



中國秦發集團有限公司  
CHINA QINF A GROUP LIMITED

Incorporated in the Cayman Islands with limited liability 於開曼群島註冊成立的有限公司 | Stock code 股份代號 : 866

**Transform, Integrate,  
Transcend, Prosper.**

變革融合 超越共贏

**2017**

**ENVIRONMENTAL, SOCIAL  
AND GOVERNANCE REPORT**  
環境、社會及管治報告

# ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## 環境、社會及管治報告

### ABOUT THIS REPORT

Through the issuance of this Environmental, Social and Governance Report, we expect to review the Group's issues and inadequacies in fulfilling its social responsibilities and formulating a sustainable development strategy, thereby summarizing and disclosing to the stakeholders the performance of the Group, maximizing the transparency of the Group, and further improving the sustainable development performance of the Group and the community.

This Environmental, Social and Governance Report has been prepared in accordance with the latest version of Environmental, Social and Governance Reporting Guide (the "Guide") of Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. Unless otherwise stated, this report covers the overall business performance of the Group during the period from 1 January 2017 to 31 December 2017, and the scope in the section of environmental performance disclosure will primarily cover Huameiao Energy – Xingtai Coal ("Xingtai Coal") under the Group. As the second Environmental, Social and Governance Report of the Group, this report further discloses the environmental performance indicators of Xingtai Coal compared with the one issued in the last year, and further data disclosure will be made when the comprehensive data system and internal processes are more mature.

This report is prepared mainly in accordance with the Group's internal statistics, various archive documents and estimations. Should you have any feedback on this report, please send an email to [ir@qinfagroup.com](mailto:ir@qinfagroup.com) so that we can further improve our policies in relation to sustainable development.

### 關於本報告

透過發佈此《環境、社會及管治》報告，我們希望能檢視集團在履行社會責任及制定可持續發展策略上的問題和不足，從而總結並向持份者披露集團的表現，最大程度地增加集團透明度，並進一步改善集團及社會的可持續發展表現。

此《環境、社會及管治報告》已照香港聯合交易所有限公司證券上市規則附錄二十七之《環境、社會及管治報告指引》（「指引」）之最新版本撰寫。除非另有說明，本報告涵蓋集團在2017年1月1日至2017年12月31日的整體業務表現，並在環境績效披露部分以旗下華美奧能源－興陶煤礦（「興陶煤礦」）為主要披露範圍。作為本集團第二本《環境、社會及管治報告》，本報告較去年進一步披露了興陶煤礦在環境方面的績效指標，待整體數據系統及內部流程更為成熟時，將作進一步的數據披露。

此報告之編制主要根據本集團內部之數據統計、各類存檔文件及估算而成。如閣下對本報告有任何反饋，歡迎發送電郵至 [ir@qinfagroup.com](mailto:ir@qinfagroup.com)，令我們的可持續發展政策得以完善。

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#### ABOUT THE GROUP

As the leading non-state-owned thermal coal supplier of China, the Group has been engaged in the operation of integrated coal supply chain, including coal mining in China, purchase and sales, filtering, storage, blending and shipping transportation. During the year ended 31 December 2017, the Group continued to focus on these business activities and expanded its integrated coal supply chain through upward vertical integration. After purchasing and blending coal from domestic market of China, the Group resells it to the power plants, cement plants and coal traders mostly located in Chinese coastal areas. The coal purchased by the power plants is mainly used in the combustion process to generate steam for power and heat generation, while in cement plants, the coal is mainly used in the cement production process as the main fuel. Compared with the performance of the previous year, in 2017, the Group restarted its original coal procurement channels and successfully exploited a procurement channel in Inner Mongolia. The total purchase of coal in 2017 amounted to 2,834,000 tonnes, of which 857,000 tonnes were for foreign trade and 1,977,000 tonnes were for domestic trade.

As of 31 December 2017, the Group owns and operates five coal mines in China, located in Shuozhou and Xinzhou, Shanxi Province, China, respectively. In particular, Xingtai Coal has the largest scale of construction, with the annual production capacity at 1,500,000 tonnes and a total area of 4.3 square kilometers. As of 31 December 2017, its reserves were 72,200,000 tonnes, accounting for 32.20% of the Group's total reserves. In terms of annual production, Xingtai Coal's raw coal production and commercial coal production reached 2,767,000 tonnes and 1,798,000 tonnes, respectively, accounting for approximately 41.6% of the total production. Pursuant to the principle of materiality of HKEX, as Xingtai Coal accounts for a significant proportion of the Group's business, this report will focus on disclosing the business performance of Xingtai Coal in addition to the overall policy of the Group.

#### 關於集團

本集團是中國領先的非國有動力煤供應商，經營一體化煤炭供應鏈，包括於中國採煤、煤炭購銷、選煤、存儲、配煤及航運運輸業務。截至二零一七年十二月三十一日止年度，本集團繼續專注該等業務活動及透過上游垂直整合拓展其一體化煤炭供應鏈。本集團將採購自中國國內市場的煤炭，經配煤後轉售予多數位於中國沿海地區的發電廠、水泥廠及煤炭貿易商等客戶，其中發電廠採購煤炭主要用於燃燒過程，以產生蒸汽用於發電及發熱，而水泥廠則主要用於生產水泥過程中的主要燃料。與上年度表現比較，集團原有煤炭採購渠道在2017年陸續重啟，並成功開拓內蒙的採購渠道。2017年採購煤總量為2,834,000噸，其中外貿煤採購857,000噸，內貿煤採購1,977,000噸。

截至二零一七年十二月三十一日，本集團在中國擁有及經營五個煤礦，分別位於中國山西朔州及忻州。其中，興陶煤業為當中建設規模最大的一個，年產量達1,500,000噸，總面積達4.3平方千米。其截至2017年12月31日的儲量為72,200,000噸，佔集團整體儲量的32.20%。在全年產量方面，興陶煤業的原煤產量及商業煤產量分別達2,767,000噸及1,798,000噸，約佔整體產量的41.6%。根據港交所重要性的原則，由於興陶煤礦佔集團業務重大部分，此報告將會在披露集團整體政策方向外，以興陶煤礦的業務表現為披露重心。

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#### MESSAGE FROM THE CHAIRMAN

In the past year, the “De-capacity” policy was implemented by Chinese government against the coal industry, and a total of 250 million tonnes of excess coal production capacity was reduced, exceeding the original target of 150 million tonnes. In the “De-capacity” process, besides accelerating the withdrawal of those long-term suspending “zombie enterprises”, China reorganized the large coal mines that violated regulations and had high risk, thereby promoting industry restructuring and transformation, and improving the overall level. Entering the year 2018, the Guidance for Energy in 2018 has been issued by the National Energy Administration recently, pointing out that advanced production capacity will be actively developed in the future and focusing on the large coal bases located in Shendong, Shanbei, Huanglong and Xinjiang, etc., so the construction of several large modern coal mines will be approved orderly. That means high-quality coal production capacity is expected to be accelerated successively, after the implementing of “De-capacity” from 2016, and new capacity will be gradually released from the second quarter of 2018. We also believe that it will help to improve the supply level of coal, stabilize the coal prices, and give impetus to the development of the industry.

Depending on the impetus from national policy, as a leading provider of integrated coal businesses in China, we are always committed to improving the level of business operations, mining technology and environmental management for our outstanding performance, on which we are willing to become the beneficiary in the process of industry integration. Therefore, during the year, we continued to carry out the reform and promote the Group’s informatization construction to improve its degree and level, thereby rationalizing the governance structure and strengthening the management and control system. Furthermore, we actively promoted land reclamation to recover the damage caused to the environment in coal mines construction to the greatest extent, and provided continuous management and protection to restore the land to its proper appearance, in order to bring greater returns to the society.

#### 主席的話

過去一年，國家對煤炭行業實施「去產能」政策，累計化解煤炭過剩產能2.5億噸，較原定的1.5億噸超額完成任務。在這去產能的過程中，我國除了加快退出長期停工停產的「殭屍企業」外，亦同時針對違規違法及風險大的煤礦作出整頓，藉此推進業界重組及轉型，提升整體水平。踏入2018年，國家能源局近期公佈了《2018年能源工作指導意見》，指出未來將積極發展先進產能，以神東、陝北、黃龍、新疆等大型煤炭基地為重點，有序核准建設一批大型現代化煤礦。這意味著，自2016年度去產能開始後，後期優質煤礦的產能有望加速，2018年二季度開始新增產能將逐步釋放，我們亦相信將有助於提升煤炭的供給水準、穩定煤炭價格，為行業發展提供動力。

靠著國家政策提供的動力，我們作為中國領先的煤炭一體化經營業務提供商，一直致力提升業務營運、開採技術及環境管理方面的水平，期望靠著自身的優秀表現，成為行業整合過程中的得益者。所以，我們在年內在持續進行改革提升，推動集團信息化建設，提高集團信息化程度和水平，從而理順治理結構，加強管控體系。此外，我們更積極推動土地復墾，將建設礦井時對環境帶來的損害盡量修復，同時提供持續的管理及保護，讓土地恢復其應有的面貌，為社會帶來更大的回報。

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Being in the most important period of industry reform, we wish to demonstrate the Group's capabilities and commitments by improving the quality of internal governance and operation, and seize the opportunities in the harsh era to move forward with the industry. Meanwhile, we understand that improving the Group's performance in sustainable development will effectively control the risks we are facing, thereby maintaining the Group's competitiveness. Therefore, in order to guarantee the long-term development of the Group, the interests of shareholders and the sustainability of environmental resources, we will strive to maintain a balance between development and conservation, and strive for the rapid and orderly development of our business on the premise of avoiding irreversible damage.

**Xu Da**

*Chairman*

27 July 2018

身處於行業改革最重要的時期，我們期望能透過提升內部管治質量及營運方式，顯示集團的能力及承擔，在風高浪急的時代中緊握機遇，與行業共同邁步向前。與此同時，我們了解到提升集團在可持續發展方面的表現，將可有效地控制我們所面對的風險，從而保持集團的競爭力。所以，為了集團的長遠發展、股東的利益以及環境資源的永續性，我們將致力維持發展與保育間的平衡，在避免造成不可逆轉的破壞的前提下，爭取業務高速有序的發展。

*主席*

**徐達**

二零一八年七月二十七日



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### STAKEHOLDER COMMUNICATION

The Group believes that it is very important to have an effective communication with stakeholders. Therefore, it communicated with stakeholders (such as investors, shareholders, employees, suppliers and customers, etc.) in various forms during the year and collected opinions for the Group from various circles, so that the management could formulate the development strategy accordingly.

As for the shareholders, we welcome them to submit their comments via email or other means. The board of directors regularly reviews shareholders' inquiries and respond to them according to the actual situation. Shareholders may also submit to the board of directors or the secretary of the Group in writing if they have special inquiries or suggestions. Except for this, shareholders can also make inquiries directly to the board of directors at the general meeting. During the year, the Group held one annual general meeting.

For the employees, the Group believes that their work performance and learning attitude will be affected by internal factors such as work environment, colleagues and the Group's policies. As a result, the Group has an open mind to encourage employees to actively report their comments to the management and provide the Group with advice on improving the business model, thereby improving the operation performance of the Group.

Additionally, we have also attached great importance to mutual communications with official institutions, with an expectation to promote industry development and enhance overall level of development through concerted efforts. During the year, we have held various meetings with the officers at provincial level and officers of district committee and district government at city level, and even signed relevant cooperation agreements. It is expected that such efforts will not only propel the progress of the industry but also drive development of the Group. With unremitting efforts, we have successfully reached a consensus with government of Shinan District, Qingdao, and signed a strategic cooperation agreement in the first half of 2018, which is of significant importance to promoting industrial restructuring as well as transformation and upgrade.

### 持份者溝通

本集團相信與持份者的有效溝通非常重要，所以在年內多次與持份者（例如投資者、股東、員工、供應商及客戶等）以多種形式交流，並藉以收集各界對集團的意見，好讓管理層在制定發展策略時有據可依。

至於在股東方面，我們歡迎股東通過電郵或其他方式提出意見，董事會將定期審閱股東查詢，並按實際情況作出回應。股東若有特別查詢或建議，亦可通過書面方式遞交董事會或本集團秘書。除此之外，股東亦可在股東大會上直接向董事會作出查詢。在年內，本集團共舉辦1次股東週年大會。

對於員工，本集團相信員工的工作表現和學習態度會受工作環境、同事、集團政策等內部因素影響。因此，本集團採取開放式的態度，鼓勵員工積極向管理層反映意見，為本集團提供改善經營模式的意見，從而達到改善集團營運表現的效果。

此外，我們亦重視與官方機構之間的交流，期望在雙方的努力下，能夠促進行業發展，提升整體水平。在年內，我們多次與省、市的區委及區政府官員會面，甚至簽訂相關的合作協議，希望能在推動行業進步的同時，拉動集團的發展。在持續不懈的努力之下，我們成功與青島市市南區達成共識，更在二零一八年上半年簽訂了戰略合作協議，對於推動產業結構調整、推動轉型升級具有非常重要的意義。

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Focusing on the long-term interests of shareholders and other stakeholders, the Group emphasizes accountability and transparency in the corporate governance principles. The board of directors reviews performance frequently to ensure that they meet the increasing expectations of stakeholders and fulfill the commitments to quality corporate governance.

### KEY ISSUES IDENTIFICATION

The Group did not identify the key issues for the issuance of this report during the year. However, we have learned the key points of stakeholders' concerns through continuous communication with them and collection of opinions in the past, which have been recorded for future reference. Generally, we determine the correlation of one issue to our reporting objectives based on its importance to the development of the Group and its impact on business operations.

In particular, due to the business characteristics of the Group, advertising, labeling and intellectual property rights are with low correlation and do not have significant impacts on the Group's business. Therefore, no thorough disclosure about them was made in this report.

### PERFORMANCE OF THE YEAR

In 2017, resulting from the steady increase of economic efficiency of the industry, the Group seized the opportunity of coal price recovery and restarted the coal business. The coal operation and trade volume increased by 232.6% compared with last year, which was an encouraging overall performance. In response to the concerns of a number of stakeholders and to demonstrate the public our performance in environmental, social and governance, the following paragraphs describe the Group's measures and performance indicators during the year and show its determination to maintain the sustainable development as well.

#### • Environmental Aspect

According to the statistics, the power generation of China in 2017 was 6.42 trillion KWH, of which coal power accounted for 64.5%. In the gradual recovery of the industry, one of the important factors affecting the development of Chinese coal power is carbon emission reduction. As a coal production superpower, China has the responsibility to resort more environmentally friendly and efficient mining methods to minimize greenhouse gas emissions and avoid environmental damage. Therefore, in order to cope with the upgrading and transformation of the industry, we need to continuously improve energy conversion efficiency and reduce the carbon emission intensity of coal power. As for the emission of atmospheric pollutants, we still need to focus on the specificity and coordination, and adopt locally-selected technologies and mining methods to minimize the emission of pollutants.

本集團的企業管治原則強調問責性與透明度，並以股東及其他持份者之長期利益為依歸。董事會不時檢討表現，確保符合持份者不斷提高的期望，以及履行其優質企業管治的承諾。

### 關鍵議題識別

本集團在年內尚未進行針對發行本報告之關鍵議題識別。然而，透過過去與各持份者的持續溝通及意見收集，我們了解到他們所關心的重點及議題，並將相關意見記錄在案，以供日後翻閱。一般而言，我們會按照該議題對集團發展的重要性及對業務營運的影響，從而決定該議題與我們匯報目標的相關性。

其中，由於本集團的業務特性，與廣告、標籤及知識產權的關聯性較為低，對本集團的業務並未構成重大影響，故在此報告內未作深入披露。

### 全年表現

在2017年，行業經濟效益穩步回升，集團把握煤價復蘇的時機，重啟煤炭業務，煤炭經營及貿易量較去年增加232.6%，整體表現令人鼓舞。為了回應一眾持份者所關心的議題，同時向大眾展示我們在環境、社會及管治方面的表現，以下段落將闡述集團在年內的各項措施及績效指標，並顯示集團對於維持可持續發展發展的決心。

#### • 環境部分

據統計，2017年全國發電量為6.42萬億千瓦時，其中煤電佔64.5%。在行業逐步恢復的狀況下，其中一個影響我國煤電發展的重要因素就是碳減排。作為一個煤炭大國，中國有責任採取更為環保及高效的開採方式，盡量減低溫室氣體的排放，並避免對環境造成的傷害。因此，為了配合行業的升級轉型，我們需要不斷提高能源轉化效率，降低煤電碳排放強度。至於在大氣污染物排放方面，我們仍要注重針對性與協調性，因地制宜選擇技術及開採方式，盡量減少污染物的排放。

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#### Relating Environmental Performance Indicators

All the environmental data disclosed herein are data related to Xingtao Coal. Being one with the largest scale of construction among all the coal mines of the Group, Xingtao Coal has a production capacity of 1,500,000 tonnes and a total area of 4.3 square kilometers. As of 31 December 2017, its reserves were 72,200,000 tonnes, accounting for 32.20% of the Group's total reserves. In terms of annual production, Xingtao Coal's raw coal production and commercial coal production reached 2,767,000 tonnes and 1,798,000 tonnes, respectively, accounting for approximately 41.6% of the total production.

The quantitative measurement of greenhouse gas emissions (carbon emission) is carried out base on the Guangdong Province Enterprise (Unit) Carbon Dioxide Emissions Information – Reporting Guide (2018 Revision) (《廣東省企業(單位)二氧化碳排放資訊-報告指南(2018年修訂)》) prepared by the Guangdong Provincial Development and Reform Commission and the Guidelines for the Calculation and Reporting of Greenhouse Gas Emissions by Coal Producing Enterprises in China (Trial) (《中國煤炭生產企業溫室氣體排放核算方法與報告指南(試行)》) prepared by the National Development and Reform Commission with reference to international standards, such as ISO 14064-1.

#### 環境相關績效指標

此次所披露的環境數據均為興陶煤業之相關數據。興陶煤業為集團旗下所有煤礦當中建設規模最大的一個，年產量達1,500,000噸，總面積達4.3平方千米。其截至2017年12月31日的儲量為72,200,000噸，佔集團整體儲量的32.20%。在全年產量方面，興陶煤業的原煤產量及商業煤產量分別達2,767,000噸及1,798,000噸，約佔整體產量的41.6%。

溫室氣體排放(碳排放)的量化過程是根據廣東省發展改革委員會所編制的《廣東省企業(單位)二氧化碳排放資訊-報告指南(2018年修訂)》及中國國家發展改革委員會所編制的《中國煤炭生產企業溫室氣體排放核算方法與報告指南(試行)》而進行，並且參考了ISO 14064-1等國際標準。



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	Scope/activity	Guangzhou office	Xingtiao Coal Mine in Shanxi	Emission (tonnes of CO <sub>2</sub> equivalent) 排放量 (噸二氧化碳當量)
	範圍／活動	廣州辦公室	山西興陶煤礦	
Greenhouse gas emission 溫室氣體排放	<b>Scope 1: direct greenhouse gas emissions</b> <b>範圍1：直接溫室氣體排放</b>			
	Fossil fuel burning – stationary sources 化石燃料燃燒－固定源	N/A 不適用	326.5	<b>37,394.1</b>
	Fossil fuel burning – moving sources 化石燃料燃燒－移動源	62.3	— <sup>1</sup>	
	Fugitive emissions – underground mining and post-mining activities 逃逸排放－井工開採及礦後活動	N/A 不適用	37,005.3	
	<b>Scope 2: Energy indirect greenhouse gas emissions</b> <b>範圍2：能源間接溫室氣體排放</b>			
	Purchased electricity 外購電力	74.1	28,327.9	<b>28,402.0</b>
	<b>Total greenhouse gas emissions</b> <b>溫室氣體排放總量</b>	<b>136.4</b>	<b>65,659.7</b>	<b>65,796.1</b>
	<b>Greenhouse gas density</b> <b>溫室氣體密度</b>	2.2 tonnes/ employee 2.2噸／員工	0.024 tonne/ tonne of raw coal 0.024噸／噸原煤	
	<b>Type of air pollutants</b> <b>空氣污染物種類</b>	<b>Guangzhou office</b> <b>廣州辦公室</b>	<b>Xingtiao Coal Mine in Shanxi</b> <b>山西興陶煤礦</b>	<b>Total emissions</b> <b>總排放量</b>
Exhaust gas emission 廢氣排放	Nitrogen oxides (kg) 氮氧化物(千克)	8.0	14,310.0	<b>14,318.0</b>
	Sulfur oxides (kg) 硫氧化物(千克)	0.4	14,310.0	<b>14,310.4</b>
	Inhalable particles (kg) 可吸入顆粒物(千克)	0.7	5,731.9	<b>5,732.6</b>

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	Category 類別	Quantity generated (tonnes) 產生量 (噸)
Waste 廢棄物	Total hazardous waste <sup>2</sup> 有害廢棄物總量 <sup>2</sup>	5.68
	Density of hazardous waste (calculated based on per thousand tonnes of raw coal production) 有害廢棄物密度 (以每千噸原煤產量計算)	0.002
	Total non-hazardous waste 無害廢棄物總量	The data about quantity of non-hazardous waste generated from Guangzhou office and Xingtai Coal Mine in Shanxi was not collected during the reporting year. 廣州辦公室及山西興陶煤礦於報告年度 均未有統計無害廢棄物的產生量

## Consumption of various energies

## 各項能源使用量

	Type 類別	Guangzhou office 廣州辦公室	Xingtai Coal Mine in Shanxi 山西興陶煤礦	Total consumption 總耗用量
Energy consumption 能源使用	Direct energy (GJ) 直接能源 (吉焦耳)	889.3	4,428.1	5,327.4
	Indirect energy (MWh) 間接能源 (兆瓦時)	116.2	32,034.3	32,150.5
	Energy density 能源密度	5.8 MWh equivalent/ employee 5.8兆瓦時等值／員工	0.01MWh equivalent/tonne of raw coal production 0.01兆瓦時等值／ 噸原煤產量	
	Total water consumption (m <sup>3</sup> ) <sup>3</sup> 總耗水量 (立方米) <sup>3</sup>			330.7
	Water consumption density (m <sup>3</sup> /thousand tonnes of raw coal production) 耗水密度 (立方米／千噸原煤產量)			0.1

1 Data about the discharge of moving sources (vehicles) for Xingtai Coal Mine in Shanxi was not independently collected during the reporting year, since there was no separate statistics on fuel consumption of vehicles.

2 This figure only includes the amount of dusting remnants in Xingtai Coal Mine in Shanxi.

3 Figure for this year only includes water consumed in coal producing and domestic water due to the fact that water consumed in Guangzhou office is supplied by a property management company in regard to which we have not conducted a survey.

1 由於沒有分開統計車輛耗油量，本報告年度並未獨立計算山西興陶煤礦的移動源（車輛）排放。

2 此數字只包括山西興陶煤礦的除塵殘餘物。

3 由於廣州辦公室之用水由物業管理公司提供，未能作出統計，本年度之數字只包含煤礦的生產及生活用水。

No comparative figures were presented to demonstrate the achievement of various emission reduction measures since this year is the first time for the Group to disclose its environmental performance indicators. We undertake that comparison will be made in the future reports to monitor the overall performance of the Group in a bid for further improvement.

由於今年為本集團首次披露各項環境績效指標，暫未能進行數據比較，以顯示各項減排措施的成果。我們承諾將會在未來的報告中進行數據比較，以監察集團的整體表現，並力求進步。

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#### Coal mining

As the local benchmark of coal mines, all the five coal mines of the Group adopt the advanced technology of longwall mining and rubberized transportation system. The longwall mining is one of the four major underground coal mining technologies and is considered to be more advanced. It is a kind of high-efficiency coal mining method that mainly uses a shearer to cut coal on a mining work surface: a rotary cutting drum mechanically cuts on the surface of the coal seam, then the coal is loaded onto a chain rubberized conveyor belt, which sends the mined coal to an underground transportation system to deliver to the ground.

When the conveyor belt is idling, the installation of “auto-stop devices for underground coal output” by installing the KGK-1 starter sensors in the mines automatically stop the transportation, realizing the goal of “Engines start when there is coal supply and stop automatically when supply ceases”. This will not only reduce electricity consumption, but will also prolong the useful life of both the conveyor belts and electrical equipment, reducing overall energy use and greenhouse gas emissions.

Through mechanized coal mining, the Group has achieved efficient and intensive production, and actively improved production efficiency and resource recovery rate, thereby reducing energy use and minimizing greenhouse gas emissions as much as possible.

#### Land reclamation

Consistent with the guidance of “those who destroys shall reclaim” issued by the State Council, the Group has commenced reclamation projects in respect of all of its coal mines for the land compromised during the course of mine construction and production. The reclamation project focuses on agriculture, returning land to arable land by adhering to the principle of “using for agriculture, forestry or animal husbandry as appropriate”.

#### 採煤方面

本集團五座煤礦均採用世界先進的長壁開採技術，以及膠輪化運輸系統，為當地的標杆煤礦。煤礦的長壁開採，是目前四種主要的地下煤礦開採技術之一，亦是被認為較先進的一種。這種開採法是一種高效採煤方法，主要使用採煤機在採礦工作面上進行煤炭切割：旋轉切割滾筒在煤層表面機械式進行切割，然後裝載至鏈式膠輪化輸送帶。輸送帶隨後將已開採的煤運送至地下煤礦運輸系統，以運送至地面。

若輸送帶上並無煤，由於礦內安裝了「井下出煤無煤自停裝置」，其KGK-1型開車傳感器會使運輸帶自動停止運送，達到「有煤開車、無煤自停」的效果。此裝置不但可節省用電，同時更可延長輸送帶及機電設備的壽命，減少整體的能源使用及溫室氣體排放。

透過機械化的採煤方式，集團實現了高效集約化生產，積極提高生產效率及資源回收率，從而減低能源的使用，盡可能減少溫室氣體的產生。

#### 土地修復方面

本集團旗下的煤礦全部遵從國務院「誰損毀，誰復墾」的規定，為在礦井生產建設過程中造成損毀的土地進行復墾工程。復墾工程以農業生產為主要目標，按照「宜農則農、宜林則林、宜牧則牧」的原則將土地還原為林地。

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The Group's reclamation commitments include estimated expenditures on open pit mines and underground mines in accordance with Chinese regulations and laws. Considering various factors, including future production and development plans, geological structure of mining region, and the reserves, the Group determines the extent, quantity and timing of reclamation and mine closures. The Group will spend approximately RMB354 million on reclamation projects for five coal mines over periods of 22, 31, 25, 30 and 30 years respectively. Throughout the process, the Group will also provide streamlined management and land protection services, thereby maximizing the economic, social and ecological benefits of the land.

As at 31 December 2017, the carrying amount of the Group's reclamation expenses provision was approximately RMB105,280,000 (Year 2016: RMB96,458,000).

#### Environmental compliance management

Strictly complying with the national standards of the P.R.C., including *Environmental Management System Requirements and Guidelines* (GB/T 24001-2016/ISO 14001:2015) and *Energy Management System Requirements and Guidelines* (GB/T 23331-2012), we have established relating environmental management system and ensured the compliance of employees through inspections and regular reviews. The Group has also strictly complied with the requirements of the *Environmental Protection Law of the P.R.C.* and the *Environmental Impact Assessment Law of the P.R.C.* to constrain the operation and ensure that the necessity of environmental protection has been taken into consideration while developing development strategies.

In terms of greenhouse gas emissions, according to the *Ambient Air Quality Standards of the P.R.C.* (GB3095-1996), we ensure that the emissions comply with the requirements of the authorities to minimize the impact on air quality. In addition, our waste water discharge policy strictly follows the requirements of the *Integrated Wastewater Discharge Standard of the P.R.C.* (GB8979-1996) and the *Code for Design of Outdoor Wastewater Engineering* (GBJ14-1997) to strictly control the discharge quality of waste water. In order to reduce the discharge of waste water, we not only turn to use pump models that can save more electricity but also reuse treated coal washing water to reduce the general discharge of waste water.

As for the waste treatment, in order to reduce the impact caused by the hazardous and non-hazardous waste inevitably produced in the production process, we have fully complied with the requirements of *Pollution Control Standard for Hazardous Wastes Incineration of the P.R.C.* (GB18484-2001), *Standard for Pollution Control on Hazardous Wastes Storage of the P.R.C.* (GB18597-2001) and *Standard for Pollution Control on Landfill Sites for Hazardous Waste of the P.R.C.* (GB18598-2001). Beyond the compliance, the Group proactively develops techniques for recycling materials and includes waste with specific uses into resource allocation scheme so as to reduce the production of waste.

本集團的復墾承擔包括根據中國法規及法例規定對露天礦及地下礦的估計開支。本集團考慮未來產量及發展計劃、開採區域地質結構和儲量等多個因素而確定復墾及礦井關閉的範圍、數量和時間。本集團對五個煤礦的復墾工程將會總共投放約人民幣三億五千四百萬元，分別為期22、31、25、30和30年。過程中本集團亦會提供精化管理及土地的保護工作，讓土地能在最大限度發揮經濟、社會和生態三方面的效益。

於二零一七年十二月三十一日，本集團預提復墾費用之賬面值約人民幣105,280,000元（二零一六年：人民幣96,458,000元）。

#### 環境合規管理方面

我們一直嚴格依據中華人民共和國國家標準《環境管理體系要求及使用指南》(GB/T 24001-2016/ISO 14001:2015) 及《能源管理體系要求及使用指南》(GB/T 23331-2012)的要求，建立集團相關的環境管理體系，並透過巡查及定期檢視確保員工按要求工作。集團同時亦一直嚴格遵守《中華人民共和國環境保護法》及《中華人民共和國環境影響評價法》的要求，約束集團的營運方式，確保在制定發展策略的同時，顧及到環境保護的必要性。

在溫室氣體排放方面，我們按照《中華人民共和國環境空氣質量標準》(GB3095-1996)，確保溫室氣體排放符合當局的要求，盡量減少對空氣品質造成影響。此外，我們的污水排放政策亦嚴格遵循《中華人民共和國污水綜合排放標準》(GB8979-1996) 及《室外排水設計規範》(GBJ14-1997)的要求，嚴格控制污水的排放品質。為了減少污水的排放，我們除了轉為使用更省電的水泵型號外，更盡量重複使用經處理的洗煤水，以減少整體的污水排放量。

至於在廢物處理方面，為了減低由生產過程中不可避免地產生的有害及無害廢棄物造成的影響，我們已全面遵守《中華人民共和國危險廢物焚燒污染控制標準》(GB18484-2001)、《中華人民共和國危險廢物貯存污染控制標準》(GB18597-2001)及《中華人民共和國危險廢物填埋污染控制標準》(GB18598-2001)的要求。在合規之上，本集團積極發展物質循環利用工藝，把有明確用途的廢物納入資源分配計劃，藉以減少產生廢棄物。

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

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#### • Governance Aspect

The governance performance of a company is a major factor in shaping its solid foundation. We believe that only with good governance capabilities can we take the development of the company to a far greater position to enable the company to have long-term development capabilities. Therefore, we attach importance to the quality of our governance and expect to establish an efficient, transparent and fair governance structure in addition to compliance to increase the confidence of stakeholders in the governance of the Group. As the Group's highest decision-making body, the board of directors frequently reviews the corporate governance practices to ensure that they meet the shareholders' growing expectations and fulfill the commitments to good corporate governance.

#### Employment

We are committed to safeguarding the interests and rights of our employees and maintaining a harmonious relationship between employer and employees, because we believe that the Group has a responsibility to guarantee that the employees' works is properly rewarded and that any forced labor or exploitation is prevented. In addition, we believe that the status of employees is closely related to the development of the Group. Only the healthy and selfless employees can promote the continuous development of the company. Otherwise, it will only slow down the development of the company and even affect the performance of the business operations.

#### Relating HR data:

As at 31 December 2017, the total number of employees in the Group was 2,027, with an overall male-to-female ratio of approximately 11:1.

#### • 管治部分

一家企業的管治表現是形成其堅實基礎的主要因素。我們相信，只有良好的管治能力，才能將企業的發展帶到更遠大的境地，讓企業具備長遠發展的能力。因此，我們重視自身的管治質量，希望在合規之餘，能夠建立高效、透明、公正的管治架構，增加持份者對集團的管治信心。作為集團最高之決策團體，董事會不時檢討其企業管治常規，確保符合股東不斷提高的期望，以及履行優良企業管治之承諾。

#### 僱傭方面

我們一直致力保障員工福利與權益，維持勞資之間的和諧關係，因為我們相信集團有責任確保員工的付出能得到合理的回報，杜絕任何強迫勞工或剝削事件的發生。此外，我們更相信員工的狀態與集團的發展息息相關，只有健康、投入工作的員工，才能推動企業繼續發展，不然只會拖慢企業的發展速度，甚至影響業務營運表現。

#### 人力相關數據：

截至2017年12月31日，集團員工總數為2,027人，整體男女比例大約為11：1。

		Male 男性	Female 女性
Under 16 years old	16歲以下	0	0
16-24 years old	16-24歲	2.22%	0.25%
25-40 years old	25-40歲	38.53%	3.21%
41-59 years old	41-59歲	49.24%	4.64%
60 years old or over	60歲或以上	1.87%	0.05%



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		Male 男性	Female 女性
Management	領導層	0.74%	0.05%
Functional departments	職能部門	2.25%	6.36%
Front line departments (including local teams, and groups)	前線部門（包括區隊及組隊）	70.60%	0

Due to the business characteristics, the Group's front line business operations have high physical requirements and the working environment is relatively strict, so that the front line employees are all male. The employee turnover of the Group during the year was 10.06%, mainly from employees in the front line departments, accounting for about half of the total number of employee turnover.

#### • Recruitment practices

HR Department coordinates and manages the recruitment by drafting the recruitment plan of the Group, organizing the recruitment in each business unit, and designing qualification requirements for different positions of each department. According to the scope of recruitment, we divide the recruitment into two categories: internal recruitment and external recruitment. The internal recruitment selects from existing employees in the Group, while external recruitment is an open recruitment for the public, and the applicants must pass the written test and interview. In the selecting standard, we value the behavior and ethics of the employees and take the professional skills, academic and technical qualifications, abilities, past experience, actual performance and physical and psychological conditions of the applicants into consideration.

In terms of compliance, strictly complying with the relevant requirements of national laws and regulations such as *the Labor Law of the P.R.C.* and *the Labor Contract Law of the P.R.C.*, the Group has formulated and implemented the *Administrative Measures for Recruitment* to ensure that labor contracts are signed with all employees, and all forms of discrimination in gender, ethnicity, religion and age, etc. in recruitment, training and promotion are eliminated. In the process of signing, renewing, termination or dissolution of the labor contract, we will guarantee that all relevant processes are fair, open and justice through spot checks, regardless of gender, ethnicity or other factors.

由於業務特性，集團前線業務運作對體力要求較高，加上工作環境較為嚴苛，所以前線員工均為男性。在流失比率方面，集團在年內的流失比率為10.06%，主要為前線部門的員工，約佔總流失人數的一半。

#### • 招聘慣例

我們在招聘員工時，會由人力資源部進行招聘工作的統籌管理，負責擬定集團招聘計畫並組織各事業部實施，為各部門不同崗位設計任職資格要求。根據招聘範圍的不同，我們將招聘分為內部招聘和外部招聘兩大類：內部招聘為從集團現有員工中進行選聘，而外部招聘則為向社會廣大公眾進行公開招聘，應聘者需通過筆試及面試。在挑選準則方面，我們重視員工的行為及道德，會考慮求職者的專業技術水準、學術及技術資格、能力、過往經驗、實際表現以及身體及心理狀況。

在合規性方面，集團嚴格遵照《中華人民共和國勞動法》、《中華人民共和國勞動合同法》等國家法律法規的有關規定，制定並實施《員工招聘管理辦法》，確保與所有員工簽訂勞動合同，在招聘、培訓及升遷等事宜上杜絕一切形式的性別、民族、宗教、年齡等方面的歧視。在簽訂、續訂、終止或解除勞動合同等過程中，我們會透過抽查等方式，確保所有相關流程都是公平公開公正，不受性別、種族或其他因素的影響。

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In addition, the Group has always strictly observed the national regulations for prohibiting the use of child labor (minors under the age of 16). In the recruitment, the overall procedure will be monitored by HR, and applicants will be required to present ID cards or other valid certificates for verification of age to prevent child labor from being recruited. All the employees currently recruited are over 18 years old. We also strictly prohibit any forced labor in accordance with national regulations to ensure that employees work on a voluntary basis: we will never detain employees' personal certificates, collect entry guarantee deposits, withhold salaries, or force employees to work by debt, threats or illegal restrictions on personal freedom, while the standard employment contract issued by local Labor Bureau is strictly implemented.

In case of child labor or forced labor discovered, the Group will report to the police or local Labor Bureau, and provide appropriate assistance to the litigants, such as returning them to their original place of residence. The Group endeavors to ensure that our employees cooperate with the investigations of the police and Labor Bureau. If it is caused by the Group's negligence, the Group will immediately terminate the labor contract with the litigant and compensate the litigant for the losses and injuries caused by the incident. However, in case of fraud, necessary legal measures will be taken by the Group to punish it.

During the year, the Group neither violated any laws or regulations relating to the prevention of child labor or forced labor, including the *Labor Law of the P.R.C.*, *Special Protection Regulations for Juvenile Employees*, or *Prohibition of the Use of Child Labor*, nor was subject to relevant penalties.

#### • Health and safety of employees

Due to the characteristics of our businesses, the health and safety of employees have always been regarded as the most important link. The Group has committed to reducing the possibility of employees' facing danger for many years and ensuring the safety of working environment. Therefore, we continue to improve the operation processes, including mechanizing some of the processes as much as possible, reducing the intervention of human resources, and strengthening the training of employees in occupational safety to enhance their safety awareness.

此外，集團嚴格遵守國家法規，禁止使用童工（未滿16歲的未成年人）。在招聘時，整體程序會由人事部進行監察，同時要求應聘者出示身份證等有效證件，以供核查年齡，確保不會招聘童工。目前所招聘的員工年齡都超過18歲。我們亦嚴格根據國家法規，禁止任何強迫性勞動，確保員工在自願的基礎上工作：我們絕不扣留員工個人證件、不收入職押金、不扣押工資、不以債務威脅或非法限制人身自由等方法強迫工作，並嚴格按照當地勞動局部門發佈的標準僱傭合同執行。

如若本集團發現有聘用童工及強迫用工的情況，集團會向警方或是當地勞動局報告，為當事人提供適當援助，例如將當事人送回原居住地。本集團竭力保證員工配合警方及勞動局部門的調查，若調查確實因集團疏忽而導致事件發生，本集團立即與當事人解除勞動合同，並向當事人就事件而造成的損失及傷害作出補償。然而，若該事件屬於欺詐行為，本集團會採取必要的法律措施，對該行為做出制裁。

在年內，集團未有違反《中華人民共和國勞動法》、《未成年工特殊保護規定》、《禁止使用童工規定》等與防止童工或強制勞工相關的法律法規或因此受到相關處罰。

#### • 員工的健康與安全

由於業務特性，員工的健康與安全一直是集團最重視的一環，長年致力減低員工面向危險的可能性，確保作業環境的安全。因此，我們持續改善作業流程，包括盡量將部分工序機械化，減少人力的介入，同時加強員工在職業安全方面的培訓，提高他們的安全意識。

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We have strictly observed the relating laws and regulations as follows:

我們已嚴格遵守以下的相關法例法規：

Safety Law of the P.R.C. 《中華人民共和國安全法》	To standardize the overall requirements of design, arrangement and safety of coal mines 規範煤礦整體的設計、安排及安全性要求
Regulation on Safety Supervision of Coal Mines of the P.R.C. 《中華人民共和國煤礦安全監察條例》	
Coal Mine Safety Rules of the P.R.C. 《中華人民共和國煤礦安全規程》	
Coal Mine Safety Rules 《煤礦安全規程》	
Regulation on Safety Testing and Inspection of Primary Drainage System 《主排水系統安全檢測檢驗規範》	To specify equipment inspection standards for professional reference 明確設備的檢驗規範以供專職人員參考
Regulation on Safety Testing and Inspection of Air Compressors 《空氣壓縮機安全檢測檢驗規範》	
Industrial Standard-Solid Woven Whole-core Fire Resistant Conveyor Belt 行業標準《織物整芯阻燃輸送帶》	
Industrial Standard-Wire (Rope as Core Materials) Fire Resistant Conveyor Belt 行業標準《鋼絲繩芯阻燃輸送帶》	
Regulation on Inspection and Acceptance of Installation of Equipment 《設備安裝工程質量驗收規範》	
Regulation on Safety Testing and Inspection of Primary Ventilation System 《主通風機系統安全檢測檢驗規範》	
Catalogue of Testing and Inspection of Safety Equipment Used in Coal Mine (First Batch) 《煤礦在用安全設備檢測檢驗目錄（第一批）》	To standardize safety requirements for apparatus, equipment and systems 規範器材、設備及系統的安全要求

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Therefore, several internal regulations, including *Occupational Health Management System*, *Safe Production Responsibility System*, *Operation Rules for Different Job Positions* and *Operation Rules* have been formulated, and the Occupational Health Management Department is responsible for supervising relevant units and personnel to ensure that all the relevant measures have been fully implemented. We have also customized and distributed protective accessories for employees, and set up occupational protection facilities in the workplace to ensure the safety of our employees. Regularly reviewing the use of labor protection products and the setting of on-site occupational protection facilities, we believe that most accidents of the work injuries can be effectively avoided to guarantee the safety and health of employees. In addition, we have regularly organized occupational health physical examinations for the employees to remind them to pay attention to their physical conditions and avoid industrial accidents caused by working ill.

For safety trainings, we mainly organize trainings and demonstrations on the aspects of compliance, protection measures and disaster prevention and control for employees, such as “policies and laws and regulations on work safety in coal mine”, “disciplines and rules within coal mine”, “labour contracts and labour protections”, “mine ventilation and disaster prevention and control”, “general situation of mine”, “self and mutual medical aid” and “trauma emergency”.

If any accident happens, we would follow the established emergency procedures to arrange appropriate treatment for the injured staff. In particular, we have entered into Medical Services Agreement and Coal Mines Rescue Agreement with Pinglu District Chinese Medicine Hospital and Pinglu District Mines Rescue Squadron respectively to treat the patients in the accidents.

During the year, Xingtao Coal operated by Huameiao Energy, a subsidiary of the Group, was rated as a Class One Safety Demonstration Coal Mine by China Coal Industry Association, which represents the recognition to our persistence in safety operation from the industry and the public.

有見及此，我們制定了《職業健康管理制》、《安全生產責任制》、《各工種崗位操作規程》及《作業規程》等內部規章，並由職業健康管理部門負責監督相關單位及人員，確保他們已全面執行相關措施。我們亦會為員工訂製並發放保護用品，並在作業場所裡設置職業防護設施，確保員工的作業安全。而透過定期檢查員工勞動保護用品的使用情況及現場職業防護設施的設置情況，我們相信可有效避免大部分的工傷意外，保障員工的安全與健康。此外，我們更為員工定期組織職業健康體檢，從而提醒他們注意自己的身體狀況，避免帶病上班而引發工業意外。

在安全培訓方面，我們主要為員工提供在合規性、保護措施及災害防治方面的講解及演示，例如「煤礦安全生產方針及法律法規」、「煤礦內部礦紀礦規」、「勞動合同與勞動保護」、「礦井通風與災害防治」、「礦井概況」、「自救互救」及「創傷急救」等。

如有意外發生，我們會按照既定應急流程為傷員安排適合的治療。其中，我們與平魯區中醫院及平魯區礦山救護中隊分別簽定了《醫療服務協議》及《礦山救護協議》，以應對意外事件帶來的傷亡人員。

在年內，本集團旗下的華美奧能源營運的興陶煤礦已被中國煤炭工業協會評為一級安全示範煤礦，顯示我們一直以來對於安全作業的堅持已獲得行業及大眾的認可。

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

### 環境、社會及管治報告

#### • Reward the employee's contribution

We are grateful to the employees for their hard works and contributions, so a comprehensive compensation and benefits system has been developed to guarantee their reasonable compensation and benefits. The Group implements an employee performance-based incentive system and reviews the system at fixed period. In addition to the basic salary, the Group will provide year-end bonuses to the outstanding employees. The directors believe that the compensation offered by the Group to employees are competitive, compared with market standards and practices.

The Group has strictly observed local laws about minimum wage standard and relevant welfare systems. In addition to basic social insurance required by national regulations such as pension, medical care, unemployment, work injury and maternity, the additional employee benefits, including housing provident fund and supplementary medical insurance, are offered to employees to improve their pension and medical security. Except for the general basic welfare, the Group takes the inconvenience of coal miners on their way to work into consideration. Therefore, a special housing allowance is set up to enable them to move to the vicinity of the coal mine at a lower cost, and save the transportation costs and time spent on the way to work. This will not only provide convenience for employees, but also yield more operational efficiency to the Group.

In terms of rest periods arrangements, the Employee Attendance Management System and Employee Rest Periods Management System have been formulated and implemented. The Group defines personal leave, sick leave, marriage leave, bereavement leave, maternity leave, work injury leave, family leave and annual leave for employees to help balance work and life. Furthermore, we value the legitimate rights and interests of female employees and ensure that they can apply leaves for maternity, breastfeeding and annual gynecological examination as needed to fulfill their family responsibilities. In order to thank our employees for their continuous hard works, the Group holds an annual gala every year to thank them for their efforts in the past year and present outstanding performance awards to excellent employees for praise and motivation.

#### • 回饋員工的付出

我們感謝一眾員工對集團的付出，亦珍視他們的貢獻，所以制定了完善的薪資及福利制度，確保他們得到合理的回報。本集團已採用一套以員工表現為基礎之獎勵制度並定期檢討該制度。除基本薪金外，本集團會向表現出眾的員工提供年終花紅。董事相信，與市場準則及慣例相比較，本集團提供予員工的薪酬待遇具有競爭力。

本集團嚴格遵守各地最低工資標準的法律及相關福利制度，依法為員工繳納養老、醫療、失業、工傷及生育等基本社會保險，更在國家法規要求之上，額外為員工提供住房公積金、補充醫療保險等補充員工福利，提高員工的養老及醫療保障。除了一般的基本福利外，本集團考慮到煤礦工人在上班路程上的不便，故特設房屋津貼，讓他們能在較低成本下遷往煤礦附近居住，節省交通費用和上班途中使用的時間。此舉不但為員工提供了方便，同時亦可為集團帶來更高的作業效率。

在休假安排方面，本集團制定並實施《員工考勤管理制度》及《員工休假管理制度》，本集團設定事假、病假、婚假、喪假、產假、工傷假、探親假和年休假等假期，協助員工平衡工作與生活的需要。此外，我們重視女性員工的合法權益，確保她們能夠按需要申請產檢假、哺乳假及年度婦科檢查，一盡家庭崗位責任。而為了感謝員工一直以來的付出，本集團每年亦會辦舉周年晚會，答謝員工在過去一年的努力，同時向表現優秀的員工頒發傑出表現獎，以作嘉許並激勵士氣。



## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

### 環境、社會及管治報告

#### • Encourage the employees to upgrade

We believe that the employees' development with direct and positive impact will give the Group more developing impetus. Therefore, we have always attached great importance to employees' training, while we expect to unblock the employees' development and promotion channel through upgrading their working skills. In this way, the Group was able to establish a talent echelon construction system with corporate characteristics and standardize the employee training contents.

#### Relating training data:

		Percentage of employees trained (%) 受訓僱員百分比(%)	
		Male 男性	Female 女性
Management	領導層	3.80%	0.00%
Functional departments	職能部門	14.90%	6.70%
Front line departments (including local teams, and groups)	前線部門 (包括區隊及組隊)	74.60%	0

  

		Training hours per capita (hours) 人均受訓時數(小時)	
		Male 男性	Female 女性
Management	領導層	200	0
Functional departments	職能部門	121	80
Front line departments (including local teams, and groups)	前線部門 (包括區隊及組隊)	85	0

For new employees, training on administrative personnel system, administrative management system and personnel management system will offer them a better understanding of the corporate culture. In addition, existing employees can also obtain job qualification certificates through other skills training contents to complete their personal abilities and further develop in the professional field. Related trainings are also organized for different grades of employees every year. For example, we have organized trainings on safe production responsibility system and fine management for management of coal mine and coal washery. The personnel department is also required to keep record of attendance to ensure sufficient time for participation and thorough understanding of training contents on the part of employees.

#### • 鼓勵員工更上層樓

我們相信員工的進步將為集團帶來更多發展動力，直接帶來正面影響。所以一直以來，我們注重員工培訓，希望透過提升員工技能，暢通員工的發展及晉升管道。通過這樣的方式，集團得以建立具有企業特色的人才梯隊建設體系，同時規範員工培訓內容。

#### 培訓相關數據：

對於新員工，我們會給予他們關於行政人事制度、行政管理制及人事管理制度等事項的培訓，令他們能更瞭解企業的文化。此外，在職員工亦可透過其他技能培訓內容，考取崗位資格證，建立自己的個人能力，進一步在專業領域上發展。我們每年更會為不同職級的員工安排相關訓練，例如為煤礦及洗煤廠的管理人員安排安全生產責任制及精細化管理相關的培訓，並要求人事部進行點名，確保員工有充足上課時間，對培訓內容能有充分了解。

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Except for the general employees, the Group also encourages the directors to attend internal training and training provided by independent service providers. Based on the training records submitted to the Group, directors confirms that they have obtained and read the training materials during the year under review and have attended training on various subjects.

除了一般員工外，本集團亦鼓勵董事出席內部培訓及由獨立服務供應商提供的培訓。根據董事提交予本集團的培訓記錄，各董事已確認於回顧年度內已獲得及閱讀培訓資料，並已出席有關多個範疇之培訓。

### Products

The characteristics of commercial coal produced by the Group are as follows:

### 產品方面

本集團出產的商業煤特徵如下：

Coal characteristics	煤質特徵	Huameiao Energy – Xingtao Coal 華美奧能源 — 興陶煤業	Huameiao Energy – Fengxi Coal 華美奧能源 — 馮西煤業	Huameiao Energy – Chongsheng Coal 華美奧能源 — 崇升煤業
Coal seam	煤層	4	9	9
Moisture (%)	水分(%)	9.13-12.11%	2.07-2.90%	8.70-11.84%
Ash (%)	灰分(%)	21.07-29.94%	18.36-30.42%	21.25-23.85%
Sulphur (%)	含硫量(%)	0.76-1.81%	0.31-0.84%	1.78-2.40%
Volatile (%)	揮發物含量(%)	21.96-27.49%	19.90-29.49%	27.54-28.88%
Calorific value (MJ/kg)	發熱量 (兆焦耳／千克)	17.30-18.13	17.08-22.03	20.36-22.25

### • Production management

After being washed and blended, the coal produced by the Group is mainly sold to power plants, cement plants and coal traders located in Chinese coastal areas. As an integrated coal supplier, we offer services to our customers, including coal mining, purchase and sales, filtering, storage, blending and shipping transportation. In order to guarantee the quality of our products and services, we attach great importance to the processing of each step for perfection.

### • 生產管理

本集團所生產的煤在洗煤及配煤後，主要售予處於中國沿海地區的發電廠、水泥廠及煤炭貿易商的客戶。由於我們是一家一體化的煤炭供應商，我們會為客戶提供採煤、煤炭購銷、選煤、存煤、配煤及航運運輸的服務。為了保證產品及服務的質量，我們在高度重視每一個環節的處理，以期盡善盡美。

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Process 程序	Method 方式
Coal mining 採煤	<ul style="list-style-type: none"> <li>Efficient centralized control of automation systems to increase overall efficiency</li> <li>高效的自動化系統集中控制，提高整體效率</li> </ul>
Coal washing 洗煤	<ul style="list-style-type: none"> <li>The coal dressing and processing procedure will be carried out in a closed loop circulation system while coarse coal slime will be stored in enclosed rooms after the dehydration process. This can ensure that finished goods will not be contaminated by external impurities and thus guarantee the stable quality of the finished goods</li> <li>洗選加工程序均於閉路循環系統中進行，脫水後的粗顆粒煤泥會存放於密封空間，確保成品不會被外界雜質所影響，保持成品的穩定質素</li> <li>All coal mines and coal washing plants are equipped with sample preparation rooms and laboratories conforming to the national standards to conduct analysis on the quality of coal in operating coal mines as well as scientific tests such as sieving and float-and-sink test on a regular basis to ensure the reliability of the coal dressing procedure</li> <li>各礦井及洗煤廠均設有符合國家標準的制樣室及化驗室，會定期分析生產礦井中的煤品質，進行篩分及浮沉試驗等科學性測試，確保煤炭洗選工序可靠</li> </ul>
Coal storage 存煤	<ul style="list-style-type: none"> <li>A dedicated warehouse and stock feeding system is established. The jetty and corridors used to deliver commercial coal are completely enclosed, which can effectively prevent any external factors from affecting the quality of the clean coal</li> <li>設有專門的儲放倉及放料系統，並全面密封運送商品煤的棧橋及走廊，有效地避免外在因素影響精煤品質</li> </ul>

The testing requirements refer to several national standards, including *Methods for Evaluating the Performance of the Equipment for Coal Sieving*, *General Rules for Analytical and Testing Methods of Coal*, *Methods for Determining the Total Moisture Content in Coal*, *Methods for Determining the Minerals in Coal* and *Methods for Determining the Calorific Value of Coal*.

所參考之檢測要求：《煤用篩分設備工藝性能評定方法》、《煤炭分析試驗方法一般規定》、《煤中全水分的測定方法》、《煤中礦物質的測定方法》及《煤的發熱量測定方法》等國家標準。

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### 環境、社會及管治報告

#### • Supply chain management

The percentage of procurement from major suppliers of the Group is as follows:

		The percentage of procurement 所佔採購額之百分比
The largest supplier	最大供應商	18.2%
Total of TOP5 suppliers	五大供應商合計	70.4%
Total number of suppliers	供應商總數	There are a total of 725 cooperation suppliers, who are all from China 共有725間合作供應商，全部供應商均來自國內

Mainly purchasing coal in Chinese market, we have established stable partnerships with our major suppliers, and most of them have at least three years business relationships with us, which have enabled the Group to obtain reliable, high quality and stable supply of coal and long-term development in this market.

In order to ensure the health and stability of the entire supply chain, we will first examine the backgrounds and businesses of new cooperation suppliers. The legal department and procurement department of the Group will not only examine the business scale and financial position of these partners, but also confirm their scopes of business as permitted by the business licenses are consistent with the proposed procurement projects of minerals to ensure such projects are in compliance with the relevant laws. In addition, to maintain healthy and sound cooperation for development, the Group carries out evaluation on suppliers on an annual basis to review the annual performance of materials suppliers and service providers, while considering removing disqualified suppliers from the list of cooperatives.

Apart from procurement projects with specific requirements due to business operation or those only with single supplier, at least two or more suppliers will be selected for other procurement projects to undergo comparisons, including price comparison between products of similar quality, quality comparison between similar products and comparison of reputation between products of similar prices. The Group strictly monitors the prices and quality of products to ensure fair and just procurement, while maintaining stable supply of quality raw materials at reasonable prices.

#### • 供應鏈管理

本集團主要供應商所佔採購額之百分比如下：

中國是我們主要採購煤炭的市場，更與主要煤炭供應商建立了穩定合作關係，其中大多數該等供應商與我們有至少三年的業務往來關係。這長時間的合作關係令本集團取得了可靠、優質及穩定的煤炭供應，有助於我們在此市場作長遠發展。

為了確保整個供應鏈的健康及穩定，對於新合作的供應商，我們會先審查他們的背景及業務。集團法務部及採購部除了會審視其經營規模及財政狀況外，更會確認其營業執照上所允許之經營範圍符合採購礦物質的計劃項目，以確保有關項目合乎有關法例。此外，為維繫健康良好的合作發展，集團每年均會進行供應商評審，以審核各材料及服務供應商的年度表現，並考慮將不達標的供應商從合作清單上移除。

除了因業務經營而有特殊要求或只有單一供應商外，其他採購項目均選擇至少兩個或以上的供應商進行比較，當中包括同等質素的價格比較、同等產品的質量比較，及同等價格的信譽比較等，採取嚴格的價格及質量監督，以確保採購工作公平公正，同時維持穩定、合理且優質的原料供應。

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

### 環境、社會及管治報告

#### • Customer management

The percentage of sales to major customers of the Group is as follows:

		The percentage of sales 所佔銷售額之百分比
The largest customer	最大客戶	12.0%
Total of TOP5 customers	五大客戶合計	50.3%

We believe that the most effective way to retain customers is to provide them with the highest quality products.

In order to maintain the quality of commercial coal, the Group exercises sampling and analysis in every single sales process, while Coal Quality Management Centre will conduct benchmark tests with purchasers on a regular basis to collect opinions regarding the quality of products for future improvement. Moreover, the Group also engages a third party testing unit with international qualification in testing for carrying out tests on our commercial coal to ensure the fair and just test results.

For our corporate customers, including power plants, cement plants and coal traders, we will definitely sign contracts with them in accordance with Management Measures for Contracts of Qinfa Group and effectively fulfill the contents as stipulated in the contracts to ensure the legitimate interests of both parties. In the process of cooperation, we inevitably come into contact with confidential information of these corporate customers, and we have the responsibility to prevent the relevant information from leaking out. Therefore, we specify the access authority for customers' information and standardizing the retrieval process of information and documents, with a view to ensuring proper protection of any relevant information and data of customers, according to Confidentiality System of Qinfa Group.

During the year, the Group did not receive any recall case in respect of the quality of coal products.

#### • 客戶管理

本集團主要客戶所佔銷售額之百分比如下：

		The percentage of sales 所佔銷售額之百分比
The largest customer	最大客戶	12.0%
Total of TOP5 customers	五大客戶合計	50.3%

我們認為最有效保障客戶的方式，就是為他們提供最優質的產品。

為了保持商品煤質素，集團從各銷售環節中進行採樣及化驗，並且由煤質管理中心定期與買方進行基準測試，收集對產品質素的意見，以供日後改善之用。此外，集團亦邀請擁有國際檢驗資格的第三方檢測單位，對我們的商品煤進行檢測，確保檢測結果公平、公正。

由於我們的客戶均為發電廠、水泥廠及煤炭貿易商等企業客戶，為了保障雙方權益，我們必定會與所有客戶按《秦發集團合同管理辦法》簽訂合約，並切實按合約所定的內容。由於在合作的過程中，我們無可避免會接觸到企業客戶機密資料，我們有責任保護相關資料不會流出。因此，我們根據《秦發集團保密制度》，明確各項客戶資料的讀取權限，並規範各項資料及文件的讀取流程，確保任何客戶相關的資料及數據均得到妥善保護。

年內，本集團並無任何與煤產品質素有關的回收個案。



## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

### 環境、社會及管治報告

#### Anti-corruption

We are committed to creating and developing a culture of honesty and integrity, and we hope that all the employees understand the importance of integrity to the long-term development of the Group.

In terms of compliance, in addition to strictly complying with the laws and regulations of the P.R.C. on corruption or bribery, all the employees are required to have a thorough understanding of the laws on preventing bribery, blackmail, fraud and money laundering, and to be honest, law-abiding and integrity, thereby maintaining a high level of professionalism.

In order to implement the requirements of relevant laws and regulations in business operations, we have formulated clear rules and regulations in accordance with the requirements of the laws to clearly clarify the duties and regulations of each department for the employees to observe at work. In addition, the Group has adopted a two-pronged approach to provide employees with a clearer understanding of the importance of business ethics through the development of the guideline for the Rewards and Punishments Management for Employees and relevant training courses. In the Rewards and Punishments Management for Employees, The Group clearly clarifies that all employees must promise neither to accept improper remuneration, nor to stipulate or request any bribe or other improper interests from counter parties of the Group, in order to avoid conflicts of interest.

During the year, no corruption case relating to the Group or its employees were discovered.

#### 企業廉潔方面

我們一直致力創造及培養誠實正直的企業文化，希望整體員工都能理解廉潔對集團長遠發展的重要性。

在合規方面，除了嚴格遵守中華人民共和國有關於貪污或受賄方面的法律法規外，我們亦要求整體員工深入了解防止賄賂、防止勒索、防止欺詐及防止洗黑錢方面的法例，做到誠信守法、正直廉潔，維持高度的專業水平。

為了在業務營運中深度落實相關法律法規的要求，我們根據法例要求，建立了清晰的規章制度，清楚定明各個部門的崗位職責及規範，讓員工在工作時有據可依。此外，集團亦雙管齊下，分別透過制定《公司員工獎懲管理》指引，以及提供相關的培訓課程，讓員工更清楚了解商業道德的重要性。在《公司員工獎懲管理》中，集團明確定明所有員工必須承諾不得收受不恰當的酬金，亦不可與集團的交易對象約定或索取任何賄賂或其他不當利益，避免利益衝突。

在年內，我們並沒有發現任何與集團或其僱員相關的貪污個案。

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

### 環境、社會及管治報告

#### • Social Aspect

Sticking to the principle of “From the Society and For the Society”, we are convinced that a responsible company will transfer part of the profits taken from the society to the resources for building the society, so that the society can have the sustainable development to provide the company with more ideal long-term development conditions.

During the year, responding to the national policy of “Targeted Poverty Alleviation”, we provided assistance to the needy public to create better living conditions. For example, we signed 10-year drinking water assistance agreements with the poverty-stricken villages in Pinglu District, and subsidized RMB700 per year to relevant families to resolve the difficulties of drinking water, meet their living needs, and guarantee the safety of drinking water. In particular, we offered the drinking water assistance expenses for 35 families in Xiamujiao Township, Songgou Village and Baidaogou Village in 2017, and the total amount needed for the whole year was paid in full.

In addition, the natural disasters at Pinglu District, such as drought, heavy rain and hail, caused great losses to many residents. We followed the national spirit of poverty alleviation and launched a social donation activity of “Deliver Warmth and Show Love” for the whole region to assist the public to return to normal life after the disaster.

#### • 社會部分

我們一直堅守「取之社會，用之社會」的原則，深信一家有承擔的企業會從社會所賺取的利潤中，轉化部分成為建設社會的資源，好讓社會持續發展，長遠為企業提供更理想的發展條件。

在年內，我們回應國家「精準扶貧」的政策，向有需要的社會大眾提供援助，創造更好的生活條件。例如，我們與平魯區貧困村簽訂10年的飲用水援助協議，向相關農戶每年資助人民幣700元的補貼，解決貧困村飲水困難問題，滿足其生活需要，並保障飲用水的安全。其中，我們已解決下木角鄉、嵩溝村及白道溝村合計35戶村民2017年的飲用水援助費用，一次過付清全年所需的總額。

此外，由於平魯區早前遭受乾旱、暴雨及冰雹等天災的侵襲，為不少居民帶來重大損失。我們秉承國家的扶貧精神，在全區展開「送溫暖、獻愛心」的社會捐助活動，協助大眾在受災後恢復正常生活。

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

### 環境、社會及管治報告

Assistance in details:

詳細援助情況如下：

	Project 項目	Amount 金額
Drinking water assistance for Bachigou Village, Shuangnian Township	雙碾鄉扒齒溝村扶貧飲用水援助費用	RMB24,500 人民幣24,500元
Donation to community of Pinglu District	平魯區社會捐款	RMB10,100 人民幣10,100元
Donation to government of Taocun Township, Pinglu District	平魯區陶村鄉政府捐款	RMB60,000 人民幣60,000元
Donation to villagers' committee of Shangmujiao Village, Pinglu District	平魯區上木角村民委員捐款	RMB200,000 人民幣200,000元
Poverty alleviation fund for Taocun, Pinglu District	平魯區陶村扶貧款項	RMB100,000 人民幣100,000元

As a local responsible company, we expect to provide practical assistance to local residents in different ways to support the regional development, improve people's livelihood, and benefit the entire region from our development.

作為當地一家有擔當的企業，我們希望能透過不同的方式向當地居民提供實際援助，扶持地區發展，改善民生狀況，讓整個地區均能從我們的發展中受益。

## LOOKING FORWARD

Striving for progress, we expect to improve the efficiency and develop both the environmental protection and corporate governance in the future, to achieve quality development. We will improve the existing processes and technologies by recruiting advanced technicians to further reduce the environmental impact, while bringing new thinking to existing employees and improving the standardization awareness of coal mine workers to develop their normalized behavioral habits. Furthermore, we also expect to establish a more scientific and standardized supplier management system to further regulate the performance of suppliers while improving procurement efficiency and cost.

We believe that environmental quality and governance principles should not be sacrificed for responsible development, but supplement to each other, while business continuity is supposed to be promoted by creating a sustainable industry environment.

## 展望未來

我們一直力求進步，希望在未來能夠提高效率，在環境保護及企業管治方面均有所進步，實現有品質的發展。我們將會透過引進先進技術人員，改善現有工藝及技術，在進一步減低對環境影響的同時，更可為現有員工帶來新思維，提高煤礦工人標準化意識，形成規範化的行為習慣。此外，我們也希望可建立更科學、更規範的供應商管理體系，在改善採購效率及成本的同時，進一步規管供應商的表現。

我們相信，負責任的發展並不應該以環境質量及管治原則來換取，而是應該相輔相成，透過創造可持續發展的行業環境，推動業務持續向前。

