



北控清潔能源集團有限公司

Beijing Enterprises Clean Energy 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: 01250



Environmental, Social and
Governance Report
環境、社會及管治報告

2019



Contents 目錄

About the ESG Report	關於本報告	2
Description of Preparation	編制說明	2
Reporting Scope	報告範圍	2
Reporting Guide	報告指引	2
Disclaimer of the ESG Report	報告聲明	2
The Chairman's Statement	主席致辭	3
About the Group	關於本集團	5
The Group Overview	集團概覽	5
Business Review	業務回顧	6
Sustainable Development Governance	可持續發展管治	10
Responsible Communication	責任溝通	10
Compliant Operation	合規運營	16
Adopting Green and Clean Approach	行綠色清潔之道	17
Developing Clean Energy	發展清潔能源	17
Enhancing Resource Efficiency	提高資源利用	19
Refining Emission Management	細化排放管理	23
Concerning Environmental Impacts	關注環境影響	31
Being Responsible – Develop Innovative Technology and Achieve Service Excellence	有擔當 – 創新科技 打造卓越服務	32
Technological Research and Innovations	科研與創新	32
Safety and Monitoring	安全與監督	33
Customers and Services	客戶與服務	35
Having Values – Promote People-oriented Culture and Provide Development Channels	有價值 – 以人為本 提供發展渠道	37
Protecting Employees' Right	維護員工權益	37
Occupational Health and Safety	職業健康與安全	43
Promoting Employees' Development	助力員工發展	45
Being Sharing – Establish Development and Practice Social Responsibility	有分享 – 立足發展 踐行社會責任	48
Standardising Procurement and Management	規範採購與管理	48
Community Harmony and Building	社區和諧與共建	50
Appendix: Index of Environmental, Social and Governance Reporting Guide	附錄：《環境、社會及管治報告指引》內容索引	53

About the ESG Report 關於本報告

DESCRIPTION OF PREPARATION

This is the fourth Environmental, Social and Governance Report (the “ESG Report”) of Beijing Enterprises Clean Energy Group Limited (the “Company”, “BECE” or “We”, and together with its subsidiaries, the “Group”). To provide a comprehensive understanding of the Group’s performance in the areas of environmental, social and governance (“ESG”), the ESG Report should be reviewed in parallel with the section headed “Corporate Governance Report” of the 2019 Annual Report.

REPORTING SCOPE

The ESG Report focuses on the Group’s sustainability policies and performance relating to the investment, development, construction, operation and management of photovoltaic power businesses (the “Photovoltaic Power Business”), wind power businesses (the “Wind Power Business”) and clean heat supply businesses (the “Clean Heat Supply Business”) in the People’s Republic of China (“China” or the “PRC”). Unless otherwise stated, the scope of the ESG Report covers the Company and its subsidiaries. The reporting period of the information covered by the ESG Report is from 1 January 2019 to 31 December 2019 (the “Reporting Period”).

REPORTING GUIDE

The Group has prepared the ESG Report in accordance with the “Environmental, Social and Governance Reporting Guide” (the “ESG Guide”) under Appendix 27 of the “Rules Governing the Listing of Securities (the “Listing Rules”) on the Stock Exchange of Hong Kong Limited (the “SEHK”). The ESG Report complies with all reporting requirements under the “Comply or Explain” Provision in the ESG Guide; and is prepared based on four reporting principles, including “materiality”, “quantitative”, “balance” and “consistency”.

DISCLAIMER OF THE ESG REPORT

The Board of Directors of the Company is accountable for the ESG strategy formulation and ESG reporting. The ESG Report is published in both traditional Chinese and English. If there is any inconsistency, the English version shall prevail.

編制說明

本報告是北控清潔能源集團有限公司（「本公司」、「北控清潔能源」或「我們」，連同其附屬公司統稱為「本集團」）的第四份環境、社會及管治報告（「本報告」）。為全面了解本集團於環境、社會及管治（「ESG」）方面的表現，本報告應與二零一九年年度報告中「企業管治報告」章節一併閱覽。

報告範圍

本報告的內容主要集中於本集團在中華人民共和國（「中國」）從事投資、開發、建造、營運及管理光伏發電業務（「光伏發電業務」）、風電業務（「風電業務」）及清潔供暖業務（「清潔供暖業務」）在可持續發展方面的政策和表現。另有說明，報告範圍涵蓋本公司及旗下附屬公司，報告期間為二零一九年一月一日至十二月三十一日（「本報告期」）。

報告指引

本集團按照《香港聯合交易所有限公司（「香港聯交所」）證券上市規則》（「上市規則」）附錄二十七《環境、社會及管治報告指引》（「ESG指引」）編製本報告。本報告遵守ESG指引中有關「不遵守就解釋」的條文，並且以「重要性、量化、平衡、一致性」這四項匯報原則作為編制基礎。

報告聲明

本公司董事會負責ESG策略制定及相關匯報工作。本報告以兩種語言：中文繁體及英文進行發佈。報告內容如有歧義，請以英文版為準。

The Chairman's Statement 主席致辭

In 2019, the Group adhered to the management principles of “Sufficient Authorisation, Goal-oriented, Positive Incentives, and Control and Review in Place” and the lean concepts of “Outstanding Employees, Lean Operation, High-quality Products and Innovation”, to carry out organisational reform, improve its systems and processes and optimise its management and control system. During the Reporting Period, the Group implemented a cost accounting-oriented business unit management system in its entire process covering investment, technology, construction and operation and maintenance, which integrated authorisation and performance and was supplemented by a precise and professional authorisation and evaluation incentive system, so as to comprehensively optimise and adjust its organisational structure, steadily promote comprehensive IT-based construction and process re-engineering, streamline processes, strengthen collaboration, improve efficiency, and focus on new income sources, cost reduction and efficiency enhancement from the perspective of its management and control system.

The Group adhered to its core values of “Being Responsible, Having Values and Being Sharing” and its corporate culture as the core driver of the Group’s development. During the Reporting Period, the Group adopted multi-type and multi-level cultural promotion activities with full coverage, such as the launching ceremony of the “BECE Principles” cultural system, to promote employee consensus. The Group also unified its employees’ pace of action through cultural points rewarding system, personal performance-based cultural assessment mechanism, “Red and Yellow Card” punishment mechanism and other supporting mechanisms. By means of promotion and implementation, the Group endeavours to incorporate its corporate culture into its systems and requires all employees to effectively keep the same in mind and to put into practice.

二零一九年度，本集團遵循「充分授權、目標導向、陽光激勵、監審到位」的管控方針，貫徹「精兵、精益、精品、創新」的經營理念，進行組織變革，完善制度流程，優化管控體系。於本報告期，本集團通過從投資、技術、建設和運維等全流程推行以成本核算為目標導向，授權與結果相結合的事業部制管理體系，同時輔以精準和專業的授權及考核激勵制度，全面優化調整組織架構，穩步推行全面信息化建設和流程再造，簡化流程，強化協同，提升效率，聚焦從管控體系上開源節流，降本增效。

本集團圍繞「有擔當、有價值、有分享」核心價值觀，堅持把企業文化作為本集團發展的核心驅動力。於本報告期，本集團通過《北控清潔能源宣言》文化體系發佈儀式等多類型、多層次、全覆蓋的文化宣貫活動，凝聚全員共識；通過文化積分獎勵、文化考核與個人績效掛鉤、「紅黃牌」處罰機制等配套機制，統一行動步伐；以文化宣貫活動和落地保障機制為抓手，讓企業文化真正固化於制、內化於心、外化於行，全面生根發芽。

The Chairman's Statement 主席致辭

“Being Responsible”: While striving to achieve its business objectives and generate returns for its shareholders, the Group also seeks to improve its performance in the areas of environment, occupational health and safety, resource consumption and other areas, and progressively incorporates these elements into strategic and daily operations. The Group actively supports the nation's commitment to green development, faces challenges courageously, attaches great importance to safety management, and pays consistent attention to safety management. During the Reporting Period, the Group often carried out non-scheduled inspections and investigations on hidden dangers in its projects and achieved 100% rectification. The Group also planned and conducted trainings on various aspects such as safety management and emergency rescue, which further enhanced the employees' awareness of danger prevention as well as the quality of the Group's safety management.

“Having Values”: The Group has always regarded its employees as valuable assets for the Company's development and strives to maximise its competitive edge in human resources. By focusing on the work experience and career development opportunities of its employees, providing competitive welfare and benefit conditions, and maintaining a fair and open human management foundation, the Group is dedicated to establishing a culture of mutual respect and thus executing the greatest synergy and cooperation of the team.

“Being Sharing”: The realization of social responsibility is the foundation of corporate growth. In this regard, the Group actively promotes community development and constructs a responsible supply chain. We have taken into considerations the elements such as occupational health, safety and environmental protection in the partnership conditions on top of the suppliers' fundamental compliance with laws and regulations. The Group aims to share with its business partners the benefits brought by the green energy industry, and at the same time the responsibilities and obligations of giving back to the community by applying professional technologies and resources.

Seize the day and live it to the fullest. BECE has always been committed to implementing the energy development strategy of “Four Revolutions and One Cooperation”, regarding “Promoting the Revolution in Energy Production and Consumption, and Building a Clean, Low-carbon, Safe and Efficient Energy System” as its mission to contribute to the construction of a community of human destiny in the global village for the benefit of all humankind and future generations.

「有擔當」：在致力於實現業務目標並為股東創造回報的同時，本集團亦力求提升環境、職業健康與安全、資源消耗以及其他領域的績效，並逐步將該等要素落實於戰略及日常運營。本集團積極配合國家堅定綠色發展道路，勇於面對挑戰，並高度重視安全管理工作，對安全管理常抓不懈。於本報告期，本集團不定期經常性地開展項目隱患排查，並實現100%整改；策劃開展安全管理及應急救護等多方面的取證培訓工作，進一步增強了危險防範意識，提升了安全管理質量。

「有價值」：本集團一直將員工隊伍視為公司發展的寶貴資源，力求最大限度地發揮人力資源優勢，通過關注員工的工作體驗和職業發展機會，提供具競爭性的福利條件，以平等公開作為人才管理基礎等措施，致力於建立互相尊重的文化氛圍，從而發揮協同合作的最高價值。

「有分享」：踐行社會責任是企業成長的基礎，為此，本集團積極推動社區發展，構建負責任供應鏈，在要求供應商合規合法的基礎上，我們在合作條件中加入職業健康、安全、環保等因素的考量，目標在分享綠色能源產業帶來的發展優勢的同時，亦分享責任與義務，並利用專業技術及資源回饋社會。

只爭朝夕，不負韶華。北控清潔能源一直致力於貫徹「四個革命、一個合作」的能源發展戰略，以「推進能源生產和消費革命，構建清潔低碳、安全高效的能源體系」為企業擔當，助力於地球村的人類命運共同體建設，造福全人類及子孫後代。

About the Group 關於本集團

THE GROUP OVERVIEW

BECE (stock code: 1250) is listed on the main board of the SEHK. The three major shareholders of the Company are Beijing Enterprises Water Group Limited (“BEWG”), the private equity funds managed by CITIC Private Equity Funds Management Co., Ltd. and Tus-Holdings Co., Ltd.

BECE principally engages in the investment, development, construction, operation and management of Photovoltaic Power Businesses, Wind Power Businesses and Clean Heat Supply Businesses in the PRC. The Group also actively explores other clean energy businesses. Focusing on the clean development and use of energy so as to provide “Clean Energy Plus” solutions, the Group adheres to its mission of “Contributing Our Clean Energy and Building a Green Future” and upholds its core values of “Being Responsible, Having Values and Being Sharing”, striving to build up a clean energy business ecosystem featuring multi-energy complement, and synergies on diverse of business lines and profit sources as well as to become a leading integrated clean energy service provider.

集團概覽

北控清潔能源（股票代號：1250）於香港聯交所主板上市，本公司三大股東包括北控水務集團有限公司（「北控水務集團」）、中信產業投資基金管理有限公司管理之私募股權基金及啟迪控股股份有限公司。

本集團主要在中國從事投資、開發、建造、營運及管理光伏發電業務、風電業務及清潔供暖業務，並積極探索其他清潔能源業務，以能源的清潔開發和利用為主線，悉心提供「清潔能源+」解決方案，秉持「奉獻清潔能量，創享綠色未來」的使命和「有擔當、有價值、有分享」的核心價值觀，致力構建多能互聯、多業協同、多點盈利的清潔能源生態系統，成為領先的清潔能源綜合服務商。



BUSINESS REVIEW

The National Development and Reform Commission of the PRC (the "NDRC") and the National Energy Administration promulgated "Notice of Actively Promoting the Work Concerning Subsidy-free Grid Parity for Wind Power and Photovoltaic Power Generation" (No. 19 [2019] of the NDRC) in January 2019, which set out the launching of the construction of grid parity projects and low-priced grid pilot projects. The Group conducted relevant research and strategic planning right away to respond to industry policies and market changes proactively, promoting the development and construction of grid parity and low-priced photovoltaic and wind power projects.

In the area of centralised Photovoltaic Power Business, as of 31 December 2019, the aggregate on-grid installed capacity of the centralised photovoltaic power plants held by the Group reached approximately 2,256MW, mainly located in resource areas II and III as promulgated by the NDRC in Anhui Province, Shandong Province, Hebei Province and Henan Province, etc..

業務回顧

中國國家發展和改革委員會（「國家發改委」）、國家能源局於二零一九年一月發佈《關於積極推進風電、光伏發電無補貼平價上網有關工作的通知》（發改能源〔2019〕19號），要求開展平價上網項目和低價上網試點項目建設。本集團積極順應行業政策和市場變化，第一時間開展相關研究，並有針對性地進行相關部署，穩步推進平價與低價光伏與風電項目開發與建設。

在集中式光伏發電業務方面，截至二零一九年十二月三十一日，本集團持有已併網集中式光伏電站累計裝機規模約2,256兆瓦，主要分佈於安徽省、山東省、河北省、河南省等國家發改委劃分的II類及III類資源區。

Centralised photovoltaic power plant,
Qixian Miaokou, Henan Province
河南省淇縣廟口集中式光伏發電站



Centralised photovoltaic power plant,
Jinzhai County, Anhui Province
安徽省金寨縣集中式光伏發電站





Distributed photovoltaic power station in a water plant of BEWG, Dongguan, Guangdong Province
廣東省東莞北控水務集團水廠內的分佈式光伏發電站

In respect of the distributed Photovoltaic Power Business, as of 31 December 2019, the total installed capacity of the distributed photovoltaic power plants held and/or managed by the Group that are in operation is over 600MW. These power plants are mainly located in resource area III as promulgated by the NDRC, such as Henan Province, Anhui Province, Shandong Province, Jiangsu Province and Hebei Province, etc., which included the distributed photovoltaic power stations constructed by the Group in certain water plants of BEWG of which the Group sold electricity to the respective water plants.

在分佈式光伏發電業務方面，截至二零一九年十二月三十一日，本集團持有及／或管理的已投運分佈式光伏發電站總裝機規模超過600兆瓦，主要分佈於國家發改委劃分的III類資源區（如河南、安徽、山東、江蘇及河北等省份），當中包括本集團在北控水務集團之若干水廠建造並向有關水廠出售電力的分佈式光伏發電站。

About the Group 關於本集團

In respect of the Wind Power Business, as of 31 December 2019, through self-development, joint development and acquisitions, etc., the aggregate capacity of the Group's grid-connected, under-construction and approved-to-construct wind power projects reached over 1,400MW. These projects are mainly located in Hebei Province, Henan Province, Shandong Province and the Inner Mongolia Autonomous Region, which are mainly situated in resource area IV as promulgated by the NDRC.

在風電業務方面，截至二零一九年十二月三十一日，本集團通過自主開發、聯合開發及收購等方式實現併網、在建及獲批待建風電項目總規模超過1,400兆瓦，項目主要位於河北省、河南省、山東省及內蒙古自治區，主要分佈於國家發改委劃分的IV類資源區。



Wind power plant, Alashan, the Inner Mongolia Autonomous Region
內蒙古自治區阿拉善盟風力發電站

Wind power plant, Binzhou, Shandong Province
山東省濱州風力發電站





Clean coal consumption and power plant excess heat energy centralised heat supply project in Yinchuan City, the Ningxia Hui Autonomous Region
寧夏回族自治區銀川市清潔化燃煤及發電站餘熱能源集中供暖項目

For the Clean Heat Supply Business, as of 31 December 2019, through development and business acquisition, the Group held and/or managed 17 projects that are in operation, with an aggregate actual clean heat supply area of 27 million square meters in Henan, Hebei, Shanxi, Shaanxi, the Ningxia Hui Autonomous Region, Liaoning, Shandong, Jiangsu and other provinces.

For other clean energy businesses, the Group has been exploring multi-energy complement, hydropower, energy storage, distribution and sales of electricity and other clean energy businesses, and exploring international opportunities for strategic development and business diversification, with an aim to become a leading integrated clean energy service provider.

在清潔供暖業務方面，截至二零一九年十二月三十一日，本集團通過開發及業務收購，持有及／或管理17項位於河南、河北、山西、陝西、寧夏回族自治區、遼寧、山東、江蘇及其他省份的已營運項目，實際清潔供暖面積合共達到2,700萬平方米。

在其他清潔能源業務方面，本集團一直探索多能互補、水電、儲能、配售電及其他業務範疇等其他清潔能源業務，並探索國際機遇，以進行戰略及多元化發展，旨在成為領先的清潔能源綜合服務商。

Sustainable Development Governance 可持續發展管治

RESPONSIBLE COMMUNICATION

責任溝通

It is important to build up close communications with stakeholders for the sustainable development of BECE. During the Reporting Period, the Group has engaged and communicated with stakeholders through different channels, to understand their concerns, expectations and opinions over the Group's ESG matters. The engagement exercise acts as an important reference for the Group to establish corresponding development plans and management strategies, to achieve "Government's Reassurance, Customers' Satisfaction, Enterprise's Profitability, Employees' Benefit and Partners' Win-Win".

與利益相關方建立緊密聯繫對比控清潔能源的可持續發展至關重要。於本報告期，本集團通過不同渠道與利益相關方進行充分的溝通和對話，以了解各利益相關方對本集團ESG議題的關注、期望及意見，從而以此作為參考依據，建立相應的發展規劃及管理方針，達至「政府放心、客戶滿意、企業營利、員工受益、夥伴共贏」。

Stakeholders Group 利益相關方組別	Communication Channel 溝通渠道	Frequency 頻率
Employees 員工	Group meetings and departmental meetings 集團及部門會議	Occasionally 不定期
	Annual employee meeting 年度員工大會	Annually 每年
	Questionnaires 問卷調查	Annually 每年
	Internal communication through emails 通過電子郵件發出的內部通訊	Occasionally 不定期
	Internal trainings 內部培訓	Occasionally 不定期
Shareholders and Investors 股東及投資者	Annual general meeting 股東週年大會	Annually 每年
	Interim reports and annual reports 中期及年度報告	Twice a year 每年兩次
	Investor meetings 投資者會議	Occasionally 不定期
	Press releases and announcements 新聞稿及公告	Occasionally 不定期
	On-site visits 現場考察	Occasionally 不定期

Stakeholders Group 利益相關方組別	Communication Channel 溝通渠道	Frequency 頻率
Customers 客戶	Customer meetings 客戶會議	Occasionally 不定期
	Questionnaires 問卷調查	Annually 每年
	On-site visits 現場考察	Occasionally 不定期
Suppliers 供應商	Supplier meetings 供應商會議	Occasionally 不定期
	Questionnaires 問卷調查	Annually 每年
	Technical seminars 技術研討會	Occasionally 不定期
	On-site visits 現場考察	Occasionally 不定期
Contractors 承包商	Contractor meetings 承包商會議	Occasionally 不定期
	Questionnaires 問卷調查	Annually 每年
	Seminars 交流研討會	Occasionally 不定期
	On-site visits 現場考察	Occasionally 不定期
Government 政府	Government meetings 政府會議	Occasionally 不定期
	On-site visits 現場考察	Occasionally 不定期

Stakeholders Group 利益相關方組別	Communication Channel 溝通渠道	Frequency 頻率
Cooperative Partners 行業合作夥伴	Cooperative partner meetings 行業合作夥伴會議	Occasionally 不定期
	Questionnaires 問卷調查	Annually 每年
	Seminars 研討會	Occasionally 不定期
	On-site visits 現場考察	Occasionally 不定期
Media 媒體	Press releases and announcements 新聞稿及公告	Occasionally 不定期
Community Partners 社區合作夥伴	Questionnaires 問卷調查	Annually 每年
	Participation in charity events 參與慈善活動	Occasionally 不定期

During the Reporting Period, the Group conducted the materiality assessment by distributing questionnaires. The detailed procedures are as follows:

I. Identification

Through communications with stakeholders to understand their expectations, and with reference to the ESG Guide, peer benchmarking and corporate development characteristics, the Group selected a total of 26 sustainability issues (including 10 from the environmental aspect, 7 from the social aspect and 9 from the operational aspect), and constructed the Group's sustainable development issue pool.

II. Ranking

The Group invited stakeholders to participate in the assessment through online questionnaires, to rank each issue from the pool of sustainable development issue according to their degree of concern.

於本報告期，本集團採用問卷調查的方式開展實質性議題評估，其具體流程如下：

I. 識別

本集團透過與各利益相關方的溝通以了解他們的期望，並結合參考ESG指引、同行基準分析及企業發展特色，篩選歸納出共26項可持續發展議題（其中，環境層面10項、社會層面7項、運營層面9項），構建了本集團的可持續發展議題庫。

II. 排序

本集團邀請各利益相關方以網上問卷的形式參與調查評估，按照其對可持續發展議題庫中各議題的關注程度進行排序。

III. Evaluation

The Group reviewed the importance of each issue based on the two dimensions, namely “the degree of impact on BECE” and “the degree of impact on stakeholders”. The Group identified 5 highly important material issues in each of the environmental aspect, social aspect, and operational aspect respectively.

IV. Review

The Group reviewed the selected material issues and confirmed their significance to the Group’s stakeholders, and then disclosed them specifically in the ESG Report.

The results of the materiality assessment are as following diagram:

III. 評估

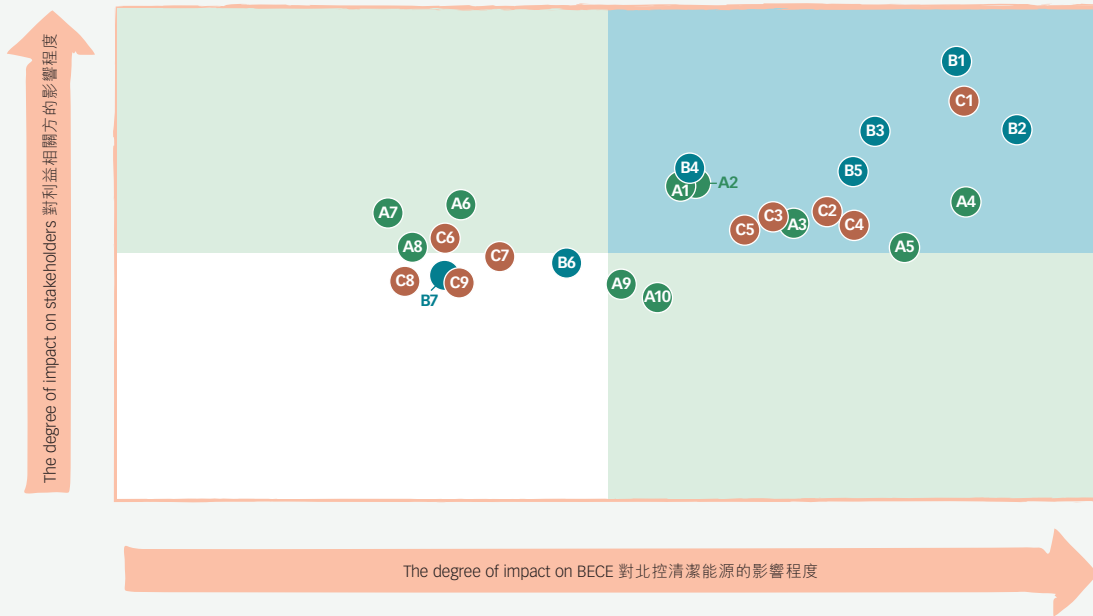
本集團根據「對比控清潔能源的影響程度」及「對利益相關方的影響程度」兩個維度審視各議題的重要性，得到環境層面中5項、社會層面中5項以及運營層面中5項高度重要的實質性議題。

IV. 檢視

本集團檢視篩選出來的實質性議題並確認其對本集團利益相關方的重要意義，從而有针对性地於本報告中進行披露。

有關實質性議題評估結果請參見下圖：

MATERIALITY MATRIX
實質性議題矩陣圖



Sustainable Development Governance 可持續發展管治

Material Issues 議題	A. Environmental Aspect 環境層面	B. Social Aspect 社會層面	C. Operational Aspect 運營層面
1st Tier Issues ¹ (Issues distributed in the blue area of the materiality matrix) 第一層級議題 ¹ (分佈於實質性議題矩陣圖中藍色區域的議題)	A1. Air Pollutant Emission and Management 大氣污染物排放及管理	B1. Employee Benefits and Welfare 員工待遇及福利	C1. Law and Regulation Compliance 遵守法律法規
	A2. Reasonable Use of Resources 資源合理使用	B2. Employee Training and Development 員工培訓及發展	C2. Research and Development 研發及開發
	A3. Environment and Natural Resources Protection 保護環境及天然資源	B3. Occupational Health and Safety 職業健康與安全	C3. Product and Service Quality Management and After-sale Service 產品及服務質量管理與售後服務
	A4. Innovation and Application of New Energy 新能源技術開發及利用	B4. Employee Involvement and Communication 員工參與及溝通	C4. Integrity Management 廉潔管理
	A5. Environmental Compliance 環境合規	B5. Employment Rights and Benefits 僱傭權益	C5. Supply Chain Management 供應鏈管理

¹ 1st Tier Issues: Details about strategies and practices are stated in the ESG Report as responses.
第一層級議題：於本報告中，詳細回應與其有關的策略及績效

Material Issues 議題	A. Environmental Aspect 環境層面	B. Social Aspect 社會層面	C. Operational Aspect 運營層面
2nd Tier Issues ² (Issues distributed in the green area of the materiality matrix) 第二層級議題 ² (分佈於實質性議題矩陣圖中綠色區域的議題)	A6. Solid Waste Emission and Management 固體廢棄物排放及管理		C6. Protection for Intellectual Property 知識產權保護
	A7. Wastewater Emission and Management 污水排放及管理		
	A8. Greenhouse Gas Emission and Management 溫室氣體排放及管理		
	A9. Green Product 綠色產品		
	A10. Environmental Protection Investment 環境保護投資		
3rd Tier Issues ³ (Issues distributed in the white area of the materiality matrix) 第三層級議題 ³ (分佈於實質性議題矩陣圖中白色區域的議題)		B6. Community Participation and Contribution 社區參與及貢獻	C7. Reasonable Marketing and Promotion 合理營銷及宣傳
		B7. Labour Standards 勞工準則	C8. Complaint Mechanism about Products and Services 關於產品及服務的投訴機制
			C9. Protection of Customer Privacy and Information Security 客戶隱私保護及信息安全

² 2nd Tier Issues: Relevant practices are included in the ESG Report as responses.

第二層級議題：於本報告中，回應與其有關的部分實踐

³ 3rd Tier Issues: Ongoing concerns

第三層級議題：持續關注

COMPLIANT OPERATION

The Group conscientiously applies the principles of business integrity, stringently complies with the laws, rules, and regulations set out by the regulatory authorities in regions that the Group operates, including but not limited to the “Criminal Law of the People’s Republic of China”, the “Criminal Procedure Law of the People’s Republic of China”, the “Anti-Unfair Competition Law of the People’s Republic of China”, the “Supervision Law of the People’s Republic of China”, the “Prevention of Bribery Ordinance (Cap. 201)” and other regulations related to prevention of bribery, extortion, fraud and money laundering. Through formulating policies such as the “Supervision and Management Ordinance of BECE”, we prohibit any illegal practice against business ethics, improving our corporate governance level. During the Reporting Period, the Group did not receive any reports related to bribery, extortion, fraud and money laundering.

According to the “Supervision and Management Ordinance of BECE”, the Audit and Supervision Department is responsible for monitoring and inspecting the Group’s headquarters’ departments, business units, project companies, managers and employees to ensure that they are performing their duties and responsibilities properly. For those who are failing to perform or inaccurately perform their duties and responsibilities and resulting in loss of assets or other serious adverse consequences, the Audit and Supervision Department will conduct investigations to verify and identify the responsibility.

To further prevent and rectify the violations of law and regulation, the Group established the reporting channel, encouraging employees to give advice when they identify any problems during their work. They are entitled to report to the Audit and Supervision Department on any illegal and unlawful behaviours committed by any business units (or departments), managers or employees of the Group. The Group offers rewards publicly or privately to the employees who submit advice, suggestions or complaints.

In addition, the Group signed the “Letter of Undertaking of Integrity” with the senior management and the management of each business unit, to set out disciplinary measures and penalties for violation of the code of conduct, in order to strengthen the anti-corruption awareness and regulate the professional conduct of employees.

合規運營

本集團恪守誠信經營的原則，嚴格遵守經營所在地的法律法規及監管機構的規定，包括但不限於《中華人民共和國刑法》、《中華人民共和國刑事訴訟法》、《中華人民共和國反不正當競爭法》、《中華人民共和國監察法》、《防止賄賂條例》（香港法例第201章）等有關防止賄賂、勒索、欺詐及洗黑錢的法規規定，通過制定《北控清潔能源集團有限公司監察管理條例》等政策，禁止任何違反商業道德的不法行為，加強企業管治水平。於本報告期，本集團未有接獲任何與賄賂、勒索、欺詐及洗黑錢相關的違法違規事件。

《北控清潔能源集團有限公司監察管理條例》規定集團監察審計部負責監督檢查本集團總部部門、各經營單位及項目公司、經營管理者及員工履行職責行為的正確性，對未履行或未正確履行職責從而造成資產損失或其他嚴重不良後果的行為，進行調查核實和責任認定。

為了進一步防範和糾正違法違規違紀行為，本集團建立了信訪渠道，鼓勵員工在工作中發現問題，提出建議或意見；對於本集團內任何單位（或部門）、經營管理者及員工的違法違規違紀行為，有權向監察審計部提出控告或檢舉。針對給予提交建議、意見或投訴的員工，本集團給予公開或非公開形式獎勵。

另外，本集團與高級管理層和各業務平臺管理層簽訂《廉潔從業承諾書》，對違反行為準則的事項制定紀律約束與處罰措施，強化員工反腐敗意識，規範職業行為。

Adopting Green and Clean Approach 行綠色清潔之道

DEVELOPING CLEAN ENERGY

In the era of global energy revolution, the Group is committed to implementing the energy development strategy of “Four Revolutions and One Cooperation” since its inception, regarding “Promoting the Revolution in Energy Production and Consumption, and Building a Clean, Low-carbon, Safe and Efficient Energy System” as its mission to generate a steady source of green energy for the benefit of all humankind and future generations.

The Group upholds a high sense of responsibility to the society and stakeholders, carries an open, inclusive, pragmatic and rule-respecting attitude, and takes on the core corporate responsibilities of technological innovation, environmental protection and benefiting mankind, to design, construct, operate and manage clean energy demonstrative projects. The Group is committed to minimising the environmental impacts during its operations, for the air and greenhouse gas emission, water and land pollution and hazardous and non-hazardous waste production, stringently complying with relevant environmental laws and regulations and industry standards in the locations where it operates, especially the “Environmental Protection Law of the People’s Republic of China”, the “Law of the People’s Republic of China on Environmental Impact Assessment”, the “Water Pollution Prevention and Control Law of the People’s Republic of China”, the “Atmospheric Pollution Prevention and Control Law of the People’s Republic of China”, the “Law of the People’s Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Wastes” and the “Energy Conservation Law of the People’s Republic of China”. To further enhance the awareness on environmental protection of the Group’s employees on areas such as energy saving, emission reduction and water conservation, the Group has established relevant regulations, such as the “Regulations on the Management of Environmental Protection and Water and Soil Conservation of BECE”, the “Office Waste Management System” and the “(Pilot) Procedures for Ecological Factors Analysis and Evaluation” and the “Vehicle Management System”.

發展清潔能源

身處世界能源變革時代的浪潮中，本集團自成立以來，一直致力於貫徹「四個革命、一個合作」的能源發展戰略，以「推進能源生產和消費革命，構建清潔低碳、安全高效的能源體系」為企業擔當，創造源源不斷的綠色能量，造福全人類及子孫後代。

本集團秉持對社會、對利益相關方高度的責任心，本著開放包容、簡單務實、尊重規則的態度，堅持以技術創新、保護環境、造福人類作為企業的核心責任，設計、建成、運營、管理清潔能源示範項目。本集團致力於在營運過程中減低對環境的影響，在有關廢氣及溫室氣體排放、向水及土地的排污、有害及無害廢棄物的產生等方面，本集團嚴格遵守運營所在地的環保法律、法規及行業標準，特別是《中華人民共和國環境保護法》、《中華人民共和國環境影響評價法》、《中華人民共和國水污染防治法》、《中華人民共和國大氣污染防治法》、《中華人民共和國固體廢物污染環境防治法》、《中華人民共和國節約能源法》等相關法律法規，並制定了《北控清潔能源集團有限公司環境保護和水土保護管理規定》、《北控風力發電有限公司辦公廢棄物管理制度》、《環境因素識別與評價控制程序（試行）》、《車輛管理制度》等制度，以期進一步提高本集團員工在節能減排和節水等方面的環保意識。

Adopting Green and Clean Approach 行綠色清潔之道

To achieve higher efficiency on electricity generation and lead the development of the clean energy industry, the Group continuously explores technological innovation by formulating policies that actively encourage employees to carry out research and development, adopt advanced power plant layouts and equipment (e.g., photovoltaic modules and power inverters). The following details the data on the amount of grid-connected electricity generated by the Group's power plant projects, and their contributions to the protection of the environment:

為達到更高的發電效率和引領清潔能源產業的發展，本集團持續探索技術創新，通過制定相關政策鼓勵員工積極研發，採用新的電站佈局及升級設備組件（如光伏發電組件及逆變器等）。有關本集團持有的電站項目產生的上網電力，以及對環境所作的貢獻，具體數據如下：

Electricity generation 電力產出	Unit 單位	2019 二零一九年	2018 二零一八年
Photovoltaic power plants 光伏發電站	Megawatt hour 兆瓦時	3,243,652	2,691,338
Wind power plants 風力發電站	Megawatt hour 兆瓦時	459,119	197,558

Type 類別	Unit 單位	2019 二零一九年	2018 二零一八年
Reduction of standard coal by approximately 減少標準煤碳約	Tonnes 公噸	1,155,265	889,780
Reduction of carbon dioxide emissions by approximately 減少二氧化碳排放約	Tonnes 公噸	3,043,678	2,438,228
Reduction of Sulfur dioxide emissions by approximately 減少二氧化硫排放約	Tonnes 公噸	1,444	751
Reduction of nitrogen oxide emissions by approximately 減少氮氧化物排放約	Tonnes 公噸	1,333	722

ENHANCING RESOURCE EFFICIENCY

The Group's principal business includes photovoltaic power, wind power and clean heat supply project operation. Our operation process consumes mainly purchased electricity, water resources and fuels for clean heat supply services and vehicle uses. Through formulation of environmental protection policies and measures, for instance, our wind energy project companies have set up the "Energy Reduction Management Policy"; while the clean heat supply project companies have set up the "(Pilot) Regulations on Production Energy Consumption Management for BE Clean Heat Energy Company Limited"; we strictly comply with environmental requirements, increased resources in environmental education, and strive to raise the awareness on environmental protection of our employees.

Resource Management Measures:

- Requiring energy measurement management system set up at every wind power plant and benchmarking the on-going electricity consumption of our facilities;
- Installing new water-saving faucets and posting water-saving signs, as well as strengthening daily inspection and maintenance of water facilities at power generation plant, to avoid water wastage from being diverted, seepage, dripping and leaking;
- Posting signs for energy saving;
- Encouraging employees to consciously develop water-saving habits, such as closing the faucet immediately after use to avoid continuous tap water running.

提高資源利用

本集團的主營業務包括光伏發電、風力發電、清潔供暖項目運營，在運營過程中主要消耗的資源能源類別是外購電力、水資源及用於清潔供暖、車輛使用的燃料。本集團通過制定環境保護政策，如風力發電項目公司制定了《節能減排管理制度》；清潔供暖項目公司制定了《北控清潔熱力有限公司生產能耗管理規定（試行）》，嚴格執行環保要求，加大員工環保教育投入，增強全員環保意識。

管理資源的措施：

- 要求每一風力發電站建立能源計量管理體系，並透過能耗對標活動持續管理用電消耗的表現；
- 更換節水型水龍頭及張貼節水標誌，並加強發電場地用水設備的日常檢查和維護，減少和避免自來水「跑、冒、滴、漏」的現象；
- 張貼「節約用電」的標識標語；
- 號召員工自覺養成節約用水習慣，及時關緊水龍頭，堅決杜絕長流水的現象。



Adopting Green and Clean Approach 行綠色清潔之道

Water Consumption 耗水量	Unit 單位	2019 二零一九年	2018 二零一八年
Water consumption of photovoltaic power plants 光伏發電站的耗水量	Tonnes 公噸	13,771	42,554
Water consumption of wind power plants 風力發電站的耗水量	Tonnes 公噸	4,600	2,444
Water consumption of clean heat supply projects 清潔供暖項目的耗水量	Tonnes 公噸	1,550,281	900,268
Water consumption intensity in power plants 電站耗水密度	Tonnes/Revenue (HKD million) 公噸／營業收入 (百萬港元)	2.90	6.45
Water consumption intensity in clean heat supply projects 清潔供暖項目耗水密度	Tonnes/Revenue (HKD million) 公噸／營業收入 (百萬港元)	244.69	128.97

Electricity Consumption 電力消耗	Unit 單位	2019 二零一九年	2018 二零一八年
Photovoltaic power plants 光伏發電站	Megawatt hour 兆瓦時	34,339	32,602
Wind power plants 風力發電站	Megawatt hour 兆瓦時	3,583	1,289
Clean heat supply projects 清潔供暖項目	Megawatt hour 兆瓦時	93,943	43,063
Headquarter offices 總部辦公室	Megawatt hour 兆瓦時	165	142
Energy consumption intensity in power plants and headquarter offices 電站及總部辦公室電力消耗密度	Megawatt hour/ Revenue (HKD million) 兆瓦時／營業收入 (百萬港元)	6.01	4.88
Energy consumption intensity in clean heat supply projects 清潔供暖項目電力消耗密度	Megawatt hour/ Revenue (HKD million) 兆瓦時／營業收入 (百萬港元)	14.83	6.17

Adopting Green and Clean Approach 行綠色清潔之道

Fuel Consumption	Unit	2019	2018
汽油消耗	單位	二零一九年	二零一八年
Vehicles usage in photovoltaic power plants 光伏發電站車輛使用	Liter 升	166,437	177,184
Vehicles usage in wind power plants 風力發電站車輛使用	Liter 升	18,206	9,547
Vehicles usage in clean heat supply projects 清潔供暖項目車輛使用	Liter 升	40,606	29,403
Vehicles usage in offices 辦公室車輛使用	Liter 升	7,569	13,454

Diesel Consumption	Unit	2019	2018
柴油消耗	單位	二零一九年	二零一八年
Vehicles usage in photovoltaic power plants 光伏發電站車輛使用	Liter 升	13,458	0
Vehicles usage in wind power plants 風力發電站車輛使用	Liter 升	1,398	/
Vehicles usage in clean heat supply projects 清潔供暖項目車輛使用	Liter 升	5,086	17,533

Total Fuel Consumption Intensity	Unit	2019	2018
總燃油消耗密度	單位	二零一九年	二零一八年
Total fuel consumption intensity in power plants and offices 電站及辦公室總燃油消耗密度	Giga-Joule/ Revenue (HKD million) 千兆焦耳/ 營業收入 (百萬港元)	0.98	0.92
Total fuel consumption intensity in clean heat supply projects 清潔供暖項目總燃油消耗密度	Giga-Joule/ Revenue (HKD million) 千兆焦耳/ 營業收入 (百萬港元)	0.22	0.23

Adopting Green and Clean Approach 行綠色清潔之道

Usage of Other Fuel Sources 其他燃料資源使用	Unit 單位	2019 二零一九年	2018 二零一八年
Coal consumption by clean heat supply projects 清潔供暖項目煤炭使用量	Tonnes 公噸	393,297	310,667
Coal consumption intensity in clean heat supply projects 清潔供暖項目煤炭使用密度	Tonnes/Revenue (HKD million) 公噸／營業收入 (百萬港元)	62.08	44.51
Natural gas consumption by clean heat supply projects 清潔供暖項目天然氣使用量	Cubic meter (Ten thousand) 立方米(萬)	2,593	1,237
Natural gas consumption intensity in clean heat supply projects 清潔供暖項目天然氣使用密度	Cubic meter (Ten thousand)/ Revenue (HKD million) 立方米(萬)／ 營業收入 (百萬港元)	0.40	0.18
Purchased steam consumption by clean heat supply projects 清潔供暖項目外購蒸汽使用量	Giga-Joule 千兆焦耳	423,386	453,938
Purchased steam consumption intensity in clean heat supply projects 清潔供暖項目外購蒸汽使用密度	Giga-Joule/ Revenue (HKD million) 千兆焦耳／ 營業收入 (百萬港元)	66.83	65.03
Purchased hot water consumption by clean heat supply projects 清潔供暖項目外購熱水使用量	Giga-Joule 千兆焦耳	4,204,867 ⁴	1,959,269
Purchased hot water consumption intensity in clean heat supply projects 清潔供暖項目外購熱水使用密度	Giga-Joule/ Revenue (HKD million) 千兆焦耳／ 營業收入 (百萬港元)	663.69	280.69

⁴ Due to the increase in certain clean heat supply projects in the second half of 2018, the hot water consumption data in the Reporting Period increased accordingly.
由於2018年下半年新增了若干清潔供暖項目，故本報告期熱水使用量數據隨之增大。

REFINING EMISSION MANAGEMENT

As a socially responsible corporate, the Group is concerned about global climate change. Besides adopting the above-mentioned measures, the Group also further reduces greenhouse gas and air pollutant emissions through promoting green travel and establishing the "Vehicle Management System". In the Clean Heat Supply Business, the "(Pilot) Regulations on Production Energy Consumption Management for BE Clean Heat Energy Company Limited" also regulates the relevant air pollutant emissions, which requires subsidiaries to strengthen emission management, such as improving combustion methods, and adopting proper measures to ensure pollutant emissions such as dust, sulfur dioxide and nitrogen oxides are below national and local emission standards. Meanwhile, subsidiaries are required to report regularly about their emission metrics such as dust, sulfur dioxide, nitrogen oxides, and carbon emissions.

Regarding the wastewater management, the Group has introduced water treatment equipment in production areas. All domestic and industrial sewage generated in power plants are required to be properly treated before being discharged. Test results have shown that our sewage discharges meet the required standard. During the Reporting Period, the Group obtained its water mainly from the municipal waterworks and had no difficulties in sourcing water.

細化排放管理

作為一家富有社會責任感的企業，本集團關注全球氣候變化。在採取如上所述的資源節約措施的基礎上，本集團通過倡導綠色出行，制定《車輛管理制度》，進一步減少溫室氣體和空氣污染物的排放。在清潔供暖業務中，《北控清潔熱力有限公司環境保護工作管理辦法（試行）》亦對空氣污染物的排放作出相關規定，要求各附屬公司要加強廢氣排放管理，改進燃燒方式，採取適當方法，確保煙塵、二氧化硫、氮氧化物等污染物優於國家和地方排放標準；同時各附屬公司須定期報送排放指標（煙塵、二氧化硫、氮氧化物、碳排放）。

針對污水管理，本集團在生產區引進了水處理設備，規定發電站產生的所有生活和工業污水在排放前均已妥善處理。經檢測證實，本集團的污水排放達到規定標準。於本報告期，本集團的用水主要來自市政自來水廠，並無求取水源上的困難。

Adopting Green and Clean Approach 行綠色清潔之道

Greenhouse Gases Emissions 溫室氣體排放量	Unit 單位	2019 二零一九年	2018 二零一八年
Scope 1⁵ 範圍1 ⁵			
Total emissions 排放總量	Tonnes carbon dioxide equivalent (CO ₂ -e) 二氧化碳當量公噸	779,189	858,279
– Coal emissions – 煤炭排放	Tonnes carbon dioxide equivalent (CO ₂ -e) 二氧化碳當量公噸	722,530	830,877
– Emissions from vehicles in power plants and offices – 電站及辦公室車輛排放	Tonnes carbon dioxide equivalent (CO ₂ -e) 二氧化碳當量公噸	484.01	551.65
– Emissions from vehicles in clean heat supply projects – 清潔供暖項目車輛排放	Tonnes carbon dioxide equivalent (CO ₂ -e) 二氧化碳當量公噸	106.90	111.03
– Natural gas emissions – 天然氣排放	Tonnes carbon dioxide equivalent (CO ₂ -e) 二氧化碳當量公噸	56,068	26,739

⁵ Greenhouse gases are generated from fossil fuel consumption from stationary sources and road mobile sources during the Reporting Period. Calculations of greenhouse gases emission refer to "Appendix 2: Reporting guidance on Environmental KPIs" published by the SEHK, "Guidelines for Accounting and Reporting of Greenhouse Gas Emissions from Land Transport Companies (Trial)" published by the former Ministry of Environmental Protection of the PRC, and "Guidelines for Accounting and Reporting of Greenhouse Gas Emissions from Industrial Enterprises in Other Industries (Trial)" published by the National Development and Reform Commission of the PRC.

此處的溫室氣體排放來源於本報告期固定源及道路移動源所消耗的化石燃料產生的溫室氣體排放。計算方法主要參考聯交所發佈的《附錄二：環境關鍵績效指標匯報指引》、中華人民共和國原環境保護部發佈的《陸上交通運輸企業溫室氣體排放核算方法與報告指南（試行）》以及中華人民共和國國家發展和改革委員會發佈的《工業其他行業企業溫室氣體排放核算方法與報告指南（試行）》。

Greenhouse Gases Emissions	Unit	2019	2018
溫室氣體排放量	單位	二零一九年	二零一八年
Scope 2⁶			
範圍2⁶			
Total emissions 排放總量	Tonnes carbon dioxide equivalent (CO ₂ -e) 二氧化碳當量 公噸	589,659	324,848
– Heat consumption – 熱力消耗	Tonnes carbon dioxide equivalent (CO ₂ -e) 二氧化碳當量 公噸	509,108 ⁷	265,433
– Emissions from electricity use in power plants and offices – 電站及辦公室運營電力排放	Tonnes carbon dioxide equivalent (CO ₂ -e) 二氧化碳當量 公噸	23,237	25,008
– Emissions from electricity use in clean heat supply projects – 清潔供暖項目電力排放	Tonnes carbon dioxide equivalent (CO ₂ -e) 二氧化碳當量 公噸	57,314	34,387

⁶ Greenhouse gases are generated from consumption of purchased heat in the production process as the indirect greenhouse gases emission during the Reporting Period. Calculations of greenhouse gases emission refer to "Guidelines for Accounting and Reporting of Greenhouse Gas Emissions from Industrial Enterprises in Other Industries (Trial)" published by the National Development and Reform Commission of the PRC, and "Notice on the Preparation of the 2018 carbon emission report and verification and emission monitoring plan" published by the Ministry of Ecology and Environment of the PRC.

此處的溫室氣體排放來源於本報告期外購熱力在生產過程中所產生的間接溫室氣體排放，計算方法參考中華人民共和國國家發展和改革委員會發佈的《工業其他行業企業溫室氣體排放核算方法與報告指南（試行）》和中華人民共和國生態環境部發佈的《關於做好2018年度碳排放報告與核查查及排放監測計劃制定工作的通知》。

⁷ Due to the increase in certain clean heat supply projects in the second half of 2018, the heat consumption data in the Reporting Period increased accordingly.

由於2018年下半年新增了若干清潔供暖項目，故本報告期熱水消耗數據隨之增大。

Adopting Green and Clean Approach 行綠色清潔之道

Greenhouse Gas Emissions 溫室氣體排放量	Unit 單位	2019 二零一九年	2018 二零一八年
Total Emissions (Scope 1 & Scope 2) 總排放量 (範圍1和範圍2)			
Total emissions 排放總量	Tonnes carbon dioxide equivalent (CO ₂ -e) 二氧化碳當量公噸	1,368,849	1,183,126
Greenhouse gas emission intensity of the power plants and offices 電站及辦公室的溫室氣體排放密度	Tonnes carbon dioxide equivalent (CO ₂ -e)/ Revenue (HKD million) 二氧化碳當量公噸/營業收入 (百萬港元)	3.74	3.66
Greenhouse gas emission intensity of the clean heat supply projects 清潔供暖項目溫室氣體排放密度	Tonnes carbon dioxide equivalent (CO ₂ -e)/ Revenue (HKD million) 二氧化碳當量公噸/營業收入 (百萬港元)	212.31	165.8

Air Emissions from Vehicles ⁸ 車輛空氣污染物排放量 ⁸	Unit 單位	2019 二零一九年	2018 二零一八年
Carbon Monoxide (CO) 一氧化碳 (CO)	Kilogram 千克	2,753	969
Sulfur Oxides (SO _x) 硫氧化物 (SO _x)	Kilogram 千克	3.81	3.65
Nitrogen Oxides (NO _x) 氮氧化物 (NO _x)	Kilogram 千克	686.25	74.22
PM _{2.5} Particulates PM _{2.5} 懸浮粒子	Kilogram 千克	18.99	9.10
PM ₁₀ Particulates PM ₁₀ 懸浮粒子	Kilogram 千克	20.71	9.37

Air Emissions from Clean Heat Supply Projects 清潔供暖項目空氣污染物排放量			
Dust 煙塵	Tonnes 公噸	16.99	28.54
Sulfur Oxides (SO _x) 硫氧化物 (SO _x)	Tonnes 公噸	99.83	80.87
Nitrogen Oxides (NO _x) 氮氧化物 (NO _x)	Tonnes 公噸	226.22	189.54

Wastewater Discharges 污水排放量	Unit 單位	2019 二零一九年	2018 二零一八年
Wastewater discharged by photovoltaic power plants 光伏發電站的污水排放量	Tonnes 公噸	8,670	32,543
Wastewater discharged by wind power plants 風力發電站的污水排放量	Tonnes 公噸	1,120	1,099
Wastewater discharged by clean heat supply projects 清潔供暖項目的污水排放量	Tonnes 公噸	233,930	9,690

⁸ Calculations refer to "Technical Guideline for the Preparation of Road Vehicle Emission Inventory (Trial)" published by the former Ministry of Environmental Protection of the PRC.
計算方法主要參考中華人民共和國原環境保護部發佈的《道路機動車排放清單編制技術指南（試行）》。

Adopting Green and Clean Approach 行綠色清潔之道

To reduce the waste produced by the power plants, the Group established various waste management procedures, such as the “Regulations on Facility Repair and Handling” and the “Regulations on Dangerous Chemicals” in accordance to relevant laws and regulations such as the “Law of the People’s Republic of China on the Prevention and Control of Environment Pollution by Solid Wastes”, and adopted a “Repair before Sale” principle to handle impaired facilities at the power plants. Considering that hazardous waste is not only harmful to the environment, but is also detrimental to the health and safety of our employees. As such, the Group handle hazardous waste carefully by setting up designated collection areas for each type of hazardous wastes, and has appointed qualified industrial waste handlers to collect and handle the wastes in a proper manner. The non-hazardous office waste generated in the Group’s operations is mainly waste paper. To reduce the consumption of the paper, the Group advocates a paperless office, enhancing the awareness on environmental protection of employees. The Group devotes to achieve a green operational principle that emphasises on environmental protection and resource conservation.

In the Clean Heat Supply Business, the “(Pilot) Regulations on Production Energy Consumption Management for BE Clean Heat Energy Company Limited” regulates business units to dispose hazardous waste properly in accordance with the relevant national regulations. All business units should reuse general waste which is not listed on the “Directory of National Hazardous Wastes” as far as practicable. If reuse is not possible, business units should take effective measures to reduce consumptions and hire qualified companies to handle the waste.

為了減少電站產生的廢棄物，本集團根據《中華人民共和國固體廢物污染環境防治法》等相關法律法規，制定了《設備維護與處置規定》、《危險化學品管理規定》一系列廢物管理程序，並遵循「先修再售」原則來處置電站損壞的設備。考慮到有害廢棄物不僅對環境有害，亦可能會對員工的健康與安全造成危害，為此，本集團為每種有害廢棄物設置指定的收集區，謹慎地處理各類有害廢棄物，並委聘了合格的工業廢物處理人員以適當的方式收集及處理有關廢棄物。本集團在運營過程中所產生的無害辦公廢棄物主要為廢紙，為了有效減少對紙張的消耗，本集團積極推行無紙化辦公，注重加強員工個人的環保意識，致力實現遵循保護環境、節約資源的綠色運營理念。

在清潔供暖業務中，《北控清潔熱力有限公司環境保護工作管理辦法（試行）》中規定產生危險廢物的單位，必須按照國家有關規定對廢物進行妥善處置；盡可能再次利用未列入《國家危險廢物名錄》的一般廢物。若無法利用，各單位應採取有效措施進行減量控制並將廢棄物交由具有相應資質的公司處理。

Hazardous and Non-hazardous Waste Generated		Unit	2019	2018
有害及無害廢棄物產生量		單位	二零一九年	二零一八年
Used batteries generated from photovoltaic power plants 光伏發電站產生的廢電池	Kilogram 千克		961	75
Used batteries generated from wind power plants 風力發電站產生的廢電池	Kilogram 千克		0	0
Used batteries generated from clean heat supply projects 清潔供暖項目產生的廢電池	Kilogram 千克		0	0
Used batteries generated from headquarter offices 總部辦公室產生的廢電池	Kilogram 千克		2.7	0.2
Used batteries generation intensity 廢電池產生密度	Kilogram/Revenue (HKD million) 千克／營業收入 (百萬港元)		0.15	0.01
Used daylight lamp generated from photovoltaic power plants 光伏發電站產生的廢日光燈	Unit 個		200	836
Used daylight lamp generated from wind power plants 風力發電站產生的廢日光燈	Unit 個		36	24
Used daylight lamp generated from clean heat supply projects 清潔供暖項目產生的廢日光燈	Unit 個		0	0
Used daylight lamp generated from headquarter offices 總部辦公室產生的廢日光燈	Unit 個		0	0
Used daylight lamp generation intensity 廢日光燈產生密度	Unit/Revenue (HKD million) 個／營業收入 (百萬港元)		0.04	0.12

Adopting Green and Clean Approach 行綠色清潔之道

Hazardous and Non-hazardous Waste Generated 有害及無害廢棄物產生量		Unit 單位	2019 二零一九年	2018 二零一八年
Boiler slag generated from clean heat supply projects 清潔供暖項目產生的鍋爐渣	Tonnes 公噸		64,664	55,709
Coal ash generated from clean heat supply projects 清潔供暖項目產生的煤灰	Tonnes 公噸		23,039	10,935
Office waste generated from photovoltaic power projects 光伏發電項目辦公垃圾產生量	Tonnes 公噸		6.90	4.22
Office waste recycled from photovoltaic power projects 光伏發電項目辦公垃圾回收量	Tonnes 公噸		6.18	4.02
Office waste generated from wind power projects 風力發電項目辦公垃圾產生量	Tonnes 公噸		0.28	0.24
Office waste recycled from wind power projects 風力發電項目辦公垃圾回收量	Tonnes 公噸		0.20	0
Office waste generated from clean heat supply projects 清潔供暖項目辦公垃圾產生量	Tonnes 公噸		0	5.08
Office waste recycled from clean heat supply projects 清潔供暖項目辦公垃圾回收量	Tonnes 公噸		0	5.08
Office waste generated from headquarter offices 總部辦公室辦公垃圾產生量	Tonnes 公噸		29.2	0.75
Office waste recycled from headquarter offices 總部辦公室辦公垃圾回收量	Tonnes 公噸		29.2	0
Office waste generation intensity 辦公垃圾產生密度	Kilogram/Revenue (HKD million) 千克／營業收入 (百萬港元)		5.74	1.47

CONCERNING ENVIRONMENTAL IMPACTS

To strengthen the Group's management on environmental protection and water and soil conservation, the Group has further formulated the "Regulations on the Environmental Protection and Water and Soil Conservation of BECE", which requires all business units to implement the accountability system for targets on environmental protection and water and soil conservation, to establish level-based targets and performance appraisal methodology, and to achieve the various targets on environmental protection and water and soil conservation by each level.

During our implementation of construction projects, such as those construction projects for photovoltaic power, wind power and clean heat supply, the Group requires each business unit to stringently comply with the "Law of the People's Republic of China on Environmental Impact Assessment", the "Regulations on the Administration of Construction Project Environmental Protection" and the "Classified Administration Catalogue of Environmental Impact Assessments for Construction Projects". During feasibility study stage of a construction project, the construction unit (or the project company) should engage a qualified company to prepare an environmental impact report which assesses the environmental impacts brought by the project comprehensively. The project company should then submit the report to the environmental protection administrative department for approval on time in accordance with the management procedures. The Group anticipates to strengthen the management of potential environmental risks, minimise its environmental impacts and achieve sustainable development through standardising ecological protection and pollution prevention measures at all stage.

關注環境影響

為了加強本集團環境保護和水土保持管理工作，本集團進一步制定了《北控清潔能源集團有限公司環境保護和水土保持管理規定》，要求各單位必須落實環境保護和水土保持目標責任制，並逐級分解落實各項環境保護和水土保持指標，制定分級控制目標和考核辦法。

在實施建設項目（包括光伏、風電、清潔供暖等建設項目）時，本集團要求各單位必須遵守《中華人民共和國環境影響評價法》、《建設項目環境保護管理條例》和《建設項目環境影響評價分類管理名錄》。在建設項目可行性研究階段，建設單位（或項目公司）應委託具備資質的公司編制環境影響報告書（表），對產生的環境影響進行全面評價，並按照管理程序及時上報政府環保行政主管部門審批。本集團期望通過規範各個階段的生態環境保護和防治污染工作以加強管理潛在的環境風險，最大化的減少對環境的影響，實現全面可持續發展。

Being Responsible – Develop Innovative Technology and Achieve Service Excellence 有擔當－創新科技 打造卓越服務

TECHNOLOGICAL RESEARCH AND INNOVATIONS

科研與創新

The Group actively encourages technological research and development and innovation. During the Reporting Period, the Group acquired 1 invention patent and had 5 invention patents that are being processed. The Group also acquired 10 utility model patents, had 3 utility model patents that are being processed and applied for 2 utility model patents. To further promote the concept of scientific development, strengthen and regulate the technology management and enhance the technological innovation capability, the Group has established systems such as the “Management System of Technological Work of BECE”, the “Management of Technological Achievements of BECE” and the “Management of Intellectual Property Rights of BECE”.

本集團積極鼓勵科技研發及創新，於本報告期，本集團已取得發明專利1項，正在受理中發明專利5項；已取得實用新型專利10項，正在受理中實用新型專利3項，正在申請實用新型專利2項。為了進一步深入貫徹落實科學發展觀，加強和規範本集團的科技管理工作，全面提升本集團的科技創新能力，本集團制定了《北控清潔能源集團有限公司科技工作管理制度》、《北控清潔能源集團有限公司科技成果管理辦法》以及《北控清潔能源集團有限公司知識產權管理辦法》等規章制度。

The “Management System of Technological Work of BECE” regulates technological works, including to establish a comprehensive technology management system, to establish a technological work management system, to formulate and implement the Group’s technology development plan, to establish a Group Technical Committee, and to work on technological project management, intellectual property management, technological achievements management, technology awards management, external technological exchange and technological funds management. The Group’s departments, operation departments and project companies actively carry out technological innovation and technological transformation works. The Group will reward groups or individuals who have made significant contributions on technology and innovation aspects.

《北控清潔能源集團有限公司科技工作管理制度》規定科技工作包括健全科技管理體系；建立科技工作管理制度；制定集團科技發展規劃並組織實施；成立集團技術委員會；科技項目管理、知識產權管理、科技成果管理、科技獎勵管理、對外科技交流、科技經費管理等工作。本集團各部門、各經營部門及項目公司應積極開展技術創新、技術改造等工作。針對在技術創新工作中作出重要貢獻的集體或個人，本集團會依據實際情況給予相關獎勵。

In addition, the Group emphasises on its protection of intellectual property rights. The “Management of Intellectual Property Rights of BECE” regulates that Technology Research and Development Center is the centralised department on intellectual property rights management of the Group, which is responsible for formulating the management system on intellectual property rights, and directing, supervising and inspecting the patent protection management in all business units. Before carrying out technology activities relating to intellectual property rights, such as the initiation or completion of major scientific research projects, application for trademark registration or use of new trade names, the responsible departments must search and update the intellectual property rights involved in the activities so as to further strengthen the intellectual property rights management.

此外，本集團亦十分重視知識產權的保護，《北控清潔能源集團有限公司知識產權管理辦法》規定技術研發中心是集團知識產權統一管理部門，負責制定知識產權相關管理制度，指導、監督、檢查各單位專利權保護管理工作等。在進行如重大科研課題立項或結題、申請商標註冊或使用新商號等科技創新、科技攻關等涉及知識產權活動前，有關部門必須對活動涉及知識產權進行檢索和查新，以進一步加強對知識產權的管理。

Being Responsible – Develop Innovative Technology and Achieve Service Excellence
有擔當－創新科技 打造卓越服務



Example of patent certificates
 專利證書示例

SAFETY AND MONITORING

The Group strictly complies with laws and regulations concerning health, safety matters and remedies that are relevant to our products and services, such as the “Work Safety Law of the People’s Republic of China”, the “Law of the People’s Republic of China on the Prevention and Control of Occupational Diseases”, the “Fire Protection Law of the People’s Republic of China”, the “Measures for Regulating the Work Safety of Electricity”, the “Measures for Administrative Penalties against Illegal Acts Concerning Work Safety”, the “Guidelines for Enterprises to Develop Emergency Response Plan for Work Place Accidents” and the “Guideline of China Occupational Safety and Health Management System”. Also, the Group has established a series of internal management policies, including the “Procedures on Hazard Identification, Risk Assessment and Risk Control”, the “Regulations on Photovoltaic Power Plant Production”, the “Regulations on the Management of Operation and Maintenance Organizations”, the “Regulations on Photovoltaic Power Plant Safety and Equipment” and the “Safety Production Management System” to manage potential occupational safety and health risks arising from the production and operation process in a comprehensive manner.

安全與監督

本集團嚴格遵守與所提供的產品和服務中涉及健康、安全事宜及補救方法相關的法律法規，如《中華人民共和國安全生產法》、《中華人民共和國職業病防治法》、《中華人民共和國消防法》、《電力安全生產監管辦法》、《安全生產違法行為行政處罰辦法》、《生產經營單位安全生產事故應急預案編制導則》、《企業安全生產標準化基本規範》，並制定了一系列內部管理政策，如《危險源辨識、風險評價和風險控制程序》、《光伏電站生產準備規定》、《運維組織機構管理規定》、《光伏電站安全、設備標志管理規定》、《安全生產管理制度》，全面管理生產運營過程中潛在的職業安全健康風險。

Being Responsible – Develop Innovative Technology and Achieve Service Excellence 有擔當 – 創新科技 打造卓越服務

For the safety management, the Group upholds the management principles of the “Promoting Safety First through Preventive Measures and Integrated Governance” and seeks to reduce the chance of safety incidents. To enhance the efficiency of our monitoring and governance, the Group has established a Safety Quality Department and hired designated production safety personnel to strengthen the implementation of our control. Safety investigation is conducted on both regular and occasional basis, which subsidiaries conduct at least one comprehensive investigation every month, while the Group conducts safety investigation on all business segments quarterly and checks on all major projects. Within five days after a safety investigation, the investigation team will report all major safety issues and require immediate remediation by the organisation through formal notification.

Furthermore, through the “Regulations for Managing Production Safety Incident”, the Group requires different business units to prepare their own emergency plans for mitigating the impact of the potential safety incidents. For instance, they are required to formulate integrated, incident-specific and on-site emergency plans respectively in accordance to national regulations such as the “Emergency Response Law of the People’s Republic of China”, the “Measures for the Administration of Emergency Response Plans” and the “Measures for the Administration of Contingency Plans for Work Safety Accidents”. Moreover, each business unit are required to conduct safety training of integrated, incident-specific and on-site emergency plans regularly to ensure that their emergency plans could be implemented effectively.

在安全事務的管理工作中，本集團堅持秉持「安全第一，預防為主，綜合治理」的管治理念，主動以預防性的管理工作減低發生工業事故的機會。為了提升監督及管治效率，本集團成立了安全質量管理部，聘請安全生產管理的專責人員，負責對各附屬公司的安全生產進行監督檢查管理。安全監督檢查以定期及不定期兩種方式進行，各附屬公司於每月須至少組織一次全面的監督檢查，集團於每個季度則須向各個業務板塊進行安全生產監督檢查，並且檢查所有重點項目。在檢查結束的5日內，檢查團隊將報告重大安全問題，並以通報的形式要求組織處理，定時反饋整改情況。

此外，本集團亦在《安全生產事故應急管理規定》中要求不同工作單位建立安全事故應急預案，以便有效應對不同業務的潛在安全事故，如依據《中華人民共和國突發事件應對法》、《突發事件應急預案管理辦法》和《生產安全事故應急預案管理辦法》，分別制定綜合應急預案、專項應急預案、現場處置方案；在此基礎上，各單位須定期進行綜合應急預案、專項應急預案及現場處置方案演練，確保預案能有效地實行。

CUSTOMERS AND SERVICES

The Group adheres to the development strategy that actively develops renewable energy such as photovoltaic power and wind power from the natural renewable resources at the supply side, develops businesses such as heat supply business to explore the market at the demand side, and expands the distribution and sales of electricity and other energy through gaining opportunities from energy reformation at both supply and demand sides. To continuously improve the quality of customer service, we take feedback extensively from customers and other stakeholders, and then regulate our management based on customers' complaints on our products and services. For instance, the "(Pilot) Customer Service Management System of BE Clean Heat Energy Company Limited" states:

- All complaint orders should be recorded and then passed to duty officers⁹, and should not be withheld. When the duty officers receive the complaints, they should investigate and verify the situation.
- If the complaint is justified, the complaint should be recorded in an assessment form. Penalties should be imposed according to the assessment criteria. The customer should be replied with detailed penalties and problems should be solved through coordination. A follow-up action should be made to the customer after the problem has been resolved.
- For online questions or complaints, the customer service department shall designate employee to respond them on time through posting, commenting, private letters or other forms.
- 投訴工單須如實錄入，不得隱而不報，並派單給當班值長⁹。值長接到投訴工單後，須瞭解情況，認真核實問題。
- 若投訴問題屬實，須將該投訴記錄於考核表中，按照考核標準進行處罰，並對用戶的投訴進行回覆，告知具體的處罰措施，以及協調解決用戶反映的實際問題。待用戶實際問題得到解決後，對用戶進行回訪。
- 對於用戶在網絡上提出的問題或投訴，客服部須指定專員在網絡上以發帖、跟帖、撰寫評論、私信等不同形式，及時回覆社會公眾提出的問題或訴求。

⁹ Duty officer: refers to the commanding employee on duty
值長：指值班期間相關指揮人員

Being Responsible – Develop Innovative Technology and Achieve Service Excellence 有擔當 – 創新科技 打造卓越服務



Case Study 案例

Straight to the door, straight to the heart.

直管到戶深入人心



To adhere to the "Notice on the Implementation of Pilot Work on Central Heat Supply to Direct Piping to Households"[2019]No.99 issued by Xi'an Municipal Comprehensive Law-enforcing Bureau of City Administration, we adopted an all-in-one service that providing "Toll-to-Door, Direct-to-Door and Service-to-Door" to our customers. Since the beginning of August 2019, Xi'an Beijing Enterprises Jiasheng Heating Power Co., Ltd. set up sign-up points in the neighborhoods and won the heart of the majority of customers through patient and enthusiastic attitude, which consolidated a smooth commencement of heat supply in the winter.

For privacy issues of our products and services, the Group has formulated the "Confidentiality Policy of BECE" based on the actual situation and in accordance with the "Regulation on the Implementation of the Law of the People's Republic of China on Guarding State Secrets", the "Anti-Unfair Competition Law of the People's Republic of China" and other relevant laws and regulations. This policy states that the design and the development of a new product by using the Group's trade secrets or release of relevant information without the Group's written consent is strictly forbidden. In case of any violation or infringement causing economic loss to the Group, the Group will take action in accordance with relevant regulations to further protect the Group's confidentiality and safeguard the legal rights of customers.

為了貫徹實施西安市城市管理和綜合執法局發出的[2019]99號《關於實施集中供熱至直管到戶試點工作的通知》，採取「收費到戶、直供到戶、服務到戶」一體化服務。西安北控嘉晟熱力有限責任公司自2019年8月初，即在小區內設定簽約點，通過耐心、熱情的服務得到了廣大用戶的認可，為冬季供熱工作順利開展夯實了基礎。

在有關所提供產品和服務的隱私事宜中，本集團根據《中華人民共和國保守國家秘密法》、《中華人民共和國反不正當競爭法》等有關法律法規，結合實際情況，制定了《北控清潔能源集團有限公司保密制度》，該制度要求員工未經集團書面同意，不得利用集團的商業機密進行新產品的設計與開發，不得以任何方式向第三方透露有關信息，如有違反或發生侵權行為造成集團經濟損失的事件，本集團將依據相關規定進行處理，以進一步保護集團機密，切實維護客戶的合法權益。

Having Values – Promote People-oriented Culture and Provide Development Channels

有價值－以人為本 提供發展渠道

PROTECTING EMPLOYEES' RIGHT

The Group strictly complies with the laws and regulations, including the “Labour Law of the People’s Republic of China”, the “Labour Contract Law of the People’s Republic of China”, the “Law of the People’s Republic of China on the Protection of Minors”, the “Social Insurance Law of the People’s Republic of China”, the “Employment Ordinance”, the “Minimum Wage Ordinance” and the “Employees’ Compensation Ordinance” of Hong Kong. On the basis of complying with laws and regulations, the Group respects human rights and prohibits the use of any child labour or forced labour. The Group is against any form of discrimination and protects the employee rights by establishing detailed internal systems and communication channels for employees. During the Reporting Period, the Group has not received any violations of laws and regulations relating to recruitment, dismissal, remuneration, promotion, working hours, resting period, equal opportunities, diversity and anti-discrimination.

維護員工權益

本集團在嚴格遵守《中華人民共和國勞動法》、《中華人民共和國勞動合同法》、《中華人民共和國未成年人保護法》、《中華人民共和國社會保險法》以及香港《僱傭條例》、《最低工資條例》、《僱員補償條例》等法律法規的基礎上，尊重人權，禁止僱用童工和強制勞工，反對任何形式的歧視，並通過制定詳細的內部制度和建立員工溝通渠道以維護員工權益。於本報告期，本集團未有接獲與人員招聘、解僱、薪酬、晉升、工作時數、假期、平等機會、多元化、反歧視相關的違法違規事件。

Employment 勞動僱傭

Recruitment and Promotion

招聘及晉升：

In order to recruit a variety of talented individuals, the Group has set up a rational and equal recruitment mechanism which involves the comprehensive assessment of candidates’ knowledge, morality, ability, experience and job qualification requirements. This mechanism is based upon the “Management Approaches of Beijing Enterprises Clean Energy Group Limited” toward Employee Recruitment and our adherence to the principles of “Social Orientation, Open Recruitment, Fair Competition, Comprehensive Assessment and Merit Selection”. Through formulating the “Management Measures for Employee Promotion” to specify the rules for the promotion of employees and regulate the management of promotion of employees.

為了確保科學合理地選拔、平等真實地招聘各類優秀人才，本集團依據《北控清潔能源集團有限公司招聘管理辦法》，秉承「面向社會、公開招聘、公平競爭、全面考核、擇優錄用」的原則，從學識、品德、能力、經驗及崗位資格要求等方面對應聘者進行全面考核，並通過制定《員工晉升管理辦法》，明確員工晉升規則，規範員工晉升管理。

Labour standards

勞工準則：

The Group encourages multicultural and innovation capability and adheres to legal employment management. It is clearly stipulated in the “Staff Handbook” that the employees’ treatment in the Group is not affected by factors such as age, gender, race, nationality and marital status.

To avoid child labour and forced labour, the Group requires candidates to present their identity cards during the recruitment process, ensuring that they meet the legal requirements. In addition, the legal rights of employees are protected through the signing of labour contracts. During the Reporting Period, the Group has not received any cases of violations relating to the illegal employment of child labour and forced labour.

本集團鼓勵多元文化和創新能力，堅持合法用工、依法管理，在《員工手冊》中明確指出員工的待遇不因其年齡、性別、種族、國籍、婚姻狀況等因素而受到影響。

為了防止童工及強制勞工情況的發生，本集團在招聘環節要求候選人必須出示身份證，確保其符合法律規定的最低年齡，另通過簽訂勞動合同等方式，保障員工的合法權益。於本報告期，本集團未曾接獲任何與非法僱用童工及強制勞工相關並對本集團有重大影響的違規事件或任何投訴。

Dismissal

解僱：

In respect of the employee dismissal, the Group enforces relevant regulations in accordance to the “Labour Law of the People’s Republic of China” and the “Labour Contract Law of the People’s Republic of China”, strictly prohibits any unfair or unreasonable dismissal.

關於員工解僱，本集團按照《中華人民共和國勞動法》及《中華人民共和國勞動合同法》中相關規定執行，嚴格禁止不公平或不合理的解僱事件發生。

Having Values – Promote People-oriented Culture and Provide Development Channels 有價值－以人為本 提供發展渠道

Working Hours and Leaves 工作時數與假期

To systematically standardise working hours and improve employee benefits, the Group has developed the “Management Approaches of Beijing Enterprises Clean Energy Group Limited toward Attendance and Leave” based on national and local policies and regulations relating to labour, insurance and welfare, as well as actual conditions. This management approach systematically regulates employees’ working hours, and also stipulates that employees are entitled to statutory holidays such as sick leave, injury leave, marriage leave, bereavement leave, maternity leave, annual leave.

為了系統地規範員工工作時數，切實提高員工福利水平，本集團依據國家及地方有關勞動、保險、福利等政策規定，結合實際情況，制定了《北控清潔能源集團有限公司員工考勤及休假管理辦法》，該管理辦法系統地規範了員工工作時數，明確規定了員工可享受病假、工傷假、婚喪假、產假、以及帶薪年假等法定節假日。

Salary and Benefits 薪酬與福利

On a fair basis, the Group further offers competitive remuneration packages to its employees in order to attract talented people. It is stipulated that the Company should provide two types of welfare allowances to employees according to the “Welfare Allowance System of Beijing Enterprises Clean Energy Group Limited”:

- Statutory welfare allowance: employees are entitled to welfare and benefits according to the relevant national legal provisions. For example, the Company makes contributions toward social insurance and a housing provident fund for employees in accordance with the prescribed proportion;
- Special welfare allowance: employees are provided with special welfare such as communication subsidies, job title subsidies, on-site subsidies, based upon the actual working environment, work content and other factors.

本集團在公平的基礎上，進一步向員工提供具有競爭力的薪酬以持續吸引優秀人才。《北控清潔能源集團有限公司福利津貼制度》規定公司應向員工提供兩類福利項目：

- 法定福利項目，即員工根據國家相關法律條款可享受的福利待遇，如為員工按照規定比例上繳社會保險及住房公積金；
- 專項福利項目，即根據實際工作環境、工作內容等因素享受的特殊福利項目，如通訊補助、職稱補助、工地現場補助等。

Having Values – Promote People-oriented Culture and Provide Development Channels 有價值－以人為本 提供發展渠道

As of the end of the Reporting Period, the Group had 2,059 employees in total, of which 1,566 were male, 493 were female. The detailed figures are as follows:

截至本報告期末，本集團員工總人數為2,059人，其中，男性員工為1,566人，女性員工為493人。具體數據請參見下表：

By Gender 按性別劃分	Total Workforce 員工總人數(人)	
	2019	2018
	二零一九年	二零一八年
Male 男	1,566	1,978
Female 女	493	488

By Age 按年齡劃分	Total Workforce 員工總人數(人)	
	2019	2018
	二零一九年	二零一八年
18-25 Years Old 18-25歲	183	295
26-34 Years Old 26-34歲	804	1,243
35 Years Old or Above 35歲或以上	1,072	928

By Employment Type 按僱傭類型劃分	Total Workforce 員工總人數(人)	
	2019	2018
	二零一九年	二零一八年
Senior Management 高級管理人員	13	10
Middle Management 中層管理人員	86	191
General Employee 普通員工	1,636	1,828
Contract and Temporary Employee 合約及短期員工	324	437
Total 合計	2,059	2,466

Having Values – Promote People-oriented Culture and Provide Development Channels 有價值－以人為本 提供發展渠道

By Birthplace 按籍貫劃分	Anhui 安徽	Beijing 北京	Gansu 甘肅	Guangdong 廣東	Guangxi 廣西	Guangzhou 貴州	Hainan 海南	Hebei 河北	Henan 河南	Yunnan 雲南
Total Workforce in 2019 2019年員工 總人數(人)	38	101	8	1	2	11	1	265	76	6
By Birthplace 按籍貫劃分	Heilongjiang 黑龍江	Hubei 湖北	Hunan 湖南	Jilin 吉林	Jiangsu 江蘇	Jiangxi 江西	Liaoning 遼寧	Qinghai 青海	Ningxia 寧夏	Zhejiang 浙江
Total Workforce in 2019 2019年員工 總人數(人)	58	26	5	120	36	19	294	3	84	1
By Birthplace 按籍貫劃分	Inner Mongolia 內蒙古	Shandong 山東	Shanxi 山西	Shaanxi 陝西	Sichuan 四川	Tianjin 天津	Tibet 西藏	Xinjiang 新疆	Hong Kong 香港	
Total Workforce in 2019 2019年員工 總人數(人)	432	120	230	83	10	11	5	3	10	

By Gender 按性別劃分	Total Employee Turnover 員工流失總人數(人)	
	2019 二零一九年	2018 二零一八年
	Male 男	653
Female 女	203	185

Having Values – Promote People-oriented Culture and Provide Development Channels 有價值－以人為本 提供發展渠道

By Age 按年齡劃分	Total Employee Turnover 員工流失總人數(人)	
	2019 二零一九年	2018 二零一八年
	18-25 Years Old 18-25歲	69
26-34 Years Old 26-34歲	342	405
35 Years Old or Above 35歲或以上	445	184
Total 合計	856	699

By Birthplace 按籍貫劃分	Anhui 安徽	Beijing 北京	Fujian 福建	Gansu 甘肅	Guizhou 貴州	Hebei 河北	Henan 河南
Total Employee Turnover in 2019 2019年員工流失總人數(人)	12	74	8	8	13	74	34
By Birthplace 按籍貫劃分	Hunan 湖南	Jilin 吉林	Jiangsu 江蘇	Jiangxi 江西	Liaoning 遼寧	Qinghai 青海	Ningxia 寧夏
Total Employee Turnover in 2019 2019年員工流失總人數(人)	11	14	21	15	249	1	5
By Birthplace 按籍貫劃分	Shanxi 山西	Shaanxi 陝西	Yinchuan 銀川	Sichuan 四川	Tianjin 天津	Tibet 西藏	Hong Kong 香港
Total Employee Turnover in 2019 2019年員工流失總人數(人)	97	18	28	20	7	1	3
By Birthplace 按籍貫劃分	Hubei 湖北	Yunnan 雲南	Shandong 山東	Zhejiang 浙江	Heilongjiang 黑龍江	Inner Mongolia 內蒙古	Xinjiang 新疆
Total Employee Turnover in 2019 2019年員工流失總人數(人)	18	6	76	3	10	27	3

Having Values – Promote People-oriented Culture and Provide Development Channels 有價值－以人為本 提供發展渠道

OCCUPATIONAL HEALTH AND SAFETY

The Group is committed to creating a safe and secure working environment for our employees. To provide a safe working environment and protect employees from occupational hazards, the Group adheres stringently to the relevant laws and regulations, such as the “Work Safety Law of the People’s Republic of China”, the “Fire Protection Law of the People’s Republic of China”, the “Law of the People’s Republic of China on the Prevention and Control of Occupational Diseases”. During the Reporting Period, The Group did not receive reporting of significant safety incident of work-related fatalities, or reporting of lost workdays due to work-related injuries.

Based on the establishment of a comprehensive safety system and security mechanism (please refer to the section “Safety and Monitoring” for details), the Group also emphasises awareness on health and safety of our employees and formulated “Regulations on the Responsibility System for Production Safety” to regulate the education and training institutions in each unit should take into account the actual working conditions, the situation of the employees and the requirements of their posts. The Group carried out various forms and levels of targeted safety training and kept learning recordings. During the Reporting Period, we organised 12 safety training sessions with a total of more than 500 participants, which resulted in 100% of BECE’s internal employees being employed after training and assessment. Through a series of safety training and activities, the Group aims to enhance employees’ ability to identify various potential safety risks in the work environment and understand relevant preventive measures.

職業健康與安全

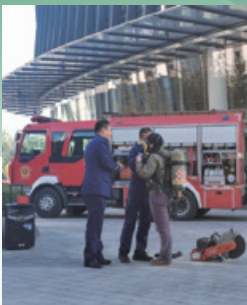
本集團致力為員工締造安全和受保障的工作環境。在有關提供安全工作環境及保障員工避免職業性危害方面，本集團嚴格遵守對本集團有重大影響的法律法規，如《中華人民共和國安全生產法》、《中華人民共和國消防法》和《中華人民共和國職業病防治法》。於本報告期內，本集團沒有接獲因工作關係而死亡的事件，也未接獲有關因工傷而損失的工作日的申報。

在建立健全安全制度和保障機制（具體可查閱「安全與監督」章節）的基礎上，本集團亦重視員工的健康與安全意識，制定了《安全生產教育培訓管理規定》，規定各單位的教育培訓機構應結合工作實際、員工情況及崗位要求，有針對性地開展多種形式、分層次的安全生產教育培訓工作，並保留學習記錄。於本報告期，我們組織開展了12次安全培訓，共達500多人次參與，實現北控清潔能源內部員工100%經培訓考核後上崗。本集團希望通過一系列的安全培訓及活動，讓員工識別在工作環境中不同的安全風險及其預防措施。



The Company organised the 2019 fire drill on November 7, 2019

於2019年11月7日，本公司舉行2019年火災事故應急演練活動



Having Values – Promote People-oriented Culture and Provide Development Channels 有價值—以人為本 提供發展渠道



Shanxi Regional Qingyuan Power Plant 2019 Fire Drill was successfully held on November 8, 2019
2019年山西區域沁源電站消防演練活動於2019年11月8日順利召開

Cultural activity is a representation of spiritual and cultural lives and actively helps to enhance employees' overall quality, alleviate work pressure and enrich their lives outside the workplace. To this end, the Group actively hosts multiple cultural and entertaining activities for employees, such as team building. These activities effectively help employees to attain a balance between their career development and personal leisure lives and help them to maintain a healthy physical and psychological conditions.

文化活動作為精神文化生活的表現之一，在提高員工綜合素質，舒緩員工工作壓力，豐富員工業餘生活方面起到積極的作用。為此，本集團積極為員工提供各種文化娛樂活動，如團建活動等，這些活動有效地幫助了員工在事業發展及個人業餘愛好之間取得平衡，保持身心健康。



BE Clean Heat Energy Company Limited organised the 2019 team building activities on August 31, 2019
於2019年8月31日，北控清潔熱力有限公司舉辦2019年團建活動

Having Values – Promote People-oriented Culture and Provide Development Channels 有價值－以人為本 提供發展渠道

PROMOTING EMPLOYEES' DEVELOPMENT

According to talent development strategy and individual employee development planning, the Group has formulated the "Training Management System of BECE", which clearly stipulates that managers at all levels have the responsibility to provide conditions and opportunities for their subordinates, and grow together through sharing. Employees can choose various types of training according to their actual situation, including enrolling in open classes, external vocational training, foreign training or visits. For open classes, the human resources department regularly collects information on open class, prepares schedules for open classes and recommends training courses to relevant departments. For external vocational training, employees participate in external vocational training or study in areas related to their own work are entitled to the reimbursement of related expenses and examination leave, of which specific details are set out in the "Employee Social Title and Qualification Management Measures". In addition, planned foreign training or visits are conducted by the Group according to the developmental status of the Group, whereby main management personnel or professional and technical personnel of important positions undergo study and training abroad when situations are deemed suitable. The adoption of a variety of training methods not only improves the quality of training, but also helps employees utilize their time for a better personal growth.

助力員工發展

本集團根據人才發展戰略及員工個人發展規劃，制定了《北控清潔能源集團有限公司培訓管理制度》，明確規定各級經理人均有責任為其下屬創造條件和提供機會，在分享中共同成長。員工可結合自身實際情況，選擇不同形式的培訓，如公開課、業餘自學、國外培訓或考察等。公開課是指人力資源部定期收集公開課信息，編制公開課資源表，並推薦培訓課程予相關部門；業務自學是指員工參加與自己從事的工作有關的業餘培訓或學習，可享受考試假及相關費用的報銷，具體參照《員工社會職稱和資質管理辦法》執行；而國外培訓或考察是根據集團業務發展情況，在有條件的情況下，本集團將有計劃地組織主要管理人員或重要崗位的專業技術人員到國外考察培訓。多樣化的培訓方式不僅提高了培訓質量，也利於員工最大化的利用時間，獲得成長。

Having Values – Promote People-oriented Culture and Provide Development Channels 有價值－以人為本 提供發展渠道

During the Reporting Period, the Group completed major projects for talent development including (i) elite management talents training with kick-off meetings, (ii) case (project) review and sharing training for each department, (iii) new employee training and (iv) management trainee evaluation and debriefing. The detailed training data is as follows:

於本報告期，本集團已完成的人才培養重點項目，包括：(i) 菁英管理人才培養規劃，以及召開菁英班啟動會；(ii) 各部門案例（項目）覆盤及分享培訓；(iii) 新員工成長力及制度培訓；(iv) 管培生評估定崗及管培生述職匯報工作。具體培訓數據請參見下表：

Percentage of Employee Trained (%) 受訓員工百分比 (%)	
By Gender 按性別劃分	2019 二零一九年
Male 男	76.85%
Female 女	23.15%
By Employment Type 按僱傭類型劃分	2019 二零一九年
Senior Management 高級管理人員	2.58%
Middle Management 中層管理人員	6.48%
General Employee 普通員工	73.56%
Contract and Temporary Employee 合約及短期員工	17.38%

Having Values – Promote People-oriented Culture and Provide Development Channels 有價值－以人為本 提供發展渠道

Average Hours of Training Completed by Each Employee (Hours)

每名員工完成培訓的平均時數(小時)

By Gender 按性別劃分	2019 二零一九年	2018 二零一八年
Male 男	23.38	12.72
Female 女	19.79	11.25
By Employment Type 按僱傭類型劃分	2019 二零一九年	2018 二零一八年
Senior Management 高級管理人員	43.05	/
Middle Management 中層管理人員	42.80	/
General Employee 普通員工	23.42	/
Contract and Temporary Employee 合約及短期員工	8.26	/



The Group successfully launched the third phase of open class training on 19 July 2019
2019年7月19日，本集團順利開展第三期公開課培訓活動

Being Sharing – Establish Development and Practice Social Responsibility

有分享－立足發展 踐行社會責任

STANDARDISING PROCUREMENT AND MANAGEMENT

The Group is committed to building a responsible supply chain. Besides complying related laws and regulations such as the “Bidding Law of the People’s Republic of China” and the “Regulation on the Implementation of the Bidding Law of the People’s Republic of China”, the Group has further formulated relevant systems to manage supply chain risks such as the “Group’s Supplier Management System”, the “Group’s Tendering and Procurement Management Approach” and the “Qualified Supplier Management System”.

The Group stipulates that all bidding and procurement processes should follow the principles of fairness, justness, openness and integrity. In the process of bidding and procurement activities, all departments should perform their duties and work collaboratively to ensure these activities are completed orderly, efficiently and controllably. Subsidiaries and their employees are strictly prohibited from engaging in any unjust and unfair behaviour like bid rigging, colluded bidding and complementary bidding.

During the selection process, we require all potential suppliers to submit qualification in health, safety and environmental performance, such as ISO 9001 Quality Management Systems Certification, ISO 14001 Environmental Management Systems Certification and OHSAS 18001 Occupational Health and Safety Management Systems Certification. Our designated officers will then conduct on-site visits to suppliers to conduct a comprehensive performance assessment in areas such as corporate environment, quality, delivery, services, business performance, production management and safety. Potential suppliers will become our qualified suppliers after approval of the supplier assessment report is granted by the Group’s management.

In addition, to further address the environmental and social risks associated with supply chain and promote the sustainable development of the entire supply chain, the Group stringently stipulates its upstream suppliers to fulfill their obligations on safety, health and environmental issues. For instance, the Group’s photovoltaic solar panel procurement requirements state clearly that our suppliers are required to comply with all national mandatory standards on energy, safety and environment. In addition, the Group extended our requirements to suppliers’ procurement in key components and raw materials. Providing technical specifications for our solar panel manufacturers, we would shortlist at least three or more upstream suppliers for their components and raw materials purchases. Our panel manufacturing partners would then require to choose their upstream suppliers according to the designated shortlist to ensure upstream products are compliant with our standards for product quality, safety, environmental protection as well as occupational health etc..

規範採購與管理

本集團致力於構建負責任的供應鏈，在遵守《中華人民共和國招標投標法》、《中華人民共和國招標投標法實施條例》等有關法律法規的基礎上，進一步制定了《北控清潔能源集團有限公司供應商管理制度》、《集團招標採購管理制度》、《合格供應商管理制度》等相關制度管理供應鏈風險。

本集團規定所有招標採購活動應遵循公平、公正、公開和誠實信用的原則，在招標採購過程中，各部門應履行各自職責，齊心一力，保障招標採購活動有序、高效、可控地完成。各附屬公司與員工不得有任何參與圍標、串標、陪標等嚴重違規行為。

在供應商篩選階段，本集團要求潛在供應商提供 ISO 9001 質量管理體系認證證書、ISO 14001 環境管理體系認證證書、OHSAS 18001 職業健康與安全管理體系認證證書等在健康、安全與環境方面的資質認證。通過實地考察等方式，供應商考察人員根據企業環境、質量、供貨、服務、業績、施工管理、安全文明管理等多維度進行評分與綜合評定，編制供應商考察評審報告後經本集團管理層審批，確定其是否能成為合格供應商。

此外，為了進一步管理供應鏈的環境及社會風險，促進整個供應鏈的可持續發展，本集團嚴格約束上游供應商履行在質量安全、健康與環境方面的義務，例如：在太陽能光伏板的採購技術規範中，本集團明確要求供應商所提供的產品滿足國家在能源、安全、環保方面的強制性標準與規定要求。在此基礎上，本集團跟蹤上游供應商在關鍵元器件與原材料方面的上游廠家，在技術規範中對關鍵的元器件或原材料的上游廠家提供至少三家以上的短名單，太陽能光伏板供應商應嚴格在短名單中使用上游產品，確保上游產品符合質量、安全、環境、職業健康等體系要求。

Being Sharing – Establish Development and Practice Social Responsibility 有分享 – 立足發展 踐行社會責任

For the evaluation and supervision of suppliers, the Group requires that each procurement units of the Group to conduct post-contract evaluations on an annual basis. The post-contract evaluations of suppliers are divided into two stages: evaluation on the execution of contract conditions and the evaluation on operational performance. As of the end of the Reporting Period, the Group cooperated with a total of 238 suppliers in the PRC, which are from Beijing, Shanghai, Jiangsu, Shandong, etc.. Specific information is as follows:

有關對供應商的評價和監督事宜，本集團規定由集團及各經營單位招標採購部門按照年度組織集團及本經營單位相關部門進行供應商後評價工作。供應商的後評價分為合同履約評價以及運行評價兩個階段。截至本報告期末，本集團合格供應商數目共計238家，來自北京市、上海市、江蘇省、山東省等地區，具體信息如下所示：

Region	地區	Number of Qualified Suppliers (Unit) 合格供應商數目 (家)
Beijing	北京市	62
Shanghai	上海市	13
Tianjin	天津市	5
Chongqing	重慶市	1
Jiangsu	江蘇省	31
Shandong	山東省	23
Hebei	河北省	17
Henan	河南省	17
Zhejiang	浙江省	15
Liaoning	遼寧省	14
Shaanxi	陝西省	8
Guangdong	廣東省	7
Anhui	安徽省	4
Gansu	甘肅省	3
Shanxi	山西省	3
Inner Mongolia	內蒙古	2
Ningxia	寧夏	2
Xinjiang	新疆	2
Jiangxi	江西省	2
Hunan	湖南省	2
Guizhou	貴州省	1
Heilongjiang	黑龍江省	1
Jilin	吉林省	1
Hubei	湖北省	1
Qinghai	青海省	1

Being Sharing – Establish Development and Practice Social Responsibility 有分享 – 立足發展 踐行社會責任

COMMUNITY HARMONY AND BUILDING

The Group acknowledges that good relationship with the community is one of the important guarantees for the business to achieve sustainable growth, so the Group has been working hard to create value for the community. During the Reporting Period, The Group complied with “Law of the People’s Republic of China on Donations for Public Welfare”. Through active and regular communications with local residents (including vulnerable groups from the neighbouring community), the Group actively participates in public activities to make contributions to the construction of a harmonious community.

The Group actively responded to the call of the National Policy of “Targeted Poverty Alleviation” and provided financial and material supports to the poverty alleviation works. During the Reporting Period, the Group had a total of 9 power plants that launched poverty alleviation projects. Of which, Haixing power plant, Yihua power plant, Fengning power plant, Suotou power plant, Kuancheng power plant, Yuxian power plant, Anyang power plant donated funds for poverty alleviation while Zhongning power plant and Yuyang power plant donated goods to help impoverished households in villages;

- To support the local education development, Haixing power plant has donated RMB4 million. Furthermore, it spent RMB600 per mu per year on reclamation of saline-alkali soils to boost local economic development;
- Yihua power plant aided 667 impoverished households in Guocun Town of Zhangjiakou through of poverty alleviation funds. Each household receives RMB3,000 per year. Besides funds, the plant also donated RMB1 million to Guocun Town;
- Fengning power plant aided 2,000 impoverished households in Neixiang Town of Fengning Manchu Autonomous County through targeted poverty alleviation;
- Suotou power plant donated RMB3 million to Tang County for poverty alleviation. It also aids 1,000 impoverished households in the county every year;
- Kuancheng power plant donates RMB150,000 to the government of Weizigou Government for infrastructure development annually;

社區和諧與共建

與營運所在社區的良好關係是業務能夠可持續增長的重要保障之一，為此本集團持續努力為社區創造價值。於本報告期，本集團遵循《中華人民共和國公益事業捐贈法》等法律法規，通過定期與業務營運所在地的社區（包括附近社區的弱勢群體）進行溝通，熱心參與公眾實踐，致力為建設和諧社區貢獻力量。

本集團積極響應國家扶貧攻堅政策的號召，並在資金及物資上對扶貧工作給予支持。於本報告期，本集團共計有9個電站開展扶貧工作。其中，海興電站、宜化電站、豐寧電站、梭頭電站、寬城電站、蔚縣電站、安陽電站主要通過捐贈資金精準扶貧；中寧電站、榆陽電站主要通過捐贈物資幫扶鄉村貧困戶。具體完成情況如下：

- 海興電站為支持當地城市發展，捐資人民幣400萬元用於當地教育，同時為促進經濟發展，每年每畝投入人民幣600元進行鹽鹼地治理工作；
- 宜化電站對口幫扶張家口市崞村鎮，共計帶動貧困戶667戶，每戶每年獲取扶貧資金人民幣3,000元，同時為崞村鎮捐贈人民幣100萬元；
- 豐寧電站對豐寧滿族自治縣所管轄區域內鄉鎮2,000戶貧困戶進行精準扶貧；
- 梭頭電站為唐縣每年捐贈扶貧資金人民幣300萬元，每年扶持貧困戶1,000戶；
- 寬城電站每年向葦子溝鄉政府捐贈人民幣15萬元用於基礎建設；

Being Sharing – Establish Development and Practice Social Responsibility 有分享 – 立足發展 踐行社會責任

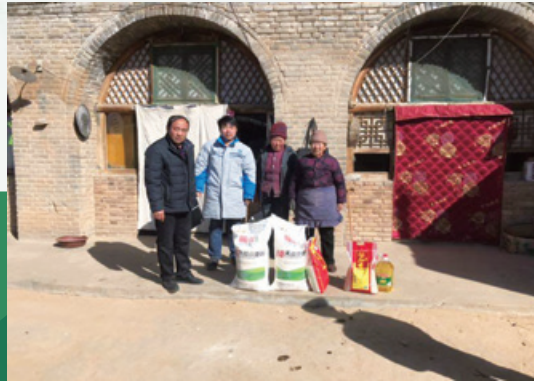
- Yuxian power plant and the local Government jointly implemented an infrastructure construction project and paid a total of RMB820,000 during the Reporting Period;
- Zhongning power plant aided 3 impoverished households in Desheng Village of Zhongning County with a total amount of RMB30,000;
- Yuyang power plant aided 4 impoverished households in Xibentan Village, Xiaohaotu Township, Yuyang District and 16 impoverished households in Kangjiawan Village, Qingyun Township, Yuyang District with the total amount of RMB21,000;
- Anyang power plant aided Lunzhang Town through a “Donation through Purchase” scheme with a total amount of RMB60,000.
- 蔚縣電站與鄉政府共同實施地企共建公共基礎建設計劃，於本報告期共支付資金人民幣82萬元；
- 中寧電站對口扶貧中寧縣太陽梁鄉德盛村3戶貧困戶，涉及金額人民幣3萬元；
- 榆陽電站對口扶貧榆陽區小壕兔鄉西奔灘村4戶貧困戶、榆陽區青雲鎮康家灣村16戶貧困戶，涉及金額人民幣2.1萬元；
- 安陽電站通過「以購代捐」的方式對倫掌鎮進行幫扶，涉及金額人民幣6萬元。



During the Reporting Period, Zhongning power plant actively responded to the Zhongning government's targeted poverty alleviation plan, which targets to help impoverished households in Desheng Village, Zhongning County.

中寧電站於本報告期響應中寧縣政府定點扶貧工作安排，定點幫扶中寧縣太陽梁鄉德盛村貧困戶

Being Sharing – Establish Development and Practice Social Responsibility 有分享—立足發展 踐行社會責任



During the Reporting Period, Yuyang power plant actively responded to the Yuyang government's targeted poverty alleviation plan, which targets to help impoverished households in Xibentan Village, Xiaohaotu Township, Yuyang District and Kangjiawan Village, Qingyun Township, Yuyang District

榆陽電站於本報告期響應榆林市榆陽區政府定點扶貧工作安排，定點幫扶榆陽區小壕免鄉西奔灘村和榆陽區青雲鎮康家灣村貧困戶



Appendix: Index of Environmental, Social and Governance Reporting Guide

附錄：《環境、社會及管治報告指引》內容索引

Aspects 層面	Key Performance Indicators "KPI" 指標	Descriptions of KPI 指標內容	Disclosures 披露情況	Location of the ESG report/ Remarks 所在報告位置／備註
Environmental 環境				
A1: Emissions 排放物	General Disclosures 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer. Relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste: 有關廢氣及溫室氣體排放、向水及土地的排污、有害及無害廢棄物的產生等的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料	✓	Adopting Green and Clean Approach 行綠色清潔之道
	A1.1	The types of emissions and respective emissions data 排放物種類及相關排放資料	✓	Adopting Green and Clean Approach 行綠色清潔之道
	A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility) 溫室氣體總排放量（以噸計算）及（如適用）密度（如以每產量單位、每項設施計算）	✓	Refining Emission Management 細化排放管理
	A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility) 所產生有害廢棄物總量（以噸計算）及（如適用）密度（如以每產量單位、每項設施計算）	✓	Refining Emission Management 細化排放管理
	A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility) 所產生無害廢棄物總量（以噸計算）及（如適用）密度（如以每產量單位、每項設施計算）	✓	Refining Emission Management 細化排放管理

Appendix: Index of Environmental, Social and Governance Reporting Guide

附錄：《環境、社會及管治報告指引》內容索引

Aspects 層面	Key Performance Indicators "KPI" 指標	Descriptions of KPI 指標內容	Disclosures 披露情況	Location of the ESG report/ Remarks 所在報告位置／備註
	A1.5	Description of measures to mitigate emissions and results achieved 描述減低排放量的措施及所得成果	✓	Adopting Green and Clean Approach 行綠色清潔之道
	A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved 描述處理有害及無害廢棄物的方法、減低產生量的措施及所得成果	✓	Refining Emission Management 細化排放管理
A2 : Use of Resources 資源使用	General Disclosure 一般披露	Policies on the efficient use of resources, including energy, water and other raw materials 有效使用資源（包括能源、水及其他原材料）的政策	✓	Adopting Green and Clean Approach 行綠色清潔之道
	A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production, volume, per facility) 按類型劃分的直接及／或間接能源（如電、氣或油）總耗量（以千個千瓦時計算）及密度（如以每產量單位、每項設施計算）	✓	Enhancing Resource Efficiency 提高資源利用
	A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility) 總耗水量及密度（如以每產量單位、每項設施計算）	✓	Enhancing Resource Efficiency 提高資源利用
	A2.3	Description of energy use efficiency initiatives and results achieved 描述能源使用效益計劃及所得成果	✓	Adopting Green and Clean Approach 行綠色清潔之道
	A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved 描述求取適用水源上可有任何問題，以及提升用水效益計劃及所得成果	✓	Adopting Green and Clean Approach 行綠色清潔之道
	A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced 製成品所用包裝材料的總量（以噸計算）及（如適用）每生產單位佔量	Not applicable to principal business 主要業務不適用	

Appendix: Index of Environmental, Social and Governance Reporting Guide 附錄：《環境、社會及管治報告指引》內容索引

Aspects 層面	Key Performance Indicators "KPI" 指標	Descriptions of KPI 指標內容	Disclosures 披露情況	Location of the ESG report/ Remarks 所在報告位置／備註
A3: The Environment and Natural Resources 環境及天然資源	General Disclosure 一般披露	Policies on minimising the issuer's significant impact on the environment and natural resources 減低發行人對環境及天然資源造成重大影響的政策	✓	Concerning Environmental Impacts 關注環境影響
	A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them 描述業務活動對環境及天然資源的重大影響及已採取管理有關影響的行動	✓	Concerning Environmental Impacts 關注環境影響
Social 社會				
B1 : Employment 僱傭	General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare: 有關薪酬及解僱、招聘及晉升、工作時數、假期、平等機會、多元化、反歧視以及其他待遇及福利的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料	✓	Protecting Employees' Right 維護員工權益
	B1.1	Total workforce by gender, employment type, age group and geographical region 按性別、僱傭類型、年齡組別及地區劃分的僱員總數	✓	Protecting Employees' Right 維護員工權益
	B1.2	Employee turnover rate by gender, age group and geographical region 按性別、年齡組別及地區劃分的僱員流失比率	✓	Protecting Employees' Right 維護員工權益

Appendix: Index of Environmental, Social and Governance Reporting Guide

附錄：《環境、社會及管治報告指引》內容索引

Aspects 層面	Key Performance Indicators "KPI" 指標	Descriptions of KPI 指標內容	Disclosures 披露情況	Location of the ESG report/ Remarks 所在報告位置／備註
B2 : Health and Safety 健康與安全	General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards 有關提供安全工作環境及保障員工避免職業性危害的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料	✓	Occupational Health and Safety 職業健康與安全
	B2.1	Number and rate of work-related fatalities 因工作關係而死亡的人數及比率	✓	Occupational Health and Safety 職業健康與安全
	B2.2	Lost days due to work injury 因工傷損失工作日數	✓	Occupational Health and Safety 職業健康與安全
	B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored 描述所採納的職業健康與安全措施，以及相關執行及監察方法	✓	Occupational Health and Safety 職業健康與安全
B3 : Development and Training 發展及培訓	General Disclosure 一般披露	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities 有關提升員工履行工作職責的知識及技能的政策。描述培訓活動	✓	Promoting Employees' Development 助力員工發展
	B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management) 按性別及僱員類別（如高級管理層、中級管理層等）劃分的受訓僱員百分比	✓	Promoting Employees' Development 助力員工發展
	B3.2	The average training hours completed per employee by gender and employee category 按性別及僱員類別劃分，每名僱員完成受訓的平均時數	✓	Promoting Employees' Development 助力員工發展

Appendix: Index of Environmental, Social and Governance Reporting Guide 附錄：《環境、社會及管治報告指引》內容索引

Aspects 層面	Key Performance Indicators "KPI" 指標	Descriptions of KPI 指標內容	Disclosures 披露情況	Location of the ESG report/ Remarks 所在報告位置／備註
B4 : Labour Standards 勞工準則	General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour 有關防止童工或強制勞工的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料	✓	Protecting Employees' Right 維護員工權益
	B4.1	Description of measures to review employment practices to avoid child and forced labour 描述檢討招聘慣例的措施以避免童工及強制勞工	✓	Protecting Employees' Right 維護員工權益
	B4.2	Description of steps taken to eliminate such practices when discovered 描述在發現違規情況時消除有關情況所採取的步驟	No incidents related to child or forced labour occurred during the Reporting Period, hence this section is not applicable 未出現使用童工及強制勞工的情況，不適用	
B5 : Supply Chain Management 供應鏈管理	General Disclosure 一般披露	Policies on managing environmental and social risks of the supply chain 管理供應鏈的環境及社會風險政策	✓	Standardising Procurement and Management 規範採購與管理
	B5.1	Number of suppliers by geographical region 按地區劃分的供應商數目	✓	Standardising Procurement and Management 規範採購與管理
	B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored 描述有關聘用供貨商的慣例，向其執行有關慣例的供貨商數目、以及有關慣例的執行及監察方法	✓	Standardising Procurement and Management (Number of suppliers where the practices are being implemented will be disclosed in the future) 規範採購與管理（其中，執行有關慣例的供貨商數目將於未來披露）

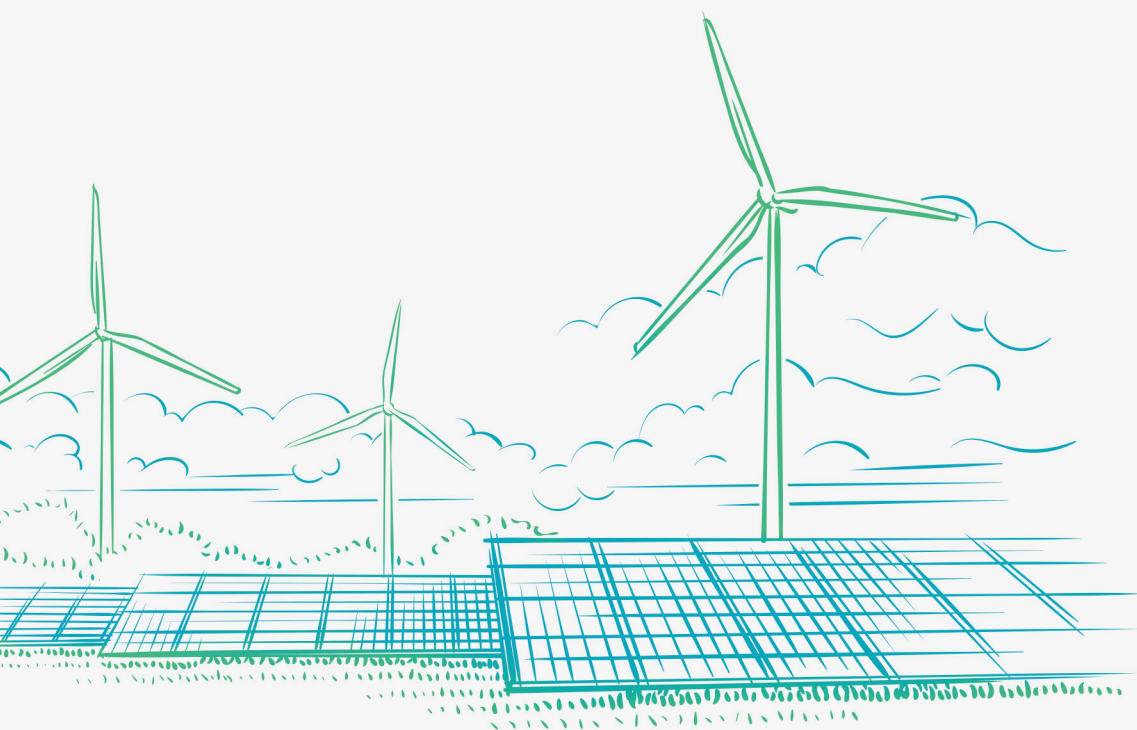
Appendix: Index of Environmental, Social and Governance Reporting Guide

附錄：《環境、社會及管治報告指引》內容索引

Aspects 層面	Key Performance Indicators "KPI" 指標	Descriptions of KPI 指標內容	Disclosures 披露情況	Location of the ESG report/ Remarks 所在報告位置／備註
B6 : Product Responsibility 產品責任	General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress 有關所提供產品和服務的健康與安全、廣告、標籤及私隱事宜以及補救方法的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料	✓	Being Responsible – Develop Innovative Technology and Achieve Service Excellence (Information related advertising and labelling are not applicable to principal business) 有擔當－創新科技打造卓越服務（其中，有關廣告及標籤事宜，主營業務不適用）
	B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons 已售或已運送產品總數中因安全與健康理由而須回收的百分比	Not applicable to principal business 主營業務不適用	
	B6.2	Number of products and service related complaints received and how they are dealt with 接獲關於產品及服務的投訴數目以及應對方法	✓	Customers and Services (Number of complaints will be disclosed in the future) 客戶與服務（其中，有關投訴的數據將於未來披露）
	B6.3	Description of practices relating to observing and protecting intellectual property rights 描述與維護及保障知識產權有關的慣例	✓	Technological Research and Innovations 研發與創新
	B6.4	Description of quality assurance process and recall procedures 描述質量檢定過程及產品回收程序	Not applicable to principal business 主營業務不適用	
	B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored 描述消費者數據保障及私隱政策，以及相關執行及監察方法	✓	Customers and Services 客戶與服務

Appendix: Index of Environmental, Social and Governance Reporting Guide 附錄：《環境、社會及管治報告指引》內容索引

Aspects 層面	Key Performance Indicators "KPI" 指標	Descriptions of KPI 指標內容	Disclosures 披露情況	Location of the ESG report/ Remarks 所在報告位置／備註
B7: Anti-corruption 反貪污	General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering 有關防止賄賂、勒索、欺詐及洗黑錢的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料	✓	Compliant Operation 合規運營
	B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases 於匯報期內對發行人或其僱員提出並已審結的貪污訴訟案件的數目及訴訟結果	✓	Compliant Operation 合規運營
	B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored 描述防範措施及舉報程序，以及相關執行及監察方法	✓	Compliant Operation 合規運營
B8: Community Investment 社區投資	General Disclosure 一般披露	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests 有關以社區參與來了解營運所在社區需要和確保其業務活動會考慮社區利益的政策	✓	Being Sharing – Establish Development and Practice Social Responsibility 有分享－立足發展踐行社會責任
	B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport) 專注貢獻範疇（如教育、環境事宜、勞工需求、健康、文化、體育）	✓	Being Sharing – Establish Development and Practice Social Responsibility 有分享－立足發展踐行社會責任
	B8.2	Resources contributed (e.g. money or time) to the focus area 在專注範疇所動用資源（如金錢或時間）	✓	Being Sharing – Establish Development and Practice Social Responsibility 有分享－立足發展踐行社會責任



北控清潔能源集團有限公司
Beijing Enterprises Clean Energy Group Limited

Rooms 6706-07, 67th Floor, Central Plaza
18 Harbour Road, Wanchai, Hong Kong
香港灣仔港灣道18號中環廣場67樓6706-07室