718.16	988.25
		Greenhouse gas emissions (scope 1)	10,000 tonne	1,363.30	1,434.84	769.08
		Greenhouse gas emissions (scope 2)	10,000 tonne	267.17	283.32	219.17
2	Density of greenhouse gas emissions	Density of comprehensive greenhouse gas emissions from saleable coal production	tCO <sub>2</sub> /tonne	0.08	0.07	0.05
		Density of comprehensive greenhouse gas emissions from methanol production	tCO <sub>2</sub> /tonne	187	3.36	2.92
		Density of comprehensive greenhouse gas emissions from power generation	tCO <sub>2</sub> /MWh	0.19	0.21	0.43
No.	Emission Management <sup>(2)</sup>					
1	Sulphur dioxide (SO <sub>2</sub> ) emissions	tonne	751.48	640.04	517.22	
2	Nitrogen oxide (NO <sub>x</sub> ) emissions	tonne	7,767.29	8,361.12	8,190.12	
3	Volatile organic compounds (VOCs)	tonne	108.36	88.23	343.45	
4	Smoke and dust emissions	tonne	117.62	95.47	86.76	
5	COD emissions	tonne	645.82	666.15	327.36	
6	Ammonia nitrogen emissions	tonne	28.86	34.89	7.92	
7	Hazardous waste generation	10,000 tonne	8.57	7.04	1.01	
8	Density of hazardous waste	Density of hazardous waste from saleable coal production	kg/tonne	0.02	0.02	0.01
		Density of hazardous waste from methanol production	kg/tonne	24.83	27.49	5.14
		Density of hazardous waste from power generation	kg/MWh	0.02	0.002	0.02
9	Disposal rate of hazardous wastes in compliance	%	100	100	100	
10	Total general solid wastes	10,000 tonne	917.73	1,178.77	1,230.67	
11	Density of general solid wastes	Density of general solid wastes from saleable coal production	tonne/tonne	0.05	0.08	0.10
		Density of general solid wastes from methanol production	tonne/tonne	0.72	0.96	0.44
		Density of general solid wastes from power generation	tonne/MWh	0.17	0.09	0.33
12	Wastewater discharged	10,000 m <sup>3</sup>	5,567.77	6,156.02	4,637.44	
13	Wastewater by disposal	Wastewater discharged to surface water	10,000 m <sup>3</sup>	2,772.06	3,678.29	2,016.14
		Wastewater discharged to groundwater	10,000 m <sup>3</sup>	0.00	0.00	0.00
		Wastewater discharged to third party	10,000 m <sup>3</sup>	2,795.70	2,477.73	2,621.30

Environmental Performance Indicators		Unit	2022	2021	2020	
No.	Resource Management					
1	Recycled water volume	1 million m <sup>3</sup>	3,455.34	2,604.49	1,348.26	
2	Total water consumption	1 million m <sup>3</sup>	175.73	161.41	155.87	
3	Water consumption by source	Surface water consumption	1 million m <sup>3</sup>	79.10	62.48	25.48
		Groundwater consumption	1 million m <sup>3</sup>	54.60	49.39	57.16
		Municipal water consumption	1 million m <sup>3</sup>	1.79	1.47	1.60
		Third party water consumption	1 million m <sup>3</sup>	6.95	8.87	8.84
4	Density of water consumption	Density of water consumption from saleable coal production	m <sup>3</sup> /tonne	1.14	0.98	1.11
		Density of water consumption from methanol	m <sup>3</sup> /tonne	15.91	19.91	14.19
		Density of water consumption from power generation	m <sup>3</sup> /MWh	1.04	1.16	4.82
5	Comprehensive energy consumption	10,000 tonne standard coal	1,145.62	1,137.37	798.55	
		1 million kWh	93,264.85	92,593.56	65,009.83	
6	Energy consumption by category	Coal consumption	10,000 tonne	481.03	518.79	249.89
		Coal slurry consumption	10,000 tonne	169.37	161.02	257.47
		Gasoline consumption	tonne	126.68	180.23	136.70
		Diesel consumption	tonne	231,017.09	225,807.66	233,144.03
		Power consumption	1 million kWh	3,694.17	3,893.13	2,666.19
		Natural gas consumption	10,000 m <sup>3</sup>	55.62	54.89	17.55
		Outsourced steam consumption	GJ	425,156.67	467,199.71	2,271,299.00
7	Total energy consumption by business	Total energy consumption of commercial coal	10,000 tonne standard coal	139.31	119.52	67.53
			1 million kWh	11,341.32	9,729.88	5,497.23
		Total energy consumption of methanol production	10,000 tonne standard coal	932.82	945.49	634.01
			1 million kWh	75,940.92	76,972.05	51,614.52
		Total energy consumption of power generation	10,000 tonne standard coal	73.02	71.92	96.59
			1 million kWh	5,944.35	5,855.33	7,863.09
8	Density of comprehensive energy consumption by business	Density of comprehensive energy consumption from commercial coal	MWh/tonne	0.11	0.09	0.05
		Density of comprehensive energy consumption from methanol production	MWh/tonne	22.47	30.75	28.31
		Density of comprehensive energy consumption from power generation	MWh/kWh	0.001	0.001	0.003

Social Performance Indicators		Unit	2022 年	2021 年	2020 年
No.	Health and Safety				
1	Number of work-related deaths		person	0	0
2	Rate of work-related deaths		%	0	0
3	Time lost due to work injuries		days	840	526
4	Trainings on work safety		person-times	24,570	33,137
No.	Health				
1	Number of occupational-disease incidence		person	0	0
2	Percentage of occupational-disease incidence		%	0	0
3	Screening rate of occupational diseases		%	100	100
No.	Employment				
1	Total headcount		person	64,279	61,864
2	Total headcount by gender	Total number of male employees	person	49,259	47,032
		Total number of female employees	person	15,020	14,832
3	Total headcount by age	Total number of employees aged 30 and below	person	4,963	3,726
		Total number of employees aged between 31 and 40	person	19,596	20,929
		Total number of employees aged between 41 and 50	person	25,671	24,907
		Total number of employees aged 51 and above	person	14,049	12,302
4	Total headcount by geographical region	Total number of employees in Shandong	person	50,040	50,654
		Total number of employees in other parts of China	person	11,764	8,096
		Total number of employees in foreign countries and regions	person	2,475	3,114
5	Total headcount by employment type	Total number of full-time employees	person	64,279	61,839
		Total number of part-time employees	person	0	25
6	Total headcount by category	Total number of sales staffs	person	535	464
		Total number of technical staff	person	4,322	3,918
		Total number of production staff	person	38,911	37,531
		Total number of administrative staff	person	3,624	3,494
		Total number of supportive staff	person	16,149	15,767
		Total number of financial staff	person	738	690
		Total number of senior management	person	11	11
		Total number of mid-level management	person	632	453
		Total number of first-line management	person	9,185	8,968
7	Total headcount by academic qualification	Total number of employees with middle school degree and below	person	14,771	13,925
		Total number of employees with high school degree	person	20,534	20,562
		Total number of employees with junior college degree and above	person	28,974	27,377
8	Voluntary turnover rate of employees		%	1.00	0.90
9	Voluntary turnover rate by gender	Voluntary turnover rate of male employees	%	1.04	0.70
		Voluntary turnover rate of female employees	%	0.87	1.53
10	Voluntary turnover rate by age	Voluntary turnover rate of employees aged 30 and below	%	2.72	0.78
		Voluntary turnover rate of employees aged between 31 and 40	%	0.78	0.33
		Voluntary turnover rate of employees aged between 41 and 50	%	0.81	0.75
		Voluntary turnover rate of employees aged 51 and above	%	1.03	2.19



Social Performance Indicators			Unit	2022	2021	2020
No.	Employment					
11	Voluntary turnover rate by geographical region	Voluntary turnover rate of employees in Shandong	%	0.51	0.88	0.32
		Voluntary turnover rate of employees in other parts of China	%	0.94	0.56	0.70
		Voluntary turnover rate of employees in foreign countries and regions	%	11.15	2.02	6.35
No.	Employment Development					
1	Proportion of trainees		%	74.92	78.36	89.34
2	Proportion of trainees by gender	Proportion of male trainees	%	76.85	80.75	91.54
		Proportion of female trainees	%	68.43	72.60	83.16
3	Proportion of trainees by category	Proportion of trainees as senior management	%	100	100	100
		Proportion of trainees as mid-level management	%	69.62	100	100
		Proportion of trainees as first-line management	%	71.48	100	79.86
		Proportion of trainees as employees and workers	%	75.51	91.57	93.18
4	Per capita training time		hours	41.37	42.21	48.40
5	Per capita training time by gender	Per capita training time of male employees	hours	42.92	45.52	52.04
		Per capita training time of female employees	hours	36.19	31.72	38.21
6	Per capita training time by category	Per capita training time of senior management	hours	54.00	53.64	88.00
		Per capita training time of mid-level management	hours	42.78	53.83	92.13
		Per capita training time of first-line management	hours	41.72	41.64	46.21
		Per capita training time of employees and workers	hours	41.27	41.85	48.45
No.	Social Investment <sup>(4)</sup>					
1	Total investment in public welfare projects and external donations		RMB 10 thousand	9,358.62	* <sup>(3)</sup>	*
2	Total investment in poverty alleviation and rural revitalisation projects		RMB 10 thousand	7,833.76	*	*
3	Tax paid		RMB 100 million	226.02	114.05	77.25
4	Dividend per share		RMB per share	4.30	2.00	1.00
5	Total cash dividend		RMB 100 million	212.79	98.97	48.73
6	Social contribution per share	China Accounting Standards	RMB per share	16.62	10.14	5.79
		International Financial Reporting Standards	RMB per share	16.52	10.28	5.16

- The Company's greenhouse gases inventory includes carbon dioxide, methane, and nitrous oxide. In the inventory, the greenhouse gases are listed by carbon dioxide equivalence, and the calculation of the greenhouse gases is based on the *2019 Annual Emission Reduction Project of China Regional Power Grid Baseline Emission Factor* issued by the Ministry of Ecological Environment of the People's Republic of China and the *IPCC Guidelines for National Greenhouse Gas Inventory 2006, 2019 Revised Edition* by the Intergovernmental Panel on Climate Change (IPCC). The calculation range of greenhouse gas emissions of the Company: Scope 1, the production of the Company; As for coal slurry, only the consumption is disclosed in this report, due to the lack of sufficient theoretical basis for calculating the greenhouse gases from the combustion of coal slurry. Scope 2, the internal consumption of the Company, such as indirect energies like outsourced electricity, heat, and steam. Scope 3, the greenhouse gases to be counted at an appropriate time in the future, including the quantity of coal bed gases produced during coal mining.
- The Company's exhaust gas emissions are counted and calculated according to the actual concentration of pollutants.
- The contents marked as "\*" means that they are not disclosed in the ESG report of the corresponding year.
- The company's donated funds in 2022 is RMB 93,586.19 thousand.
- No major adjustments have been made to the disclosure scope compared with that of the Company's previous ESG reports, with the consistent statistical approaches adopted.

## Honours in 2022

Honourable titles		Issuer
1	Constituent to CSI 300 and SSE 180 indexes	Shanghai and Shenzhen Stock Exchanges
2	Included into the list of MSCI China Index	MSCI
3	No. 1 Chinese Coal Enterprise in CDP Rating	CDP
4	Constituent to Hang Seng Corporate Sustainability Index	Hang Seng Indexes
5	ESG Rating BBB Grade	Sino-Securities Index
6	ESG Rating B+ Grade	SynTao Green Finance
7	ESG Rating A Grade	Wind
8	Listed in 2022 China ESG 50 released by Forbes	Forbes
9	No. 23 in the Top 50 Global Mining Companies	MINING.COM
10	Included in the List of A-share Listed Companies with Generous Returns of Cash Dividends in 2021	China Association for Public Companies
11	Included in the List of A-share Listed Companies with Sincere Returns of Cash Dividends in 2021	China Association for Public Companies
12	Best practice for annual results presentations by listed companies	China Association for Public Companies
13	No. 93 in Fortune China 500	<i>Fortune (Chinese edition)</i>
14	Class A for Information Disclosure in 2020-2021	Shanghai Stock Exchange
15	Golden Bull Business Leadership Award	<i>China Securities Journal</i>
16	Golden Bull Business Leadership Award Management Award	<i>China Securities Journal</i>
17	China Top 100 Enterprise Award	Top 100 Summit, China Association for Public Companies
18	China Top 100 Special Contribution Enterprise Award	Top 100 Summit, China Association for Public Companies
19	P5w.net Investor Relations Gold Award for Innovation in Performance Presentation	<a href="https://www.p5w.net/">https://www.p5w.net/</a>
20	Best Board of Directors in the 17th Golden Roundtable Awards for Boards of Directors of Listed Companies in China	<i>Directors &amp; Boards Magazine</i>
21	The 5th New Fortune Best IR Hong Kong Stock Company	<i>New Fortune Magazine</i>
22	AAA rating of national market quality credit - "Customer Satisfaction Benchmarking Enterprise"	China National Coal Association
23	Gold Award at the 2022 International Convention on Quality Control Circles (ICQCC)	International Convention on Quality Control Circles
24	National Market Quality Credit Grade AAA (Customer Satisfaction Benchmark Enterprise)	China Association for Quality
25	The 7th China Industry Award	China Federation of Industrial Economics

## Outlook 2023

In 2023, China's economy will remain resilient and vital in a still complex and challenging external environment, providing a solid guarantee for the high-quality development of the energy sector. With the focus on green, low-carbon and high-quality development, Yankuang Energy will continue to replace old growth drivers with new ones, accelerate industrial transformation and upgrading, and improve the quality of management and control, in a bid to gain a new competitive edge in the energy industry.

We remain firmly grounded while keeping our eyes on the long run. We will make sufficient investment in our competitive edges of the five sectors and adopt the "resources + capital" development model to outstrip our competitors. We will deepen the market-oriented and lean management and apply lean management through the whole process of production and operation for higher efficiency. We will launch a comprehensive improvement project benchmarking against first-class quality and efficiency, promote the excellent performance management model, and build up a characteristic governance system, so as to shape the image of a listed company with compliance, transparency and high value.

Long as the journey is, we will reach our destination if we stay the course; difficult as the task is, we will get the job done if we keep working at it. Yankuang Energy will take initiatives to identify, respond to and seek changes, so as to tackle evolving situations, foster new opportunities and open new ground. We will forge ahead with entrepreneur spirit and fortitude to create new advantages featured by high-quality development. We will firmly grasp the pulse of the times, chase the pace of energy reform, and seize the strategic opportunities for high-quality and efficient development. We will spare no effort to enhance our core competitiveness, value creativity and sustainable development to build "a sustainable world-class mining conglomerate with the leading development of the clean energy", that is industry-leading, trusted by shareholders, welcomed by society and honoured by employees.



## Index for Guidelines of Shanghai Stock Exchange of Self-Regulation for Listed Companies No. 1

### Guidelines of Shanghai Stock Exchange of Self-Regulation for Listed Companies No. 1 - Standardised Operation

#### Chapter VIII Social Responsibility

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Please refer to the website of Shanghai Stock Exchange for details of the guidance: <http://www.sse.com.cn>.



## ESG KPIs Index

Content	Page	
<b>Statement of the Board of Directors</b>		
A disclosure of the board's oversight of ESG issues A disclosure of the board's ESG management approach and strategy, including the process used to evaluate, prioritise and manage material ESG-related issues (including risks to the issuer's businesses) A disclosure that how the board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the issuer's businesses.	4	
<b>Reporting Principles</b>		
Materiality: (i) the process to identify and the criteria for the selection of material ESG factors; (ii) if a stakeholder engagement is conducted, a description of significant stakeholders identified, and the process and results of the issuer's stakeholder engagement.	Report Overview	
Quantitative: Information on the standards, methodologies, assumptions and/or calculation tools used, and source of conversion factors used, for the reporting of emissions/energy consumption (where applicable) should be disclosed.	Report Overview	
Consistency: The issuer should disclose in the ESG report any changes to the methods or KPIs used, or any other relevant factors affecting a meaningful comparison	Report Overview	
<b>Reporting Boundary</b>		
A narrative explaining the reporting boundaries of the ESG report and describing the process used to identify which entities or operations are included in the ESG report. If there is a change in the scope, the issuer should explain the difference and reason for the change.	Report Overview	
<b>A. Environmental</b>		
<b>A1 Emissions</b>		
General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. Note: Air emissions include NO <sub>x</sub> , SO <sub>x</sub> , and other pollutants regulated under national laws and regulations. Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. Hazardous wastes are those defined by national regulations.	26-29	
A1.1	The types of emissions and respective emissions data.	26-29,61-62
A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	36,62
A1.3	Total hazardous waste produced (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	29,62
A1.4	Total non-hazardous waste produced (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	29,62
A1.5	Description of emissions target(s) set and steps taken to achieve them.	26-29,35-36
A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	26-29
<b>A2 Use of Resources</b>		
General Disclosure Policies on the efficient use of resources, including energy, water and other raw materials. Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.	30-31	
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (KWh in '000s) and intensity (e.g. per unit of production volume, per facility).	31,63
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	63
A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	30-31
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	30-31
A2.5	Total packaging material used for finished products (in tons) and, if applicable, with reference to per unit produced.	See Note <sup>1</sup>
<b>A3 The Environment and Natural Resources</b>		
General Disclosure Policies on minimising the issuer's significant impacts on the environment and natural resources.	32-33	
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	32-33

## ESG KPIs Index

Content		Page
<b>A4 Climate Change</b>		
	General Disclosure Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	34-36
A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	34-36
<b>B. Social</b>		
<b>B1 Employment and Labour Practices</b>		
	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	46-54
B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	64-65
B1.2	Employee turnover rate by gender, age group and geographical region.	64-65
<b>B2 Health and Safety</b>		
	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	38-44
B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	64
B2.2	Lost days due to work injury.	64
B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	37-44
<b>B3 Development and Training</b>		
	General Disclosure Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. Note: Training refers to vocational training. It may include internal and external courses paid by the employer.	50-52
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	65
B3.2	The average training hours completed per employee by gender and employee category.	65
<b>B4 Labour Standards</b>		
	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	46-49
B4.1	Description of measures to review employment practices to avoid child and forced labour.	47
B4.2	Description of steps taken to eliminate such practices when discovered.	See Note <sup>2</sup>
<b>B5 Supply Chain Management</b>		
	General Disclosure Policies on managing environmental and social risks of the supply chain.	24
B5.1	Number of suppliers by geographical region.	24,61
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	24
B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	24
B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	24
<b>B6 Product Responsibility</b>		
	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	19-23

Content		Page
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	23
B6.2	Number of products and service related complaints received and how they are dealt with.	23,61
B6.3	Description of practices relating to observing and protecting intellectual property rights.	20
B6.4	Description of quality assurance process and recall procedures.	22-23
B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	23
<b>B7 Anti-corruption</b>		
	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	16
B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	61
B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	16
B7.3	Description of anti-corruption training provided to directors and staff.	16
<b>B8 Community Investment</b>		
	General Disclosure Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	56-60
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	55-60
B8.2	Resources contributed (e.g. money or time) to the focus area.	55-60

1. The Company barely uses packaging materials in its main businesses. The Company recycles the packaging materials used according to the relevant policies.
2. As the Company is exposed to a lower risk of child and forced labour, there is no need to establish remedial measures for the violation identified.

## Index for GRI Standards

<b>Statement of use</b>	Yankuang Energy Group Company Limited has reported in accordance with the GRI Standards from January 1, 2022 to December 31, 2022.
<b>GRI 1 used</b>	GRI 1: Foundation 2021

GRI STANDARD	DISCLOSURE	LOCATION	
<b>GRI 2: General Disclosures 2021</b>			
The organization and its reporting practices	2-1	Organizational details	Report Overview
	2-2	Entities included in the organization's sustainability reporting	Report Overview
	2-3	Reporting period, frequency and contact point	Report Overview
	2-4	Restatements of information	Report Overview
	2-5	External assurance	-
Activities and workers	2-6	2-6 Activities, value chain and other business relationships	24
	2-7	Employees	45-54
	2-8	Workers who are not employees	16,40
Governance	2-9	Governance structure and composition	6,12,14
	2-10	Nomination and selection of the highest governance body	6,12
	2-11	Chair of the highest governance body	-
	2-12	Role of the highest governance body in overseeing the management of impacts	4,12
	2-13	Delegation of responsibility for managing impacts	4,7
	2-14	Role of the highest governance body in sustainability reporting	4,6
	2-15	Conflicts of interest	-
	2-16	Communication of critical concerns	8
	2-17	Collective knowledge of the highest governance body	-
	2-18	Evaluation of the performance of the highest governance body	-
	2-19	Remuneration policies	48
	2-20	Process to determine remuneration	48
	2-21	Annual total compensation ratio	-
Strategy, policies and practices	2-22	Statement on sustainable development strategy	6
	2-23	Policy commitments	16,46-49
	2-24	Embedding policy commitments	16
	2-25	Processes to remediate negative impacts	23,49
	2-26	Mechanisms for seeking advice and raising concerns	8,23,49
	2-27	Compliance with laws and regulations	26,38,40
	2-28	Membership associations	-
Stakeholder engagement	2-29	Approach to stakeholder engagement	8
	2-30	Collective bargaining agreements	49

GRI STANDARD	DISCLOSURE	LOCATION	
<b>GRI 3: Material Topics 2021</b>			
Materiality assessment	3-1	Process to determine material topics	8
	3-2	List of material topics	8



Contents of Disclosed Items			Location
GRI 201: Economic Performance	3-3 Management of material topics	Management approach for economic performance	18-24
	Topic-specific disclosures	201-1 Direct economic value generated and distributed	61,65
		201-2 Financial implications and other risks and opportunities due to climate change	34-35
		201-3 Defined benefit plan obligations and other retirement plans	48-49,53-54
		201-4 Financial assistance received from government	-
GRI 202: Market Presence	3-3 Management of material topics	Management approach for market presence	-
	Topic-specific disclosures	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	-
		202-2 Proportion of senior management hired from the local community	-
GRI 203: Indirect Economic Impacts	3-3 Management of material topics	Management approach for indirect economic impacts	-
	Topic-specific disclosures	203-1 Infrastructure investments and services supported	55-58,60
		203-2 Significant indirect economic impacts	-
GRI 204: Procurement Practices	3-3 Management of material topics	Management approach for procurement practices	24
	Topic-specific disclosures	204-1 Proportion of spending on local suppliers	-
GRI 205: Anti-corruption	3-3 Management of material topics	Management approach for anti-corruption	16
	Topic-specific disclosures	205-1 Operations assessed for risks related to corruption	-
		205-2 Communication and training about anti-corruption policies and procedures	16
		205-3 Confirmed incidents of corruption and actions taken	16
GRI 206: Anti-competitive Behaviour	3-3 Management of material topics	Management approach for anti-competitive behaviour	16
	Topic-specific disclosures	206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	-
GRI 207: Tax 2019	3-3 Management of material topics	Management approach for Tax	-
	Topic-specific disclosures	207-1 Approach to tax	-
		207-2 Tax governance, control, and risk management	-
		207-3 Stakeholder engagement and management of concerns related to tax	-
		207-4 Country-by-country reporting	-
GRI 301: Materials	3-3 Management of material topics	Management approach for materials	-
	Topic-specific disclosures	301-1 Materials used by weight or volume	-
		301-2 Recycled input materials used	-
		301-3 Reclaimed products and their packaging materials	-
GRI 302: Energy	3-3 Management of material topics	Management approach for energy	30-31
	Topic-specific disclosures	302-1 Energy consumption within the organisation	31,63
		302-2 Energy consumption outside of the organisation	-
		302-3 Energy intensity	30-31,63
		302-4 Reduction of energy consumption	30-31
		302-5 Reductions in energy requirements of products and services	30-31
GRI 303: Water Resources	3-3 Management of material topics	303-1 Interactions with water as a shared resource	31
	Topic-specific disclosures	303-2 Management of water discharge-related impacts	31
		303-3 Water withdrawal	31,63
		303-4 Water discharge	26,63
		303-5 Water consumption	31,63
		GRI 304: Biodiversity	3-3 Management of material topics
Topic-specific disclosures	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		-
	304-2 Significant impacts of activities, products, and services on biodiversity		33
	304-3 Habitats protected or restored		33
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations		-

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GRI 305: Emissions	3-3 Management of material topics	Management approach for emissions	26-29	
	Topic-specific disclosures	305-1 Direct (Scope 1) GHG emissions	36,62	
		305-2 Energy indirect (Scope 2) GHG emissions	36,62	
		305-3 Other indirect (Scope 3) GHG emissions	-	
		305-4 GHG emissions intensity	28-29,62	
		305-5 Reduction of GHG emissions	-	
		305-6 Emissions of ozone-depleting substances (ODS)	-	
305-7 Nitrogen oxides (NO <sub>x</sub> ), sulphur oxides (SO <sub>x</sub> ), and other significant air emissions	26,28-29,62			
GRI 306: Effluents and Waste	3-3 Management of material topics	Management approach for effluents and waste	26-29	
	Topic-specific disclosures	306-1 Water discharge by quality and destination	26,62	
		306-2 Waste by type and disposal method	29,62	
		306-3 Significant spills	-	
		306-4 Transport of hazardous waste	29	
306-5 Water bodies affected by water discharges and/or runoff	-			
GRI 307: Environmental Compliance	3-3 Management of material topics	Management approach for environmental compliance	26,28	
	Topic-specific disclosures	307-1 Non-compliance with environmental laws and regulations	26	
GRI 308: Supplier Environmental Assessment	3-3 Management of material topics	Management approach for supplier environmental assessment	24	
	Topic-specific disclosures	308-1 New suppliers that were screened using environmental criteria	24	
GRI 401: Employment	Topic-specific disclosures	308-2 Negative environmental impacts in the supply chain and actions taken	-	
		3-3 Management of material topics	Management approach for employment	46-47
		401-1 New employee hires and employee turnover	47,64-65	
GRI 402: Labour/Management Relations	Topic-specific disclosures	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	48-49,54	
		401-3 Parental leave	48	
		3-3 Management of material topics	Management approach for labour/management relations	46-47
GRI 403: Occupational Health and Safety	Topic-specific disclosures	402-1 Minimum notice periods regarding operational changes	-	
		3-3 Management of material topics	Management approach for occupational health and safety	40-43
		403-1 Occupational health and safety management system	43	
		403-2 Hazard identification, risk assessment, and incident investigation Disclosure	43	
		403-3 Occupational health services	43	
		403-4 Worker participation, consultation, and communication on	43	
		403-5 Worker training on occupational health and safety Disclosure	44	
		403-6 Promotion of worker health	43-44	
		403-7 Prevention and mitigation of occupational health and safety	43	
		403-8 Workers covered by an occupational health and safety	40,43	
403-9 Work-related injuries Disclosure	48,64			
GRI 404: Training and Education	Topic-specific disclosures	403-10 Work-related ill health	43	
		3-3 Management of material topics	Management approach for training and education	44,50-52
		404-1 Average hours of training per year per employee	51,65	
GRI 405: Diversity and Equal Opportunity	Topic-specific disclosures	404-2 Programmes for upgrading employee skills and transition assistance programmes	50-52	
		404-3 Percentage of employees receiving regular performance and career development reviews	51	
		3-3 Management of material topics	Management approach for diversity and equal opportunity	12,47
GRI 406: Anti-discrimination	Topic-specific disclosures	405-1 Diversity of governance bodies and employees	12,47	
		405-2 Ratio of basic salary and remuneration of women to men	-	
GRI 407: Freedom of Association and Collective Bargaining	Topic-specific disclosures	3-3 Management of material topics	Management approach for anti-discrimination	47
		407-1 Incidents of discrimination and corrective actions taken	-	
GRI 407: Freedom of Association and Collective Bargaining	Topic-specific disclosures	3-3 Management of material topics	Management approach for freedom of association and collective bargaining	49
		407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	-	

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GRI 408: Child Labour	3-3 Management of material topics	Management approach for child labour	47
	Topic-specific disclosures	408-1 Operations and suppliers at significant risk for incidents of child labour	-
GRI 409 Forced or Compulsory Labour	3-3 Management of material topics	Management approach for forced or compulsory labour	47
	Topic-specific disclosures	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour	-
GRI 410: Security Practices	3-3 Management of material topics	Management approach for security practices	-
	Topic-specific disclosures	410-1 Security personnel trained in human rights policies or procedures	-
GRI 411: Rights of Indigenous Peoples	3-3 Management of material topics	Management approach for the rights of indigenous peoples	57
	Topic-specific disclosures	411-1 Incidents of violations involving rights of indigenous peoples	-
GRI 413: Local Communities	3-3 Management of material topics	Management approach for local communities	-
	Topic-specific disclosures	413-1 Operations with local community engagement, impact assessments, and development programs	56-60
		413-2 Operations with significant actual and potential negative impacts on local communities	-
GRI 415: Public Policy	3-3 Management of material topics	Management approach for public policy	-
	Topic-specific disclosures	415-1 Political contributions	-
GRI 416: Customer Health and Safety	3-3 Management of material topics	Management approach for customer health and safety	22-23
	Topic-specific disclosures	416-1 Assessment of the health and safety impacts of product and service categories	22-23
		416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	-
GRI 417: Marketing and Labelling	3-3 Management of material topics	Management approach for marketing and labelling	20,23
	Topic-specific disclosures	417-1 Requirements for product and service information and labelling	20,23
		417-2 Incidents of non-compliance concerning product and service information and labelling	-
		417-3 Incidents of non-compliance concerning marketing communications	-
GRI 418: Customer Privacy	3-3 Management of material topics	Management approach for customer privacy	23
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Definition	
Acronym	Full name
Yankuang Energy, the Company, we	Yankuang Energy Group Company Limited
Shandong Energy	Shandong Energy Group Co., Ltd.
YulinNeng Hua	Yanzhou Coal YulinNeng Hua Company Limited
HezeNeng Hua	YanmeiHezeNeng Hua Company Limited
Shanxi Neng Hua	Yanzhou Coal Shanxi Neng Hua Company Limited
Hua Ju Energy	Shandong Hua Ju Energy Company Limited
Ordos Company	Yankuang Energy (Ordos) Company Limited
Haosheng Company	Inner Mongolia Haosheng Coal Mining Company Limited
Donghua Heavy Industry	YankuangDonghua Heavy Industry Company Limited
Inner Mongolia Mining	Inner Mongolia Mining (Group) Co., Ltd.
Future Energy	Shaanxi Future Energy Chemicals Co. Ltd
Lunan Chemicals	YankuangLunan Chemicals Co., Ltd.
Yancoal Australia	Yancoal Australia Limited
Jining III Coal Mine	Jining No.3 Coal Mine
Jining II Coal Mine	Jining No.2 Coal Mine
Zhuanlongwan Coal Mine	Ordos Zhuanlongwan Coal Mining Company Limited
Tianchi Energy	Shanxi HeshunTianchi Energy Company Limited



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