

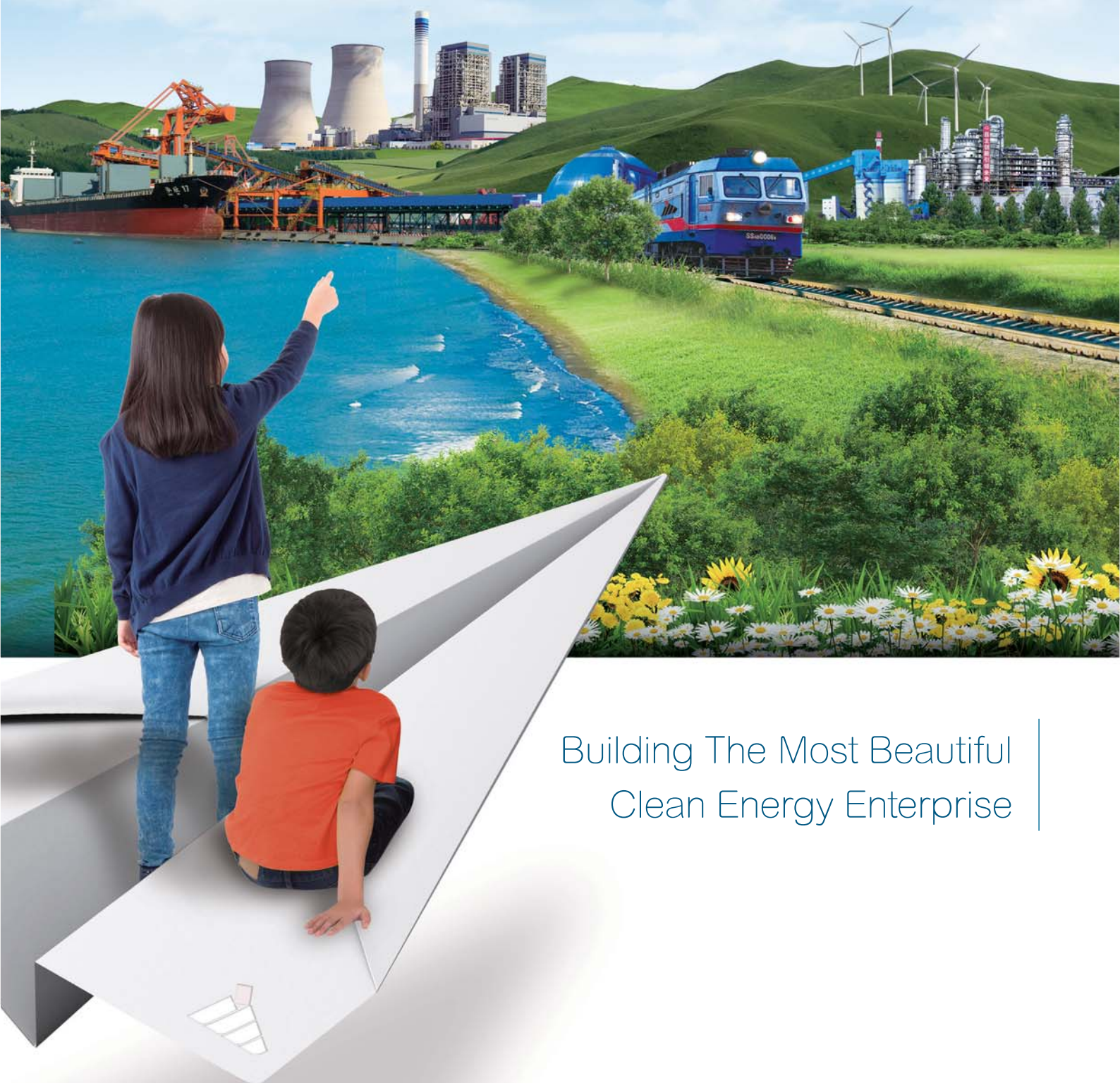


**中国神华能源股份有限公司**  
CHINA SHENHUA ENERGY COMPANY LIMITED

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

Stock Code: 01088

## 2015 CSR REPORT



Building The Most Beautiful  
Clean Energy Enterprise



## Cover Story:

# Building the Most Beautiful Clean Energy Enterprise

China Shenhua focuses on clean and efficient conversion and utilization of coal, operating efficient and green mines, ultra-low emission power plants, modern green logistics chains as well as clean and efficient coal chemical plants. By leveraging synergy of the industrial chain, it aims to achieve green, circular and low-carbon development, thus building the most beautiful clean energy enterprise.

**Coal** – Speeding up the transformation of development mode, adhering to safe, green and efficient mining for greater quality and benefits to promote full life-cycle clean utilization of coal across the industry and the entire industrial chain.

**Power** – Adhering to the principle of high quality development and applying technologies such as ultra-low emission, water efficiency and comprehensive utilization of resources for a cleaner, smarter and more efficient.

**Transportation** – Improving transportation service network and building a modern transportation service industry characterised by supportive logistics network, advanced technologies and equipment as well as green and efficient logistical services, aiming for better value creation from transportation resources.

**Chemical industry** – Building a low-carbon, clean, technically advanced and intrinsically safe modern coal chemical industry with remarkable economic return leveraging the advantages of China Shenhua in resource and technology to become a model for industrial transformation.

In the future, China Shenhua will proactively build a coal-centred clean energy ecosphere. Through clean development and utilization of coal, the company sets out to further improve its value-creating capacity of both the upstream and downstream industrial chain (coal, power, transportation and chemical), and endeavour to be the promoter, executor and forerunner in clean energy supply and provider of clean energy technology solutions and services.

## “1245” Clean Energy Development Strategy of China Shenhua

Becoming a world first-class  
supplier of clean energy

1

Goal

Change in the concept of development  
Change in the mode of development

2

Changes

Safe development  
Transitional development  
Innovative development  
Harmonious development

4

Developments

- Enhancement of the quality and efficiency of development
- Enhancement of the standards of management
  - Enhancement of the capability of internationalization
- Enhancement of the soft power of the enterprise
  - Enhancement of the capability to fulfill social responsibilities

5

Enhancements





## Company Profile

China Shenhua Energy Company Limited is a H shares and A shares listed company controlled by Shenhua Group Corporation Limited ("Shenhua Group"). It is a coal-based integrated energy company with businesses of coal, electric power, railway, port, shipping and coal to chemicals, primarily engaged in production and sale of coal and power, coal transportation through railway, port and shipping as well as coal-to-olefins production.

China Shenhua is the largest listed coal supplier both in China and the world. The Company's coal business has been regarded as a role model in China in terms of scale, efficiency and safety. China Shenhua also owns a sizeable and efficient power generation operation, which complements the Company's coal business for coordinated development. The Company owns and operates a large transport network integrating railway, port and shipping fleet, which creates tremendous synergy and cost advantages for the Company.

### Coal Sales

**370.5**  
million tonnes

### Profit for the Year Attributable to Owners of the Company

**17,649**  
RMB million

### Total Tax Paid

**37,480**  
RMB million

### Total Power Sales

**210.45**  
billion kwh

### Basic Earnings per Share

**0.887**  
RMB / share

### Donations to Society

**209**  
RMB million

### Revenue

**177,069**  
RMB million

### Year-End Dividend (tax inclusive, proposed)

**0.32**  
RMB / share

### Social Contribution per Share

**4.092**  
RMB / share



## About This Report

The Social Responsibility Report for 2015 ("CSR Report") is the ninth social responsibility report issued by China Shenhua Energy Company Limited ("China Shenhua" or the "Company"). This report mainly discloses information on the work of the Company in aspects of corporate governance, operation in good faith, technological innovation, safe production, employees' interests, environmental protection and public welfare, with an aim to enhance understanding and communication with all stakeholders.

The Board and all the Directors of the Company guarantee that the report does not contain any false representation, misleading statement, or major omission, and bear joint and several liabilities for the truthfulness, accuracy and completeness of the content hereof.

### Main Scope of the Report

G4 Materiality Disclosures | G4-17

China Shenhua Energy Company Limited and its subsidiaries, including companies and assets newly acquired or established in 2015. For details of the main scope of the report, please refer to "Equity Structure Diagram".

### Reporting Period

The CSR Report of the Company is issued annually. The reporting period is from 1 January to 31 December 2015.

### Preparation Basis of the Report

"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" and "Guidelines on Preparation of 'Corporate Report on Performance of Social Responsibilities'" issued by the Shanghai Stock Exchange;

"Environmental, Social and Governance Reporting Guide" ("ESG") issued by the Hong Kong Stock Exchange;

Sustainability Reporting Guidelines (G4) issued by Global Reporting Initiative ("GRI"). This report is issued based on G4 core selection, but the reporting and disclosure remain consistent with the social responsibility report in the previous year.

### Principles of Data Processing

G4 Materiality Disclosures | G4-20 | G4-22

The reporting period of data and statement disclosed in this report is consistent with the reporting period of this report. The financial information contained in this report is sourced from the audited financial report of the Company for 2015. Unless otherwise indicated, Renminbi is the denomination currency in this report. The major indicators on safety and environmental protection of the Company are calculated in accordance with China's regulations or industry standards.

The equity interests or assets acquired by the Company from Shenhua Group Corporation Limited, the controlling shareholder of the Company, and its subsidiaries in 2015 are included in the equity interests or assets in this report, according to the principle on consolidation of businesses under common control of the PRC ASBE. The indicative data on social responsibility such as environmental protection, safety, technology and employees' interests throughout 2015 are included in this report. Comparative data of some previous years are restated when giving the data of 2015 whereas data not restated are marked by "\*\*\*". Data on social responsibility of assets acquired from third parties are included in relevant indicators for 2015 in this report based on data from operation period after the delivery.





## **Assurance**

This report has been assured independently by our independent auditor, Deloitte Touche Tohmatsu Certified Public Accountants LLP. The proof, scope, methodology and conclusion of the assurance are included in the Appendices.

## **Language versions and availability of the Report**

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. In case of any other discrepancies, the Simplified Chinese version shall prevail.

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 [1088@csec.com](mailto:1088@csec.com) or dial 86-10-5813- 3355 to request for a printed copy of this report.

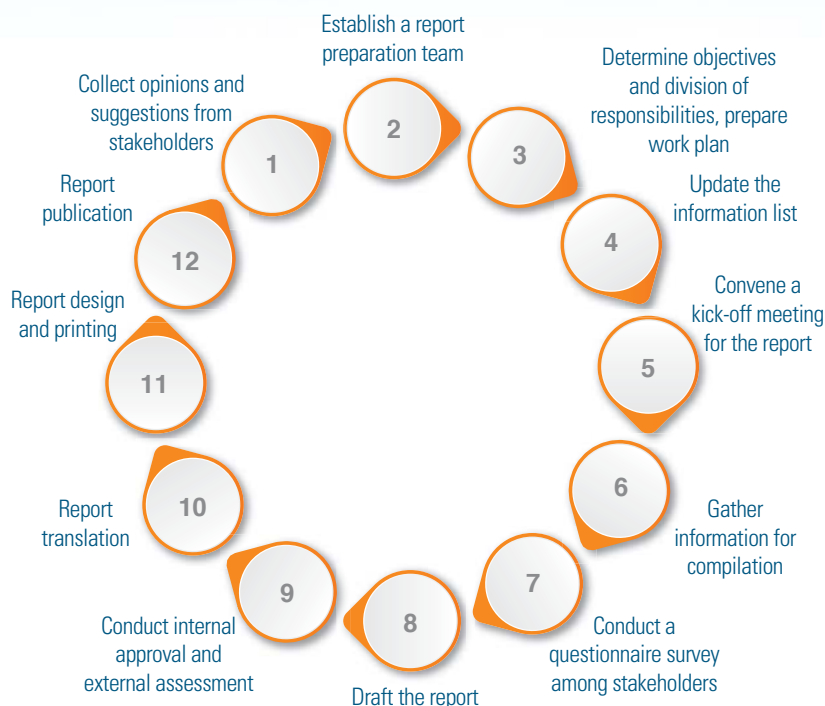
We have taken into consideration the different reading interests and requirements of different stakeholders to the extent possible during the compilation of this report to make it as plain, clear and easy to read as possible. The compilation of this report may not be entirely satisfactory due to various objective constraints. The Company will continue to improve and enhance the report. You are welcome to express your opinions and suggestions by filling in and returning the Feedback Sheet attached with this report.

## Compilation of This Report

By issuing the CSR Report, China Shenhua proactively responds to the expectation and attention of stakeholders while streamlining the operation and management of the Company, so as to avoid economic, social and environmental risks and enhance the Company's management capability. After publication of the CSR Report every year, the Company solicits opinions and suggestions from investors, employees, customers, suppliers and other stakeholders on corporate operation and management as well as report preparation, and adopts those that are reasonable. The replies will be disclosed in the CSR Report of the next year.

### Compiling Procedure

The CSR Management Division under the General Office of China Shenhua has designated personnel in charge of preparing CSR Reports, collecting opinions and suggestions from stakeholders and establishing a report preparation team involving various departments at the end of the year. In 2015, the Company launched a questionnaire survey among stakeholders for the first time to understand in a comprehensive way the issues concerning different stakeholders.

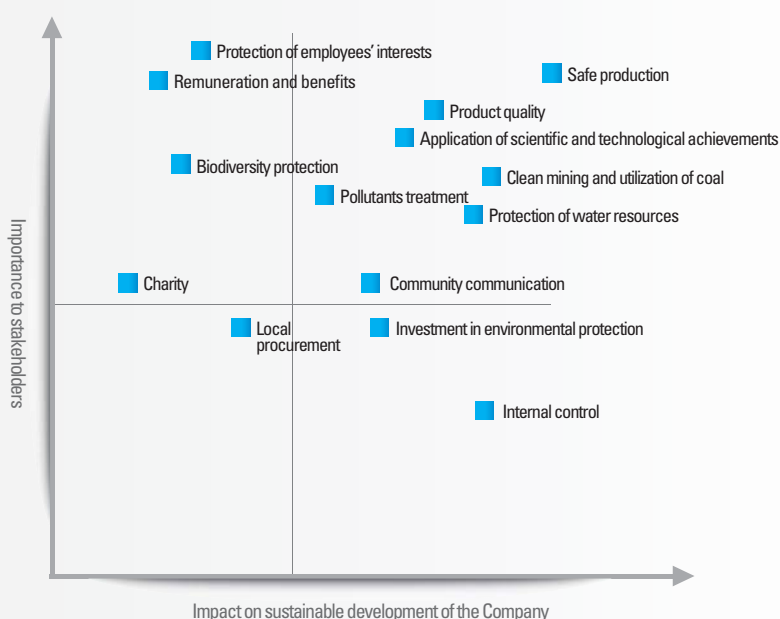


Drafting Procedure of 2015 CSR Report of China Shenhua

### Identification of Substantive Issues

**G4** Materiality Disclosures | **G4-18** | **G4-19** | **G4-23**

The contents disclosed in the CSR Report were determined by China Shenhua based on the relevant standards and documents, policies and regulations on social responsibility and the issues of concern to stakeholders within the year. In 2015, the Company comprehensively analyzed and captured the importance of social responsibility issues to stakeholders based on 201 questionnaires from stakeholders and, through internal discussion, determined the significance of such issues for sustainable development of China Shenhua. On this basis, the Company finalized issues to be disclosed in the report.



Examples of Certain Substantive Social Responsibility Issues Identified



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## Chairman's Statement



**Chairman: Zhang Yuzhuo**



## Dear Friends,

2015 is a challenging year marked by severe oversupply and sluggish demand in the energy sector. China Shenhua, guided by the “1245” clean energy development strategy, took full advantage of its integrated business model, seeking breakthroughs via transformation, driving growth with innovation while safeguarding interests of all stakeholders through win-win cooperation. As a result, the Company registered solid operation performance with revenue and profit standing at RMB177.069 billion and RMB24.959 billion respectively in the year.

Keeping abreast of the market dynamics, the Company brought the advantages of its integrated operation into full play. As coal price continued to slide and demand awfully weak power and transportation businesses have become important support underpinning the Company's stable operation. Based on the operating revenue of each business segment before eliminations upon consolidation under the International Financial Reporting Standards, contribution of the coal, power, transportation and coal chemical segments to the Company were 17.2%, 50.2%, 30.9% and 1.7% respectively in 2015. The Company has participated actively in “the Belt and Road Initiative” of the State, kept reinforcement of the global layout and expanded its business into countries including Australia, Indonesia, the United States and Russia.

The Company enhanced its technological innovation capacity to accelerate the process of transformation. In 2015, China Shenhua launched a series of technological innovation and demonstration projects to bolster implementation of the “1245” clean energy development strategy. A number of key projects were successfully launched including the “Ecological Restoration Technologies and Demonstrations for Large-scale Energy Bases” under the National Scientific and Technological Support Programme, and the “Key Technologies and Applied Research for Digital Mines” under the National 863 Program; the national laboratory for “protection and utilization of water resources in coal mining” was officially approved, which is the first key national laboratory of the Company. Throughout the year, China Shenhua won 24 Provincial or Ministerial Science and Technology Progress Awards.

The Company maintained stable and safe production with one of the best safety records in the world. In 2015, China Shenhua actively pushed forward construction of the intrinsic safety system to thoroughly troubleshoot potential risks. Our safety control and management capabilities have also been enhanced with constantly improving safety awareness among employees. No accident involving three or more people occurred in the year and the target of “zero fatality” was also achieved in four business segments of chemicals, railway, port and shipping. Production safety of China Shenhua remained one of the best in the industry.

We also set up platforms to boost career development of employees. China Shenhua deems talent cultivation as the fundamental guarantee to achieving the corporate target of world-class clean energy supplier. The Company established a three-tier training system with full coverage of the headquarters, secondary companies and grassroots workshops and mines. Thanks to these career development platforms and channels, excellent talents emerge at all levels across the Company.

Remarkable progress made in energy conservation and emission reduction contributes to the protection of clear water and blue sky. China Shenhua built and improved on an online monitoring platform and initiated management over greenhouse gases emission mitigation. By tackling key problems in energy efficiency and implementing major projects of energy conservation and environment protection, the Company managed to achieve better-than-expected reduction in product energy intensity and pollutant emission. The Company vigorously participated in controlling the scattered low-grade coal burning in the area of Beijing, Tianjin and Hebei and slashed investment projects that were not in line with the clean energy development strategy. By the end of 2015, the Company had 35 ultra-low emission coal-fired generation units, leading the industry in environmental protection and emission reduction while creating new highlights in the Company's in clean energy landscape.

The Company made persistent efforts to promote public welfare and harmonious development of local communities. China Shenhua works actively to shoulder social and public responsibilities as a central SOE and integrated itself into the local economy to promote common development of both the Company and local communities. With Shenhua Public Welfare Foundation as the platform, we are committed to public services, rural education and medical and health undertakings, and fulfilled our social responsibility in overseas operation as well. Since its establishment five years ago, the Foundation has donated a total of RMB1.075 billion for poverty alleviation, medical assistance, education, etc., benefiting 7.86 million people in over 2,000 counties across 31 provinces (area, cities).

In 2016, China Shenhua aims to become not only a world-class clean energy supplier, but also a top provider of clean energy technology solutions. Committed to innovative, coordinated, green, open and shared development, the Company will strive to enhance development quality and efficiency, corporate governance, global presence, soft power and the capability to fulfil social responsibilities, contributing to the transformation of a cleaner coal industry in China with better safety and environmental protection.

We sincerely hope all stakeholders will as always continue to care for, understand and support the development of China Shenhua and join hands with us to build a more sustainable future!

張士卓

24 March 2016

# Full Integration of Social Responsibility: Towards a First-Class Company

Increasing the capacity to undertake more social responsibility is one of the main targets of China Shenhua's "1245" clean energy development strategy. By consistently improving the standards of its professional CSR management, China Shenhua endeavours to cultivate CSR awareness in every employee's mind and in every operation, striving to realize full integration of social responsibility with strategic decisions-making, business operation and employee behaviours.







# Full Integration of Social Responsibility: Towards a First-Class Company

## Background of Sustainable Development

In 2015, China's economy stabilized from the downward trend while structural adjustment sped up. Market demands for coal, power and chemical products were extremely weak with coal market in particular suffering from lasting sluggishness. Faced with such a challenging and complex market environment, China Shenhua, aiming to become a world-class supplier of clean energy and provider of energy technology solutions", adapted itself to the new normal of economic growth, rode on development opportunities and faced up to the challenges. By fully leveraging its advantages of integrated operation, the Company continued to improve its management and maintained stable production and operation over the year.

Opportunities	Challenges	Advantages	Disadvantages
<ul style="list-style-type: none"> <li>Adjustments to national energy policies, changes in industrial policies, project approval and regional economic policies, etc;</li> <li>Deepened SOE reform;</li> <li>The Belt and Road Initiative of China;</li> </ul>	<ul style="list-style-type: none"> <li>The coal market outlook is grim;</li> <li>Environmental issues are increasingly alarming. The public require enterprises to conserve energy and reduce emissions, which impose constraints on the development of high-carbon industries;</li> <li>Enterprises are under pressure to ensure safe production;</li> </ul>	<ul style="list-style-type: none"> <li>Unique integrated operation;</li> <li>Talents team with high overall quality;</li> <li>Strong capacity of technology research and development;</li> <li>Strong resilience against risks;</li> </ul>	<ul style="list-style-type: none"> <li>There still is gap as compared with the top international companies.</li> </ul>

## Countermeasures

- Improve delicacy management and stably enhance operating quality;
- Adjust business structure, speed up implementation of "1245" clean energy development strategies and make conventional energy cleaner;
- Reinforce safety management, tighten up control and rectification of potential safety hazards and comprehensively shore up the risk prevention and control system
- Better organize operation of various business segments to mitigate the effect of a sliding coal market on company performance;
- Focus on value creation and strengthen coal and power marketing



## Philosophy in CSR

With “Scientific and harmonious, enterprising and virtuous” as its core values and “powering social development with green energy” as its mission, China Shenhua is committed to exploring a CSR management and practice mechanism with mutual benefits and harmony as the final goal, and encourage all employees to bear in mind the factors of economy, safety, innovation, environment, employees and society, thus forming a CSR promotion model of China Shenhua characteristics and establishing a culture of social responsibility.



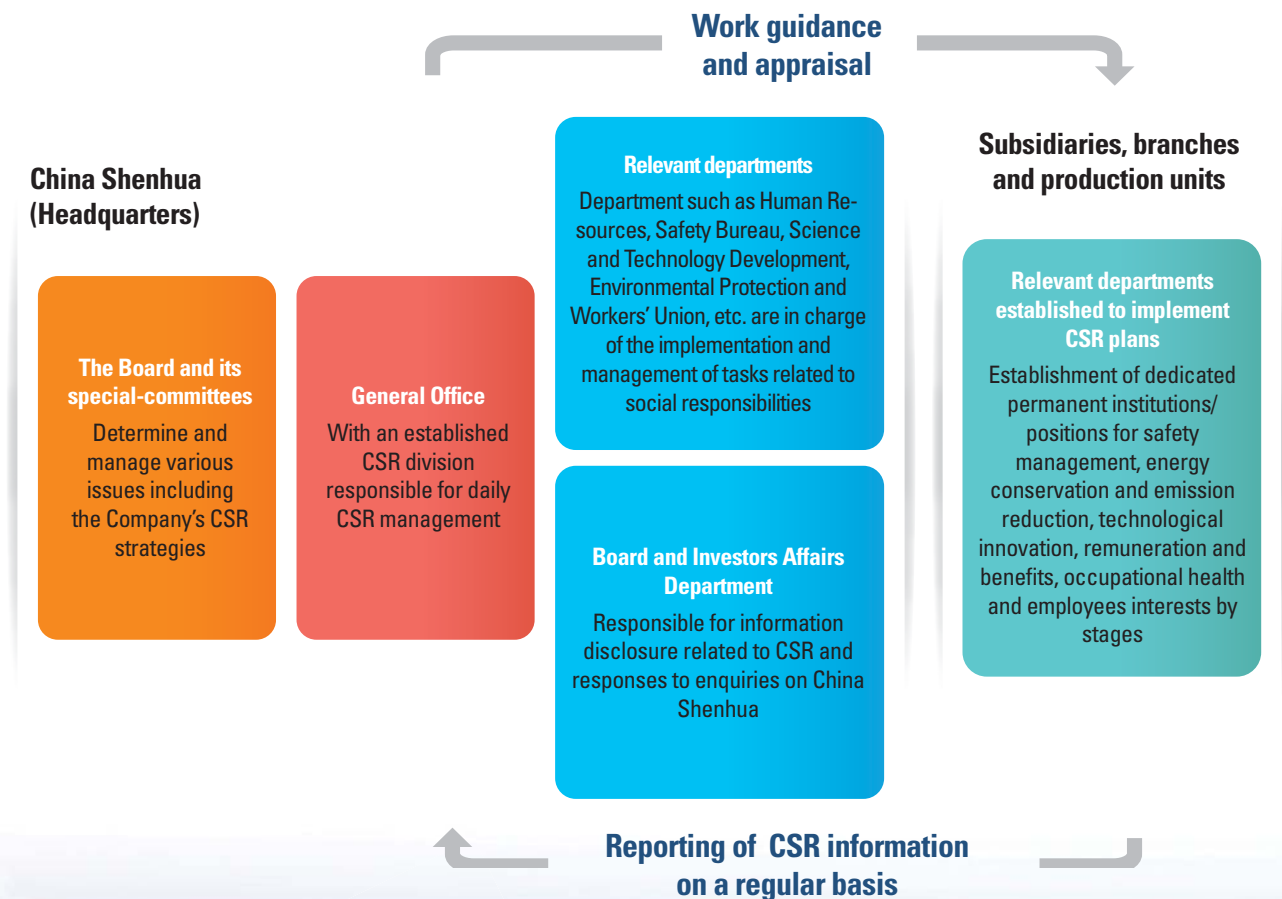
CSR Model of China Shenhua

## CSR Management

In 2015, the Company has continuously consolidated the foundation of CSR management under the general concept of “strengthening strategic leadership, responsibility communication, responsibility integration and corporate branding”.

### Organization

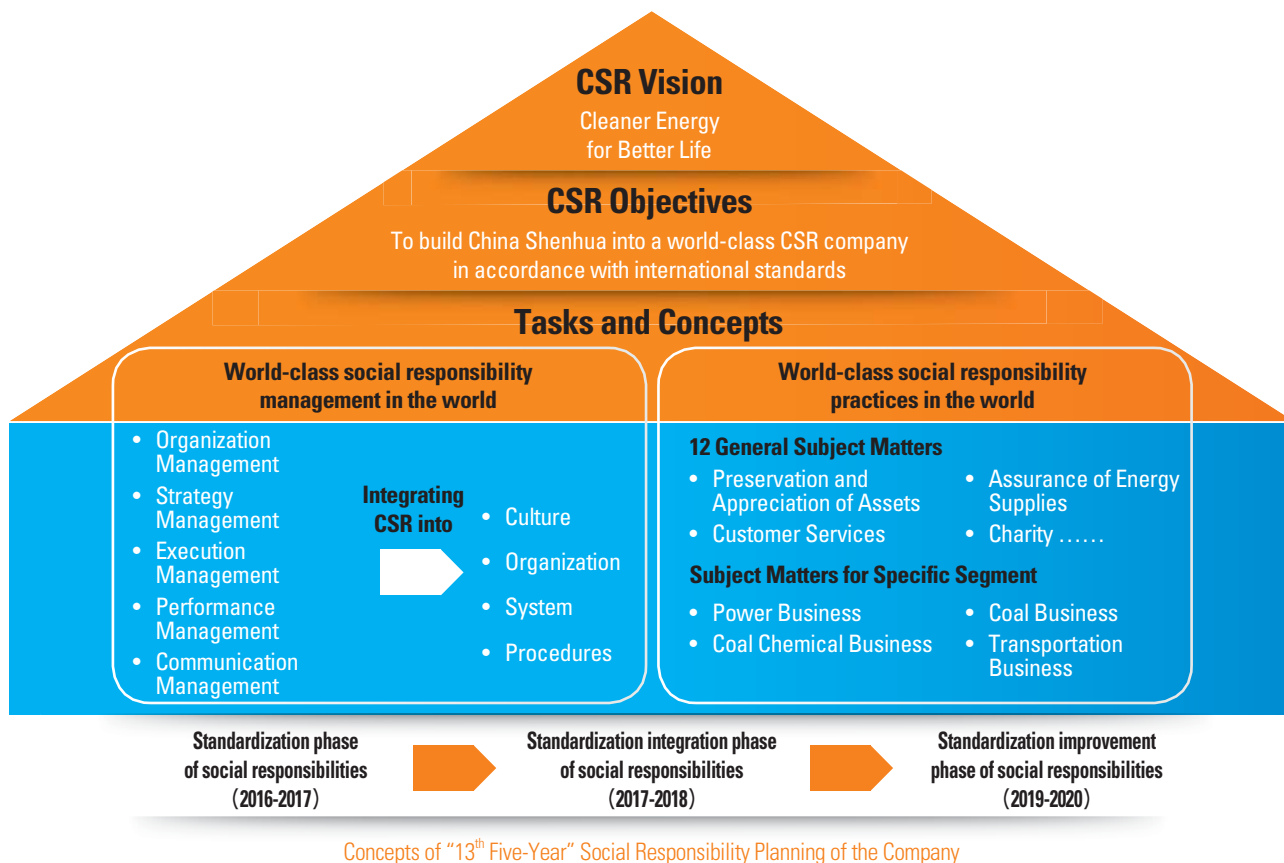
The Company has built up a CSR management system covering various levels and business segments. The Board and its special committees serve as the decision-making body with respect to the Company’s CSR strategies with a vice president in charge of implementation. The general office is the responsible department with CSR management division there under taking up daily operation to ensure systematic implementation of CSR related activities. All subsidiaries (branches) and production units have designated CSR management bodies and personnel to implement various CSR tasks.



CSR Organizational System of the Company

## Planning

According to requirements of “the 13<sup>th</sup> Five-Year Plan” of China and the Company’s “1245” clean energy development strategy, China Shenhua has complied the “13<sup>th</sup> Five-Year” CSR Planning focusing on sustainable development, and made systematic plans for the CSR fulfilment roadmap for the next five years, so as to comprehensively improve its CSR capacity.



## Capacity Building

The Company has actively conducted CSR training. Through its website, CSR reports, special meetings etc., it promotes its CSR philosophy to enhance employees’ CSR consciousness and capability. In 2015, employees of the Company participated in the “first ‘Responsibility Sharing – Chief Responsibility Officer Project in China’ public training programme” organized by the Chinese Academy of Social Sciences (CASS). Four management staff members were awarded with the “Chief Responsibility Officer” certificates. In addition, by participating in the formulation of industry standards on social responsibilities, the Company has understood and learnt the advanced experience from industry peers. In 2015, the Company, as one of the compilers, participated in the drafting of the Standards of Preparation and Electronic Disclosure of CSR Report of Listed Companies, organized by China Association for Public Companies.



Employees Participating in the First session of the “Responsibility Sharing - Chief Responsibility Officer Planning in China” Public Training Organized by the CASS



## Communication with Stakeholders

The Company has actively conducted CSR communication activities. It communicates with all stakeholders by publishing CSR report, participating in charity project fairs in China, establishing CSR Column and participating in various CSR communication activities both home and abroad. In 2015, the Company continued to encourage its subsidiaries to independently prepare and issue CSR reports. Second-tier companies such as Shendong Coal Group, Shuohuang Railway Company, Shenshuo Railway Branch and Shenbao Energy Company, have independently prepared and issued CSR reports while Shenhua Australia has issued its own CSR report based on its local operations.



Visit by the Team of "Responsibility Sharing – Journey Through China" Campaign organized by CASS to Shendong Mines



Symposium on Social Responsibility with Owen Hasler (Mayor of Gunnedah Shire, Australia) and his companions

The Company focuses on and actively responds to expectations and appeals from stakeholders in daily production and operations. We take into account the needs of stakeholders throughout our production and operations to form a community of shared interests where the Company and the stakeholders progress and develop together. **G4 Materiality Disclosures:** [G4-24](#) [G4-25](#) [G4-26](#) [G4-27](#)

Stakeholders	Expectations and needs	Communication methods	Feedback by the Company
<b>Investors</b>	High profitability, reasonable dividend policy, increasing market value	General meeting of shareholders, information disclosures, investor hotline, investor meetings, roadshows, reverse roadshows and company websites	Stepping up efforts in information disclosure and improving profitability, modifying operations with views from the market
<b>Customers</b>	Fulfilment of contracts, quality assurance, service guarantee, mutual benefits and win-win cooperation	Negotiation of contracts and agreement, sales and order-placement meetings, customer services, customized product development and customer satisfaction surveys	Provision of quality energy products and services in an effective, safe and green manner, strictly keeping commercial secrets, customizing products
<b>Staff</b>	Fair wages and welfare, employee health and safety protection, more opportunities for promotion and development, caring for staff	Labour contracts, the employee representative committee, employers' satisfaction survey, labour unions and the office for petition	Improving the wage system and staff protection system, increasing investment in health and safety protection of workers, bring greater happiness to employees
<b>Suppliers</b>	Long-term cooperation, abiding by commitments, open and fair procurement, common development, mutual benefits and win-win cooperation	Negotiations of contracts and agreements, product and services, joint development	Keeping commercial principles and processes open and transparent, standardized management and separation of management from operation, good fulfilment of contracts and agreements, green and responsible procurement
<b>Community</b>	Participation in community development, contribution to public welfare, increase in employment security and conservation of local ecology and environment	Cooperation and co-development, public welfare activities, publicity activities and employment security	Contribution to public welfare, commitment to stimulating local employment, boosting local economic growth
<b>Regulatory authorities</b>	Stringent compliance with laws and regulations, energy security, compliance in operation, tax payment in accordance with laws, environmental protection, energy efficiency and emission reduction, jobs creation, technological innovation	Participating in the formulation of regulations and policies, attending relevant meetings, submitting work reports and information	Faster economic transformation, stringent compliance with laws and regulations, active communication with relevant regulatory authorities
<b>Creditors</b>	High solvency, due repayment of debts and interest, mutual trust and cooperation	Contracts and agreements	Repayment of debts when due, better communication and liaison
<b>Industrial peers</b>	Fair competition, harmonious development, jointly carrying out research on safe production, environmental protection and low carbon operation, and jointly tackling the sluggish market and challenges	Industrial associations, seminars and conference	Undertaking key scientific research projects of the industry, promoting experience in safe production, maximizing value of the industrial chain, sharing technological achievement and techniques and refraining from vicious competition in the industry

## Social Contribution per Share

In 2015, the social contribution per share of China Shenhua stood at RMB4.016 per share (Accounting Standard for Business Enterprises) and RMB4.092 per Share (International Financial Reporting Standards) respectively.

## CSR Honours

China Shenhua received the “2014 China Securities Market Information Disclosure Award for Excellence in Transparency” in “2015 China Securities Market Information Disclosure Law Forum and the Award Ceremony for Excellence in Transparency” hosted by China Securities Law Research Institute.

China Shenhua received the “Top 100 Chinese Listed Companies in 2015 with the Most Capital Brand Premium” award by China Center for Market Value Management in its List of Top 100 Chinese Listed Companies in 2015 with the Most Capital Brand Premium.

China Shenhua received the “Star of the Silk Road” award in the “New Silk Road, New Mission – The Belt and Road Capital Forum” hosted by Economic Observer.

The 2014 CSR Report of China Shenhua received the Silver Award of the 26th International Galaxy Awards conferred by American international communications appraisers.

China Shenhua was awarded Excellent Team of Information Disclosure (Class A) by the SSE.

China Shenhua was rated AA- , Aa3 and A+ by the three most authoritative international credit rating agencies, namely Standard & Poor’s, Moody’s and Fitch Ratings, respectively, which is the same with China’s sovereign rating assigned by the three agencies, thus making China Shenhua one of the few enterprises who have the same rating with China’s sovereign rating

<sup>Note</sup> Social contribution value per share is calculated on the basis of the Company’s basic earnings per share created for shareholders, adding the value of tax paid to the country, salary paid to its employee, interests on borrowings paid to creditors such as banks and value created for other stakeholders such as external donations, and deducting other social costs due to environmental pollution and other factors. Other social costs due to environmental pollution and other factors include the taxes and fees payable and funds provided in accordance with the relevant requirements of the State, including pollutant discharge fee, coal sustainable development fund, compensation for water and soil losses, compensation for land acquisition, security deposits for mine environment control and restoration and provision of reclamation expenses.



# High Quality and Efficiency for Stronger and Healthier Growth

Adhering to the guidance of the "1245" clean energy development strategy, industry layout and deepens cooperation across the industry chain through the proactive transformation of development vision and models, constantly improves the efficiency of integrated operations and strives to realize steady and efficient operations.







## High Quality and Efficiency for Stronger and Healthier Growth

### Annual focuses of stakeholders

- Credible and compliant business dealings, combating corruption and upholding integrity; building up the development of an upright and incorruptable enterprise
- Realization of stable and effective operation by adopting effective measures to alleviate the continuous downward pressure from the coal market
- Flexible supply of coal products with prices paralleling the prevailing market prices and various terms of payment
- Regular disclosure of corporate information in a timely manner; maintaining sustainable and stable dividend distribution
- Strengthening two-way communication; improving transparency in procurement; further deepening of cooperation

### Our efforts

- Consolidation of the prevention and control mechanism against corruption; strengthening of risk control; credible and compliant operation
- Proactive adaptation to market trends; stronger integrated operation and improved industrial chain
- Materialization of the “1245” clean energy development strategy
- Guarantee of a stable supply of coal and power; customized coal-blending plans to meet the requirements of different customers; active negotiation with clients to improve the methods of payment
- Timely disclosure of information, commitment to a continuous dividend distribution policy to protect investors’ interests
- Frequent visits to suppliers, construction of e-commerce platform in response to their feedback

### Performance in 2015

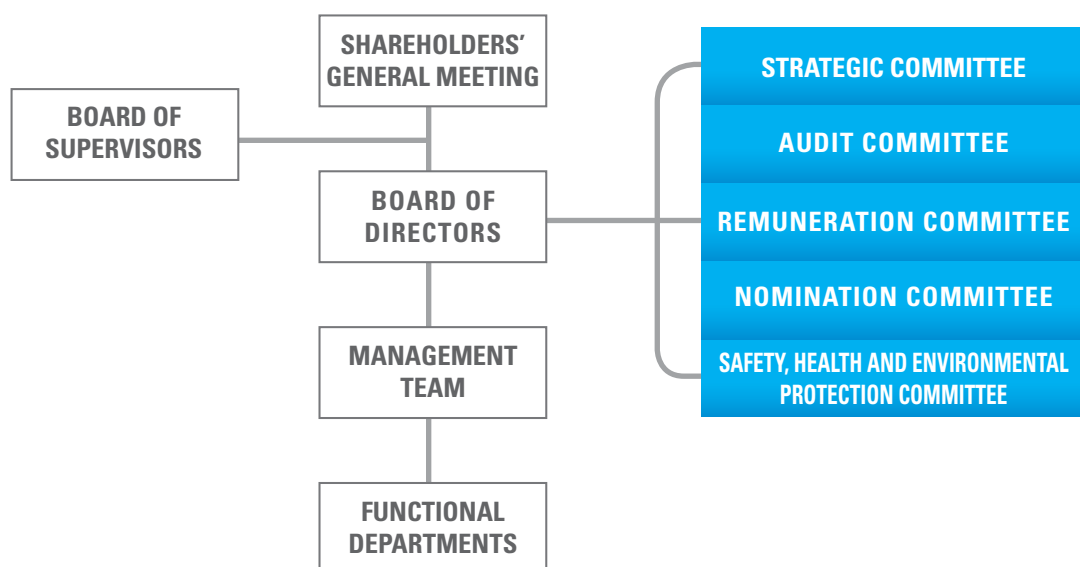
- Total profit: RMB24.959 billion
- Conducted 2,421 sessions of integrity education seminar with an attendance of 107,524 persons
- Had issued 233 information disclosure documents for the year and had over 700 contacts with analysis and fund managers
- Final dividend distributed as proposed by the Board was RMB0.32 (tax inclusive)
- Invited domestic professionals and experts from relevant industries to conduct 15 technical interviews with 31 clients from industries of electricity, metallurgy and chemicals, etc.
- 103 suppliers of materials were evaluated for the year

### Plans for 2016

- Explore a smart energy system that can integrate fossil energy with non-fossil energy
- Strengthen the anti-corruption mechanism; continue to advance credible and compliant operation
- Strictly control the costs, strengthen the management and control of expenditure and deepen refined management
- Put clients’ demand first; guarantee the quality of coal and the stable supply of electricity
- Carry forward green purchase; build up a more transparent purchase mechanism; realize mutual benefits with our suppliers

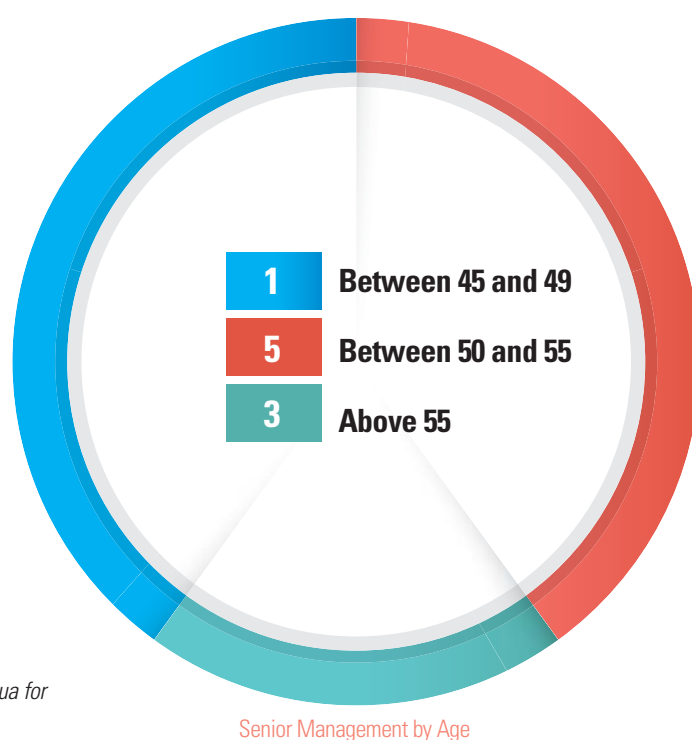
## Corporate Governance

Pursuant to requirements of the Company Law, the Securities Law and other laws and regulations, China Shenhua has established a comprehensive corporate governance structure with specifically prescribed rules of meetings and work procedures, defining clear scopes of authority and responsibility for the shareholders' general meeting, the Board, the Supervisory Committee and the management team respectively, making sure that each function is duly performed to counterbalance and coordinate in an effective manner for the company's independent, efficient and transparent operation.



As of the end of 2015, the third session of the Board of Directors comprised 7 directors, including 1 female director. In 2015, the Board held 9 meetings, reviewing more than 47 proposals on annual report, remuneration of directors and supervisors, dividend distribution and other matters and debriefing 3 reports. The Group convened 1 annual general meeting, 1A-share class meeting and 1 H-share class meeting.

In 2015, the Company issued the Brokerage Management Measures for Equity Transfer of China Shenhua Energy Company Limited and other regulations to standardize equity transfer of the Company and further secure a law-based, compliant and efficient governance. A link-up and feedback mechanism between the master data platform (MDM) and data application platforms has been established to carry out dynamic supervisions on various ownership units so as to reinforce their governance and efficiency.



Please refer to Sections VIII and IX of the 2015 Annual Report of China Shenhua for detailed information with respect to corporate governance of the Company.



## Board of Directors



**ZHANG Yuzhuo**

Chairman, Executive director



**LING Wen**

Vice Chairman, Executive director



**HAN Jianguo**

Executive director, President



**FAN Hsu Lai Tai**

Independent non-executive director



**GONG Huazhang**

Independent non-executive director



**Guo Peizhang**

Independent non-executive director



**CHEN Hongsheng**

Non-executive director

## Supervisors



**ZHAI Richeng**

Chairman of the Supervisory Committee



**TANG Ning**

Supervisor



**SHEN Lin**

Employee representative Supervisor

## Senior Management



**HAN Jianguo**  
Executive director, President



**LI Dong**  
Senior vice president



**WANG Jinli**  
Senior vice president



**WU Xiuzhang**  
Vice president



**WANG Yongcheng**  
Vice president



**ZHANG Zifei**  
Vice president



**WANG Shumin**  
Vice president



**HUANG Qing**  
Secretary to the Board



**ZHANG Kehui**  
Chief Financial Officer

## Compliance in Operation

In compliance with the national laws and regulations and the Listing Rules, China Shenhua continued to update its own policies and management towards its operation and control so as to enhance its compliance for sustainable development.

### Compliance with the Law

The Company maintains that law-based corporate governance is an effective way in standardizing operation and management, improving core competitiveness and building a world first-class enterprise. In 2015, according to the action plan of building a law-compliant Shenhua, the Company identified specific tasks and reinforced compliant operation in 7 key business segments, including finance, property right, engineering, procurement, sales, bid invitation and tendering and offshore business.

The Company creates an environment of law compliance, popularizes legal knowledge at the headquarters and in all subsidiaries and branches, and advances legal affairs and communications with legal personnel via the legal-affair information management system. In 2015, the legal information system already had 10 major modules (including contract management, authorization management, dispute management and trademark management), which effectively promotes the sharing of legal information within the Company and reduces the risks caused by poor communication of legal information.

#### One Hundred days of Law Popularization

Legal consults were invited to deliver a special tour lectures on hot and tricky issues related to laws and regulations of bid invitation and tendering, environmental protection laws and public litigation of environment protection. A total of 3 lectures were given throughout the year, benefiting approximately 2,000 employees at the headquarters and the second-tier enterprises.

#### "12.4" Legal Lectures

We held legal lectures on 4 December, the Constitution Day and the day of law enforcement publicity by way of on-site lecturing and live telecast, raising the legal awareness of all employees (including employees from subsidiaries and branches).

#### Advanced Training Courses for Senior Executives

Two advanced training courses was held for subsidiary senior executives to strengthen the legal mentality and awareness so their lawful duties are well performed in the decision-making process.

#### Professional Training Courses for Legal Personnel

We carried out two professional training courses for our legal personnel by inviting external experts to teach civil litigation laws, compliance management and other courses to improve their professional capacity.

### Law Popularization Activities Held by the Company in 2015

### Internal Control and Risk Management

The Company has established a bullet-proof risk management and control system of "regional supervision and hierarchical accountability", with the internal audit division at the headquarters, regional audit centers and risk management departments of different subsidiaries and branches performing their respective duties and collaborating with each other under the leadership of the Board and its Audit Committee. Centering on its core businesses and administrative requirements, the Company has effectively controlled and avoided potential risks through its pre-warning criteria and quarterly monitoring and reporting system.



The Company has established an internal audit information system covering modules of internal audit, internal control assessment and risk management to effectively enhance the informatized management and control of risks in respect of production safety, marketing and sales, cost control, environmental protection and major risks. In 2015, the Company's internal risk management and control has covered all its business segments with 100% coverage for both risk management and internal control assessment. The internal control system of the Company operated at a premium in 2015, with no material flaw identified in connection with its design or execution.

Please refer to Section IX of 2015 annual report of China Shenhua for the internal control of the Company and the third party audit report.

Please refer to page 25 of the 2013 Social Responsibility Report of China Shenhua for detailed information with respect to risk management and internal control operation mechanism.

### Party's Culture Building and Anti-corruption Efforts

The Company has worked in line with the principle of planning, deployment, implementation, inspection and evaluation with regard to building up the Party's culture and anti-corruption efforts along with its production and operation. Through the coordination of supervisory functions such as overseeing, inspection, audit, petitioning and deploying supervisory committees, it has kept promoting the construction of the monitoring system, strengthening the accountability and awareness of supervisory duties in all its employees, making greater efforts to inspect corruption constantly rectifying "the four types of detrimental practice"<sup>Note 1</sup>, devoting vigorous efforts to supervision and accountability, thereby accomplishing significant results in terms of building up the Party's culture and anti-corruption.

### Improve Systematic Regulation

- Promoted the implementation of "two responsibilities"<sup>Note 2</sup>, and obtained considerable progress in cultivating anti-corruption by sparing no effort
- Improved the leadership structure and work in relation to anti-corruption, setting up an anti-corruption coordination team and establishing a joint conference mechanism
- Relevant systematic requirements were extended to our suppliers and business partners. Commercial bribery and corruption were expressly prohibited by agreements including the Agreement on Business Ethics
- Revised the supervision measures of printing, bidding and procurement, and adhered to strict bidding and tendering discipline



### Strengthen Anti-corruption Supervision

- Seized the inspection teams of the central government for feedbacks, reform and implementation, "sharp sword effect" of internal inspection is effectively leveraged
- stringently investigated and penalized the breach of eight spiritual issues stipulated by the central government and the consolidation and expansion was obtained by rectifying "the four types of detrimental practice"
- Comprehensively enhanced the discipline and investigation work, and consistently maintained a high tension situation for penalizing embezzlement
- Intensified the supervision and inspection of sales of coal, construction management, external investment, financial management and other key areas to prevent material corruption risks



### Improve Institutional Structure

- A supervisory department was set up at the headquarters specially responsible for the organization, coordination and administration of anti-corruption and anti-embezzlement efforts of the Company
- Three disciplinary inspection and supervision centers were founded in Beijing, Ordos and Yinchuan



### Smooth Supervision Channels

- Opened up irregularity reporting channels by making public the reporting hotline, email and postal address to allow the public exercise oversight
- Encouraged internal supervision by employees through various channels
- All information of the informers was kept in strict confidence. During the year there was no retaliation to informers as a consequence of their report of corruption



### Integrity Education

- Anti-corruption conferences were held on a regular basis
- Integrity education was put into the overall deployment and annual arrangement of the Company's education plan; regular education was held through lectures, seminars and distribution of learning materials



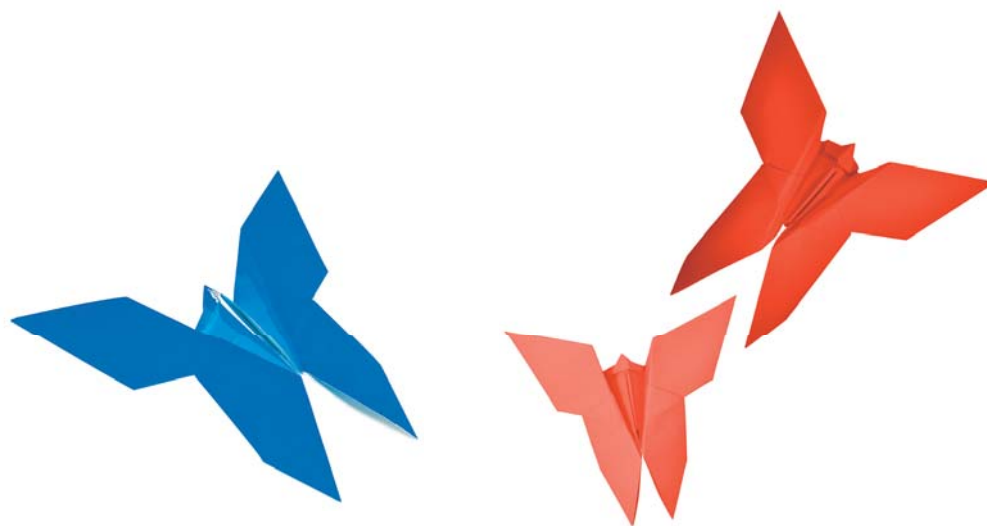
Long-term Mechanism of Party's Culture Building and Anti-corruption Efforts

<sup>Note 1</sup> "The four types of detrimental practice" refer to formalism, bureaucracy, hedonism and extravagance.

<sup>Note 2</sup> "Two responsibilities" refer to implementation of the accountability system for the promotion of integrity as the party conduct, in which Party committee takes the main responsibilities and discipline committee takes supervisory responsibilities.

*Party's Culture Building and Anti-corruption Efforts of the Company in 2015*

Party's Culture Building and Anti-corruption Efforts	2014	2015
Sessions for Integrity education	1,239	2,421
Employees participating in integrity education activities	67,851	107,524
Reports accepted	204	198
Reports verified	125	261
Persons subject to have received disciplinary or administrative penalties	41	47
Losses recovered from anti-bribery, fraud and embezzlement (RMB10,000)	44.62	91.21



## Efficient Management

Confronted with a severe and complex market situation, China Shenhua has strived to dynamically optimize its resources allocation between various business segments, subsidiaries and branches, with the clean energy development strategy at the core, based on the integrated operation of its coal mining, power, transportation and coal chemical businesses. With low-cost operation and refined management, the Company managed to maximize its general value.

### Integrated Operations

The company has strived to address both the insufficient demand and falling prices in the energy industry by business/management innovation and full communication of the market information. Guided by an integrated operation on a safe and stable basis, all business sectors have further strengthened their collaboration and coordination. Among which, the coal sector adopted an market-oriented approach to optimize product portfolios so as to increase the added value. The power sector maintained its stable operation by means of fully utilizing the existing capacity and tapping the potential. The rail, port and shipping sectors well organized transportation plan to maximize their capacity through upstream and downstream matching, reverse transportation and two-way transportation. The coal-to-chemical sector improved its production arrangement to secure a long-term full operation on a safe, stable and efficient basis. In terms of the consolidated financial booking offsetting each sector's previous business revenue in accordance with the International Financial Reporting Standards, the ratio of the sectors including coal, power, transportation and coal-to-chemical in 2015 was 17.2%, 50.2%, 30.9% and 1.7% respectively, showing a continued adaptation to the market, demonstrating an increasingly sustained adaptation to each of the markets.

### Business Performance in 2015

Major operating indicators	2014 (restated)	2015
<b>Commercial Coal Production (million tonnes)</b>	306.6	280.9
<b>Coal Sales (million tonnes)</b>	451.1	370.5
<b>Total Electricity Sales (billion kwh)</b>	218.42	210.45
<b>Sales of Polyethylene (thousand tonnes)</b>	265.5	319.2
<b>Sales of Polypropylene (thousand tonnes)</b>	268.1	312.9
<b>Freight by Self-Owned Railway (billion tonne-kilometres)</b>	223.8	200.1
<b>Seaborne Coal at Self-Owned Ports (million tonnes)</b>	174.0	158.5
<b>Shipping Freight (billion tonne-nautical miles)</b>	72.2	64.1

Please refer to Section V of the 2015 Annual Report of China Shenhua for detailed information on integrated operation and business segments.



## IT-Based Management

The Company completed the “SH217” Information Project in 2015, further expanding the system functions and progress its application in all subsidiaries and branches on the basis of stable system working. In parallel, the company also progressed its construction of “a digital Shenhua” featured by “digital Mining”, explored its application of the IT management modules in the coal and power sectors, thus further promoting an integrated high efficient operation backed by the digital management.

### Case Study: Digital Mine – Improving Management Efficiency with Information Technology

The Digital Mine project is a microcosm of China Shenhua’s efforts to promote IT-based management. Leveraging the integrated platform with self-developed production and management systems, the Company integrated scattered independent coal mine systems into one platform, and combined them with the systems at the levels of management and coal mine control, to realize information sharing, functional linkage and coordinated operation, promote industrial development and structural adjustment, and realize a safe, efficient, intelligent and green coal mine operating. The demonstration project has been completed in Shendong hundred-million tonne class coal mines, the Guohua Jinjie Coal Mine, SHCCIG Hongliulin and Huangling No.1 Coal Mine, the average number of operators per shift at fully mechanized coalface decreased from 15 to 3, number of workers under the shaft decreased by 20%, the overall working efficiency increased by 16%.



## Overseas Business Development

The Company responds actively to the national “The Belt and Road” Initiative, making great efforts to promote existing overseas projects. Meanwhile, the Company took active measures to develop clean energy (such as wind power) and gain hold in the global market.

By the end of 2015, the Company had overseas projects in Australia, Indonesia, the United States, Russia, etc., covering coal, railway, shale gas, thermal power, wind power and other industries, among which: the shale gas project in the USA saw 12 new wells put into production in 2015, increasing the number of production wells to 17 and the Company realized stable operation and reserved relevant experience and talents; the Watermark Coal Project in Australia saw its environmental impact assessment completed; the Company won the bids for Sumsel-1 Coal-fired Steam Power Plant 2×350 MW IPP project and Jawa-7 2×1,000MW Coal-Fired Independent Power Plant project in Indonesia. Other overseas projects are progressing smoothly and steadily.

The Company strengthened overseas risk control and prevention, enhanced its risk management and “pre-assessment, conducted research on the “13<sup>th</sup> Five-Year” International Operation Special Planning and National Guidelines for Enterprises of Overseas Legal Risk Prevention. The Company explored setting-up of a regular supervision mechanism for overseas projects whereby a global strategy is well implemented.

### Case Study: “Going Overseas” Strategy Supports Indonesian Power Supply

In December 2015, China Shenhua won the bid of Jawa-7 2×1,000MW Coal-Fired Independent Power Plant project in Indonesia, it is the second independent project following Sumsel-1 Coal-fired Steam Power Plant 2×350 MW IPP project in Indonesia in 2015. Jawa-7 plans to build two million kw ultra-supercritical coal-fired steam generators. They will be the largest generators in Indonesia and also China Shenhua’s first 1 million kw grade generators overseas. Upon completion, the project will help ease electricity shortage in Indonesia and promoting local economic growth.



## Cooperation for Mutual Benefits **G4 Materiality Disclosures: G4-21**

Safeguarding the legitimate rights and interests of investors is a priority for China Shenhua. The Company cherishes good relationship with both clients and suppliers to work for a win-win through capital operation, quality products and service and transparent procurement policy.

### We Care About Our Investors

The Company makes full disclosure in accordance with regulatory requirements to serve as a trustworthy partner by means of enhancing the communication with the current and potential investors coupled with a relatively stable cash dividend distribution policy.

- Information Disclosure

In 2015, China Shenhua placed considerable emphasis on the information disclosure tasks of operating expectation management. On one hand, China Shenhua was committed to the disclosure model of “annual operational targets + monthly operating data” and provided investors with accurate operating data in a timely manner. On the other, it made proactive efforts to disclose how the Company responded to the downward trend and adverse scenario in the coal and power generation market, adopted the practice of “early alert + results estimates” and embarked on the expectation management of results in various aspects, thereby offering valid investment decision-making information. In 2015, China Shenhua had issued 233 information disclosure documents.

- Communication with Investors

China Shenhua constantly engaged with the investors to address their concerns and conduct deepened and candid dialogues via diverse channels including performance announcement conferences, road shows, shareholders meetings, the establishment of shareholders database and dynamic feedback, to understand investor’s demand accurately. In 2015, the Company strengthened the direct communication between management and shareholders with a total of 700 meetings with analysts and fund managers, creating a virtuous channel for two-way communication. The Company successfully held two online communication activities with good interaction with investors on SSE’s “e-interaction platform”.

### Main Channels for Company-Investors Interaction in 2015

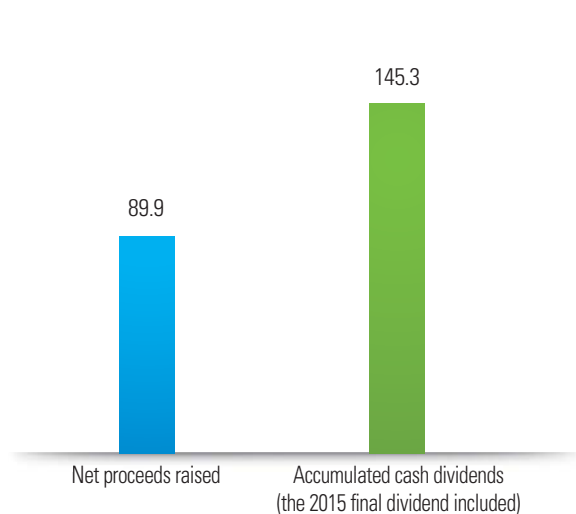
Forms	Times
Performance release	2
Road show	2
Online exchange	2
Reverse roadshow	1
Participation in investors’ forums	5



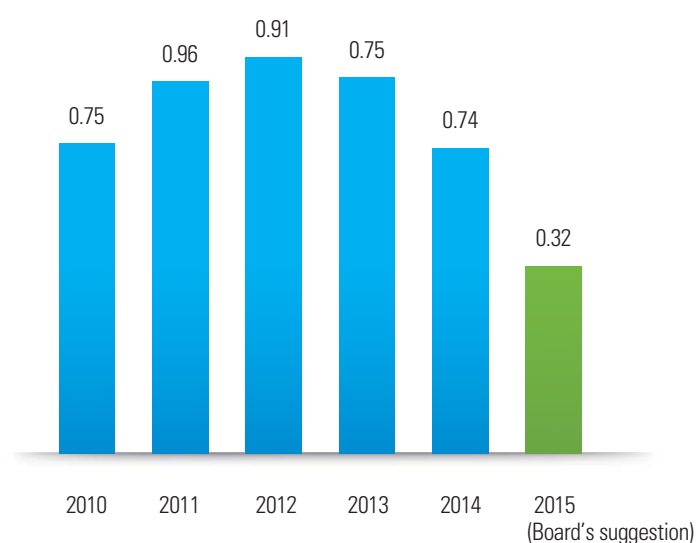
The Reverse Roadshow Held in Sanhe Power Plant

• Returns for Investors **G4 Materiality Disclosures: G4-21**

The Company is committed to improving profitability and safeguarding investors' interests through its sound capability. The Company adheres to a stable cash dividend distribution policy in 2015 and distributed a year-end dividend of RMB0.32 per share (inclusive of tax) on the Board's suggestion, representing 39.4% of its basic earnings per share under the Accounting Standards for Business Enterprises, with a total of approximately RMB6.365 billion (inclusive of tax). The Company's total cash dividends from 2005 to 2015 amounted to RMB145.3 billion.



Total Cash Dividends of China Shenhua (RMB billion)



Distribution of Final Dividends by China Shenhua (RMB/share)



## We Provide Quality Products and Services

China Shenhua eagerly defends the legitimate rights and interests of customers. We provide customers with quality products and services for mutual benefits and win-win.

- Quality Products

Thermal coal, electricity and coal to chemicals products are the main products of the Company. We adhere to the principle of “seeking survival, growth and profits from quality”, and actively standardize production to ensure a steady supply of coal, electricity and coal chemical products. In 2015, total sales revenue contributed by the Company’s top five customers was RMB45,878 million, accounting for 25.9% of the total revenue.

### Coal Products

To safeguard stable coal quality, the Company adopted stringent industry, national and international standards on coal products. We prepared the *Measures On Coal Quality Control* (《煤炭品質管制辦法》), and set up coal quality control agencies. With channels like the coal quality information system, each step of the Company’s operation, such as loading at the mining area, railway transport and port operations is now able to instantly communicate, ensuring that any coal quality problem, if there were to be any, will be solved immediately. In 2015, the Company did not engage in legal disputes about coal quality.

In 2015, the Company actively promoted clean coal products featuring low sulphur, low ash and high calorific value. The Company entered into contracts with parties in Tianjin, Cangzhou and Baoding in Hebei province for the provision of clean coal, thus playing an active role in promoting clean growth across the country, especially in north China.

### Power Products

The Company adheres to a comprehensive development strategy, which geographically involves with pit-mouths, ports, intersections, main power transmission routes, economically developed loading hubs and coastal provinces where coal-fired power generators with high efficiency, high parameter, high volume and low emission are prioritized for construction. In doing so, power stability and clean energy supply can be achieved thanks to their optimum installed capacity arrangements and reasonable power plans.

### Coal Chemical Products

The Company’s principal products were stably produced while the safe and stable operation of equipment was safeguarded. The Company comprehensively expended the sales channel to provide a reliable and stable supply of coal chemical product. Our polyethylene products have a wide molecular weight distribution, which are the preferred special materials for film and sheet. Our polypropylene products have even performance and reliable quality, which can satisfy domestic needs for general polypropylene materials and all kinds of special materials. In 2015, pass rates for our polyethylene and polypropylene products both were higher than 99%.

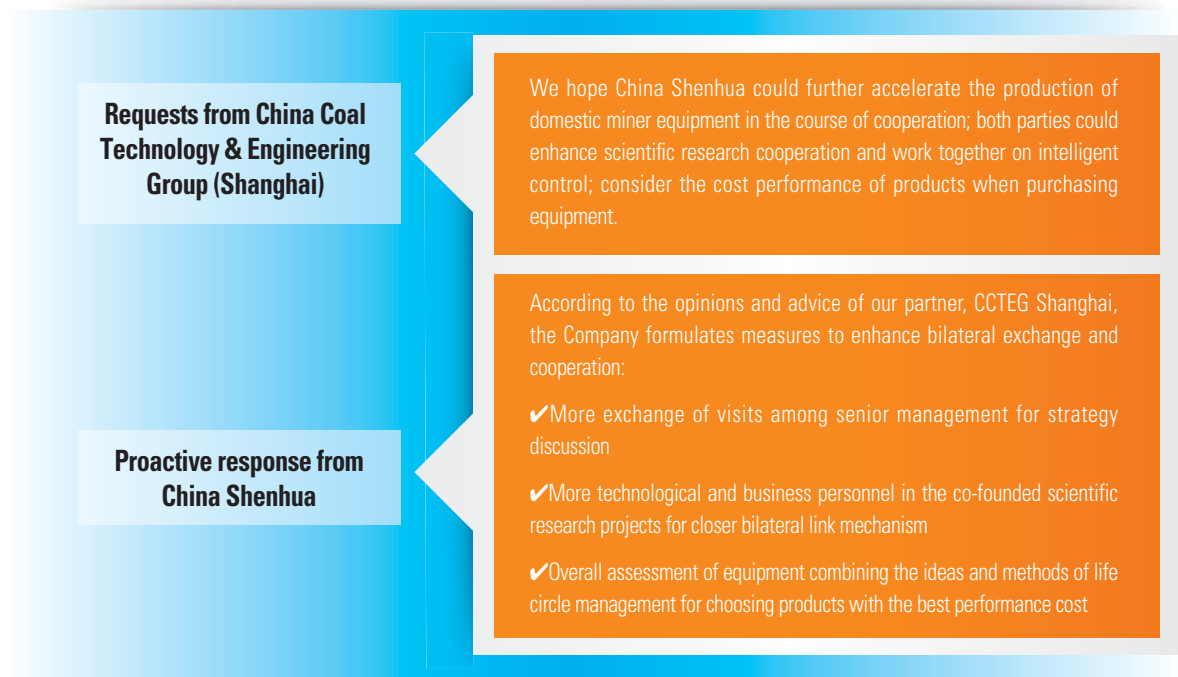
- Customer Services

Upholding the principle that “clients are the market, clients are the king”, the Company has established and strictly implemented the *Administration Rules of Commercial Coal and Coal Chemical Product Clients*, standardized aspects including client attraction, file keeping, maintenance of data, after-sale service and confidentiality in order to provide better service to customers. No infringement on customer’s privacy and loss of customer materials has existed in the year.

In 2015, the Company organized 15 technological visits by domestic industry experts to 31 clients in the power, metallurgical and chemical sectors to learn the problems arising from purchase and use of the Group’s coal. The satisfaction surveys have been carried out respectively against long-term and key customers from the power, chemical and metallurgical sectors, showing that the customer satisfaction in the power and chemical industries was 87.5%, and 91.7% were satisfied with three indicators of the coal including volatile flux, ash content and no impurity. Metallurgical customers, including Hebei Steel Group, also reported an overall satisfaction with our sales services. With respect to customers’ wish for less water in coal and the problem of tonnage loss, the Company has proactively coordinated mine production and monitoring units to stabilize coal quality so as to ensure stable coal quality for customers.

We Build Responsible Supply Chains **G4 Materiality Disclosures: G4-21**

The Company has been continuously improving its supplier management system. The functions of business modules on the electronic platform are adjusted by revising the Methods of Material Suppliers Management, so as to manage in an integrated manner, collection of supplier information, performance evaluation, short list of suppliers and dispute settlement, and fuse supplier management with IT. As of the end of 2015, our informational system had 33,832 registered suppliers, including 1,879 new suppliers. In 2015, the Company evaluated 103 material suppliers. The total purchase amount of the top five suppliers was RMB14,562 million, accounting for 13.2% of the total purchase amount for the year.



The Company regards the social value and social influence (especially the fulfilment of social responsibility) as important aspects in supplier assessment and enhanced admission management. According to specific admission requirements, the Company not only demands that a supplier presents certification of quality, environment and occupational health and safety regimes, but that the supplier's product and its production meets national environmental protection standards and regulations and has passed external expert assessment.

The Company set up an informatized platform of Purchase Retracing and Supplier Relationship Management System (SRM) and important resources and commodities were online transacted on the platform. Besides, specifically for small-amount purchasing, the Company opened "e-catalogue purchase", "e-trading purchase" and other new channels to make the e-trading purchase transparent. In 2015, our purchase amount accounts for 76.52% of the total purchase amount.





Supplier Representatives Visiting Modern Stereoscopic Warehouses

*Material Suppliers by Geographical Region* <sup>Note</sup>

Geographical Region	Number
Northern China	12,662
Northeastern China	1,683
Eastern China	9,495
Central Southern China	3,491
Southwestern China	1,313
Northwestern China	4,883
Others	339

<sup>Note</sup> Definitions of geographical regions are as below: Northern China (Beijing, Tianjin, Hebei, Shanxi, Inner Mongolia); Northeastern China (Heilongjiang, Jilin, Liaoning); Eastern China (Shanghai, Shandong, Jiangsu, Anhui, Jiangxi, Zhejiang, Fujian); Central Southern China (Henan, Hubei, Hunan, Guangdong, Guangxi, Hainan); Southwestern China (Chongqing, Sichuan, Guizhou, Yunnan, Tibet); Northwestern China (Shaanxi, Gansu, Ningxia, Xinjiang, Qinghai); Others (HK, Macau, Taiwan & overseas).



# Driving Reform for Innovation and Upgrading

China Shenhua regards technological innovation as the engine of enterprise development in driving the integration of innovation chain, industrial chain and market demand. In the course of driving innovation, emphasis is given not only to fuel but fuel and raw material; development is sought in a coordinated mix of energies instead of in coal only; the high-carbon extensive growth model changes into one that is clean and effective and ultra-low in emission; energy production and consumption will have more intelligent interaction than ever before.







## Driving Reform for Innovation and Upgrading

### Annual Focuses of Stakeholders

- Drive the transition by innovation to clean energy of the enterprise
- Master core technologies and protect IPRs
- Translate scientific achievements into real value

### Our Efforts

- Proactively explored and practiced new models and mechanisms integrating industry, education and research and established an innovation studio
- Ensured innovation investment and nurtured innovative talent to inject good momentum in the research and development for clean energy technology
- Introduced a tiered patent system and agency resources evaluation system to enhance core technologies protection
- Established and improved the system for encouraging the translation of achievement, actively promoted its application of technological achievement and established technological achievement demonstration projects

### Performance in 2015

- RMB858 million was invested in science and technology in 2015
- Capitalized on 3 State research and development platforms including “the State Key Laboratory for water resource protection and use in coal exploration”, established 6 technological centres within subsidiaries and branches
- Already has the authorization to use more than 489 patents, over 111 of which are invention patents
- The invention patent named “Distributed utilization of underground water of mine shafts” was awarded the Seventeenth Chinese Patent Gold Medal

### Plans for 2016

- Promote the innovation of collaboration to establish innovation platforms for industrial synergy and build an online innovation platform
- Promote the independent innovation to reinforce core technologies and the capacity to develop products
- Promote the innovation of the talent mechanism, with emphasis on introduction and cultivation at talents of various levels, the growth mechanism for innovative and technological talents and the creation of an innovative culture



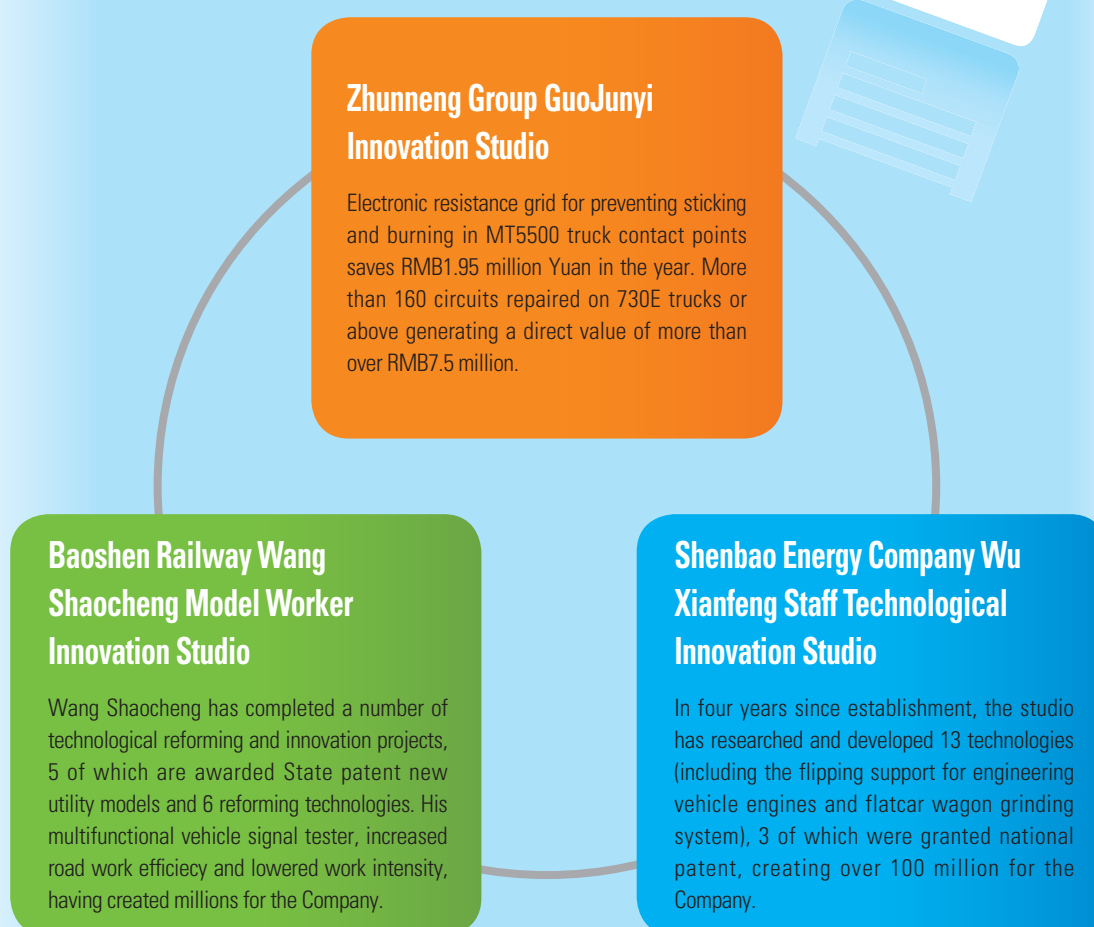
## An Open Innovation Model

China Shenhua has established stable long-term strategic cooperation mechanisms with the Chinese Academy of Engineering, Tsinghua University, China University of Mining and Technology and other universities, promoting the integration of industry, education and research and formulating an open innovation model based on full and integrated use of scientific and technological resources in society.

The company creates its own innovation culture, for which platforms have been established including the Shenhua Research Institute, Shenhua Management College, and the technological centers at subsidiary and branch levels. Innovation studios in subsidiaries and branches are encouraged. By the end of 2015, the Company has owned 3 State research and development platforms (including the "State key Laboratory for water resource protection and use in coal exploration") and established six technological centers at subsidiary and branch levels.

### Case Study: Innovation Studio Stimulates Enterprise Creativity

China Shenhua regards personnel cultivation and training as an important task and proactively encourages the subsidiaries and branches to establish "innovation studios" for frontline workers to be able to innovate and transform their technological innovation achievement into real productivity. By the end of 2015, there were 13 "model worker innovation studio" at factory level and expenses in subsidies for innovations reached RMB3.15 million.



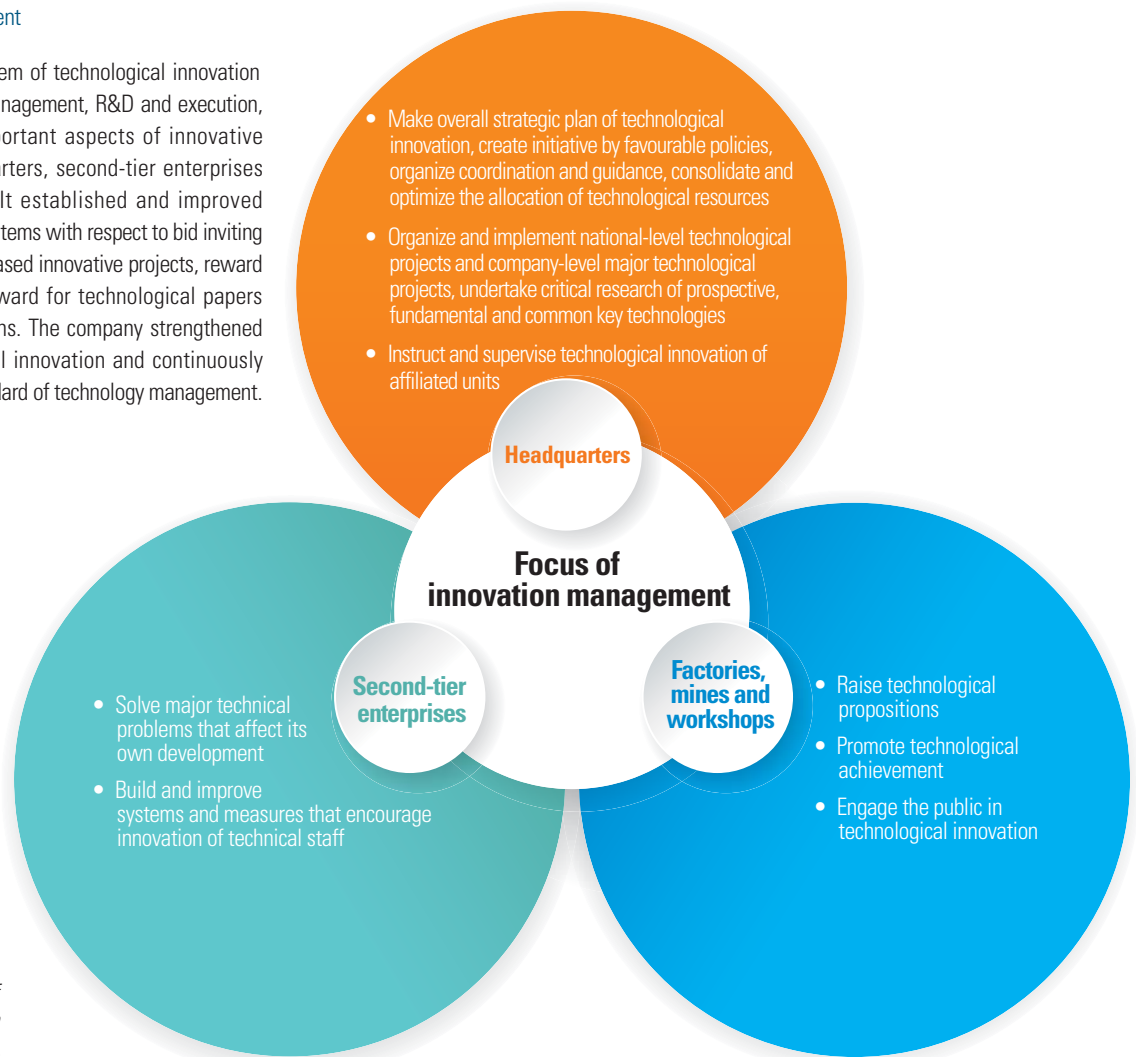
Some Innovation Studio Achievements of China Shenhua

## Management of Technological Innovation

Guided by the principle of “Science first, talents first”, “Enabling low-carbon development in high-carbon industries via technological innovation”, the company aims to improve its technological innovation system, enhance independent innovation capacity and create a world first-tier enterprise by stepping up technological innovation.

### Improve Innovation Management

Based on the four-tiered system of technological innovation including decision-making, management, R&D and execution, the Company specified important aspects of innovative management at its headquarters, second-tier enterprises and third-tier enterprises. It established and improved technological management systems with respect to bid inviting and tendering in technology-based innovative projects, reward for technological results, reward for technological papers and post-doctoral workstations. The company strengthened examination of technological innovation and continuously improved the quality and standard of technology management.



*Please refer to page 38 of China Shenhua 2014 CSR Report about China Shenhua's technological innovation system*

Innovation Management Focus at the Headquarters, Second-Tier Enterprises and Third-Tier Enterprises of the Company

### Protect Intellectual Property Right

The Company attaches great importance to IPR protection and introduced in a tiered patent system and agency resources evaluation system. In the process of implementing a series of projects of technological innovations, assessment of IPR and technological standards projects, the Company: appointed a Special Supervisor of Intellectual Property Rights and Patent Engineers to engage in the whole process of technological R&D and industrial demonstration; analyzed patent information to instruct technological R&D and patent arrangement; formulated policies for protecting IPRs and technical secrets, and apply for patents at an appropriate time; trailed the technological advancements of competing enterprises with a patent alert; conducted assessment of IPRs to manage them in all processes of important technological and economic activities.

In 2015, “Management of Intellectual Property Rights in the Protection and Use of Patents Regarding Coal Mine Underground Reservoir” was listed in Examples of Enterprises Using Intellectual Property Rights by Beijing IP Office and was widely studied and learnt. The Company was named “National Model Enterprise for Intellectual Property Right Management” and “the Beijing Practice Base for National Patent Examiners”.

## Case Study: Protection and Use of Patents Regarding Coal Mine Underground Reservoir

“Patented Technology of Coal Mine Underground Reservoir” developed by China Shenhua was breakthrough in the traditional notion of mine water disposal. By using mined-out areas as water storage space, the Company developed this completely new way of storing and using mine water underground, making mine water more useful and effectively protecting and using water resources in coal mining. Surrounding the R&D of this patented technology, the Company created and arranged patents in many fields including underground reservoir construction, reservoir capacity monitoring, reservoir dam structure and safety monitoring. Accumulatively 53 national patents have been applied for in China and 38 patents have been licensed in this area, forming a pool of interrelated patents.



### Increase Investment in Technology

In 2015, the Company continued to increase R&D input and strived to make important technological breakthrough by focusing on research and manufacturing of major excavation equipment, key technology in green coal mining, ultra-low emission technology for coal-fired power plants, high-efficiency combustion of CFB generators, key technology in 30 tonne-axle-load heavy-haul railway as well as research and manufacturing of core equipment. Annual input in R&D was RMB858 million.



The World's First 30 Tonne-axle-load 25,000-tonne Train Equipped with the LTE-R Communication System Commenced Operations on the Shuohuang Railway.

### Build up Talents Pool

Through a three-tier technological innovation and talent training base system, the Company has intensified the cultivation of scientific research talents. By 2015, 8 units had set up post-doctoral workstations, and the “academicians’ workstation” had attracted 29 academicians from various fields and disciplines such as mining engineering, mine engineering geology and geophysical prospecting, mine gas prevention. In 2015, the Company had 2 new academicians of the CAE, 1 new “Thousand-People Plan” expert, 1 new “Hundred, Thousand and Ten Thousand Talents Project” expert and 10 new receivers of government subsidies from the State Council.

### China Shenhua Senior Scientific Research Talents (persons)

Academician of the CAE	3
Technical talent with senior professional titles	3,874
Expert enjoying special government subsidies	43
National nominees of the Hundred, Thousand and Ten Thousand Talents Project	5



## Achievements in Technological Innovation

Guided by core principles of “innovation motivation, value creation and leading technology”, China Shenhua has achieved a great many results of scientific research projects such as digital mines, heavy-haul railways and ultra-low emission. The Company facilitates the transfer from achievements in science and technology to real productivity, promotes the distribution and application of achievements, and drives an efficient, intensive and clean development with innovative achievements.

### Achievements in Science and Technology

The Company has actively undertaken domestic and overseas innovation projects and participated in the formulation of industrial standards. In 2015, the Company set up 81 new science R&D projects with an overhead budget of RMB1.13 billion, and its subsidiaries and branches had 329 self-financed projects under study. The Company also undertook 9 national science research projects, which received government grants amounting to RMB19.37 million, concluded 693 patent applications and was granted 489 patent licenses including 111 invention patent licenses and 3 foreign patent licenses. The Company received 24 Provincial and Ministerial Technology Advancement Awards within the year. Invention patent “Distributive Use of Underground Mining Water” won the Golden Award for Outstanding Chinese Patented Invention at its 17<sup>th</sup> session.



### Undertake national innovation projects

- “Ecological Rehabilitation Technology and Demonstration of Large-scale Energy Bases” and the “Research on Digital Mine Key Technology and Application”, have passed the final examination of Ministry of Science and Technology
- 3 applications of national technological innovation projects including “Key Control Technology and Engineering Demonstration of Near-Zero Emission at Large-Scale Coal-Fired Power Plants” have finished approval procedures and started

### Participate in formulation of industrial standards

- Being involved in the formulation of 7 national standards including “Quality for Commodity Coal Lignite”
- Leading the formulation of the industry standard named “DL/T 1452–2015 Ultrasonic Guided Waves Testing for Pipes in Thermal Power Plants”, which was officially promulgated

### Participate in international strategic projects

4 World Coal Association (WCA) Strategic Research Projects:

- “Status of coal in the global energy structure by 2035”
- “Examples and analysis of PR strategy of WCA”
- “Commercialization path analysis of CCS technology”
- “Example analysis of optimal practice and industrial application in coal mining”

### Commercialization of Achievements

The Company put emphasis on the commercialization of achievements in science and technology, intensified study of practical scientific projects and application and promotion of new technological achievements, sped up transforming scientific achievements into productivity and added economic, environmental and social values by means of technological innovation, on the basis of which a virtuous cycle of “input-output-re-input” has formed.

### Application of Some of the Company's Patents in 2015

Business Area	Achievements Application and Transformation	Benefits
Coal business	Innovation and industrial demonstration of mine shaft draining and windless water source heat pump at Daliuta mine and Jinjie mine	Replacing the original coal-fired hot stoves, cutting annual emission of carbon dioxide by 9,360 tonnes and sulphur dioxide by 2 tonnes
	Efficient all-section tunnelling machine	The first sample machine was put into industrial testing at Shendong Daliuta mine increasing the average speed of digging coal tunnels from 1,500 meters per month to 3,000, ensuring smooth successive excavation
Power business	Technological research and engineering application of near-zero emission of fume pollutants of generator set #1 at Sanhe Power Station	Remarkable effects against pollutant emissions: emission from generator set #1 now has a concentration of soot of 5mg/Nm <sup>3</sup> , sulphur dioxide of 9mg/Nm <sup>3</sup> and nitrogen oxides of 35mg/Nm <sup>3</sup> , becoming the first “ultra-low emission” 300MW class coal-fired generating set in the area of Beijing, Tianjin and Hebei. It was given the title of “National Demonstration Power Plant of Energy Conservation and Emission Reduction” by the National Energy Administration
	Technological research and engineering application of the demonstration project of salty water desalination of 25 thousand tonnes per day	The 25 thousand tonnes/day MED equipment that is independently researched has a water production ratio of 13.51, and a power consumption of 0.95kWh/m <sup>3</sup> . Salt content of produced water is less than 5mg/L, on par with international cutting-edge standard
Transportation	Research of technology application of shore-power supply for vessels (of port of unloading)	It is of demonstrative significance to realizing faster low-carbon transport and creating a better environment at ports







# Aiming for Zero Accident: Commitment to Safe Production

China Shenhua always adheres to the concept of “scientific and safe development”, perseveres in making safe production the foundation and guarantee of business expansion, institutes a set of scientific and rigorous system to prevent and control safety hazards with a strong sense of mission and responsibility as regards the safety of our employees, and in doing so, effectively manages all staff and every aspect of the whole process and every aspect, and creates a virtuous circle of safe development that keeps reinforcing itself.



## Aiming for Zero Accident: Commitment to Safe Production

### Annual Focuses of Stakeholders

- Create a safe production environment to prevent accidents
- Carry out the R&D of technology and equipment for safe production to enhance the level of IT-application and automation
- Strengthen training in safe production to raise employees' ability to work safely

### Our Efforts

- Keep a real focus on the development of safety accountability and strengthen overall safety management
- Take the building of an intrinsically safe system to great depth
- Organize expert consultation, focused inspections, special inspections, spot inspections and blanket inspections
- Carry out "promoting safety with science and technology" program to research and improve key safety technologies including those of major disaster control
- Stop unsafe behaviours and make detailed rules to prevent them from happening
- Improve emergency management system and conduct various emergency drills

### Performance in 2015

- No fatalities occurred in five major segments, namely power, chemical, railway, port and shipping, achieving the set safety target of "zero fatality"
- Some technical problems to safe production were solved
- 3,856 various safety training sessions were held, with 186,082 employee attendance, and 240,439 training hours in total
- 66.7% of the enterprises received first-class or second-class rating in intrinsic safety

### Plans for 2016

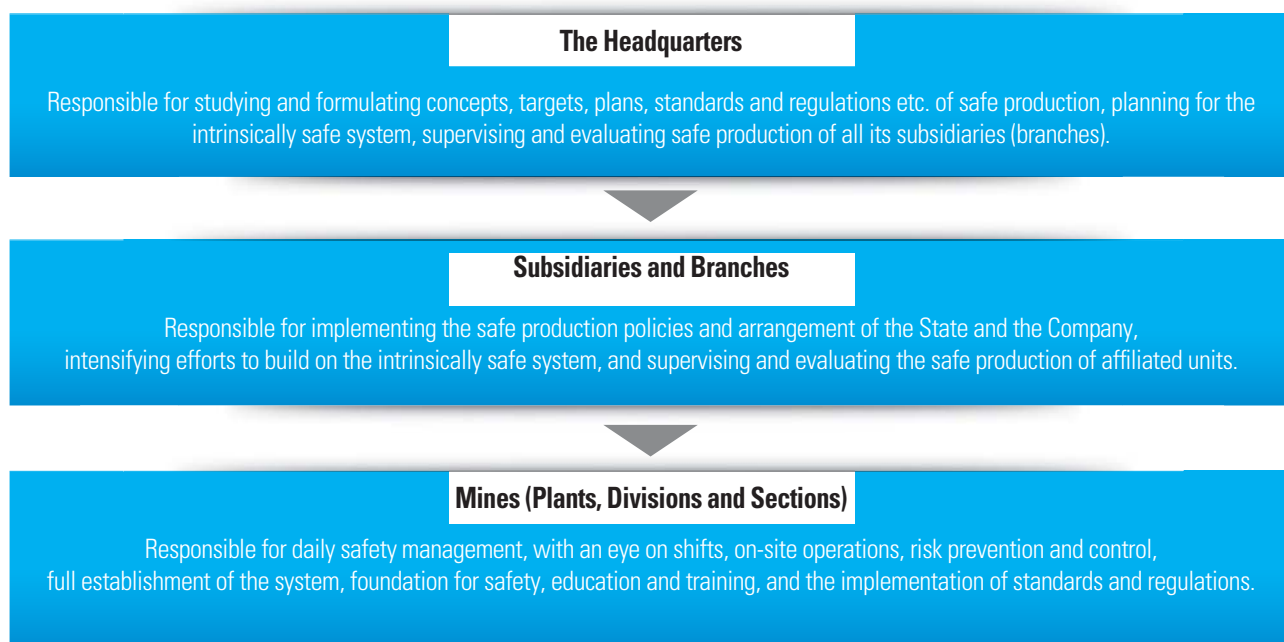
- Strengthen the implementation of responsibilities, and boost the execution capability
- Enhance the guidance role of culture, and improve the innovation capability
- Promote and optimize system establishment, and raise the level of establishment of the role as a safety-oriented company
- Foster the inspection of hidden weaknesses, and step up the capability of incident prevention
- Augment the management of and control over key areas, and ratchet up the on-site management capability
- Inject more resources, and elevate the protection management
- Better the construction of foundational network and infrastructure, and refine the basic management capability

## Safety Management System

China Shenhua built a safety management system to meet the needs of its diversified operations. The Safety, Health and Environment Committee under the Board of Directors established a three-tier management system in accordance with the management principles of "headquarters regulate, enterprises take charge, make concerted efforts, and ensure full participation". The Company clearly states safety responsibility and positioning on all levels, establishes an all-inclusive safety management system in which everything is properly managed and implemented subject to supervision and regular check, and everyone has clearly defined responsibility, in order to ensure that every process and every aspect is safe and under control.

The Company intensified efforts to build on the intrinsically safe system. It checked and accepted 129 production units in total, with 33 first-class ratings and 53 second-class ratings, 32 third-class ratings and 11 fourth-class ratings in intrinsic safety. The rate of first-class and second-class intrinsic safety ratings was 66.7%.

The Company keeps improving its safety performance evaluation system and promoting the implementation of a safe production accountability regime. In 2015, the Company's Chairman, Vice Chairmen and the President made more than 30 special safe production inspections in such manners as the one characterised as "Four 'Nos and Two Directs'" <sup>Note</sup>. Subsidiaries and branches at all levels have signed "confirmation of responsibilities for safety objectives" and "undertakings of safe production", which detailed their responsibility. Chairpersons and General Managers of coal subsidiaries and branches go down shafts 5.5 times per month on average. Deputy General Managers in charge of safety and production go down 9 times per month on average, with 15 times at most. This effectively ensures smooth and safe production operations. With continuously intensified safety check, safety premium now accounts for 40% of the wage of Shendong Mine's employees, which further inspires employees' enthusiasm and creativity in boosting and securing safe production.

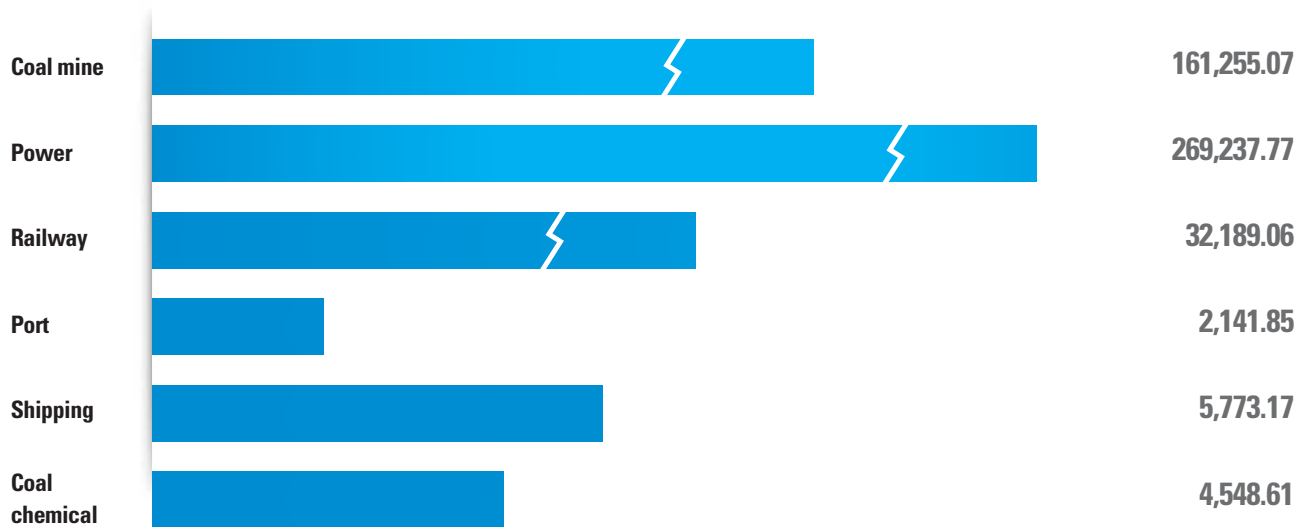


### The Three-Tier Management System

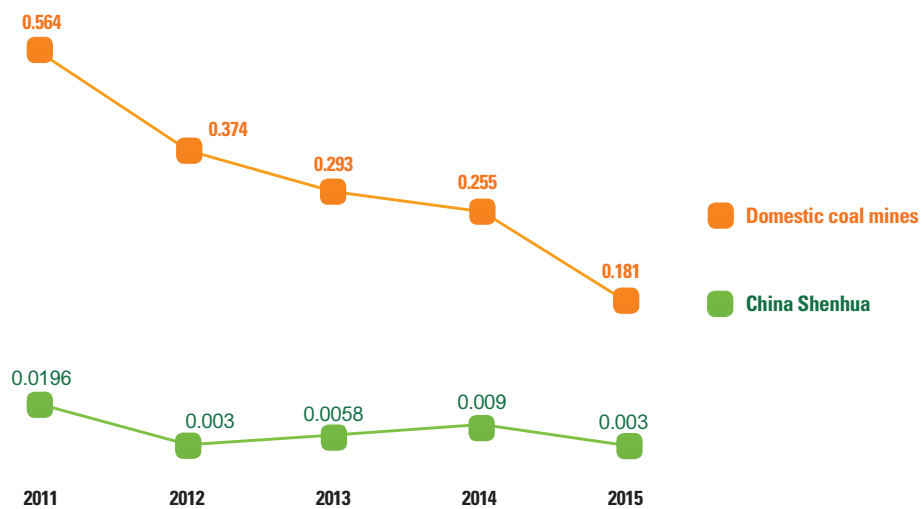
In 2015, China Shenhua committed RMB4.751 billion to production safety. No major or grave production safety-related accidents happened throughout the year. The number of work-related fatalities was 2, representing a fatality rate per million tonnes of raw coal output at 0.003 and 18 coal mines extended their safe production period to over 1,000 days. Shendong Bulianta Mines have operated safely for over 15 years. The fatality in coal chemical and shipping has been eliminated and achieved the "zero fatality" target. Coal chemical industry achieved the goal of "no leakage, no fire, no explosion, no poison, no suffocation, no harm" for the first time.

Note: "Four 'Nos and Two Directs'" is an unannounced inspection and visit system for work safety, established and carried out by State Administration of Work Safety in September 2014, which is a method of work, with the meaning of "not making an announcement, not giving a notice, not debriefing reports, not getting accompanied or served with hospitality, going directly to the grassroots and going directly to the scene."





Financial Input into Each Segment for Production Safety in 2015 (RMB10,000)



Fatality Rate per Million Tonnes of Raw Coal Production between 2011 and 2015



Production Division II of Huanghua Harbour Administration Company was Signing Accountability Agreements with Working Teams



Heads of Shendong Bulianta Mines was Checking Safety Work

## Innovation in Safety Technology

China Shenhua continues improving the standards of mechanization, IT application and automation to reduce the number of workers in dangerous jobs. In 2015, Safety Administration Information System came online at each subsidiary and branch, successfully applying information technology in such safety management areas as examination, and analysis of potential safety hazards, hazards identification and control, system operation and assessment, emergency management and evaluation etc.. The company steadily took forward the construction of digital mines, applied cutting-edge technology to the construction of Guojiawan Mine and Qinglongsi Mine of Yushen Company, drawing on the experience of the Jinjie demonstrative digital mine, and by doing so, advanced safety technology and management standards of the traditional coal industry through information technology.

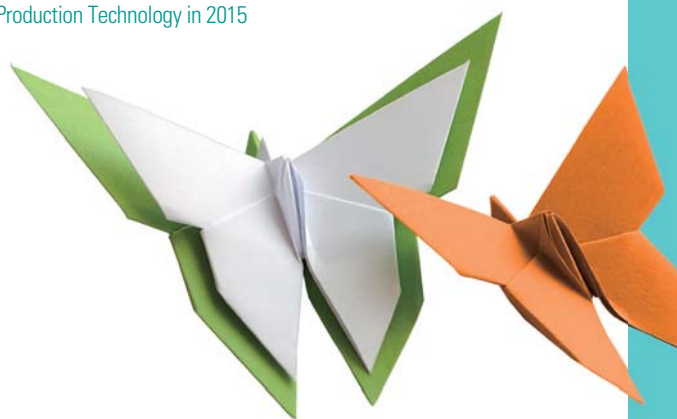


Digital Control Centre of Fujian Energy Hongshan Power Plant

In 2015, the Company solved some technical problems that had affected safe production through researching and developing key safety technologies on areas like major disaster control and subsequent technical retrofit, thus improving safety standards of its production system.

Technology research and services projects	Actual results	Honours
Prevention and control technology of varied spontaneous fires occurred during the mining of contiguous coal seams under the impact of complex and disaster-prone geologic body	Effectively prevent spontaneous fires occurred during the mining of contiguous coal seams under the impact of complex and disaster-prone geologic body	Won a Second Class Prize of Science and Technology Award granted by China Occupational Health Association in 2015
Research and practice in specialized and coordinated management and control of main hazard sources at coal mines	Effectively put main hazard sources under control	Won a First Class Prize for Outstanding Achievements in National Energy Soft Science Research
Research on key technology of combined outburst prevention for contiguous outburst coal seams	Effectively reduce gas content of outburst coal seams and diminish outburst danger of those coal seams	Identified as advanced and competitive internationally by experts from China Coal Society

Some Research Results Obtained by the Company in Safe Production Technology in 2015



## Safe Operation Environment

China Shenhua combines structural adjustment with transformation and upgrading under the new normal, actively promotes lean management, strengthens safety rectification, optimizes processes and in doing so, creates an intrinsically safe production environment.

### Risk Elimination

The Company believes that “a potential safety hazard means an accident”, and takes such measures to tackle potential hazards as pre-emptive control, investigation of potential hazards and rectification thereof etc.. In 2015, guided by the principle of “tiered management and responsibility”, the Company carried out special inspections and expert consultation by sectors and by professions, found out 67,482 hazards and problems of various sorts. A detailed consultation report is drafted after each inspection to provide solutions to the problems and implemented under the guidance of experts on-site. As of now 61,735 rectifications have been finished with a completion rate of 91.5%.

By the end of 2015, the company had 20 mines in production, including 14 super-safe and efficient mines accounting for 70% of the total.

#### Take preventive measures

Strengthen control of potential hazards, prevent and control their occurrence, analyze the reason of each new potential hazard, hold people to account, and work hard to eliminate and reduce new hazards

#### Investigate potential hazards

Make serious effort to screen and rectify potential hazards, keep driving self-screening and rectification to great depth to make sure that every potential hazard is covered and there is no blind spot left behind

#### Eliminate potential hazards

Step up efforts to address potential hazards, make tailored and specified rectification plans for new potential hazards and fully implement the accountability system in line with the principle of “five rectifications”



Employees of Shendong Daliuta Coal Selection Plant were Maintaining Equipments



Employees of Sanhe Power Plant were Checking Equipments



## Emergency Management

With a view to strengthening its capability to respond to emergencies and solve subsequent safety risks, the Company keeps beefing up its emergency management institutions and teams, improves emergency contingency plans and conducts emergency drills to enhance responsiveness to emergencies and real-time practices. In 2015, the Company increased investment in emergency equipments and intensified trainings and drills, thus effectively building on its emergency rescue teams. The Company had 36 full-time rescue teams, 40 part-time rescue teams, 15 fire teams, and 1,100 medical personnel. 685 different emergency rescue drills were carried out, as a result of which employees' awareness of avoiding dangers and self-help and mutual rescue under emergency situations has been heightened, and rescue teams' responsiveness to emergencies and real-time practices improved.

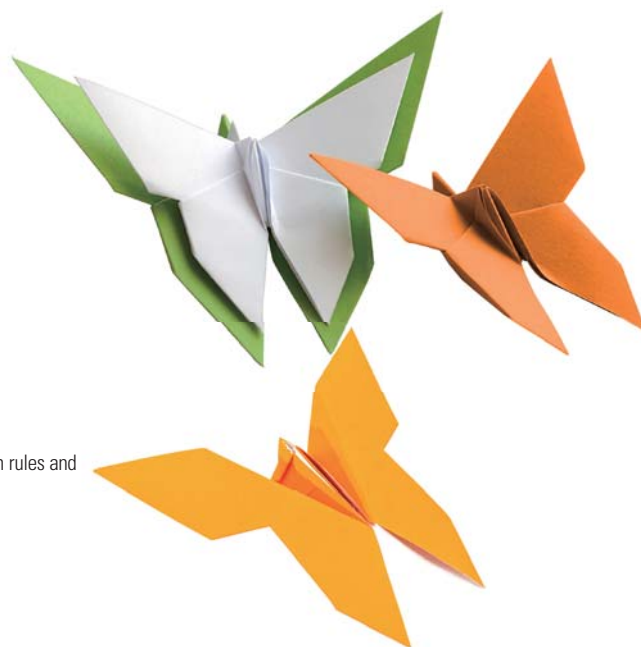


Zhunge'er Power Plant was Conducting an Emergency Drill

## "Three Violations" Rectification

The Company severely punishes high-risk "Three Violations" behaviours so that every employee forms a habit of safety behaviour; and dares not, cannot and does not want to violate rules. In 2015, the Company intensified the punishment for "Three Violations" in all respects through criticism and education, economic and administrative penalties, and by setting up exposure platforms, whistle-blowing boxes and self-reflection rooms. Throughout the year, the Company punished more than 15 thousand employees committing "Three Violations", dismissed 66, transferred 72 to other positions and forced 6.4 thousand to attend "Three Violations" courses, and collected a total penalty of RMB4.0495 million. As a results, "Three Violations" dropped significantly.

Note "Three Violations" is an abbreviation of "breach of supervision rules, breach of operation rules and breach of labor disciplines"



## Safety Behaviour of Employees

China Shenhua pays attention to cultivating safety awareness of employees and upgrades on-site operators' technical skills by enhancing post-related knowledge sharing and safety skills training, and in doing so, ensures standardized operations and intrinsic safety for employees.

### Cultivating a Safety Culture

The Company continues to uphold the policy of "safety first, prevention first and comprehensive management", and fulfils its commitment to undertake every employee's work safety by putting safety as a top priority and distilling distinctive safety ideas philosophy. The Company also values the cultivation of safety culture, conducts publicity and education activities such as safety knowledge contests, safety workshops, signing campaign for workplace safety and essay competition etc. to create an intensive safety culture.

In 2015, the Company counted and analysed coal mine accidents occurred within the last decade, from which 57 typical cases were selected, together with 100 cases collected nationwide, to make a series of safety education films on typical coal mine accidents so that similar accidents can be prevented.

### Ideas on workplace safety

"No accident is unavoidable and no risk is uncontrollable"

"Zero injury in coal mines is possible"

"No excuses for excessive methane gas emission during production"

"No excuses for unscheduled outage in power plants"

"No excuses for railway and port equipment failures"



Shuohuang Railway Company was Conducting Signing Campaign during "Safe Activity Month"

## Case Study: Cultural Guidance, Active Safety

Under the cultural guide of "Like Army, Like School and Like Family", Guohua Sanhe Power Plant continues to uphold the policy of "People-Oriented, Life First, Pre-emptive Risk Control, Duty Bound, Cultural Guide and Active Safety" to implement safety accountability systems at all levels and foster a deep-rooted safety culture. While rigorously inspecting safety measures on construction sites and improving safety control procedures, Sanhe Power Plant explores a new management model of "Safety Culture in System, Object, Behaviour and Attitude" and plays to the role of safety culture in management to help guide, motivate, unite and restrict its workforce.

At the scene of the environmental retrofit of Unit #4 in 2015, hoisting machines often temporarily took up the main passage of the plant. However, no employee had ever walked through the warning area even when there was no operation underway. When asked why, one employee said: "As it is a cordoned area, for the sake of safety, I would rather take a detour than take a change". It may serve as a telling clue that safety culture has taken root in the employees' minds.



### Prioritizing Safety Education

The Company is highly concerned about the safety education for employees. Based on a strengthened team of teachers and expanded training channels the Company enhances the training effect by way of practical operations, skill competitions and drills in order to improve employees' safety skills and make "safety first" their subconscious behaviour. In 2015, the Company conducted 3,856 various safety training sessions with 186,082 employee attendances and 240,439 training hours in total.

- Baoshen Railway Company adopts the way of interaction and mutual training by carrying out "One Question a Day, One Course a week and One Test a month" activity and texting messages to employees about safety knowledge to heighten their safety awareness.
- Shenshuo Railway Branch conducts safety education and ensures the implementation of safety regulations during the roll call, and encourages employees to draw lessons from cases of typical accidents.
- Shengli Energy enhances employees' safety awareness through accident cases, safety education films and experiences sharing, and directly promotes safety knowledge to employees with safety slogans, note boards and LED screens.



Sanhe Power Plant was Conducting Safety Trainings for Employees



Hulunbeier Power Plant was Conducting Signing Campaign against "Three Violations"







## People-Oriented Development for a Better Life

Employees are regarded as our cornerstone and driving force of development. China Shenhua cares about the health and safety of its employees, protects their legitimate rights and interests, and creates favourable conditions for them to grow with the Company.







## People-Oriented Development for a Better Life

### Annual Focuses of Stakeholders

- Adjust employees' wages to market changes to ensure competitive salaries
- Improve their working environment
- Protect their career development rights and improve the related training system
- Care about the life of employees and enrich their leisure activities

### Our Efforts

- Protect employees' rights and interests in salaries and welfare, training and democratic management, etc.
- Offer quality welfare facilities and organize excursions, cultural activities and sports games for employees
- Perfect the annual medical check-up system and set up employees' occupational safety and health records
- Organize special training courses for employees at different levels

### Performance in 2015

- 89% of second-tier enterprises had labour unions formed, with 99% of employees having joined as members
- Full coverage of the ERP Human Resources Information System across the Company
- Safety standards for employees were enhanced and the number of new occupational disease cases continued to decline
- Serious illness allowance of RMB1.8197 million and study subsidy of RMB0.23 million were granted to the offspring of employees

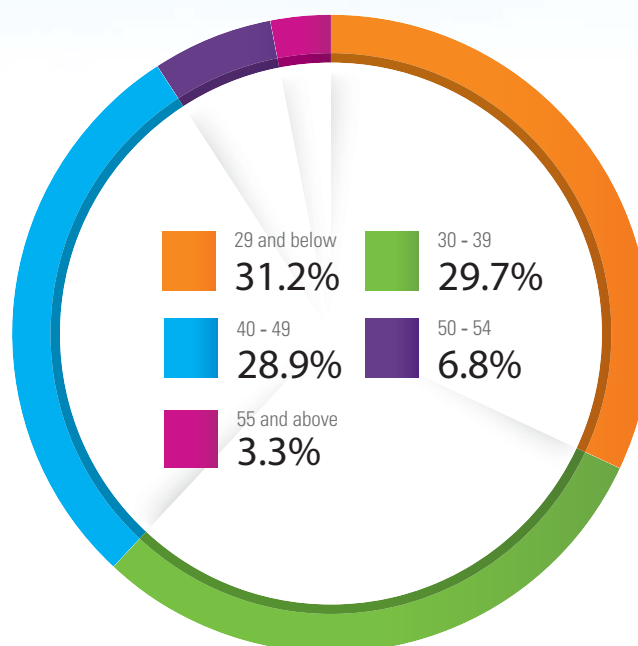
### Plans for 2016

- Increase employees' salaries and welfare and guarantee their quality of life
- Continuously prevent and control occupational diseases to reduce new cases thereof
- Increase the number of labour unions in second-tier enterprises and urge all employees to join
- Care about employees' leisure life and psychological health



## Equal Opportunities in Employment

In strict compliance with laws and regulations including the Labour Law, China Shenhua upholds an equal and non-discriminative employment policy to provide equal employment opportunities for all candidates, regardless of their nationality, race, gender, religion, belief and cultural background. Taking into account characteristics and development requirements of different positions, the Company actively provides job opportunities on suitable positions for the disabled, the minorities and women and ensures equal pay for equal work for both male and female employees. As of the end of 2015, the Company had a workforce of 95,498 employees, including 383 disabled employees, 4,656 minority employees and 19,792 female employees, representing 0.4%, 4.88% and 20.73% of the workforce. In 2015, the Company newly recruited 9,184 employees with a turnover of 2.28%.



Employees by Age

Employees by specialty

Category of Professionals	End of 2014 (persons)	End of 2015 (persons)	Year-on-year change (%)
Operation and maintenance	61,599	55,985	9.11 ↓
Management and administration	13,252	13,372	0.91 ↑
Finance and accounting	1,562	1,620	3.71 ↑
R&D and technical support	10,083	14,992	48.69 ↑
Sales and marketing	2,282	2,312	1.31 ↑
Others	3,960	7,217	82.25 ↑
<b>Total</b>	<b>92,738</b>	<b>95,498</b>	<b>2.98 ↑</b>

*Employees by Education Background*

Education Level	End of 2014 (persons)	End of 2015 (persons)	Year-on-year changes (%)
Postgraduate or above	2,887	3,130	8.42 ↑
University graduate	26,350	28,202	7.03 ↑
College graduate	24,577	25,512	3.80 ↑
Vocational school graduate	14,715	14,888	1.18 ↑
Technical school and high school graduate or below	24,209	23,766	1.83 ↓
Total	92,738	95,498	2.98 ↑

*Staff Turnover Rate by Age and Gender*

Age Group/Gender	Male (%)	Female (%)	Total (%)
Aged 29 or below	0.52	0.11	0.63
Aged 30 – 39	0.51	0.1	0.61
Aged 40 – 49	0.23	0.04	0.27
Aged 50 – 54	0.08	0.07	0.15
Aged 55 or above	0.48	0.14	0.62



## Protection of Rights and Interests

In strict compliance with laws and regulations regarding labour and human rights, China Shenhua takes such measures as instituting and enhancing collective contract system, signing labour contracts with each employee, improving remuneration and welfare mechanism and strengthening occupational health management to protect employees' legitimate rights and interests. In case of any violation, the Company will carry out investigation and impose necessary punishment on the employing unit and demand rectification within a specified period. In 2015, the Company signed labour contracts with 100% of its staff. No breach of any standards, rules or regulations on child labour and forced labour has ever occurred.

### Remuneration and Welfare

Upholding the philosophy of "salary levels specified by positions, difference by competence, and remunerations by performance", the Company puts in place remuneration and welfare mechanism that are internally fair and externally competitive. The Company established a sound mechanism to encourage and incentivize employees to develop and realize their personal values. Based on annual performance assessment, the Company paid salary, bonus, allowance and subsidy totalling RMB12,412 million to employees in 2015.

In 2015, the Company contributed to all the statutory social insurance programs and the housing fund for its employees in time and in full, with its employee social insurance coverage ratio reaching 100%. Employees are entitled to paid leave, maternity leave, paternity leave and other statutory leave in accordance with the law. In addition, the Company also provides employees with paid sick leave and personal leave, granting 10 days of paid leave on average for each employee this year.

### Democratic Management

The Company keeps expanding communication channels to engage with employees on an equal basis and protects employees' right to know, express, participate and supervise in accordance with the law via workers' congress and the labour union. The labour union of the Company is established independently with 11 designated personnel. 89% of second-tier enterprises have established labour unions, with 99% of employees having joined as members. The branches and subsidiaries gathers opinions and reasonable suggestions of employees through long-standing channels such as chairman's mailbox and mine manager's hotline, and keeps employees informed of major events occurred during the Company's operation via such platforms as internal website, house journals and newspapers and so on. In 2015, the sixth session of the first workers' congress collected from employee representatives 82 proposals, all of which were properly handled.

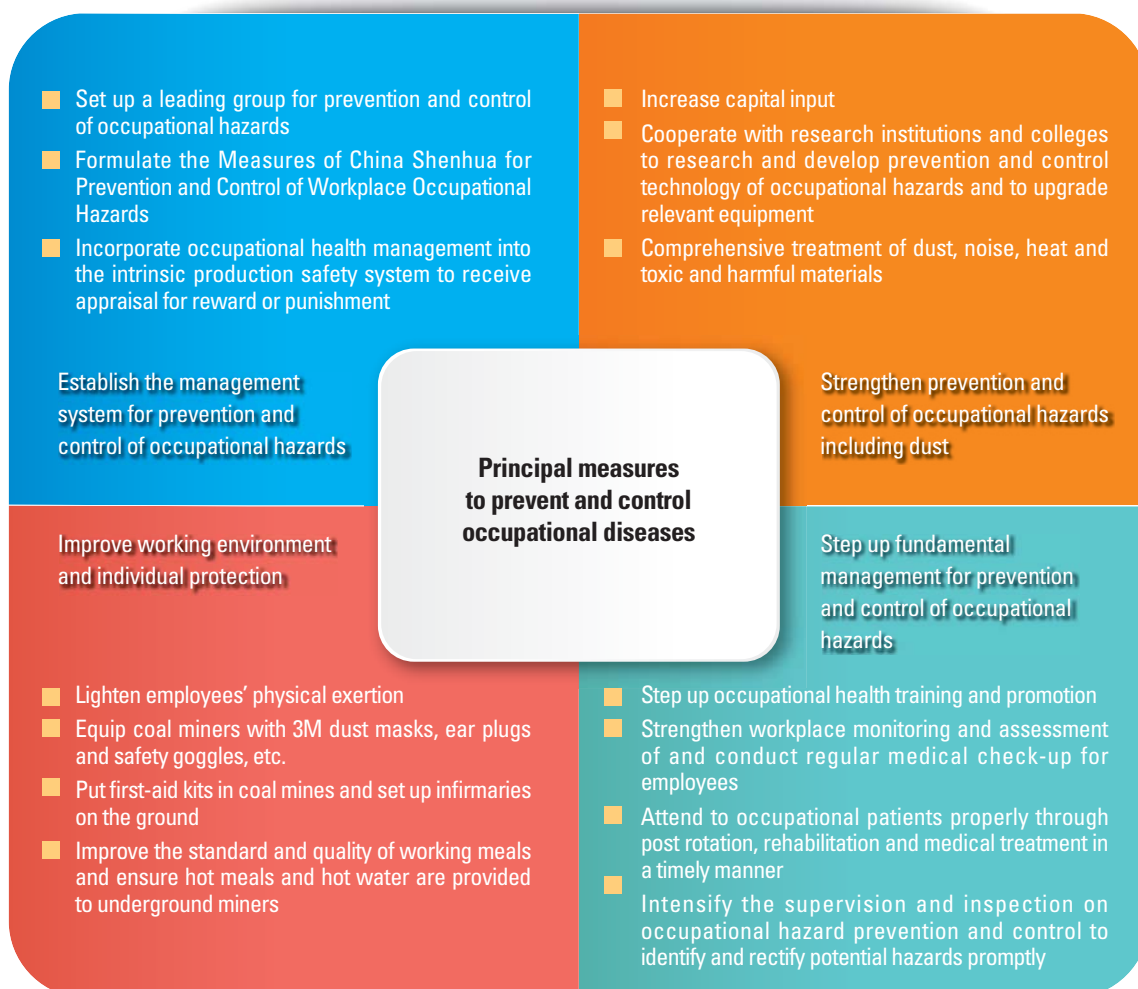


## Occupational Health

China Shenhua always takes employees' safety and health as the most valuable asset of the Company and constantly improves the occupational safety and health management system and its performance to control and reduce occupational safety and health risks and create a safe working environment.

### Prevention and Control of Occupational Diseases

Under the guideline of "people first, prevention first, prevention plus treatment", the Company focuses on the prevention, control and even elimination of occupational diseases, constantly improves working environment, and continues to detect, control and eliminate occupational hazards in workplace through strengthened management, improved system, scientific research and technological innovation so as to eliminate the sources of occupational diseases. The Company formulated a sound annual medical check-up system, set up employees' occupational safety and health records and offered medical treatment and care to employees diagnosed with occupational diseases through donations to relevant foundations or self-fundraising. In 2015, the Company invested RMB779 million in occupational health and there were 12 new cases of occupational diseases.



Principal Measures of China Shenhua to Prevent and Control Occupational Diseases

## Case Study: Shendong Coal Group took Multi-pronged Approach to Prevent and Control Occupational Diseases

Shendong Coal Group attaches great importance to prevention and treatment of employees' occupational diseases. In 2015, the Company sent a team to Australia to learn advanced experiences and afterwards adopted an innovative ventilation method of "far-pressing-near-absorption" to reduce dust at the coal face to  $3.5 \text{ mg/m}^3$ , far below the mine operation standard of  $10 \text{ mg/m}^3$ . The Company's self-developed dry (wet) dust removal system and new air duct were put into operation, effectively controlling dust at the coalface and protecting employees' occupational health with technical and equipment support. The Company also endeavours to disseminate occupational health knowledge and increase employees' awareness and ability of occupational hazard prevention and control via occupational health knowledge quizzes, health knowledge contests, and occupational health education with CDs, brochures and LED billboards.



### Psychological Health of Employees

The Company pays great attention to employees' psychological health and actively carries out psychological counselling and management training for employees to help them solve psychological problems. A great variety of entertainment activities are organized to enrich employees' leisure life and help them relax and release work stress.



A work from "China Coal Cup – the Second Session of Calligraphy, Paintings and Photography Exhibition from Coal Workers in Beijing"



Shenhua Team in the Ninth "Shengzhao Manda" Tennis Match of China's Energy Sector



Shendong Coal Group Set Up a Psychological Counselling Room to Provide Employees with Comprehensive, Professional Psychological Guidance and Treatment

## Training and Development

Adhering to the philosophy of “investment in talents is the best investment”, China Shenhua is committed to providing clear career paths for employees, improving incentive mechanism and organizing training programs to enhance employees’ skills and capability. The aim is to achieve common development of employees and the Company.

### Training for Employees

The Company has conducted various education and training activities for employees, and established a three-level system of training institutions covering the headquarters, secondary units and factories, mines, and workshops. Each level of the training institution system was independent from each other, and conducted training activities for the staff under their administration. As of the end of 2015, the Company had 18 training centers with their captive facilities, covering an area of approximately 200,000 m<sup>2</sup>. There are nearly 200 classrooms and more than 1,200 full-time and part-time lecturers. In 2015, the accrued input in training was RMB142 million. The training engaged 2.2521 million employees with a total length of 4.1372 million training hours and an average length of 43.32 hours/person.

### Training for Employees of Different Categories

Category of Employees	Total Number of Trainees	Accumulated Training Hours
<b>Management</b>	<b>123,382</b>	<b>1,054,438</b>
<b>Including: Senior management</b>	<b>17,658</b>	<b>104,999</b>
<b>Senior professionals</b>	<b>222,381</b>	<b>648,522</b>
<b>Technicians</b>	<b>1,712,977</b>	<b>2,235,666</b>
<b>Others</b>	<b>193,393</b>	<b>198,597</b>



The Company has been actively promoting talent reserve program and adopts various approaches in training, discovering and reserving talents. In 2015, the Company held “Middle-aged and Young Cadre Training Class” for 2 terms and “Young Cadre Training Class” for 1 term, with a total participation of 135 persons.

Each branch and subsidiary has been actively exploring new training models to improve training results through a great variety of training methods, such as on-site teaching and on-line learning.

- Guohua Power Company introduced training management measures for enhancing employees’ professional competence so as to improve employees’ occupational capability through training;
- Shenbao Energy Company emphasizes on improving the quality of staff from culture perspective. The Company has kept enriching corporate culture so as to improve the employees’ professional ethics and individual characters, which in turn improved their overall quality;
- Baoshen Railway launched varied training programs for new recruits under the subjects of corporate culture, remuneration and performance and safety education.

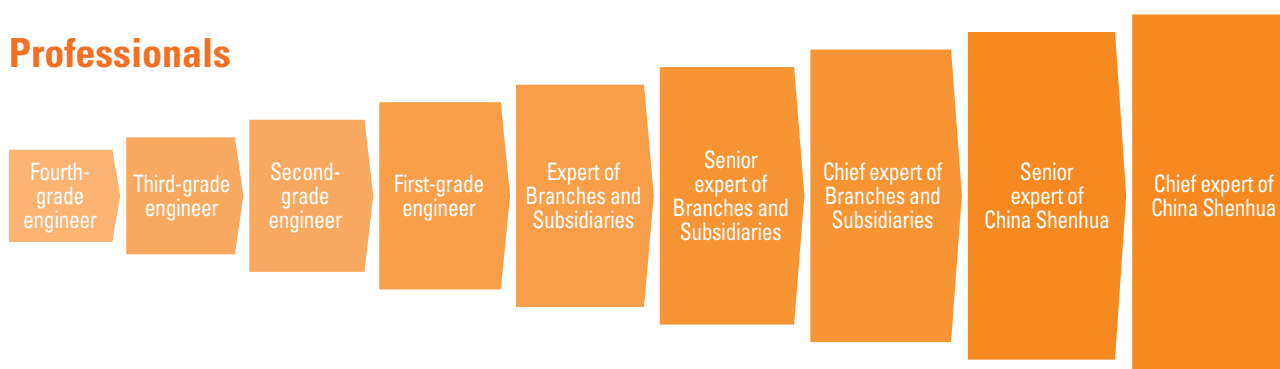


Middle-aged and Young Cadre Training Class, In Which Cadres Conducted Practical Rehearsal

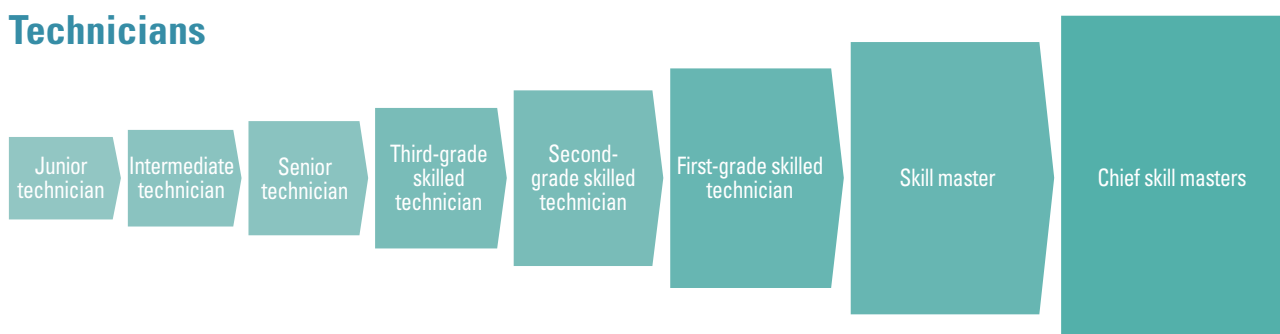
## Career Development

By formulating and constant improving rules and regulations like Management Measures for Career Development of Professional Technician and Management Measures for Career Development of Skilled Workers, the Company has established comprehensive career development paths for employees encompassing three channels for different types of employees, namely operation and management staff, professionals and technicians. According to the promotion mechanisms which link promotion with performance assessment of employees, professionals and technicians under different levels were entitled to corresponding administrative ranks and remunerations. In 2015, operation and management staff, professionals and technicians accounted for 14.6%, 15.1% and 70.3% of the entire workforce respectively.

### Professionals



### Technicians



Career Development Paths at China Shenhua



## Caring for Employees

In 2015, the Company continued to further promote the “Happy Employee Project” and took various measures to improve working and living quality of employees, with an aim to heighten employees’ sense of happiness and belonging.

### Employees in Need

The Company constantly improves its support mechanism for employees in need. By strengthening serious disease relief and education funds, China Shenhua is devoted to assisting employees in need to overcome challenges. In 2015, the Company provided a total of 3 batches of assistance to employees in need, RMB1.8197 million of serious disease relief was granted to 38 employees in need, and RMB0.23 million of student subsidies were granted to children of 46 employees for their college studies. During the New Year and the Spring Festival of 2015, the Company organized visits to factories and mines, and gave a total of RMB3 million “Warmth Bonuses” to frontline workers.

### Female Employees

China Shenhua cares about and attaches great importance to the livelihood and career development of female employees, and endeavours to arrange reasonable positions for them based on women’s physiological features and industry characteristics. In strict compliance with state regulations, the Company provides female employees with all kinds of leave to meet their special needs such as pregnancy and maternity etc. Female employees’ legitimate rights and special interests have been listed in the collective contracts or in special collective contract for female workers of the Company. Female workers’ committees have been established in the headquarters, branches and subsidiaries of the Company for the sole purpose of protecting the rights and interests of female workers.

### Front-line employees

The Company cares much about the work and life of front-line employees with remuneration policy reasonably tilting towards them to solve the issues which are most important, most directly felt and most realistic for them. In 2015, the Company organized and commenced the “Portrait for One Hundred Miners Exhibition”, made micro movies and other activities to set up platforms for frontline employees to showcase their images, thus enhancing their senses of pride and cohesiveness.



The Speech Contest for Female Employees



Group Photo of Female Employees after Attending a Photography Seminar

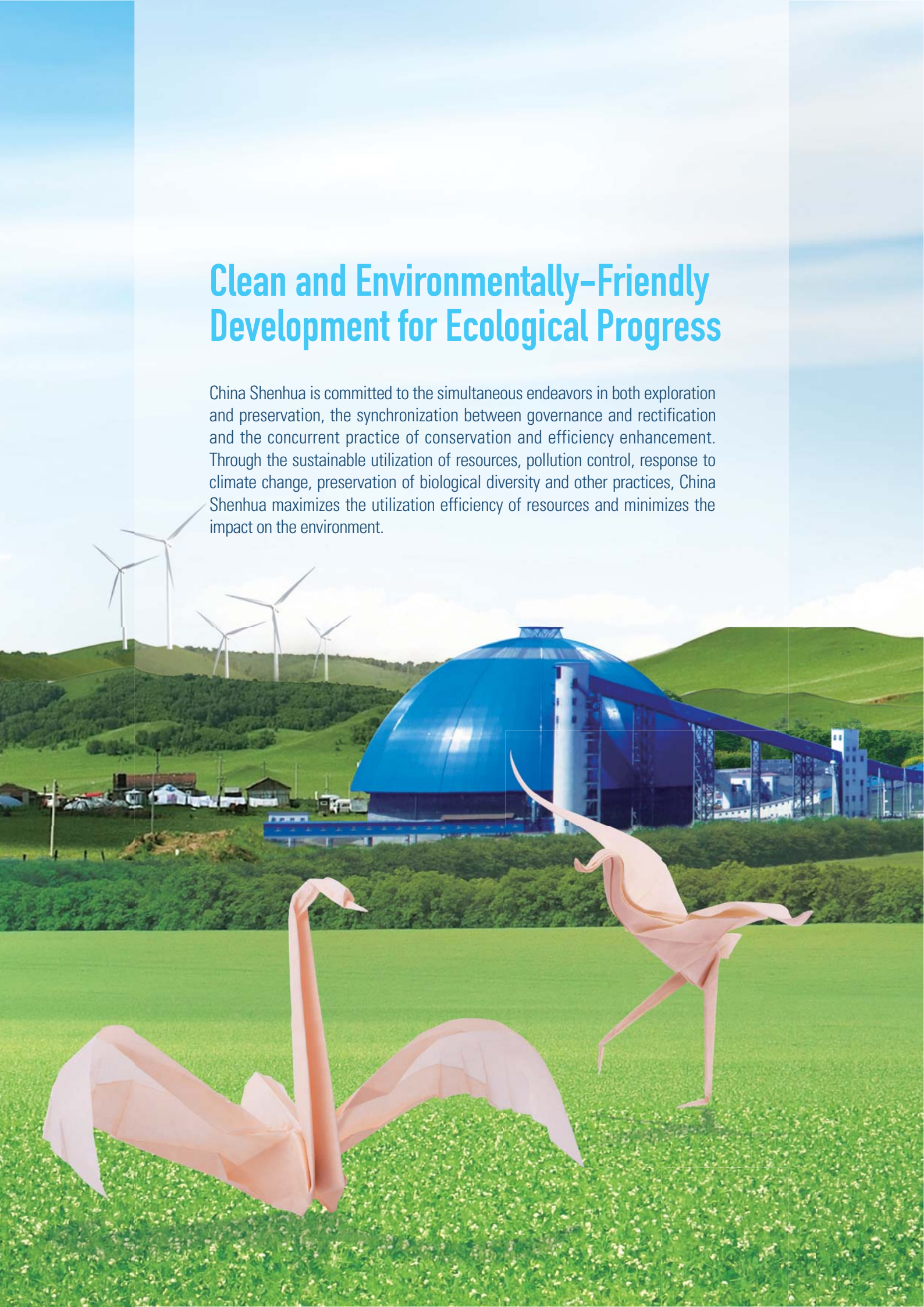


The Poster of “Love Among Blood” (《天山儿女》), a Micro Movie Filmed by the Company that Reflects the Lives of Its Frontline Employees



# Clean and Environmentally-Friendly Development for Ecological Progress

China Shenhua is committed to the simultaneous endeavors in both exploration and preservation, the synchronization between governance and rectification and the concurrent practice of conservation and efficiency enhancement. Through the sustainable utilization of resources, pollution control, response to climate change, preservation of biological diversity and other practices, China Shenhua maximizes the utilization efficiency of resources and minimizes the impact on the environment.







## Clean and Environment-Friendly Development for Ecological Progress

### Annual focuses of stakeholders

- Step up the utilization efficiency of coal and water resources, converse energy and resources
- Accomplish ultra-low emission of generating units to reduce the emissions of air pollutants
- Lower the emissions of greenhouse gas in response to climate change
- Enhance ecological treatment, preserve biological diversity

### Our efforts

- Embark on achieving breakthroughs in the energy conservation of tens of thousands of companies and the emission cuts management of greenhouse gas
- Conduct key construction projects for energy conservation and environmental protection
- Implement the action plan for air quality protection in a comprehensive manner and focus on promoting the ultra-low emission of coal-fired power plants
- Issue the action plan for water pollution control and prevention
- Strengthen and optimize the online supervision platform of pollutants
- Commence the establishment of the pilot pre-supervision system of energy conservation and environmental protection

### Achievements of actions for 2015

- The comprehensive energy consumption per RMB ten thousand output value was 3.14 tonne standard coal/tent RMB thousand
- Ultra-low emission was accomplished for accumulatively 35 coal-fired generating units (20,310 MW)
- The emissions of sulfur dioxide and nitrogen oxide from the thermal power business decreased by 20.6% and 29.7% respectively.
- The utilization rate of solid waste and wastewater was 31.6% and 69.9% respectively
- Additional green area amounted to 19.9937 million m<sup>2</sup>

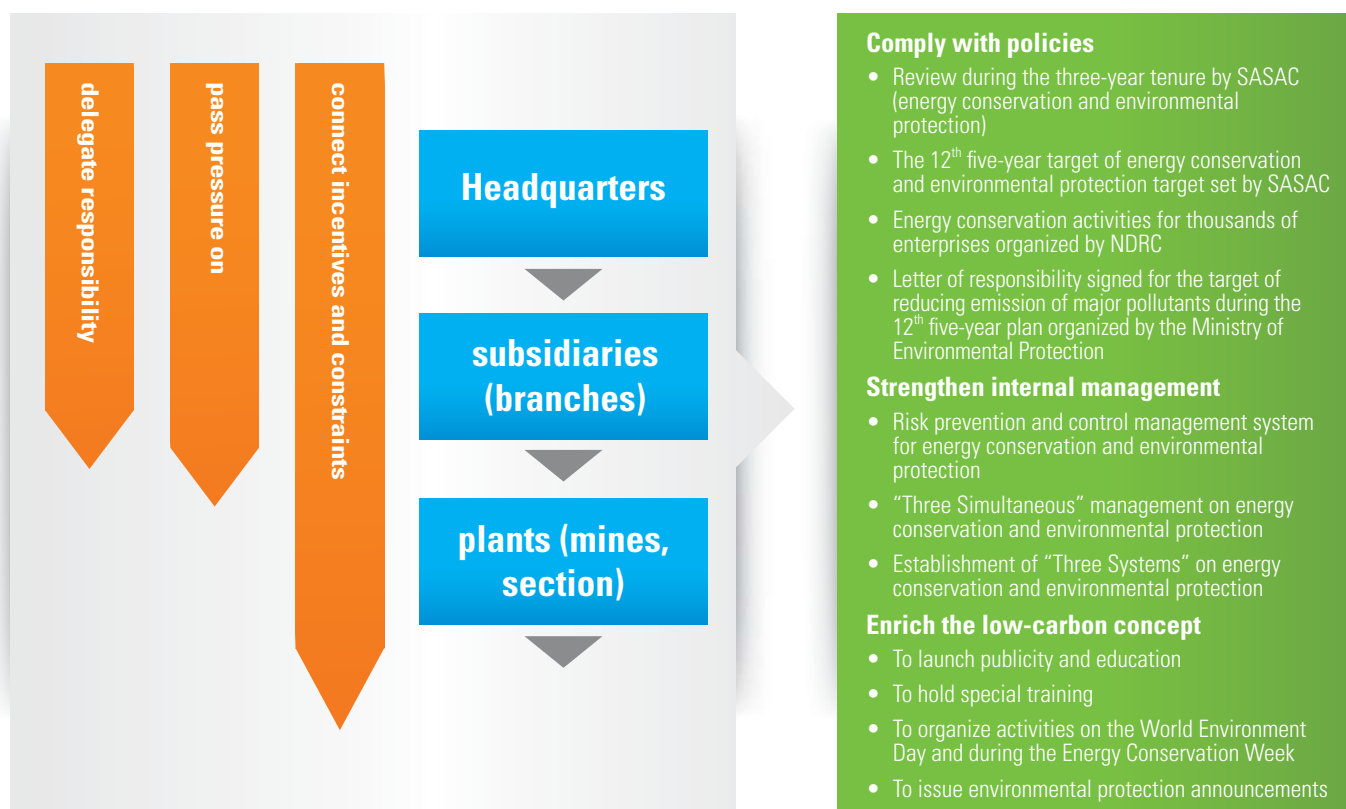
### Plans for 2016

- Carry out 100 key projects for energy conservation and environmental protection
- Promote implementation of the action plans for air and water pollution control and prevention in a comprehensive manner
- Reinforce the emission management of greenhouse gas and emission reduction reserve projects
- Formulate and implement the 13<sup>th</sup> five-year energy conservation and environmental protection plans
- Initiate dry runs for response to environmental emergencies



## Management of Energy Conservation and Environment Protection

The Board, together with its safety, health and environmental committee are the highest decision-making authority in respect of energy conservation and environmental protection. The company established a top-down management system and assessment mechanism for energy conservation and environmental protection on three levels: head office, subsidiaries (branches) and plant (mine, section), in order to delegate responsibility, pass pressure on, and connect incentives and constraints on each level.



Management System of Energy Conservation and Environmental Protection

In order to ensure the accomplishment of the target on energy conservation and environmental protection in the "12<sup>th</sup> Five-Year Plan" and keep the continuously steady improvement of environmental safety of the Company, through the "Joint Action Plan for Energy-Saving and Environmental Protection in 2015", the Company changed the methods of development, further pushed forward the upgrading and reconstruction of energy conservation and environmental protection to realize the "two improvements" in awareness and in environmental safety standards, and "two reductions" in per-unit energy consumption and emission of pollutants. In 2015, the Company used the joint action plan for energy conservation and environmental protection as the main channel to focus on the management of energy conservation and environmental protection, reduction of energy consumption and greenhouse gas emission, and progress in ecological conservation and pollution treatment. The reduction of per-unit energy consumption and of pollutants emission exceeded the planned target, outperforming the mission of assessment in the "12<sup>th</sup> Five-Year Plan". No serious environmental safety incidents occurred throughout the year.

### Establishment of an Energy Conservation and Environmental Protection System

In 2015, the Company continued to push forward the establishment of standardized management policies including ISO14001 (environmental management), HSE (health, safety and environment management), energy management system, risk prevention and control management, etc. The Company rigorously implemented "Three Simultaneous" management on energy conservation and environmental protection to manage various environmental risks. Meanwhile, the Company established and commenced operation of an online monitoring platform which comprises supervision, alert warning and benchmarking to realize real-time monitoring and alert warning for major pollution sources of the 117 enterprises in three major segments, namely coal, electricity and coal to chemicals.

## Statistics

Completed the digital benchmarking module for energy conservation and environmental protection, carried out benchmarking twice a year and pushed for all plants and mines to achieve excellent performance; compiled the Statistical System and Calculation Method for Energy Conservation and Environmental Protection covering general business, coal, electricity, transportation and coal chemistry in an effort, to further normalize and standardize the benchmarking of statistics.

## Monitoring

Conducted trials of a six-grade alert system for the online monitoring and premonition platform of 117 production enterprises under 14 major subsidiaries and branches; compiled the plan on the construction of an online monitoring system for energy consumption; the eco-environmental remote sensing monitoring centre completed 4 monitoring reports including the Monitoring and Assessment of Land Reclamation of Subsiding Areas in Underground Coal Mines in Shandong Central Area.

## Assessment

Performance evaluation and administrative accountability were implemented and the mission of energy saving and environmental protection in the "12<sup>th</sup> Five-Year Plan" was outperformed; 10 units and 101 individuals were recognized as examples in environmental protection and energy saving during the "12<sup>th</sup> Five-Year Plan".

Progress of the Three Major Energy Conservation and Environmental Protection Systems of China Shenhua in 2015

## Case Study: Guohua Power Company Became the First Power Enterprise in the Country to Disclose All Environmental Information

On 2 June, Guohua Power Company held a ceremony for launching the online environmental information disclosure system. The environment standards of all its 18 power plants were disclosed. It became the first power enterprise in the country that discloses all of its environmental information from headquarters. The public can view information on the platform for publicizing environment information (<http://www.ghepc.com>) environmental including the introduction of the company, plan of self-monitoring of the environment, emergency response proposal, and latest emission monitoring data of air pollutants including dust, SO<sub>2</sub> and N<sub>x</sub>O<sub>y</sub>, among which are clear figures of hourly averages, updates, operating status of generators and pollutant emission standards.



Ceremony for Launching the Online Environmental Information Disclosure System



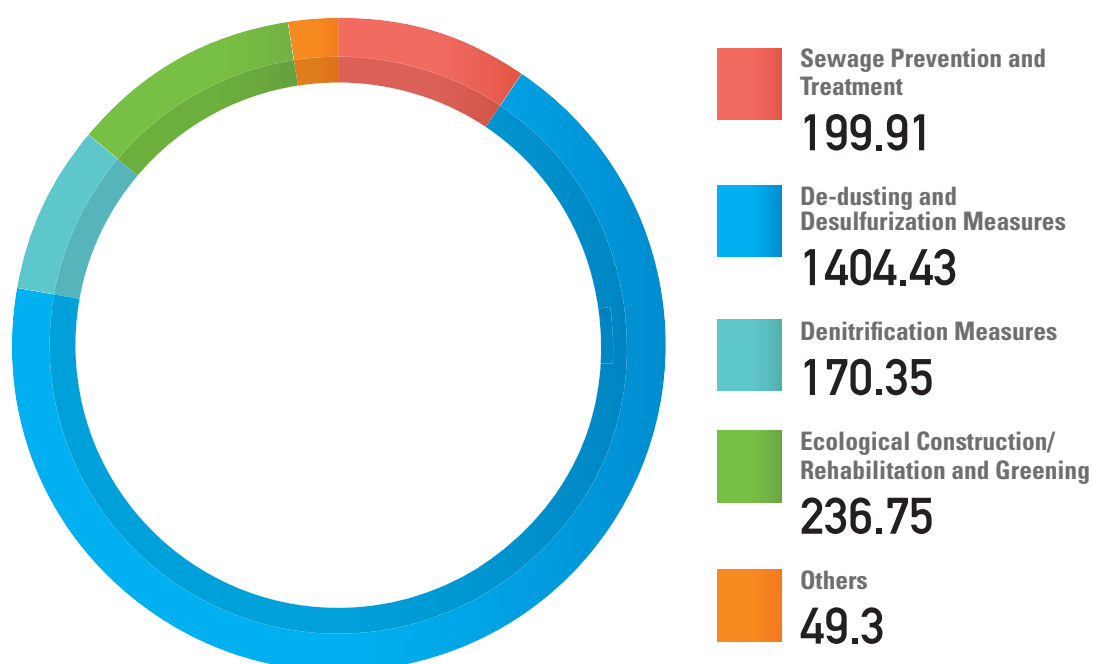
A Glimpse of the Platform of Environmental Information Disclosure System

### Investment in Energy Conservation and Environmental Protection

In 2015, the Company made an investment of RMB 3.803 billion earmarked for energy conservation and environmental protection projects, comprising of RMB2.061 billion and RMB1.742 billion committed to environmental protection and energy conservation respectively. The energy conservation and environmental protection projects mainly include energy conservation projects such as re-engineering of boilers, through-flow, frequency conversion, geothermal heat pumps and air-source heat pumps, and environmental protection projects such as de-dusting, desulfurization, denitrification, comprehensive utilization of water resources, sewage prevention and treatment, ecological construction and treatment of gangue dump sites.

*Investment by China Shenhua for Energy Conservation and Environmental Protection in Each Business Segment in 2015 (RMB million)*

Business Segment	Investment in Energy Conservation and Environmental Protection	Investment in Environmental Protection	Investment in Energy Conservation
Coal business	393.6	347.7	45.8
Power business	3,173.6	1,493.3	1,680.4
Coal to chemicals business	0.3	0.3	0.0
Transportation business	235.6	219.5	16.1
<b>Total</b>	<b>3,803.1</b>	<b>2,060.8</b>	<b>1,742.3</b>



*Structure of China Shenhua's Investment in Environmental Protection in 2015 by Purpose (RMB million)*



## Energy Conservation and Emission Reduction

With coordinated operations in coal, power, railway, port, shipping and chemical, the Company committed great efforts to develop a circular economy of “resources – products – wastes – renewable resources”, maximize the potential of energy conservation through measures including major energy conservation engineering, energy conservation research for ten thousands enterprises, boilers improvement in the coal industry and energy auditing, and improve the utilization efficiency of energy. In 2015, the comprehensive energy consumption of the Company was 44.7491 million tonnes of standard coal whereas the comprehensive energy consumption for an output of RMB10,000 was 3.14 tonnes standard coal.

*The Energy Consumption of Each Business Segment of the Company from 2013 to 2015*

Energy Consumption of Each Business Segment	2013	2014	2015
<b>Comprehensive energy consumption of raw coal production (kg standard coal/tonne)</b>	<b>2.21</b>	<b>2.25</b>	<b>2.13</b>
<b>Comprehensive energy consumption of railway (kg standard coal/10 thousand tonne kilometers)</b>	<b>26.01</b>	<b>25.86</b>	<b>24.45</b>
<b>Comprehensive energy consumption of port throughput (kg standard coal/10 thousand tonnes)</b>	<b>2,855.09</b>	<b>2,673.01</b>	<b>2,775.24</b>
<b>Comprehensive energy consumption of shipping (kg standard coal/1,000 tonne nautical miles)</b>	<b>5.81</b>	<b>5.59</b>	<b>4.95</b>
<b>Comprehensive energy consumption of polyolefin (kg standard coal/tonne)</b>	<b>5,595.96</b>	<b>5,350.83</b>	<b>4,916.72</b>

### Clean Coal

The Company continues to improve coal mining, washing, processing and transportation, systematically pushes forward the production of clean coal, increases the comprehensive utilization efficiency of coal resources, strives to make coal “greener”, and promotes the renovation and upgrading of the traditional way of coal production. In 2015, the Company sold 0.15 billion tonnes of coal with low ash and sulphur contents and high calorific value in the Beijing-Tianjin-Hebei region and surrounding areas, the Yangtze River Delta and Zhujiang River Delta, guaranteeing the supply of high quality and environment-friendly coal in key areas. Meanwhile, the Company constantly pushed forward the substitution of loose coal in Beijing-Tianjin-Hebei region, and entered into sales and purchase agreements to provide cities including Changzhou, Baoding, Langfang and Chengde with 20 million tonnes of clean coal.

## Measures

### Green Mining

Build a "safe, green, smart, and efficient" modern coal production system and explore a green production model featuring low consumption, low emission and high efficiency.

### Increase in Recovery Rate

Aim to "create a resource-conserving enterprise through refined mining to best tap potential", and continue to increase resource recovery rate.

### Strengthening Coal Washing, Selection and Processing

The Company washes all suitable coal, sells refined coal with high calorific value to the outside and uses or treats coal gangue and coal with low calorific value on the site.

## Performance

Comprehensive energy consumption of raw coal amounted to 2.13 kg standard coal/tonne.

The average recovery rate of coal mining areas reached 89.19%, among which, the average recovery rate of underground mining areas reached 84.64% and that of open-pit mining areas reached 97.81%, both being leading figures in the industry.

The Company washed and processed raw coal of 266.57 million tonnes, and removed coal gangue of about 26.7 million tonnes, suppose the coal travels an average of 600 km, railway freight turnover has been cut by 16 billion tonne km

### The Measures and Performance of the Clean Coal Production of the Company

#### Recovery Rate in Mining Areas

	2013	2014	2015
<b>Recovery rate of coal mining areas (%)</b>	<b>87.76</b>	<b>88.56</b>	<b>89.19</b>
<b>Recovery rate of underground mining areas (%)</b>	<b>82.75</b>	<b>83.81</b>	<b>84.64</b>
<b>Recovery rate of open-pit mining areas (%)</b>	<b>97.79</b>	<b>97.8</b>	<b>97.81</b>





Modern Coal Conveyor of Shengli Energy Company  
Efficient Power

In accordance with the power development idea of “efficient conversion of clean coal and integrated utilization of resources”, the Company upgraded and reformed green power generation to save energy and protect the environment, carried out energy conservation reform of the heat supply and capacity expansion of existing generating units, through-flow of steam turbines, optimization of cold junction and improvement of auxiliary machines, thus advancing the upgrading of the power industry. In 2015, the Company’s generating units with a capacity of 600MW and above accounted for 67% of the total capacity of coal-fired generators, whereas the average coal consumption for sold electricity of coal-fired units was 318 g standard coal/kWh. The Company completed the re-engineering of six steam turbines, Guohua Power completed the through-flow re-engineering of four generating units and integrated upgrading and renovation of five generating units. The coal consumption for power supply decreased by more than 10 g/kWh after renovation. The average coal consumption for power supply of Guohua Power Branch was 308.5 g standard coal/kWh, representing a decrease of 1 g standard coal/kWh. Guohua Power Jinjie Power Plant#2 generator was recognized as the best 600MW grade sub-critical air-cooling generating unit in terms of coal consumption for power supply.

#### High-end Coal Chemical Industry

The coal to chemicals industry holds on to the principle of “optimized structure and complementary energy mix”, applying advanced management, upgraded techniques and optimized operations in each link from energy generation to energy consumption. The utilization rate of energy resources was maximized by the recycling of various by-products, residual heat and residual pressure. In 2015, the comprehensive energy consumption of each tonne of olefin of the Company was 4,916.72 kg standard coal/tonne.

#### Green Transportation

The Company established an integrated transportation system of railway, port and shipping, optimized the organization and coordination of transport, and launched reverse full-trip transport at ports to boost transportation efficiency as well as high-power alternating current locomotives to reduce energy consumption. In 2015, the comprehensive energy consumption of railway freight throughput was 24.45 kg standard coal per ten thousand tonne kilometers. After “Shenhua” ship, an eight-axle huge power alternating current locomotive was launched along the Shuohuang Railway, the power consumption of locomotives decreased by 15.9%.



Upgrading of Generating Unit No.2 in  
Suizhong Power Plant

### Case Study: Special Campaign Against Small Industrial Coal-fired Boilers

The Company carried out special management for 681 small coal-fired boilers by way of elimination, renovation or optimization, and implemented renovation measures including renovation of ground source, air source and water source heat pumps and heating systems, utilization of boilers with large capacity and low pollution, utilization of residual heat in power plants and acquisition of heat from boilers, etc. As of the end of 2015, the Company invested 210 million in the special campaign, dealing with 346 boilers, among which, 212 boilers were shut down or replaced, 79 boilers were renovated for energy conservation and environmental protection and 55 boilers were adjusted so as to be more efficient and clean.





## Water Conservation by Increasing Efficiency

The Company adheres to the principle of “Needs-based, Supply-driven and Adaptive to the reality” in the exploitation and use of water resources, and maximizes the efficiency of the use of water resources through strengthening the protection of water resources, water conservation and reuse of waste water. In 2015, the Company used 191.34 million tonnes of freshwater in total, and the water used for thermal power generation was 0.73 kg/kwh. The Company desalinated 12.54 million tonnes of sea water.

*The Utilization of Water Resources of the Company*

	2013 (restated)	2014 (restated)	2015
<b>Total use of freshwater (million tonnes)</b>	<b>200.4</b>	<b>186.8</b>	<b>191.34</b>
<b>Water used for thermal power generation (kg/kwh)</b>	<b>0.95</b>	<b>0.72</b>	<b>0.73</b>
<b>Seawater desalinated (million tonnes)</b>	<b>8.27</b>	<b>8.95</b>	<b>12.54</b>

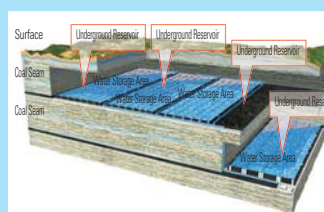
**Water conservation.** The Company proactively promotes measures including water protection in coal mining, air cooling in power plants and water conservation techniques to protect water resources and reduce consumption of water. As of the end of 2015, installed capacity of direct air cooling technology of the Company reached 12,400 MW, accounting for 24% of the total capacity of the coal-fired generators of the Company. 18 of 20 gangue generator units operated by Shendong Power were equipped with air cooling equipment, of which the freshwater used for power generation throughout the year was 0.55 kg/kwh.

**Seawater desalination.** Being adaptive to local conditions, the Company’s coastal power plants uses desalinated seawater in power generation to realize joint production of electricity and water; self-owned ships were equipped with seawater desalination equipment to produce water in areas with qualified water and reduce the consumption of fresh water. Huanghua Power possesses three sets of seawater desalination devices with the water processing capability of 57.5 thousand tonnes per day. In 2015, apart from satisfying the demand of power plants, Huanghua Power also provided surrounding enterprises with desalinated water of approximately 9.71 million tonnes, becoming one of the major water supplier in the area.

**Waste Water Recycling.** The Company combined the distinct features of its four major businesses, and strengthened the integrated management and recycling of every kind of waste water in order to improve the comprehensive utilization efficiency. The reclaimed waste water is primarily used for mining, coal washing, and selection and processing, power plants cooling, dust removal for mines and roads, green rehabilitations, toilet flushing and car washing. In 2015, waste water produced by the Company amounted to approximately 167.38 million tonnes among which 117 million tonnes were recycled, representing a recycling rate of about 69.9%.

## Case Study: “Underground Coal Mine Reservoir” Technology Facilitates the Sustainable Utilization of Water Resources

Coal mining produces massive mine water. In order to guarantee the operation safety under the mines, mine water needs to be drained out to the surface and most of which would be evaporate afterwards. After having researched the difficulties for 20 years, the Company invented an underground coal mine reservoir technology to guide the underground water in the aquifer to mined out areas for storage. The Company established corresponding water processing, extraction and utilization projects to utilize mine water in an efficient manner and conserve freshwater. Currently, 35 underground reservoirs have been built in Shendong mining area with over 25 million m<sup>3</sup> reserved water, and 68 million m<sup>3</sup> of supplied water for the year. They provided over 95% of water in mining areas for production, daily and ecological purposes, which realized the virtuous three-dimensional water resource in mining areas. In particular, Daliuta Mine in Shendong mining area, as the earliest established demonstration project of distributed mines with underground reservoirs, can save approximately 2.8 million tonnes of fresh water.



Demonstration of Coal Mine Groundwater Reservoirs



## Treatment of Pollution

The Company adheres to the principle of preventing pollution at source, controlling pollution in the process and combating pollution at the end by clean production and pollution prevention and control so as to minimize the impact of its production and business operations on the environment. While ensuring environmental safety, the Company also endeavours to contribute to improving the environment.

### Gas Emission Treatment

The Company commits itself to the Action Plan for Air Pollution Prevention and Control (2013–2017) by fluegas, denitrification and desulfurization, ash prevention and control and boilers renovation on a large scale. With a view to minimize air pollutant emissions, the Company lays emphasis on promoting ultra-low emission at coal-fired power plants. In 2015, ultra-low emission renovation was completed for 28 coal-fired generating units (16,810 MW) and 35 coal-fired generating units (20,310 MW) achieved ultra-low emission, representing 38.9% of the total installed capacity of coal-fired power plants. 5 generating units were entitled to subsidies for achieving ultra-low emission.



Site of the Wet Electrostatic Precipitation Renovation for the No. 4 Generating Unit of Guohua Sanhe Power Plant

### Examples of Ultra-low Emission in 2015

Date	Examples
15 July	The No. 2 generating unit of Shenwan Chizhou Jiuhua Power Generation Company commenced on-grid power generation after an investment of RMB200 million in implementing the technological renovation for advanced energy conservation and environmental protection, becoming the first coal-fired generating unit in Anhui Province realizing “ultra-low emission”.
11 November	The No. 3 generating unit of Sanhe Power Plant passed the 168-hour full-load trial running and commenced production. The 2-year holistic upgrading and renovation for energy conservation and environmental protection purposes for all 4 generating units of the power plant proved to be successful in all respects and Sanhe Power Plant became the first coal-fired plant with “ultra-low emission” technology in the Beijing-Tianjin-Hebei region.
15 December	The No. 7 generating unit of Taicang Power Plant passed the 168-hour trial running for its “ultra-low emission” renovation project, which marked the successful commencement of operations of the first “ultra-low emission” generator in Jiangsu Province.

### Flue Gas Emissions of the Company's Thermal Power Business

Type and Category of Emissions	2013 (restated)	2014 (restated)	2015
Total sulphur dioxide emissions (10'000 tonnes)	19.1	16.0	12.65
Intensity of sulphur dioxide emissions (g/kWh)	0.78	0.69	0.57
Total nitrogen oxide emissions (10'000 tonnes)	40.8	27.9	19.6
Intensity of nitrogen oxide emissions (g/kWh)	1.68	1.20	0.88
Intensity of soot emissions (g/kWh)	0.12	0.08	0.06

## Prevention and Treatment of Water Pollution

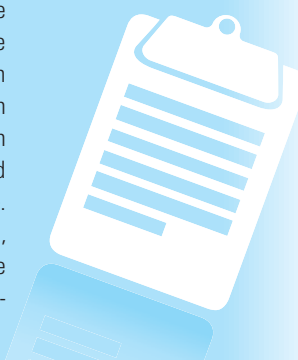
The Company has formulated and implemented the Action Plan for Water Pollution Prevention and Control (2015–2020) and has consolidated its efforts to promote the prevention of and control over pollution caused by coal mine water, industrial effluent and domestic sewage, and reduce the emission of wasted water. In 2015, 27 wastewater treatment projects were implemented, reducing chemical oxygen demand by 631 tonnes.

### Comprehensive Utilization of Wastewater

	Volume discharged (million tonnes)			Volume utilized (million tonnes)		
	2013 (restated)	2014 (restated)	2015	2013 (restated)	2014 (restated)	2015
<b>Coal mine water*</b>	114.4	104.6	105.3	63.2	63.1	71.1
<b>Industrial effluent</b>	61.6	48.4	46.97	42.5	40.3	41.15
<b>Domestic sewage</b>	15.0	14.7	14.85	4.1	4.2	4.45

### Case Study: The Company took the Lead in Releasing and Implementing the Corporate Version of “10 Measures for Water Pollution Control”

For the purpose of implementing the Action Plan for Water Pollution Prevention and Control formulated by the State Council, the Company has taken the lead in releasing and implementing the corporate version of the Action Plan for Water Pollution Prevention and Control (2015–2020), in which the targets for water pollution prevention and control up to 2020 have been set forth and the roadmap for the tasks has been put forward. In particular, the main focus is on 37 sub-missions under 10 major missions and the safety of water consumption and the hydro-environment is ensured by measures including preserving, saving and purifying water and protecting environmentally-sensitive areas from three aspects, namely acquisition, consumption and discharge. The specific measures include water pollution prevention and control projects, review of clean production, management of and control over wastewater discharged by companies that dwell in environmentally-sensitive areas, launch of an online monitoring system for the key pollution sources of wastewater, phasing out of low-capacity coal-fired generating units, technological innovation platforms and example projects.



## Solid Waste Recycling

The Company continues to optimize its structure and products, extend its industrial chain, create synergy between industries, actively develop a circular economy and try its best to ensure maximum utilization of resources to reduce the discharge of solid waste. Solid waste that cannot be utilized for the moment is disposed of in a safe manner. In 2015, the comprehensive utilization rate of solid waste was 31.6%, among which, the comprehensive utilization rate of fly ash, slag and desulfurized gypsum was 70%. In 2015, integrated utilization generators had a total capacity of 70,240 MW, representing 13.4% of the total installed capacity. In 2015, coal gangues consumption stood at 4.238 million tonnes, equivalent to 1.212 million tonnes of standard coal. This shows that we are able to utilize resources of low calorific value at the same place and in a clean manner.



## Ecological Progress

The Company adheres to the notion of producing green coal and building ecological mining sites. Great emphasis has been laid on soil and water conservation, windbreak and sand fixation, subsidence treatment, land rehabilitation and greening, ecological projects and other efforts in a bid to safeguard and improve local eco-environment and strive to advance the ecological progress. In 2015, the Ecological Restoration Technology for Large-scale Energy Base and Its Demonstration, the national technological support scheme undertaken by the Company, had successfully passed the examination, providing technological support and demonstrations for the protection and restoration of the ecology of the country's coal reserves. In 2015, the Company invested RMB0.237 billion in water and soil conservation and ecological construction and created green areas of 19.9937 million m<sup>2</sup>.

### Underground Mines

Having taken into account the ecological conditions of the mining sites, the Company has adopted an ecological treatment model which integrates pre-mining pollution control, in-process protection and post-mining restoration. As we endeavour to improve the ecology of the mining sites in a holistic manner, priority has been given to subsidence prevention and control, management of coal gangue (soil) piles, rehabilitation and greening for mining sites as well as green space management and protection. In 2015, about RMB140 million was invested in the Shendong Coal ecological project and was dedicated to soil and water conservation for subsidence areas, ecological corridors of soil and water conservation, further greening for production areas, rehabilitation and greening for coal gangue piles, among others, covering an area of 15 km<sup>2</sup> with roughly 3.5 million trees and shrubs being planted.



A Part of the Mining Site of Shendong Coal

### Open-Pit Mines

Mining, rehabilitation and greening at open-pit mines of the Company are conducted in a synchronized manner. Timely rehabilitation and greening has been carried out in accordance with the procedure of topsoil stripping, layering up, mining, back-filling, covering the topsoil and restoring vegetation, which enables a full-scale greening and restores the ecology to its pre-mining conditions. In the meantime, the Company is determined to integrate rehabilitation and environmental protection with industrial operations with a view to establish an eco-park that incorporates woodlands, cash crops, husbandry and tourism all in itself. In 2015, with a focus on all aspects of its production and the entire process of its business development, Shenbao Energy Company invested RMB3.9 million and transformed the waste piles into a green space of 0.29 million m<sup>2</sup> and maintained 1.5973 million m<sup>2</sup> of grasslands with 5,300 trees.



A Part of Shenbao Energy Company Preserves the Ecology of Grassland

### Along the Railway

The Company is committed to biological sand control, vegetation planting and maintenance along the Company's railway protecting and significantly improving the ecology along the railway. In 2015, Baoshen Railway invested RMB49.8 thousand in biological sand control projects and built sand barriers of 5,975m and stumps of 83,400 m<sup>2</sup> and shrubs of 1,200 m<sup>2</sup>.

## Responding to Climate Change

The Company keeps a watchful eye on climate change and integrated the idea of low carbon into its production and business operations. By virtue of the existing achievements in clean coal and low-carbon technologies, the Company is actively researching, developing and offering clean energy solutions, fostering clean coal conversion and advocating the idea of clean coal use. All this has driven our clients and users to take part in and support clean coal development in an active response to climate change.

### Development of Low-Carbon Energy

The Company has been vigorously developing renewable energy such as wind power and hydropower. As of the end of 2015, the installed capacity of wind power and hydropower amounted to 16 MW and 125 MW respectively, producing 0.69 billion kwh in total in the year. The consumption of standard coal went down by 0.205 million tonnes. Carbon dioxide (CO<sub>2</sub>) emissions were reduced by 0.513 million tonnes.

### Carbon Management

The Company has actively responded to the challenges and opportunities with respect to greenhouse gas emission cuts arising from the United Nations Climate Change Conference held in Paris. The Company established the management frameworks for carbon emission cuts and formulated the corporate criteria for the audit and review of the CO<sub>2</sub> emissions in coal and coal-chemical industries. The Company has also commenced researching on carbon emission management strategies as part of its 13<sup>th</sup> Five-Year Plan, re-organized in a holistic manner work procedures such as the statistics, review and audit of carbon emissions, and carbon transactions and examined the historical data of carbon emissions of all production units and conducted on-site investigations into the carbon emissions of 32 power plants.

### Green Office

The Company enhances awareness of environmental protection via a number of ways such as TV, the Internet, newspapers and internal publications, and held thematic activities including “Energy Conservation Week”, “World Environment Day” and the “Conserve a watt of electricity, a piece of paper and a drop of water”. Great efforts have also been made to further promote our vision of eco-friendly office practices and encourage green offices with a view to guide our employees to begin conserving resources by doing minor things such as saving electricity and paper in their daily work. By focusing on small things and paying attention to management of details, we were able to minimize energy consumption.



Green Office Measures



# Dedication with Compassion: Harmony and Win-Win Development

China Shenhua insists on rewarding the society as an important way to realize corporate values. It cares for and actively participates in the social and economic affairs of the community, helping people in need and offering public service to the community for harmonious development of the Company and society.







## Dedication with Compassion: Harmony and Win-Win Development

### Annual Focuses of Stakeholders

- Communicate with the community
- Care for the development of the communities where we operate, provide job opportunities and develop featured economy
- Continue to carry out, optimize and upgrade public service activities such as Loving Care Libraries, Loving Care Activities, and Loving Care Schools

### Our Efforts

- Strengthened communication with the community by regularly opening our factories to the public
- Supported infrastructure in the community
- Developed activities to help people in need through Shenhua Foundation
- Actively participated in community construction and environmental protection

### Performance in 2015

- Organized activities on the "Open Day of Environmental Protection" to foster full communications with the community
- External donations amounted to RMB209 million
- Provided relief for a total of 20,158 children suffering from leukaemia and congenital heart defect, and increased the number of "Shenhua Loving Care Schools" to 13 and built 10,170 Shenhua Loving Care Libraries.

### Plans for 2016

- Continue to organize "Open Day" activities to promote the communications with the community
- Participate in the economic progress of the communities where we operate and improve local living standard
- Carry out harmonious operation overseas and increase efforts growing local communities and protecting the environment of the places where we participate in



## Communicate with the Community

Trust and support from the community is the cornerstone for stable development of China Shenhua. The Company values the communications and conversations with local residents, and builds a sound communication mechanism through “Open Day” activities, lectures on specific topics, operation of new media platforms, etc., to timely disclose information in relation to the community’s interests, thus enabling residents of the community to fully understand the operation of the Company.

### Case Study: Netizens Walked into GuohuaTaicang Power Plant to Experience Green Power Generation

In October 2015, GuohuaTaicang Power Plant organized an activity named “Home at Taicang • Get Closer to Gangcheng: Tour to the Fascinating New City” with 25 netizens as participants walking into the power plant to experience the operation of ultra-low emission of coal-fired power generators, which was constructed with great efforts by Guohua Power. Through an in-depth introduction into power generation and pollutant reduction for ultra-low emission given by the power plant’s employees, the netizens understood the efforts of achieving ultra-low emission made by Guohua Power. The beautiful and tidy working environment, the management philosophy of safety, health and environmental protection, as well as the clean and elegant on-site working environment of Guohua Taicang Power Plant all had a deep impression on the visitors.



Young Journalists of Dingzhou TV are Visiting Guohua Dingzhou Power Plant



## Participate in Community Development

China Shenhua proactively cares for the needs of the community, actively improves investment in the community and assistance policies, creates job opportunities, and helps grow the local economy.

### Job Creation in the Community

The Company actively promotes localized employment by giving priority to hiring local employees under the same conditions based on the benefit-sharing mechanism and the principle of harmonious development. The Company has established maintenance, assembling and manufacturing bases in Shendong and Zhunge'er Mines, thereby creating many job opportunities.

### Case Study: Shendong Coal Attaches Great Importance Creating Employment in the Local Community

Shendong Coal Group insists on promoting harmonious development, actively fulfils social responsibilities, and attaches great importance to the localization of employees to promote win-win for both the regions and the Company. As of 2015, in the three provinces of Shaanxi, Inner Mongolia and Shanxi where Shendong Coal operates, local employees account for 80% of all registered employees, with 12,382 being local people of Shaanxi. The Company absorbed spare labour through various channels and helped about 20,000 farmers get a job. The ecological green project creates nearly 100,000 rural jobs every year. External professional service including property and logistics units provided nearly 10,000 job opportunities, creating large number of employment to low-income workers in the community.



### Contribute to Local Economy

The Company supports and participates in the economic construction of the surrounding regions while developing. On the premises of fairness and quality, the Company constructs projects and purchases materials in the locality, and enjoys good cooperative relationship with local enterprises. The Company has gradually opened transportation market of Shenhua railways, actively developed reverse-transportation, put great effort to make the Shenhua railways an important passageway for local material transportation, thus promoting the economic development of the areas along the railway.

### Case Study: Ankang – Xi'an – Fugu Fast Passenger Train Calls at Fugu Station of Shenshuo Railway

Shenshuo Railway actively supports regional economic development, cares for the needs of the public, and made efforts to solve the obstacles to regional development. Though Shenshuo Railway is a special railway for transporting heavy goods which differs significantly from passenger transport railway, the Company invested more than RMB40 million despite a number of technical problems in the renovation of route and facilities, and successfully started the operation of Ankang – Xi'an – Fugu fast passenger trains. This project enables the Fugu people to go out much more easily than they were able to before, and provided more convenient conditions to facilitate economic development, passengers' transportation and cultural communication for Shaanxi's cities and counties.



People in Fugu County Taking the  
"Fast Passenger Train from Ankang to Xi'an to Fugu"

## Public Welfare

China Shenhua puts equal emphasis on development and contribution, provides funds for medical care, education and disaster relief as a token of gratitude to society and the public.

### Donations

The Company actively participates in public service activities through Shenhua Foundation. In 2015, the Company donated RMB209 million to society, among which, Shenhua Foundation donated RMB205 million.

### Major Public Service Activities Launched by Shenhua Foundation and the Achievements

Public Service Project	Achievements
Healthcare – Project of Shenhua Loving Care Activities: saving children suffering from the “two diseases”	As of the end of 2015, the project has cooperated with 77 3-A hospitals in 27 provinces (municipalities and autonomous regions), helped 20,158 children who suffer from “two diseases”, among which, 2,741 suffering from leukaemia and 17,417 from congenital heart defect.
Healthcare – “Shenhua Loving Care Activities” screening project of congenital heart defect for new-born babies for free	As from 2015, the project has been providing screening of congenital heart defect to new-born babies for free in Hebei as trial programme, having screened 1,052 new-born babies, with 87 positive, by the end of 2015.
Healthcare – Prevention of coal miner pneumoconiosis project	The project conducts treatment and prevention of pneumoconiosis for coal mine workers together with China Coal Miner Pneumoconiosis Treatment Foundation, and donates to the Foundation RMB1 million every year for 5 years for the prevention and treatment of coal miner pneumoconiosis.
Culture and Education – Shenhua Loving Care Schools Project	In 2015, the Company donated RMB5 million to help construct the building for the Central Primary School in Arele, Yutian County, Xinjiang. Currently, the number of caring schools has increased to 13.
Culture and Education – Shenhua Loving Care Libraries Project	As of the end of 2015, 18.1057 million books have been donated to primary and high schools in poor areas such as in Xinjiang, Ningxia, Qinghai and Sichuan, representing a total value of RMB422 million. The Company built 10,170 Shenhua Loving Care Libraries which benefit 7.7694 million students.
Culture and Education – Teacher and Student Assistance Project	The project was launched in 2015 and will provide RMB2.5 million each year for four successive years to 500 poor college students in Hotan, Xinjiang. The total amount of donation will be RMB10 million.

For more information, please refer to the website of Shenhua Foundation at <http://www.shf.org.cn/>.



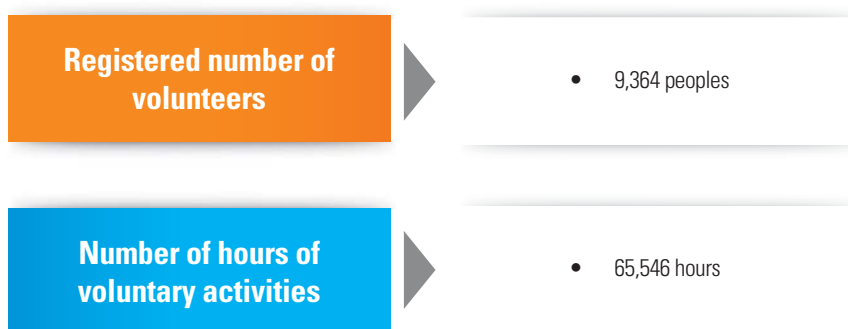
Primary School in Linchuan, Fuzhou, Jiangxi built by the Company



Synthetic Rubber Sports Tracks of Baorixile Primary School Built by the Company in 2015



The Company encourages employees to organize and participate in voluntary activities with the spirits of “contribution, friendliness, assistance, progress”, including city cleaning, helping migrant workers, and visiting the elderly who live alone, etc.



#### Volunteer Activities of China Shenhua in 2015

##### Disaster Rescue and Relief

In the event of an emergent social disaster, the Company actively works with relevant departments for post-disaster arrangements and relief. In 2015, after the blasts at a warehouse storing dangerous goods owned by Ruihai Company at Tianjin Port on 12 August, the Company donated RMB5 million and went into rescue activities in no time, providing about 50,000 bottles of purified water free of charge to residents, policemen, firemen and armed police in the affected region, and sending more vehicles to support the efforts. In March 2015, the “Shenhua 806” ship of the Company saved 5 fishermen in the Zhuhai waters who were unable to be contacted. This was another successful rescue after saving four in the Huanghai waters by the ship.



The Company Participated in the Rescue Work After the Explosion Occurred at Tianjin Port on 12 August

## Serving Overseas Communities

Guided by “the Belt and Road initiative” of the Chinese government, China Shenhua continues to expand overseas business, improve the ability to perform social responsibilities in local communities, drive local economy and contribute to society through localized operation, engagement with the community, protection of the environment and participation in charity.

### Harmonious Overseas Operation

When operating overseas, the Company focuses on strengthening the localization of employees and cultural immersion to ensure that the construction projects are conducted in an orderly manner and that the communities are developed in a harmonious way.

### Case study: PT.GH-EMM Honored as the “Top 10 Best Electricity Indonesia”

In order to support and stimulate the sound development of the electricity industry in Indonesia, facilitate the advancement of the industry and offer quality electricity services to society, the 6th Indonesia Electricity Exhibition was held from 21 to 23 October 2015 at Grand City in Surabaya. PT. GH-EMM Indonesia was invited to the exhibition and by virtue of its outstanding corporate image as an enterprise with standardized management, impressive operating results and proactive fulfillment of social responsibilities, it rose among its counterparts in the Indonesia Best Electricity Award 2015 at the exhibition and awarded the “Top 10 Best Electricity Indonesia” prize by the Minister of Electric Power of the Ministry of Energy & Mineral Resources and other leaders.



#### •Localization of employees

The Company increased the proportion of local employees while staying in strict compliance with local labour laws and regulations. The Company purchases injury insurances, travel insurances and pensions to safeguard the legitimate interests of its local employees.

Among all the registered employees of the Indonesian Company, 2/3 are Indonesians. They also take up a large share in annual award of outstanding staff. The Australian Pty insists on the principle of “localization” and abandons the labour structure model of “fly-in and fly-out”. It tries to employ of local people and formulates appropriate training schemes by taking into account the distinctive characteristics of local employees so as to facilitate their growth.



Diversified Team at the Australian Pty

#### •Cultural Immersion

When operating overseas, the Company focuses on communication and exchange with local residents, facilitates cultural integration and builds a harmonious relationship with the community. In 2015, the Company actively promoted the “Cities of Friendship” links between Gunnedah shire and Linhe of Bayannur in Inner Mongolia.

### Case Study: Your Festival with My Blessing

The Company respects local culture and customs. On the Eid al-Adha, one of the three major Islamic religious festivals in Indonesia, the Muslims gather at the mosque after bathing to have a grand ceremony. PT.GH EMM INDONESIA organized visits to 350 households of poor villagers in seven surrounding villages, bringing sheep and festive greetings according to the local customs. They were warmly welcomed and treated by the local villagers wherever they went to.





### Protect of Local Environment

The Company implements its belief in environmental protection, strictly complies with overseas environmental protection standards for operation, and welcomes supervision from relevant authorities and the public, all in an effort to protect the local environment. In 2015, the Watermark Open-Cut Mine Project of the Company strictly complied with the Australian local laws and regulations, and the EIA report was approved by the Australian government. The Russian Company takes an active part in the protection of local ecological environment during operation. Upon completion of the geographical exploration, the Russian Company immediately put the earth back on the surface to restore the original environment, thus gaining themselves a good local reputation.



Trees Planted in the Area Adjacent to the Watermark Open-Cut Coal Mine Project as Visual Barriers

### Support to Charity

During the process of developing and operating overseas, the Company actively participates in local social service and contributes to local communities. The Australia Pty has joined the voluntary activity called "Meals on Wheels"<sup>Note</sup> since 2013, becoming the first mining company to support such activity. Currently, there are a total of 13 volunteers participating in the activity, sending meals three times a month to the elderly aging at 82 in average. In 2015, Zashulanskoye project in Russia provided 5,374.55 tonnes of coal to local residents for heating in the winter, which effectively improved the heating condition in the local community.



Australia Pty Received the Renovation Award in the Northern Inland by Virtue of the "Meals on Wheels" Activity



Volunteers from Australia Pty Introduces Traditions of the Spring Festival in a Local Aborigines' Kindergarten

<sup>Note</sup> The "Meals on Wheels" voluntary activity is a nation-wide voluntary activity that has great influence among the grass roots in Australia and a history of 60 years. Its mission is to provide to the elderly who live alone and the disabled in the communities meals and other supports for free, so that the people in need could feel caring from the communities and be able to live independently at home instead of being forced to live in nursing homes.



## Planning and Outlook

Looking forward into the year of 2016, China Shenhua will continue to uphold the principles of “Safe and efficient, clean and environment-friendly, mutual success in harmony”, unswervingly follow the “1245” clean energy development strategy, fulfil social responsibilities, make traditional energy cleaner, develop new energies and strive to provide society with clean energy technology solution, so as to achieve safety, more efficient, cleaner and more harmonious development.

With sustainable development at the core and the “13<sup>th</sup> Five-Year” CSR Special Plan as the bulwark, the Company will further strengthen and promote the philosophy and management of social responsibility, reinforce communication with stakeholders, and endeavour to make CSR a foremost element that is embedded in the Company’s gene.

The Company will continue to deepen science and technology reform, improve scientific innovation mechanism, focus on building a technological innovation platform, strengthen management on expense and projects of scientific research and development, press ahead with protection of intellectual property and participation in standard setting, promote scientific cooperation and exchange and consistently improve the capacity of independent innovation that matches a world leading clean energy supplier.

Abiding by the philosophy of “Safety First, Prevention First, Multiple Approaches”, the Company will further stress the delegation of safety responsibilities, lead safety innovation by culture, improve inspection and solutions to potential safety hazards, deepen the construction of a risk mitigation and control management system; increase input in safety guarantee, duly conduct basic safety management, and enhance emergency rescue capability to achieve the aim of “eradicate serious work-related incidents, prevent general accidents, achieve zero casualty and pursue zero injury”.

The Company will further improve the construction of an energy conservation and environmental management system, focus on reform trends in energy conservation and environmental protection, set the focus on strengthening energy conservation and carbon emission reduction, press ahead with major projects including energy consumption cuts and air and water pollution prevention to enhance the capacity and raise the level of green development of the Company.

The Company will attach more importance to the health and safety of its employees, actively build a safe working environment, focus on the prevention and treatment of employees’ occupational diseases, solve their psychological health issues, construct a comprehensive management system for occupational safety and health, improve a versatile training system and a diverse career promotion structure, care about employees’ life and their families, enrich their social life and realize all-round development of the employees.

The Company will more vigorously shoulder its social responsibilities, know the community’s needs, create job opportunities, increase investment in community and improve the policy and promote local economy growth. The Company will continue to put equal importance on development and contribution, donate to public undertakings and participate in disaster rescue and relief. The Company will continue to expand overseas business, drive localized operation, reinforce communication with local communities, protect local environment and participate in local charity.

## Appendix I: Indicator System on Social Responsibility Performance of China Shenhua

GENERAL INDICATORS **G4 Materiality Disclosures: G4-21**

First Tier Indicators	Second Tier Indicators	Company's performance in 2015
Social Contributions	Social contributions per share (RMB/share) (ASBE)	4.016
	Social contributions per share (RMB/share) (IFRS)	4.092
	Cash dividend in aggregate (RMB million) (2005-2015)	145,320
	Final dividend for 2015 (RMB/share) (tax inclusive) (proposal)	0.32
	Total tax paid (RMB million)	37,480
	Donations to society (RMB million)	209
	Volunteer service period (hours)	65,546
Financial	Revenue (RMB million)	177,069
	Total assets (RMB million) (ASBE)	553,965
	Total assets (RMB million) (IFRS)	559,791
	Net profit attributable to shareholders of the Company (RMB million) (ASBE)	16,144
	Profit for the year attributable to owners of the Company (RMB million) (IFRS)	17,649
Business	Commercial coal production (million tonnes)	280.9
	Coal sales (million tonnes)	370.5
	Total power output dispatch (billion kwh)	210.45
	Sales of Polyethylene (thousand tonnes)	319.2
	Sales of Polypropylene (thousand tonnes)	312.9
	Turnover of self-owned railway (billion tonne km)	200.1
	Seaborne coal at self-owned ports (million tonnes)	158.5
	Shipment turnover (billion tonne nautical miles)	64.1
Stakeholder Relations	Number of information disclosure documents released	233
	Percentage of purchase from top five suppliers to total purchase (%)	13.2
	Percentage of total sales revenue contributed by the Company's top five customers (%)	25.9
	Number of suppliers assessed	103
Safety Production	Capital investment (RMB100 million)	47.51
	Safety production training (person-time)	186,082
	Number of first class intrinsic-safety compliant units	33



First Tier Indicators	Second Tier Indicators	Third Tier Indicators	Company's performance in 2015
Environmental Protection	Investment in environmental protection (RMB100 million)		20.61
	Investment in energy conservation (RMB100 million)		17.42
	Utilization of energy	Integrated energy consumption (10 thousand tonnes of standard coal)	4,474.91
		Integrated energy consumption per RMB10 thousand output value (tonne standard coal/RMB10,000)	3.14
		Total electricity consumption (10 thousand kwh)	2,096,650.2
		Total natural gas consumption (10 thousand m <sup>3</sup> )	35,600
		Total oil consumption (10 thousand tonnes)	35.83
		Consumption of other energies	Note 1
	Utilization of water resources	Total water consumption (million tonnes) <sup>Note2</sup>	220.1
		Water consumption per RMB10 thousand output value (tonne/RMB10 thousand)	14.31
		Fresh water consumption (million tonnes)	191.34
		Amount of sewage water produced (million tonnes)	167.38
		Integrated utilization rate of sewage water (%)	69.9
	Chemical Oxygen Demand (COD)	Total emission (10 thousand tonnes)	0.21
	Ecological construction	Capital investment in water and soil conservation and ecological construction (RMB100 million)	2.37
		New afforestation area (10 thousand m <sup>2</sup> )	1,999.37
	Number of major environmental pollution accidents <sup>Note 3</sup>		0
	Hazardous wastes	Total emission (tonne)	1,492.5
		Hazardous wastes emissions per RMB10,000 output value (kg/RMB10,000)	0.1
	Harmless wastes	Total emission (10 thousand tonnes)	3,207.38
		Harmless wastes emissions per RMB10,000 output value (tonne/RMB10,000)	2.25
	Soot	Total emission (tonne)	12,577.1

<sup>Note 1</sup> Consumption of raw coal amounted to 105.0334 million tonnes, washed coal amounted to 1.0958 million tonnes, coke oven gas amounted to 330.7503 million m<sup>3</sup>, thermal power amounted to 1,247,962.7 million kJ and gangue (used as fuel) amounted to 4.2376 million tonnes.

<sup>Note 2</sup> Of the total, consumption of surface water amounted to 128.16 million tonnes, groundwater amounted to 19.41 million tonnes, running water amounted to 40.85 million tonnes and recycled water, rainwater and others amounted to 28.8 million tonnes.

<sup>Note 3</sup> As defined in the National Emergency Response Proposal for Environmental incidents (2006) (Guo Ban Han [2014] No. 119).

First Tier Indicators	Second Tier Indicators	Third Tier Indicators	Company's performance in 2015
Employees' Interests	Basic information of employees	Number of current employees	95,498
		Number of employees with disabilities	383
		Number of child labor	0
		Number of part-time employees	12
		Number of employees from minority ethnic groups	4,656
		Number of female employees	19,792
	Occupational health	Capital investment (RMB100 million)	7.79
		Additional employees with occupational disease (cases)	12
	Staff training	Staff training (person-time)	2,252,133
		Staff training time in aggregate (hours)	4,137,223
Technological Innovation	Capital investment in research and development (RMB100 million)		8.58
	Number of scientific research and development projects undertaken	Number of projects approved by the headquarters	81
		Number of patents obtained	489
	Intellectual property rights applications	Including: number of invention patents obtained	111

## COAL PRODUCTION AND TRANSPORTATION BUSINESS

First Tier Indicators	Second Tier Indicators	Third Tier Indicators	Company's performance in 2015
Safety Production	Basic conditions	Fatality rate per million tonnes of raw coal production	0.003
		Number of serious accidents and above <sup>Note</sup>	0
	Construction results	Mechanization rate of coal mining and excavation (%)	99.91
		Number of coal mines with a safety record of consecutive 1,000 days or above	18
		Number of super-safe and efficient mines (2013)	14
Utilization of Resources	Utilization of energy	Comprehensive energy consumption of raw coal production (kg standard coal/tonne)	2.13
		Electricity consumption of raw coal production (kwh/tonne)	6.12
		Electricity consumption for the selection of thermal coal (kwh/tonne)	2.39
		Comprehensive energy consumption of railway (kg standard coal/10 thousand tonnes kilometers)	24.45
		Comprehensive energy consumption of port throughput (kg standard coal/10 thousand tonnes)	2,775.24
		Comprehensive energy consumption of shipping (kg standard coal/1,000 tonnes nautical miles)	4.95
		Comprehensive energy consumption of polyolefin (kg standard coal/tonne)	4,916.72
	Recovery rate in mining area of coal	Average recovery rate in mining area (%)	89.19
		Average recovery rate in mining area of underground coal mines (%)	84.64
		Average recovery rate in mining area of open-cut mines (%)	97.81
	Coal washing and selection	Raw coal washed and processed (million tonnes)	266.57
		Gangue removed (million tonnes)	26.66
		Reduction in railway freight turnover due to gangue removed (100 million tonne km)	159.96
Emission Treatment	Solid emissions	Coal gangue generated (10 thousand tonnes)	2,694.79
		Integrated utilization of coal gangue (10 thousand tonnes)	542.81
		Other solid waste generated (10 thousand tonnes)	49
		Integrated utilization of other solid waste (10 thousand tonnes)	0.81

<sup>Note</sup>

As defined in the "Productions Safety Accident Report and Investigation & Treatment Regulations" (Order No. 493 of the State Council).




## POWER GENERATION BUSINESS

First Tier Indicators	Second Tier Indicators	Third Tier Indicators	Company's performance in 2015
Condition of Units at the end of reporting period	Total installed capacity (MW)		54,128
	Installed capacity of coal-fired generators (MW)		52,257
	Units of 600MW (inclusive) and above	Capacity (MW)	35,000
		Proportion to the total capacity of coal-fired units (%)	66.98
	Desulfurization units	Capacity (MW)	52,257
		Proportion to the total capacity of coal-fired units (%)	100
	Denitrification units	Capacity (MW)	47,947
		Proportion to the total capacity of coal-fired units (%)	91.75
	Integrated utilization of the installed capacity of power plants (MW)		7,024
	Installed capacity of direct air cooling technology (MW)		12,400
	Installed capacity of heating units (MW)		18,564
	Installed capacity of wind power units (MW)		15.75
	Installed capacity of hydropower units (MW)		125.2
Safety production	Basic conditions	Number of serious accidents and above <sup>Note</sup>	0
Utilization of resources	Consumption of energy	Average consumption of standard coal for power output dispatch of coal-fired units (g/kwh)	318
	Utilization of water resources	Fresh water consumption for thermal power generation (kg/kwh)	0.73
		Water resource from seawater desalination (10 thousand tonnes)	1,253.78
	Utilization of renewable resources	Wind power generation (10 thousand kwh)	2,327.37
		Hydropower generation (10 thousand kwh)	67,158.19

Note

As defined in the "Productions Safety Accident Report and Investigation &amp; Treatment Regulations" (Order No. 493 of the State Council).



First Tier Indicators	Second Tier Indicators	Third Tier Indicators	Company's performance in 2015
Emission treatment	Sulphur Dioxide (SO <sub>2</sub> ) treatment	Indicator of SO <sub>2</sub> emission from thermal power generation (g/kwh)	0.57
		Total emission (10 thousand tonnes)	12.65
	Nitrogen oxide (NO <sub>x</sub> ) treatment	Indicator of NO <sub>x</sub> emission from thermal power generation (g/kwh)	0.88
		Total emission (10 thousand tonnes)	19.58
	Soot treatment	Indicator of soot emission from thermal power generation (g/kwh)	0.06
	Coal fly ash and cinder and desulphurized gypsum	Total generation (10 thousand tonnes)	1,941.98
		Integrated utilization (10 thousand tonnes)	1,358.54

## Appendix II: GRI G4


### Content Index



The table below sets forth certain “core” indicators and “additional” indicators in relation to the businesses of China Shenhua, which enables the readers to understand how the report is in compliance with the GRI (G4) indicators.


	GRI DESCRIPTION	PAGE	EXTERNAL ASSURANCE
<b>Strategy and Analysis</b>	G4-1 Provide a statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization’s strategy for addressing sustainability.	6, 7	No
	G4-2 Provide a description of key impacts, risks, and opportunities.	6, 7	No
<b>Organizational Profile</b>	G4-3 Name of the organization.	1	No
	G4-4 Primary brands, products, and services.	1, 25, 29	No
	G4-5 Location of the organization’s headquarters.	2, 107	No
	G4-6 Number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	26	No
	G4-7 Nature of ownership and legal form.	1, 106	No
	G4-8 Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	29	No
	G4-9 Scale of the organization.	25, 29, 30, 53	Partial
	G4-10 Total number of employees by employment contract and gender.	53, 90	Yes
	G4-11 Percentage of total employees covered by collective bargaining agreements.	55	No
	G4-12 Describe the organization’s supply chain.	30, 31	Partial
	G4-13 Report any significant changes during the reporting period regarding the organization’s size, structure, ownership, or its supply chain.	19, 30, 31, 106	No
	G4-14 Report whether and how the precautionary approach or principle is addressed by the organization.	22, 43	No
	G4-15 List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	14	No
	G4-16 List memberships of associations (such as industry associations) and national or international advocacy organizations	13	No





	GRI DESCRIPTION	PAGE	EXTERNAL ASSURANCE
<b>Material Aspects and Boundaries</b>	G4-17 List all entities included in the organization's consolidated financial statements or equivalent documents. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	2	No
	G4-18 Explain the process for defining the report content and the Aspect Boundaries. Explain how the organization has implemented the Reporting Principles for Defining Report Content.	4	No
	G4-19 List all the material aspects identified in the process for defining report content.	4	No
	G4-20 For each material Aspect, report the Aspect Boundary within the organization.	2	No
	G4-21 For each material Aspect, report the Aspect Boundary outside the organization.	27, 28, 30, 88	No
	G4-22 Report the effect of any restatements of information provided in previous reports and the reasons for such Restatements.	2	No
	G4-23 Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	4	No
<b>Stakeholder Engagement</b>	G4-24 Provide a list of stakeholder groups engaged by the organization.	14	No
	G4-25 Report the basis for identification and selection of stakeholders with whom to engage.	14	No
	G4-26 Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	14	No
	G4-27 Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.	14	No


	GRI DESCRIPTION	PAGE	EXTERNAL ASSURANCE
<b>Report Profile</b>	G4–28 Reporting period (such as fiscal or calendar year) for information provided.	2	No
	G4–29 Date of most recent previous report (if any).	2	No
	G4–30 Reporting cycle (such as annual, biennial).	2	No
	G4–31 Provide the contact point for questions regarding the report or its contents.	2, 3, 109	No
	G4–32 Report the ‘in accordance’ option the organization has chosen. Report the GRI Content Index for the chosen option (see tables below). Report the reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be ‘in accordance’ with the Guidelines.	94–97	No
	G4–33 Report the organization’s policy and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided. Report the relationship between the organization and the assurance providers. Report whether the highest governance body or senior executives are involved in seeking assurance for the organization’s sustainability report.	104–105	No
<b>Governance</b>	G4–34 Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	12, 19–21	No
	G4–35 Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.	12, 19–21	No
	G4–36 Details on whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body.	12, 19–21	No
	G4–37 Report processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics. If consultation is delegated, describe to whom and any feedback processes to the highest governance body.	12, 19–21	No
	G4–38 Composition of the highest governance body and its committees.	14, 19–21	No



	GRI DESCRIPTION	PAGE	EXTERNAL ASSURANCE
<b>Ethics and Integrity</b>	G4-56 Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	13	No
	G4-57 Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines.	22, 23	No
	G4-58 Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines.	22, 23	No
<b>Disclosure to management method</b>	G4-DMA Report why the Aspect is material. Report the impacts that make this Aspect material. Report how the organization manages the material Aspect or its impacts. Report the evaluation of the management approach.	4, 11, 14, 18, 34, 42, 52, 64, 78	No
<b>Economics</b>	G4-EC1 Direct economic value generated and distributed.	28, 88	Partial
	G4-EC6 Proportion of senior management hired from the local community at significant locations of operation.	85	No
	G4-EC7 Development and impact of infrastructure investments and services supported.	37, 39, 80, 89	No
	G4-EC8 Significant indirect economic impacts, including the extent of impacts.	37, 39, 80, 89	Partial
	G4-EC9 Proportion of spending on local suppliers at significant locations of operation.	30, 31	Partial



	GRI DESCRIPTION	PAGE	EXTERNAL ASSURANCE
<b>Environment</b>	G4-EN2 Percentage of materials used that are recycled input materials.	71, 73	No
	G4-EN5 Energy intensity.	68, 89	Partial
	G4-EN7 Reductions in energy requirements of products and services.	68	Yes
	G4-EN8 Total water withdrawal by source.	71	Partial
	G4-EN10 Percentage and total volume of water recycled and reused.	71, 73, 89	Partial
	G4-EN12 Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	74, 86	No
	G4-EN21 NO <sub>x</sub> , SO <sub>x</sub> , and other significant air emissions.	72, 89	Partial
	G4-EN23 Total weight of waste by type and disposal method.	89	Partial
	G4-EN27 Extent of impact mitigation of environmental impacts of products and services.	75	No
	G4-EN29 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	89	Yes
	G4-EN31 Total environmental protection expenditures and investments by type.	67, 89	Partial
	G4-EN32 Percentage of new suppliers that were screened using environmental criteria.	30	No



	GRI DESCRIPTION	PAGE	EXTERNAL ASSURANCE
<b>Society – Labor Practices and Decent Work</b>	G4-LA1 Total number and rates of new employee hires and employee turnover by age group, gender, and region.	53, 54	Partial
	G4-LA4 Minimum notice periods regarding operational changes, including whether these are specified in collective agreements.	55	No
	G4-LA6 Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender.	44, 91	Partial
	G4-LA7 Workers with high incidence or high risk of diseases related to their occupation.	56, 57	No
	G4-LA9 Average hours of training per year per employee, by gender, and by employee category.	58	Partial
	G4-LA10 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	58, 59	No
	G4-LA12 Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	19, 53, 54, 90	Partial
	G4-LA16 Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms.	55	No
<b>Society – Human rights</b>	G4-HR5 Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.	55, 90	No
	G4-HR6 Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor.	55	No

	GRI DESCRIPTION	PAGE	EXTERNAL ASSURANCE
<b>Society – Society</b>	G4-S02 Operations with significant actual and potential negative impacts on local.	79, 80	No
	G4-S04 Communication and training on anti-corruption policies and procedures.	23, 24	Yes
	G4-S05 Public policy positions and participation in public policy development and lobbying.	23, 24	Yes
<b>Society – Product Responsibility</b>	G4-PR1 Percentage of significant product and service categories for which health and safety impacts are assessed for improvement.	29	No
	G4-PR5 Results of surveys measuring customer satisfaction.	29	No
	G4-PR8 Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	29	No



## Appendix III: Disclosure recommendations of Shanghai Stock Exchange and ESG Contents Index of Hong Kong Stock Exchange


Content of the Report	Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange	Recommendations of disclosure of the Shanghai Stock Exchange
<b>Cover Story</b>		
<b>Company Profile</b>	B8.2	
<b>About This Report</b>		Preparation Guidelines Article 3
<b>Compilation of This Report</b>		
<b>Chairman's Statement</b>	B8.1, B8.2	Notice Articles 1, 2
<b>Full Integration of social Responsibility: Towards a First-Class Company</b>		
Background for Sustainable Development		
Philosophy in CSR		
CSR Management		Notice Articles 1, 2
Communication with Stakeholders		
Social Contribution per Share		Notice Article 4, Preparation Guidelines Article 5
CSR Honours		
<b>High Quality and Efficiency for Stronger and Healthier Growth</b>		
Corporate Governance		
Compliance in Operation		
Compliance with the Law		
Internal Control and Risk Management		
Party's Culture Building and Anti-corruption Efforts	B7. General Disclosures, B7.1, B7.2	
Efficient Management		
Integrated Operations		
IT-Based Management		
Overseas business Development		
Cooperation for Mutual Benefits		
We Care About Our Investors		Notice Articles 5(3) Preparation Guidelines Articles 4(3)
We Provide Quality Products and Services	B6. General Disclosures, B6.2, B6.4, B6.5	Notice Articles 5(1), (3), Preparation Articles 4(1), (3)

Content of the Report	Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange	Recommendations of disclosure of the Shanghai Stock Exchange
We Build Responsible Supply Chains	B5. General Disclosures, B5.1, B5.2	
<b>Driving Reform for Innovation and Upgrading</b>		
An Open Innovation Model		
Management of Technological Innovation		
Improve innovation Management		
Protect Intellectual Property Right	B6.3	
Increase Investment in Technology		
Build up Talents Pool		
Achievements in Technology Innovation		
Achievements in Science Technology		
Commercialization of Achievements		
<b>Aiming for Zero accident: Commitment to Safe Production</b>		Notice Articles 1, 2
Safety Management System	B2.1	
Innovation in Safety Technology		
Safe Operation Environment		Notice Article 5(1), Preparation Guidelines Article 4(1)
Risk Elimination		
Emergency Management		
“Three Violations” Rectification		
Safety Behavior of Employees		Notice Article 5(1), Preparation Guidelines Article 4(1)
Cultivating a Safety Culture		
Prioritizing Safety Education		
<b>People-Oriented Development for a Better Life</b>		Notice Articles 1, 2
Equal Opportunities in Employment	B1. General Disclosures, B1.1, B1.2	
Protection of Rights and Interests	B4. General Disclosures, B4.1, B4.2	
Remuneration and Welfare	B1. General Disclosures	

Content of the Report	Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange	Recommendations of disclosure of the Shanghai Stock Exchange
Democratic Management		
Occupational Health		Notice Article 5(1), Preparation Guidelines Article 4(1)
Prevention and Control of Occupational Diseases	B2. General Disclosures, B2.3	
Psychological Health of Employees		
Training and Development	B3. General Disclosures	Notice Article 5(3), Preparation Guidelines Article 4(3)
Training for Employees	B3.1, B3.2	
Career Development	B1. General Disclosures	
Caring for Employees		
Employees in Need		
Female Employees		
Front-line Employees		
<b>Clean and Environment-Friendly Development for Ecological Progress</b>		Notice Articles 1, 2, 5(2), Guidelines Article 3(1), Preparation Guidelines Article 4(2)
Management of Energy Conservation and Environmental Protection		Guidelines Article 3(3), (5), (9)
Establishment of an Energy Conservation and Environmental Protection System		
Investment in Energy Conservation and Environmental Protection		
Energy Conservation and Emission Reduction	A2. General Disclosures, A2.1	Guidelines Article 3(2), (5), (9)
Clean Coal	A2.3	
Efficient Power	A2.3	
High-end Coal Chemical Industry	A2.3	
Green Transportation	A2.3	
Water Conservation by Increasing Efficiency	A2.2, A2.3, A2.4	Guidelines Articles 3(2), (3)
Treatment of Pollution	A1. General Disclosures	Guidelines Articles 3(3), (4), (5), (6)
Gas Emission Treatment	A1.1, A1.2, A1.5	



Content of the Report	Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange	Recommendations of disclosure of the Shanghai Stock Exchange
Prevention and Treatment of Water Pollution	A1.1, A1.5	
Solid Waste Recycling	A1.5, A1.6	
Ecological Progress	A3.1	Guidelines Article 3(3)
Underground Mines	A3.1	
Open-Pit Mines	A3.1	
Along the Railway	A3.1	
Responding to Climate Change		
Development of Low-Carbon Energy	A1.5	
Carbon Management	A3.1	
Green Office	A3. General Disclosures, A3.1	
<b>Dedication with Compassion: Harmony and Win-Win Development</b>		Notice Articles 1, 2
Communicate with the Community	B8. General Disclosures	
Participate in Community Development	B8. General Disclosures	Notice Article 5(1), Preparation Guidelines Article 4(1)
Job Creation in the Community	B8.1	
Contribute to local Economy	B8.1, B8.2	
Public Welfare	B8. General Disclosures	
Donations	B8.1, B8.2	
Disaster Rescue and Relief	B8.1, B8.2	
Serving Overseas Communities	B8. General Disclosures	
Harmonious Overseas Operation	B8.1	
Protect of Local Environment	B8.1	
Support to Charity	B8.1, B8.2	
<b>Planning and Outlook</b>		
<b>Indicator System on Social Responsibility Performance</b>	A1.1, A1.3, A1.4, A2.1, A2.2	
<b>Global Reporting Initiative G4 Content Index</b>		



Content of the Report	Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange	Recommendations of disclosure of the Shanghai Stock Exchange
Disclosure Recommendations of Shanghai Stock Exchange and ESG Contents Index of Hong Kong Stock Exchange		
Results of Third Party Assurance		
Major Assets Distribution Map		
Equity Structure Diagrams		
Feedback Sheet		

Notes: "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".

#### DETAILS OF INDICATORS NOT DISCLOSED IN ESG

Code and Name of the Indicator	Disclosure Plan and Details
A1.2 Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	The Company is actively enhancing a statistical and calculation system of carbon dioxide, which is estimated to be disclosed in 2017

## App IV: Results of Third Party Assurance



### Independent Assurance Report

#### To the Board of Directors of China Shenhua Energy Company Limited (the "Board of Directors"):

We have been engaged by the Boards of Directors of China Shenhua Energy Company Limited ("CSEC") to perform a limited assurance engagement on the information disclosed in its 2015 Social Responsibility Report for the financial period from 1 January 2015 and 31 December 2015.

#### Responsibilities of the Board of Directors

The Board of Directors is responsible for the compilation and presentation (including reporting guidelines, limitations, reporting data and relevant identification procedures) of the Report in accordance with the recommendations of the following guidelines issued by Shanghai Stock Exchange and Hong Kong Stock Exchange. The above guidelines published by the Shanghai Stock Exchange (collectively the "SSE Guidelines") are as follows:

- 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
- Environmental, Social and Governance Reporting Guide ("ESG")

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; and for maintaining adequate records.

#### Our Responsibilities

In accordance with our agreed terms of engagement with CSEC, it is our responsibility to carry out a limited assurance engagement ("assurance engagement") and to express a conclusion on CSEC's compliance with the recommendations of the guidelines issued by Shanghai Stock Exchange and if there were any error that would have a material impact on the Key Social Responsibility Indicators related to ESG disclosed in the report ("the Report") based on our work performed; and to report our conclusion solely to the Board of Directors, and for no other purpose. We do not assume responsibility towards or accept liability to any third parties for the contents of this Independent Assurance Report.

#### Basis of Our Work

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 Federation of Accountants. We planned and performed our work so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to form our conclusions below.



### Procedures, Scopes and Limitations of Our Work

Our procedures performed included interviewing with CSEC's personnel responsible for collecting, compiling and reporting the information, analyzing the information obtained, and other procedures relevant to the collection of the appropriate audit evidence. Specifically we:

- 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;
- In accordance with the recommendations of SSE Guidelines and ESG, comparing the information presented in the Social Responsibility 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 Social Responsibility 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 ESG;
- Visits to Shenhua Shendong Coal Group Corporation Limited and Guohua Power Branch of the Company, selected on the basis of a risk analysis;
- Reconcile key financial data in the Social Responsibility Report with the audited financial statements.

In a limited assurance engagement, the evidence gathering procedures are less in scope than a reasonable assurance engagement. Accordingly, we do not express an opinion on the effectiveness of any of the CSEC's application systems, business processes, and the related financial performance data.

We performed our limited assurance engagement over the internal controls and procedures at and information provided by the head office of CSEC, Shenhua Shendong Coal Group Corporation Limited and Guohua Power Branch of the Company. We did not carry out limited assurance engagement mentioned above at any other branches and subsidiaries of CSEC nor involve interviewing with external stakeholders. Moreover, historical comparative data is not within the scope of our work.

### Our Conclusions

- Subject to the limitation of our work, and the work performed and described in the Independent Assurance Report, nothing has come to our attention that causes us to believe that the 2015 Social Responsibility Report was not prepared in compliance with the recommendations of SSE Guidelines at any material respect; and
- Subject to the limitation of our work, and the work performed and described in the Independent Assurance Report, nothing has come to our attention that causes us to believe that there were any error that would have a material impact on the Key Social Responsibility Indicators related to ESG disclosed in the Report.

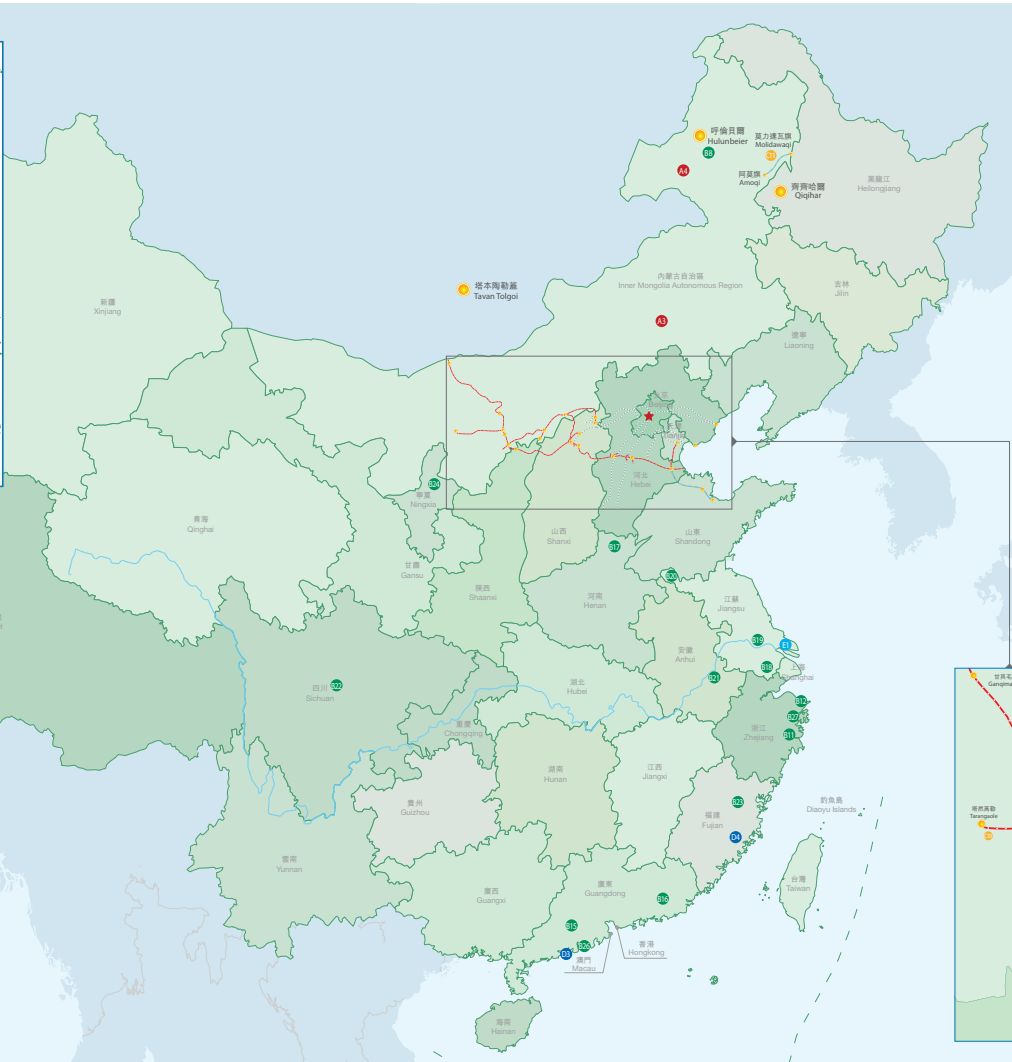
This is translation of the Chinese language version of the Independent Assurance Report. If there is any conflict in meaning between the Chinese and English versions, the Chinese version will prevail.

**Deloitte Touche Tohmatsu Certified Public Accountants LLP**

24 March 2016



- 圖例 Legend
- 省界線 Provincial Boundary
  - 國有或地方鐵路 State-owned or Local Railway
  - 自有運營鐵路 Self-owned Railway (in operation)
  - 自有在建鐵路 Self-owned Railway (under construction)
  - 自有礦區 Self-owned mines



2016

### 煤礦 COAL MINE

- A1. 神東礦區 Shaodong Mines
- A2. 浩吉礦區 Haoji Mines
- A3. 錦州礦區 Jinchou Mines
- A4. 寶日希勒礦區 Baorishile Mines
- A5. 包頭礦區 Baotou Mines
- A6. 澳大利亞格魯斯納煤礦項目 (規劃審看中) Australian Coal Project in Australia (planning under review)
- A7. 新街台格爾勒勒礦區 (前期工作階段) Xinjie Taigelerlele Exploration Area (preliminary work in progress)

### 電廠 POWER

- B1. 淩河電力 Linghe Power
- B2. 三河電力 Sanhe Power
- B3. 拉開電力 Laikou Power
- B4. 臨山電力 Linshan Power
- B5. 淩河電力 Linghe Power
- B6. 神東電力 Shendong Power
- B7. 神東電力 Shendong Power
- B8. 淩河電力 Linghe Power
- B9. 北京熱電 (已關停) Beijing Thermal (shut down)
- B10. 拉開電力 Laikou Power
- B11. 淩河電力 Linghe Power
- B12. 淩河電力 Linghe Power
- B13. 淩河電力 Linghe Power
- B14. 淩河電力 Linghe Power
- B15. 台山電力 Taishan Power
- B16. 淩河電力 Linghe Power
- B17. 淩河電力 Linghe Power
- B18. 淩河電力 Linghe Power
- B19. 淩河電力 Linghe Power
- B20. 淩河電力 Linghe Power
- B21. 淩河電力 Linghe Power
- B22. 神華四川能源 Shenhua Sichuan Energy
- B23. 神華福建能源 Shenhua Fujian Energy
- B24. 神華電力 Ningdong Power
- B25. 神華電力 Ningdong Power
- B26. 神華電力 Ningdong Power
- B27. 神華電力 Ningdong Power
- B28. 神華電力 Ningdong Power

### 鐵路 RAILWAY

- C1. 神東鐵路 Shendong Railway
- C2. 神東鐵路 Shendong Railway
- C3. 神東鐵路 Shendong Railway
- C4. 神東鐵路 Shendong Railway
- C5. 神東鐵路 Shendong Railway
- C6. 神東鐵路 Shendong Railway
- C7. 神東鐵路 Shendong Railway
- C8. 神東鐵路 Shendong Railway
- C9. 神東鐵路 Shendong Railway
- C10. 神東鐵路 Shendong Railway
- C11. 神東鐵路 Shendong Railway

### 港口 PORT

- D1. 神東港口 Shendong Port
- D2. 神東港口 Shendong Port
- D3. 神東港口 Shendong Port
- D4. 神東港口 Shendong Port

### 煤化工 COAL CHEMICAL

- F1. 神東煤化工 Shendong Coal Chemical

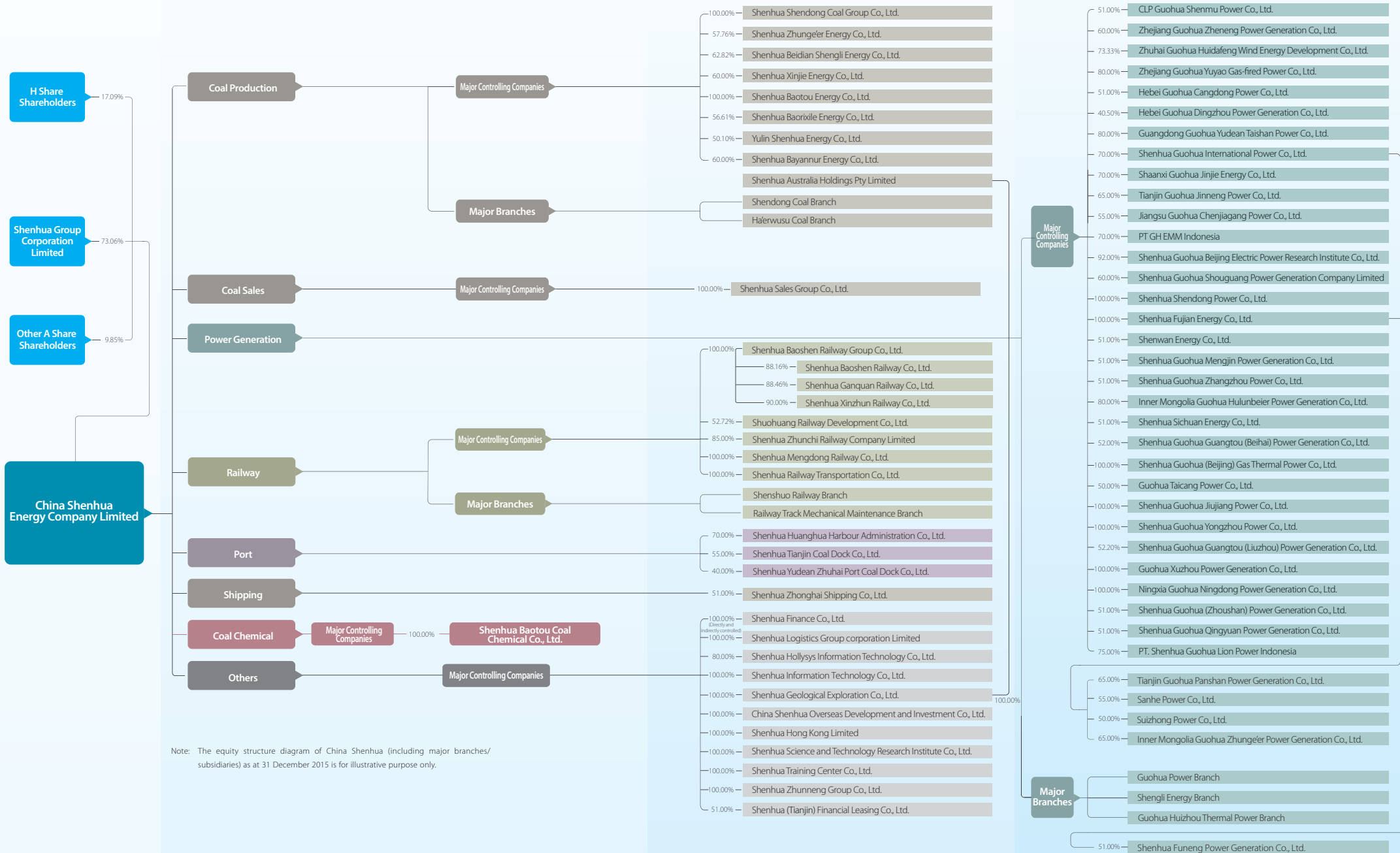
### 航運 SHIPPING

- E1. 神華中遠航運 Shenhua Zhongyuan Shipping Company

註：於2016年3月24日之分布圖，僅供參考。  
Note: This map as at 24 March 2016 is for illustrative purpose only.



# Equity structure diagram







## App VI: Definition

Abbreviation	Full Name
Shenhua Group Corporation	Shenhua Group Corporation Limited
China Shenhua or the Company	China Shenhua Energy Company Limited
Branches and Subsidiaries	Branches and subsidiaries of China Shenhua, unless the context otherwise requires
Shendong Coal Group, Shendong Group or Shendong Coal Company	the corporation conglomerate consisting of Shenhua Shendong Coal Group Co., Ltd. and its subsidiaries
Guohua Power Company	Beijing Guohua Power Company Limited
Guohua Power Branch, Guohua Power	Guohua Power Branch of the Company
Zhunge'er Energy Company	Shenhua Zhunge'er Energy Co., Ltd.
Shenhua Research Institute	Shenhua Science and Technology Research Institute Co., Ltd.
Yulin Shenhua	Yulin Shenhua Energy Co., Ltd.
Shuohuang Railway Company or Shuohuang Railway	Shuohuang Railway Development Co., Ltd.
Shenbao Energy Company	Shenhua Baorixile Energy Co., Ltd.
Shengli Energy	Shenhua Beidian Shengli Energy Co., Ltd.
Shenshuo Railway Branch	Shenshuo Railway Branch of the Company
Baoshen Railway	Shenhua Baoshen Railway Group Co., Ltd.
Baotou Coal Chemical Company	Shenhua Baotou Coal Chemical Co., Ltd.
Huanghua Harbour	Shenhua Huanghua Harbour Administration Co., Ltd.
Hongshan Power Plant	Hongshan Power Plant of Shenhua Fujian Energy Co., Ltd.
Sanhe Power	Sanhe Power Co., Ltd.
Zhunge'er Power	Inner Mongolia Guohua Zhunge'er Power Generation Co., Ltd
Hubei Power	Inner Mongolia Guohua Hulunbeier Power Generation Co., Ltd.

Abbreviation	Full Name
Suizhong Power	Suizhong Power Co., Ltd
Huanghua Power	Hebei Guohua Cangdong Power Co., Ltd.
Taichang Power	Guohua Taichang Power Generation Co., Ltd.
EMM Indonesia	PT. GH EMM INDONESIA
Australian Company	Shenhua Australia Holdings Pty Limited
Russian Company	Общество с ограниченной ответственностью «Разрез уголь»
Accounting Standards for Business Enterprises	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
Shanghai Listing Rules	Rules Governing the Listing of Stocks on Shanghai Stock Exchange
Shanghai Stock Exchange	Shanghai Stock Exchange
Hong Kong Listing Rules	Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited
Hong Kong Stock Exchange	The Stock Exchange of Hong Kong Limited
A Share(s)	Ordinary shares that are issued to domestic investors with the approval of CSRC and listed on the domestic stock exchanges, and denominated, subscribed and transacted in RMB
H Share(s)	Ordinary shares that are issued to foreign investors with the approval of CSRC and listed on the Hong Kong Stock Exchange, and denominated, subscribed and transacted in Hong Kong dollar
Company Law	Company Law of the People's Republic of China
Securities Law	Securities Law of the People's Republic of China
Labor Law	Labor Law of the People's Republic of China
SASAC	Stated-owned Assets Supervision and Administration Commission of the State Council of the People's Republic of China
NDRC	National Development and Reform Commission of the People's Republic of China

## Feedback Sheet and Contact Information

China Shenhua values your opinions on the Company's endeavors on corporate social responsibility and this Corporate Social Responsibility 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 1088@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: \_\_\_\_\_

Contact address: \_\_\_\_\_ Postal code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

China Shenhua Energy Company Limited  
Block A Shenhua Tower  
22 Xibinhe Road, Dongcheng District,  
Beijing, China  
Postal Code 100011

Affix  
stamp  
here

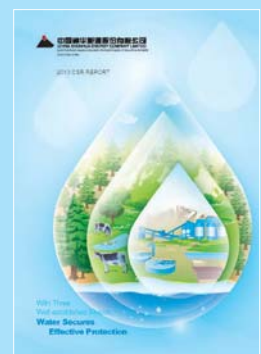
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Postal code: 100011





2014 CSR REPORT



2013 CSR REPORT



2012 CSR REPORT



2011 CSR REPORT



2010 CSR REPORT



2009 CSR REPORT



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