



**中国神华能源股份有限公司**  
**CHINA SHENHUA ENERGY COMPANY LIMITED**

(a joint stock limited company incorporated in the People's Republic of China with limited liability)

Stock Code: 01088



# **Promoting Determined Contributions to Protect the World**

# **2020**

## **Environmental, Social and Governance Report**

# About the Report

The report mainly introduced information of China Shenhua Energy Company Limited (hereinafter referred to as “China Shenhua” or the “Company”) in aspects of environmental protection, social responsibility and corporate governance aiming at enhancing communication and liaison with all stakeholders.

## Reporting Period

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The reporting period is from 1 January to 31 December 2020 while certain contents exceed this period.

## Main Scope of the Report

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The report covers China Shenhua and its subsidiaries. For details of the main scope of the report, please refer to the 2020 Annual Report as disclosed together with this report.

## Source of Data

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Data were mainly sourced from official documents, statistical and financial reports of the Company, as well as the environmental, social, and governance (hereinafter referred to as the “ESG”) information collected from the Company’s statistics and audits. This report is available in Chinese and English. If there is any inconsistency between the two versions, the Chinese version shall prevail. Unless otherwise stated, the currency used is the Renminbi. The major indicators on safety and environmental protection of the Company are calculated in accordance with China’s regulations or industry standards, including *General Principles for Calculation of the Comprehensive Energy Consumption (GB/T2589–2008)*, *the General Principles of Water Statistics in Enterprises (GB/T 26719–2011)*, *Calculation Method for Pollution Discharge Volume at the Discharge Outlet of State Controlled Pollution Sources (H.B. [2011] No.8)*, *Energy Statistical Reporting System (2019) (National Bureau of Statistics)*, etc.

## Preparation Basis

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The Environmental, Social and Governance Reporting Guide as set out in Appendix 27 of the *Rules Governing the Listing of Securities on HKEx*;

*“Notice on Strengthening Listed Companies’ Undertaking of Social Responsibilities and Issuance of Guidelines on Environmental Information Disclosure by Companies Listed on the Shanghai Stock Exchange”, “Guidelines on Environmental Information Disclosure by Companies Listed on the Shanghai Stock Exchange”, “Guidelines on Preparation of Corporate Report on Performance of Social Responsibilities”, “Notice of Information Disclosure in Relation to Further Optimizing Poverty Alleviation Work of Listed Company”, and the “Guidelines on Environmental, Social Responsibility and Corporate Governance Information Disclosure by Listed Companies (Draft for Public Comments)” issued by the Shanghai Stock Exchange;*

*The GRI Sustainability Reporting Standards* (referred to as “GRI standards”) issued by the Global Sustainability Standards Board (the “GSSB”).

## Assurance

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This report has been assured independently by our independent auditor, KPMG Huazhen LLP (Special General Partnership). The proof, scope, methodology and conclusion of the assurance are included in Appendix III.

## Availability of the Report

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This report is published in Simplified Chinese, Traditional Chinese and English. The financial data contained in the Simplified Chinese version are extracted from the A-Share financial report of the Company, whereas those in the Traditional Chinese version and English version are extracted from the H-Share financial report of the Company. This report is available to stakeholders and the public in a PDF document, which can be downloaded from the websites of the Shanghai Stock Exchange and the Hong Kong Stock Exchange and the official website of China Shenhua ([www.csec.com](http://www.csec.com)). Please email [ir@csec.com](mailto:ir@csec.com) or dial 86-10-5813-1088/3399/3355 to request for a printed copy of this report.

We have taken into consideration the different reading interests and requirements of different stakeholders to the extent possible during the compilation of this report to make it as plain, clear and easy to read as possible. The compilation of this report may not be entirely satisfactory due to various objective constraints. You are welcomed to put forward your opinions and suggestions by completing the Feedback Sheet attached to this report. The Company will improve and enhance the report on a best effort basis in the future.

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## Chairman's Statement



### Dear Stakeholders:

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In 2020, confronted with the complicated internal and external development situations and formidable tasks of reform, development and stabilization, China Shenhua made every effort to deal with various risks and challenges and fully implemented its political, economic and social responsibilities. China Shenhua endeavoured to advance, undertook arduous tasks in the big test and handed in a qualified answer sheet, with a new chapter written in high-quality development. The Company has made due contributions to the economic and social development of the PRC.

We resolutely followed the spirit in a series of important speeches made by General Secretary Xi Jinping on the measures for prevention and control of COVID-19 and economic and social development, fully mobilized the implementation of work plan to “prevent the spread of the pandemic, ensure safe production, protect the health of staff, and ensure energy supply”. We strived to fight against the pandemic and took the lead in resuming work and production. To ensure continuous supply of energy materials for the frontline, the Company effectively played the role of pillars of great power, and has made positive contributions to ensuring the safe and stable supply of energy in the PRC.

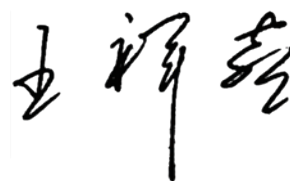
We earnestly adhered to decision-making deployment of the “six stabilities” and “six guarantees” of the Party Central Committee, implemented the job requirements of ensuring “stability on three fronts, security in four areas and enhancing the leadership and building of the Party” of the SASAC, and built a new model of intensive, platform-based, transparent and efficient operation, management and control, in order to fully achieve the target expected at the beginning of the year and satisfy the completion of the 13th Five-Year. The Company ranked 10th among the Top 250 Global Energy Companies in 2020, and ranked 2nd among PRC enterprises by Platts.

We successfully completed the re-election of the Board and the Supervisory Committee, and continuously improved the governance system. The Company carried out “de-institutionalisation” rectification, adjusted its organisational structure, rationalised the management functions, comprehensively formulated rules and regulations, and strengthened team building. We optimised the industrial layout, promoted the reform and restructuring of the transportation industry, and completed the finance company transaction. We optimised the shareholding structure, implemented the repurchase of H Shares and continued the large proportion of cash dividends to boost investor confidence, and further promoted the reform of state-owned enterprises with the “Double Hundred Actions”, in which the reform experience of Baoshen Railway was selected as a typical case of the SASAC.

We have made substantial progress in key projects, such as the operation of Huangda railways, dual-unit concurrent operations of Jinjie Power Plant Phase III, the entire construction of Unit No. 2 of Project Indonesia Jawa-7 and the commencement of construction of the Luoyuanwan project. The intelligent construction has achieved outstanding results. Shendong Coal has built a number of fully mechanised mining surface, unmanned opencast mining trucks of Zhunge'er Energy Group have entered field tests, and promoted the implementation of key projects such as the state repair of railway freight cars, intelligent driving and mobile blocking, as well as the achievement of the whole-process intelligent shipping at Huanghua Port of turning-stacking-fetching-loading process. We have also prepared the China Shenhua “14th Five-Year” development plan to set the direction for future development.

We continued to promote the green energy production and all-round advancement of green technology progress to provide quality clean energy for the society. Through measures such as saving resources, reducing emissions and strict handling emissions to protect the balance of ecology and nature, 22 mines of the Company were awarded the Special-grade Safe and Efficient Coal Mine in 2018-2019, 15 coal mines were selected into the national green mine list. The Company actively addressed climate change, explored the development and utilisation of new energy, participated in national carbon market construction, continuously improved the level of carbon emission management, as well as promote the improvement of product and service quality, optimised the supply chain management system to boost industry and social progress. The Company adhered to the development philosophy of people-oriented, guaranteed the legitimate rights and interests of employees to build a diversified career development platform for employees. The Company actively engaged in public welfare and poverty alleviation, and all the three counties designated for poverty alleviation have been lifted out of poverty. China Shenhua has won various honors such as the National Civilised Unit, the Advanced Enterprise of Energy Conservation and Emission Reduction for Coal Industry, the Enterprise of Energy and Social Responsibility of the Year.

In the new year, opportunities and challenges coexist. China Shenhua will adhere to the principle of “empowering the society and boosting the economy”, undertake the mission of “ensuring energy supply and leading energy revolution”, practice the core values of “green development and pursuit of excellence”, promote the spirit of “hard work, dedication, innovation and striving to be the first”, urge to come up with an action plan that enables the peaking of carbon emission, accelerate the peaking of carbon emission as soon as possible, and vigorously develop new energy to achieve the synergy effect of pollution reduction and carbon reduction, implement large-scale land greening actions, improve the carbon sink capacity of the ecosystem, strive to reach the peaking of carbon dioxide emissions by 2025, strive to achieve carbon neutralization by 2060, and create a world-class listed energy company with global competitiveness.



Wang Xiangxi  
Chairman

26 March 2021

## ESG Governance Statement from the Board

China Shenhua is well aware of the importance of good corporate governance and risk management processes, including ESG management, which is crucial to the sustainable development of the Company.

The Board of China Shenhua is the highest responsible and decision-making institution for ESG matters, which takes full responsibility for the Company's ESG strategies and reporting, and monitors ESG related matters that may affect the interests of the Company's business or operation, shareholders and other stakeholders. The Safety, Health and Environmental Protection Committee of the Board is responsible for supervising the commitment and performance of ESG key issues, to ensure the integration of ESG concept and the Company's strategy.

Based on the external socio-economic environment and the Company's development strategy, the Board of China Shenhua regularly reviews the major issues of ESG, discusses and determines the risks and opportunities of ESG, takes the management and improvement of key issues as the annual strategic work of ESG, considers them as part of the Company's overall strategy formulation, and supervises the issue management and performance.

In 2020, the 14th Five-Year Plan in relation to the special plan of China Shenhua's ESG governance was prepared by the Company and approved by the Board, which formulated major policies and key directions of China Shenhua's ESG governance, and defined the "three-step" promotion strategy of ESG governance. At the same time, the Company has set ESG targets, including greenhouse gas emissions, waste emissions, and utilisation of energy and resources. The Board regularly reviews the achievement of the targets, and reviews the implementation strategies and action plans of the annual targets.

This report discloses the details of progress and effectiveness of ESG work of China Shenhua in 2020, which was considered and approved at the sixth meeting of the fifth session of the Board on 26 March 2021. The Board and all directors of China Shenhua warrant that there are no false representations, misleading statements or material omissions contained in this announcement and severally and jointly accept full responsibility for the authenticity, accuracy and completeness of the information contained herein.



# About China Shenhua

## Profile of the Company

China Shenhua was founded on 8 November 2004, and the H shares and A shares of China Shenhua were listed on the Hong Kong Stock Exchange and Shanghai Stock Exchange on 15 June 2005 and 9 October 2007, respectively.

At present, China Shenhua is the only A + H share listed company of China Energy, and is the world-leading coal-based integrated energy listed company. As of 31 December 2020, the Company's total assets is RMB562.9 billion, the total number of employees is 76,182, and the total market value is US\$52.3 billion (approximately RMB338.4 billion).

China Shenhua is the core integrated operation of China Energy. The Company is mainly engaged in coal, electric power, railway, port, shipping and coal chemical industry. Starting from the coal mining business, the Company has made use of its own transportation and sales network, as well as the downstream electric power and coal chemical industry to promote the development model of conglomerate and cross-industry vertical integration, improve the industrial concentration, increase the added-value of products, and form the scale advantages to constitute the core competitiveness of Chinese Shenhua.

## Business profile

### Coal



The approved production capacity is 330 million tonnes, of which Shendong mining area has a production capacity of 200 million tonnes of clean and environment-friendly coal, and its production, technology, energy consumption, environmental protection and other indicators have reached the world's advanced level.

### Port



China Shenhua has a number of self-owned integrated port and docks, such as Huanghua port, Tianjin coal terminal and Zhuhai coal terminal, with an annual designed throughput capacity of 250 million tonnes.

### Railway



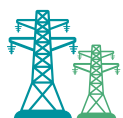
With a total mileage of 2,371 km and an annual transportation capacity of 520 million tonnes, China Shenhua is the second largest railway operator in China, of which the special railway line from Shendong mining area to Huanghua port, Shen (Shuo) Huang railway, is the second largest channel of "Coal Transportation from West to East" in China.

### Shipping



China Shenhua has 40 cargo ships with a capacity of 218 million dwt.

### Power



The total installed capacity is 32.28 million kW, including coal-fired power generation of 31.20 million kW, gas-fired power generation of 0.95 million kW and hydropower generation of 0.13 million kW. The Company has vigorously promoted clean power generation. At present, all conventional coal-fired power units of the Company has achieved ultra-low emission.

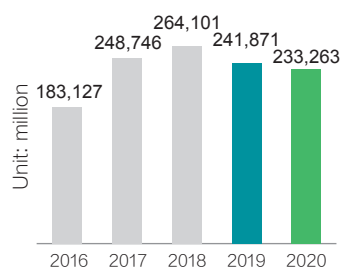
### Coal to chemical



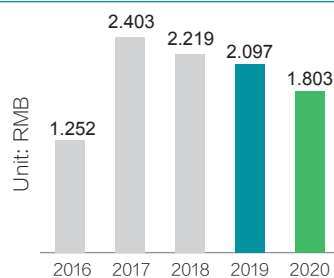
The coal to olefin production capacity of Baotou is approximately 600,000 tonnes/year. The main products are polyethylene, polypropylene and a small number of by-products, with the first large-scale methanol to olefin plant (MTO) in China. Bayannur Energy has 1.2 million tonnes/year coking production capacity.

## About China Shenhua 2020

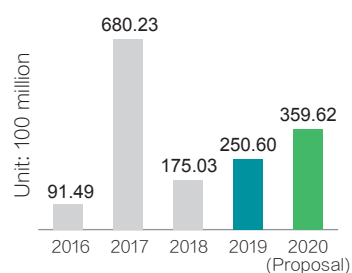
Income: RMB233,263 million



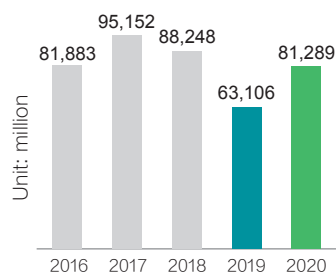
Basic earnings per share:  
RMB1.803/share



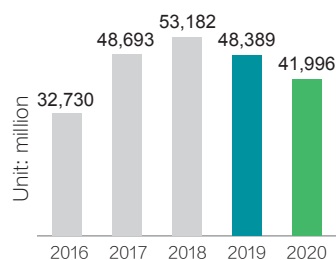
Cash dividend:  
RMB359.62 '00 million



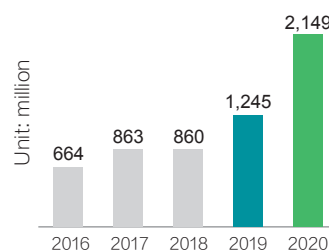
Net cash inflow from  
operating activities:  
RMB81,289 million



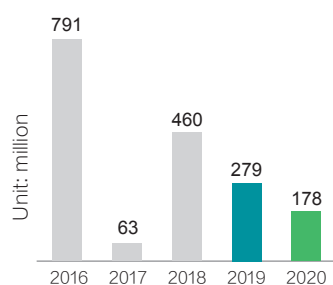
Total tax amount:  
RMB41,996 million



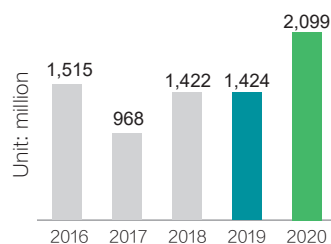
R&D Investment:  
RMB2,149 million



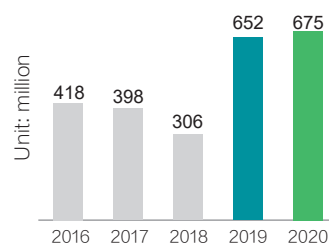
Social donation amount:  
RMB178 million



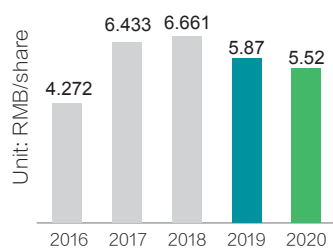
Environmental  
protection investment:  
RMB2,099 million



Investment in  
occupational health:  
RMB675 million



Social contribution  
value per share:  
RMB5.52/share



## Responsibility and Honor



### STCN

Capital Operation Benchmark  
Award in the 14th (2020)  
China Listed Companies Value  
Selection

August 2020

### Shanghai Stock Exchange

Class A Evaluation on  
Information Disclosure of  
Listed Companies on the Main  
Board of SSE from 2019 to  
2020

September 2020

### China Association for Public Companies with Shanghai Stock Exchange and Shenzhen Stock Exchange

No.6 on the List of Substantial  
Returns of Listed Companies

September 2020

### Cultural Commission of the Central Government

The sixth "National Modern  
Unit"

November 2020

### New Fortune

Second New Fortune Best  
Listed Company

November 2020

### China Environment Service Industry Association

2018-2019 Advanced  
Enterprise of Energy  
Conservation and Emission  
Reduction for Coal Industry

November 2020

### Hong Kong Ta Kung Wen Wei Media Group Limited, Listed Companies Association of Beijing and Hong Kong Chinese Enterprises Association

Outstanding Listed Companies  
in the 30th Anniversary of Capital  
Market, the 10th China Securities  
Golden Bauhinia Awards

December 2020

### China Power Industry Corporation Public Transparency Summit

2020 "Outstanding Enterprise  
in Responsibility Information  
Disclosure" Award of China  
Power Industry Corporation

December 2020

### Sina

Annual Sustainable  
Development Award – Golden  
Awards

December 2020

### Energy Magazine

2020 Energy Social  
Responsibility Enterprises

December 2020

### 2020 ESG Rating of Petrochemical Industry Listed Companies in the PRC

AAA (Top of the List)

December 2020

### Caijing Magazine

2020 Evergreen Award –  
Sustainable Development  
Inclusive Award

January 2021



# “Chinese Standards” Go Global to Achieve Multi-value Co-creation

——14-year in-depth cultivation of China Shenhua Indonesia thermal power project



Accumulated investment of China Shenhua Indonesia thermal power project  
US\$ **3,118** million



Number of power projects  
**3**



Proportion of installed capacity in total installed capacity of Indonesia  
coal power **8%**



Installed capacity  
**3.1** million kW



Accumulated power generation of China Shenhua Indonesia thermal power project **23.737** billion kWh



Local jobs provided in Indonesia more than **7,000**



Investment in local development  
RMB **33.42** million





## 14 Years of High Quality Practice

Indonesia thermal power project of China Shenhua started under the historical background of China's The "Belt and Road" Initiative and Indonesia's strategic concept of "Global Maritime Fulcrum". After 14 years, based on the international development path of symbiotic value concept, China Shenhua has gradually grown into the largest Chinese invested enterprise in Indonesia's power field, which has been highly recognised and widely recognised by the Indonesian government, power industry and people.



## Footprint of Indonesia thermal power project of China Shenhua:

**2007**

Guohua Power and Indonesia EMM signed a Memorandum of Understanding

**2008**

The formal registration and establishment of PT.GH EMM INDONESIA

**2008**

PT.GH EMM INDONESIA signed PPA contract with PLN (Indonesia National Power Company)

**2011**

No. 1 and No. 2 units of Sumsel EMM project were put into operation

**2017**

South Sumatra No. 1 Project obtained project financing closure certificate

**2017**

Zero-meter foundation of first unit of main house of Java No. 7 Project was completed

**2018**

The generator stator of No. 1 unit of Java No. 7 Project was successfully hoisted in place

**2019**

An agreement on the price of power was reached between PLN (Indonesia National Power Company) and the project company

**2019**

The LP cylinder of No. 2 steam turbine in Java No. 7 Project was successfully locked  
Unit 1 of Java No. 7 Project was put into commercial operation  
Construction of South Sumatra No. 1 Project officially started

**2020**

Each project unit in Indonesia fought against the pandemic and resumed work to achieve "zero pandemic"





**2009** Commencement of Sumsel EMM project



**2015** China Shenhua won the bid for Java No. 7 Project

**2016** Land reclamation by throwing sand in Java No. 7 Project

**2015** China Shenhua-LPE consortium won the bid for South Sumatra No. 1 Project



**2019** PLN (Indonesia National Power Company) formally confirmed coal source and price of South Sumatra No. 1 Project

**2019** The rotor of No. 2 generator of Java No. 7 Project was smoothly installed



**2020** Grid connection of Unit 2 of Java No. 7 Project was successfully achieved

**2020** Construction of the first tank of concrete in South Sumatra No. 1 Project

**2020** Unit 2 of Java No. 7 Project successfully passed the 168-hour trial run



## Craftsmanship of Creating Quality Projects

### EMM Indonesia Project – Overseas project unfolded in full swing

PT.GH EMM INDONESIA PROJECT entered Indonesia with high-quality and high-tech standards, creating a good start for the development of China Shenhua in Indonesia.

On 7 July 2009, the EMM Indonesia project was launched, symbolising that the first overseas project of China Shenhua was officially unfolded in full swing.

The construction period of the two units of the EMM Indonesia project was 12 months and 11 months earlier than the requirements of the PPA contract, respectively, which promptly relieved the shortage of power supply in the area. Since commercial operation in 2013, it has been continuously operating for 8 consecutive years, with an equivalent availability factor of over 94%, successfully realising the long-term safe and stable operation of the world's first integrated drying and power generation system with an overall moisture content of lignite exceeding 60%, and gradually developing into the most stable power source in South Sumatra.



Panorama of EMM Indonesia

The EMM Indonesia project has been awarded the “Best Power Generation Enterprise” in Indonesia for consecutive years, and has been awarded a series of awards such as “Technology Innovation Enterprise”, “Environmental Protection Improvement and Reform Excellent Enterprise”, and the SMK3 Golden Certificate of the Ministry of Labor of Indonesian. The Energy Commission of Indonesian listed the EMM Indonesia project as a demonstration project, and proposed the suggestion to the Chinese Embassy of EMM Indonesia project as a standard to recommend power teams to enter Indonesia.

### Java No. 7 Project – Going Global under “Chinese standard”

The Java No. 7 project is a large-scale thermal power generation project with Chinese manufacturing system, high standard and cooperation to “go global”. It is an excellent example of integrating power engineering design, equipment manufacturing, construction as well as management and operation in China.

The Java No.7 Project integrates advanced environmental protection and digital thermal power generation technologies. After the unit is put into operation, the major economic and technical indicators are better than the designed values, and the major environmental indicators are significantly better than the emission standards of Indonesia. The construction of seawater desalination system supported by the project has positive and practical significance for the utilisation of water resources in Indonesia, a thousand island country.



Panorama of Java No. 7 Project

Since the commercial operation in December 2019, the unit 1 of the Java No. 7 Project has continuously and safely operated for over 300 days, with an equivalent availability factor of 100%. On 23 September 2020, unit 2 of the Java No. 7 Project passed the 168-hour trial operation, and the project was fully completed. The project has become a high-efficiency and environmentally friendly power station with the largest installed capacity, the highest parameters, the most advanced technology and the best indicators in the history of Indonesia's power construction, demonstrating the “Chinese standard” in the world.



### The 3 “First” of Java No. 7 Project in Indonesia

The first project to complete the financing and closure within 6 months after the PPA contract took effect

The first company to achieve an one-off completion of 11 registration certificates in accordance with the “3-hour investment license application channel” of the Indonesian Investment Coordination Committee

The first enterprise to obtain the approval of corporate income tax reduction and exemption in accordance with the corporate income tax reduction and exemption policy of the Ministry of Finance of Indonesia

## Win-win Mission to Create Multi-value

While fulfilling its mission of power generation and driving economic development, China Shenhua Indonesia Thermal Power Project is committed to achieve win-win situation based on long-term value creation.

**Responsibility of environmental protection to jointly build blue and clear water.** China Shenhua Indonesia Thermal Power Project has adhered to the concept of “ecological environmental protection and green development”, insisted on the construction of ecological civilisation, protected biodiversity, utilised and protected the original mangroves, and built a colorful coal transportation trestle bridge blending with the natural environment. During the design and planning period of the project, there were environmental protection plans to reserve the room for improvement, achieving far better environmental protection level as compared with the Indonesian national standard.

### Case

#### Mangrove protection of Java No. 7 Project

During the construction and production process of Java No. 7 Project, the ecological protection project was actively promoted, the blue sky and clear water were jointly built with local residents, and the coastal wetland ecology was conserved. During the infrastructure construction period, the offshore mangrove forest coverage rate increased by more than 30% on the original basis. “Equatorial solitary smoke, mangrove against blue sky and egrets in sunglow” have become a beautiful scenery around the project.



**Strengthening the exchange and cultivation of talents, and cultivating trees is also cultivating people.** We promoted the “localisation” of Indonesian talents, setting up training bases for Indonesian talents in China, and 180 Indonesian employees have travelled to China to participate in learning and exchanges. We strengthened the “apprenticeship training”, whereas Chinese masters guide Indonesian apprentices, and local experienced employees guide local new employees. We invested RMB1.45 million to cooperate with Indonesian universities to build the “Power Simulation and Research and Education Cooperation Center” to cultivate operation talents for Indonesian power construction. We have promoted the “internationalisation” of Chinese talents by recruiting 100 fresh graduates every year as international talents for reserve training and 10 foreign students in Indonesia or other countries every year as translation talents, and sending 10 cadres to Indonesia for temporary training and cultivation every year, in order to cultivate and reserve an international talent team for overseas infrastructure, production and operation.



The first session of Indonesian language training class



Donation of epidemic prevention materials to surrounding communities

**Creating sustainable value to bring warmth to people's livelihood.** The project has actively contributed to the development of local people's livelihood. During the dry season, clean drinking water is provided to surrounding villages through the self-contained water treatment system in the plant. The construction of 9 kilometers of community roads, excavation of 24 water wells, construction of mosques, dredging of rivers and hardening of docks have improved the surrounding infrastructure. As of 31 December 2020, the Indonesian project has invested a total of RMB33.42 million to help local development, providing over 7,000 local jobs, increasing the economic income of surrounding residents and improving the local living standards.



## Corporate Governance



China Shenhua has adhered to the strategic objective of “establishing a global top-tier integrated energy listed company with international competitiveness”, guided by the modern corporate system and the Articles of Association, promoted the in-depth integration of leadership of the Party and corporate governance, continuously improved the level of corporate governance and standardised internal control system and system construction, so as to strengthen the capability of the Company to withstand risks. The Company has attached great importance to abiding by business ethics, standardising the behavior of the enterprises and employees by improving the compliance management system and ensuring the integrity and efficiency of the Company’s operation, and is committed to creating stable and long-term value with partners.

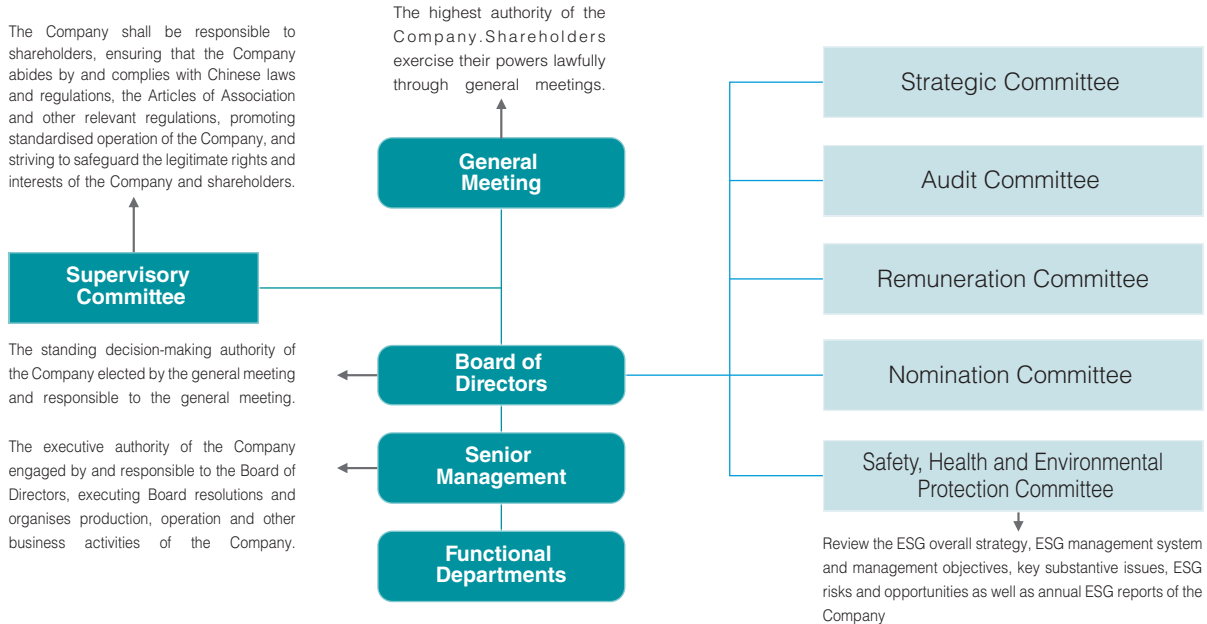




## Corporate governance

Decent corporate governance mechanism, conducive to the enhancement of corporate value and maintenance of shareholders' interests, is an important basis for the Company to realize sustainable development. China Shenhua has constantly optimized its corporate governance system and constantly improved its management level during the long-term corporate governance practice. General meetings, the Board and its special committees, the Supervisory Committee as well as the corporate governance structure of the management and all functional department of which the general manager is responsible for have clear duties and responsibilities with high effectiveness.

## Governance Structure



### 1

Annual General Meeting

### 1

Extraordinary General Meeting

### 2

Class Meetings of the Holders of A shares

### 2

Class Meetings of the Holders of H shares

## Shareholders and general meeting

General meeting is the highest authority of the Company. Shareholders exercise the functions and duties lawfully through general meetings. The Company convenes general meetings in strict accordance with the *Articles of Association*, and performs such work as notice, review, voting and information disclosure based on the rules of procedures to adequately safeguard all shareholders to rank *pari passu*, and effectively exercise their rights to know, to participate, to question and to vote.

In 2020, China Shenhua organised a total of one annual general meeting, one extraordinary general meeting, two class meetings of the holders of A shares and two class meetings of the holders of H shares, and all proposals were approved.

The Company attaches great importance to the protection of the interests of investors. The Company adequately illustrates the fact of the operation information of the Company to the investors through periodic reports, announcements, SSE e-interactive internet platform, hotlines, mail and other channels. In 2020, four performance conferences were held through the SSE Roadshow Center platform to safeguard the investors' right to know under the normalized prevention and control of the epidemic. The Company has formulated separate vote counting and cumulative voting system, not imposing any minimum shareholding limitation for soliciting voting rights, disclosure of the policy of dividend distribution and other regulations to protect the legitimate interest of minority shareholders.





## Directors, Board of Directors and special committees

Directors of the Company, who are elected at the general meetings, are responsible to the shareholders with a term of office of three years and are eligible to be re-elected upon expiry of the term of office. Directors protect the interests of the shareholders as a whole, pursue the principle of being diligent, honest and prudent, and be earnest to perform duties.

The Board of Directors is a standing decision-making body of the Company and is responsible to the general meeting. The Board of Directors established the Strategic Committee, the Audit Committee, the Remuneration Committee, the Nomination Committee and the Safety, Health and Environmental Protection Committee. All special committees leverage their expertise, and carry out pre-consideration and gate keeping of the resolutions of the Board of Directors. In May 2020, the Board of Directors of the Company completed the re-election work. A total of seven meetings of the Board of Directors, two independent board committee meetings and sixteen special committee meetings were convened throughout the year to review a total of 72 resolutions, such as annual reports and related party/connected transactions, to ensure that the various work of the Company is carried out in an orderly manner. In 2020, the integrity education receiving rate of Directors of the Company is 100%, with a total of 31 training hours; and the Company conducted two ESG-related training sessions including the “Environmental, Social and Governance Reporting Guide” of the HKEx.

China Shenhua formulated the diversity policy of members of the Board of Directors. Election of the members of the Board of Directors is based on diversity, combined with the characteristics and functions of personnel, as well as the actual condition, proprietary business model and work demand of the Company. The Directors of the Company were from different industries. Knowledge structure and professional sector of each Director in the overall structure of the Board of Directors are professional and complementary, presenting the characteristics of diversity to safeguard the scientific decision-making of the Board of Directors.

## Performance of duties of independent directors

The Company’s independent Directors have faithfully performed and diligently fulfilled their duties pursuant to the Company Law, the listing rules of the place of listing, as well as relevant provisions such as Guiding Opinions on Establishing Independent Director System for Listed Companies, the Articles of Association, the Company’s Independent Director System and other regulations of the Company, adhering to diligence, honesty in performing duties as independent Directors, safeguarding the interests of the Company as a whole, and safeguarding the legitimate rights and interests of all shareholders, especially minority shareholders.

# 7

Board meetings

# 2

Independent Board committee meetings

# 16

Special committee meetings

# 72

Resolutions approved

# 31

Hours of training in integrity education for Directors

### Performance of duties of independent Directors in 2020

1

Conducted Investigation in Shendong and Zhunge'er Energy mining areas to learn about the intellectualisation of coal mines and construction of ecological environment, and put forward targeted opinions and suggestions on the continuation of coal resources, coordination with governments at all levels and the management of labor dispatch.

2

Investigated in sales group to learn about the pending settlement volume of coal sales and the impact on the annual financial information of the Company, and proposed opinions and suggestions.

3

Participated in the "14th Five-Year Plan" seminar of the Company and put forward opinions and suggestions on climate change risks and other content.

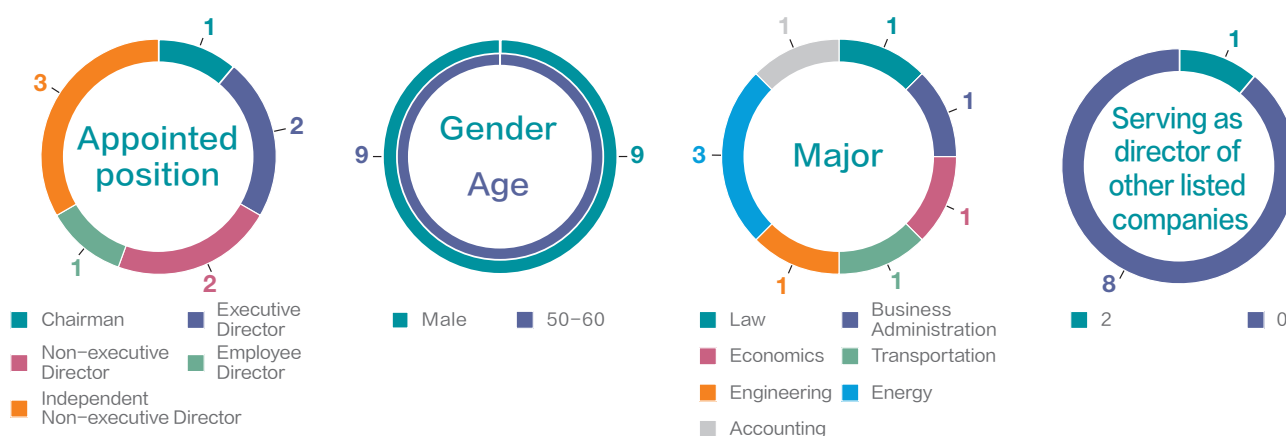
4

Issued independent opinions on the 2019 profit distribution plan, related party transactions, external guarantees, internal control, management remuneration, information disclosure, fulfillment of commitments by controlling shareholders as well as other matters and solutions of the Company.



In 2020, some Directors and Supervisors of China Shenhua investigated in Shendong mining area

### Diversified structure of the fifth session of the Board of Directors of China Shenhua



## Supervisors and Supervisory Committee

The Supervisory Committee of the Company honestly and prudently performs the functions of supervision, and actively and effectively commences work in accordance with the *Company Law*, the *Articles of Association* and relevant regulations, to ensure the Company's compliance with and conforming to the laws and regulations of the PRC, the Listing Rules, the Article of Association and other relevant regulations. The Company endeavored to maintain the legitimate interests of the Company and shareholders. In May 2020, the election of the new session of Supervisory Committee of the Company was completed. At present, the Supervisory Committee of the Company comprised 3 Supervisors, including one employee representative Supervisor; 5 meetings of the Supervisory Committee were convened throughout the year and the meetings were conducted in accordance with the *Company Law* and the *Articles of Association*.

## Senior management

Senior management, the executive authority of the Company, is engaged by and responsible to the Board of Directors. According to the requirements of the *Company Law* and the *Articles of Association* as well as the authorisation of the Board of Directors, Senior Management executes Board resolutions and organises production, operation and other business activities of the Company.

## Compliance Management

According to the principle of “comprehensive coverage, emphasis on key points, clarity of authority and responsibility, efficient coordination”, China Shenhua establishes the Compliance Management Committee in order to construct the compliance management leadership system comprising the leadership of the Party Committee, the decision-making of the Board of Directors, the supervision of the Supervisory Committee, the coordination of the Compliance Management Committee and management promotion with the compliance management work mechanism of the combination of lead management, specialization and enhanced supervision.



In 2020, China Shenhua has not involved in any material litigations and arbitrations.





## Related Party Transaction Management

The Company formulated *Related Transaction Administrative Measures*, established related party transaction team which is responsible for the management of the Company's related party transaction affairs, the guidance, supervision and monitoring of the subsidiaries' related party transaction management, review on the relevant files of the related party transactions, fulfillment of the relevant applications of the Board of Directors and general meetings, reporting to the listing authorities and update on the list of related parties and the information regarding the related relationships, to ensure the continuous related party transactions are conducted in accordance with the fairness, just and openness. The one-off related party transaction is in compliance with the listing regulatory requirements. In 2020, the related party transaction team convened 8 meetings, to consider 39 matters, including the related party transaction limit adjustment of the subsidiaries.

## Risk Prevention Management

China Shenhua focused on risk prevention management, optimised the internal control system and commenced overall risk prevention work, regularly evaluated and consistently supervised its effectiveness to protect the overall interest of the Company and its shareholders while promoting the sustainable development of China Shenhua.

### Internal Control

In 2020, China Shenhua implemented the requirement regarding the *Implementation Advice on the Enhancement on Construction and Supervision of Internal Control System by the Central Government*, formulated the *Internal Control Management Requirement*, further specified the duties and job distribution of internal control management and made clear about internal control which covers strategic development and production operating management and other areas and conducted throughout the whole process of decision,

execution and supervision; formulated the *2020 Work Plan on Internal Control Evaluation* to coordinate the enterprises to commence self-evaluation on internal control and realised comprehensive coverage of self-evaluation on internal control of enterprises at all levels in the Company for the year, comprehensive coverage of inspection and supervision on the effectiveness of internal control on the subordinated enterprises for three years. China Shenhua integrated business information systems such as GRC and ERP into the internal control system and control measures, in order to enhance the quality of immediate inspection and auto alert on major risks.

### Risk Control

China Shenhua implemented the closed-loop management on risk control and monitoring, regularly conducted risk identification, evaluated major risks and carried out daily monitoring through measures such as quarterly monitoring of major risks, special inspection and internal audit.

In 2020, China Shenhua established a comprehensive risk management system:

#### Established a sound and comprehensive risk management system

Formulate the *comprehensive risk management Requirement*

Specify the duties and job distribution of comprehensive risk management

#### Strengthened the risk control reporting mechanism

Commence the major risk seasonal tracking and monitoring work and significant risk matters mechanism

Complete the comprehensive risk management report and major risk monitoring report of each quarter

In 2020, the Company evaluated eight major risks, including the risk of macroeconomic fluctuations, risk of safety production and environmental protection, risk of market competition, risk of international operations, risk of legal affairs, risk of project management, risk of integrated operations and risks of changes in industry policies, and adopted corresponding countermeasures:

Risk Level	Corresponding Countermeasures
<b>Risk of macroeconomic fluctuations</b>	<ul style="list-style-type: none"> <li>• Enhance the research on trends of policy and industry development</li> <li>• Promote scientific and technological innovation and enhancement</li> <li>• Continue to implement clean energy strategies and develop new energy industry</li> </ul>
<b>Risk of safety production and environmental protection</b>	<ul style="list-style-type: none"> <li>• Strengthen the operation of safety risks prevention and management system and inspection and examination on major potential risks, and strengthen the safety production training and emergency rescue management</li> <li>• Continue to enhance environmental monitoring and strictly impose red lines for ecological protection, strongly promote green mine construction and continuously build a coal-power <i>ultra-low emission</i> brand and comprehensively implement ecological and civilised construction</li> </ul>
<b>Risk of market competition</b>	<ul style="list-style-type: none"> <li>• Strictly implement long-term contracts, enhance quality control</li> <li>• Enhance the comprehensive coordination of production, transportation, sales and usage</li> <li>• Improve the quality efficiency of electrical business development and participate in market transactions in compliance with laws and regulations</li> <li>• Participate in investment in coal flowing channels of national railways, and increase the collection and distribution capacity of railways owned by the Company</li> </ul>
<b>Risk of international operations</b>	<ul style="list-style-type: none"> <li>• Further carry out the analysis and research on any decision on overseas project investment to ensure economic and technological feasibility of the project</li> <li>• Proactively respond to the impacts brought by COVID-19 to overseas business and enhance the monitoring on overseas risks and orderly expand its international businesses</li> <li>• Enhance the cultivation and introduction of compound cadre talents</li> </ul>
<b>Risk of legal affairs</b>	<ul style="list-style-type: none"> <li>• Improve the effectiveness of compliance management with IT measures</li> <li>• Enhance the prevention and response capability towards major legal cases</li> <li>• Enhance the compliance management of matters including approval of coal and power projects and registration of licenses</li> <li>• Enhance the tracking research on overseas legal system and implement risk control measures</li> </ul>
<b>Risk of project management</b>	<ul style="list-style-type: none"> <li>• Strengthen its construction safety management, enforce its administration in safety emergency plans</li> <li>• Strengthen management and construction cost control at the early stage of the project</li> <li>• Formulate effective measures to reduce or eliminate the impact of the factors of phase expansion</li> </ul>
<b>Risk of integrated operations</b>	<ul style="list-style-type: none"> <li>• Strengthen scientific scheduling and plan management</li> <li>• Improve railway collection and distribution system, strengthen the coordination of power grid, and strengthen the operation management of production equipment</li> </ul>
<b>Risk of changes in industry policies</b>	<ul style="list-style-type: none"> <li>• Strengthen the policy research and enhance the coordination of policies</li> <li>• Proactively promote the industry upgrade and structural adjustment</li> <li>• Proactively implement the targets of <i>CO<sub>2</sub> Emission Peak</i> and <i>Carbon Neutrality</i></li> </ul>

## Compliance Operation

### Adhering to Business Ethics Standards

China Shenhua has adhered to business ethics standards, strictly complied with the *Anti-Monopoly Law of the People's Republic of China* and *Anti-unfair Competition Law of the People's Republic of China* and other laws and regulations, stringently complied with the business ethics standards, upheld the principles of honest operations, fair competitions, determination on anti-monopoly and unfair competition, opposed any forms of business bribery, and required the business partners to comply with the relevant policy requirements regarding anti-business bribery and anti-corruption. For the key areas including procurement and sales, the Company has proactively carried out the investigation on incorruptible employment risks, made key prompts for key positions, and guided employees to consciously resist commercial bribes and reflect and report relevant events in a timely manner.

### Anti-Corruption

China Shenhua has adhered to honest operation, fair competition and cultivated integrity culture, and thus constantly improved the pertinence and effectiveness of supervision, and created a regulated and legal operation environment. The Company has strictly complied with the *Supervision Law of the People's Republic of China* and *Anti-Money Laundering Law of the People's Republic of China* and other relevant laws and regulations, formulated national-wide, multi-line and multi-level management system which covered the Company and its subsidiaries, strengthened the restrictions and supervisions on the power and constantly commenced anti-corruption activities, implementing “dare not to be corrupt, cannot be corrupt and unwilling to be corrupt”.

## Reporting and Complaints

The Company has established an optimised and transparent complaint and reporting management procedures and handling measures, set up and announce the reporting numbers and email, and reiterated various reporting methods during statutory holiday and other important dates, made it clear about the comments given by the party committees and the public, and commenced the channels of supervision, strengthened the collective management, disposal by categories and regular handling with the evidence of issues.

### Violation and Penalty

The Company has established management mechanism, in which the violation is linked with the employee performance remuneration. Regarding the violation by employees who bring material economic losses to the country and the enterprise, the responsible person shall be subject to economic penalty and the amount involved will be deducted from the remuneration of the employee based on the “*Measures for Addressing Non-compliances and Malpractices of the Staff of China Energy Investment Corporation (Trial)*” and other relevant requirements.

## China Shenhua Anti-Corruption Management System

## Key Points

*Work Rules of the Disciplinary Inspection Committee of CCP China Shenhua Energy Company Limited (Trial)*

Expressly require the organization rules, rules of procedure and work discipline of the work of the Disciplinary Inspection Committee

*Management Measures of Corruption Reports and Evidence of Issues of Disciplinary Inspection Committee of China Shenhua Energy Company Limited (Trial), Handling Measures of Evidence of Issues of Disciplinary Inspection Committee of China Shenhua Energy Company Limited (Trial)*

Standardise the scope of acceptance and source channels, registration and management, processing programs of evidence of issues, standardise the flow and registration of evidence of issues, approval programs of handling approaches, statistical analysis and data delivery and work discipline

*Administrative Measures on Integrity Talks of China Shenhua Energy Company Limited (Trial), Administrative Measures for the Management of Cadres of the Party Committee of China Shenhua Energy Company Limited*

Standardise the content of the talks and filing requirements of the key management of the Company's Party committee

*Administrative Measures of Response to Advice on Party Style and Anti-Corruption of Disciplinary Inspection Committee of China Shenhua Energy Company Limited*

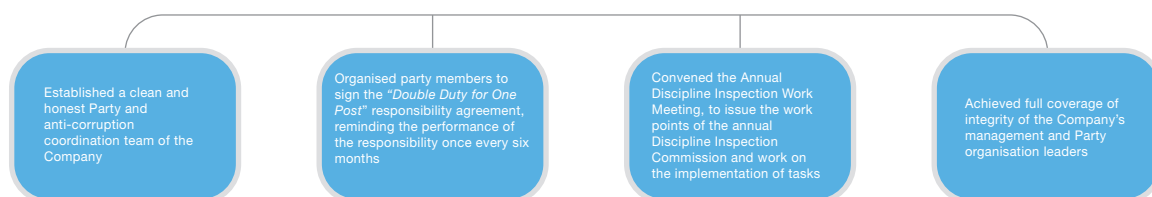
Provide a basis for seeking truth from facts, compliance with laws and regulations, scientifically and reasonably standardizing the response to the advice on Party Style and anti-corruption

*Requirement Regarding the Prohibition of Engagement in Economic Activities within the Group System by Relatives of the Management and Other Persons with Special Relationships (Trial)*

Expressly declare that the relatives of the management and other persons with special relationships are prohibited from engaging in economic activities within the group system

The main anti-corruption work carried out by the Company in 2020:

### Implementing the major responsibility for stringent governance within the entire party



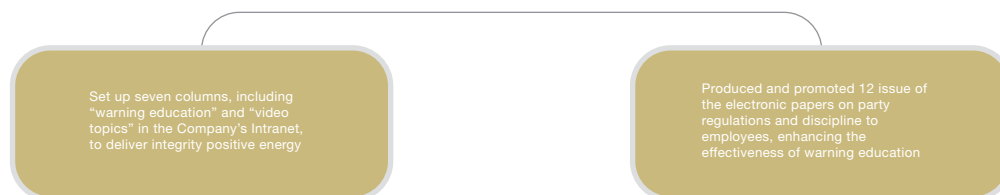
### Anti-corruption advocacy supervision and inspection



### “Know the Law, know the bottom Line, keep a positive attitude” integrity education activities



### Strengthening the construction of publicity bases



## 2020 Indicators

Number of significant complaints

> **0** case

Number of concluded legal cases regarding corruption practices

> **0** case

Number of employees received anti-corruption training

> **57,541** persons

Number of directors, supervisors and senior executives received anti-corruption training

> **26** persons

Number of management from subsidiaries and branches received anti-corruption training

> **228** persons

Number of other employees received anti-corruption training

> **57,287** persons

## Party Building

Guided by Xi Jinping Thought on New-Era Chinese Socialism, China Shenhua earnestly fulfilled its main responsibilities for comprehensive and strict rule over the Party, and gave full play to the vanguard and exemplary role of Party organization and members, in order to lead the development of first-class enterprise with first-class Party building and provide a strong political guarantee for the Company's reform and development.

The Company establishes decision-making and implementation supervision mechanisms with equal rights and responsibilities, coordinated operation, and effective checks and balances, and explores modern state-owned enterprise governance systems with Chinese characteristics.

In the actual operation of China Shenhua, both the Board of Directors and the Party Committee are the main body of corporate governance, but each has its own duties and responsibilities, which are both distinct and connected. The Board of Directors of China Shenhua plays a decision-making role in the operation of the Company and is responsible for formulating strategies, making decisions and preventing and controlling risks of the Company. The Party Committee plays a leading role in guiding the direction, managing the overall situation and ensuring implementation. With regard to the decisions regarding major operation and management issues by the Board of Directors' decision-making, the Party Committee shall conduct a directional check, focusing on whether the decision-making items are in line with the Party's theory and Party's line, principles and policies, whether it is in line with the strategic planning of the Party and the state, and whether it is conducive to enhancing the efficiency of the enterprise, to enhance the competitiveness of the enterprise, increase the value of state assets, and safeguard the interests of the public and the legitimate rights and interests of the employees. Preliminary studies and discussion by the Party Committee is not the same as the preliminary decision and does not replace the decision of the Board of Directors.



In 2020, China Shenhua continued to enhance the quality of Party building works and carried out the following activities:

### Strengthen the Party's political construction and improve service guarantee

Organised 25 meetings of the Party committee for the whole year to review 284 issues, including 166 pre-settlement matters

Convened the Party's Construction Work Meeting to draw up key points of the Party's work in 2020

Convened a Party member congress of the Company to create a new member of the Party committee and a new member of the Discipline Inspection Committee

### Enrich the form and content to improve and equip your mind

Organised the 10 central learning group to study theories of the Party committee

Organised the insistent studying activities of important intra-party systems such as the *Regulations on the Work of Basic Organisations of the State-owned Enterprises of the Communist Party of China (Trial)*, *Regulations on the Work of Basic Organisations of the Communist Party of China* issued more than 800 theoretical books

Continuously organised reading and learning activity titled "emphasize on study, improve quality and set good example" and distributed 2,191 books

Organised 7 theme party events, including "bravely taking responsibility, striving for the best, and ensuring complete excellence"

Organised training activities for party members in the old conference sites of Hongqiqu and Gutian to attend voluntary service activities such as "New Fourth Army"

### Improve the platform mechanism and carry out advertisement and education

Completed the launch of the Company's intranet and the upgrade of Chinese-language external network and the opening of the feature, "Today's on the Board"

Organised promotional events on the theme of the 71st anniversary of the founding of the People's Republic of China, outstanding people, investor protection, etc.

Extensively carried out advertisement and education on the knowledge of epidemic prevention and control and produced 16 WeChat push on the topic of epidemic prevention and control



## Sustainable Supply Chain Management

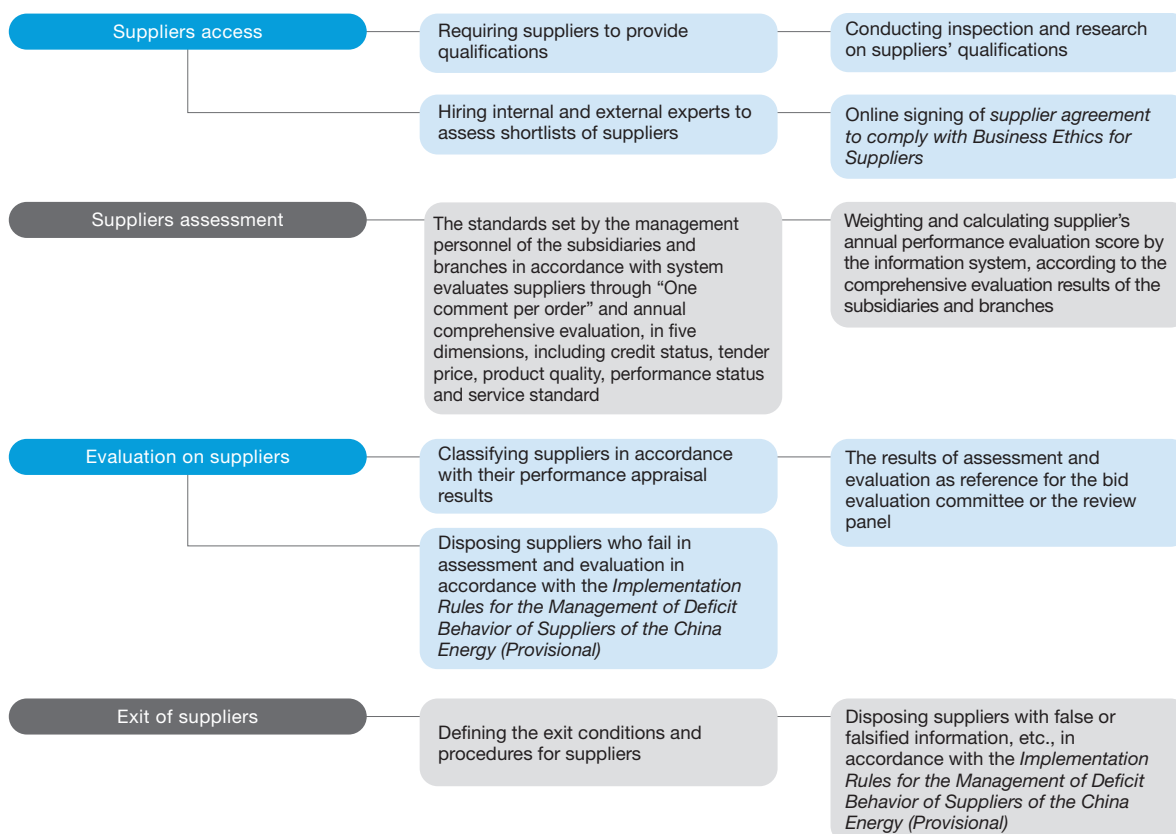
Supply chain management is an essential part of maintaining the normal operation of the Company. China Shenhua regards suppliers as an important partner and strives to work with suppliers to create a mutually beneficial business environment.

China Shenhua followed the *Administrative Measures for Suppliers of China Energy (Provisional)*, *Implementation Rules for the Management of Access and Exit of Suppliers of China Energy (Provisional)*, *Implementation Rules for the Management of Shortlists of Suppliers of China Energy (Provisional)*, *Implementation Rules*

*for the Performance Management of the Material Supplier of China Energy (Provisional)* and *Green Procurement Approach of China Shenhua Energy Company Limited (Provisional)*, establishing a strict supplier management system. Each subsidiary and branch shall formulate *Measures for Managing Contractors*, *Implementation Rules for Safety Assessment of Contractors* and other relevant rules and regulations, and shall manage the entire process of the access, selection, use, evaluation and assessment of contractors and suppliers, making clear regulations on issues including the business integrity of suppliers, compliance with business ethics and environmental protection responsibilities.

### Supplier Assessment

China Shenhua regularly conducted supplier performance appraisal through a unified information system, and commended the suppliers with excellent performance while punishing the suppliers with breach of faith.



## Supply Chain Risk Management

China Shenhua incorporates supply chain risk into its comprehensive risk management system to control risks of the supply chain. In 2020, China Shenhua initiated ESG supply chain risk identification research on risk and responded to manage risks.

### Supply Chain ESG Risk

### Countermeasures

Environment	Environmental accidents and emergency management	Strengthening the management and supervision of third parties
	Discharge of pollutants	Strengthening the management and supervision of third parties
	Carbon Emission Management	Sorting out the sources and amount of carbon emissions from third parties Assisting third parties in formulating carbon emission management strategies
Social responsibilities	Health and Safety	Improving the safety management for all procedures of the contractors Regulating contractors' labor and employment, and signing labor contract agreements, regular medical examinations, etc.
		Clearly prohibiting third parties from forced labor and employment of child labor
	Labour Rights	Requiring third parties to sign labor agreements and to rationalise working hours
Corporate Governance	Supply Chain Anti-Corruption	Requiring third parties to make clear to their employees the situation and handling of the conflict of interest between the individual and the Company, and establishing a conflict of interest management mechanism

## Green Procurement

China Shenhua attaches great importance to the green development and performance of its suppliers, and prioritises the procurement of products that meet specific environmental protection requirements throughout the whole process of the life cycle of the product, products that are harmless or less harmful to the ecological environment, products with high resource utilisation rate and products with low energy consumption. China Shenhua promotes the improvement of environmental behavior of suppliers, which in turn will promote and demonstrate the green consumption of society.

By the end of 2020, China Shenhua had 115,371 compliance suppliers.

<b>115,223</b> China (excluding Hong Kong, Macau and Taiwan areas)	<b>37</b> Asia (excluding China)	<b>11</b> North America
<b>68</b> Hong Kong, Macau and Taiwan areas	<b>29</b> Europe	<b>3</b> Oceania

## ESG Governance



The ESG governance concept of China Shenhua was to adhere to the new strategic idea for energy security highlighting “four reforms and one cooperation”, made strategic deployment for the overall development of China Energy highlighting “One Target, Three Models and Five Strategies, and Seven First-class”, followed the idea of industry leading, innovation-driven development and value creation, enhanced Party building, strived for integrated and coordinated secure development, accelerated intelligence, promoted clean and efficient use of coal along the whole industry chain, provided quality energy products and services, endeavoured to set an excellent role model to global enterprises in terms of the idea of sustainability, performance of social responsibility and development of smart enterprise.





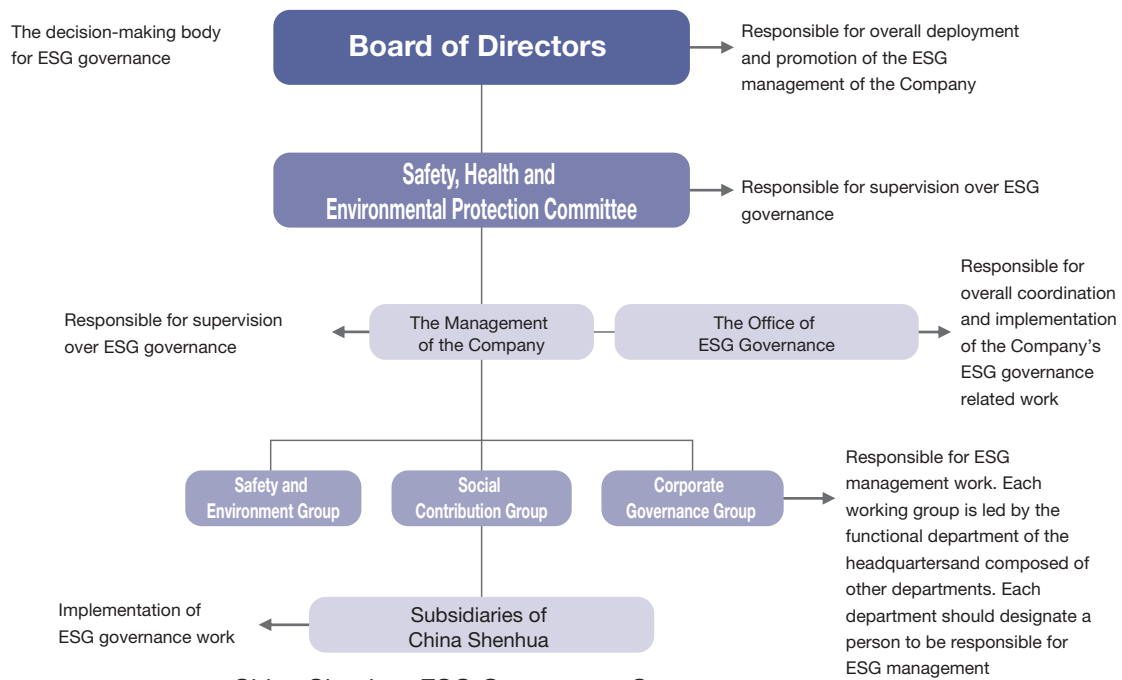
## ESG Governance

China Shenhua continued to improve the ESG governance system, and integrated ESG governance into the Company's overall governance and operation, so as to strengthen the ESG management system, and enhance ESG management capabilities

## Governance Structure

The Board, as the highest responsible and decision-making body for China Shenhua's ESG matters, is responsible for overall Company's ESG strategy and reporting. Through regular communication meetings, it listens to ESG executive reports, and monitors ESG related matters that may affect the interests of the Company's business or operation, shareholders and other stakeholder, so as to ensure the integration of ESG concept and Company's strategy. The Board is also responsible for approving and determining the results of stakeholders' communication and determination of major issues, and reviewing and approving the final Company's ESG report.

The Safety, Health and Environmental Protection Committee of the Board of Directors is responsible for monitoring the commitment and performance of key ESG topics, assessing the Company's ESG-related risks, regularly supervising and formulating the Company's ESG management policy, ESG strategy and ESG-related goals, and regularly reporting ESG matters and progress to the Board of the Company. The Safety, Health and Environmental Protection Committee has established various ESG working groups composed of related departments, which are responsible for executing and promoting the Company's specific ESG matters, regularly communicating and reporting working progress to the Safety, Health and Environmental Protection Committee, and reviewing risks. In addition, the Audit Committee of the Board of Directors attaches great importance to ESG matters, including regularly reviewing the Company's annual ESG report, connected transactions and information disclosure matters, and submitting to the Board for consideration and approval.



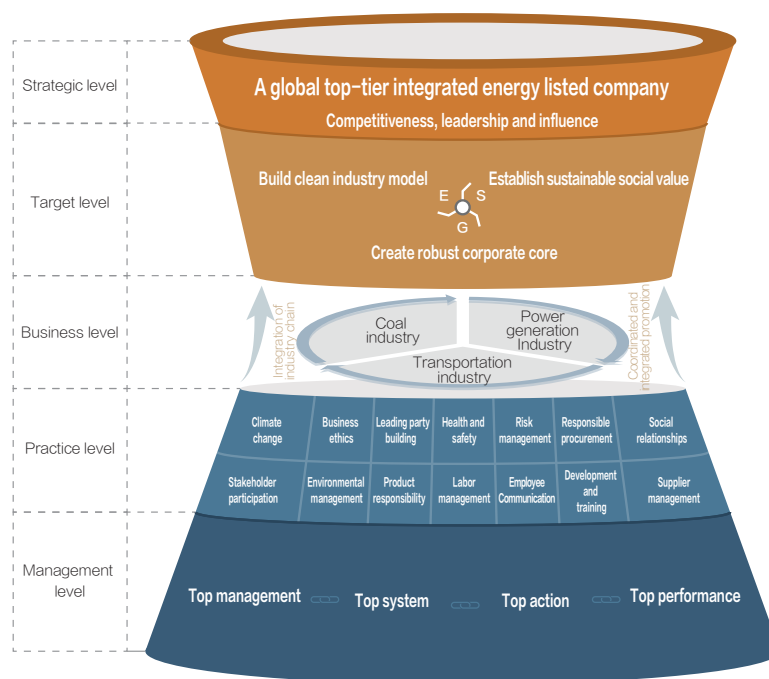
China Shenhua ESG Governance Structure



## Our ESG Actions in 2020

**Improving management system:** In October 2020, the fourth meeting of the Board of the Company considered and approved the *Administrative Measures on Environmental, Social and Corporate Governance of China Shenhua Energy Co., Ltd. “(Trial)”*, which clarified the Company's ESG working principles, ensured the effective operation of the Company's ESG governance system, and comprehensively improved the ESG performance capability.

**Preparing special plan:** In 2020, the Company prepared the “14th Five Year Plan for ESG Governance”, which analyzed China Shenhua's ESG governance status and development environment, proposed development strategies and development goals of ESG governance, clarified the key direction of ESG governance work in the next five years and the “three-step” promotion strategy, and formulated an annual implementation plan to implement the planning goals.



China Shenhua 14th Five-Year ESG Strategic Model

**Building information system:** In 2020, combined with existing ERP, SRM and other systems, the Company built and applied an ESG information management system. The ESG information management system was implemented, officially embedding ESG governance requirements in the daily management process, thereby promoting the standardization and informatization of ESG management, so as to realize the integration of ESG governance requirements with production operations.

ESG Information System Schematic Diagram



## Communication with Stakeholders

China Shenhua has attached great importance to the communication between stakeholders, established an efficient communication and feedback mechanism of stakeholders, and identified the feedback and expectations of various stakeholders to the Company, so as to improve the Company's ESG performance in a targeted manner, and effectively respond to the needs of all parties.

Stakeholders	Expectations and needs	Communication and feedback
Government	Compliance with disciplines and laws Energy safety Payment of taxes pursuant to laws Driving the development of local economy	Strengthening operation management in compliance with regulations Optimizing production organization and ensuring energy supply Accepting supervision and assessment Carrying out strategic cooperation
Shareholders	Stable operation Sustainable development Earnings and returns Unimpeded information flow	Improving competitiveness and profitability Fulfilling social responsibility for ecological and environmental protection Increasing the proportion of cash dividend and carrying out share repurchases Information disclosure in a timely manner, carrying out investor exchanges, and treating small and medium shareholders equally
Customers	Performance of contracts in good faith Quality assurance Premium services	Guaranteeing the exchange rate of long-term contracts Strengthening the management of product quality and optimizing product structure Carrying out satisfaction survey and securing quasi liner transportation
Staff	Wages and welfare Protection of employee rights and interests Career development Health and safety Humanitarian care	Medical insurance, enterprise annuity Labor union organization, election of employee directors and employee supervisors Education and training, career development platform Fighting against the epidemic and elimination of occupational diseases Caring for staff, and the set up of complaint feedback mailbox
Environment	Coping with climate change Water resources Pollution prevention and treatment Energy saving and emissions reduction Biodiversity protection	Carbon emission reduction, exploration of carbon neutral path Water resources management, comprehensive utilization of sewage and wastewater Carrying out pollution control Technological innovation, energy saving and consumption reduction Building green mines
Partners	Business ethics Transparent procurement Mutual benefit and win-win cooperation	Good faith execution of contracts Open procurement, e-procurement Business exchange and cooperation, Symposium
Community	Community development Public welfare activities Jobs creation	Community activities, visits and exchanges, respect for cultural traditions Donation to schools for education, targeted poverty alleviation, emergency relief and voluntary service Skills training, local employment and procurement
Creditors	High solvency Due repayment of debts and interest Mutual trust and cooperation	Due repayments Better communication and liaison commencement of cooperation
organizations	fair competition Facilitating industry progress Promoting the development of industrial chain	Refraining from vicious competition Exchange of experience Technological innovation

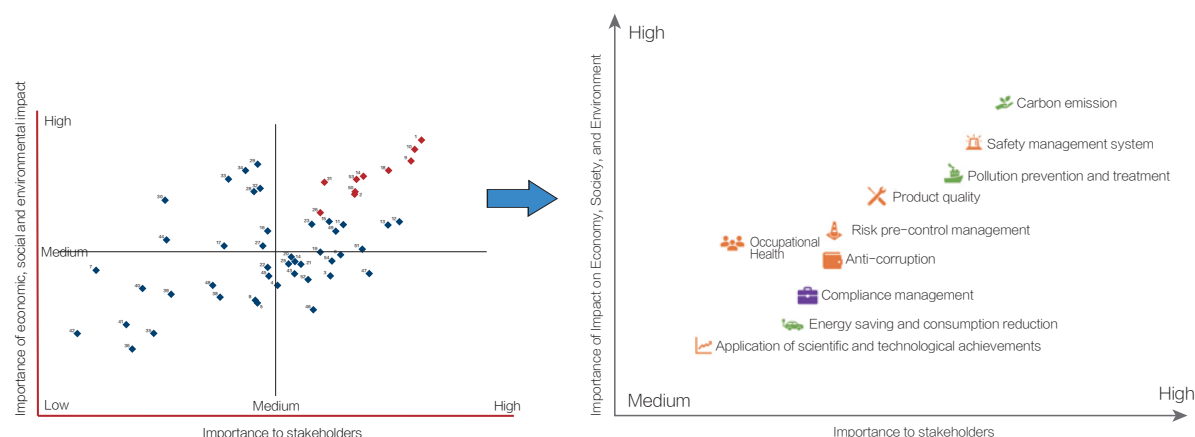


Preaching Activity Themed “Entering China Shenhua” Held by the Communist Youth League in Dongcheng District, Beijing

## Response to ESG Reporting Principles

**Principle of importance:** China Shenhua identified and selected ESG issues related to the Company through different forms of communication and exchanges with various stakeholders in accordance with the requirements of the *Environmental, Social and Governance Reporting Guide* issued by the HKEx, with reference to international common ESG initiatives and standard and the ESG issues of general concerns in the industries.

The Company conducts an evaluation of importance of ESG issues through anonymous online questionnaire surveys every 3 to 5 years. After analyzing and calculating the questionnaire data, the Company prioritizes, draws a matrix of China Shenhua's substantive issues, and determines the extent and boundary of the issue disclosure. In 2019, with the approval of the Board of Directors, the Company identified China Shenhua's ten key substantive issues. In this report, key substantive issues would be disclosed in terms of mechanism improvement, management improvement, action practice and performance.



**Principle of quantification:** In 2020, China Shenhua established an information management system for ESG covering the headquarters and subsidiaries of the Company, which conducted regular statistics on the quantitative key disclosure indicators of all “environment” categories and certain “society” categories in the ESG Report, and summarized and disclosed at the end of the year. This report explained the calculation methods and reference standards of ESG quantitative data. Please refer to each section of the report for details.

## ESG Target Management



Complying with relevant national environmental protection laws and regulations, China Shenhua looked forward to the performance of carbon emission, pollution prevention and treatment and energy conservation in 2020–2025, and continuously improved the target management action in combination in accordance with the requirements of the *Three-year-plan for Safety Environmental Protection of China Energy (2019–2021)* and the *Environmental, Social and Governance Reporting Guide* of the HKEx, the identification results of substantive issues and the actual operation of China Shenhua. In 2020, the Company reviewed the progress of the target implementation, the Safety, Health and Environmental Protection Committee of the Company regularly reviewed and supervised the progress of indicator management, and reported to the Board of Directors. For details, please refer to the section headed “Green Empowerment” of this report.

**Principle of consistency:** This report had no significant adjustment to the disclosure scope of the ESG Report of the Company in previous years, with using consistent statistical methods of disclosure, and further refining corresponding disclosure categories of certain HKEx ESG reporting guidelines. This report disclosed the multi-year comparison of 62 ESG indicator data. Please refer to each section of the Report for details.

## Response to United Nations 2030 Sustainable Development Goals (SDGs)

In 2019, the Ministry of Foreign Affairs issued the *Progress Report on China's Implementation of the 2030 Agenda for Sustainable Development*, actively responding to the 2030 Sustainable Development Goals of the United Nations (hereinafter referred to as SDGs). The Company benchmarked the ESG action and effectiveness with SDGs, and responded to 14 issues related to SDGs in this report.

## SUSTAINABLE DEVELOPMENT GOALS

SDGs	Key Issues and Chapters	SDGs	Key Issues and Chapters
 <p>1 无贫穷</p> <p>No poverty</p>	Completion of the task of poverty alleviation	 <p>2 零饥饿</p> <p>Zero hunger</p>	Completion of poverty alleviation

SDGs	Key Issues and Chapters	SDGs	Key Issues and Chapters
 <p>3 良好健康与福祉</p> <p>Good health and well-being</p>	Public welfare	 <p>4 优质教育</p> <p>Quality education</p>	Public welfare Completion of the task of poverty alleviation
 <p>5 性别平等</p> <p>Gender equality</p>	Protection of the rights and interests of female employees	 <p>6 清洁饮水和卫生设施</p> <p>Clean water and sanitation</p>	Saving and protection of water resources
 <p>7 经济适用的清洁能源</p> <p>Affordable and clean energy</p>	Product quality Scientific and technological innovation and application of achievements Efficient use of energy	 <p>8 体面工作和经济增长</p> <p>Decent work and economic growth</p>	“Chinese Standards” Going international Realise mutual creation of value among various parties Protection of employees’ rights and interests Employee development assistance
 <p>9 产业、创新和基础设施</p> <p>Industry, innovation and infrastructure</p>	Safety management system Safety in production	 <p>11 可持续城市和社区</p> <p>Sustainable cities and communities</p>	Community care
 <p>12 负责任消费和生产</p> <p>Responsible consumption and production</p>	Product liability Safety management of contractors Sustainable supply chain management	 <p>13 气候行动</p> <p>Climate action</p>	Tackling climate change Energy conservation and resource protection
 <p>15 陆地生物</p> <p>Life on land</p>	Ecological restoration and biodiversity	 <p>17 促进目标实现的伙伴关系</p> <p>Partnership for the goals</p>	Sustainable supply chain management



## Product Responsibilities



China Shenhua has firmly established the concept and consciousness of "quality first", strictly controlled the quality of products and services, promoted high-quality development with high-quality products, and provided the society with safe and stable supply and transportation services for coal, electric power and coal chemical products.





## Product Quality

China Shenhua has strictly abided by the relevant national laws and regulations and industry quality standards, implemented *China Energy Group's Special Program for Creating First-Class Quality* and other systems, formulated *Administrative Measures for Coal Quality* and other quality management systems and specifications, and clarified the objectives, tasks and specific measures of quality control and management.

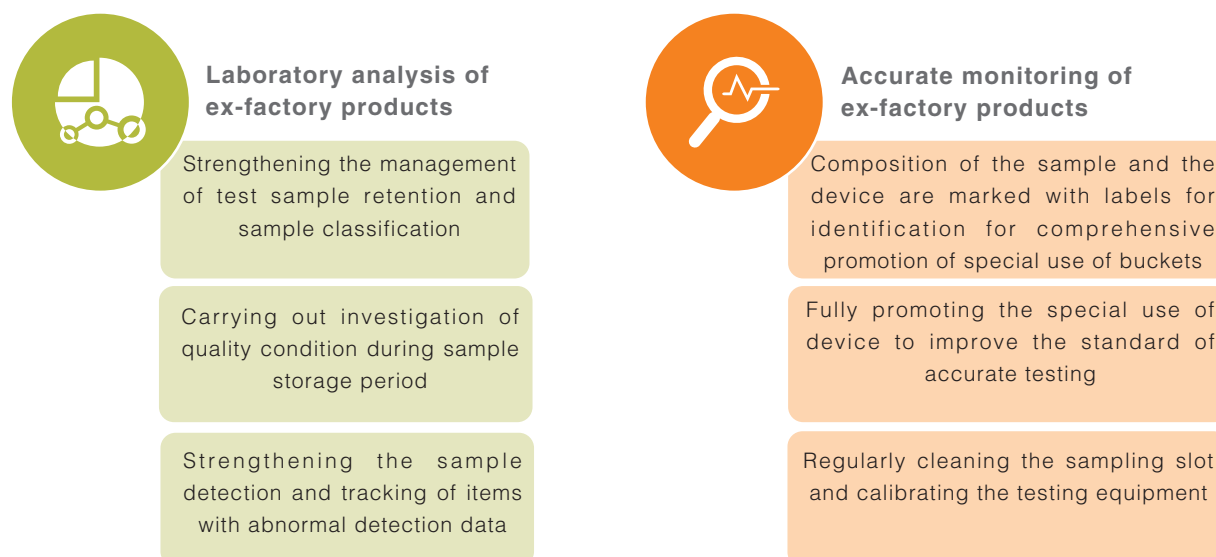
## Commercial coal

China Shenhua has carried out strict quality control in all aspects of coal production, transportation and sales, established a perfect coal quality information network, and made use of digital means to build a coal quality data monitoring system to ensure the quality of commercial coal in an all-round way.



## Coal chemical products

China Shenhua has strictly controlled the monitoring indicators, refined the testing standards, and ensured the quality of coal chemical products with high standards and strict requirements. Guided by the market, Baotou Coal Chemical successfully researched and developed 10 new polyolefin products throughout the year. The cumulative qualified rates of polyethylene and polypropylene products reached 98.96% and 100% respectively, and the rate of superior products reached 89.15% and 96.71%, both of which reached the best level in history. Polypropylene S2040, S2024, V30G and H30S have passed FDA testing, GB testing and EU ROHS testing.



Quality control of coal chemical products of Shenhua

### Power and thermal products

China Shenhua has strived to improve the operation level and management and control ability of power production system, so as to ensure the safe and stable operation of units and provide users with continuous and stable power and heating. In 2020, China Shenhua generated 136.33 billion kWh of electricity and 39.038 million GJ of heat. 12 units of the Company won awards in the national thermal power efficiency benchmarking competition, and 4 units won awards in the national thermal power operation reliability benchmarking competition.

### Transportation services

China Shenhua has thoroughly implemented the task of transportation structure adjustment, promoted the implementation of the policy of “transit railway”, actively carried out the “big logistics” business, provided high-quality transportation services for the society, and to meet the needs of customers. In 2020, the turnover of cargo transportation provided by the Company to the external customers was 27.8 billion tonne kilometers, and 5 new railway special lines were approved for connection.

### Engineering construction

China Shenhua set up the National Energy Central Station of Construction Engineering Quality Supervision for coal industry to carry out engineering quality supervision and management on the coal, railway and coal chemical construction projects invested and constructed by the Company. In 2020, the Central Station of Construction Engineering Quality Supervision carried out single engineering quality certification for quality improvement and efficiency improvement of Ha'erwusu and Heidaigou Coal Preparation plants, Bazhun railway, Tahan railway and other projects. The reconstruction and expansion project of equipment maintenance center of Zhunneng Energy Group was awarded “2019–2020 Coal Industry Quality Project and ‘Sun Cup’ Project” by China National Coal Construction Association.

## Protect Customers' Rights and Interests

China Shenhua has taken customer satisfaction as the goal, constantly innovated service model, improved service quality, and achieved win-win development between the Company and customers.

### Customer service

China Shenhua has taken “value creation” as the core connotation of customer service, established a customer manager service system, and responded to and dealt with customer opinions in a timely manner. The Company has maintained long-term and stable cooperation with domestic authoritative research institutions in the field of coal and domestic well-known experts in boiler combustion, coal gasification, coal quality inspection, etc., provided technical services for customers in the whole process of pre-sale, in-sale and after-sale, found and solved problems encountered by customers when using commercial coal in time, and provided technical guarantee for customers to use commercial coal safely.

In order to further understand customer opinions and improve customer experience, China Shenhua conducted a customer satisfaction survey on coal products, pricing, logistics, contract fulfillment and customer service in 2020.



0.00%

Percentage of total products sold or shipped which were recalled for safety and health reasons in 2020



13

Number of complaints received about products and services in 2020



Service type	Customer satisfaction of commercial coal in 2020	
	Launch sales	Direct sales
Product	97.6%	100%
Pricing	87.3%	94%
Logistics	Planned connection: 93.2%	N/A
	Self-owned port operation service: 88.2%	N/A
	Turn time: 70.9%	N/A
	Quasi liner service: 93.2%	N/A
Fulfillment of contract	93%	96.7%
Customer service attitude	98.4%	100%

### Privacy protection

Sales Group has established a trade secret protection committee, which is fully responsible for the protection and confidentiality of users' privacy and information. In daily work, the committee adheres to the principles of "approaching and using as work demands" and "sectional approaching and special personnel mastering of core trade secrets", classifies the customer's privacy information in accordance with "core trade secrets" and "ordinary trade secrets", and implements strict hierarchical management. As of 31 December 2020, there was no disclosure of customer privacy and information in China Shenhua.

## Scientific Innovation and Achievement Application

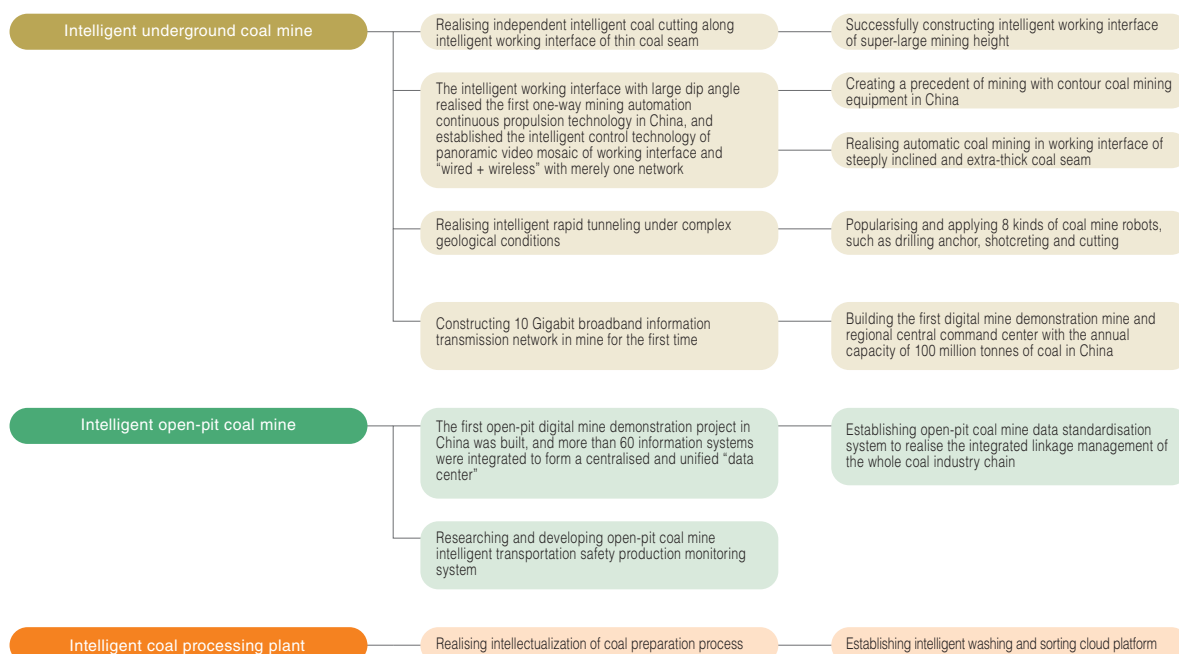
Scientific and technological innovation is the source of driving force for sustainable development of enterprises. China Shenhua will integrate the development of innovation and technology into the Company's operation and management strategy, constantly improves the system of scientific and technological innovation and intellectual property protection, encourages internal innovation atmosphere, and actively carries out external scientific and technological innovation cooperation to jointly promote industrial progress and development.

### Technological innovation and application

China Shenhua has formulated the *Administrative Measures of Scientific and Technological Work (Trial)*, the *Administrative Measures on Science and Technology Projects of the Department (Trial)*, and the *Administrative Measures of Technical Standards (Trial)*, formed a perfect management mechanism of scientific and technological innovation, continuously increased investment in scientific research, promoted scientific and technological research and development and transformation of scientific and technological achievements, encouraged subsidiaries and branches to carry out diversified scientific and technological activities, created innovation studios, insisted on linking scientific and technological assessment with year-end performance evaluation, and commended and rewarded innovative projects and individuals, so as to create an enterprise atmosphere of full staff innovation. For the R&D investment of China Shenhua in recent years, please refer to the section headed "About China Shenhua 2020" in this report.

## Progress in intelligent construction of coal mines

China Shenhua has actively promoted the intelligent construction of coal mine, and constantly improved the mechanization, automation, informatization and intelligent degree of coal mine operation, so as to realize the high-quality development of coal industry. As of 2020, China Shenhua has commenced construction of 6 intelligent coal mine demonstration projects, built 11 intelligent working interfaces, developed 5 intelligent fast driving working interfaces, started the field tests of unmanned driving of mine trucks in 3 open-pit coal mines, built 5 intelligent coal washeries and developed the trial of 8 types of coal mine robots.



### Major achievements of intelligent construction in coal mines of China Shenhua

## Research and Development Team

The Company has strived to create an open, cooperative and shared scientific research collaboration system, a deep integration of production, education and research achievements transformation system. The Company has carried out in-depth scientific research cooperation with the government, universities and various scientific research institutions, and actively participated in the government and industry association standards formulation and other related work. At present, China Shenhua has 1 State Key Laboratory – Laboratory of Coal Mining and Water Resources Protection and Utilisation; one academician expert workstation and 6 postdoctoral workstations. In 2020, there were 4 National Science and Technology Project of China under research in the state-level key laboratory, 4 Major Consulting Projects of Chinese Academy of Engineering and 42 scientific and technological innovation projects of China Energy, relevant achievements have won 2 first prizes, 1 second prize, 1 patent gold prize and 5 provincial and ministerial awards. China Shenhua and its subsidiaries won more than 60 industry-level scientific and technological awards.



## Case

## The world's first 5G+ 220-tonne unmanned truck marshalling project under extremely cold conditions entered the stage of full-load industrial trial operation

Open-pit Coal Mine of Shenbao Energy is located in the middle part of Hulunbeier Grassland. The extremely cold weather in such location has created considerable difficulties and safety risks of labour transportation. In October 2020, 5 unmanned mining dump trucks on the production site of Open-pit Coal Mine of Shenbao Energy were automatically loaded with excavators one by one, realising the integrated operation of loading, transporting and platooning, and marking the world's first 5G+ 220-tonne unmanned truck marshalling project under extremely cold conditions entering the full-load industrial trial operation stage.

Since the commencement of the project, following 5G independent networking construction, test site planning, truck modification, installation and commissioning, operation test of operation site and authoritative inspection, all performance indexes have met the requirements of safe operation and successfully passed the safety review of Chinese Association of Automation. In essence, the project improved the operation safety, helped realise intelligent, safe and efficient production in open-pit coal mines, and further implemented the concept of "safety is guaranteed as fewer or even no one works at the site".



In 2020, the industrial trial operation of the unmanned transportation project has been stable, with no safety accidents, and has achieved four global "top 1": the world's first unmanned grouping operation project of large-scale mining dump trucks in extremely cold (-50 degrees Celsius) environment; achieving the unmanned industrial operation project of five large-scale mining dump trucks under the first 5G network in China; The efficiency of the first unmanned comprehensive transportation in China exceeded the manned open-pit mine unmanned project; the first project in China achieved unmanned marshalling of large-scale mining dump trucks and intelligent cooperative operation with electric shovels and remote bulldozers under 5G network.

## Case

## Huanghua Port upgraded intelligent technology of the whole process for coal

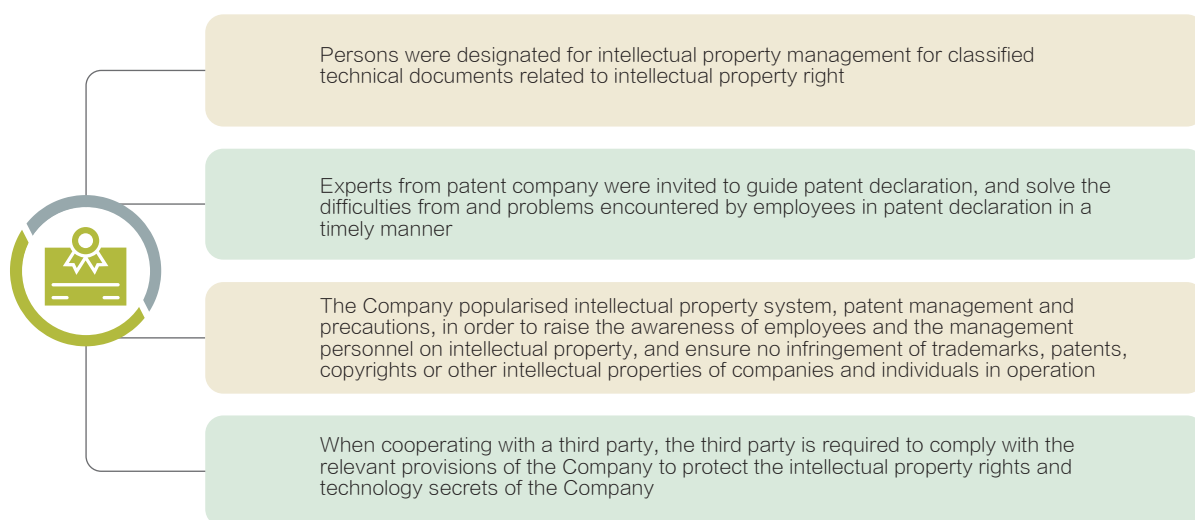
Huanghua Port broke the thinking mode of traditional production, applied modern technology and management means to promote the intelligent construction of coal ports, and formed a complete set of technical schemes for the production and operation of coal ports in the new era, which solved the problems that have long plagued the intelligent development of coal ports. The project innovatively put forward the mathematical model of stratified stacking of stacker and the coal blending method in the yard to realise accurate coal blending in unloading; developed a portable ship positioning device based on 5G and Beidou system, accurately detected the ship's posture, and realised the anti-collision protection of the ship loader space and the accurate distribution of the cabin. Through advanced technologies including the Internet of Things and Big Data, the Company established an ecological ambient intelligence management and control platform in the national bulk cargo ports to achieve the long-term dust suppression control of coal ports. A whole process equipment control system based on intelligent sensing was proposed, improving the coherence and effectiveness of interactive execution of tasks in the whole system.



"Whole Process Intelligent Key Technologies and Applications of Coal Port" project of Huanghua Port has formed a set of technical schemes applicable to the production and operation of domestic coal ports, which has played a positive role in promoting the development of China's coal ports at a higher starting point, and won the first prize for scientific and technological progress of China Ports & Harbours Association in 2020.

## Protection of intellectual property

China Shenhua has strictly abided by the *Intellectual Property Protection Law* and other domestic laws and regulations, and formulated management systems, such as the *Intellectual Property Management Measures (Trial)*, which clarified the intellectual property management process, and improved the compliance of intellectual property protection work.



## Patent Application of the Company in 2020

<p>&gt; Number of newly added applications for patents</p> <p><b>704</b> items</p>	<p>&gt; Number of authorisations for patents during the year</p> <p><b>915</b> items</p>	<p>&gt; Number of patents invented during the year</p> <p><b>198</b> items</p>
<p>&gt; Accumulated number of authorised patents</p> <p><b>5,261</b> items</p>	<p>&gt; Accumulated number of patents</p> <p><b>1,163</b> items</p>	

## Safety and Health



Safety is the basic bottom line of sustainable development of an enterprise. Guided by the overall idea of “cultural guidance, responsibility implementation, risk pre-control, strong guarantee and solid foundation”, China Shenhua adhered to the principle of “shared responsibility between the Party and government, one post and two responsibilities, joint management, and undertaking liability for negligence of duty” to optimize the safety management system and to escort safe production and employees’ health.





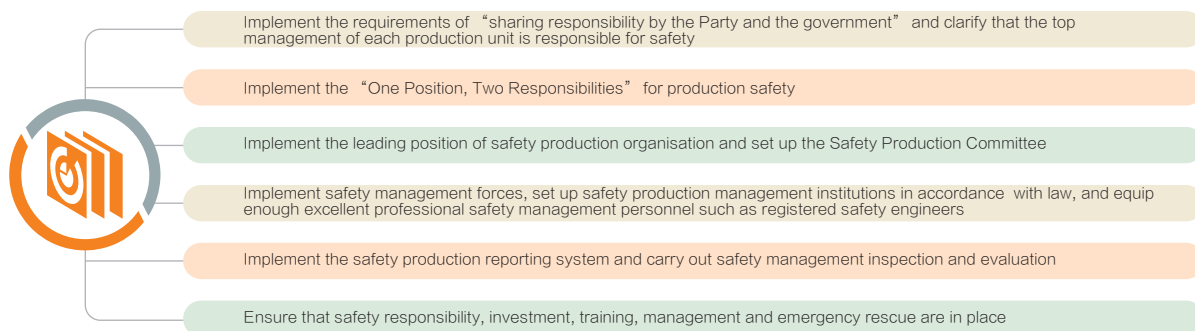
## Safety Management System

China Shenhua set the three levels of safety management system at headquarters of the Company, subsidiaries and branches and mines (plants, office and section) and set the Safety Production Committee at each subsidiary in accordance with the levels to implement safety production responsibility and safety risk control mechanism as well as to comprehensively guarantee efficiency of safety management.

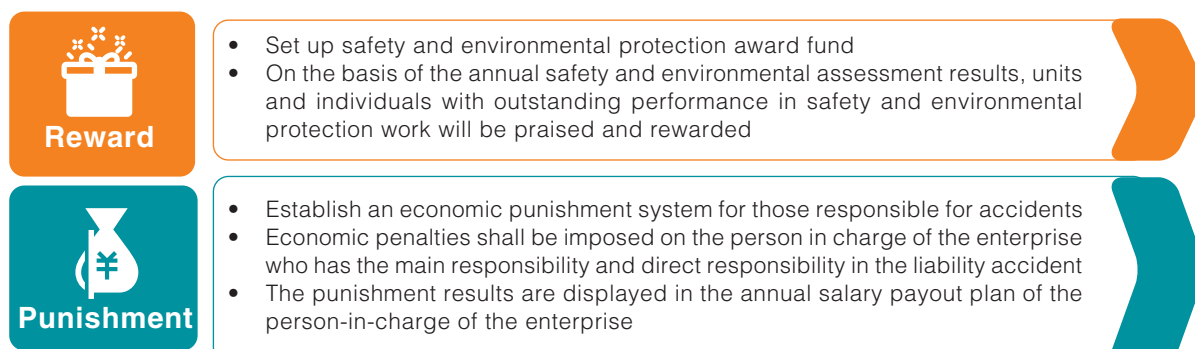


China Shenhua's Three Levels of Safety Management System

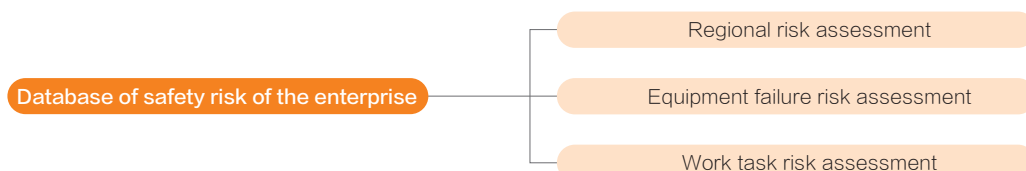
The production units of China Shenhua have strictly implemented the responsibility of safe production, clarified the responsibility of each tier of management and level business department employees and focused on the leadership responsibility, professional responsibility and overall responsibility of safe production, revised and improved the safe production assessment system, implemented the requirements in relation to performance of safe production, performance evaluation, job promotion, reward and punishment mechanism.



Responsibility mechanism of China Shenhua safe production



Reward and punishment mechanism for safety responsibility of China Shenhua



Prevention and control mechanism of safety risk of China Shenhua

## Safe Production

China Shenhua has strictly abided by relevant domestic and industrial laws and regulations, such as *Production Safety Law of the People's Republic of China*, *Law of the People's Republic of China on the Coal Industry*, and has taken “terminating serious or even catastrophic production safety accidents, effectively containing general accidents and striving to achieve zero deaths” as safety production goal, firmly established the concept of safety development, comprehensively carried out special rectification actions for safety production for three years, and paid close attention to all the work in the “year of risk management and control”, and the safety production situation was generally stable.

### Prevention and control of safety risks

All production units of China Shenhua have followed the safety risk pre-control mechanism, adopted risk identification methods such as risk matrix method and job task analysis method, normally carried out post, equipment, system, environment and operation risk assessment, classified the identified risks, formulated management and control measures by means of elimination, replacement, reduction, isolation, program control and protection, and at the same time implemented control responsibilities to prevent production safety accidents caused by risk evolution and escalation of hidden danger. In 2020, Shendong Coal implemented the risk assessment of the whole business scope, whole workflow, whole operation process and whole equipment cycle; Shuohuang Railway aimed at risk pre-control and upgrades its intrinsic safety information system, which improved the level of risk management and control.

### Safety standardisation and informatisation

China Shenhua has been committed to strengthening the construction of safety production standardisation, comprehensively promoting the post standard operation process, and realising the standardisation of safety production risk control, hidden danger management, site management, operation behaviour, equipment and facilities and operation environment. At the same time, China Shenhua has accelerated the informatisation of safety and environmental protection management process, and established three-level video centralized monitoring system for the headquarters of the Company, subsidiaries and production and operation units system. China Shenhua has promoted the application of video intelligent analysis technology, and realised the workplace electronic fence isolation, automatic identification of illegal behaviour, risk automatic warning, etc. through face recognition, moving trajectory tracking of personnel and objects, work environment monitoring and other functions.

In 2020, the Company actively carried out on-site safety production standardisation dynamic standard rating work. All of its 24 mines passed the 2018–2019 annual coal industry safety and efficiency mine evaluation, and 5 mining areas were rated as high-yield and efficient mining areas, ranking first in China. The mechanisation rate of coal mining and tunneling of the Company reached 100%.

### Special inspection of safety management

All production units of China Shenhua combined spring (autumn) inspection, summer peak, annual safety and environmental protection inspection and major activities to ensure supply and power, and conducted special investigation on national “safety production month”, fire prevention monthly activities and other work to strengthen key measures of safety environmental protection. In addition to the abovementioned routine safety inspection, China Shenhua organised more than 10 on-site inspections and investigations in 2020, including the special inspection of three preventions and water control in rainy season, consultation of safety production system, etc.; a steering group was set up to focus on rectifying the hidden dangers of long steep ramp operation of 10,000 tonnes and 20,000 tonnes heavy-haul trains and the safety hazards of level crossing, and specially supervise the construction safety management of Huangda railway; a working group was dispatched to carry out special inspection on maintenance and operation management of power enterprises; a national expert resource team was organized to carry out full coverage inspection on major hazard sources of existing hazardous chemicals.

### Emergency support

China Shenhua has earnestly implemented the *Administrative Measures on Emergency Response Plans for Production Safety Accidents*, continuously improved the emergency rescue mechanism, promoted the standardised development of emergency rescue. In 2020, the Company improved the actual combat ability of emergency rescue team by holding emergency rescue training and emergency rescue technology competition. China Shenhua comprehensively improved the emergency response capacity by organising emergency drills to test the practicality and operability of emergency response plans and on-site disposal plans, completed the annual construction task of the Company's emergency command platform, and initially realised the “one map of emergency command” of real-time accident information, sharing of emergency resources and visualisation of collaborative command.



## Case

## Fujian Energy carried out comprehensive practical emergency drill for liquid ammonia leakage

On 18 September 2020, Fujian Energy held a comprehensive practical emergency drill for liquid ammonia leakage in Hongshan Power Plant. The drill followed the principle of “promoting practice with drill, focusing on actual combat, promoting combat with practice, casting elite soldiers”. Through the comprehensive emergency drill, the emergency response and disposal capacity of ammonia leakage were effectively strengthened and improved, and the overall emergency management level of the enterprise was further improved.



## Safety Culture

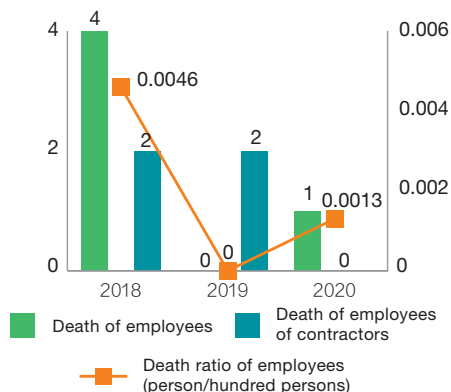
China Shenhua continuously improved the construction of safety culture, promoted the safety production awareness of employees by publicising safety laws and regulations, carried out various safety trainings such as self-rescue and mutual rescue, and achieved the goal of preventing the situation from worsening. In 2020, the Company organised safety training classes, safety production month, safety skills competition and other activities to help employees improve safety quality, professional skills and management ability, and establish correct safety values. Zhunge'er Energy Equipment Management Center and other units were awarded “National Safety Culture Construction Demonstration Enterprise”.

## Case

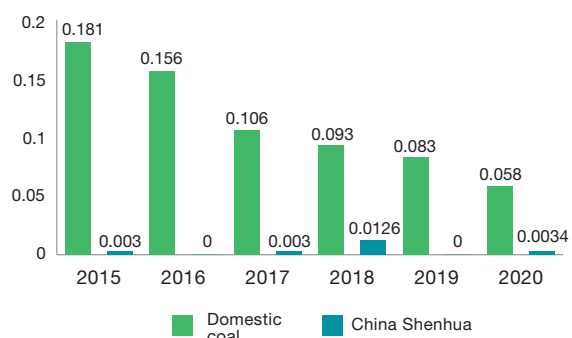
## Zhunneng Power Plant organised online safety culture training

On 22 July 2020, Zhunneng Power Plant organised and carried out a safety culture training titled “building a safety culture and creating a zero-accident power plant”. With the help of the online platform of the grass-roots Party school, the training was conducted by the third-party senior safety culture and production site management experts. The training content included the basic content of safety culture, the specific practice in the power plant and the publicity and implementation skills. During the course, the lecturer interacted with the trainees online for practical problems, and actively exchanged with the teachers in the discussion area with more than 90 employees. The total number of trainees in this training course reached 2,336, which not only successfully helped the employees enhance their awareness of safety responsibility, but also effectively improved the safety production ability of the employees. The training session won the unanimous praise of the trainees.

## Number of death due to work and mortality ratio of employees in recent three years



## Mortality rate per million tonnes of raw coal production between 2015 and 2020



## Occupational Health

China Shenhua attached great importance to the protection of occupational health, pursuant to “*Prevention and Control of Occupational Diseases Law of the People’s Republic of China* and other relevant laws and regulations, continuously improved the management system of occupational diseases, carried out the risk assessment of occupational diseases, and the Company implemented the health protection measures for employees. In 2020, the Company comprehensively checked the occupational hazards and their distribution in production and construction units, carried out special research on occupational disease prevention and control management strategies and technical paths, promoted the solution of prominent occupational health problems, focused on the treatment of dust, noise and other serious occupational hazards in workplaces, and strengthened source prevention and control and workplace health management and control. The publicity activities of “Law on Prevention and Control of Occupational Diseases” were carried out

systematically to further enhance the occupational protection awareness of employees.



### Assessment of occupational disease risk in workplace

- Entrusting professional third party to carry out occupational hazard assessment
- According to the assessment results, targeted management measures were formulated to strengthen the daily monitoring of key occupational hazard factors

### Physical examination of employees

- Carrying out health examinations covering all employees and organize special occupational health examinations for hazardous positions
- Establishing employee occupational health files

### Labor protection equipment

- Providing all employees (including regular employees and dispatched employees) with high standard and effective personal protective equipment
- Guiding employees to use labor protection tools correctly

### Workplace environment renovation

- Renovating and upgrading workplace facilities and equipment, reducing equipment noise and dust generation
- Setting up occupational hazard factors and risk warning in workplace

### Occupational health training

- Carrying out various forms of occupational health training
- Improving the knowledge and skills of occupational health and occupational hazards protection of employees

### Mental health counseling

- Inviting third party experts to carry out popular science education on employees' mental health
- Carrying out online mental health counseling

Main actions of China Shenhua occupational health management

<sup>1</sup> Days of work suspended due to occupational diseases = (total number of working days suspended \* 1,000,000) / total number of working hours; Source of calculation formula: OHSAS 18001 (number of lost working days per million working hours)

## Case

## Shendong Coal carried out occupational health science education

During the national safety production month, Shendong Coal carried out in-depth publicity and education activities on prevention of occupational disease injury and protection of occupational health and safety. The Company answered the problems encountered by grassroots units in the process of occupational disease prevention and management by compiling and printing the Occupational Disease Prevention and Control Book, inviting experts to give lectures, holding award-winning competition and grassroots propaganda activities, etc. Meanwhile, the Company mobilised all employees to actively participate in the answering of occupational health knowledge on WeChat public account platform to improve the awareness of occupational disease prevention and control. In addition, the Company organised the full-time (part-time) management personnel of occupational hazard prevention and control in all units to carry out occupational hazard prevention and control and management training, and carried out the graduation examination, with a pass rate of 100%.

## Case

## Shendong Coal researched and developed “water atomisation dust removal vehicle” to protect the health of employees

In order to improve the dust removal effect of working face and reduce the harm of dust to employees' health in production, Shendong Coal used waste materials to refit and process into a movable and telescopic trolley, and connected the water atomising dust collector to the upper and lower trays of the trolley, which could adjust the spray angle with the direction of the roadway and the size of the section, so as to achieve the best effect quickly. This set of equipment was easy to operate and flexible to move, and it could be adjusted to any place underground for spray dust removal at any time. Just connected the air pipe and water pipe to the equipment, and the roadway could be completely cut off for spray dust reduction. Shendong Coal made use of a dry dust removal fan in conjunction with the “water atomisation dust removal vehicle”, and the dust-reduction rate at the workplace reached 92.4%, effectively solving the problem of dust collection in the whole-rock roadway and creating a safe and healthy working environment for the employees.



100

2020  
Employee health  
examination coverage (%)



0.20

2020  
Total recordable  
injury rate (%)



11

2020  
New occupational  
diseases (case)



675

2020  
Occupational health  
investment (RMB million)



3,815

2020  
Safety production input  
(RMB million)



149

2020  
Total number of work-related  
injuries (person)



## Contractor Safety Management

China Shenhua adhered to the management principle of “unified leadership, hierarchical responsibility, who to undertake, supervise and implement the project are held responsible”, formulated the contractor safety management system and series of safety management specifications, and continuously strengthened the contractor safety management from the aspects of contractor warehousing, contractor work process, contractor assessment, contractor safety awareness training, etc.



China Shenhua contractor whole process safety management

## Green Empowerment



China Shenhua has always attached great importance to ecological and environmental protection. We vigorously developed clean, safe and efficient energy, deepened the construction of green mines, ultra-low emission transformation and other key tasks, so as to vigorously promote pollution prevention and control as well as ecological environment management, implement energy conservation and emission reduction measures, and continuously improve the level of carbon emission control. Therefore, the level of ecological civilization construction has steadily improved, the battle for pollution prevention and control has achieved positive results, and the discharge of pollutants has continued to decline, with no ecological and environmental protection incidents causing serious impacts.





## Improvement of Construction of Environmental System

While strictly implementing laws, regulations and relevant standards, including the *Environmental Protection Law of the People's Republic of China* and *Environmental Impact Assessment Law of the People's Republic of China*, China Shenhua has established a comprehensive environmental management system covering “target planning”, “management system” and “risk assessment”. In addition, we have established an efficient information management system, so as to effectively solve the problems of the accuracy and timeliness of environmental data collection and the unblocked channels for reporting and issuing management goals.



## Planning of Environmental Target

Adhering to the strategic goal of “One Target, Three Models and Five Strategies, and Seven First-class” of the China Energy, based on the *14th Five-Year Special Plan for ESG Governance of China Shenhua* as a forerunner, China Shenhua has prepared short-term environmental protection plans and mid-and long-term plans for each business segment to pointing out the environmental development direction for its subsidiaries.

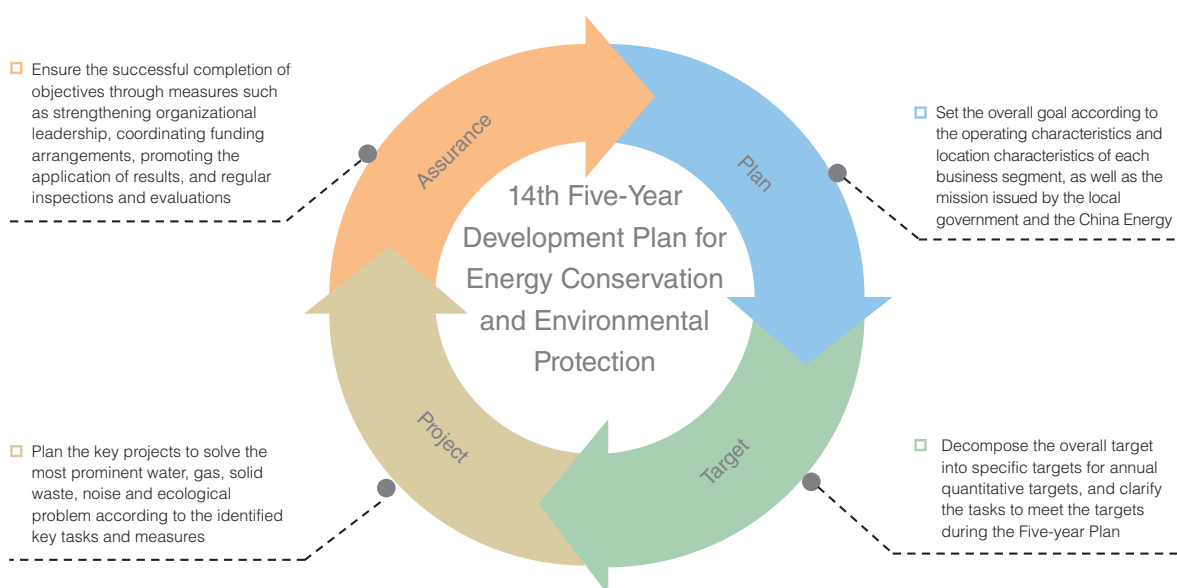
### Short-term plan for environmental protection

*Action Plan for Pollution Prevention and Control in 2020*

### Mid and long-term plans for environmental protection

*14th Five-Year Special Plan for ESG Governance of China Shenhua 14th Five-Year Development Plan for Energy Conservation and Environmental Protection First-class Special Program for Clean Development Three-year Plan for Environmental Protection*

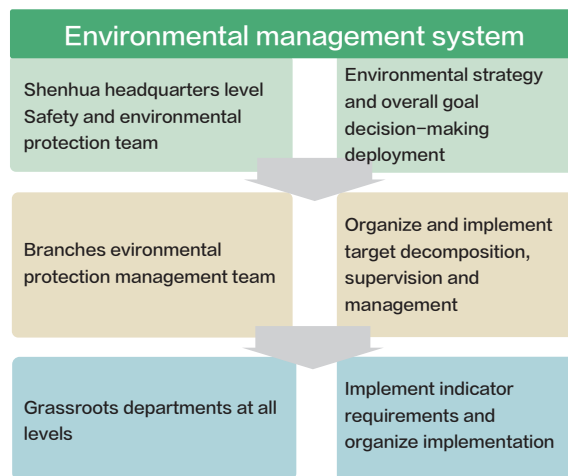
China Shenhua has prepared the *14th Five-Year Development Plan for Energy Conservation and Environmental Protection* applicable to existing coal, power, transportation and chemical industries. The plan analyzes in detail the development status and internal and external situations encountered by the Company, points out the outstanding environmental problems, and establishes environmental development strategies and development goals on such basis.



## Environmental Management System

China Shenhua has formulated *Administrative Measures on Environmental Protection*, *Environmental Protection Responsibility System* and other environmental management systems, and established a three-level management system for decision-making and deployment, supervision and management, as well as organization and implementation. China Shenhua continued to promote certification work of environmental system for factories. As of the end of the year 2020, 6 of our member enterprises obtained ISO14001 certification of environmental management system, 5 enterprises obtained ISO50001 system certification, while 1 company obtained ISO45001/OSHAS18001 certification.

Note: The thermal power project in Indonesia was not included in the statistical scope of the section headed “Green Empowerment”.



## Environmental Risk Control

China Shenhua has attached great importance to the environmental risk identification and construction of prevention and control capabilities. Pursuant to the *Three-year-plan for Safe Environmental Protection of China Energy (2019-2021)*, 2020 was the year themed “*Risk Management and Control*”. According to the characteristics of environmental risks and management and control responsibilities, each production enterprise shall comprehensively identify risks by grading, classification, and specialization in accordance with the risk management control system and process, actively carry out hidden danger investigations, and effectively control

risks in terms of organization, system, technology, emergency response, etc., so as to achieve a standardized and normalized environmental risk management.

<b>Environmental supervision and testing</b>	<ul style="list-style-type: none"> <li>▶ The Company strictly implemented the discharge permit management system. The Company has formulated and implemented the annual work plan of discharge permit pursuant to laws, and standardized the pollutant discharge under permit, self-monitoring, information reporting and disclosure.</li> <li>▶ The Company strictly implemented the management system of online monitoring of pollutant. The Company has strengthened the implementation of monitoring responsibility, standardized the daily monitoring work, established the monitoring and management account, and enhanced the public management of monitoring results.</li> <li>▶ The Company improved the inspection and maintenance level of network transmission equipment. The Company has optimized the inspection and maintenance system of online monitoring equipment including the CEMS to ensure the continuous monitoring of pollutant discharge and accurate and effective data transmission</li> </ul>
<b>Environmental hazard investigation</b>	<ul style="list-style-type: none"> <li>▶ The Company earned out environmental impact assessment. In accordance with relevant laws and regulations including the <i>Methods for Environmental Impact Assessment and Measures for the Administration of Pollutant Discharge Permits (Trial)</i> the Company has formulated the environmental risk identification standards for pollution sources, took regular and irregular supervision and inspection actions, and tracked and supervised the rectification plan in combination with the environmental protection inspections of government departments to implement the management and control measures.</li> <li>▶ The Company strengthened the investigation and treatment of hidden environmental protection dangers. The Company has developed the investigation proposal for hidden dangers of environmental protection equipment, comprehensively investigated the hidden dangers of environmental protection equipment system such as desulfurization, denitration, dust precipitation, waste water, hazardous waste to promote the management of <i>List of Material Environmental Risks</i>, and establish the hidden danger management account with regular check and update.</li> </ul>
<b>Environmentalemergency management</b>	<ul style="list-style-type: none"> <li>▶ In accordance with the requirements of <i>Investigation and Handling Measures for Environmental Incident and Administrative Measures of Emergency for Environmental Accidents</i>, the Company has formulated comprehensive emergency management operating procedures and plans to set normal emergency drills based on possible risk points to reduce environmental impact.</li> <li>▶ The Company has formulated emergency drill scheme and standardized emergency drills. Through the emergency drill of environmental events with relatively significant impact on the environment, such as “liquid ammonia leakage” and “desulfurization system leakage”. The Company has tested its emergency linkage mechanism, and improved its capability in coping with emergencies rapidly and collaboratively.</li> </ul>

## Case

## Huanghua Port organized emergency drills for marine oil spills and oil boom deployment

On 25 September 2020, Huanghua Port dispatched the “Shenhua Environmental Protection” oil spill cleaning vessel and the “Shenhua Towing No. 8” eliminating-towing dual-use vessel to actively participate in the “2020 Hebei Sea Area Ship-borne Dangerous Chemical Pollution Emergency Exercise”, and successfully completed the on-site cleaning, water mist spray and other links of the drill tasks, accumulating experience for effectively controlling chemical leakage and reducing environmental damage.



“Shenhua Environmental Protection” emergency drill site

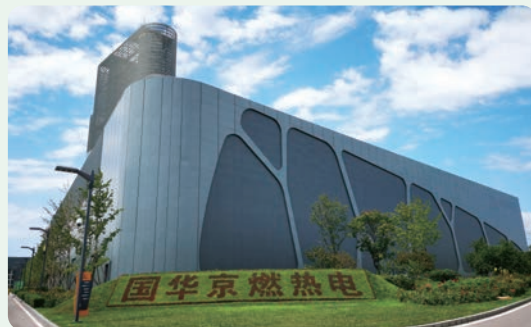
### Construction of an Integrated Information System for Environmental Protection

China Shenhua vigorously promoted the construction of an integrated information system for environmental protection, and improved the real-time, systematic and standardized management of energy conservation and environmental protection work. We made full use of information technology to achieve full three coverages of key enterprises and key pollution sources under “online monitoring, ecological remote sensing, and energy conservation and environmental protection monitoring”, effectively improving the inefficiency of the original manual operation, ensuring the timely assignment of tasks and targets and the completeness, accuracy and reliability of energy management data.

## Case

## “Smart Power Station” demonstration project of Guohua Power

Walking into the Beijing Gas work area, the small river, patio and work area blend with each other, with no noise, smoke or dust, neither peculiar smell. The “Smart Power Station” of Guohua Power Beijing Gas aims at being a “low-carbon, environmentally friendly, technologically advanced, world-class digital power station” and a “one-button start/stop, unattended operation, full-duty information power station”, which is the green ecological power station with the highest level of intelligence and the least employment in China.



Beijing Gas plant



## Case

## Construction of energy-saving and environmental protection information management system in Shendong Coal Baode Coal Mine

Shendong Coal Baode Coal Mine has added an energy-saving and environmental protection online management system module to its enterprise information system, which can instantly inquire the progress of energy-saving and environmental protection work through computers and mobile terminals, so as to effectively guarantee the advancement of energy-saving and environmental protection goals.



## Response to Climate Change

The issue of climate change is a common challenge in the world, and controlling and reducing carbon emissions have become an inevitable responsibility of enterprises. Based on the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD), China Shenhua responded to the impact of climate change that investors are increasingly concerned about from four aspects.

### Governance System of Climate Change Risks and Opportunities

The Board of China Shenhua is responsible for the supervision and management of climate-related issues and work. Safety, Health and Environmental Protection Committee is mainly responsible for climate-related issues, and its main responsibilities are to review the Company's climate change risks and opportunities, make recommendations to the Board on the proposed climate change-related plans or programs, supervise the implementation of climate change actions, and review the management of related indicators. The specific implementation of climate change tasks, such as measuring the impact of climate change risks, issuing internal reports in accordance with the TCFD framework, and formulating action plans for mitigating the impact of climate change, were implemented by the safety and environmental protection group and relevant departments, subsidiaries and branches.

China Shenhua has prepared the *14th Five-Year Special Plan for ESG Governance*, in which a detailed plan for the climate strategy has been formulated, specifically including building a climate change risk assessment system, establishing a carbon emission management system, formulating a greenhouse gas emission reduction target system, formulating a management plan for mitigating the impact of climate change, setting a greenhouse gas emission reduction target based on SBTi, and gradually participating in carbon emission management in the supply chain, etc.

### Identification, Assessment and Management of Climate Change Risks and Opportunities

According to the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD), combined with climate-related policies such as the *Report on Respond to Climate Change in 2020: Enhancing Climate Action*, China Shenhua identified and evaluated climate risks and opportunities in its own business sectors, and formulated relevant management policies, so as to mitigate and respond to the impact of climate change on the Company's business.

## Identification

Study the China's policies, laws and regulations and the development trend of the coal energy market in terms of energy saving, carbon emission reduction and water resources, and identify the three types of risks

## Assessment

Relevant business departments, as well as internal and external industry experts conduct discussions and judgments to determine the possibility and impact of risks and opportunities, and conduct detailed assessments

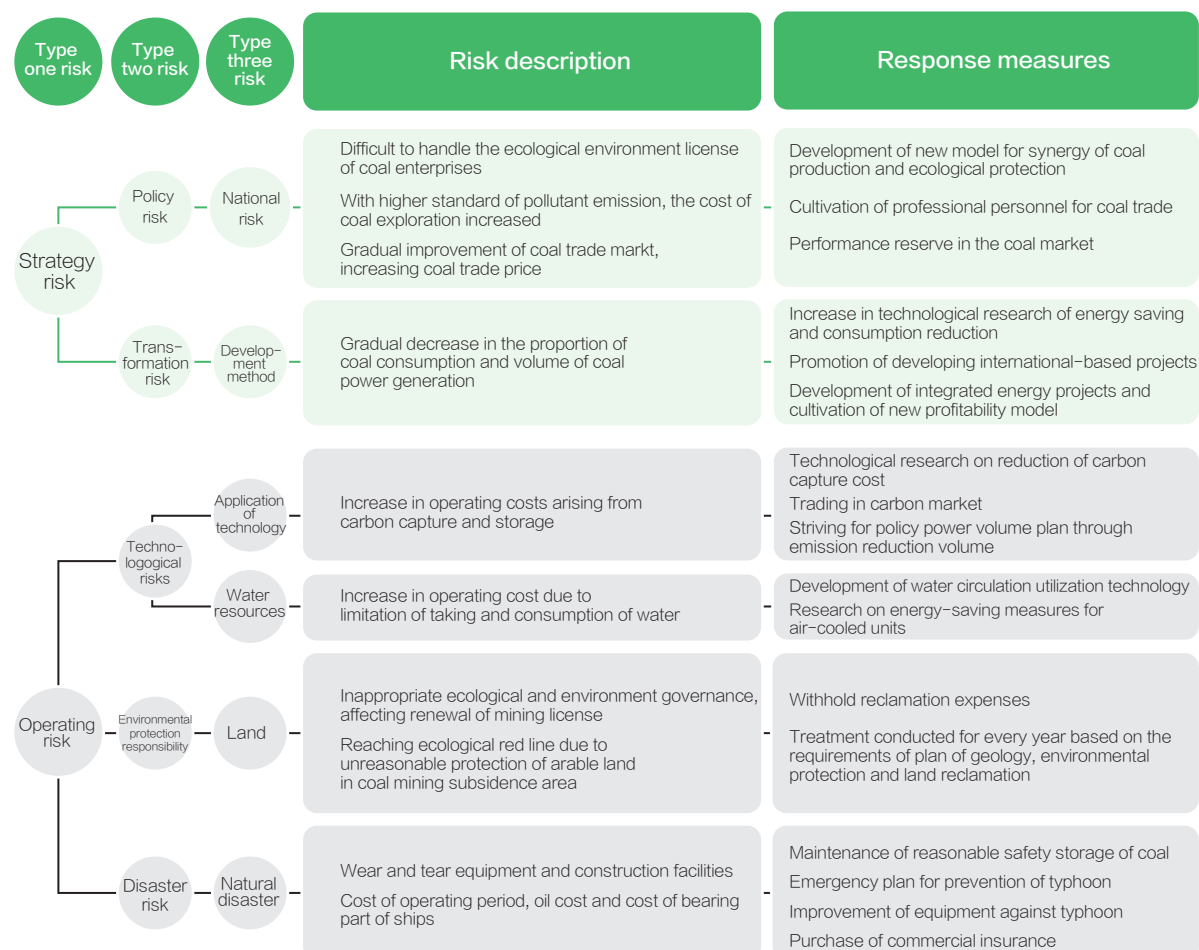
## Management

Take corresponding measures in accordance with the content of risks and opportunities to save costs and reduce risks

### Impact of Climate Change Risks, Opportunities on the Company

Based on the above climate change risk and opportunity governance system and the process of identification, evaluation and management, China Shenhua has identified the climate risks and opportunities that are most likely to affect the Company under the current circumstances, as follows:

Climate risk identification:

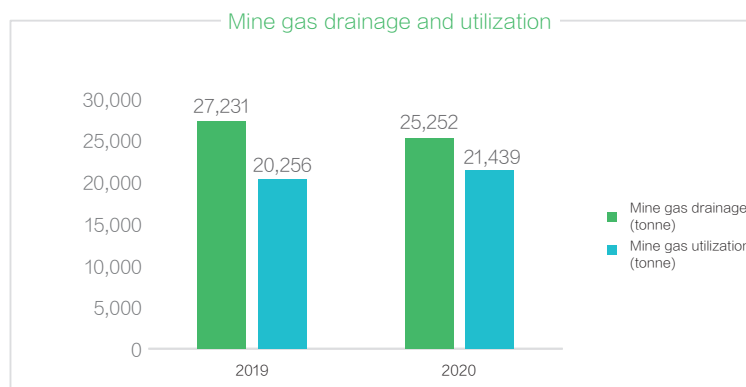
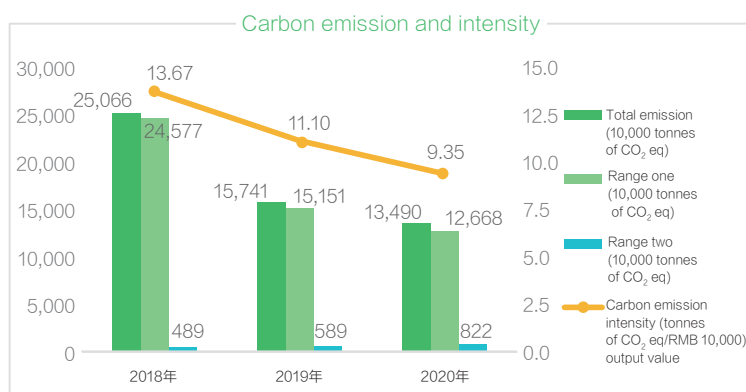


### Climate opportunity identification:

Type of opportunities	Market expansion	Policy support
Description of opportunities	Renowned nearly zero emission technology of coal-fired power generating, bringing more opportunities for development of domestic and overseas projects  National policy of "Transformation of road transportation to rail" and "co-transportation of freight and rail" brought about increase cargo transportation	China paying attention to the construction of green mine, helping to win a greater advantage in the acquisition of coal resources  China paying attention to multi-level integrated usage of water resources
Response to opportunities	Provision of cleaner product and services, attracting consumers and services	Planning for industrial ecology chain to improve the utilization rate of water resources  Proactive creation of green mines

### Control of Greenhouse Gas Emission

According to laws or regulations, including the *Energy Conservation Law of the People's Republic of China*, *National Plan of Response to Climate Change in China*, *Working Plan of 13th Five-Year Plan for Controlling Greenhouse Gas Emission*, China Shenhua formulated systems including the *High-Quality Action Plan on Energy Conservation and Consumption Reduction Themed Tackling Hard Problems in 2020*, *Looking Forward to 2025* and the *Target-oriented Responsibility System of Energy Conservation and Environmental Protection* to carry out greenhouse gas emission reduction and target setting work.





## Carbon emission control target of China Shenhua



### Our Actions in 2020

#### *Exploration of “Carbon Peak” and “Carbon Neutral Path”*

In December 2020, China Energy held the “China’s Energy Transition Strategy Seminar under the Carbon Neutral Vision”. During the period, the think tank of China Energy entered into a letter of intent for strategic cooperation with four units, including Energy Research Institute of the National Development and Reform Commission, the Low-Carbon Energy Laboratory of Tsinghua University, the Academy of Mathematics and Systems Science of the Chinese Academy of Sciences (Predictive Science Research Center) and the Institute of Industrial Economics of the Chinese Academy of Social Sciences, so as to jointly study the strategic path that China Energy took the lead in leading the energy, coal and power industry to “carbon peaks” and “carbon neutrality”. As the core enterprise of China Energy, China Shenhua would actively participate in the project research work and formulate the Company’s “carbon peak” and “carbon neutrality” strategic path under the overall framework of China Energy.

### *Advancement of Energy Transition*

China Shenhua would accelerate the development of new energy industry, so as to create new bright spots of clean energy and cultivate new growth poles. In December 2020, the fifth meeting of the fifth session of the Board of the Company reviewed and approved that China Shenhua contributed RMB4 billion to participate in the establishment of Beijing Guoneng New Energy Industrial Investment Fund (“Guoneng Fund”) as a limited partner. On 22 January 2021, the Guoneng Fund Partnership Agreement was formally signed, with an overall scale of the Guoneng Fund of RMB10.02 billion, and the main investment directions are wind power, photovoltaics, and new technology projects in emerging industries, such as hydrogen energy, energy storage, and integrated smart energy. After the investment and operation of the Guoneng Fund, it was estimated that approximately RMB50 billion of funds would flow to the new energy industry, which could drive more than 6 million kilowatts of wind power and photovoltaic projects to land.

In addition, China Shenhua actively used clean energy such as solar and wind energy to replace the original energy supply equipment, gradually reducing the proportion of fossil energy used in its own production process, and effectively reducing greenhouse gas emissions.

## Case

## Shigetai Coal Mine replaced coal-fired boilers with solar energy

Shandong Coal Shigetai Coal Mine Plant selected solar vacuum tubes with domestic independent intellectual property rights, and installed 48 sets of ultra-low temperature air source heat pump units, 29 sets of steam tube and shell heat exchangers and 19 sets of emergency electric boilers, so as to ensure all-weather stable operation and hot water supply under extreme weather conditions. The system was completed and put into operation in October 2020. Shigetai Coal Mine stopped using coal-fired boilers during the non-heating season, to reduce coal combustion and boiler exhaust emissions and effectively reduce greenhouse gas emissions.



Shigetai coal mine solar energy equipment

### Improvement of Industrial Chain Efficiency

In 2020, China Shenhua's intelligent mine construction achieved fruitful results, while the transportation division vigorously promoted the "Transformation of Road Transportation to Rail, Decentralization to Centralization" and technological innovation, the power division put into operation three supercritical units of approximately 660MW, so as to improve the overall operational efficiency of the integrated industrial chain in an all-round way and further reduce the overall energy consumption.

## Case

## Baoshen Railway promoted the construction of "Transformation of Road Transportation to Rail" special line

According to the *Three-Year Action Plan for Promoting Transport Structure Adjustment (2018–2020)* of the State Council, Baoshen Railway Group has accelerated the construction of new lines and the integration of special lines, and has greatly increased the proportion of railway transportation. At present, Baoshen Railway still mainly loads trucks at container stations, and the proportion of dedicated lines directly into the mine and into the factory is insufficient. Not only can speeding up the connection of dedicated lines attract the cargo flow of roads to the railway, but also can effectively extend the railway transportation mileage. While achieving cleanliness, corporate efficiency is also enhanced.



Track laying work site of dedicated line

### Technological Consumption Reduction

China Shenhua carried out technological innovation, promoted energy conservation and emission reduction, controlled greenhouse gas emissions, so as to respond to the challenges of climate change.

#### Case

Guohua Power's energy saving and consumption reduction level has been significantly improved

Guohua Power implemented the *Coal-fired Unit Energy Saving and Consumption Reduction Plan of Guohua Power (2017–2020)* and implemented technical improvements for power plants to reduce coal consumption for power supply. Through the application of supercritical technology, system optimization, heating reform, etc., Guohua Power promoted carbon reduction and increased unit load. The coal consumption for power supply was reduced by 1.4 g/kWh in 2020.

#### Case

Huanghua Port deployed shore power supply system

Shore power supply technology is to stop using the ship's diesel generators when the ship docks at the dock, and use the power grid on the dock to supply power. The use of this technology can reduce the fuel consumption of ships docking at the port and reduce the emission of carbon dioxide and air pollutants. At present, Huanghua Port has installed 6 berth shore power supply systems, covering 10 coal berths, replacing 2,674 tonnes of fuel oil per year, and reducing carbon dioxide emissions by 8,654 tonnes per year.

### Carbon Capture

China Shenhua actively participated in the activities of industry associations and advocacy alliances, including the China Electricity Council, CO<sub>2</sub> Capture, Utilization and Storage Industry Technology Innovation Strategic Alliance (CCUS). The Company officially launched the Jinjie Energy CCS project in 2019, as an important part of the national key research and development plan "High-performance absorbent/absorption materials and technology for CO<sub>2</sub> capture" (2017YFB0603300), it was intended to demonstrate and guide the real CO<sub>2</sub> net zero emissions of coal-fired power stations, having significant environmental and social benefits, which can make important contributions to the achievement of China's "carbon peak" and "carbon neutrality" target.

#### Case

Carbon capture, utilization and storage technology (CCS) project of Jinjie Energy

The whole process demonstration project of carbon dioxide capture, utilization and storage (CCUS) after combustion with 150,000 tonnes/year of Jinjie Energy has adopted advanced chemical absorption process. Upon construction, we would achieve the objective of the CO<sub>2</sub> capture rate of coal-fired flue gas over 90%, CO<sub>2</sub> density over 99%, and the energy consumption of absorbent regeneration less than 2.4GJ/tCO<sub>2</sub>. The industrial-grade liquid CO<sub>2</sub> separated from the project was stored in spherical tanks, which could further be utilized in industrial areas including oil displacement in oilfield, salinity aquifer and other areas to promote the simultaneous improvement of environmental and social benefits. As of the end of 2020, the project has entered the engineering commissioning stage.



Site of Jinjie Energy CCS demonstration project



In addition, Shenhua implemented gas utilization. While reducing the safety risks caused by gas, it could also reduce greenhouse gas emissions caused by gas leakage, and give full play to energy use efficiency to achieve “three birds with one stone” in gas utilization.

#### Case

#### Gas power generation project of Baode Coal Mine

Mining gas before coal mining can fundamentally prevent coal mine gas accidents, and the development and utilization of gas can also improve the atmospheric environment. Shendong Coal Baode Coal Mine used gas drained underground as raw materials to build two gas power stations, Zaolin Power Station and Liujiachi Power Station. Up to now, the two power stations have installed a total of 10 Shengdong gas power generation units and their supporting equipment, electrical and thermal control systems. In 2020, Baode Coal Mine extracted 35.23 million m<sup>3</sup> of gas and utilized 29.91 million m<sup>3</sup> of gas. The combined annual power generation and heat supply of the two power stations was equivalent to saving 30,000 tonnes of raw coal, while creating economic benefits, it reduced the emissions of gas and carbon dioxide and other greenhouse gases.



Gas power generation unit

#### Carbon Asset Management

China Shenhua independently carried out the carbon emission management and inventory work of key enterprises including thermal power and coal chemical industry, and compared the carbon inventory data with the annual carbon emission verification data conducted by the government to ensure the accuracy of the data. In addition, the key energy-using and emission-control enterprises of China Shenhua's subordinates carried out carbon asset management and reserve work in accordance with the requirements of the regional government, so as to promote carbon allowances and carbon market transactions, and further improve carbon emission management, as well as participate in the construction of the national carbon market. In 2020, all pilot power plants completed annual settlement compliance for carbon emission quota.

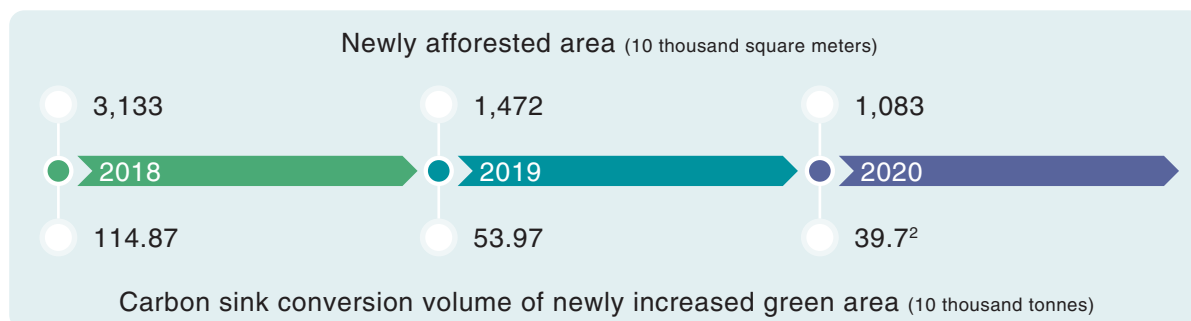
#### Case

#### Beijing Gas realized profit from carbon trading

Guohua Power Beijing Gas has conducted in-depth research on carbon market trading policies and situations, and formulated accurate and feasible trading performance plans in a timely manner. In November 2020, Beijing Gas seized the most favorable opportunity for the transaction and successfully realized the exchange of the Beijing Carbon Allowance (BEA) with the equivalent amount of China's Certified Emission Reduction (CCER) transaction, ensuring the completion of the plant's 2019 annual settlement compliance for carbon emission quota while achieving good profits.

In addition, we continued to implement projects including land reclamation in mining areas, comprehensive treatment of subsidence zone, Afforestation surrounding the factory and increase the green area and vegetation coverage rate by planting trees and grass, as well as soil and water conservation to increase carbon sinks. By the end of 2020, 15 coal mines of China Shenhua have been recorded in the national green mine list, and 5 coal mines in the provincial/district green mine list.

## Carbon sink performance of China Shenhua



### Information Disclosure Enhancement

China Shenhua actively participated in the disclosure of greenhouse gas emissions. Since 2019, we have begun to participate in CDP (Carbon Disclosure Project) questionnaire responses, update annual greenhouse gas emission performance and disclose set emission targets. In July 2020, we submitted the annual climate change, water safety and forest questionnaire, in which the water security questionnaire was rated as B (the highest level is level A) and the climate change questionnaire was rated as D.



## Pollution Prevention and Control

China Shenhua has strictly complied with relevant national laws and regulations and local policies, regulations to constantly update management concepts, management systems and supervision measures, so as to promotes precise, scientific, and legal pollution control, ensuring that pollutants meet the discharge standards. In 2020, China Shenhua invested a total of RMB 996 million in pollution control funds.

### Sewage Treatment and Recycling

China Shenhua has implemented the laws and standards including the *Water Pollution Prevention and Control Law of the People's Republic of China*, *Marine Environmental Protection Law of the People's Republic of China*, *Urban Wastewater Recycling and Urban Miscellaneous Water Quality Standards*, *Action Plan for Water Pollution Prevention (2015–2020)*, formulated the *Water Resources Management Measures*, adhered to equal emphasis on water conservation and sewage treatment, as well as strengthen the treatment of industrial wastewater, coal sewage, and domestic sewage, so as to ensure that water pollutants meet the discharge standards and improve the efficiency of reuse, promote enterprises in the Yangtze River Economic Zone, the Yellow River Basin and other key areas to achieve "zero discharge" of wastewater. In 2020, the overall sewage and wastewater utilization rate reached 74.84%.

<sup>2</sup> According to the measuring and calculation of the China Carbon Trading Network (<http://www.tanjiaoyi.com/article-4820-1.html>), the planting number for each adult woods per mu (667 square meters) is about 60 to 110 strains, which can absorb about 24.455 tonnes of CO<sub>2</sub> (taking the median of 90 strains). Then the calculation formula of carbon sink is: carbon dioxide absorption volume = green area (mu) × 24.455. In order to balance the green area scale of woodland and grassland, China Shenhua set the benchmark of 10 plants per mu, on the calculation of which China Shenhua has completed carbon sink with newly afforested area in calendar year.

## Sewage reduction target of China Shenhua

### COD emission (tonne)

Taking 2020 as the base year, reduce 4% in 2025

2019 2025



Including domestic sewage treatment plant and mine sewage treatment plant in the mining area, recycling all the treated water after the sewage being processed by the sewage treatment plant, with no sewage discharge outlet in the plant area, so as to realize zero sewage discharge



Recycling sewage entering the desulfurization system with reduced volume, recycling the desulfurized wastewater in the slag convey or and spraying ash yard to realize zero discharge of sewage

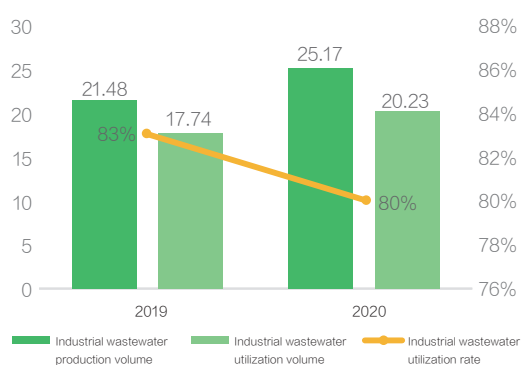


Continue to improve sewage treatment facilities and strive to recycle 100% of the treated sewage

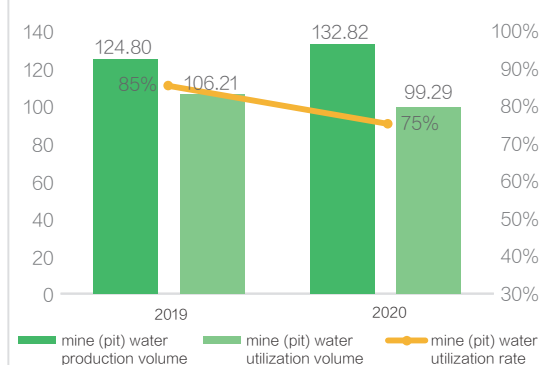


Committed to zero discharge of sewage, recycling and quenching the sewage after treatment by the biochemical station

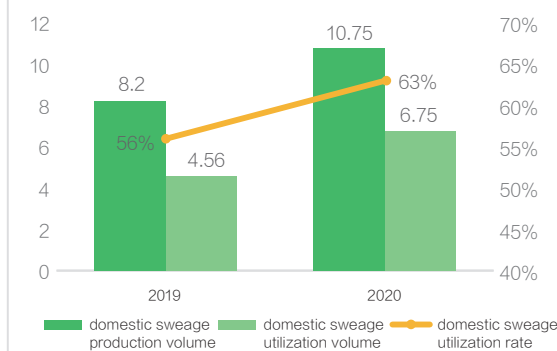
Production and utilization of industrial wastewater (Unit: million tonnes)



Production and utilization of mine (pit) water (Unit: million tonnes)

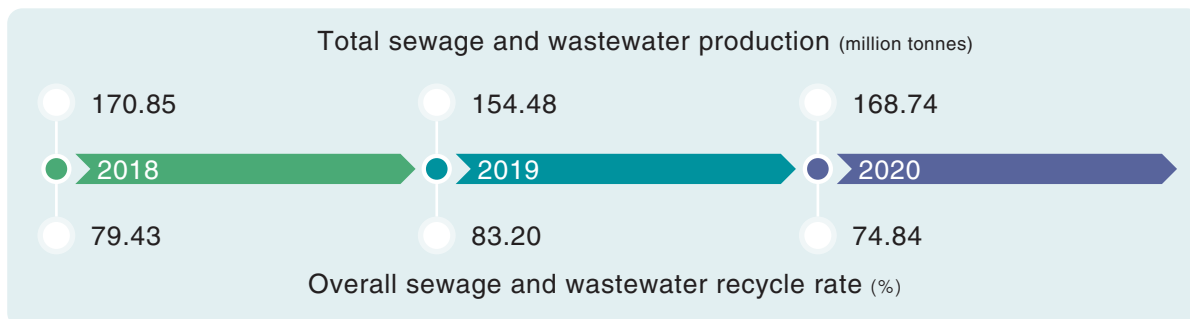


Production and utilization of domestic sewage (Unit: million tonnes)





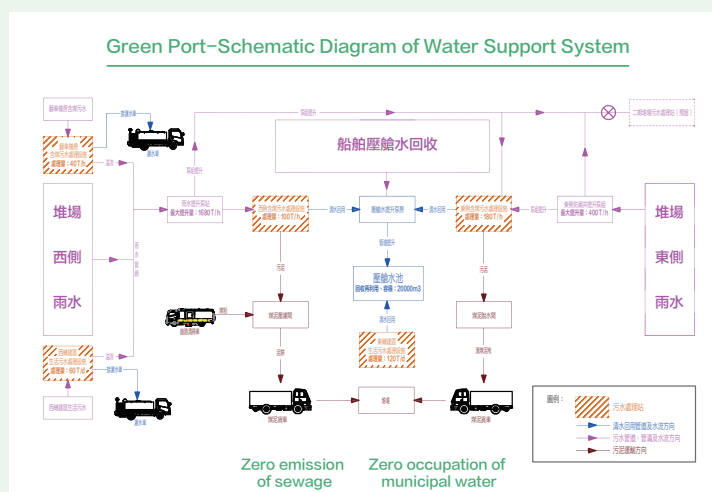
## Sewage and wastewater recycle performance of China Shenhua



### Case

Tianjin Coal Dock strived to achieve “zero discharge of rain and sewage, zero occupation of municipal water”

In 2020, Tianjin Coal Dock continued to improve its water pollution prevention and control capabilities, forming a water recycle system in which all rainwater is collected, all reclaimed water is recycled, and ballast water is all recovered. During the Reporting Period, 100% of the sewage generated by Tianjin Coal Dock was treated and reached the recycled standard, and all of which was used for production spraying and dust suppression. In addition, more than 260,000 tonnes of ballast water was recovered, effectively achieving the objective of “zero discharge of rain and sewage, zero occupation of municipal water”.



Schematic diagram of Tianjin Coal Dock water support system

### Case

Shengli Energy effectively solved the problem of draining and storing water in winter

Shengli Energy implemented East Lake and West Lake construction projects to solve the problem of draining water in winter. In 2020, the storage capacity of East Lake and West Lake reached 130,000 cubic meters and 270,000 cubic meters respectively, effectively solving the problem of unused drained water storage in winter, and improving the overall landscape effect of green mines.



Water storage project of Shengli Energy

## Case

## Yushen Energy realized 100% recycle of mine water

In 2020, the sewage treatment stations of the two coal mines of Yushen Energy adopted treatment processes including coagulation, sedimentation, and air flotation. The treated mine water was all used for underground production water, with a recycle rate of 100%.



Mine water recycle equipment

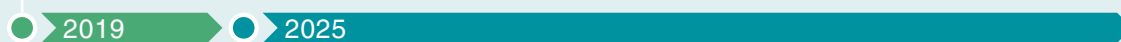
### Dust and waste gas treatment

In strict accordance with the laws and standards including the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution*, and the *Law of the People's Republic of China on Integrated Emission Standard of Air Pollutants*, Shenhua formulated the *Administrative Measures for the Prevention and Control of Atmospheric Pollution* to strengthen the supervision and management of the emission of sulfur dioxide, nitrogen oxides, dust and other waste gases, and ensure the stable operation of ultra-low emission facilities. In 2019, the Company's conventional coal-fired units all achieved the standard of ultra-low emission.

### Shenhua waste gas emission reduction target

#### Emission performance of thermal power sulfur dioxide (g/kwh)

Take 2020 as the base year, reduce by 2% by 2025



Take 2020 as the base year, reduce by 2% by 2025

#### Emission performance of thermal power nitrogen dioxide (g/kwh)

#### Emission performance of thermal power dust (g/kwh)

Take 2020 as the base year, reduce by 3% by 2025





Coal

The coal storage and transportation in Ascending well mine are closed to prevent and control coal dust. All links of ground raw coal bunker, belt trestle, product bunker and loading tower are closed to transport coal. No coal is found in the mining area. The coals were all solidified by carriage spraying before shipment. The coal dust pollution in the coal storage and transportation is controlled from the source of production.



Power

Promoting deep transformation of desulfurization and emission reduction of coal-fired units, carrying out the transformation of precise ammonia distribution and injection, and comprehensively promote the closure of coal yards.



Transportation

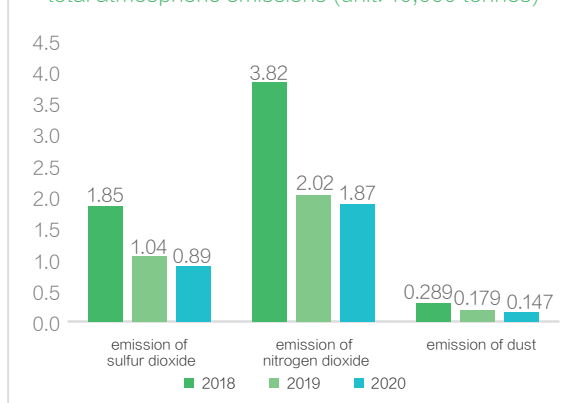
Reasonably using kerosene electric heater in oil supply unit, install high-voltage shore power equipment and promote ship operation control system to reduce the emission of air pollutants from ships.



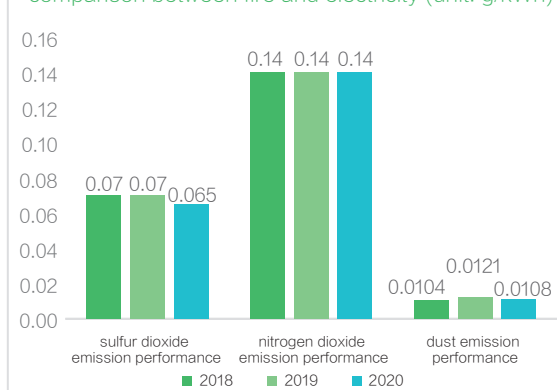
Chemical engineering

In the chemical engineering process, effective measures were taken to seal and collect VOCs and odor in the main links of each system, and waste gas treatment system was installed.

Comparison between fire and electricity of total atmospheric emissions (unit: 10,000 tonnes)



Atmospheric emissions performance comparison between fire and electricity (unit: g/kWh)



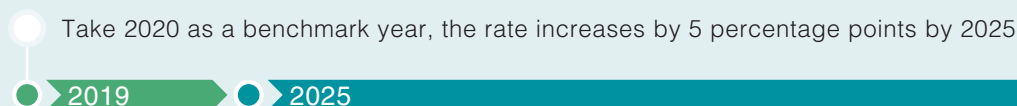
## Solid waste disposal

In strict accordance with the laws and regulations including the *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes*, *Directory of National Hazardous Wastes and Standard for Pollution Control on Hazardous Waste Storage*, Shenhua formulated management system including *Solid Waste Treatment and Disposal System*, *Annual Hazardous Waste Management Plan* and *Administrative Measures on Hazardous Waste Transfer* to actively promote the resource utilization of general solid waste, and dispose hazardous waste in accordance with the law.



## Shenhua solid waste emission control target

### Comprehensive utilization rate of general solid waste (%)



### Main solid waste disposal measures of Shenhua

#### General solid waste

Promoting classified recycling and treatment, promoting recycling and reuse, and strictly reducing pollutant emissions.

#### Hazardous waste

Entrusting the units with professional disposal qualification for centralized disposal, and strictly promoting the standardized management of hazardous waste by strengthening the management of hazardous waste production, transfer, storage and classification management.



Resource utilization and treatment of domestic waste, boiler ash, desulfurization gypsum, coal gangue and other general solid waste; the Company's hazardous wastes are all entrusted to qualified units for disposal.



General solid waste ash and gypsum are comprehensively utilized, and hazardous wastes are disposed in accordance with the law.



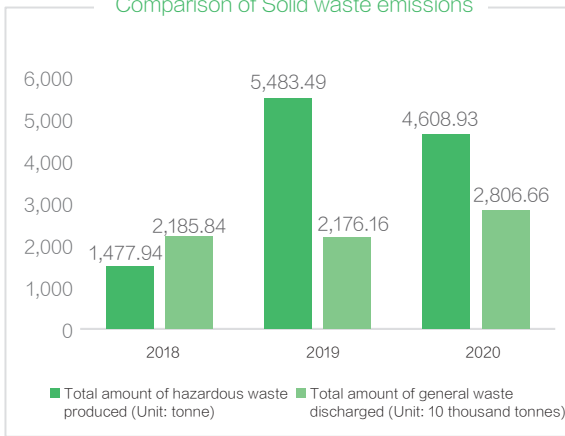
The solid waste generated by ships shall be recycled ashore or incinerated in ship incinerator.



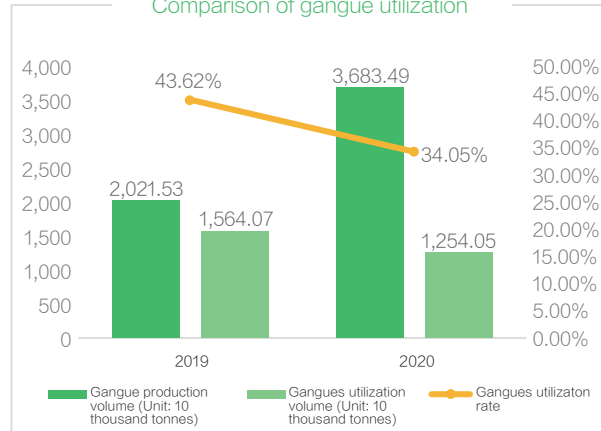
All the hazardous wastes produced by coking plant are recycled and blended with coal for coking, and all the hazardous wastes produced by methanol plant are recycled and disposed by qualified units through bidding, and Administrative Measures for Hazardous Waste Transfer Manifests is implemented according to the law.

Hazardous waste production	Unit	2020
waste catalysts	tonne	1,711.52
waste resin	tonne	76.35
waste engine oil	tonne	2,721.06
Asbestos waste	tonne	100

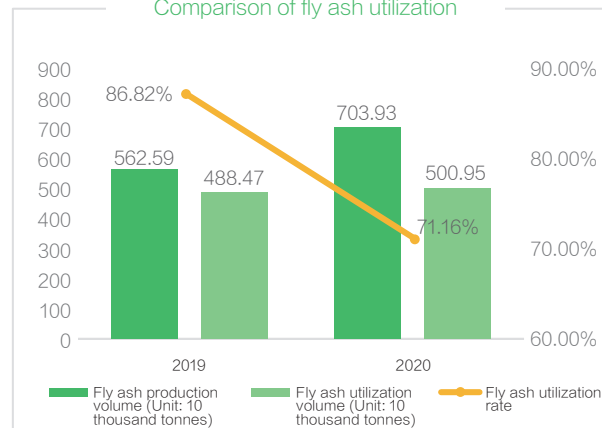
Comparison of Solid waste emissions



Comparison of gangue utilization



Comparison of fly ash utilization



## Case

## Shendong Coal Gangue Resource Utilization to Reduce Solid Waste Emissions

In 2020, Shendong Coal implemented 2 land reclamation projects in Shigetai mine and Wulan mulun coal mine, with a total land area of about 480 mu. According to the soil covering standard, the top surface of the gangue dump sites is covered with 1 m soil. The field roads, irrigation pipe network, water conservation facilities, etc. were implemented, the slope of the gangue dump sites was planted with Chinese pines for reclamation and greening, and the top surface of the waste dump was transformed into farmland, which can be planted with crops. After processing, the domestic sewage of mine was used to irrigate the farmland, which effectively protects the ecological environment quality and prevent soil erosion in the surrounding area of the gangue dump sites, achieving both ecological and economic benefits.

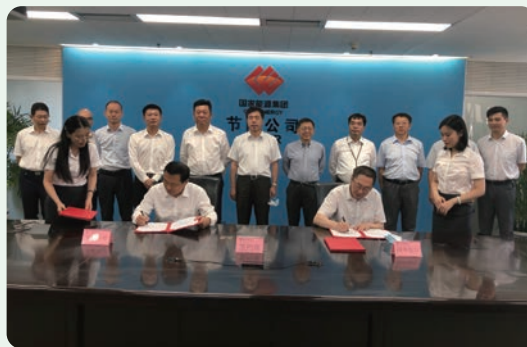


Panoramic Map of gangue dump sites reclamation

## Case

## Cooperation between Guohua Power and China Energy-saving Emission Reduction Co., Ltd. on solid waste emission reduction

In August 2020, Guohua Power and China Energy-saving Emission Reduction Co., Ltd. signed the *Cooperation Framework Agreement on Construction of High Value Utilization Achievement Transformation Platform and Comprehensive Utilization Trading Platform of Solid Waste in Power Plants* in Beijing and carried out cooperation around the high value comprehensive utilization of solid waste, so as to accelerate the technological breakthrough in comprehensive utilization technology of solid waste in coal-fired power plants, solve the practical problems of fly ash pollution and land occupation problems faced with coal-fired power plants, promote the upgrading of fly ash utilization mode, utilization technology and equipment as well as the development of high-end products, create greater economic and social benefits.



Agreement signing site

## Energy Conservation and Resource Protection

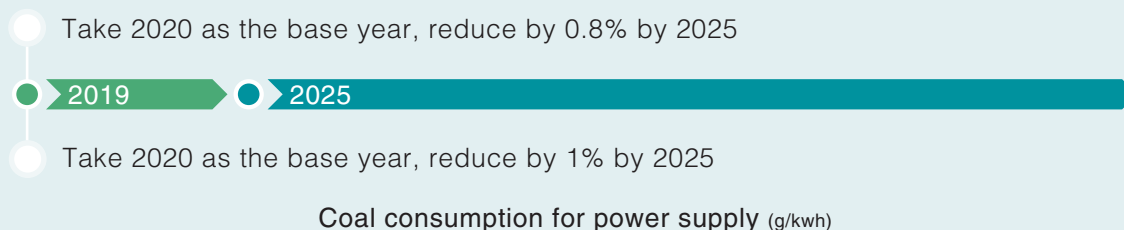
In strict accordance with the laws and regulations including *Energy Conservation Law of the People's Republic of China*, *Renewable Energy Law of the People's Republic of China* and *Law of the PRC on Circular Economy Promotion*, Shenhua formulated *The Fourteenth Five-Year Development Plan on Energy Conservation and Environment Protection* to strengthen technological transformation and improve the efficiency of energy and water use.

### Efficient use of energy

Shenhua has formulated management systems including the *Energy Conservation Management Measures and Responsibility System for Energy Conservation* so as to implement the energy saving requirements in the whole cycle of coal "mining", "transportation" and "transformation", and vigorously promote the allocation and efficient use of clean energy in the existing business. In 2020, Shenhua reduced energy consumption by 1.6% compared with the previous year. The Company won the title of advanced enterprise for energy conservation and emission reduction of China National Coal Association. For details of energy efficiency improvement and related technical transformation, see Section of Climate Resilience in this Report.

### Shenhua Energy Saving Target

Comprehensive energy consumption per RMB10,000 output value<sup>3</sup>  
(tonne of standard coal/RMB10,000)



<sup>3</sup> The scope of statistics includes coal and coal chemical business, excluding transportation, electric power business.



### Shenhua Energy Consumption Data

Energy consumption and intensity		2018	2019	2020
Direct Energy	Total oil consumption (10 thousand tonnes)	35.91	38.32	39.88
	Total natural gas consumption (100 million m <sup>3</sup> )	11.79	8.44	8.41
Indirect energy	Total electricity consumption (100 million Kwh)	226.61	173.04	169.06
Comprehensive energy consumption (10 thousand tonnes of standard coal)		4,958.44	4,394.49	4,324.04
Comprehensive energy consumption per RMB10 thousand output value (tonne/RMB 10,000)		2.72	2.96	3.05

#### Case

Fujian Energy uses small index competition leverage to leverage 4.35g of coal consumption in 5 years

Since the small index competition system was put into use in 2015, Fujian Energy has effectively improved the enthusiasm, delicacy and scientificity of the operators through the real-time dynamic optimization of the index system and the weight of each index. By 2020, through the five-year comparative analysis of unit economy, the coal consumption was reduced by approximately 4.35g/Kwh in five years, effectively realizing the energy efficient utilization.

#### Case

Xinshuo Railway promotes railway green development

Xinshuo Railway started from the railway network layout, technology upgrading and operation organization to reduce carbon emissions and promote the green and clean development of railway. In 2020, the Company eliminated 19 coal-fired boilers, reduced coal consumption by 6,000 tonnes and carbon emissions by 12,000 tonnes.

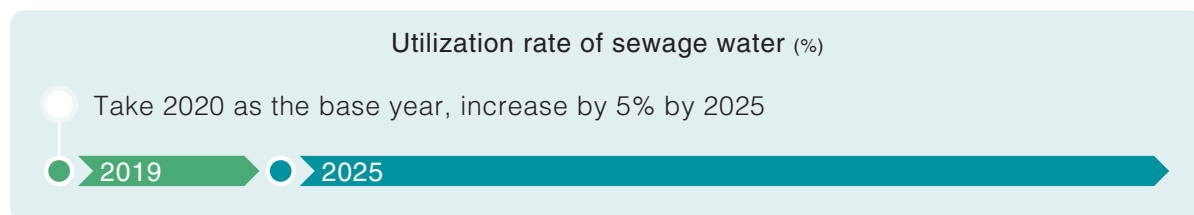


The revamped boiler room

## Water resources saving and protection

In strict accordance with the laws and regulations including the *Water Law of the People's Republic of China* and the *Regulation on the Administration of Water Sourcing Permission and Levy of Water Resource Fees*, Shenhua formulated the management system including *Guidelines for Water Management of Thermal Power Plants* and *Guidelines for Water Saving in Thermal Power Plants* and set targets for water use.

### Shenhua water resources saving target



Shenhua Safety, Health and Environmental Protection Committee and the senior management including the general manager are responsible for the strategies or performance related to water management. At the executive level, the Company set up leading groups for energy conservation and environmental protection at all levels to standardize the use of water resources. Our main water sources were municipal pipe network, surface water, etc. at present, there is no difficulty in access to water. In order to reduce the dependence and impact on surface water and underground water sources, we explored the improvement technology of cutting water use under existing conditions in various business sectors, and sought the implementation of seawater desalination technology, construction water purification and reuse technology, ballast water reuse, broadened water source channels and improved water reuse efficiency, so as to reduce the pressure on water resources in multiple ways. In 2020, the consumption of recycled water and other alternative water sources (such as sea water and desalinated water) accounted for 17% of the total water consumption of Shenhua.



We optimize the concentration ratio of cooling tower, carry out leakage free management, and implement water reuse



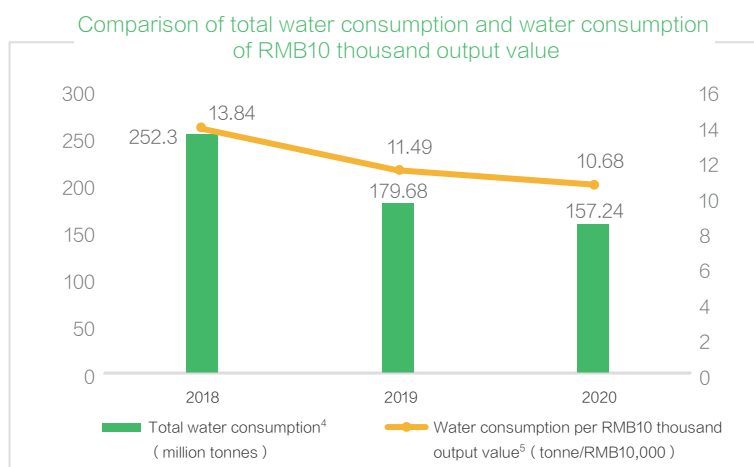
We use reclaimed water for power generation, striving to realize "zero exploitation" of groundwater



All rainwater is collected, all reclaimed water is recycled, and all pressure storage water is recycled to realize "zero occupation of municipal water"



The steam condensate and purge gas in chemical plants are recycled, and electrochemical devices are introduced to improve water quality



### Water resources protection performance of China Shenhua

Water resources type	Unit	Consumption volume in 2019	Consumption volume in 2020
Fresh water	<i>million tonnes</i>	132.3	130.89
Including Land surface water	<i>million tonnes</i>	106.48	92.93
Underground water	<i>million tonnes</i>	5.62	2.65
Tap water	<i>million tonnes</i>	20.2	35.31
Recycled water (reclaimed water)	<i>million tonnes</i>	43.05	11.22
Other water (Such as desalinated water)	<i>million tonnes</i>	4.33	15.13

#### Case

#### Huanghua port built five ecological water systems of “two lakes and three wetlands”

In 2020, Huanghua Port built five ecological water systems of “two lakes and three wetlands” with a total area of 630,000 m<sup>2</sup> and water storage capacity of 900,000 m<sup>3</sup>. The construction of “two lakes and three wetlands” ecological water system not only prevents the coal-containing rainwater from discharging into the sea under the rainstorm weather, thus protecting the ecological environment of the sea area, but also maximizes the recycling of water resources, saving the water cost of dust removal through spraying water and port greening, and provides a beautiful landscape for the port area together with the ecological green belt of the port area.



An aerial view of “two lakes and three wetlands” in Huanghua Port

<sup>4</sup> Total water consumption=fresh water + Recycled water+other water

<sup>5</sup> Water consumption per RMB10 thousand output value = total water consumption of industrial enterprises/total industrial output value (RMB10,000)



### Use of packaging materials

Shenhua Coal Chemical business involves the use of product packaging materials. Baotou Coal Chemical has formulated management systems such as *Product Packaging Quality Management Regulations* and *Quality Control Plan for Main and Auxiliary Packaging Materials* to strictly ensure the packaging quality and control the packaging weight, and actively promote the reduction of packaging materials.

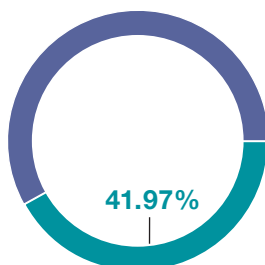
## Ecological Restoration and Biodiversity

Shenhua keeps in mind that taking from the nature and repaying the nature is a must. In the process of operation, we analyzed the damage and impact of business on the natural environment, and took practical actions to reduce and compensate the damage to the environment.

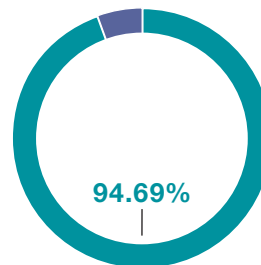
### Ecological restoration

In strict accordance with the laws and regulations including the *Mineral Resources Law of the People's Republic of China* and *Regulations on Environmental Protection Management of Construction Projects* and requirements including *China Energy's Implementation Opinions on Building Green Mines in an All-Round Manner*, Shenhua formulated management systems such as *Administrative Measures on Environmental Protection and Soil and Water Conservation* to speed up the construction of green mines, reclaim the land in mining areas, harness the land in subsidence areas, restore the local ecological environment and increase carbon sink.

Treatment rate of  
subsided land



Dump rehabilitation  
rate for open-pit mines



Project	Unit	As of 2020/2020
Accumulated subsidence treatment area	10 thousand m <sup>2</sup>	14,506.82
Accumulated rehabilitation area of waste dump in open-pit coal mine	10 thousand m <sup>2</sup>	1,840.52
Annual new land rehabilitation area of open pit mine	10 thousand m <sup>2</sup>	307.85
Annual new land treatment area of mine subsidence area	10 thousand m <sup>2</sup>	4,171.89

## Case

## Ecological restoration and comprehensive improvement of technology and demonstration project of large-scale coal-power base in eastern grassland area (national key R&amp;D project)

In order to solve the problem of grassland ecological degradation caused by the exploitation of large-scale coal-fired power base in the Eastern Grassland Area, Shenhua, together with Tsinghua University and other universities and scientific research institutions developed key technologies such as water resources protection and utilization, land consolidation, soil reconstruction, vegetation restoration and landscape ecological restoration of coal-fired power base in semi-arid and extremely cold grassland area, and carried out ecological restoration and comprehensive improvement of technology and demonstration project in Eastern Grassland Area of Shengli Energy. In 2020, a total of 8,324.1 mu of demonstration area was built, and the vegetation coverage rate was 35% higher than the background value (compared with 2017). More than 96% waste land in the demonstration area was reclaimed, afforested or effectively utilized.



Effect picture of ecological restoration and comprehensive improvement of technology and demonstration project of large coal-fired power base

## Case

## Research and demonstration project of subsidence area treatment in Buer'tai mine

In 2020, the mine water and ecological coordinated management research and demonstration project of subsidence area treatment in Buer'tai mine of Shendong Coal integrated the collaborative technology of mine water use and ecological management, created the gravity irrigation technology and winter irrigation technology in subsidence area, improved the structural layout of "one lake, two fields, three forests and four grasses", and filled the blank space of ecological comprehensive control in mining subsidence area through innovation of the ecological prevention and control mode and technology in mining subsidence area.



Field effect of subsidence area treatment in Buer'tai mine

## Biodiversity protection

According to the *Water and Soil Conservation Law of the People's Republic of China*, the *Environmental Impact Assessment Law of the People's Republic of China* and the requirements of the local government where Shenhua operates overseas, Shenhua formulated the management systems including *Measures for the Administrative Measures on Ecological Environment Protection and Soil and Water Conservation*, Focusing on the protection of biodiversity and biological habitats. In the process of engineering construction and project operation, we strictly implemented the requirements of environmental assessment, and improved the environment and increase biodiversity in the process of operation.

### Case

#### Ecological restoration turns desert into oasis

In 2020, Shendong Coal arranged 69 ecological restoration projects, covering an area of 45 square kilometers. As of the end of 2020, the Company has treated an ecological area of 376 square kilometers, and has basically constructed the ecological spatial structure of mountains, rivers, forests, fields, lakes and grass. The vegetation coverage rate has increased from 3% to more than 64%. The plant community has changed from herbaceous community dominated by *Artemisia ordosica* to shrub grass community dominated by *Hippophae rhamnoides*. The number of plant species has increased from 16 species to nearly 100 species, and the microbial and animal populations have also increased significantly. In terms of climate, it has improved the phenomenon of low rainfall and uneven inter-year rainfall, reversed the degradation of the fragile ecological environment, and promoted the harmonious co-existence between man and nature.



## Environmental protection propaganda

On the World Environment Day, National Energy Saving Publicity Week and other world and national environmental protection days, Shenhua has carried out a variety of publicity and training activities to advocate employees to protect the environment, conserve energy, lead low-carbon life and low-carbon travel, so as to make all employees conscious of energy conservation and emission reduction.

### Case

#### Activities of Zhuhai Harbour Administration On National Energy Saving Publicity Week and the Low Carbon Day

Focusing on the themes of Save Energy and Improve Efficiency to Preserve Green Waters and Hills and Green and Low-carbon Development to Build a Moderately Prosperous Society in All Respects, Zhuhai Harbour Administration actively carried out the practical activities of 2020 National Energy Saving Publicity Week and the low carbon day. By carrying out signature collected from employees garbage collection, green riding and other activities, employees can feel the beauty of nature and get closer to the nature so as to protect nature, enhance the awareness of environmental protection, energy conservation and emission reduction, form good habits of conservation and environmental protection in daily work, and make continuous efforts to build a beautiful green and smart dock.



Staff of Zhuhai Harbour Administration actively participate in environmental protection activities



## Employee Care



Shenhua has always adhered to and practised people-oriented idea and actively maintain and safeguard the legitimate rights and interests of employees. In 2020, focusing on “strengthening the foundation, promotion and reform”, Shenhua strengthened the training and skill improvement of employees, optimized the talent management mechanism, stimulated the work vitality of employees, and strived to build a high-quality talent team. The Company cared for employees with practical actions to enhance the sense of happiness, identity and gains of employees, strived to create a cohesive spiritual home for employees, and worked hand in hand with employees for common progress and common growth.





## Protection of Rights and Interests of Employees

Shenhua adhered to the people-oriented principle, standardized labor employment according to law, and established labor employment management systems including labor contract management, employee recruitment, vacation, education and training by strict compliance with the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Trade Union Law of the People's Republic of China*, the *Constitution of the Chinese Trade Union* and other laws and regulations. In 2020, the Company revised the management systems including *Administrative Measures for Personnel Management of Headquarters*, comprehensively optimized the Company's personnel and employment management mechanism, provided decent salary and benefits, and enhanced the talent competitive advantage of Shenhua while protecting the rights and interests of employees.

## Compliance and equal employment

Shenhua adhered to the principles of open, fair and just recruitment and equal employment, signed labor contracts in accordance with the law, prevented any form of employment discrimination, treated employees of different nationalities, races, genders, religious beliefs and cultural backgrounds equally, actively provided employment opportunities for vulnerable groups, protected the rights of female employees, ensured equal remuneration for equal work for men and women, and strictly implemented the maternity leave regulations for female employees, safeguarded and protected every employee's equal legal rights and interests in accordance with the law.



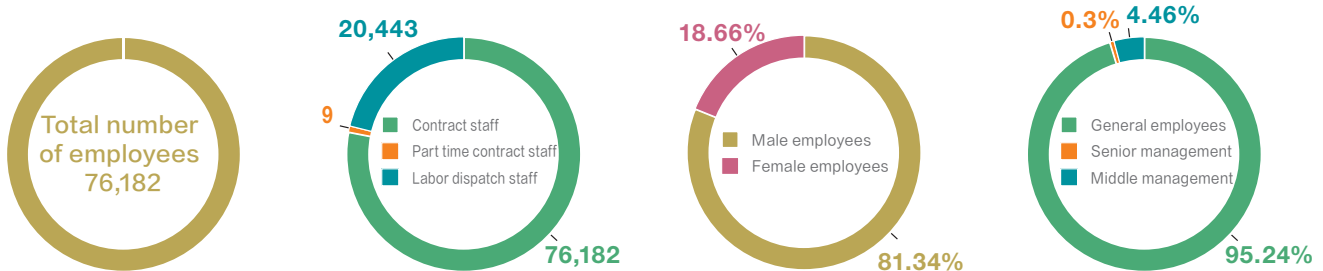
Chinese and Indonesian staff work together on site

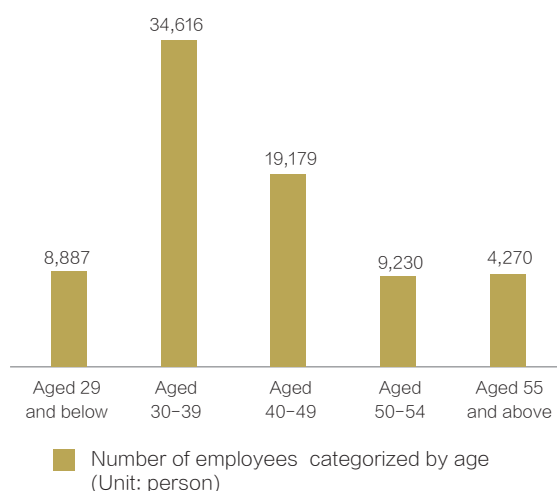
In strict accordance with the national laws and regulations, the Company constantly standardized the labor management, strictly forbade the employment of child labor, and rejected all form of forced employment and compulsory employment. The Company carried out irregular inspections

on the execution of labor employment through implementing labor employment supervision and inspection system to ensure legal employment. There were no employment of child labor, forced labor and employment dispute in 2020.

China Shenhua supported international regulations and principles including *Universal Declaration of Human Rights*, *the Declaration on the Protection of Human Rights*, *International Convention on the Elimination of All Forms of Racial Discrimination*, *ILO Declaration on Fundamental Principles and Rights at Work*, *the Convention on the Minimum Age for Admission to Employment*, *the Employment Policy Convention*, *the Discrimination Convention (Employment and Occupation)* and *Convention on Equal Pay for Work of Equal Value to Male and Female Workers* on the premise of abiding by the laws and regulations of the place where it operates.

## Compositions of employees





Number of employees as categorized by regions		
In China (person)	Hong Kong, Macao and Taiwan (person)	Foreign regions (person)
75,867	4	311

Number and percentage of employees turnover categorized by gender		
Gender	Turnover (person)	Ratio (%)
Male employees	646	1.03
Female employees	303	2.09

Number and proportion of employee turnover as categorized by age group		
Age of employees	Turnover (person)	Ratio (%)
29 or under	114	1.27
30-39	350	1.00
40-49	115	0.60
50-54	370	3.85

Number and proportion of employee as categorized by regions		
Regions	Turnover (person)	Ratio (%)
Within China	949	1.25
Hong Kong, Macao and Taiwan regions	0	0
Foreign regions	0	0

### Remuneration and Benefits

China Shenhua provided a competitive salary and welfare system for employees, which mainly consisted of fixed salary, floating salary, various allowances, social insurance and other welfares. The remuneration distribution of China Shenhua adhered to the effectiveness and efficiency orientation and highlights value creation. Continuously establishing and improving the salary incentive and restraint mechanism, and the total wages and employee wages were in line with and matched with market, economic benefits and labor productivity, respectively. The internal distribution of the Company focused on the first-line production, key positions, and high-level, high-skilled talents, and reasonably widened the wage distribution gap. Strengthened the performance appraisal of all employees, closely linked employees' salary income with their work performance and actual contributions, gave full play to the incentive-oriented role of remuneration, and timely fulfilled the annual salary of the management and special rewards for employees.

In 2020, the Company overcame the impact of COVID-19 pandemic and ensured the timely payment of full employee salaries, payment of social insurance, housing provident fund and enterprise annuity. Guaranteed the retirement wages and benefits of retirees. Helped employees apply for supplementary medical insurance, social insurance transfer, individual tax settlement, and reimbursement of medical expenses for minor children, and completed the directors and supervisors' high liability insurance and employee "group accident insurance" and "critical illness insurance" procurement renewal work of the year. Meanwhile, the Company completed the base adjustment, verification and declaration of social security, annuity and provident fund.



### Democratic Communication

China Shenhua wholeheartedly followed the principle of relying on employees to run an enterprise, attached great importance to employees' opinions and suggestions on enterprise development and management, progressively improved the democratic management system of the Company with the workers' congress as the basic form, published the *"Key Points of Trade Union Work in 2020"*, improved the *"Trade Union Member Registration Form"* and the *"Trade Union Membership Management"*, and established and improved the union member files. The Company researched and drafted systems and methods included the *"Workers' Congress System"*, *"Working System of Special Working Committee of Workers' Congress"*, and *"Measures for Soliciting Proposals of Workers' Congress Representatives"*, which effectively improved the working mechanism of the trade union and smoothed information exchange and communication channels for Employees create opportunities for sentiment.

### Protection of the rights and interests of female employees

China Shenhua attached great importance to the work of female employees. In order to further protect and serve the rights and interests of female employees, and to provide support for female employees, in 2020, the Company formulated the *"Guiding Opinions on the Work of Female Employees"* and *"Notice on Strengthening Labor Protection for Pregnant and Lactating Female Employees during the COVID-19 Pandemic Prevention and Control Period & Reasonable Arrangements for Working Methods"* and other systems protect the legal rights of female employees in work and family. Focused on the theme of "March 8th" Women's Day, the Company planned and arranged selection activities for outstanding female employees, invited famous Chinese medicine doctors to teach and sit in the clinic and other suitable care activities for female employees.

#### Case

#### Logistics Group held a psychological counseling lecture on COVID-19 pandemic prevention and control for female employees

In March 2020, the Logistics Group launched a special video lecture on psychological counseling on COVID-19 pandemic prevention and control with the theme of "security and anxiety, fighting the COVID-19 pandemic together", and invited senior psychologists to conduct online psychological counseling for more than 300 female employees. The lecture focused on the three aspects of "live in peace, self-purification", "accompany with peace of mind, stabilize the family", and "safe workplace, concerted efforts", guided female employees to transform their emotions into motivation and effectively carried out self-psychological construction under the COVID-19 pandemic situation, so as to relieve work pressure, and maintain mental health and work motivation.

## Assistance to Employees' Development

China Shenhua attached great importance to the career planning of employees, adhered to the employment concept of having both ability and political integrity and morality first, continuously improved and deepened the talent training mechanism, provided special training for employees of different types and levels, continued to improve the organization of talent institutions, and strengthened the talent team construction to ensure sufficient talents, reasonable hierarchy and optimized structure of the Company.

### Career Development

In 2020, the Company revised the *"Headquarters Personnel Management Measures"* and *"Headquarters Departments and Staff Assessment Measures"* to continuously improve the employee promotion mechanism and talent evaluation system. Formulated and issued the *Interim Measures for the Management of Company Title Evaluation and Implementation Rules*, established a mid-level professional title evaluation committee at the headquarters, established an evaluation expert database, and unblocked the talent development channels of the department. Intensifying the selection and recommendation of young cadres, the Company formulated and promulgated the *"Implementation Measures for the Vigorous Discovery, Training and Selection of Outstanding Young Cadres"*, carried out the selection and recommendation of outstanding young cadres in the department, strengthened the exchange and training of personnel in the department, comprehensively considered work needs, work history and professional background, and carried out cross-departmental, multi-position exchange of cadres, especially encouraged young cadres to exchange and exercise in multiple positions.



## Case

## Dingzhou Power started a new mode of promotion for grassroots employees

In September 2020, the Dingzhou Power Maintenance Department launched competitive employment for various professional and dedicated jobs in accordance with the “*Regulations on the Management of Internal Staff Configuration*”. The competitive recruitment mode adopted professional written examination and democratic evaluation. The total score of the recruited personnel was not less than 80 points and could be directly hired; the trial period was 6 months if the score was less than 80 points, and the maintenance department organized the assessment after the end. Those who passed the inspection during the trial period could be officially employed; those who failed the inspection during the trial period could return to their original positions or arrange other positions. Dingzhou Power’s new job promotion model had fully aroused the enthusiasm of employees to learn technology and practice skills, and provided powerful talent guarantee for the company.



## Case

## Shendong Coal implemented the development plan of professional skills talents

Shendong Coal had expanded the career development channels of employees from three levels of management, professional technology and skill operation, and clarified the development paths and directions of various talents. The Company had formulated the development plan of professional and technical talents, completed the annual and expiration assessment of secondary professional teachers, implemented the renewal and payment according to the assessment results of the employment period, and organized the renewal and new employment of professional and technical positions of tertiary teachers and below, and chief teachers of grassroots units and below. The Company had recruited 1,982 professional and technical positions and 1,352 skilled technicians at all levels through the professional skills talent development plan.



## Employee Training

China Shenhua continuously improved the multi-level and multi-channel training system with the headquarters and various subsidiaries as the main body, and built a staff training channel that parallels administrative management, professional technology and skill operations. In 2020, China Shenhua Headquarters continued to build the “Headquarters Monthly Special Training” brand, held 12 special training sessions with 1,623 participants; selected cadres and employees at different levels to participate in special promotion training, participated in online learning classes such as Shanghai Stock Exchange Pujiang College with more than 400 participants.

## Employee training in 2020



2020 China Shenhua “Headquarters Monthly Special Training” brand training theme

### Employee training

**74,784** employees

### Total training hours

**6,702,074.98** hours

### Training hours per capita

**89.6** hours

Blockchain technology and application, knowledge of the prevention and control of COVID-19 pandemic caused by coronavirus infection, new era and energy revolution, big data and digital economy, letting state-owned enterprise party organizations and party members become the new force to promote enterprise reform and development, online training courses for party members of the headquarters, the historical experience of the Communist Party of China in seizing national power, the industrial transformation from the perspective of China's economic and financial evolution, the promotion of the “Rule of China” to a higher level, the Interpretation of Civil Code Contract Compilation Rules and Application of Laws, Confidentiality Training, my country's Coal Development Policy in the New Era, and Domestic and Foreign Coal Analysis.

Indicators	2020
Proportion of employed professional and technical personnel (%)	14.34
Total number of employed professional and technical personnel ( <i>person</i> )	10,927
Employee productivity (profit before tax/total number of employee) ( <i>10 thousand/person</i> )	77.92

## Persons received training and training hours as categorized by sex

Gender	Persons received training ( <i>person</i> )	Training hours ( <i>hours</i> )
Male employees	61,089	5,565,577.85
Female employees	13,695	1,136,497.13

## Persons received training and training hours as categorized by functions

Types	Persons received training ( <i>person</i> )	Training hours ( <i>hours</i> )
Senior management	220	32,843.27
Middle management	3,303	341,134.64
General staff	71,274	6,328,096.87

## Employee Care

China Shenhua actively supported employees in need, held a variety of recreational activities to enrich employees' spare time, and meet their higher spiritual needs.

### Case

#### Baoshen Railway offered assistance and consolation to employees in need

Baoshen Railway has established files for employees in need, and conducted visits and investigations to verify the causes of poverty and assistance expected through the grassroots labour union organizations, and provided targeted assistance and consolation. In 2020, a total of 31 employees were assisted and consoled, including 15 extremely poor employees and 16 poor employees. A total of RMB138,000 consolation fund was distributed.



### Case

#### China Shenhua Trade Union actively carried out activities of caring for staff during the COVID-19 pandemic

In 2020, the China Shenhua Trade Union organized a theme contest focusing on "preventing the spread of the COVID-19 pandemic, ensuring safe production, ensuring the health of employees, and ensuring stable supply" and an online exhibition of calligraphy works with the theme of "Victory Fighting Together", in order to cheer for the fight against the COVID-19 pandemic, strengthen the confidence of the majority of employees to overcome the COVID-19 pandemic, and enrich the amateur cultural life in the fight against the COVID-19 pandemic. During the COVID-19 pandemic, the Company made concerted efforts to purchase and distribute masks, disinfectant, disinfectant soap, alcohol, gloves, etc. for employees and their families to ensure anti-epidemic materials.



### Case

#### Shengli Energy organizes employees to conduct mental health assessment

In October 2020, Shengli Energy organized all employees to conduct mental health assessment, and successively carried out four sessions of mental health lectures and mental quality development courses covering all employees of the company. Members of the Mental Health Association of the Chinese Academy of Sciences and national secondary psychological consultants were invited as lecturers to give targeted lectures on the common psychological problems of employees in the mental health assessment, so as to help employees reduce their stress, put into work and life with a good attitude and full enthusiasm, and improve work efficiency and life happiness.





## Community Charity



China Shenhua has insisted on improving the people's living and economic development level in the surrounding society through materials donations, charitable activities and voluntary actions, and promoted the harmony between the enterprise and local community.





## Community Care

China Shenhua has leveraged its own business advantages, been devoted to community public welfare undertakings, vigorously carried out caring for the community, and actively communicated with stakeholders to promote long-term stable development and social harmony at local community.

### Number of China Shenhua volunteers in 2020

**9,668** volunteers

### Volunteer Service time in 2020

**48,412.5** hours

### Volunteer Service

China Shenhua has actively put into practice the voluntary service spirit of "Dedication, Fraternity, Mutual Assistance and Progress" to satisfy the needs of local people and carried out voluntary activities to serve the society.

#### Case

#### Volunteer service team named Original Intention of Bu'ertai mine

In 2018, Shendong Coal established the "Original Intention Volunteer Service Team" of Bu'ertai mine and it has been in operation until now. At present, 87 volunteers have joined the service team, with an average age of 29 years old. It is a vigorous and promising volunteer team. In 2020, the service team has successively carried out 37 volunteer services such as "Anti-epidemic leader, serve first", "Improve the environment, share health", and have served more than 17,000 employees and surrounding people. It has interpreted the voluntary spirit of "Dedication, Fraternity, Mutual Assistance and Progress" with practical actions.



### Promoting the local development

China Shenhua encourages its subsidiaries to use the Company's platform and personnel advantages to promote the local development, adhere to the principle of local employment, create more local employment opportunities, so as to promote regional economic development.

#### Case

#### Shendong Coal actively promotes the opening and operation of Daliuta-Ulan Mulun integrated inter-provincial loop bus

In 2020, Shendong Coal actively promoted the opening and operation of the Daliuta-Ulan Mulun integrated inter-provincial loop bus. The project is a key joint construction and shared livelihood project between the Daliuta pilot zone and Ulan Mulun town, which revealed that the mining area and Uzbekistan had taken substantial steps in terms of interconnection and livelihood sharing.



## Anti-epidemic support

China Shenhua and each subsidiary of the Company have fully supported the community's epidemic prevention and control battles through methods such as supplying materials and deploying personnel to provide services, ranging from joint prevention and control, closure and elimination to benefits and convenience for the people.

### Case

#### Taishan Power launched a publicity activity "Helping Tonggu Village Epidemic Prevention and Control, Young Volunteers in Action"

In March 2020, Taishan Power organized volunteer activities in the community. Party member volunteers assisted the staff of the village committee's epidemic duty station to carry out temperature detection, registration and investigation of villagers entering the village. Young volunteers carried out epidemic prevention and control publicity, explained to them the relevant knowledge about epidemic prevention, guided the masses to develop a healthy lifestyle of washing hands frequently, regular ventilation, less gatherings and wearing masks, resolutely won the battle against epidemic prevention and control, and fully carried forward the the voluntary service spirit of "Dedication, Fraternity, Mutual Assistance and Progress".



## Public welfare

China Shenhua has adhered to the principle of "Contributing China Energy love, supporting public welfare undertakings, and promoting social harmony and development", and in accordance with the *Donation Management Measures (trial)* and other systems, through the China Energy Group Public Welfare Foundation<sup>6</sup> to carry out donation and funding of education, screening for "congenital heart disease" and "leukemia", so as to bring health and well-being to children in remote areas.



954

children with sickness  
were funded



13,590

benefited newborns



17

funded schools to improve  
school conditions



13

funded schools to develop  
health education system



9

schools was aided to equip  
with digital book reading  
system



26,162

purchased and  
delivered books

Main activities of the China Energy Group Public Welfare Foundation in 2020

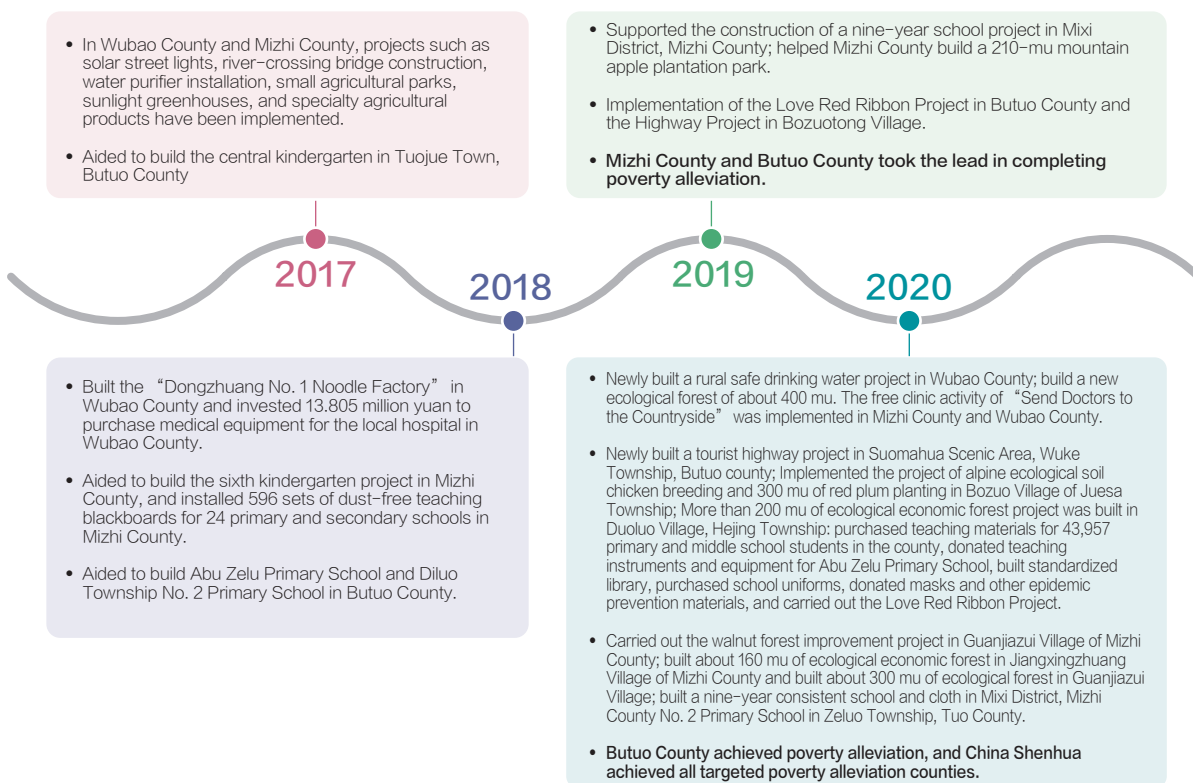
<sup>6</sup> Since the establishment of China Energy Group Public Welfare Foundation, Shenhua has cumulatively donated 80.52% of its total funds.



## Completion of the Poverty Alleviation Mission as Scheduled

Since China Shenhua has undertaken the designated poverty alleviation tasks in Mizhi County and Wubao County, Yulin City, Shaanxi Province, and Butuo County, Liangshan Yi Autonomous Prefecture, Sichuan Province, it has resolutely implemented the Party Central Committee's targeted poverty alleviation strategy, focused on the efforts to solve the prominent problems of "two assurances and three guarantees", implemented the "five major poverty alleviation projects" such as education poverty alleviation, industry poverty alleviation, infrastructure poverty alleviation, skills training poverty alleviation and Party building poverty alleviation, invested more than RMB350 million in poverty alleviation funds, implemented 382 projects, helped 103,127 poor people who have been registered to get out of poverty and trained 5,837 skilled personnel and grassroots cadres. In 2020, all three counties targeted for poverty alleviation lifted out of poverty.

### Targeted poverty alleviation process



### Case

#### Sichuan Energy continuously invested in the construction of Abu Zelu Primary School

Sichuan Energy invested a total of RMB11.9 million in supporting Abu Zelu Primary School in 2018 and 2019. It was the only boarding school for children with special difficulties and children from poor families in Butuo County, and also the largest special care school in Butuo county. In 2020, Sichuan Energy continuously invested in the purchase of teaching equipment for the school, so that the school took the lead in realizing media-based teaching; RMB852,000 was invested in the purchase spring and winter school uniforms; and RMB300,000 was invested in the construction of standardized library in the school, which alleviated the problem of reading difficult for special children and effectively enriched students' extracurricular knowledge.



Teachers and students of Abu Zelu Primary School used their spare time to express their gratitude on the playground



## Future Outlook

2021 is the first year of the “14th Five-Year Plan”, and the new journey of the second centenary goal is officially launched. The Communist Party of China will celebrate its centenary. It is of great responsibility and significance to do the work well throughout the year. China Shenhua will unswervingly follow the path of sustainable development and build a resource-saving and environment-friendly enterprise.

We will make every effort to promote the green transformation and start a new phase. Deeply implement the new energy security strategy, implement the “14th Five-Year” development plan with high standards, continuously improve the system and mechanism for promoting transformation and development, vigorously promote inventory reform, incremental improvement, and reduction optimization, and actively contribute to the construction of a clean, low-carbon, safe and efficient modern energy system, and strive to make green the most distinctive background color for high-quality development of enterprises.

We will make every effort to promote innovation-driven development. Put innovation at the core of the overall situation of corporate reform and development, adhere to the “four aspects”, accelerate the innovation of science and technology systems and mechanisms, enhance the ability of independent innovation of key technologies, accelerate key core technology research, promote the industrial chain to the high-end value chain, and strive to make innovation a strong support for high-quality development.

We will make every effort to promote management improvement and start a new phase. Adhere to problem-oriented, goal-oriented, and result-oriented, focus on achieving world-class detailed and refined management capabilities, in-depth implementation of benchmarking and first-class management improvement actions, and effectively improve safety and environmental protection, governance according to law, reform and development of management capabilities.

We will make every effort to promote harmonious development and start a new phase. Actively serve the national ecological strategy, provide green products, fully protect the rights and interests of employees, focus on personnel training, maintain community relations, adhere to targeted poverty alleviation, actively participate in public welfare undertakings, and continue to work hard to give back to society.

New era, new journey, new situation, new requirements! China Shenhua will continue to innovate, abide by its mission, organically integrate corporate development and ecological environment construction, focus on energy conservation and emission reduction, advocate low-carbon life, and fulfill environmental and social responsibilities with practical actions to achieve economic, environmental and social sustainability so as to contribute to development.

## Appendix I: Table of Key Performance

First-level Indicators	Second-level Indicators	2018	2019	2020
Carbon emission	Total emission (10 thousand tonnes of CO <sub>2</sub> equivalent)	25,066	15,741	13,490
	Including: scope 1 (10 thousand tonnes of CO <sub>2</sub> equivalent)	24,577	15,151	12,668
	scope 2 (10 thousand tonnes of CO <sub>2</sub> equivalent)	489	589	822
	Emission intensity (10 thousand tonnes of CO <sub>2</sub> equivalent/ RMB10,000 output value)	13.67	11.10	9.35
Waste gas	Total SO <sub>2</sub> emission (10 thousand tonnes)	1.96	1.5	1.16
	Total emission of SO <sub>2</sub> from thermal power generation (10 thousand tonnes)	1.85	1.04	0.89
	Performance of SO <sub>2</sub> emission from thermal power generation (g/kWh)	0.07	0.07	0.065
	Total NOx emission (10 thousand tonnes)	3.86	3.48	3.26
	Total emission of NOx from thermal power generation (10 thousand tonnes)	3.82	2.02	1.87
	Performance of NOx emission from thermal power generation (g/kWh)	0.14	0.14	0.14
	Total emission of soot (10 thousand tonnes)	0.703	0.43	0.222
	Total emission of soot from thermal power generation (10 thousand tonnes)	0.289	0.179	0.147
	Performance of soot emission from thermal power generation (g/kWh)	0.0104	0.0121	0.0108

First-level Indicators	Second-level Indicators	2018	2019	2020
Waste water	Chemical oxygen demand (10 thousand tonnes)	0.083	0.09	0.086
	Sewage and wastewater generation volume (million tonnes)	170.85	154.48	168.74
	Utilization volume of sewage and wastewater (million tonnes)	135.7	128.52	126.27
	Integrated utilization rate of sewage water (%)	79.43	83.20	74.84
	Utilization rate of industrial wastewater (%)	85.56	82.58	80.38
	Utilization rate of underground mine water (%)	83.22	85.11	74.76
General solid waste	Emission volume of harmless solid wastes (10 thousand tonnes)	2,185.84	2,176.16	2,806.66
	Harmless solid wastes emissions per RMB10,000 output value (tonne/RMB10,000)	1.2	1.5	2.0
	Including : emission of coal gangue (10 thousand tonnes)	2,242.29	2,021.53	2,429.44
	Integrated utilization of coal gangue (10 thousand tonnes)	1,163.02	1,564.07	1,254.05
Hazardous solid waste	Total emission of hazardous wastes (tonne)	1,477.94	5,483.49	4,608.93
	Hazardous wastes emissions per RMB10,000 output value (kg/RMB10,000)	0.081	0.3324	0.3196
Energy consumption	Comprehensive energy consumption (10 thousand tonnes of standard coal)	4,958.44	4,394.49	4,324.04
	Comprehensive energy consumption per RMB10 thousand output value	2.72	2.96	3.05
	Coal consumption for electricity generation (g/kWh)	308	307	307
	Total electricity consumption (100 million Kwh)	226.61	173.04	169.06
	Total oil consumption (10 thousand tonnes)	35.91	38.32	39.88
	Total natural gas consumption (100 million m³)	11.79	8.44	8.41

First-level Indicators	Second-level Indicators	2018	2019	2020
Water resource	Total water consumption (million tonnes)	252.3	179.68	157.24
	Water consumption per RMB10 thousand output value (tonne/RMB10,000)	13.84	11.49	10.68
	Total fresh water (million tonnes)	169.31	132.3	130.89
Environmental protection investment	Investment in environmental protection (RMB100 million)	14.22	14.24	20.99
	Including: investment on ecological construction (RMB100 million)	4.7	5.01	7.54
Ecological protection	New afforestation area (10 thousand m <sup>2</sup> )	3,133	1,472	1,083
Employee development	Total number of employees (persons)	86,856	75,620	76,182
	Additional employees with occupational disease (cases)	19	54	11
	Capital investment in occupational health (RMB100 million)	3.06	6.52	6.75
Community contribution	Social contributions per share (RMB/share) (Chinese Accounting Standards)	6.648	5.95	5.69
	Social contributions per share (RMB/share) (International Financial Reporting Standards)	6.661	5.87	5.52
	Accumulated cash dividend (RMB million)	239,975	265,036	300,998
	Donations to society (RMB million)	460	279	178



First-level Indicators	Second-level Indicators	2018	2019	2020
Technological innovation	Mechanization rate of coal mining and excavation (%)	99.34	100	100
	Number of super-safe and efficient mines	17	20	22
	Number of scientific projects approved by the headquarter	134	69	105
	Capital investment in research and development (RMB100 million)	8.6	12.45	21.49
	Number of patents obtained	581	556	915
	Number of invention patents obtained	113	155	198
Safety production	Investment in safety production (RMB100 million)	54.46	42.89	38.15
	Number of serious accidents and above	1	0	0
	First-level compliance units in safety production	14	18	7
Supply chain management	Total suppliers (ten thousand ones)	6.4	9.3	11.5
Corporate governance	Number of members of the Board concurrently serving as CEO of other companies (personnel)	1	0	0
	Number of financial experts in Audit Committee (personnel)	2	2	1
	Number of directors against voting (vote)	0	0	0
	External auditing expenses (RMB million)	10.5	8.55	8.55
	Number of information disclosure documents released	222	211	382
	Shareholding proportion of controlling shareholders at the end of the period (%)	73.06	69.45	69.45
	Number of shares of the Company held by directors, supervisors and the senior management at the end of the period (share)	0	0	0

## Appendix II: ESG Indicator Index

Contents		ESG Guidelines of HKEx	Recommendations of disclosure of the SSE <sup>7</sup>	GRI Standards
About the Report		A1.6, A3.1, 2.3, B8.1		102-14, 102-15
Chairman's Statement				
ESG Governance Statement from the Board				
About China Shenhua		B8.2		
Corporate Governance	Governance system		Guidelines Article 34, 36: Paragraph 1, 4; Article 37, 38, 39: Paragraph 1, 2, 3; Articles 40, 41: Paragraph 1, 2	102-18, 102-19, 102-22, 102-24, 102-26, 405-1
	Compliance Operation	B4.1, B6.3, B7, B7.1, B7.2, B7.3	Notice Articles 1, 2	102-12, 102-15, 102-17, 102-30, 103-2, 205-2, 205-3, 412-2, 415-1
	Party Building			
ESG Governance	ESG Governance Structure			102-20, 102-32
	ESG Governance System	A1.5, A1.6, A2.3, A2.4		102-12, 102-21, 102-29, 102-31, 102-33, 102-34, 102-40, 102-42, 102-43, 102-44, 102-46, 102-17

<sup>7</sup> "Notice on Strengthening Listed Companies' Efforts in Undertaking Social Responsibilities and Issuance of "Guidelines on Environmental Information Disclosure by Companies Listed on the Shanghai Stock Exchange" is referred to as the "Notice" "Guidelines on Environmental Information Disclosure by Companies Listed on the Shanghai Stock Exchange" is referred to as the "Guidelines" "Guidelines on Preparation of 'Corporate Report on Performance of Social Responsibilities'" is referred to as the "Preparation Guidelines" "Notice of Information Disclosure in Relation to Further Optimizing Poverty Alleviation Work of Listed Company" is referred to as the "Poverty Notice"

Contents		ESG Guidelines of HKEx	Recommendations of disclosure of the SSE <sup>7</sup>	GRI Standards
Safe Production	Safety Management System	B2	Notice Articles 1, 2, 5: Preparation Guidelines Article 4: Paragraph 1	403-4
	Implementation of Safe Production Responsibility	B2.3	Notice Articles 1, 2, 5: Preparation Guidelines Article 4: Paragraph 1	403-4
	Safety Risk Prevention	B2.1	Notice Articles 1, 2, 5: Preparation Guidelines Article 4: Paragraph 1	416-1
	Safety Management of Contractors	B2.3	Notice Articles 1, 2, 5: Preparation Guidelines Article 4: Paragraph 1	416-1
	Enhancement of Employee Safety Awareness	B2.3	Notice Articles 1, 2, 5: Preparation Guidelines Article 4: Paragraph 1	416-4
Environmental Protection	Response to Climate Change	A1, A1.1, A1.2, A1.5, A4, A4.1,	Notice Articles 1, 3; Guidelines Article 3: Paragraph 1, 2, 3, 5, 9; Guidelines Article 4: Paragraph 2	305-1, 305-2, 305-3, 305-4, 305-5
	Environmental Protection Management System	A1, A1.1, A1.3, A1.4, A1.5, A1.6, A2, A2.1, A2.3, A3, A3.1	Notice Articles 1, 2, 3, 5: Paragraph 2; Guidelines Article 3: Paragraph 1, 3, 4, 5, 6; Preparation Guidelines Article 4: Paragraph 2	302-1, 302-3, 302-4, 302-5, 305-7, 306-1, 306-2
	Water Resources Protection	A2, A2.2, A2.4, A3, A3.1	Notice Articles 3, 5: Paragraph 2; Guidelines Article 4: Paragraph 2	303-1, 303-2, 303-3
	Biodiversity	A2, A2.3, A3, A3.1	Notice Articles 3, 5: Paragraph 2; Guidelines Article 3: Paragraph 1, 3; Preparation Guidelines Article 4: Paragraph 2	304-1, 304-2, 304-3, 304-4

Contents		ESG Guidelines of HKEx	Recommendations of disclosure of the SSE <sup>7</sup>	GRI Standards
Employee Development	Protection of Rights and Interests of Employees	B1, B1.1, B1.2, B4, B4.1, B4.2	Guidelines Article 25: Paragraph 1, 4, 5	102-8, 102-41, 401-1, 401-2, 401-3,
	Assistance to Employee Growth	B3, B3.1, B3.2	Notice Articles 2, 5: Paragraph 3; Guidelines Article 25: Paragraph 3; Preparation Guidelines Article 4: Paragraph 3	404-1, 404-2, 405-1
	Occupational Health	B2, B2.1, B2.2, B2.3	Notice Articles 2, 5: Paragraph 1; Guidelines Article 25: Paragraph 2; Preparation Guidelines Article 4: Paragraph 1	403-2, 403-3, 403-4
	Focusing on Employees' Happiness	B8, B8.1, B8.2		
Harmonious Society	Adhering to Quality Service	B6, B6.2, B6.5		
	Creating a Responsibility Supply Chain	B5, B5.1, B5.2, B5.3, B5.4		102-9, 308-1, 308-2, 414-1, 414-2
	Creating a Beautiful Community Together	B8, B8.1, B8.2	Notice Articles 28, 29:	413-1
Future Outlook in 2020				
Appendix	Table of Key Performance		Guidelines Article 25: Paragraph 5	102-8
	Indicator Index			102-55
	Independent Assurance Report			102-56
	Definition			
	Feedback			



## Appendix III: Independent Limited Assurance Report

To the Board of Directors of China Shenhua Energy Company Limited

We were engaged by the Board of Directors of China Shenhua Energy Company Limited (“CSEC”) to provide limited assurance on the 2020 Environmental, Social and Governance Report of CSEC for the year ended 31 December 2020 (“the ESG Report”).

### 1. Responsibilities of the Board of Directors

The Board of Directors of CSEC is solely responsible for the preparation and presentation of the 2020 ESG Report, including the information and assertions contained within it, in accordance with the disclosure recommendations of the following guidelines issued by the Shanghai Stock Exchange (“SSE Guidelines”) and by the Hong Kong Exchange (“HKEX Guidelines”):

SSE Guidelines include:

- Notice on Strengthening Listed Companies’ Undertaking of Social Responsibilities and issuance of ‘Guidelines on Environmental Information Disclosure by Companies Listed on the Shanghai Stock Exchange’
- Guidelines on Environmental Information Disclosure by Companies Listed on the Shanghai Stock Exchange
- Preparation and review of internal control report and social responsibility report

HKEX Guidelines include:

- Environmental, Social and Governance Reporting Guide

The Board of Directors is also responsible for determining CSEC’s objectives in respect of social responsibility performance and reporting, including identification of stakeholders and material issues that are relevant to these stakeholders; for establishing and maintaining appropriate performance management and internal control systems from which the reported performance information is derived; for establishing and maintaining the internal control that is necessary to make ESG report free from material misstatements due to fraud or error, and for maintaining adequate records.

### 2. Responsibilities of KPMG

Our responsibility is to carry out a limited assurance engagement and to express a conclusion based on the work performed on whether the ESG report is prepared according to SSE Guidelines and HKEX Guidelines and whether there are significant misstatements in the key ESG related performance indicators disclosed in the ESG report. We conducted our work in accordance with International Standard on Assurance Engagements 3000: *Assurance Engagements other than Audits or Reviews of Historical Financial Information*, issued by the International Auditing and Assurance Standards Board. The standard requires us to plan and execute our work to obtain limited assurance that ESG reports are free of material misstatements.

Our independent limited assurance report is made solely to CSEC in accordance with the terms of our engagement. Our work has been undertaken so that we might state to the Board of Directors of CSEC those matters we have been engaged to state in this independent limited assurance report and for no other purpose. We do not accept or assume responsibility to anyone other than CSEC for our work, for this independent limited assurance report, or for the conclusions we have reached.

### 3. KPMG'S independence and quality control

We have complied with our independence and other relevant ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, and complied with the applicable requirements of International Standard on Quality Control 1 to maintain a comprehensive system of quality control.

### 4. Summary of work performed and the limitations

A limited assurance engagement on a ESG report consists of making inquiries, primarily of persons responsible for the preparation of information presented in the ESG report, and applying analytical and other evidence gathering procedures, as appropriate. Our procedures included:

- Interviewing management and staff at CSEC Head Office responsible for collating and reporting the Disclosed Information, and interviewing staff of the centralized departments for business management at CSEC Head Office;
- Comparing the information presented in the ESG Report to corresponding information in the relevant underlying sources from CSEC Head Office to determine whether key information contained in such underlying sources has been included in the ESG Report;
- Performing analytical review procedures on the selected key indicators relating to environmental protection, production safety and others recommended to be disclosed by SSE Guidelines and HKEX Guidelines;
- Carrying out assurance work to some major subsidiaries(branches), selected on the basis of a risk analysis including the consideration of both quantitative and qualitative criteria;
- Reconcile key financial data in the ESG Report with the audited financial statements.

Where the ESG report has included information or year-on-year comparisons of information not contained in previous reports, we have not examined the information for previous years.

The extent of evidence gathering procedures performed in a limited assurance engagement is less than that for a reasonable assurance engagement, and therefore, a lower level of assurance is provided. In addition, our work was not undertaken for the purpose of opining on the effectiveness of CSEC's systems and procedures.

### 5. Conclusions

Our conclusions are based on and shaped by the matters outlined in this report.

We believe that the evidence we have obtained is sufficient and appropriate, which provides the basis for issuing the assurance conclusion.

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe:

- that the ESG Report of CSEC for the year ended 31 December 2020 is not presented fairly, in all material respects, in accordance with the disclosure recommendations of the SSE Guidelines and HKEX Guidelines; and
- that significant misstatements of key performance indicators related to ESG disclosed in your 2020 ESG Report.

KPMG Huazhen LLP  
Beijing

26 March, 2021

## Appendix IV : MSCI-ESG Self-evaluation Table

MSCI Description		2020 Score
Carbon emissions	In the context of current performance, the Company set aggressive emission reduction targets	Medium
	Outstanding performance in achieving carbon reduction targets	High
	Using clean energy	High
	Carbon capture technology	High
	Energy use management and energy efficiency improvement	Medium
	Participate in CDP	High
	Other carbon reduction measures (such as carbon compensation)	High
Biodiversity and land use	Formulate policies that include provisions for the sustainable management of natural resources and raw materials	High
	Formulate policies to minimize interference in business and operation	High
	Formulate policies on land destruction	High
	Restoration or repair of disturbed areas through continuous operations	High
	Disclosure of projects to protect the natural ecological environment	High
	Biodiversity impact assessment before the project	High
Water pressure	Evidence of the use of alternative water sources	High
	CEO is responsible for water management strategy and performance	High
	Senior Executive or Executive Committee are responsible for water management strategy and performance	High
	CSR or Sustainable Development Committees are responsible for water management strategy and performance	High
Hazardous emissions and wastes	With EMS management system (such as ISO14001)	High
	Evidence of regular environmental impact audit	High
	Evidence of audit at all operating locations	High
	Evidence of annual compliance audit	High
	Disclosure of progress in achieving hazardous gas emission targets	Medium

MSCI Description		2020 Score
Occupational health and safety	With the certification and evidence of occupational health and safety	High
	The strategy and performance of occupational health and safety are managed by the Sustainable Development Committee or the H & S team or the risk leader	High
	H&S policy covers all dimensions	High
	H&S policy applies to contractors	High
	The goal of improving H & S performance	Medium
Labor management	Disclose the percentage of labor force covered by trade union/collective agreement	High
	Evidence of collective agreement	High
	Employment stock ownership plan or employment stock purchase plan	Medium
	Pay policy based on Performance	High
	Non-compensatory benefits, including pension and retirement benefits	High
Community relations	Localization policy	High
	Promise not to work in the reserve	High
	Local community participation	High
	Community impact assessment before entering the community	High
	Local procurement policy	High
	Local employment	High
	Actions to support local community development	High
	Human rights policy	High
	Business ethics policy covering contract security providers	Medium
	Violence and conflict policy	Medium
Corporate behavior	Companies monitor the effectiveness of their human rights policies	High
	Executive body responsible for managing business ethics and corruption issues	High
	Anti-corruption and fraud policy system	High
	Regular business ethics audit	Medium
	Scope of staff ethics training	Medium
Corporate governance	Whistleblower protection policy and its practice	High
	Board of Directors	High
	Remuneration	Medium
	Ownership and Control	High
	Audit	High



## Appendix V : Definitions

Abbreviation	Full Name
China Shenhua or the Company	China Shenhua Energy Company Limited
Group	the Company and its subsidiaries
China Energy	China Energy Investment Corporation Limited
China Energy Group	China Energy and its subsidiaries (excluding the Group)
Shendong Coal	Shendong Coal Group Co., Ltd.
Guohua Power	Guohua Power Branch of the Company
Zhunge'er Energy	Guoneng Zhunge'er Energy Co., Ltd.
Shuohuang Railway	Guoneng Shuohuang Railway Development Co., Ltd.
Xinshuo Railway	Shenhua Xinshuo Railway Co., Ltd.
Sales Group	Guoneng Sales Group Co., Ltd.
Huanghua Harbour Administration	Shenhua Huanghua Harbour Administration Co., Ltd.
Baoshen Railway	Guoneng Baoshen Railway Group Co., Ltd.
Logistics Group	Shenhua Logistics Group Corporation Limited
Baotou Coal Chemical	Shenhua Baotou Coal Chemical Co., Ltd.
Shenbao Energy	Shenhua Baorixile Energy Co., Ltd.
Yu Shen Energy Company	Yulin Shenhua Energy Co., Ltd.
Tianjin Coal Dock	Shenhua Tianjin Coal Dock Co., Ltd.
Zhuhai Harbour Administration	Guoneng Zhuhai Harbour Administration Co., Ltd.
Sichuan Energy	Shenhua Sichuan Energy Co., Ltd.
Fujian Energy	Shenhua Fujian Energy Co., Ltd.
EMM Indonesia	PT. GH EMM INDONESIA
Jawa-7	Shenhua Guohua (Indonesia) Jawa Power Generation Co., Ltd.
Bayannur Energy	Shenhua Bayannur Energy Co., Ltd.

Abbreviation	Full Name
Zhunge'er Power	Power-generating division controlled and operated by Zhunge'er Energy
Taishan Power	Guangdong Guohua Yudean Taishan Power Co., Ltd.
Jinjie Energy	Shaanxi Guohua Jinjie Energy Co., Ltd.
Dingzhou Power	Hebei Guohua Dingzhou Power Generation Co., Ltd.
Beijing Gas-fired Power	Shenhua Guohua (Beijing) Gas-fired Power Co., Ltd.
Shanghai Stock Exchange	Shanghai Stock Exchange
Hong Kong Stock Exchange	the Stock Exchange of Hong Kong Limited
Listing Rules	the Rules Governing the Listing of Stocks on Shanghai Stock Exchange and the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited
Accounting Standards for Business Enterprise	the latest Accounting Standards for Business Enterprises issued by the Ministry of Finance of the People's Republic of China and the related application guidelines, interpretations and other related requirements
International Financial Reporting Standards	International Financial Reporting Standards issued by the International Accounting Standards Committee
Articles of Association	Articles of Association of China Shenhua Energy Company Limited
RMB	Renminbi, unless otherwise specified

## Feedback

China Shenhua values your opinions on the Company's endeavors on environmental, social and governance and this ESG Report. Your opinions and advice will add momentum to the continual improvement of this Report.

Please fax this sheet to +86-10-5813-1814 or email it to [ir@csec.com](mailto:ir@csec.com) after you have answered the following questions.

1. Is there any topic that you are concerned about but is not covered in this Report? If so, please write down the issue(s) that you are concerned about.

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2. Which part(s) of this Report are you most interested in?

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You are welcome to provide personal particulars if you wish:

Name: \_\_\_\_\_  
 Occupation: \_\_\_\_\_ Organization: \_\_\_\_\_  
 Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Email: \_\_\_\_\_ Postal code: \_\_\_\_\_  
 Contact address: \_\_\_\_\_

The Board of Directors, Supervisory Committee and Investor Relations Department  
 China Shenhua Energy Company Limited  
 22 Xibinhe Road, Andingmen Dongcheng District,  
 Beijing, China  
 Postal Code 100011

Affix  
stamp  
here

**China Shenhua Energy Company Limited**  
**The Office of the Board of Directors**

22 Xibinhe Road, Andingmen  
Dongcheng District  
Beijing, China  
Postal code: 100011





2019 ESG REPORT



2018 ESG REPORT



2017 CSR REPORT



2016 CSR REPORT



2015 CSR REPORT



2014 CSR REPORT



Hang Seng Corporate  
Sustainability Index  
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