京能集团

北京能源國際控股有限公司
Beijing Energy International Holding Co., Ltd.

(Incorporated in Bermuda with limited liability)
(於百慕達註冊成立之有限公司)
Stock Code 股份代號：686

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT
環境、社會及管治報告
2021

VISION 願景

To become a first-class international clean energy ecological investment operator

成為一流的國際化清潔能源生態投資運營商

MISSION 使命

To build an ecological system of clean energy industry that is green, multi-functional, complementary and intelligently coordinated, and provide full life-cycle services to global energy users through value creation

構建綠色為主、多能互補、智慧協同的清潔能源產業生態體系，通過價值創造為全球能源用戶提供全生命周期服務

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ABOUT THIS REPORT
關於本報告

This is the seventh Environmental, Social and Governance ("ESG") Report of Beijing Energy International Holding Co., Ltd. (hereinafter referred to as the "Company" or "BJEI", and collectively with its subsidiaries, the "Group" or "we" or "us"), presenting our continued efforts and effectiveness for driving sustainability and corporate social responsibility. This report should be read in conjunction with the 2021 annual report of the Company (the "2021 Annual Report") to fully understand the environmental, social and governance performance of the Group. For the corporate governance section, please refer to pages 47 to 83 of the 2021 Annual Report.

本報告為北京能源國際控股有限公司(於本報告簡稱「本公司」或「公司」或「京能國際」,連同其附屬公司統稱為「本集團」或「我們」)的第七份環境、社會和管治(「ESG」)報告,旨在呈列我們為推動可持續發展和企業社會責任所作出的努力與成效。本報告應與本公司二零二一年年報(「二零二一年年報」)一併閱覽,以便全面了解本集團的環境、社會及企業管治表現,有關企業管治一節,請參閱二零二一年年報第47頁至83頁。

The board (the "Board") of directors (the "Directors") of the Company acknowledges its responsibility for ensuring the truthfulness of this report. To the best of its knowledge, this report presents the details of material topics of the Group and its impacts, and the Group's performance in managing such issues is fairly presented. This report has been reviewed and approved by the Board.

本公司董事(「董事」)會(「董事會」)確認其有責任確保本報告的真實性,且就其所知,本報告已詳細披露本集團的實質性議題及其影響,並公正地呈列本集團在管理該等議題的表現。董事會已審閱並通過本報告。

BASIS AND PRINCIPLES FOR PREPARATION

This report is prepared in compliance with the Environmental, Social and Governance Reporting Guide ("ESG Reporting Guide") set out in Appendix 27 to the Rules Governing the Listing of Securities (the "Listing Rules") on The Stock Exchange of Hong Kong Limited ("HKEX") and in accordance with the Core Option of the Global Reporting Initiative ("GRI") Sustainability Reporting Standards ("GRI Standards"). Where applicable, the Group aligns its performance with the Sustainable Development Goals ("SDGs") in the process of improving the management of its material topics.

編制依據及原則

本報告乃遵循《香港聯合交易所有限公司(「香港交易所」)證券上市規則》(「上市規則」)附錄二十七中所載的《環境、社會及管治報告指引》(「ESG報告指引」),並根據全球報告倡議組織(「GRI」)《可持續發展報告標準》(「GRI標準」)的核心符合方案而編制。本集團於完善實質性議題的管理過程中,有適當地對標可持續發展目標(「SDGs」)。

This report has complied with the "comply or explain" provisions set out in the ESG Reporting Guide, and was prepared on the basis of the reporting principles of "Materiality", "Quantitative", "Balance" and "Consistency". When preparing this report, the Group applied the reporting principles as follows:

本報告已遵守ESG報告指引中有關「不遵守就解釋」的條文，同時以「重要性」、「量化」、「平衡」和「一致性」這四項匯報原則作為編制基礎。在編制本報告的過程中，本集團應用匯報原則的情況如下：

Reporting principles 匯報原則	How they are applied in the report preparation 報告編制中的應用
Materiality 重要性	The Group has made communication with stakeholders and assessed material topics through online questionnaires to identify the material ESG topics, and to ensure that the concerns of stakeholders were addressed in this report. For the detailed assessment process and results of the material topics, please refer to the section headed "4. Sustainability Management Approach" of this report. 本集團通過線上調查問卷的方式開展與利益相關者溝通及實質性議題評估，以識別重大的ESG議題，並確保已於本報告回應利益相關者的關注。有關實質性議題的詳細評估過程及結果請參見本報告「4. 可持續發展管理方針」章節。
Quantitative 量化	The data presented in this report have been checked and verified. For the standards, methods, assumptions and/or calculation tools used to calculate quantitative key performance indicators ("KPIs"), and the sources of the conversion factors applied for the Year, please refer to the section headed "Appendix II: Overview of Environmental, Social and Governance Key Performance Indicators" in this report. 本報告所呈列的數據已作檢查及核實。有關本年度計算量化關鍵績效指標（「KPIs」所採用的標準、方法、假設及／或計算工具，以及其所使用的轉換因素的來源，請參見本報告「附錄二：環境、社會及管治關鍵績效指標總覽」章節。
Balance 平衡	In the preparation of this report, the Group focused on an impartial and transparent presentation of its performance in every aspect of sustainable development. 於本報告編寫的過程中，本集團通過公正、透明的方式闡述其可持續發展各方面的表現。
Consistency 一致性	Unless stated otherwise, the statistical methods and criteria applied in this report is consistent with last year. Quantitative data are analysed to account for year-on-year changes and are presented in a way that allows for consistent comparison by the stakeholders. 除非另行說明，本報告採用與往年相同的統計方法及口徑。量化數據經分析後以可作按年比較的一致性方式呈列，以供利益相關者檢閱。

REPORTING SCOPE AND PERIOD

The reporting period of this report is consistent with the 2021 Annual Report, covering from 1 January 2021 to 31 December 2021 (the "Year"). We identified the scope of this report encompassing business operations of the Company and its subsidiaries, details of which can be referred to the section headed "4. Sustainability Management Approach" of this report.

匯報範圍及期間

本報告涵蓋的時間範圍與二零二一年年報一致，為2021年1月1日至2021年12月31日（「本年度」）。我們將報告內容範圍界定為本公司及其附屬公司之業務營運，詳細請參見本報告「4. 可持續發展管理方針」章節。

Feedback

This report is published in both traditional Chinese and English. In case of any discrepancy between the two versions, the traditional Chinese version shall prevail. The Group is committed to maintaining communication with stakeholders, understanding and responding to their concerns and improving the comprehensiveness of this report. We welcome your feedbacks on this report and on any aspect of our sustainability performance through the feedback form which is available at the back of this report.

意見反饋

本報告以繁體中文及英文兩個語言版本發佈。若在內容理解上存在差異，請以繁體中文版本為準。本集團致力與利益相關者保持溝通，了解及回應彼等之關注，並提高本報告之全面性。我們歡迎　閣下通過本報告背面的反饋表對本報告及我們在可持續發展績效的任何方面進行反饋。

ABOUT THE COMPANY
關於本公司

The Company, headquartered in Beijing, is an investment holding company which operates its businesses through its subsidiaries. The Group is principally engaged in the development, investment, operation and management of power plants and other renewable energy projects, and strives to be a leading global eco-development solutions provider.

本公司總部位於北京，為一間透過其附屬公司經營業務之投資控股公司。本集團主要從事發電站及其他可再生能源項目的開發、投資、營運及管理，致力成為全球領先的生態發展解決方案供應商。

During the Year, the Group has focused on the development of its main business, committed to transforming the concept of clean energy into tangible results. As of 31 December 2021, the Group owned 97 solar power plants and 7 wind power plants with aggregate installed capacity of approximately 4,168.02 megawatts ("MW") and the total electricity generation volume of approximately 3,879,751 megawatt hours ("MWh") in 2021.

於本年度，本集團聚焦主業發展，致力將清潔能源的概念轉化為切實的成果。截至2021年12月31日，本集團擁有97座太陽能發電站及7座風力發電站，總裝機容量約4,168.02兆瓦（「兆瓦」），2021年總發電量約3,879,751兆瓦時（「兆瓦時」）。

With the professional operational teams and continuous investment in new technologies, the Group has successively built 3 national clean energy "top-runner" demonstration bases, with 6 Panda Power Plants built in total. In addition to the stable operation of other clean energy power plants, the Group's projects have covered 21 different provinces across China. In the future, leveraging on its resources and technologies, the Group will endeavor to lead the development of new energy industry, further promote the joint development and sharing of low-carbon and clean energy around the world.

憑藉專業的經營團隊和對新技術的持續投入，本集團先後建成國家級清潔能源「領跑者」示範基地項目3個，累計建成熊貓電站6座。加之其他清潔能源電站的穩定營運，本集團旗下項目已覆蓋中國21個不同省份。未來，本集團將繼續運用其資源與技術優勢，致力引領新能源行業的發展，進一步推動全球低碳清潔能源的共建共用。

1. Hebei	河北
2. Jilin	吉林
3. Shandong	山東
4. Shanxi	山西
5. Henan	河南
6. Inner Mongolia	內蒙古
7. Shaanxi	陝西
8. Ningxia	寧夏
9. Gansu	甘肅
10. Anhui	安徽
11. Zhejiang	浙江
12. Hubei	湖北
13. Hunan	湖南
14. Guangdong	廣東
15. Guangxi	廣西
16. Yunnan	雲南
17. Sichuan	四川
18. Qinghai	青海
19. Tibet	西藏
20. Xinjiang	新疆
21. Beijing	北京

KEY FIGURES FOR FY2021 2021財政年度關鍵數據

Revenue (RMB' Million)
收入 (人民幣百萬元)

2,825

+31.5% yoy (2020: 2,149)
+31.5% 按年 (2020年: 2,149)

EBITDA (RMB' Million)
EBITDA (人民幣百萬元)

2,397

+21.9% yoy (2020: 1,967)
+21.9% 按年 (2020年: 1,967)

Electricity Generation (MWh)
發電量 (兆瓦時)

3,879,751

+38.8% yoy (2020: 2,795,834)
+38.8% 按年 (2020年: 2,795,834)

Aggregate Installed Capacity (MW)
總裝機容量 (兆瓦)

4,168.02

+101.3% yoy (2020: 2,070.40)
+101.3% 按年 (2020年: 2,070.40)

Work-related Fatalities
因工死亡人數

0

for seven consecutive years
連續七年

PROMOTING LOW CARBON CLEAN ENERGY 推動低碳清潔能源

The total electricity generation volume for 2021 is 3,879,751MWh, equivalent to:
2021年的總發電量為3,879,751兆瓦時，相當於：

Saving 1,183 Thousands Tons of Standard Coal
節約118.3萬噸標準煤

Reducing 3,228 Thousands Tons of Carbon Dioxide Emission
減排322.8萬噸二氧化碳

Reducing 116 Thousands Tons of Sulphur Dioxide Emission
減排11.6萬噸二氧化硫

Reducing 1,940 Tons of Soot Emission
減排1,940噸煙塵

Planting 176,391 Thousands of Trees
種植17,639.1萬棵樹

2,587 Thousands Household's Electricity Consumption in a year
258.7萬戶居民一年的用電量

PROMOTING INDUSTRY DEVELOPMENT

While pursuing the benefits of power plants, we do not forget to contribute to the development of the industry. During the Year, the Company actively participated in the preparation of the national standard "Determination of Light Transmittance for the Photovoltaic Glass Module Used in Building" and the local standard "DB11/T 527–2021 Safety Management Specification of Electrical Distribution Room", striving to promote the development of the industry.

推動行業發展

在追求電站效益的同時，我們不忘為行業發展貢獻力量。於本年度，本公司積極參與國家標準《建築用光伏玻璃組件透光率測試方法》及地方標準《DB11/T 527–2021配電室安全管理規範》的編制，努力推動行業發展。

EXTERNAL COMMITMENTS

As a platform for Beijing Energy Holding Co., Ltd.*（北京能源集團有限責任公司）("BEH") to focus on the investment and operation of the clean energy ecological industry, a pioneer in the innovation of market-oriented systems and mechanisms, and a test field of the transformation and implementation of state-owned capital investment companies, the Company closely focuses on the development direction of clean, low-carbon, safe and efficient global energy, striving to become a first-class international clean energy ecological investment operator. The Company also has in-depth strategic cooperation with leading new energy companies at home and abroad, striving to create a symbiotic prosperity of the clean energy industry chain.

對外承諾

本公司作為北京能源集團有限責任公司（「京能集團」）專注於清潔能源生態產業投資運營的平台、市場化體制機制創新的先行者和國有企業資本投資公司改革落地的試驗田，緊密圍繞清潔低碳、安全高效的全球能源發展方向，努力打造一流的國際化清潔能源生態投資運營商。本公司亦與國內外領先的新能源企業深度戰略合作，悉力打造清潔能源產業鏈的共生性繁榮。

As a member of the Green Energy Ecosystem Organization (formerly known as the Photovoltaic Green-ecosystem Organization) to carry out all-round cooperation among members on the development of clean energy

作為綠色能源生態合作組織（前身為光伏綠色生態合作組織）的成員，就清潔能源的開發於成員間展開全方位合作

Following the national policy of the "Belt and Road Initiative" to provide integrated and complementary ecological solutions of green energy for countries and regions along the route, promoting the local green economic development and bringing green clean energy into millions of families

緊隨「一帶一路」國策，為沿線國家及地區提供一體化多能互補的綠色能源生態解決方案，促進當地綠色經濟建設，讓綠色清潔能源真正走進千家萬戶

Actively respond to the Paris Agreement on tackling global climate change and work with the United Nations Development Programme to jointly accelerate the "Panda Photovoltaic Power Plant" project and the transformation of the clean and low-carbon model around the world

積極回應應對全球氣候變化的《巴黎協定》，與聯合國開發計劃署攜手共同推進「熊貓光伏電站」項目，促進全球能源低碳轉型

Our Business Model

Vitalizing resources and creating value with heart

我們的業務模式

盤活資源，用心創造價值

KEY INPUTS 主要投入

Financial capital
資本資源

- Obtained through various channels including issuance of convertible bonds, equity financing business, bank borrowings and financial leases
  透過發行可換股債券、權益融資業務、銀行借款及融資租賃等多種渠道獲得

Manufactured capital
生產資源

- Property, plant and equipment of approximately RMB26,172 million
  物業、廠房及設備，總值約人民幣26,172百萬元

Intellectual capital
知識資源

- Intellectual properties, including patents, trademarks and copyrights
  知識產權，包括專利、商標及版權
- Experienced employees and managers from the power industry
  來自電力行業的經驗豐富的僱員、管理人員

Human capital
人力資源

- Full-time employees: 715 employees in the mainland China ("Mainland China"), 24 employees in Hong Kong and 13 employees overseas
  全職僱員：中國內地（「中國內地」）715名僱員、香港24名僱員及海外13名僱員
- On-site safety inspection and evaluation system
  地盤安全監督及評估系統
- Safety hazards prevention measures implemented in various stages ranging from research, design, manufacture, operation and maintenance
  在研究、設計、生產、營運及維護各環節實施的安全隱患預防措施

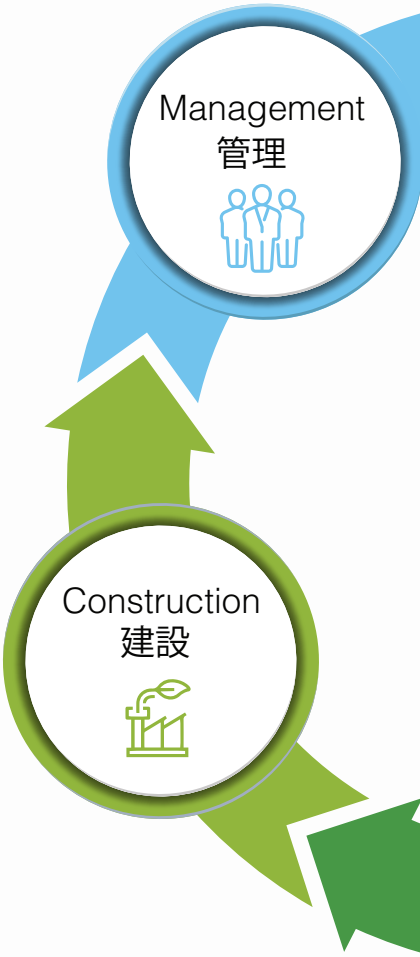
Social and relationship capital
社會關係資源

- Our key stakeholders include directors and the senior management, investors, employees, clients, suppliers, communities, business partners, NGOs engaged in environment protection and governments, etc.
  我們的主要利益相關者包括董事及高級管理層、投資者、僱員、客戶、供應商、社區、業務合作夥伴、從事環保工作的非政府組織及政府等

Natural capital
自然資源

- Water consumption: 756 tons in offices and 46,851 tons in power plants
  用水量：辦公室756噸及電站46,851噸
- Total energy consumption in offices and power plants: approximately 44,530MWh
  辦公室及電站能源消耗總量：約44,530兆瓦時

OUR BUSINESS ACTIVITIES



我們的經營活動

OUTCOMES FOR FY2021 2021財政年度經營成果

- Revenue: RMB2,825 million
  收入：人民幣2,825百萬元
- Net profit: RMB650 million
  溢利淨額：人民幣650百萬元
- EBITDA: RMB2,397 million
  EBITDA：人民幣2,397百萬元

- Total number of solar power plants: 97
  太陽能發電站總數：97座
- Total number of wind power plants: 7
  風力發電站總數：7座
- Total electricity generation volume: approximately 3,879,751MWh
  總發電量：約3,879,751兆瓦時
- Total installed capacity: approximately 4,168.02MW
  總裝機容量：約4,168.02兆瓦

- Software copyrights obtained: 20
  獲得軟體著作權：20項
- Utility model patents: 10
  實用新型專利：10項

- Overall number of employees training: 7,072 person-times
  僱員培訓總數：7,072人次
- Work-related fatalities: 0
  因工死亡人數：0
- Lost days due to work-related injury: 0
  因工傷損失工作天數：0
- Percentage of employees who received physical health check: 100%
  接受健康檢查的僱員比例：100%

- Greenhouse gas emissions: approximately 25,316 tCO_2e
  溫室氣體排放量：約25,316噸二氧化碳當量
- Hazardous waste generated: 1.60 tons
  有害廢棄物產生量：1.60噸
- Non-hazardous waste generated: 21.23 tons
  無害廢棄物產生量：21.23噸
- Non-hazardous waste recycled: 19.70 tons (Recovery rate: approximately 93%)
  無害廢棄物回收量：19.70噸（回收率：約93%）
- Scrapped solar panels recycled: 42.49 tons
  報廢太陽能電池板回收量：42.49噸

- Engaged in countryside development and service practices, and accumulated spending of RMB14 million in rural poverty alleviation
  投身於鄉村振興服務實踐，累計為鄉村扶貧支出人民幣14百萬元
- Shandong Dezhou Lingcheng Qianchao Photovoltaic Power Station and Inner Mongolia Damaoqi Photovoltaic Power Station have provided local community with clean energy, created economic value and formed good social benefits
  山東德州陵城乾超光伏電站與內蒙古達茂旗光伏電站為當地居民提供了清潔能源，創造了經濟價值，形成了良好的社會效益

LETTER TO STAKEHOLDERS
致利益相關者的信

Dear Valued Stakeholders,

During 2021, the first year of the "14th Five-year Plan", despite the adverse impact of the COVID-19 pandemic, we focused on our main business and accelerated the deployment of resource distribution and reserves, continuously enhancing our awareness of standardized operation, improving our fundamental management level, and actively fulfilling our corporate social responsibilities.

Since the reorganization, BJEI has been focused on clean energy and integrated energy investment and operation. In particular, it has been actively deploying strategic emerging industries such as stored energy and hydrogen energy, strengthening the deep integration of energy and information industry technologies, and constructing the clean energy industrial ecosystem "dominated by green energy, complemented by multiple energy sources and characterised by smart collaboration", to start a new journey of sustainable development.

In 2021, actively responding to the national development requirements of "carbon peak and carbon neutrality", we fully grasped the opportunity period for the development of the clean energy industry to vigorously develop green energy and smart energy, in an effort to realize green, low-carbon and smart development for a green home. With industry-leading technical standards and excellent innovation capabilities, the Group has various photovoltaic power plants all over China. The Group has been actively exploring an innovative new model of "PV+", under which photovoltaic development is integrated with local industries, so as to create a win-win situation for social benefits, environmental benefits and economic benefits.

尊敬的各位利益相關者：

2021年是「十四五」規劃的開局之年，我們克服新冠疫情帶來的不利影響，聚焦主業，加快資源佈局和儲備，不斷增強規範化經營意識，持續提高基礎管理水平，積極履行企業社會責任。

自重組以來，京能國際聚焦清潔能源和綜合能源投資運營，積極佈局儲能、氫能等戰略新興產業，強化能源與信息產業技術深度融合，構築「綠色為主、多能互補、智慧協同」的清潔能源產業生態體系，啟動可持續發展的新征程。

2021年，我們積極響應國家「碳達峰、碳中和」的發展要求，全力把握清潔能源產業發展的機遇期，大力發展綠色能源及智慧能源，致力於實現綠色低碳智慧發展，構建綠色家園。憑藉行業領先的技術水準和卓越的創新能力，本集團旗下光伏電站遍布全國，積極探索創新的「光伏+」新模式，讓光伏發展與當地產業相結合，創造社會效益、環境效益及經濟效益多方共贏的局面。

In order to practice sustainable development, we continuously improve our own environmental management system and policies and implement energy conservation and environmental protection measures, with an effort to reduce the impact of our own operations on the environment. Adhering to the core values of "people-oriented, pursuing excellence", we pay attention to the introduction and training of talents to consolidate the foundation of talent team construction, so as to promote the sustainable development of the Company's business. Attaching great importance to safe production, we strengthen the safety monitoring mechanism, and implement safety training and education, so as to effectively protect the safety and health of our employees, and build a safety-oriented enterprise.

為踐行可持續發展，我們不斷完善自身環境管理體系及制度的建設，落實節能環保措施，努力降低自身營運對環境造成的影響。我們始終堅守「以人為本、追求卓越」的核心價值觀，注重人才引進及培養，夯實人才隊伍建設基礎，推動公司業務持續發展。我們重視安全生產，強化安全監控機制，落實安全培訓與教育，切實保障員工安全與健康，構建安全型企業。

Adhering to high moral and ethical principles, we, as an international new energy resource pooling platform, pursue excellence and innovation as well as continuous supply, striving to enhance our service capabilities and service levels. While sharing the development achievements of clean energy technology, we actively fulfil our corporate social responsibilities, devote ourselves to social services, and use our professional technology and resources to give back to the society, so as to promote the long-term sustainable development of the society.

作為全球新能源資源匯集平台，我們以恪守高度的道德和倫理準則為基礎，追求卓越創新與持續供應，竭力提升自身服務能力與服務水平。在分享清潔能源技術發展成果的同時，我們積極履行企業社會責任，投身於社會服務，並利用專業技術及資源回饋社會，推動社會長期可持續發展。

Looking forward to 2022, we will continually adhere to the responsibility of building an ecological civilization. In particular, we will seize the opportunity of a new round of energy structure adjustment and technological change, insist on technological innovation and technological improvement, and strive to promote the scale expansion and intensive development of clean energy. Moreover, we will provide full life-cycle services to global energy users through value creation, so as to build ourselves into a green, safe and efficient "first-class international clean energy ecological investment operator" with advanced management model, stable profitability, capable talent team and remarkable reform results. Finally, I would like to take this opportunity to express my sincere gratitude to all employees, partners, shareholders and directors for their support and dedication to the Group!

展望2022年，我們將繼續堅持以建設生態文明為己任，抓住新一輪能源結構調整和技術變革機遇，堅持科技創新與技術提升，努力推進清潔能源規模化和集約化發展，通過價值創造為全球能源用戶提供全生命週期服務，打造管理模式先進、盈利能力穩健、人才隊伍精幹、改革成效顯著、綠色安全高效的「一流的國際化清潔能源生態投資運營商」。最後，我藉此機會，衷心感謝全體員工、合作夥伴、股東與董事對本集團的支持和付出！

Zhang Ping
Chairman of the Board

張平
董事會主席

SUSTAINABILITY MANAGEMENT APPROACH
可持續發展管理方針

BOARD STATEMENT

The Company has integrated the concept of sustainable development into its business development and operation and committed to creating a clean energy industry chain to continuously improving its core competitiveness. We have always maintained close communication with stakeholders based on the principle of mutual-benefit and mutual-trust and share information on environmental and social responsibilities, so as to establish meaningful and "win-win" relationships in the long run. At the same time, we actively respond to the call of the United Nations, continuously explore the integration of Sustainable Development Goals ("SDGs") into operation and management as well as their application and development at micro-levels of the Company, in order to promote sustainable development.

董事會聲明

本公司將可持續發展理念融入經營發展與業務營運中，深耕清潔能源產業鏈，不斷增強清潔能源主業核心競爭力。一直以來，我們本著互惠互信的精神，與利益相關者保持密切的溝通，並通過分享環境和社會責任相關資訊以建立長期有意義的「雙贏」關係。與此同時，我們積極回應聯合國的號召，持續探索可持續發展目標（「SDGs」）於經營管理中的應用與發展，並將其聚集到企業微觀主體層面，以推動自身可持續發展。

(Source of the Picture: United Nations Development Programme)

（圖片來源：聯合國開發計劃署）

The Board attaches great importance to the sustainable development of the Company, and is responsible for decision-making and leadership of the strategic direction of the Company's sustainable development. It also reviews and considers the sustainable development approaches, policies, systems, objectives, risks and opportunities and related major events, and monitors the achievement of objectives and performing accountability. In order to enhance the Company's overall ESG process and to ensure effective implementation and promotion of ESG efforts, the Board has delegated the responsibility for managing sustainability related issues of the Company to a cross-departmental ESG reporting team, which is managed by the chief executive officer of the Company (the "CEO"). The Board also assumes full responsibility for the annual ESG report, identifying material topics of the Company. They ensure truthfulness, compliance and effectiveness of the Company's disclosures by reviewing and approving ESG reports.

董事會高度重視本公司的可持續發展工作，負責決策及領導本公司的可持續發展戰略方向，檢討和審議可持續發展方針、政策、制度、目標、風險及機遇和相關重大事件等，監督目標完成情況並履行問責。為提升公司整體ESG進程，確保ESG工作有效落實與推進，董事會授權跨部門ESG報告團隊負責管理本公司之可持續發展相關事宜，並由本公司首席執行官（「首席執行官」）負責管理。董事會亦對年度ESG報告承擔全部責任，確認本公司的實質性議題，並通過審閱及批准ESG報告，確保本公司信息披露的真實、合規及有效。

The Group has established comprehensive and effective sustainability management and work system. The "Manual for Quality, Environmental and Occupational Health and Safety Management" was approved and issued by CEO regulates the quality, environmental and occupational health and safety management system as well as management approaches, objectives and indicators of the Group, ensuring the supply of manpower, materials and financial resources necessary for operation of the management system and facilitating the sustainable development.

本集團已建立全面、高效的可持續發展管理和工作體系，由首席執行官審批並發佈《質量、環境、職業健康安全管理手冊》明確規範了本集團質量、環境和職業健康安全的管理體系、管理方針及管理目標與指標，確保管理體系運作所需的人力、物質及財政資源供應，為可持續發展保駕護航。

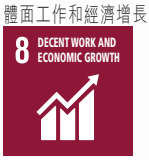
REGULAR COMMUNICATION WITH STAKEHOLDERS

Every year, the Company maintains communication with stakeholders through various channels and platforms such as annual reports, ESG reports, surveys, seminars, conferences and WeChat official accounts, and accommodates the concerns of all parties based on their feedbacks. We have incorporated the SDGs of United Nations into our business development strategy and are committed to integrating relevant SDGs into our response to stakeholders, with an aim to promote the integration of operational practices and social values. We summarized the key concerns of various stakeholder groups and responded with actions taken in 2021, details are set out in the table below.

與利益相關者定期溝通

本公司每年均會通過年報、ESG報告、調研、研討會、會議及微信公眾號等多種渠道和平台與利益相關者保持交流並重視運用反饋對各方關注事項作出行動及改進。我們已將聯合國SDGs納入業務發展戰略之中，致力將向利益相關者的回應與相關SDGs結合，積極促進營運實踐與社會價值共融。我們總結各利益相關者群體的主要關注議題，並以2021年落實的行動回應，詳見下表。

Stakeholder Groups 利益相關者群體	Key Concerns 主要關注議題	Our Response in 2021 我們於2021年的回應	Corresponding SDGs 對應的SDGs
Suppliers 供應商	• Supply Chain Management 供應鏈管理 • Environmental Compliance 環境合規 • Green Procurement 綠色採購	• Formulated a series of policies to regulate supply chain management 制定一系列政策規範供應鏈管理工作 • Prioritized cooperation with suppliers that have established management systems related to environmental and social responsibilities 優先考慮與已建立環境及社會責任相關管理體系的供應商合作 • Conducted annual supplier assessment regularly at the end of each year 於每年年末例行開展供應商評估工作 • Maintained close communication with suppliers through various channels 透過多種渠道與供應商保持密切溝通	Partnerships for the goals 促進目標實現的伙伴關係
Community 社區	• Community Engagement and Participation 社區投入與參與 • Environmental Input and Education 環保投入及教育 • Environmental Benefits 環境效益 • Protecting the Ecological Environment and Biodiversity 保護生態環境與生物多樣性 • Tackling Climate Change 應對氣候變化	• Engaged in countryside development and service practices, and accumulated spending of RMB14 million in rural poverty alleviation 投身於鄉村振興服務實踐，累計為鄉村扶貧支出人民幣14百萬元 • Organized tree-planting activities in the power station to improve environment 在電站組織開展植樹活動，以改善環境	No poverty 消除貧困 Climate action 氣候行動

Stakeholder Groups 利益相關者群體	Key Concerns 主要關注議題	Our Response in 2021 我們於2021年的回應	Corresponding SDGs 對應的SDGs
Investors 投資者	• Business Ethics 商業道德 • Anti-corruption 反貪腐 • Operational Compliance 經營合規 • Risk Management 風險管理 • Economic Performance of the Company 公司經濟表現	• Formulated the comprehensive Compliance Manual and related employee policies 制定完善的合規管理手冊及相關僱員政策 • Strengthened the internal monitoring mechanism and set up complaint and whistleblowing channel 強化內部監督機制，並設立投訴舉報渠道 • Provided anti-corruption training for all our employees, including the Group's directors, management and employees 為所有員工，包括本集團董事、管理層及員工提供反貪污培訓	
Employees 員工	• Talent Management 人才管理 • Employee Diversity and Equal Opportunities 員工多元化與平等機會 • Employee Communication 員工溝通 • Employee Benefit and Interests 員工福利與權益 • Employee Training and Development 員工培訓與發展 • Employee Safety and Health 員工安全與健康 • Prevention of Child Labour and Forced Labour 預防童工及強制勞工	• Provided an equal working environment free from harassment and discrimination 提供平等、零騷擾及零歧視的工作環境 • Recruited employees in accordance with an open, fair and equitable talent competition and selection mechanism 按照公開、公正及公平的人才競爭和選拔機制進行僱員招聘 • Protected employees' rights to advice and participation through various channels 透過多種渠道保障僱員的建議權與參與權 • Continuously improved the construction of internal compensation and benefit system to provide employees with competitive compensation and benefit packages 持續完善內部薪酬與福利體系及制度的建設，努力為僱員提供具有競爭力的薪酬和福利待遇 • Regularly carried out various employees activities to create a rich and diverse workplace life 定期開展各種員工活動，為員工打造豐富多樣的職場生活 • Developed training programs with corresponding topics for employees at all levels based on the "4+1" training system 根據「4+1」培訓體系，為各級僱員設計相應主題的培訓計劃 • Adopted a four-level safety monitoring and management system, and carried out safety training and education 採取四級安全監控管理系統，並開展安全培訓和教育 • Recorded zero occupational health and safety accident for seven consecutive years 連續七年錄得零職業健康安全事故 • Strictly examined the basic information of candidates for prohibiting child labour and forced labour 對應聘者的基本信息進行嚴格審驗，杜絕童工及強制勞工	Gender equality 性別平等 Decent work and economic growth 體面工作和經濟增長  Reduced inequalities 減少不平等

Stakeholder Groups 利益相關者群體	Key Concerns 主要關注議題	Our Response in 2021 我們於2021年的回應	Corresponding SDGs 對應的SDGs
Environmental NGOs 從事環保工作的非政府組織	• Greenhouse Gas Emissions 溫室氣體排放 • Managing Emissions 排放物管理 • Protecting Ecological Environment and Biodiversity 保護生態環境與生物多樣性 • Preserving Land Resources 保護土地資源 • Clean Energy Opportunities 清潔能源機遇 • Environmental Benefits 環境效益 • Environmental Input and Education 環保投入與教育 • Environmental Impact Assessment for Projects under Construction 在建項目環境影響評估 • Tackling Climate Change 應對氣候變化	• Set environmental objectives and promoted the implementation of energy conservation and environmental protection measures 設立環境目標，推進節能環保措施的落實 • Prepared the Manual for Quality, Environmental and Occupational Health and Safety Management as a guide to employees' code of conduct in environmental management 編制《質量、環境、職業健康安全管理手冊》作為僱員在環境管理方面行為守則的指引 • Implemented a number of measures to reduce emissions of waste gas, waste water and wastes 實施多項措施以減少廢氣、廢水及廢棄物的排放 • Advocated green office, paperless office to avoid waste of resources 主張綠色辦公、無紙化辦公，以避免資源浪費 • Adopted slope protection support and wall protection piles to prevent earth collapse and soil erosion 採取護坡支撐和護壁樁，以防止土方坍塌，水土流失 • Integrated photovoltaic development with local industries to maximize the use of land resources 光伏發展與當地產業融合以最大限度利用土地資源 • Generated renewable energy to offset the carbon emissions from fossil fuel combustion 生產可再生能源，以抵銷化石燃料燃燒產生的碳排放 • Conducted volunteering activities for environmental protection nearby the power stations 電站周邊開展環保志願活動 • Conducted environmental impact assessments for every project and ensured corresponding mitigation measures are implemented 對各項目進行環境影響評估並確保相應緩解措施得到實施 • Formulated the Contingency Plan for Natural Disaster Accidents to cope with possible risks caused by climate change 制定《自然災害事故應急預案》，以應對氣候變化可能帶來的風險	Climate action 氣候行動 13 CLIMATE ACTION Life on land 陸地生物 15 LIFE ON LAND

Stakeholder Groups 利益相關者群體	Key Concerns 主要關注議題	Our Response in 2021 我們於2021年的回應	Corresponding SDGs 對應的SDGs
Customers 客戶	• Clean Energy Opportunities 清潔能源機遇 • Product Responsibilities 產品責任 • Managing Product and Service Quality 產品和服務質量管理 • Customer Satisfaction 客戶滿意度 • Information Privacy and Security 信息隱私與安全 • Intellectual Property Protection 知識產權保護	• Generated renewable energy to offset the carbon emissions from fossil fuel combustion 生產可再生能源，以抵銷化石燃料燃燒產生的碳排放 • Strengthened environmental protection from the very beginning and explored the construction of clean energy industrial clusters 強化源頭本質環保，探索構建清潔能源產業集群 • Formulated a series of internal quality control policies covering the entire process from the design and development to the construction and operation of power plants 制定涵蓋電站設計開發到施工營運全過程的一系列內部質量控制政策 • Established an all-round and multi-level customer service system to enhance customer satisfaction 建立全方位且多層次客戶服務體系，以提升客戶滿意度 • Formulated internal confidentiality management rules and improved the comprehensive confidentiality management system 制定內部保密管理規定和完善全面的保密管理體系 • Prepared the Measures for the Management of Intangible Assets to improve intellectual property management 編制《無形資產管理辦法》，以完善知識產權管理	Affordable and clean energy 可負擔的清潔能源 7 AFFORDABLE AND CLEAN ENERGY

ASSESSMENT OF MATERIAL TOPICS FOR 2021

To implement the "materiality" reporting principle, we invited internal and external stakeholders to participate in the assessment of material topics, so as to identify ESG issues that have a significant impact on stakeholders and the environmental, social and governance as a result of the Group's operation. We conducted materiality assessment in the form of online questionnaire survey and analyzed in accordance with the materiality assessment process of the GRI, including four steps, namely identifying, prioritizing, validating and reviewing.

2021年度實質性議題評估

為貫徹落實「實質性」報告原則，我們邀請各內部和外部利益相關者參與實質性議題評估，以識別對利益相關者產生重大影響及因本集團營運而對環境、社會及管治產生重大影響的的ESG議題。我們透過線上問卷調查的形式開展實質性評估，並依照全球報告倡議組織(GRI)的實質性評估過程，包括鑒別、排序、確認和檢視四個步驟進行分析。

1. Identifying 鑒別

- In accordance with HKEX's Environmental, Social and Governance Reporting Guide, Global Reporting Initiative (GRI)'s Sustainability Reporting Standards, MSCI's ESG Rating, Integrating the SDGs into Corporate Reporting: A Practical Guide and peer analysis, we identified potential material topics of the Group
- 根據香港交易所《環境、社會與管治報告指引》、全球報告倡議組織（GRI）《可持續發展報告標準》、明晟（MSCI）ESG評級、《企業報導整合SDGs實務指南》及同業分析等識別本集團潛在實質性議題

2. Prioritizing 排序

- We invited various stakeholders (including customers, employees, suppliers, business partners, etc.) and representatives of the Group's management to participate in the online survey to collect their importance score to the Group's potential material topics
- 邀請不同的利益相關者（包括客戶、員工、供應商、商業合作夥伴等）及本集團的管理層代表參與線上問卷調查，收集其對本集團潛在實質性議題的重要性評分

3. Validating 確認

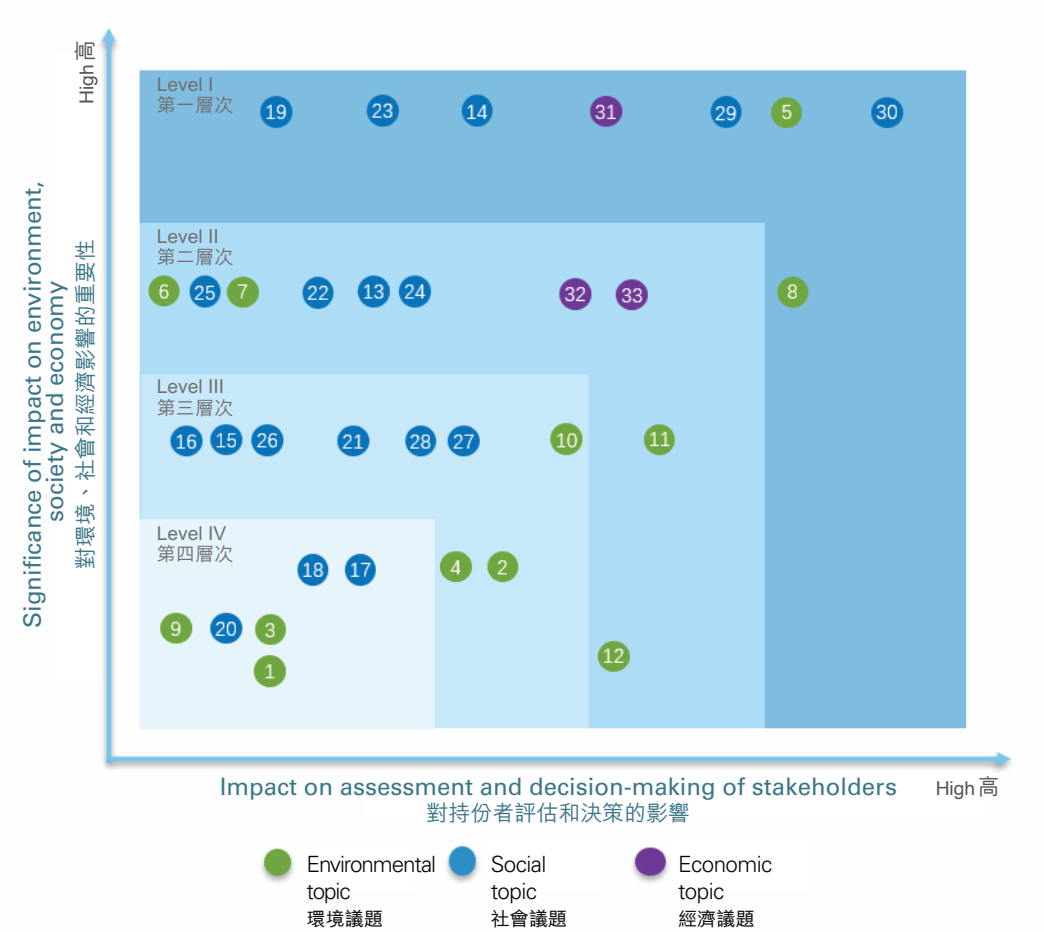
- We submitted and reported to the Board of the Group the list of material topics and the results of assessment. The Board reviewed and confirmed the results of assessment of material topics for the year
- 將實質性議題清單及評估結果提交並呈報本集團董事會，董事會審視及確認本年度的實質性議題評估成果

4. Reviewing 檢視

- We reviewed the assessment process of material topics and sought the possibility of improvement
- 檢視實質性議題評估過程，並尋找改善的可能

We prioritized the results of communication with stakeholders according to two dimensions of "significance of impact on economy, environment and society" and "significance of impact on assessment and decision-making of stakeholders", and confirmed the matrix of material topics below. The Board has reviewed and confirmed the results of the assessment of material topics.

我們將利益相關者溝通結果，按照「對經濟、環境和社會影響的重要性」及「對利益相關者評估和決策的影響重要性」兩個維度進行排序，確定以下實質性議題矩陣。董事會已審閱並確認此次實質性議題評估結果。



Level I 第一層次	Level II 第二層次	Level III 第三層次	Level IV 第四層次
5 Environmental compliance 環境合規	6 Protecting ecological environment and biodiversity 保護生態環境與生物多樣性	2 Energy and resource management 能源與資源管理	1 Water consumption 水資源消耗
8 Clean energy opportunities 清潔能源機遇	7 Protecting land resources 保護土地資源	4 Greenhouse gas emissions 溫室氣體排放	3 Managing emissions 排放物管理
14 Employee safety and health 員工安全與健康	11 Environmental impact assessment for projects under construction 在建項目環境影響評估	10 Environmental benefits 環境效益	9 Environmental input and education 環保投入與教育
19 Prevention of child labour and forced labour 預防童工及強制勞工	12 Tackling climate change 應對氣候變化	15 Employee training and development 員工培訓與發展	17 Employee communication 員工溝通
23 Product responsibilities 產品責任	13 Talent management 人才管理	16 Employee benefits and interests 員工福利與權益	18 Employee diversity and equal opportunities 員工多元化與平等機會
29 Business ethics 商業道德	22 Green procurement 綠色採購	21 Supply chain management 供應鏈管理	20 Community engagement and participation 社區投入與參與
30 Anti-corruption 反貪腐	24 Managing product and service quality 產品和服務質量管理	26 Information privacy and security 信息隱私與安全	
31 Operational compliance 經營合規	25 Customer satisfaction 客戶滿意度	27 Intellectual property protection 知識產權保護	
	32 Risk management 風險管理	28 Technology R&D and innovation 技術研發與創新	
	33 Economic performance of the Company 公司經濟表現		

The topics in the matrix were divided into four levels, of which the topics in Level I were the Group's material topics. According to the analysis result, the Group's material topics in 2021 focusing on environmental compliance, clean energy opportunities, employee safety and health, prevention of child labour and forced labour, product responsibilities, business ethics, anti-corruption, and operational compliance. Subsequent sections of this report will focus on our response during the Year. In the future, BJEI will continue to pay attention to the latest development of the industry and the needs and expectations of various stakeholders, as well as regularly review and revise the list of topics.

矩陣中的議題分為四個等級，其中第一等級的議題為本集團的實質性議題。根據分析結果，2021年本集團的實質性議題聚焦於環境合規、清潔能源機遇、員工安全與健康、預防童工及強制勞工、產品責任、商業道德、反貪腐及經營合規。本報告後續內容中將重點披露我們在本年度採取的應對行動。未來，京能國際將繼續關注行業的最新發展及各利益相關者的需求和期望，定期檢討並修訂議題清單。

FOCUS ON CLEAN ENERGY BUSINESS TO ACHIEVE SUSTAINABLE DEVELOPMENT

聚焦清潔能源主業 實現持續穩健發展

To explore and build an industrial cluster of clean energy industry "dominated by green energy, complemented by multiple energy sources and characterised by smart collaboration", and strengthen environmental protection at source to facilitate high-quality and sustainable development of enterprises.

探索構築「綠色為主、多能互補、智慧協同」的清潔能源產業集群，強化源頭本質環保，為企業高質量、可持續發展增色添彩。

Affordable and clean energy
可負擔的清潔能源

Climate action
氣候行動

Life on land
陸地生物

PROVIDING CLEAN ENERGY

The Group has been actively engaged in the development and operation of solar power and wind power generation and other renewable energy projects for a long time, with its business scope covering the entire clean energy industry chain including photovoltaic power generation, wind energy, hydrogen energy, energy storage and comprehensive energy. During the Year, the Group had 97 solar power plants and 7 wind power plants, with a total installed capacity of approximately 4,168.02MW, representing an increase of approximately 101.3% compared to 2020, and the total electricity generation volume of approximately 3,879,751 MWh.

提供清潔能源

本集團長期以來積極投身於太陽能及風力發電以及其他可再生能源項目的開發與運營之中，業務範圍涵蓋光伏發電、風能、氫能、儲能、綜合能源等清潔能源全產業鏈。於本年度，本集團擁有97座太陽能發電站及7座風力發電站，總裝機容量相比2020年增加約101.3%，達到約4,168.02兆瓦，本年度總發電量約為3,879,751兆瓦時。

We firmly believe that further transformation of renewable and clean energy is the key to tackling future climate change. During the Year, the electricity volume generated from the Group's power plants was sufficient to support one-year electricity usage of 2,587 thousands households. In the short term, the Group will remain focused on the development of solar power and wind power generation businesses while endeavouring to diversify renewable energy portfolios to complement multiple energy supplies for the benefit of more people in the long run. The table below shows the positive environmental effect of our renewable energy generation.

我們堅信深入推進可再生清潔能源轉型是應對未來氣候變化的關鍵。於本年度，本集團的電站發電量足夠為258.7萬戶居民供應整年的電力使用。短期內，本集團仍將集中精力發展太陽能及風力發電業務，並加強可再生能源組合的多樣性，從長遠角度補充多種能源供應，造福更多民眾。下表顯示我們的可再生能源發電為環境帶來的正面影響。

	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total electricity generation volume (MWh) 總發電量（兆瓦時）	34,939	485,046	859,730	1,345,830	2,115,253	3,109,894	3,172,916	2,795,834	3,879,751
Approximately equivalent to: 大約相當於：									
Standard coal saved (Tons) 節約標準煤（噸）	11,530	160,065	283,725	444,124	700,000	1,020,000	1,260,000	855,500	1,183,000
Carbon dioxide emissions reduced (Tons) 減少二氧化碳排放（噸）	29,978	416,169	737,684	1,154,722	1,815,000	2,680,000	3,160,000	2,340,000	3,228,000
Nitrogen oxide emissions reduced (Tons) 減少氮氧化物排放（噸）	269	3,735	6,620	10,363	16,287	26,000	47,000	22,400	31,038
Dust emissions reduced (Tons) 減少煙塵排放（噸）	17	243	430	673	1,058	1,567	1,586	1,398	1,940

PRESERVING LAND RESOURCES

The Group has always adhered to the dual goals of providing clean energy and protecting valuable land resources, and is committed to become a first-class international clean energy ecological investment operator. Through the effective application of scientific management and land restoration measures, we do our best to reduce the possibility of negative impacts of renewable energy projects on land.

Selecting the site carefully

The Group has reduced the impact on existing land use by selecting wastelands, deserts and idle lands in coal mining subsidence areas as the preferred sites for project construction. When the use of relatively valuable land, such as farmland or woodland, is unavoidable, we will strive to preserve the original landscape and work closely with local governments to meet national and local agro-forestry regulations.

保護土地資源

本集團始終堅持實現提供清潔能源及保護寶貴土地資源的雙重目標，致力於成為一流的國際化清潔能源生態投資運營商。我們透過有效應用科學的管理及土地恢復措施，盡最大努力降低可再生能源項目對土地造成負面影響的可能性。

審慎選址

本集團通過項目建設場地首選荒地、沙漠及採煤沉陷區閒置土地等措施，減少對現有土地用途的影響。當不可避免使用農地或林地等相對寶貴的土地時，我們會竭力維護原始地貌，並與地方政府緊密溝通，以滿足國家及當地農林業的規定。

In order to fully understand the impacts of each project on its surrounding environment, we will carry out an environmental impact assessment for each project. This includes a detailed assessment of the natural environment (e.g., the status of soil erosion, distribution of water resources, noise effect, vegetation coverage and biodiversity) of the selected location, to ensure that corresponding mitigation measures are implemented.

為全面了解項目建設對周邊環境的影響，我們會對每個項目開展環境影響評估工作。評估內容包括對選定地點的自然環境，如土壤侵蝕的現狀、水資源分佈情況、噪聲影響、植被覆蓋率及生物多樣性等，進行詳細評估，並確保緩解措施得以實施。

Mitigation Measures 緩解措施

Implement water pollution prevention measures;
落實水污染防治措施；
Implement atmospheric environmental pollution control measures;
落實大氣環境污染防治措施；
Classified management, comprehensive utilization and, proper handling and disposal of solid waste;
固體廢棄物分類管理、綜合利用和妥善處理處置；
Implement noise environmental pollution prevention measures;
落實噪聲環境污染防治措施；
Implement environmental risk prevention measures;
落實環境風險防範措施；
Implement ecology and environment protection measures;
落實生態環境保護措施；
Establish mechanisms for environmental information disclosure and public participation.
建立環境信息披露與公眾參與機制。

Reversing land degradation

In order to reverse land degradation and combat sandification and desertification at our operation sites, the Group has put in place prevention and control programmes, including:

逆轉土地退化

為逆轉土地退化，並在我們的營運地點對抗土地沙化及沙漠化，本集團已制定相關預防控制計劃，包括：

Prevention 預防

- Installation of low-standing and high-standing sand barriers to prevent sandification effectively
  安裝低立式及高立式沙障以有效防治沙化

Control 控制

- Designing and implementing the vegetation restoration scheme for the surface damaged in the construction process, with an aim to prevent soil erosion by continuously strengthening the greening work and tree management at the operation sites
  對施工過程中破壞的地表進行植被恢復方案設計並實施植被恢復，通過持續加強在營運地點的綠化工作及樹木管理防止土壤侵蝕

Repair 修復

- Regularly cleaning solar panels with water, which can moisturise the surrounding areas and facilitate soil remediation
  定期用水清潔太陽能板可以滋潤周圍地區，促進土壤修復

For the photovoltaic power stations located in coal mining subsidence areas, we attached importance to the restoration and reconstruction of surrounding vegetation, and also pay attention to prevent further soil erosion and disasters such as severe landslides caused by heavy rainfall. We implemented various measures to strengthen the management of the subsidence areas, including real-time monitoring of subsidence areas and subsidence alert. We also conducted preliminary landfill, reinforcement and greening of subsidence areas through the construction of photovoltaic power stations and PV + Forestry projects. Engineering measures were also taken to reinforce the steep slope.

針對坐落於採煤沉陷區的光伏電站，我們在重視恢復與重建其周圍植被的同時，亦注重防止水土進一步流失及因暴雨引起的嚴重山崩等災害。我們實施加強沉陷區治理的各種措施，包括對沉陷危險區進行即時監控和沉降警報，以及透過結合光伏電站建設和林光互補工程，對沉陷區進行初步的填埋、加固及綠化，同時採取工程措施加強陡坡。

Performing greening obligations and carrying out tree-planting activities

In May 2021, in response to the "Hainan Prefecture Greening Committee Office" document, Qinghai Gonghe Power Station organized tree planting activities around the power station, excavating the original dead trees and replanting new trees. A total of 345 trees were planted during the planting activities, with a survival rate of 97%.

踐行綠化義務、開展植樹活動

2021年5月，青海共和電站為響應《海南州綠化委員會辦公室》文件，於電站周邊組織開展植樹活動，對原枯死的樹木開挖，重新種植新樹木。在此次植樹活動中，我們共種植345棵樹木，成活率達97%。

Tree planting activities
植樹活動

Integration of photovoltaic development with local industry

In addition to the traditional industry model of PV power plants, the Group has been actively exploring innovative models such as "PV + Forestry" and "PV + Animal husbandry", realizing the integrated use of green energy and land in an intensive and three-dimensional process to maximize the use of land resources, and provide new driving force for the transformation of the industry, so as to achieve significant economic and social benefits.

光伏發展與當地產業相結合

在傳統光伏電站產業模式之外，本集團一直在積極探索創新的「光伏+林業」及「光伏+畜牧業」等新模式，實現綠色能源和土地的集約化、立體化綜合利用，最大限度地利用土地資源，為產業轉型發展提供新動力，實現顯著的經濟效益和社會效益。

Shandong Dezhou Lingcheng Qianchao Photovoltaic Power Station is located in Zhengjiazhai Town, Lingcheng District, Dezhou City, Shandong Province, the power station adopts the form of "PV + Agriculture", using more than 600 acres of vacant land in the photovoltaic field to plant corn, wheat, soybeans and other crops; the power station provides clean energy power for the power grid at the same time, but also for the local villagers to create agricultural benefits and the formation of good social benefit.

山東德州陵城乾超光伏電站位於山東省德州市陵城區鄭家寨鎮，電站採用農光互補形式，利用光伏場區600餘畝空地種植玉米、小麥、大豆等農作物；電站為電網提供清潔能源電力的同時，也為當地村民創造了農業收益，形成了良好的社會效益。

Inner Mongolia Damaoqi Photovoltaic Power Station is located in the pastoral area, using the "PV +" new model of "husbandry". With the local rich resources, the construction of photovoltaic power stations on the ground and the planting of pasture and sheep raising under the ground not only provide clean energy for the local area and create economic value, but also effectively control fire hazards, and improve the local ecological environment, serving multiple purposes.

內蒙古達茂旗光伏電站地處牧區，採用「牧光互補」的「光伏+」新模式。借助當地豐富的資源，上面建光伏電站，下面種植牧草養羊，不僅為當地提供清潔能源，創造經濟價值，同時有效控制火災隱患，還改善當地的生態環境，一舉多得。

CARING FOR THE ECOLOGICAL ENVIRONMENT

The Group pays attention to ecological and environmental protection. After processed by surface etching and reflection-weakening technology, the solar photovoltaic panels of the Group has achieved a surface reflectance of less than 4%, which will not cause significant light pollution or damage to wild animals. Due to our active implementation of the environmental protection activities over the years, the ecological environment surrounding the Group's power stations in various regions has continued to improve in recent years, and the biodiversity keeps increasing. In the future, we will continue to encourage on-site operation and maintenance personnel to pay attention to the harmonious coexistence between project development and the surrounding environment while maintaining the safe and stable operation of the power stations and providing clean energy for the society in the long run. During the Year, the Group newly revised and issued the Administrative Measures for Environmental Protection and the Guidelines for Technical Supervision of Environmental Protection to implement systematic management of environmental protection.

Focusing on the surrounding ecology

During the Year, new facilities were built and renovated at a number of the Group's power stations to reduce the impact on the surrounding environment.

愛護生態環境

本集團注重生態環境保護，所採用的太陽能光伏板經絨面處理和反射技術處理，表面反射率低於4%，不會造成明顯光污染影響，及對野生動物造成傷害。由於多年來積極推行環境保護支援活動，本集團旗下各區域電站周邊生態環境近年來持續改善，生物多樣性不斷增加。未來，我們將繼續鼓勵現場運維人員在長期保持電站安全、穩定運行及為社會提供清潔能源，並注重項目發展與周邊生態的和諧共生。於本年度，本集團新修訂並發布《環境保護管理辦法》、《環境保護技術監督導則》，實行環境保護體系化、系統化管理。

聚焦周邊生態

於本年度，本集團多處電站進行設施新建、改造工程，以降低對周邊環境的影響。

Inner Mongolia Zhenglanqi Photovoltaic Power Station, Northern Branch
北方分公司內蒙古正藍旗光伏電站

- In order to store used transformer oil and used batteries, Zhenglanqi Photovoltaic Power Station was renovated based on the existing storages to reduce the impact of hazardous waste on the surrounding environment.
  為存放廢舊變壓器油和廢舊電池，正藍旗光伏電站利用現有庫房進行了改造，以減少危險廢棄物對周邊環境的影響。

Xinjiang Changji Power Station, Northwest Branch
西北分公司新疆昌吉電站

- According to the Water Pollution Prevention and Control Law of the PRC, Environmental Protection Law of the PRC, Interim Measures for the Administrative Departments to Transfer Non-compliant Cases Involving Environment Protection Applicable to Administrative Detention and other laws and regulations, industrial enterprises that are not equipped with corresponding sewage treatment facilities, whose sewage treatment does not meet the standards and whose sewage is not discharged in accordance with the corresponding provisions, shall assume the legal responsibility. To this end, Changji Power Station has invested RMB150,000 in the construction and installation of sewage treatment facilities.
  依據《中華人民共和國水污染防治法》、《中華人民共和國環境保護法》、《行政主管部門移送適用行政拘留環境違法案件暫行辦法》等法律法規，工業企業未配備相應的污水處理設施、污水處理不達標、污水不按規定排放等將負上相應的法律責任。為此，昌吉電站投資人民幣15萬元建設安裝了污水處理設施。

TACKLING CLIMATE CHANGE

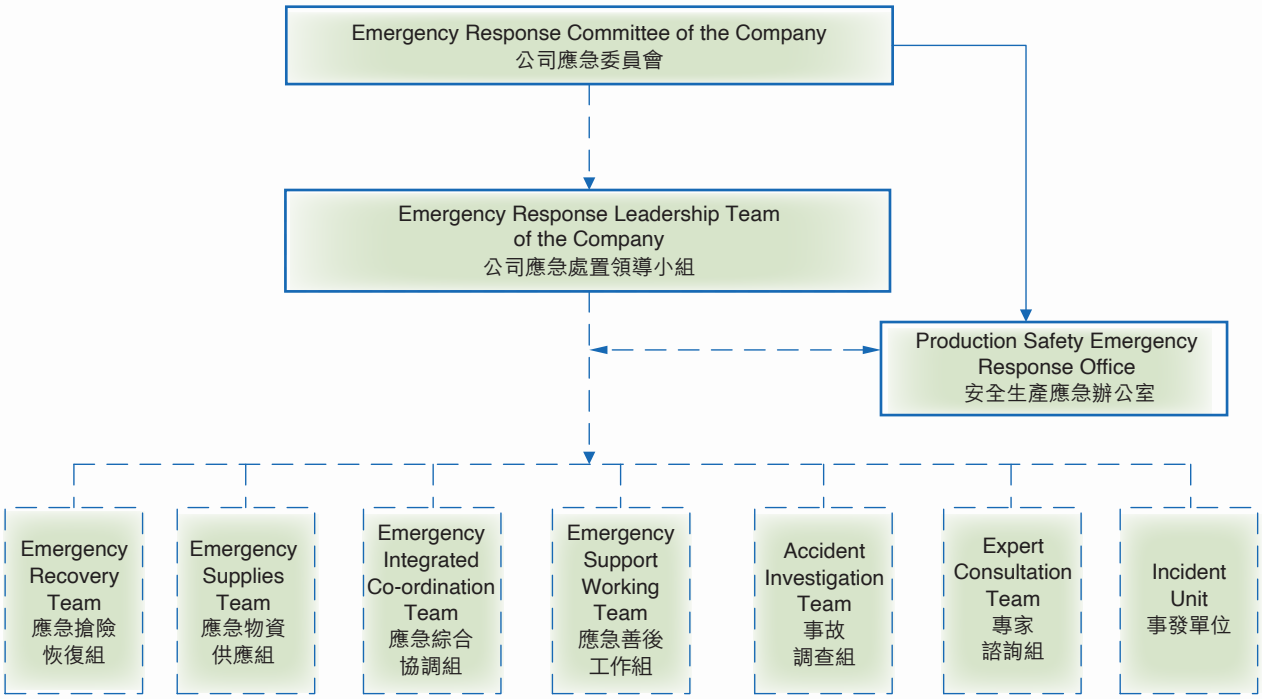
In the context of the global commitment of the Chinese government to achieve carbon neutrality, the new energy industry ushered in a golden period of development. Recently, the PRC is promoting the formulation of action plans, speeding up the construction of new power system based on new energy, and intensively introducing many favorable policies such as special policies to support green and low-carbon development, which are more conducive to the healthy and sustainable development of the new energy industry. As a pioneer in the new energy industry, the Group vigorously develops new energy such as photovoltaic and wind power, and is committed to building itself into a first-class international clean energy ecological investment operator, constructing clean energy industrial ecosystem dominated by green energy, complemented by multiple energy sources and characterised by smart collaboration, and providing full life-cycle services to global energy users through value creation.

應對氣候變化

在中國政府向全球承諾實現碳中和的大背景下，新能源產業迎來黃金發展期。國家近期正推動制定行動方案，加快構建以新能源為主的新型電力系統，密集出台支持綠色低碳發展專項政策等眾多利好政策，更有利新能源產業健康持續發展。本集團作為新能源行業的先行軍，大力發展光伏、風電等新能源，致力於將自身打造為國際一流的清潔能源生態投資運營商，構建綠色為主、多能互補、智慧協同的清潔能源產業生態體系，通過價值創造為全球能源用戶提供全生命週期服務。

In addition, the Group is well aware that climate change has become a factor that enterprises must pay attention to and fully consider in formulating long-term development plans. Therefore, we are committed to identifying climate change related risks that have occurred or are likely to occur and are highly relevant to the Group's business, and to formulate special inspection system and contingency plans for natural disaster accident such as fog, thunderstorm, flood, gale, mudflow, earthquake, geologic hazard, frost and rainstorm, so as to guide the emergency rescue work of emergency events. During the Year, the Group formulated Contingency Plan for Natural Disasters Accidents, established emergency command centre and divided the responsibilities of each working group to handle the emergency rescue works of emergencies events. In the future, we plan to further explore the financial impact of climate change and other risks and opportunities.

此外，本集團深知氣候變化現已成為企業制定長期發展規劃必須重視及充分考慮的因素。因此，我們致力於識別已經或可能發生、且與本集團業務存在較高相關性的氣候變化相關風險，制定針對大霧、雷暴、洪水、大風、泥石流、地震、地質災害、霜凍、大雨等自然災害事故的專項檢查制度及事故應急預案，指導突發事件的應急救援工作。於本年度，本集團制定《自然災害事故應急預案》，成立應急指揮機構，劃分各個工作小組職責，處置突發事件的應急救援工作。未來，我們計劃進一步探索氣候變化帶來的財務影響以及其他風險和機遇。



STRICT ENVIRONMENTAL MANAGEMENT

Responsible environmental management can achieve economic and environmental coexistence. We have been complying with the relevant laws and regulations of the country and formulated the Group's internal environmental management documents based thereon, so as to carry out environmental management more efficiently and achieve sustainable development. The Group's Manual for Quality, Environmental and Occupational Health and Safety Management serves as a code of conduct for employees on environmental management. The management representative is responsible for coordinating the Group's daily implementation of the environmental management system, with assistance from departments including the project construction command centre, engineering department and safety production department. The Environmental Occupational Health and Safety Operation Control Procedure and the Identification and Evaluation Control Procedure of Environmental Factors provide guidelines for the above-mentioned management power and responsibilities, and can supervise and control business activities, work and services. The Project Construction Monitoring and Measurement Control Procedure standardizes the monitoring and measurement of environmental management system implementation at construction site.

嚴格環境管理

負責任的環境管理可以實現經濟與環境共生。我們一直遵守國家相關法律法規，並以此為依據制定本集團內部環境管理文件，從而更高效地進行環境管理，實現可持續發展。本集團的《質量、環境、職業健康安全管理手冊》是對僱員在環境管理方面行為守則的指導方針。本集團環境管理體系的日常運作由管理層代表負責協調，項目建設指揮中心、工程部及安全生產部負責協助。《環境職業健康安全運行控制程序》與《環境因素識別與評價控制程序》是以上管理權責的工作細則指引，對經營活動、工程和服務實施監督和控制。《項目施工監視和測量控制程序》則規範項目施工現場的環境管理體系運行的監視和測量。

In order to standardize and accelerate the improvement of the Group's standard system and to meet the needs of national standards and international advanced standards, we have further formulated the Administrative Measures for Environmental Protection and Guidelines for Technical Supervision of Environmental Protection this year. The former helped us to implement comprehensive and systematic environmental protection and management, establish "Three Simultaneities"[1] management system for construction projects, and standardize the acceptance inspection regarding to environmental protection, the construction of major environmental protection governance projects, and the environmental protection management during the production process. While the latter clarifies and provides the scope of technical supervision of environmental protection, the content of and approaches used in environmental protection monitoring, the technical management and assessment indicators for environmental protection supervision.

為規範並加快本集團標準體系的完善，適應國家標準和國際先進標準的需要，我們於本年度新增《環境保護管理辦法》和《環境保護技術監督導則》。前者有助於我們實行環境保護體系化、系統化管理，建立建設項目「三同時」[1]管理體制，規範竣工環保驗收、重大環保治理項目建設、以及生產過程環境保護管理。後者明確和規範環境保護技術監督的範圍、環保監測的內容和方法、環保監督的技術管理和考核指標。

[1] The pollution prevention and control facilities in the construction project shall be designed, built and put into operation together with the principal part of the project.
建設項目中防治污染的設施，應當與主體工程同時設計、同時施工、同時投產使用。

We established the Group's environmental targets for the Year and stipulated strict requirements in four areas, namely, emissions, energy efficiency, water efficiency and waste. We have achieved all of environmental objectives during the Year through concerted efforts.

我們於本年度制定本集團的環境目標，對排放、能源使用效益、用水效益及廢棄物四個方面作出嚴格要求。經過共同的努力，我們於本年度全面完成所有環境目標。

	Environmental objectives **環境目標**	**Accomplishment ofobjectives** **目標完成情況**
Emissions **排放**	No ecological environment damage incidents, and no excessive discharge of pollutants such as wastewater 不發生生態環境破壞事件，不發生廢水等污染物超標排放	Achieved 已完成
Energy efficiency **能源使用效益**	Strengthening the management of electricity consumption in plant and energy saving to ensure the average annual comprehensive electricity consumption rate in plant less than 1.73% 加強廠用電和節能管理，確保年平均綜合廠用電率低於1.73%	Achieved (In 2021, the comprehensive electricity consumption rate of the Group's plant was 1.65%) 已完成（2021年本集團綜合廠用電率為1.65%）
Water efficiency **用水效益**	Strengthening the publicity of water-saving measures and prohibiting water waste 加強節水措施宣傳，杜絕水浪費	Achieved 已完成
Waste **廢棄物**	The management of solid waste (including hazardous waste) complies with the relevant provisions of national and local laws and regulations 固廢（含危廢）管理符合國家及地方法規相關規定	Achieved 已完成

During the Year, we were not aware of any non-compliance of relevant laws and regulations[2] that have a significant impact on the Group relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.

於本年度，我們並不知悉任何違反有關廢氣及溫室氣體排放、向水及土地排污、有害及無害廢棄物的產生且對本集團造成重大影響的法律及規例[2]事宜。

[2] Please refer to the section of Compliance with List of Laws and Regulations on Environmental, Social and Governance for environment-related laws and regulations.
環境相關法律及規例請參見遵守有關環境、社會及管治的法律及規例清單章節。

RESOURCES CONSERVATION

To improve the energy management system, the safety production department of the Group took the lead in compiling the Energy Conservation Management Measures during the Year, which clearly stipulated the corresponding responsibility of the Group, its branches and subsidiaries in energy conservation management. The energy conservation work is managed under the unified leadership of the Group with a hierarchical approach. The Group is in charge of providing general guidance to and supervising its branches and subsidiaries in energy conservation, while the branches and subsidiaries shall performed their duties within the stipulated scope of energy conservation management.

During the Year, we have implemented a number of environmental protection measures in our power stations and offices. The energy conservation awareness of our employees has been raising and transformed into standardised actions of energy conservation due to the implementation of relevant initiatives, the promotion of energy conservation management work and the improvement of the accountability system. In the future, we will keep marching to our development goal of "resource-saving, environment-friendly and safety-protection" and advancing our management philosophy of "safety, health, environment-friendly and efficiency", thereby to operate power generation in more cost-efficient way and reduce the energy consumption in power generation, and ultimately achieve sustainable development of the Company.

節省資源

為完善能源管理制度，本集團安全生產部於本年度領編《節能管理辦法》，對本集團及其分、子公司節能工作管理作出明確規定。節能管理工作由本集團統一領導，實行分級管理。本集團負責對其分、子公司節能工作的宏觀管理與監督，而分、子公司則在其職責範圍內開展相關的節能管理工作。

於本年度，我們在電站及辦公室內部推行多項環保措施。隨著措施的落實，節能管理工作的推進，以及責任制的健全，我們不斷提高僱員的節能意識，規範節約能源的行為。未來，我們將繼續努力實現「資源節約型、環境友好型、安全保障型」的發展目標，推進「安全、健康、環保、效益」的管理理念，進一步提高發電經濟運行水平，降低電力生產能耗水平，促進企業可持續發展。

ENERGY SAVING
節約能源

- Registering the energy conservation registration form with the local government department at the project approval stage, and designing the energy saving scheme for the power supply and distribution system as required. Design ideas include:
  - Reasonably selecting the capacity and number of transformers to reduce the loss in lines
  - Increasing the power factor of the system by providing supporting electrical equipment to reduce the energy consumption of the power stations

  在項目立項階段向當地政府部門備案節能登記表，按其要求為供配電系統設計節能方案。設計思路包括：
  - 合理選擇變壓器的容量和台數，以減少線路損耗
  - 通過配置配套電器設備來提高系統的功率因素，從而降低電站的能源能耗
- Using external wall insulation technology to reduce power consumption of air conditioning
  採用外牆隔熱技術以減少空調耗電量
- Strictly implementing the seasonal use time of electrical equipment to control energy consumption
  嚴格執行用電設備的季節使用時間，控制能源消耗
- Using LED lights with automatic switch at some power station bases to avoid energy waste
  於部份電站基地採用帶有自動開關的LED燈，避免能源浪費
- Turning off lights and air conditioners that are not in use, as well as other idle electrical appliances, and prohibiting the use of everburning lamps and daytime lamps
  關閉並無使用的照明設備、空調及其他閒置電器，要求人走燈滅，杜絕長明燈、白晝燈

SAVING WATER RESOURCES
節約水資源

- Posting water saving signs
  張貼節水標識
- Using flush toilets to reduce water consumption
  採用抽水馬桶以減少用水量
- Setting up collecting basins, water tanks and other facilities in areas with abundant rainfall to save water
  在降雨充沛的地區設置集水池、水箱等設施以節約用水
- Making a water use plan and conducting daily supervision according to the plan
  制定用水計劃及根據計劃進行日常監督
- Checking the water supply network regularly to prevent leaks
  定期檢查供水管網以防止漏水
- Keeping monthly water usage records, and timely preventing improper water usage and proposing rectification measures
  保存月度用水記錄，以及時防止不當用水並提出整改措施
- Exploring the possibility of recycling water resources
  探尋循環利用水資源的可能

SAVING PAPER
節約用紙

- Moving to paperless office by fully utilization of electronic transmission system
  推行無紙化辦公，充分使用電子傳輸系統
- Using both sides of all office paper to reduce paper consumption, and reduce the number of repeated printing and copying
  提倡雙面用紙，降低紙張消耗，減少重覆打印、覆印次數
- Setting up waste paper recycling bins and reuse all papers except for confidential and important documents
  設置廢紙回收箱，將非機密文件回收作為稿紙使用
- Advocating repair instead of replacement of faulty machine, utilizing the waste as well as extending the life-time of printing machine
  提倡修舊利廢，延長文印設備的使用壽命
- Keeping monthly paper records and reporting any abnormal usage in a timely manner
  保存月度用紙記錄，以及時發現任何異常使用情況

In addition, in terms of improving energy efficiency, we conducted quantitative analysis of electricity consumption to understand the major power consumptions, so as to take targeted measures to reduce power consumption. By studying the policy on electric dispatch network and electric charge, we applied the optimal SVG output method and the frequency conversion technology for cooling fans to reduce the SVG power consumption reasonably. In addition, we also strengthened the electricity management in office and living areas within the station, in particular, we selected advanced energy saving heating equipment in northern regions so as to minimize power consumption.

此外，在提高能源使用效益方面，我們對用電消耗進行量化分析，掌握耗電主要去向，並採取針對性改善耗電的措施。研究電網力調電費收取的政策，採取最優SVG輸出方式，實施冷卻風機變頻技改，合理降低SVG耗電量。此外，我們加強站內辦公和生活用電管理，北方地區研究採用節電的先進採暖方式，盡最大努力減少用電浪費。

Energy Consumption

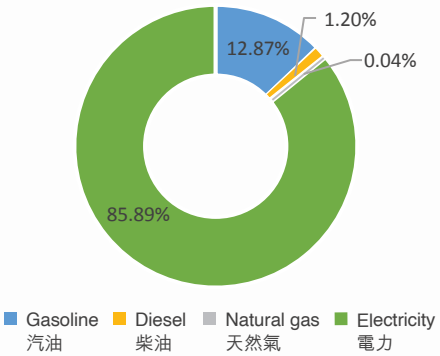
Electricity, natural gas and fuel oil consumed in offices and power plants are the main sources of the Group's energy consumption. During the Year, we consumed a total of approximately 44,530.23MWh of energy. The total energy consumption comprised of approximately 85.89%, 0.04%, 12.87% and 1.20% of electricity, natural gas, gasoline and diesel, respectively. Consumption intensity was approximately 11.48MWh per gigawatt hour ("GWh") electricity generated. The annual electricity consumption was equivalent to approximately 1% of the total power generation of the Group's power stations. The increase in electricity consumption in 2021 was due to the increase in installed capacity of the Company's stations and the increase in electricity consumption in the stations in 2021 as some stations were put into operation with SVG devices as required by the grid companies (not mandatorily required by the grid companies in 2020). During the Year, the Group's consolidated plant electricity consumption rate was 1.65%, achieving the target of a consolidated plant electricity consumption rate of less than 1.73% by 2021.

能源消耗

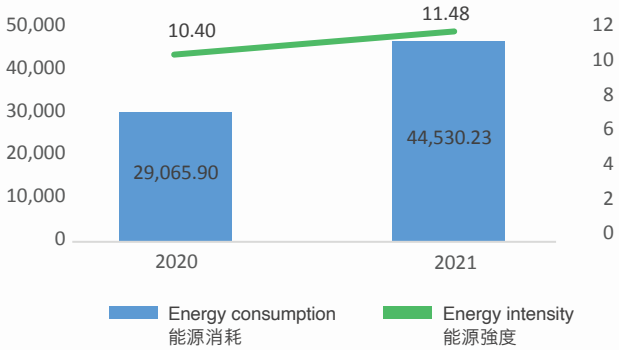
辦公室及電站所使用的電力、天燃氣及燃油為本集團的能源消耗的主要來源。於本年度，我們共計消耗約44,530.23兆瓦時的能源。電力、天然氣、汽油及柴油的消耗分別佔總能耗約85.89%、0.04%、12.87%及1.20%。消耗強度約為每千兆瓦時（「千兆瓦時」）發電量消耗11.48兆瓦時能源。年度用電量相當於本集團電站總發電量約1%。2021年用電量增加的原因一是本公司場站裝機容量增加，二是2021年部分電站因電網公司要求，將SVG裝置投入運行（2020年電網公司未強制要求），使得場用電量增加。於本年度，本集團綜合廠用電率為1.65%，達成了2021年綜合廠用電率低於1.73%的目標。

Energy consumption 能源消耗	Unit 單位	2020	2021	YoY Change 年度變化
Electricity 電力	MWh 兆瓦時	27,701.88	38,245.93	38%
Natural gas 天然氣	MWh 兆瓦時	43.39	20.55	–53%
Gasoline 汽油	MWh 兆瓦時	1,215.30	5,730.36	372%
Diesel 柴油	MWh 兆瓦時	105.33	533.39	406%
Total 合計	MWh 兆瓦時	29,065.90	44,530.23	53%
Energy consumption intensity 能源消耗強度	MWh per GWh electricity generated 兆瓦時／千兆瓦時發電量	10.40	11.48	10%

Energy Consumption in FY2021 (MWh)
2021財政年度能源消耗（兆瓦時）



Energy Consumption (MWh) and Intensity (MWh per GWh electricity generated)
能源消耗（兆瓦時）及
能源強度（兆瓦時／千兆瓦時發電量）



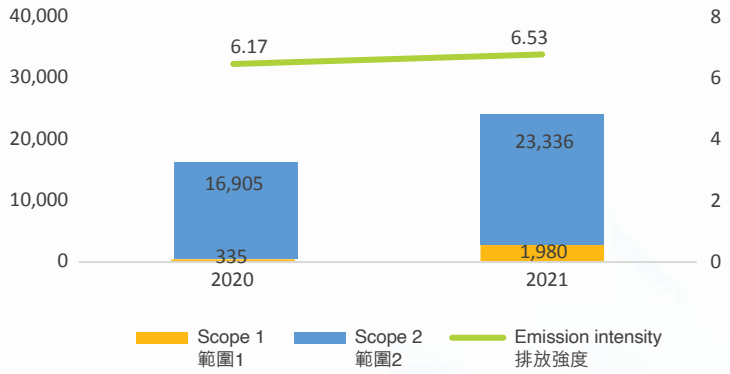
GHG Emissions

The Group is principally engaged in the operation of photovoltaic and wind power generation, and the greenhouse gas ("GHG") emissions mainly came from the fuel consumption of vehicles and combustion of natural gas for cooking. During the Year, the Group's total GHG emissions amounted to approximately 25,316 tons of carbon dioxide equivalent ("tCO_2e"), of which direct emissions (Scope 1) and indirect emissions (Scope 2) accounted for about 1,980 tCO_2e and 23,336 tCO_2e, respectively. Emission intensity was computed as approximately 6.53 tCO_2e per GWh electricity generated.

溫室氣體排放

本集團以運營光伏及風力發電為主，溫室氣體排放主要源於車輛燃油及煮食用天然氣的燃燒。於本年度，本集團的總溫室氣體排放量約為25,316噸二氧化碳當量，其中直接排放（範圍1）及間接排放（範圍2）分別約為1,980噸二氧化碳當量及23,336噸二氧化碳當量。排放強度約為每千兆瓦時發電量排放6.53噸二氧化碳當量。

GHG Emissions (tCO_2e) and Emission Intensity (tCO_2e per GWh electricity generated)
溫室氣體排放（噸二氧化碳當量）及排放強度
（噸二氧化碳當量／千兆瓦時發電量）



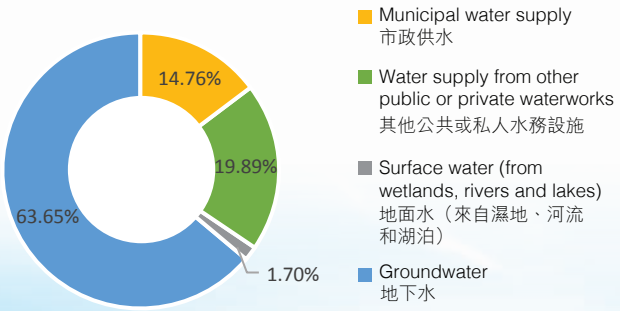
Water Consumption

The Group used less water during the construction of photovoltaic power stations, and usually used village waterwheels to fetch water locally. After operation, the power stations are usually connected to the municipal water pipes according to its geographical location, and the major water consumption consists of water usage for solar panel cleaning and in offices. We arrange the cleaning times and cleaning methods of components in a reasonable manner to save water. During the Year, we consumed a total of 47,607 tons of water and the intensity was approximately 12.27 tons per GWh electricity generated. The increase in water consumption was mainly due to the increase in the Company's installed capacity in 2021, leading to an increase in overall water consumption. In addition, there were more sand and dust weather in the northern region in the first half of 2021, so the water consumption for photovoltaic module cleaning increased significantly. During the Year, the Group did not have any problems with access to suitable water sources.

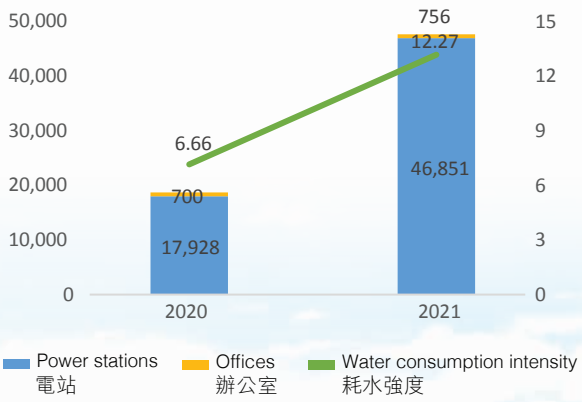
水資源使用

本集團光伏電站建設過程中的用水量較少，通常藉助村鎮水車取水。電站營運後通常根據其地理位置接入市政水管，主要用水包括清洗太陽能電池板用水及辦公室用水。我們合理安排組件的清洗次數和清洗方式，以此節約用水。於本年度，我們消耗的水資源共47,607噸，強度約為每千兆瓦時發電量消耗12.27噸水資源。耗水量增加主要由於2021年公司裝機容量增加，導致整體用水量增加，加上2021年上半年北方地區沙塵天氣較多，光伏組件清洗耗水量大幅增加。本集團於本年度並無任何獲取適用水源上的問題。

Water Consumption in FY2021 (tons)
2021財政年度水資源消耗（噸）



Water Consumption (tons) and Consumption Intensity (tons per GWh electricity generated)
水資源消耗（噸）及消耗強度（噸／千兆瓦時發電量）



CONTROL POLLUTION EMISSIONS

In the process of power generation and operations, we strictly abide by national laws and regulations, control pollution emissions, and promptly publicize and implement relevant national policies and requirements. The pollutant emissions generated by the Group mainly involve air pollutant emissions of sulphur oxide, nitrogen oxide and particulate matter, waste water and solid waste. The Environmental Occupational Health and Safety Operation Control Procedure compiled by the safety production department and the Environmental Analysis Control Procedure compiled by the operation department regulate the Group's standards for the above pollutant discharge, thereby strictly control the pollutant discharge standards to form a green operation atmosphere.

Air Pollutant Emission Management

The Group mainly operates photovoltaic and wind power generation – a new type of renewable energy that is green and environmentally friendly and does not involve the use of fuel, thus does not emit any hazardous gases, without radiation, noise and pollution. Therefore, the Group's operations mainly involve emissions of sulphur oxide, nitrogen oxide and particulate matter generated by fuel consumption of vehicles and combustion of cooking natural gas. During the Year, the Group's sulphur oxide, nitrogen oxide and particulate matter emissions were approximately 10.4kg, 2,818.3kg and 254.2kg, respectively. These emissions have no significant impact on the Group's operations and the environment. In the future, we will continue to work hard to manage the impact of air emissions through emission reduction measures.

Wastewater Discharge Management

Reasonable and proper wastewater discharge management is not only beneficial to environmental protection, but also plays a role in promoting the stable development of the city. The wastewater generated by the Group consists of domestic and production sewage and it will be discharged to municipal sewage treatment pipeline network finally. The domestic sewage is mainly from toilet water used in offices and construction sites, while production sewage mainly consists of water used for cleaning of solar panels. During the Year, we produced a total of 31,587 tons of wastewater.

控制污染排放

在電力生產及運營過程中，我們嚴格遵守國家法律法規，控制污染排放，及時宣貫國家相關政策及要求。本集團所產生的污染排放物主要有包括硫氧化物、氮氧化物及顆粒物在內的大氣污染物、廢水及固體廢棄物。由安全生產部領編的《環境職業健康安全運行控制程序》及運營部領編的《環境分析控制程序》規範了本集團在以上污染物排放方面的標準，進而嚴格控制排污標準，形成綠色營運氛圍。

大氣污染物排放管理

本集團以運營光伏及風力發電－綠色環保的新型可再生資源為主，不涉及燃料的使用，故不會排放任何有害氣體，無輻射、無噪音、無污染。我們的廢氣排放主要涉及營運過程中車輛燃油消耗及煮食用天然氣燃燒產生的硫氧化物、氮氧化物及顆粒物排放。於本年度，本集團產生的硫氧化物、氮氧化物及顆粒物排放量分別約為10.4公斤、2,818.3公斤及254.2公斤。該等排放量對我們的業務營運及環境影響並不重大。未來，我們將繼續致力透過減排措施管理廢氣排放的影響。

廢水排放管理

合理合規的廢水排放管理不僅有利於環境保護，且對城市的穩定發展起到促進作用。本集團排放的廢水包括生活污水及生產污水，廢水排放的最終地點為市政污水處理管網。生活污水主要來自辦公室及建築工地的廁所用水，而生產污水主要源自清潔太陽能電池板用水。於本年度，我們排放的廢水總量為31,587噸。

To ensure compliance of the regulations governing domestic sewage, we have set up draining ditches and sedimentation tanks (toilet sewage has to go through sedimentation in septic tanks before discharging into municipal sewage pipeline). Pouring of food residues, chemicals, oil and other contaminants in domestic sewage sewer is strictly prohibited. We have set up buried integrated wastewater treatment facilities in some stations to handle domestic sewage at construction sites, and the domestic sewage generated is recycled after contact oxidation, sedimentation and disinfection for greening or dust suppression in the stations without discharging to the outside, thus reduce water consumption. During the Year, we repaired the sewage system of Shandong Loude Power Station, the newly acquired power station of the Group's North China branch. After the repair, the sewage cleaning fee can be saved by approximately RMB6,000 per year.

為確保生活污水的合規排放，我們設置排水管及沉澱池（廁所污水經過化糞池的沉澱才可進入市政污水管道），並嚴禁食品殘渣、化學物、廢油及其他污染物進入生活污水下水道。針對建築工地的生活污水管理，部分場站建設有地埋式一體化污水處理設備，產生的生活污水經接觸氧化、沉澱、消毒後進行回收，可用於站區綠化或抑塵，不對外排放，減低水資源耗用。於本年度，我們對本集團華北分公司新接收電站－山東樓德電站的排污系統進行了修復，修復後，每年能節省約人民幣6,000元的污水清理費。

Repair for the sewage system of Shandong Loude Power Station

山東樓德電站排污系統修復

Our production sewage consists of only few suspended matters which are insignificant to the environment; we therefore allow it to naturally evaporate without any treatment. However, we continue to explore new approaches to reduce sewage discharge. We have launched a pilot project in Datong Panda Power Plant to adopt a waterless component cleaning robot for cleaning of the solar panels. In addition, we have also introduced the use of a component cleaning vehicle with fast cleaning speed and small water consumption.

我們的生產污水包含僅少量的懸浮物，對環境影響並不重大，因此其可在不進行任何處理的情況下自然蒸發。但我們仍在探索新的方式以減少污水排放，我們於大同熊貓電站推出一項試驗計劃，採用一款無水清洗機器人清洗太陽能電池板。此外，我們引進一種清洗速度快、耗水量小的零部件清洗車。

Solid Waste Management

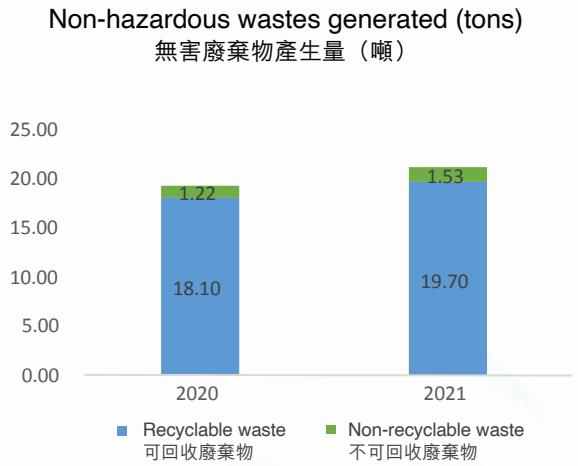
Improper treatment on solid waste not only directly affects the environment quality, but also may causes secondary pollution. The Group attaches great importance to the solid waste management and has built up a systematic approach for waste management. All waste is clearly labelled and stored separately according to different categories. There is also a designated department to check the storage of waste every week to ensure that it does not cause pollution to the surrounding environment. We have actively promoted the construction of "tapping and saving resources" project by preferentially repairing and recycling solid waste to minimize the discharge of hazardous wastes. For waste that cannot be repaired, reused or recycled and have no use value, we collect them and appoint qualified waste collection experts to handle them. For instance, in order to store waste oil of transformers and useless batteries, the power plant in Zhenglanqi of Inner Mongolia has renovated its existing warehouse to set up a warehouse for hazardous waste to enable the transfer and disposal of hazardous wastes. For hazardous wastes, they can only be handled by certification bodies approved by the environmental department.

During the Year, the Group has generated 1.60 tons of hazardous waste, mainly comprised of waste oil, and generated 21.23 tons of non-hazardous waste, including domestic waste, construction waste, waste packaging cartons and waste components, 19.70 tons of which are recyclable, representing a recycle rate of approximately 93%. On average, about 0.41kg of hazardous wastes and about 5.47kg of non-hazardous wastes were generated per GWh electricity generated respectively. During the Year, we recycled a total of 42.49 tons (approximately 34%) of scrapped solar panels.

固體廢棄物管理

固體廢棄物若處理不當不僅會直接影響環境質量，還有可能造成二次污染。本集團高度重視對廢棄物的管理，已形成系統化的管理方法。我們將所有廢棄物根據類別作清晰標識及分開儲存，由指定部門每周檢查廢棄物儲存情況以確保未對周邊環境造成污染。我們積極推進「開源節流」項目建設，對廢棄物優先進行維修再利用，最大限度減少有害廢棄物的排放。對於不可修復或重複使用的無利用價值的廢棄物，我們先將其進行收集，再委聘合資格的廢棄物收集專家對其進行處理。例如，內蒙古正藍旗電站為存放廢舊變壓器油和廢舊電池，利用現有庫房進行改造，設立專用危廢庫房，便於危險廢物的轉移處置。對於有害廢棄物，僅可由環境部門批准的認證機構處理。

於本年度，本集團共產生1.60噸的有害廢棄物，以廢油為主；另產生21.23噸無害廢棄物，包括生活廢物、建築廢物、廢物包裝紙箱及廢棄零件，其中19.70噸為可回收廢棄物，回收率達約93%。平均每千兆瓦時發電量分別產生約0.41公斤有害廢棄物及約5.47公斤無害廢棄物。我們於本年度回收約34%的報廢太陽能電池板，總共42.49噸。



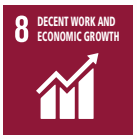
STANDARDIZE THE RESPONSIBILITY MANAGEMENT SYSTEM AND ADVOCATE THE CONCEPT OF COMPREHENSIVE SAFETY

規範責任管理制度
倡導全面安全理念

Adhering to the core value concept of "people-oriented, pursuing excellence", we strengthened the implementation of responsibilities and strove to improve the level of safety management while consolidating the quality foundation.

秉承「以人為本、追求卓越」的核心價值觀念，在夯實質量基礎的同時，強化責任落實，著力提升安全管理水準。

Gender equality
性別平等



Decent work and economic growth
體面工作和經濟增長

Reduced inequalities
減少不平等

Partnerships for the goals
促進目標實現的伙伴關係

IMPROVE LONG-TERM MECHANISM

The Group is committed to continuously improving and optimizing modern power supply services through a comprehensive quality, customer service and confidentiality management system, so as to achieve an overall improvement in power supply service capability and service quality and provide strong support for the construction of a harmonious business environment.

健全長效機制

本集團致力於透過全面的質量、客戶服務及保密管理體系，對現代供電服務進行不斷完善，實現全面提升供電服務能力與服務質量，為構建和諧營商環境提供強而有力的支撐。

Comprehensive Quality Management System

A comprehensive quality management system is of fundamental importance to an enterprise getting established in the industry. The Group is principally engaged in the development, investment, operation and management of power plants and other renewable energy projects. We have no substantial products, but still attach great importance to the quality of power plants throughout their full life-cycle and establish a comprehensive quality management system. Under the guidance of the Design and Development Procedure, the Project Construction Monitoring and Measurement Control Procedure and the Equipment Defects Management System and other documents formulated by the Group, the Group's quality control has been orderly conducted. A systematic and comprehensive management system has been built, covering a series of internal quality control policies ranging from the design and development to the construction and operation of power plants, to fully maintain the quality and safety of the Group's power grid.

全面的質量管理體系

全面質量管理體系是企業於行業內立足的基礎。本集團主要從事發電站及其他可再生能源項目的開發、投資、營運及管理，我們沒有實質的產品，但仍然高度重視發電站於整個生命週期的質量，並建立全面的質量管理體系。在本集團設立的《設計與開發程序》、《項目施工監視和測量控制程序》和《設備缺陷管理制度》等參考文件的指導下，本集團產品質量管制工作高效有序進行，形成系統化、全方位的管理體系，涵蓋電站設計開發到施工營運全過程中一系列的內部質量控制政策，充分維護本集團電網質量與安全。

Design Phase

The Group has established a comprehensive design management mechanism for power plant projects, formulated the Design and Development Procedure to stipulate the relevant requirements for the design and development of power plant projects, so as to ensure the design quality and improve the operating reliability. The technology department is responsible for determining the requirement on each stage during the development and design, referring to factors such as past experiences and resource situations. Before implementation, several assessments and verifications are conducted on projects to feasibility and correctness of the plans.

設計階段

本集團建立全面的電站項目設計管理機制，制定《設計與開發程序》等政策，規範電站項目設計與開發相關要求，保證產品設計的質量，提升營運過程的可靠性。技術部負責在參考過往經驗和資源狀況等因素的基礎上，確定設計與開發過程中各階段的要求。實施項目之前須經多次評估和驗證其設計方案的可行性和正確性。

Construction Phase

We well recognize our responsibility to conduct quality management during the construction phase. In order to ensure project quality, environmental and safety performance at the construction site and the effectiveness of the quality management process, we set up an acceptance inspection committee, which arranges quality inspections at the construction phase. We formulated the Project Construction Monitoring and Measurement Control Procedure to provide basis for planning, implementing and continuously improving the quality, environment, safety performance and management system of the project construction site. The power plants must be assessed from several aspects, such as environmental performance, safety and quality after the completion of the construction, the approval from the acceptance inspection committee must be obtained before commencement of operation.

建設階段

我們深明於建設階段展開質量管理工作的責任。為確保項目質量和施工現場的環境及安全表現，保證質量管制流程高效，我們設立驗收委員會，負責安排建設階段的質量檢查工作。我們制定《項目施工監視和測量控制程序》，為策劃、實施及持續改進項目施工現場的質量、環境、安全績效及管理體系提供依據。在建設完成後，發電站須接受來自驗收委員會對其環境表現、安全及質量等多方面評估，未獲得委員會審批的發電站不得投入營運。

Operation Phase

We achieve power quality monitoring and control, automatic control, relay protection and energy saving data statistics etc. by integrating internet technology and energy management, so as to guarantee the quality management of our operating power plants. The Group has formulated a pre-test plan for annual inspection to eliminate potential risk of equipment, ensure the safe operation of equipment, and further improve the reliability of power operation, and set up the Equipment Defects Management System to regulate the defects management on each photovoltaic power plant's equipment.

營運階段

我們結合網際網路技術與能源管控，實現電力質量監視和控制、自動控制、繼電保護及節能數據統計等，有效保障營運中發電站的質量。為消除設備潛在隱患、保障設備安全運行及提高電力運行可靠性，本集團制定年檢預試方案，並建立《設備缺陷管理制度》，以規範各光伏電站的設備缺陷管理工作。

In order to optimize the quality management system, the Group tracks errors and defects by stricly implementing the "Two Tickets and Three Systems".

為完善質量管制體系，本集團嚴格執行「兩票三制」制度追蹤錯誤及缺陷。

"Work Ticket" Management 「工作票」管理

- "Work Ticket" shall be used in inspection and rectification, elimination, maintenance, testing and installation, listing name and serial number of the equipment, work content and safety measures
  需與檢修、消缺、維護、試驗及安裝等工作中使用，列明設備名稱、編號、工作內容及安全措施等內容

"Operation Ticket" Management 「操作票」管理

- The operator of photovoltaic ("PV") power plants shall fill in the "Operation Ticket" to record the contents such as operation tasks and steps
  光伏（「光伏」）電站操作員需填寫「操作票」，記錄操作任務、操作步驟等內容

"Shift-over System" 「交接班制」

- The on-shift personnel is required to pay attention to patrol inspection, consult the records of the shift-over personnel, and know in detail the causes, processes and solutions of various events during the off-shift period
  要求接班人員重視巡檢、查閱交班人員記錄，並詳細了解休班期間發生各類事情的原因、過程及解決措施

"Equipment Patrol Inspection System" 「設備巡迴檢查制」

- It defines that all production, safety, technical and management personnel have the responsibility to inspect the equipment; the operation personnel on duty are required to conduct a comprehensive and careful patrol inspection of all equipment and systems under their duties
  明確所有生產、安全、技術及管理人員都有對設備運行巡檢的責任；要求運行值班人員對所轄的所有設備及系統進行全面且仔細的巡檢

"Equipment Periodic Test Rotation System" 「設備定期試驗輪換制」

- The standby equipment are regarded as operating equipment, and defects should be actively dealt with to make them in good condition
  視備用設備為運行設備，積極處理缺陷，使其處於良好狀態

Improving Customer Satisfaction

Customer satisfaction is an important indicator to monitor product quality. With a view to enhance customer satisfaction, the Group has established a comprehensive and multi-level customer service system. During the Year, the Group conducted customer satisfaction surveys on service quality, supply capacity, price, grid stability and safety. We were not aware of any complaints related to products and services.

提升客戶滿意度

客戶滿意度是監測產品質量的重要指標。為提升客戶滿意度，本集團建立全方位且多層次客戶服務體系。於本年度，本集團針對服務質量、供應能力、價格及電網的穩定性和安全性展開客戶滿意度調查。我們並不知悉任何有關產品及服務的投訴。

PHASE 1 第一階段

- Carry out customer demand research, mining and analyzing customer service demand
  開展客戶需求調研，挖掘分析客戶服務需求
- Introduce our services and deal with customers' enquiries
  介紹我們的服務並回答客戶諮詢
- Publicly implement the quality service commitment system to our customers
  向廣大客戶公開推行優質服務承諾制度

PHASE 2 第二階段

- Proactively reflect the progress of the contract
  主動反饋合同進度
- Establish customer files to fully meet customers' requirements for electricity commodities
  建立客戶檔案，全面滿足客戶對電力商品的要求
- Accelerate the optimization and integration of power supply service centres, and effectively improve the service quality and emergency repair efficiency in service areas under our management
  加快供電服務中心優化整合力度，有效提高轄區內服務質量及故障搶修效率
- Follow up the comments from customers timely and remove customers' doubts
  及時跟進客戶評價，消除客戶疑問

PHASE 3 第三階段

- Carry out service satisfaction evaluation and collect customers' need feedback
  開展服務滿意度測評，收集需求反饋
- Strengthen service supervision and customer visits, and improve the service supervision and evaluation system
  強化服務監督與客戶回訪，完善服務監督評價體系
- Based on massive marketing data, mine implicit customer energy consumption patterns and innovation points for customer service improvement
  基於海量行銷數據，挖掘隱含的客戶用能模式，挖掘客戶服務提升創新點
- Appropriately handle customers' complaints
  妥善處理客戶投訴

Comprehensive Customer Service System
全面的客戶服務體系

It is an important way to enhance customer satisfaction by strictly controlling service quality, strengthening service quality control and improving the functioning of the Group's facilities. During the Year, the Group further revised the Regulations on the Management of Defective Equipment and established the Regulations on the Management of Equipment Inspection and Maintenance and Regulations on the Management of Technical Modification as guidelines to improve the performance of equipment. These regulations will strengthen equipment inspection and maintenance management of the Group to realize professional management, thereby enhancing customer satisfaction.

嚴格把關服務質量，加強服務質量管制，完善本集團設備運行是提升客戶滿意度的重要途徑。本集團於本年度新修訂《設備缺陷管理規定》，新增《設備檢修維護管理規定》和《技術改造管理規定》，作為提升設備運行質量的指導性文件。這些規定能夠加強集團設備檢修維護管理工作，實現專業化管理，進而提升客戶滿意度。

During the Year, the Group has achieved remarkable results in equipment maintenance. Firstly, the Group turned its maintenance mind-set to focus on preventive maintenance, supplemented by post-event maintenance. The Group carried out intensive safety inspections featuring preventive maintenance checks. During the inspection period in spring and autumn, the main electrical equipment such as junction box, inverter device, voltage converter, SVG, etc. were thoroughly cleaned and terminals were tightened; the components were comprehensively inspected for hot spot detection by unmanned aerial vehicles; the joints of the primary and secondary electrical equipment were comprehensively inspected by infrared thermography, of which 1,066 problems were found in the spring inspection and 1,057 of which were rectified, with a rectification rate of approximately 99.16%; 713 problems were found in the autumn inspection and 672 of which were rectified, with a rectification rate of approximately 94.25%. Secondly, the Group arranged annual special maintenance, technical renovation and high-tech projects with a focus on improving the safety, reliability and economic performance of power generation equipment. During the Year, the Group carried out 47 special maintenance projects to further enhance the reliability of equipment operation.

於本年度，本集團在設備維護上有了顯著的工作成效。一是轉變維護思路，以開展預防性維護為主，事後性維護為輔。本集團深入開展以預防性維護檢查為重點的安全大檢查。在春、秋檢期間對匯流箱、逆變器、箱變、SVG等主要電氣設備進行了全面清灰和端子緊固；對元件進行了全面無人機熱斑檢測；對一、二次電氣設備接頭進行了全面紅外熱成像檢查，其中，春檢發現問題1,066項，整改1,057項，整改率約99.16%；秋檢發現問題713項，整改672項，整改率約94.25%。二是以提升發電設備安全性、可靠性、經濟性指標為重點，安排年度重大專項修理、技術改造和科技項目，於本年度，本集團進行了重大專項修理項目47項，進一步提升了設備運行可靠性。

PROTECT DATA PRIVACY AND SECURITY

Comprehensive confidentiality management system

In order to preserve the privacy and security of information, the Group has formulated internal confidentiality management regulations, improved a comprehensive confidentiality management system, developed a list of the Group's trade secrets and regulated the management of confidential data according to the sensitivity of the data, and regularly inspected the implementation of confidentiality in every department and area. At the same time, each department shall formulate a list of departmental trade secrets for the Group to support its supervision work.

In addition to the management regulations, the Group also binds its employees to safeguard the privacy and security of customer information. The Group's employees are required to sign the confidentiality agreement to fulfil their responsibility to protect the sensitive data of the Group and organize staff training on laws and regulations relating to confidentiality to avoid any intentional and unintentional disclosure of information.

保障資料私隱及安全

全面的保密管理體系

為保障資料私隱及安全，本集團制定內部保密管理規定，完善全面的保密管理體系，並制定本集團商業秘密事項清單，根據資料的敏感程度規範機密資料管理，定期監察各部門及區域的保密情況。同時，各部門需制定部門商業秘密事項列表，支持本集團的監察工作。

除管理規定外，本集團對員工也做出一定約束，以保障客戶的資料隱私和安全。本集團僱員須簽署保密協議，履行保護本集團的敏感性資料的責任，並組織員工接受保密相關法律及規例的培訓，避免任何有意及無意的資訊披露。

Strengthen Network Security Management

The Group has formulated the Administrative Measures for Network and Information Security to improve the construction of the enterprise benchmark system. As for the Group's equipment, all data in the power station cloud system is encrypted and disconnected with external network. With the installation of online monitoring equipment for network security, we regularly evaluate the safety precautions situation and the protection rating of the power plants, and implement various management and preventive measures to achieve better data stability and safety.

強化網絡安全管理

本集團制定《網絡與信息安全管理辦法》，完善企業標準體系的建設。於本集團設備層面，發電站雲系統中的全部資料都經過加密並且與外部網路隔離。通過安裝網路安全線上監測裝置，定期對發電站進行安全防護評估及保護評級，並實施多項管理和預防措施，切實保障內部網路安全，確保資料的穩定性和安全性。

Actions in 2021	*2021年行動*
• Redeployed internet protection system, procured antivirus protection software, and adopted various protection measures on both client base and servers.	• 重新部署內網防護系統，採購防護殺毒軟件，並於軟件客戶端及服務器均採用多項安全防護措施。
• Organize all branches and subsidiaries to carry out investigations regarding internet safety risk and improve the security management system, emergency plans and emergency treatment plans in a practical manner.	• 組織各分、子公司全面開展網絡安全風險排查，並結合實際，完善各項安全管理制度、應急預案和應急處置方案。
• Organize technical forces to carry out investigations regarding internet safety loopholes, verify important computer and cyber equipment and software vulnerabilities case by case, in order to discover vulnerabilities and fix it in a timely manner.	• 組織技術力量開展網絡安全隱患排查，逐一核查重要電腦和網絡設備、軟件漏洞，及時發現漏洞並修復。
• Strengthen protection of network border security, make safety isolation between each data system, transmit important business data with encryption, adopt minimal configuration for safety precaution policy, and conduct information communications to the premitted extent.	• 加強網絡邊界安全防護，並做好各個信息系統之間的安全隔離，重要業務數據採用加密傳輸，安全防護策略採取最小化配置，只在允許的範圍內進行信息通訊。
• Strictly adopt isolation protective measures for critical data infrastructures and industrial control systems.	• 對於關鍵信息基礎實施、工控系統嚴格採取隔離防護措施。
• Manage account access right of the system, eliminate weak passwords, and avoid storing important data such as account passwords in computers, mails, and network drives.	• 實現系統賬號權限管理，消除弱口令，不在電腦、郵件、網盤中存儲賬號密碼等重要數據。
• Prohibit storing, processing and transmitting confidential information on office networks and the Internet, as well as transmitting work-related sensitive information on the Internet.	• 禁止在辦公網絡、互聯網等存儲、處理、傳遞涉密信息，以及在互聯網絡傳遞工作敏感信息。
• Verify important data and system backups, and check the integrity of data backups.	• 核查重要數據、系統備份情況，並驗證數據備份的完整性。

In order to strengthen employees' network security awareness and protect data privacy and security, the Group organized training on network security laws and regulations, network security protection technology system and strategy configuration training for each branch and subsidiary during the Year to enhance the business capability of cyber security officers. The Group focused on strengthening training and education on cyber attack and defense knowledge and practical skills to build an internal cyber security attack and defence team so as to provide effective protection for the implementation of network security measures.

為強化員工網絡安全意識，保障資料隱私及安全，本集團於本年度組織各分、子公司開展網絡安全法律法規、網絡安全防護技術體系和策略配置培訓，來提升網絡安全人員業務能力。本集團重點加強了網絡攻防知識和實操能力的培訓教育，構建內部網絡安全攻防人才隊伍，為網絡安全措施的落實執行提供有效保障。

The Group's business neither involves in advertising nor product labelling, therefore, our operation is free from such impact. During the Year, there was no reported infringement of the laws and regulations[3] regarding product responsibilities such as health and safety and privacy of products and services provided, which have a significant impact on the Group.

本集團的業務不涉及廣告及產品標籤活動，故這些方面對我們的營運沒有影響。於本年度，我們並無違反有關所提供產品和服務的健康與安全及私隱事宜等產品責任且對本集團有重大影響的法律及規例[3]的情況。

[3] For laws and regulations related to privacy matters and other product responsibilities, please refer to the section of Compliance with List of Laws and Regulations on Environmental, Social and Governance.
私隱事宜及其他產品責任相關法律及規例請參見遵守有關環境、社會及管治的法律及規例清單章節。

PROMOTE EXCELLENCE AND INNOVATION

Technology Innovation and Application

The Group firmly believes that technology innovation is the driving force of enterprise development. We proactively promote the institutional and organisational development of technology innovation and comprehensively implement the "1+1+N" technology innovation system. We have compiled and published several management systems on technology innovation, such as the Measures for the Management of Technology Projects, the Measures for the Management of Technology Project Fees, the Regulations on the Management of Technology Innovation and the Measures for the Management of Technology Innovation Incentives, and also established the Technology Innovation Committee, which is composed of the Technology Innovation Office and the Expert Committee, to steadily promote the construction of the technology innovation management system and the sustainable development of the Group.

The safety production department of the Group applied unmanned aerial vehicle testing actively according to the Company's scientific and technological innovation development plan and the actual operation of power stations. During the Year, we carried out component hot spot inspections with unmanned aerial vehicle technology to detect component hot spot defects in advance. The Group carried out 35 hot spot detections for photovoltaic modules in 24 power stations, with a capacity of 1,546.48MW inspected. A total of 18,923 hot spots were found in the test, of which 5,805 hot spots have been dealt with and the remaining are still in process. We completely resolved the threat of fire in the PV area of the power station caused by severe hot spots of PV components while solving the problem of inefficient components affecting the power generation efficiency of the power station system.

推動卓越創新

技術創新與應用

本集團堅信科技創新是企業發展的原動力。我們積極推進科技創新制度建設及組織建設，全面貫徹「1+1+N」科技創新體系，先後編制和發佈《科技計劃項目管理辦法》、《科技項目費用管理辦法》、《科技創新管理規定》及《科技創新獎勵管理辦法》等科技創新管理制度，並成立科技創新委員會，下設科技創新辦公室和專家委員會，穩步推進科技創新管理體系建設，推動本集團可持續發展。

本集團安全生產部圍繞公司科技創新發展規劃，結合電站工作實際情況，積極開展無人機檢測的應用。於本年度，我們應用無人機技術開展元件熱斑檢測，提前監測元件熱斑缺陷。本集團於本年度共開展35次光伏元件熱斑檢測，涉及電站24個，巡檢容量達1,546.48兆瓦，共計發現組件熱斑數量18,923個，其中5,805塊熱斑已處理，其餘組件熱斑正在處理中。在解決低效元件影響電站系統發電效率的同時，徹底解決了光伏元件嚴重熱斑對電站光伏區的火災威脅。

Technology Application
技術應用

- Anhui Zhaolian Clean Energy Company Limited's Project on the Research and Application of Component Cleaning System for 100MW Water Surface Photovoltaic Power Station in Huaibei and Huainan has significantly improved the efficiency, power generation capacity and revenue from electricity sales of the power station's power generation system after its implementation.
  安徽招聯清潔能源有限公司《兩淮100MW水面光伏電站組件清洗系統研究與應用項目》，該項目實施後電站發電系統效率、發電量、售電收入均有明顯提升。

INTELLECTUAL PROPERTY PROTECTION

Intellectual property is an important competitiveness for the Group. Focusing on the protection of intellectual property rights, i.e. strengthening the management of intangible assets, reflects an enterprise's fulfilment to its social responsibility and constitutes an integral part of the sustainable and innovative development of an enterprise. In order to reduce the risk of intangible asset management, safeguard the interests of the Group, ensure the safety and integrity of intangible assets and take advantage of economic and social benefits, the Group has formulated an internal policy entitled the Measures for the Management of Intangible Assets, as well as a normative reference entitled the Code for the Management of Intellectual Property Rights. According to the Measures for the Management of Intangible Assets, the patents and intellectual property rights owned by the Group, such as non-patented technologies and software, shall be managed as intangible assets and protected by the Group.

During the Year, the Group obtained 20 software copyrights and 10 utility model patents. During the Year, the Group did not receive any report on infringement of intellectual property rights.

保護知識產權

知識產權是本集團的重要競爭力。注重知識產權保護，即強化無形資產管理，是企業承擔社會責任的體現，是企業實現可持續創新型發展的重要環節。為了降低無形資產管理風險，維護本集團權益，保證無形資產安全、完整，發揮經濟效益和社會效益，本集團已制定內部政策《無形資產管理辦法》以及規範性引用《知識產權管理規範》。《無形資產管理辦法》規定本集團擁有的專利權，非專利技術、軟體等知識產權屬於無形資產管理，受到本集團的保護。

於本年度，本集團共獲得軟體著作權20項，實用新型專利10項。於本年度，本集團侵犯知識產權的個案報告數量為零。

PURSUE CONTINUOUS SUPPLY

The Group continues to focus on sustainable supply chain management to contribute to the achievement of the United Nations' sustainable development goals. Stable, efficient, pragmatic and green supply chain management underpins the operations of the Group and relates to various aspects such as products, operation, personnel and environment. To this end, the Group has established a series of regulations and systems, including the Supplier Management Regulations, the Tender Management Regulations, the Procurement Management Regulations and the Procurement Plan Management Regulations, to ensure the normal development and enhance the working efficiency of supply chain management. Among them, the Procurement Plan Management Regulations is an individual standard under the standard system established and implemented by the Group, with a view to regulating the establishment of procurement plans, building a scientific and efficient plan establishment and management mechanism, and meeting national and advanced international standards.

追求持續供應

本集團持續關注可持續的供應鏈管理，積極助力聯合國可持續發展目標的實現。穩定高效、務實和綠色的供應鏈管理是本集團運營的基礎，關係到產品、運營、人員、環境等各個方面。為此，本集團設立《供應商管理辦法》、《招標管理辦法》、《採購管理辦法》、《採購計劃管理辦法》等一系列規章制度，以確保供應鏈管理工作的正常開展，提高供應鏈管理工作的效率。其中，《採購計劃管理辦法》是本集團標準體系建立和實施的個性標準，以期規範採購計劃編制，建立科學、高效的計劃編制和管理機制，適應國家標準和國際先進標準的需要。

The Group's contract suppliers are divided into three categories: materials, engineering and services, covering market entities such as state-owned enterprises, private enterprises and individual merchants. As of the end of December 2021, we had 487 suppliers who provided products or services to us through direct business relations, 7 of which were located in Hong Kong and the rest were located in Mainland China. Sourcing suppliers were concentrated in capital and technology-intensive industries. In 2021, we were valued at approximately RMB170.35 million in the payment currency.

本集團的合約供應商分為材料、工程和服務三大類，涵蓋國有企業、民營企業及個體商戶等市場主體企業；截至2021年12月底，透過直接商業關係向我們提供產品或服務的供應商共計487家，其中7家位於香港地區，其餘全部位於中國內地；採購供應商主要集中在資金及技術密集型行業，於2021年，我們的付款貨幣估值約為人民幣170.35百萬元。

Supplier Qualification

The Group has set certain admission criteria for its suppliers. The Group determines the qualification of the selected suppliers after evaluating their current operation and management, sustainable competitiveness and previous implementation of projects. If the suppliers on the qualified supplier list were found to be unable to meet the requirement, we will develop a new supplier in accordance with the relevant policies.

供應商資格

本集團供應商有一定准入標準。本集團在對預選供應商的經營管理現狀、可持續性競爭力及過往實施項目情況等方面進行評價後，方能判定其資格。如發現合格供應商名單中的供應商不能滿足需求，我們將根據相關政策開發新的供應商。

The Group's supply chain management is jointly managed by the business planning department and relevant professional departments. Among them, the business planning department is responsible for the implementation of the preparation work for the development of new suppliers, and formulation of strategies for developing suppliers and supplier admission standards. New suppliers are evaluated based on key factors such as corporate management and product services to form qualified suppliers. The Group's environmental and social risks in supply chain are managed by our business planning department, with binding terms reflected in the Supplier Management Regulations.

本集團的供應鏈管理工作由經營計劃部同相關專業部門共同管理。其中，經營計劃部統一負責執行新供應商的開發準備工作，並制定開發供應商的策略及供應商准入標準。圍繞公司管理、產品服務等主要因素對新供應商開展評估，形成合格供應商。本集團供應鏈的環境及社會風險由我們的經營計劃部主責管理，採用的約束性條款在《供應商管理辦法》中有所體現。

Supplier Selection

The Group selects suppliers with reference to two types of parameters, namely, environmental product standards or technical parameters and quality system certification parameters in the business scoring factors. The Group requires suppliers to take these two parameters into account in the quality or technical specifications of their products. In addition, the scores of suppliers' environmental system certifications carry a certain weight in the Group's supplier selection process, and the Group will, on equal terms, give preference to suppliers who have passed environmental system certification or who produce greener and more efficient products.

供應商甄選

本集團在選擇供應商時參照兩類參數，一是環保產品標準或技術參數，二是商務評分要素中的質量體系認證參數。本集團要求供應商在產品質量或技術規範中充分考慮這兩類參數。此外，供應商環境體系認證的評分在本集團甄選供應商的流程中佔據一定選擇權重，在同等條件下，本集團將優先選擇通過環境體系認證的供應商或者生產更加綠色環保，能夠提高生產效率產品的供應商合作。

Process of Supplier Selection
供應商甄選流程

Supplier Assessment

In order to manage suppliers and regulate its behaviour more effectively, the Group regularly assesses suppliers at the end of each year, with the scope covering the entire supply chain. During the Year, the Group evaluated 487 suppliers in aggregate, mainly involving quality, business, services, management and other aspects, with emphasis on the comprehensive evaluation of inspection and acceptance, quality during the warranty period, price level, payment method, after-sale services, timeliness and cooperation of problem resolution and other aspects of cooperative suppliers. The scoring will affect the suppliers' rating, and the Group will determine the subsequent cooperation and management based on the final rating, give priority to suppliers with an annual rating of A in future procurement, and suspend or terminate contracts with suppliers without business ethics or with E rating.

供應商評估

為更高效地管理供應商和規範供應商行為，本集團每年年底例行展開供應商評估工作，範圍覆蓋整個供應鏈。於本年度，本集團共計考核評價供應商487家，主要從質量、商務、服務和管理等方面進行評估，重點對合作供應商的到貨驗收及質保期內的質量狀況、價格水準、付款方式、售後服務、解決問題的及時性和配合度等方面進行綜合評價。評價打分將影響供應商的評級，本集團將根據最終評定的等級決定後續的合作管理，在未來的採購活動中優先考慮年度評級為A級的供應商，並暫停或終止與缺乏職業道德的供應商或E級供應商的合約。

Environmental Procurement

The Group proactively practices and promotes green and low-carbon approach to help achieve the goal of sustainability. The Group is committed to sustainable procurement and give priority to procuring and using raw materials conducive to environmental protection. The Group includes systematic verification requirement both in cooperative contracts with suppliers, gives priority to suppliers with established environmental management, social responsibility management and other management system during the procurement process, incorporates "the Agreement on Compliance with Social Responsibility and Ethical Standard" into procurement contracts, standardizes the procurement process and corporate standard system, enhances tender management, regulates procurement, and takes the advantage of centralised procurement, so as to achieve quality assurance, cost reduction and risk prevention of procurement.

環保採購

本集團積極踐行與推廣綠色低碳理念，助力可持續發展目標的實現。本集團致力於可持續採購，優先採購和使用有利於環境保護的原材料。本集團在與供應商的合作合同中均加入體系認證的要求，採購過程中優先考慮與已建立環境管理、社會責任管理等相關管理體系的供應商，將「遵守社會責任道德標準協議書」納入採購合約，規範採購管理流程和企業標準體系，加強招標管理工作，規範採購行為及發揮集中採購優勢，以保證採購品質，降低採購成本，防範採購風險。

DIVERSITY OF TALENT TEAM

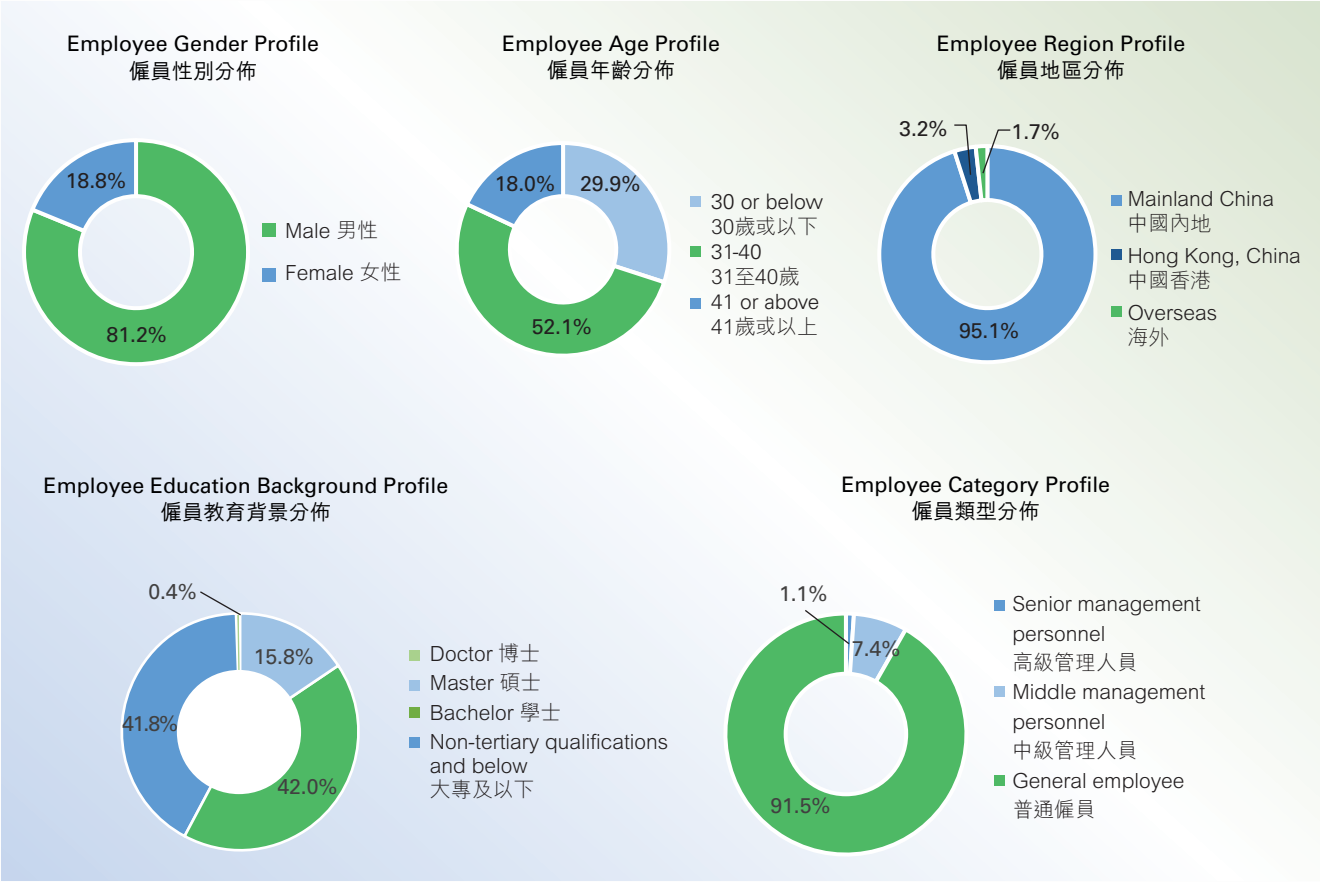
Employees are our internal driving force of corporate development. We always adhere to the people-oriented concept and respect the basic rights and interests of every employee. As of the end of December 2021, the Group totally had 752 full-time employees (no part-time or temporary employee), of which 715 (approximately 95.1%) were based in Mainland China, 24 (approximately 3.2%) were based in Hong Kong and 13 (approximately 1.7%) were based in overseas. There were 611 male employees (approximately 81.2%) and 141 female employees (approximately 18.8%). There were approximately 82.0% of our employees aged from 31 to 40 and 30 or below. There were 76 employees of ethnic minorities, accounting for approximately 10.1% of the total number of employees.

In addition, there were over 58% employees of the Group with a bachelor's degree or above, of which approximately 42.0% are bachelor's degree, approximately 15.8% are master's degree and 0.4% are doctorate degree. In total, middle and senior management staff of our team accounted for approximately 8.5% and the rest of approximately 91.5% was general staff.

多元人才隊伍

僱員是企業發展的內驅動力，我們始終堅持以人為本的理念，尊重每一位僱員的基本權益。截至2021年12月底，本集團共有752名全職僱員（無兼職或臨時僱員），其中中國內地僱員共715人（約佔95.1%），香港僱員共24人（約佔3.2%），其他海外僱員共13人（約佔1.7%）。男女僱員分別有611人（約佔81.2%）和141人（約佔18.8%）。年齡在31至40歲之間及30歲或以下的僱員總比約82.0%。少數民族人數為76人，佔僱員總數約10.1%

此外，本集團超過58%的僱員持有學士或以上學位，其中約42.0%持有學士學位，約15.8%持有碩士學位，約0.4%持有博士學位。在我們團隊中，中高級管理人員共佔約8.5%，其餘約91.5%為普通僱員。



Employment Policy

The Group places emphasis on talent building and recruit employees through an open, fair and equitable talent competition and selection mechanism. Potential candidates with different cultural backgrounds and needs are recruited through internal and external channels, including campus presentation, internet, newspapers and periodicals, internal recommendations, on-site recruitment, headhunting and so on. We are committed to providing a diverse and equal working atmosphere and environment for our employees regardless of age, marital status, sexual orientation, race, ethnicity, religion, gender and nationality. We have zero tolerance for any form of harassment and discrimination and comply with employment-related laws and regulations[4].

僱傭政策

本集團重視人才建設，通過公平、公正、公開的人才競爭及選拔機制進行僱員招聘，透過內部及外部渠道，包括校園宣講、網絡、報刊、內部推薦、現場招聘及獵頭等，委聘具有不同文化背景及不同需要的潛在候選人。我們致力於為員工提供多元平等的工作氛圍及環境，不論其年齡、婚姻狀況、性取向、種族、民族、宗教、性別及國籍等，對任何形式的騷擾和歧視零容忍，並嚴格遵守僱傭相關法律及規例[4]。

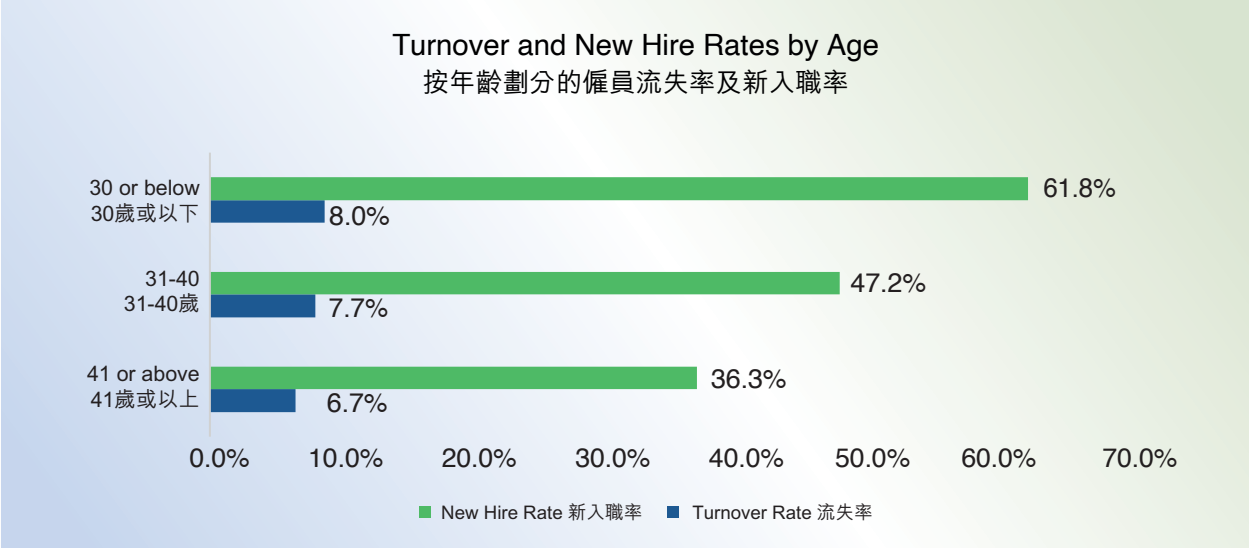
[4] For employment-related laws and regulations, please refer to the section of Compliance with List of Laws and Regulations on Environmental, Social and Governance.
僱傭相關法律及規例請參見遵守有關環境、社會及管治的法律及規例清單章節。

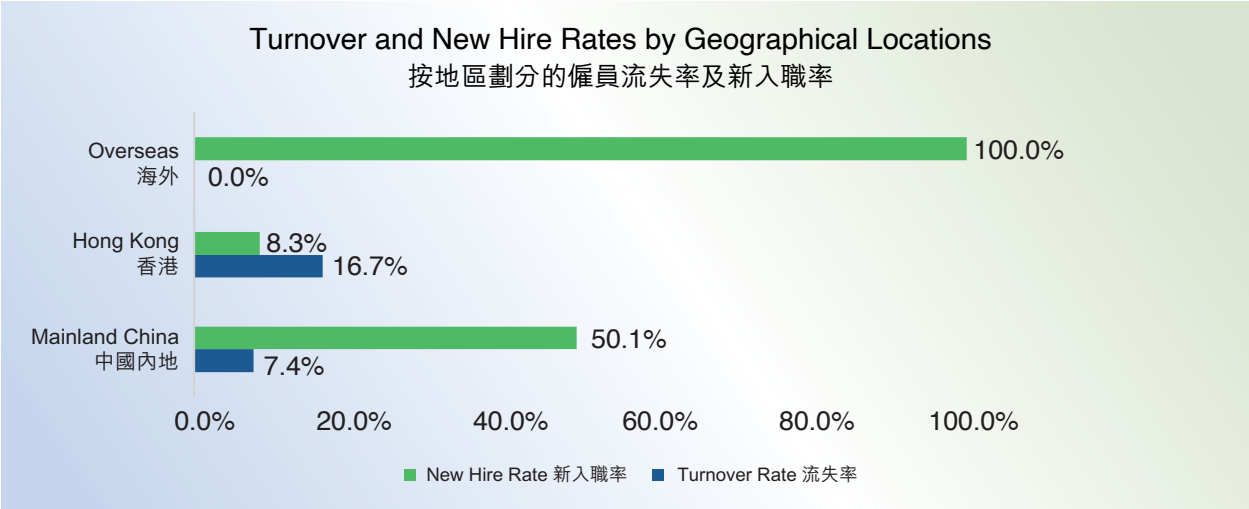
Based on relevant laws and requirements of the country and region, the Group developed a series of internal management system, including the Labour Contract Management Measures, the Recruitment Management System, and Employee Handbook, clearly regulated the recruitment and dismissal process and protected the basic rights and interests of employees. The human resources department of the Group was responsible for coordinating and management, and review of the recruitment process, allocation and filing, while other branches and subsidiaries of the Group formulated their own recruitment and hiring management regulations based on the provisions of the above management rules.

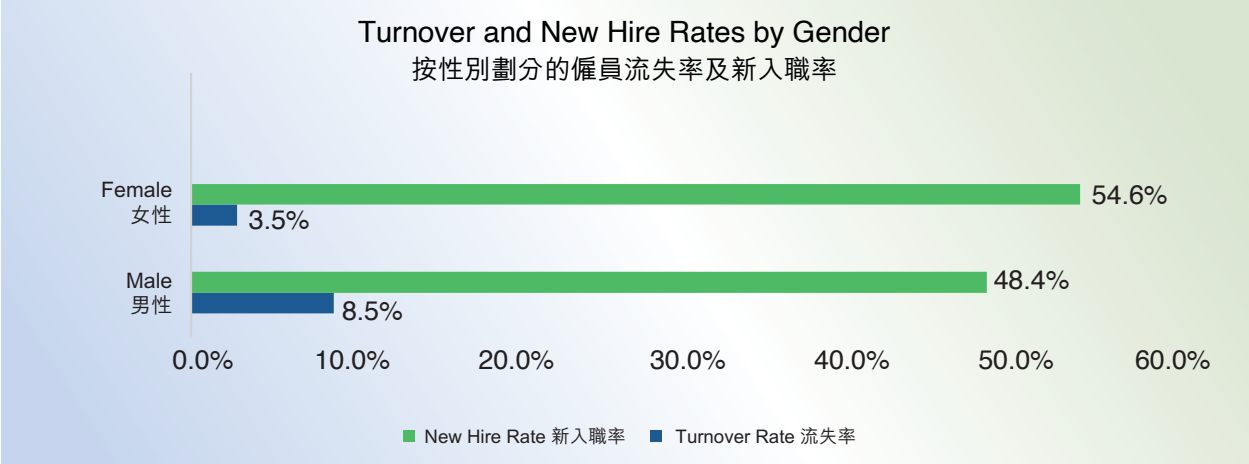
本集團依據國家和地區相關法律要求，制定一系列內部管理制度，包括《勞動合同管理辦法》、《招聘管理制度》、《員工手冊》等，明確規範招聘及解僱流程，保障員工基本權益。本集團人力資源部負責統籌管理及招聘流程審議、分配和備案工作，本集團其他分、子公司則在上述管理辦法規定的基礎上，自行制定適應本企業的招聘和錄用管理規定。

During the Year, the Group had a total of 373 newly hired employees, 296 (approximately 79.4%) of which were male and 77 (approximately 20.6%) of which were female. The overall turnover rate of the Group was approximately 7.6% or 57 employees, of which approximately 84.2% left voluntarily.

於本年度，本集團新入職僱員共373人，新入職男女僱員分別有296人（約佔79.4%）和77人（約佔20.6%）。本集團整體僱員流失率約為7.6%（即57人），其中約84.2%為自願離職。







Eliminate child labour and forced labour

We strictly comply with laws and regulation regarding the prevention of child labour or forced labour.[5] During the hiring process, we conduct a rigorous review of basic information of applicants and are determined to prohibit any use of child labour and forced labour. If any violations are found during the employment period, the Company will immediately report to the local labour department, arrange for a health examination, and cover any medical expenses that may be incurred. In case of misuse of child labour due to problems such as the authenticity of verifying documents, the Company will immediately terminate its labour relationship and provide a certain amount of study and living expenses to help them continue their education. Before the child reaches the age of 16, the Company will provide financial assistance at a rate not lower than the local minimum wage.

杜絕童工及強制勞工

我們嚴格遵守有關防止童工或強制勞工的法律及規例[5]，在招聘過程中，我們對應聘者的基本信息進行嚴格審驗，堅決杜絕任何使用童工及強制勞工的行為。如於聘用期間發現違規情況，公司將立即報告當地勞動部門，為其安排健康檢查，並承擔可能產生的醫療費用。如因核查材料的真實性等問題而誤用童工，本公司將立即終止與其的勞動關係，並提供一定的學習費用和生活費用以幫助其繼續就學。在其年滿十六周歲之前，本公司將向其提供不低於本地最低工資標準的經濟援助。

[5] For laws and regulations related to labour standard, please refer to the section of Compliance with List of Laws and Regulations on Environmental, Social and Governance.
勞工準則相關法律及規例請參見遵守有關環境、社會及管治的法律及規例清單章節。

We sign labour contract with our employees in accordance with the law, specifying their salaries, positions, termination terms of labour contracts, etc., and prohibiting forced labour. We will immediately conduct investigation if any violation is found. During the Year, the Group was not aware of any violation of relevant laws and regulations related to remuneration and dismissal, recruitment and promotion, working hours, holidays, equal opportunities, diversity, anti-discrimination, other benefits and welfare, as well as prevention of child labour or forced labour that had a significant impact on the Group.

我們依法與僱員簽訂勞動合同，明確僱員薪酬、職位及勞動合同終止條款等事項，禁止出現強迫勞動情況。如發現違規情況，我們將立即查處。於本年度，本集團並無獲悉任何違反有關薪酬及解僱、招聘及晉升、工作時數、假期、平等機會、多元化、反歧視、其他待遇及福利以及防止童工或強制勞工且對本集團有重大影響的相關法律及規例的情況。

PROTECT EMPLOYEE RIGHTS

Remuneration and Welfare

The Group has continuously improved the construction of its internal remuneration and welfare system, and has formulated the Salary Management Measures, Special Reward Management Measures, Salary and Position Sequence Management Measures, and Measures for the Administration of the Total Salary Linked with the Number of Positions and other internal management documents. We match responsibility and contribution according to the incentive mechanism, and give full play to the leverage of salary incentive, in order to achieve reasonable salary distribution, thereby fully stimulating the initiative and enthusiasm of employees to create excellence and efficiency.

保障僱員權益

薪酬與福利

本集團不斷完善內部薪酬與福利體系及制度的建設，並編制《薪酬管理辦法》、《專項獎勵管理辦法》、《薪酬及職位序列管理辦法》、《職數關聯工資總額管理辦法》等內部管理文件。根據激勵機制，匹配責任和貢獻，並充分發揮薪酬激勵的槓桿作用，實現薪酬分配合理，充分激勵員工創優創效的主動性和積極性。

Employees' remuneration consists of basic salary and performance bonus, which are evaluated and adjusted every year to reward individuals and groups for outstanding performance. We will also conduct regular salary surveys to ensure the rationality of the overall salary level in line with the average market level, and review or adjust the salary in the first quarter of each year by taking account of the Group's annual performance and operating conditions.

In addition to remuneration, the Group has established the Measures for Employee Benefits Management to provide a variety of benefits, including statutory benefits and supplementary benefits established by the Group, to enrich employees' recreational and cultural life and enhance corporate cohesion. At the same time, the Group arranges different working hours and leave time for employees according to their job requirements and relevant laws. We have 9 types of paid leave.

僱員的薪酬組成由基本工資和績效獎金構成，每年進行評估和調整，以獎勵個人、小組的突出表現。我們亦會定期進行薪資調查，以確保整體薪資水平的合理並符合平均市場水準。結合本集團年度業績和經營狀況，我們於每年第一季度對薪酬作出相應檢視與調整。

除薪酬之外，本集團建立《員工福利管理辦法》，為員工提供多項福利，包含法定福利項目和本集團自主設立的補充福利項目，以豐富僱員業餘文化生活，增強企業凝聚力等。與此同時，本集團根據僱員的職位要求和相關法律進行不同工作時間及休假時間安排，共有9種不同類別的帶薪假期。

Statutory benefits
法定福利
setting up in compliance with laws and regulations
遵循法律法規必須設置

- Social insurance (including endowment insurance, medical insurance, unemployment insurance, work-related injury insurance and maternity insurance, etc.)
  社會保險 (含養老保險、醫療保險、失業保險、工傷保險和生育保險等)
- Housing fund
  住房公積金
- Statutory holidays (including statutory holidays, annual leave, medical leave, maternity leave, etc.)
  法定假期等 (含法定節假日、年休假、醫療假、產假等)

Supplementary benefits
補充福利
resolving common needs of employees
為員工解決共同需要

- Tea break, working meal
  茶歇、工作餐
- Regular health check
  定期健康體檢
- Allowance for employee activities (including allowance for education, sports, publicity and other activities and employee collective benefits)
  僱員活動類福利（包括教育、文體、宣傳等活動福利及僱員集体福利）

Employees welfare

We strive to create a rich and diverse work life for our employees, and regularly hold a series of theme activities such as birthday parties, the 8 March Women's Day Flower Arrangement activities, group movie viewing, and "Brisk Walking" for employees. We aim to enhance employees' sense of belonging and cohesion through a variety of activities that help to promote corporate culture.

僱員福利

我們極力為員工打造豐富多樣的職場生活，定期為員工舉辦生日會、三八婦女節插花、集體觀影以及「健步走」等系列主題活動，透過多樣式的活動深化企業文化，提高員工歸屬感與凝聚力。

BJEI Regular Staff Birthday Parties
京能國際定期員工生日會

BJEI Brisk Walking and Women's Day Flower Arrangement Activities
京能國際健步走及婦女節插花活動

PROMOTE TALENT DEVELOPMENT

Talent cultivation is the key to the sustainable development of the Group. In accordance with the annual work arrangement and in light of the practical status, the Group continuously improves the training system, formulates comprehensive talent training programs, and establishes talent echelon programs to continuously optimize the management of talent cultivation. Employees can improve their personal professional skills and knowledge through multiple channels to achieve mutual development with the Group.

促進人才發展

人才培養是本集團可持續發展的關鍵。本集團按照年度工作安排並結合實際情況，不斷完善培訓體系及制度，制定全面的人才培訓計劃，並設立人才梯隊項目，持續優化人才培養的管理工作。員工可通過多渠道進行個人專業技能和知識素養的提升，實現與本集團共同發展。

Talent Cultivation

The Group have formulated the Measures for Employee Career Development Management, developed "4+1" training system, and designed training programs with different themes for employees in different positions, covering induction training, specific training, advanced training and special training, in order to meet the development needs of employees at all levels. We also engage professional training organizations to carry out training and education programs to continuously improve the quality of internal training.

人才培養

本集團已制定《員工職業發展管理辦法》，搭建全面的「4+1」培訓體系，為處於不同職位的僱員設計不同主題的培訓計劃，涵蓋入職培訓、專項培訓、進階培訓及特色培訓等多種培訓項目，以期滿足各級僱員的發展需求。我們亦聘請專業培訓機構開展培訓教育計劃，不斷提升內部培訓質量。

Induction Training for New Staff
新僱員入職培訓

- Enterprise development history, development strategy, corporate culture, organizational structure and human resources overview
  企業發展歷史、發展戰略、企業文化、組織架構、人力資源概況
- Safety education
  安全教育
- Strengthening leadership and teamwork
  領導力與團隊協作強化
- New employee role conversion, professional etiquette and professional accomplishment enhancement
  新員工角色轉換、職業禮儀、職業修養提升

Position Specific Training for Professional Technicians
專業技術人員崗位專項培訓

- Enhancing professional skills and knowledge
  專業技能及知識提升
- On-job occupational qualification training
  在職職業資格培訓
- Occupational safety education and training and emergency response
  職業安全教育培訓及應急處理

Advanced Management Training for Management Personnel
針對管理層的管理進階培訓

- Enhancing qualities and techniques of managements
  管理層素質及技術提升
- Monitoring occupational health and safety issues
  職業健康及安全事宜監管
- Learning operational strategies
  營運策略學習
- Strengthening leadership skills
  領導力強化

The Group is in a stage of rapid development. In order to better meet the needs of various business departments of the Company, the training will focus on core businesses. In 2021, a total of more than 390 courses with more than 1,100 hours were carried out for the Company's leadership, middle management and general employee at all levels in terms of safety production and operations management. The courses were carried out in various forms such as theoretical lectures, on-site learning and external training, focusing on all-rounded trainings from theoretical knowledge to technical practice. We have standardized the management of the Company's annual training work, and carried out training with the theme of "Beijing Energy Lecture Hall", personalized training for company leaders, "Pilot Program" training, and induction training for 2021 new graduates during the Year.

本集團正處於快速發展階段，為更好滿足公司各業務部門需求，培訓工作將圍繞核心業務展開。2021年，培訓主題以安全生產及管理經營為方向，針對公司領導層、中層管理人員及普通僱員各個層級共累計開展390餘次、1,100餘課時。授課方式以理論教學、現場學習及外出培訓等多形式開展，著重從理論知識、技術實踐等全方位進行培訓。我們規範化管理公司年度培訓工作，並於本年度開展「京能大講堂」主題培訓、公司領導個性化培訓、「領航計劃」培訓、以及組織2021屆新入職畢業生培訓等培訓工作。

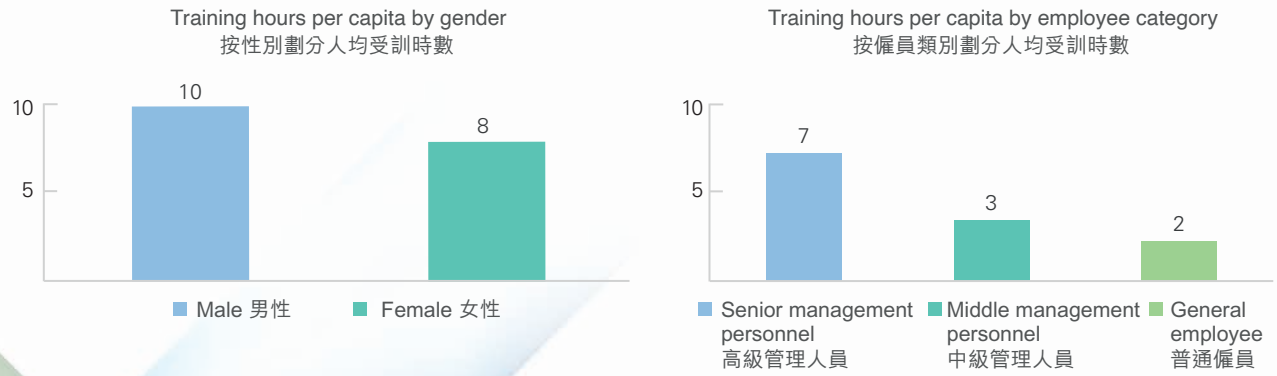
According to statistics, there were a total of 7,072 person-times of training during the Year, and the training cost per person was RMB2,121. The training coverage rate of male and female employees reached 96% and 80% respectively, with the average training hours per person of 10 hours and 8 hours, respectively. The training coverage rate of general staff reached 96%, with the average training hours per person of 2 hours. The training coverage rates of middle and senior management personnel reached 92%and 100%, respectively, with the average training hours per capita of 3 and 7 hours, respectively.

經統計，於本年度，本集團的培訓總人次為7,072人次，人均培訓開支為人民幣2,121元，男性及女性僱員的培訓覆蓋率分別達96%和80%，人均培訓時數分別為10小時和8小時。普通僱員的培訓率達96%，人均培訓時數為2小時；而中級及高級管理人員的培訓覆蓋率分別為92%和100%，人均培訓時數分別為3小時和7小時。

Special training programs
特色培訓項目

- BEH "Pilot Program" training course
  京能集團「領航計劃」培訓班
- "Beijing Energy Lecture Hall"
  「京能大講堂」
- "Flying Program"
  「起飛計劃」
- "Running Program"
  「助跑計劃」
- Online personalized training
  個性化培訓線上開課

Training hours per capita by gender and employee categories
按性別及僱員類別劃分的人均受訓時數



ENSURE OCCUPATIONAL HEALTH AND SAFETY

As a clean energy ecological investment operator, production safety provides a solid foundation for the Group's orderly operation. We have strictly implemented various rules, regulations and measures for production safety and continuously improved the level of safe production, with a bid to achieve the goal of zero accidents for the whole year. The Group has formulated the Environmental Occupational Health and Safety Operation Procedure and the Responsibility System for Safety Production and Occupational Disease Hazard Prevention and Control for All Employees, to standardise its operational safety management and actively promote the development of standardized safety production. Adhering to the principle of "CPC Committee and Administration Sharing the Same Responsibility with One Post Undertaking Both Responsibilities, Joint Management with Concerted Efforts, and Accountability for Dereliction of Duty（黨政同責、一崗雙責、齊抓共管、失職追責）", the Group clarifies the responsibilities for safety production and occupational disease prevention and control of management staff at all levels, functional departments and positions, and constantly improves the construction of the Group's standard system to keep in line with the national and international advanced standards.

確保職業健康與安全

作為一家清潔能源生態運營商，安全生產是本集團有序營運的堅實根基。我們嚴格貫徹落實安全生產各項規章制度與措施，持續提升安全生產水平，致力於達成全年安全無事故目標。本集團已制定《環境職業健康安全運行控制程序》與《全員安全生產與職業病危害防治責任制》，規範營運安全管理工作，並積極推動開展安全生產標準化。本集團堅持「黨政同責、一崗雙責、齊抓共管、失職追責」，明確各級管理人員、各職能部室及各崗位的安全生產及職業病防治職責，不斷完善本集團標準體系的建設，以適應國家標準和國際先進標準的需要。

Safety Monitoring Management System

The Group has established a comprehensive and efficient four-level safety monitoring and management system, and implemented stringent supervision and management for all operational sites and power plants to further consolidate safety production. With the use of such system, the heads of various departments and front-line employees will form a top-down safety monitoring mechanism, and at the same time, they can pinpoint the status of employees to minimise the safety risks of employees. We prioritize the identification and assessment of different levels of safety hazards and proactively implement site-specific monitoring and handling measures to minimize occupational health and safety risks and enhance safety control.

安全監控管理系統

本集團已建立全面、高效的四級安全監控管理系統，對所有營運地及發電站實施嚴格的監督和管理，進一步夯實安全生產。透過該系統，各部門負責人與一線員工將形成自上而下的安全監管機制，同時能準確定位員工狀況，盡可能降低僱員安全風險。我們優先考慮識別及評估不同級別的安全隱患，並主動實施針對特定地點的監控與處理措施，最大程度上降低職業健康與安全風險，加強安全管控。

Four-level Safety Monitoring and Management System

四級安全監控管理系統

Operational Headquarter 營運總部

- Continuously improve safety monitoring system 不斷完善安全監控系統
- Constantly monitor the implementation of safety policies at operational sites 時刻監督營運場所安全政策的實施

Regional Companies/ Subsidiaries in Each Region 區域公司/各屬地子公司

- Implement the safety policies 實施安全政策
- Monitor the safe operation management of affiliated power plants 監控附屬發電站的安全營運管理
- Organize safety training 組織安全培訓

Power Plants 發電站

- Supervise and evaluate the timely implementation of safety regulations 監督和評估安全制度的適時執行情況
- Formulate rectification measures according to safety inspection results 依據安全檢測結果制定整改措施

Individual Team 班組

- Implement and handle important operation and maintenance work, and safety measures 落實處理重要營運及維護工作以及安全措施

Combined with the Group's management system and current management, we made comprehensive revisions to the original production safety management system during the Year and completed the release of 46 systems in five batches. We supplemented and amended the Company's production safety system for all employees by sorting out the production safety management policies published by the Company to ensure that the Company's production safety management system is in line with the prevailing national laws and regulations.

結合本集團管理體系及管理現狀，我們於本年度對原有安全生產管理制度進行全面修訂，共完成五批次46項制度發佈。通過梳理本公司已發佈的安全生產管理政策，補充和修訂本公司全員安全生產制度，確保本公司安全生產管理制度符合先行國家法律法規要求。

We strictly abide by the laws and regulations that have a significant impact on the Group on providing a safe working environment and protecting employees from occupational hazards[6]. As of the end of the Year, the proportion of the Group's on-job employees receiving health examination reached 100%, and there were no incidents of occupational illness or working days lost due to work injury, and no work-related fatalities[7] were reported throughout the Year. This is the seventh consecutive year for the Group to achieve zero occupational incidents.

我們嚴格遵守對本集團有重大影響有關提供安全的工作環境及保障僱員避免職業性危害的法律及規例[6]。截至本年底，本集團接收健康檢查的在職僱員比例達100%，且全年未發生任何職業病相關事故或因工傷損失的工作日數及因工亡故[7]的個案。這是我們連續第七年實現零職業事故。

	2019	2020	2021
Number of work-related injuries (employees) 因工受傷人數（人）	0	0	0
Lost days due to work injuries (days) 因工傷損失工作日數（天）	0	0	0
Number of work-related fatalities 因工亡故的人數	0	0	0
Proportion of employees receiving health examination 接受健康檢查僱員比例	99%	100%	100%

6 For laws and regulations related to health and safety, please refer to the section of Compliance with List of Laws and Regulations on Environmental, Social and Governance.
健康與安全相關法律及規例請參見遵守有關環境、社會及管治的法律及規例清單章節。

7 The definition of work-related fatalities is determined in accordance with the Regulation on Work-related Injury Insurances (China) and the Employees' Compensation Ordinance (Hong Kong).
因工亡故的定義乃依照《工傷保險條例》（內地）及《僱員補償條例》（香港）進行判定。

Safety Hazard Investigation

The Group places emphasis on safety investigation and regards it as a key element in assessing corporate health and safety risks, and encourages all employees to regard safety as an individual and collective responsibility to foster a strong corporate safety culture. We have established a comprehensive safety hierarchical management and control mechanism to accurately determine risk assessment methods, and organized risk assessment work such as risk identification, risk evaluation and risk control. All branches of the Group completed the risk assessment work during the Year. In addition, the Group has established a points-based evaluation system through the economic responsibility system to systematically assess the safety performance of employees and their compliance with safety-related laws and regulations and internal rules and regulations.

隱患排查

本集團注重安全排查，並將其作為評估企業健康與安全風險的重點，鼓勵所有僱員將安全視為個人及集體責任，營造堅固的企業安全文化。我們建立完善的安全分級管控機制，以此精準確定風險評估方法，並組織開展風險辨識、風險評價及風險控制等風險評估工作。本集團所有分公司於本年度均完成風險評估工作。此外，本集團通過經濟責任制度建立積分評估系統，系統化考核僱員的安全表現，以及是否遵守相關安全法律法規及內部規章制度。

During the Year, we identified 156 low risks, 276 general risks and 102 major risks, and formulated corresponding safety risk management and control measures according to different risks. We seriously improved and implemented the safety hazard investigation and management work, and promoted the construction of safety supervision and inspection system such as self-inspection of power stations (including projects under construction), regional supervision and random inspection by the Company. During the inspection of power stations this Year, we found a total of 393 hidden problems, 315 of which had been rectified, with a rectification completion rate of approximately 80.15%.

於本年度，我們共識別出低風險156項，一般風險276項，較大風險102項，並根據不同風險制定相應的安全風險管控措施。我們認真完善和落實隱患排查治理工作體系，推進電站（含在建項目）自查，區域督查，公司抽查等安全監督檢查體系建設。在本年度進行電站巡查過程中，我們共發現隱患問題393項，已整改閉環315項，整改完成率約為80.15%。

Special Rectification

According to the National Three-Year Action Plan for Special Rectification of Safety Production (《全國安全生產專項整治三年行動計劃》) and based on the current status of safety production and various special safety work carried out by the Company, we formulated the three-year action plan for special rectification of safety production for the Company from 2020 onwards. Through this plan, the Group continued to carry out various safety inspections and special rectification of anti-violation management to promote the implementation of responsibilities through supervision and accountability and improve the reward and punishment mechanism.

專項整治

以《全國安全生產專項整治三年行動計劃》為依托，並結合本公司安全生產現狀及開展的各類專項安全工作，我們制定自2020年計起的為期三年的安全生產專項整治行動計劃方案。藉此計劃，本集團持續開展各類安全檢查、反違章管理專項整治等工作，以督責、問責及追責推動責任落實，完善獎勵及懲罰機制。

Safety Training

To equip our employees with occupational safety-related knowledge and skills and improve occupational health and safety of employees, the Group has formulated an annual safety training plan and carried out employee safety training by arranging a series of special activities such as knowledge competition and emergency drill. During the Year, a total of 752 person times received occupational safety and health training from the Group, with a total of 3,012 training hours. 100% of our employees received safety training during the Year.

In order to strengthen the safety awareness of employees, the Group organized the study and trainings on the Production Safety Law, so as to effectively enhance the understanding of all employees on the Production Safety Law. We also require employees to undergo occupational health examination, and fully distribute work clothes, safety helmets, insulating shoes and corresponding labour protection articles. In addition, the Group organized the key forefront production personnel of each branch to carry out four phases of safety production knowledge trainings in Datong Panda Power Plant, in order to enhance the safety production skills and management level of production personnel. During the Year, each branch of the Group organized an aggregate of 126 person times of three-level safety trainings and education for new employees, 1,390 person times of post safety training examination and 207 person times of "three kinds of people" examination for Work Ticket. At the same time, we actively strengthened safety training and organized training on cardiopulmonary resuscitation, first aid for electric shock and the use of fire-fighting equipment during the Year.

安全培訓

為落實僱員職業安全相關知識與技能，提高員工的職業健康安全，我們制定年度安全培訓計劃，通過安排知識競賽、應急演練等一系列特色活動開展僱員安全培訓。本集團於本年度共有752人次進行職業安全與健康教育培訓，員工安全培訓覆蓋率達100%，總培訓時數達3,012小時。

為強化僱員安全意識，本集團組織開展《安全生產法》學習培訓，有效提升全員對《安全生產法》的認識。我們亦要求員工進行職業健康體檢，足額配發工作服、安全帽、絕緣鞋及相應的勞保用品。此外，本集團組織各分公司的一線生產骨幹在大同熊貓電站開展四期安全生產知識培訓，以期提高生產人員安全生產技能和管理水平。於本年度，本集團各分公司組織開展新入職員工三級安全培訓教育共126人次，員工崗位安全培訓考試1,390人次及工作票「三種人」考試認定207人次。同時，我們積極加強安全實操培訓，於本年度組織開展心肺復蘇、觸電急救以及消防器材使用培訓。

「A Series of Trainings for Safety」 *「安全系列培訓」*

The first safety production management training course in 2021
2021年第一期安全生產管理培訓班

The courses were provided with optical resources, photovoltaic family modules, common fault handling, basic knowledge of safety production, emergency capacity-building, "two tickets" management, etc., and organized and carried out electric shock first aid and fire emergency drills during the training period.

課程設置為光資源、光伏族組件、常見故障處理、安全生產基礎知識、應急能力建設，「兩票」管理等方面，並在培訓期間組織開展觸電急救和火災應急演練活動。

Staff Training on Company Standards
公司標準全員培訓工作

The training focused on the Company's standardized work requirements, and the contents focused on strategy, administration, engineering, standardization, safety, manpower, etc. The training provided the knowledge of various management matters according to the standards, and timely solved the problems raised by the participants.

培訓圍繞公司規範化工作要求，內容圍繞戰略、行政、工程、標準化、安全、人力等展開，對照標準講解各項管理事項，及時解決了各參培人提出的問題。

Emergency Exercise for Personal Electric Shock
人身觸電應急演練

Fire Accident Drill in Photovoltaic Area
光伏區火災事故演練

Cardiopulmonary Resuscitation Exercise
心肺復甦演練

Pandemic Prevention and Control

Since the outbreak of the COVID-19 pandemic, the safety production department of the Group has held a special meeting on pandemic prevention and control, issued a special notice on pandemic prevention and control, organized the preparation for a special emergency plan for pandemic prevention and control and carried out emergency drills so as to develop a routine pandemic prevention and control model according to the overall arrangement of the pandemic prevention and control work. At the same time, at the weekly production meeting, pandemic prevention and control was the key agenda and became the routine line of work. All regions and power stations were urged to strictly implement the pandemic prevention and control measures and comply with the requirements of local governments. Furthermore, a pandemic prevention and control system was set up, including regular monitoring of the pandemic, entry control of external personnel and regular disinfecting of stations. As of the end of December 2021, the Group had no cases of COVID-19 infection.

疫情防控

自新型冠狀病毒疫情爆發至今，本集團安全生產部根據疫情防控工作的總體安排，緊急召開疫情防控專題會議，下發疫情防控專項通知，組織編制疫情防控專項應急預案並開展應急演練。同時，每週生產例會增設疫情防控作為重點跟踪事項和常態工作，督促各區域、電站嚴格落實各地政府疫情防控的措施及要求，建立生產系統疫情防控工作體系，做好疫情監測，外來人員管控及場站定期消毒等疫情防控工作。截止2021年12月底，本集團未發生新型冠狀病毒感染案例。

ABIDE BY THE PRINCIPLE OF COMPLIANCE OPERATIONS AND PROMOTE HEALTHY ECONOMIC DEVELOPMENT

恪守合規營運承諾 助推經濟健康發展

Adhering to the promise of "honesty, gratitude and responsibility", the Group operates our business with conscience and gives back to the community, so as to balance the benefits of all parties and share the "win-win" results.

秉持「誠信為本、感恩盡責」的承諾，本集團用良心經營企業、用愛心回饋社會，務求平衡各方得益、同享「共贏」成果。

No Poverty
消除貧困

BUILD BUSINESS REPUTATION

The Group has always persisted in the strict compliance management and high standards of business ethics, strictly regulated the behaviors of all employees by improving the compliance management system and carrying out anti-corruption training, ensured compliance and transparency in business activities, and been committed to being an outstanding corporate citizen.

樹立商業聲譽

本集團始終堅守嚴格的合規管理及保持高標準的商業道德準則，通過健全合規管理制度、開展反貪污培訓等措施，嚴格規範全體員工行為，確保經營活動的合規性和透明度，致力成為優秀的企業公民。

Operation with Integrity

The Group integrates the major issues of honesty and anti-corruption into corporate governance and the business operation, strives to gain reputation with integrity and ensure benefits with quality in the whole business life cycle, making customers, suppliers, partners and investors feel at ease to cooperate with us.

誠信經營

本集團將誠信、反貪污等重大議題融入企業管治及業務營運中，致力於整個運營生命週期內以誠信贏得聲譽、以質量確保效益，讓客戶、供應商、合作夥伴及投資者放心與我們合作。

We have been in strict compliance with local and international laws, and formulated the improved Compliance Manual and other employee policies, which have standardized the basic moral standards for employees under various management principles of conflicts of interest, and integrated honesty, trustworthiness and high moral standards into every link of corporate governance and business operation. The Group's management has taken the lead in establishing systems and norms to encourage integrity in enterprises. The Group is committed to strengthening the quality of employees' honesty and integrity and enhancing the level of enterprise's integrity by establishing and improving the position and evaluation system and incentive system for employees.

我們嚴格遵守當地及國際法律，制定完善的合規管理手冊及相關僱員政策，規範於各種利益衝突管理原則下的員工基本道德準則，讓誠實、守信與高尚的道德標準滲透至企業管治及業務經營的每一個環節。本集團管理層牽頭建立鼓勵企業誠信行為的制度規範，通過建立健全員工的崗位、考核制度和激勵制度，不斷強化員工的誠信文化建設、持續提升企業誠信水平。

Anti-corruption and Whistleblowing Policy

The Group has formulated the improved Compliance Manual and other relevant employee policies to identify the code of conduct for employees of each department and internal policies against unethical behaviours, such as bribery and conflict of interests.

The Group made strict requirements on the behaviours of employees. All employees are prohibited from soliciting any advantages from clients, suppliers, or any person in connection with the Group's business. We believe that the acceptance of relevant benefits may affect the objectivity of employees in performing their duties, resulting in employees acting against the interests of the Group. Therefore, we require employees declining advantages offered on any occasion, including the gifts such as cash, red packets, shopping cards, checks and securities, etc.; if they cannot refuse immediately, they should take the initiative to report to their superiors and hand it over to the department heads for unified treatment.

In order to improve the management system and strengthen the internal monitoring mechanism, the legal and compliance department of the Group formulated the Regulations on Compliance Consultation and Report Management. All employees are encouraged to supervise and report any violation of the manual and related policies. In addition to employees, we would also receive insider information reports from clients, suppliers or any individuals who are aware of any illegal or immoral business activities. We provide multiple channels for whistleblowers to report in real names or anonymously such as WeChat, email, phone, text message, and visits. The audit supervision department is responsible for investigating the issues reported. Once the behaviours are ruled as a violation of ethical standards, involved employees would be subject to economic and administrative penalties. If the violation is serious, the Group will consider terminating their employment or report to the relevant authorities.

During the Year, we distributed to all employees learning materials prepared by Independent Commission Against Corruption of Hong Kong, which included further awareness-raising for employees to help them deal with ethical issues such as conflict of interests and to prevent them from corruption, so as to ensure that the Group's directors, management and employees were acquainted with updated understanding of anti-corruption.

反貪污與舉報政策

本集團編制完善的合規管理手冊及其他相關員工制度，明確各部門僱員的行為操守準則及企業內部相關政策，時刻嚴防賄賂及利益衝突等不合規行為的發生。

本集團對僱員的行為作出嚴格的要求，禁止所有僱員向與本集團業務相關的客戶、供應商或任何人士索取任何利益。我們認為，收受相關利益可能會影響僱員履行職責的客觀性，導致僱員作出違背本集團利益的行為。因此，我們要求僱員在任何場合下都應當面謝絕收受相關利益，包括現金、紅包、購物卡、支票及有價證券等禮品；如不能當即謝絕，應主動向上級匯報，並上交予部門負責人統一處理。

為完善風險管理體系及強化內部監督機制，本集團法務合規部已制定《合規諮詢與舉報管理辦法》，鼓勵全體僱員對違反合規管理手冊及其他相關政策的行為進行監督和舉報。除僱員以外，我們亦接受來自客戶、供應商或任何知悉非法或不道德商業活動的個人的內幕資料舉報。我們開設多條舉報渠道供舉報者進行實名或匿名舉報，包括微信、郵件、電話、簡訊及來訪等。審計監督部將統一調查舉報事件。若調查屬實，涉事僱員將受到行政和經濟處罰；若情況嚴重，本集團會考慮終止其僱傭關係或移交司法機關處理。

我們於本年度向所有員工發送由香港廉政公署編制的學習資料，內容包括進一步提高僱員意識，幫助其應對利益衝突等道德問題，提防員工誤入貪腐陷阱，確保本集團董事、管理層及員工對反貪污的認識有所更新。

During the Year, the Group strictly complied with Prevention of Bribery Ordinance and other relevant national laws and regulations[8] against corruption. The Group was not aware of any violations of relevant laws and regulations that have a significant impact on the Group relating to bribery, extortion, fraud and money laundering and the Group was not involved in any corruption cases.

於本年度，本集團嚴格遵守包括《防止賄賂條例》在內的有關反貪污政策的國家法律及規例[8]，並無知悉任何違反有關賄賂、勒索、欺詐及洗黑錢且對本集團有重大影響的法律及規例的事宜，亦無涉及任何貪污訴訟個案。

ADVOCATE COMPETITION COMPLIANCE

The Group has been adhering to the principle of "integrity of contracts" to compete and cooperate on the premise of complying with national policies and laws as well as perform the agreements and contracts to achieve common interests and mutual development. We believe that the healthy development of the whole industry can only be ensured only if all enterprises strictly abide by relevant anti-monopoly laws and regulations and maintain fair competition in the market.

倡導競爭合規

本集團的誠信以契約為基礎，並以遵守國家政策和法律為前提，開展競爭與戰略協作，認真履行協約與合同，以求獲得雙方的共同利益和共同發展。我們深信，唯有在所有企業均嚴格遵守反壟斷相關法律法規、維護市場公平競爭的情況下，方能確保整個行業的健康發展。

The Group has been strictly complying with the Company Law of the PRC, the Anti-Monopoly Law of the PRC, the Anti-Unfair Competition Law of the PRC and other applicable laws and regulations, and is aware that its management should bear corresponding economic and legal responsibilities. During the Year, we did not have legal proceedings relating to improper competition and anti-monopoly incidents.

本集團嚴格遵守《中華人民共和國公司法》、《中華人民共和國反壟斷法》、《中華人民共和國反不正當競爭法》及其他適用的法律法規，並知悉管理層應承擔的相應經濟及法律責任。於本年度，我們並無針對不當競爭行為和反壟斷事件的法律訴訟個案。

DEVOTED TO COMMUNITY CONSTRUCTION

The Group has been committed to promoting shared achievements in clean energy technology in the residential areas under its jurisdiction of the operation through the use of the Company's platform resources and industry advantages, thus promoting the sustainable economic and social development of the residential areas. In addition, as usual, we will sign paper documents with surrounding villagers such as land use agreements before any construction project involving land acquisition is carried out to ensure that our business activities are in the interests of the community. During the Year, the Company actively participated in the rural revitalization service, with a accumulative spending of RMB14 million in rural poverty alleviation.

投身社區建設

本集團致力於透過利用公司平台資源及行業領域優勢，推動營運所轄社區共享清潔能源技術發展成果，進而促進社區在經濟及社會方面的可持續發展。此外，按照慣例，我們於任何涉及徵用土地的建設項目開展之前，均會與周邊村民簽訂紙面的文件，例如用地協議，以確保我們的業務活動合乎社區利益。於本年度，本公司積極投身於鄉村振興服務實踐，累計為鄉村扶貧支出人民幣14百萬元。

8 For anti-corruption-related laws and regulations, please refer to the section of Compliance with List of Laws and Regulations on Environmental, Social and Governance.
反貪污相關法律及規例請參見遵守有關環境、社會及管治的法律及規例清單章節。

Appendix I: Compliance with List of Laws and Regulations on Environmental, Social and Governance
附錄一：遵守有關環境、社會及管治的法律及規例清單

Aspect of ESG Reporting Guide ESG報告指引層面	Laws and regulations complied with by the Group that have a significant impact on the Group 本集團遵守對本集團有重大影響的法律及規例		Performance during the Year 於本年度表現
A. Environmental Area **A. 環境範疇**			
Aspect A1: Emissions **層面A1：排放物**	General applicable laws and regulations 一般適用的法律及規例	Environmental Protection Law of the PRC 《中華人民共和國環境保護法》 Law of the PRC on Appraising of Environmental Impacts 《中華人民共和國環境影響評價法》 Environmental Protection Tax Law of the PRC 《中華人民共和國環境保護稅法》 Regulation on the Implementation of the Environmental Protection Tax Law of the PRC 《中華人民共和國環境保護稅法實施條例》 Law of the PRC on Promoting Clean Production 《中華人民共和國清潔生產促進法》 Regulation of the PRC on Nature Reserves 《中華人民共和國自然保護區條例》 Convention on Biological Diversity 《生物多樣性公約》 Energy Conservation Law of the PRC 《中華人民共和國節約能源法》	Strictly abided by and did not violate laws and regulations that have a significant impact on the Group regarding air and GHG emissions, sewage discharge into water and land, and waste generation and disposal 嚴格遵守且無違反對本集團有重大影響的有關廢氣和溫室氣體排放、向水及土地排污、廢棄物產生及處置的法律及規例
	Air Emissions 廢氣排放	Atmospheric Pollution Prevention and Control Law of the PRC 《中華人民共和國大氣污染防治法》	
	GHG Emissions 溫室氣體排放	United Nations Framework Convention on Climate Change 《聯合國氣候變化框架公約》 Vienna Convention for the Protection of the Ozone Layer 《保護臭氧層維也納公約》 Regulation on the Administration of Ozone Depleting Substances 《消耗臭氧層物質管理條例》 Montreal Protocol on Substances that Deplete the Ozone Layer 《關於消耗臭氧層物質的蒙特利爾議定書》	

Aspect of ESG Reporting Guide ESG報告指引層面	Laws and regulations complied with by the Group that have a significant impact on the Group 本集團遵守對本集團有重大影響的法律及規例		Performance during the Year 於本年度表現
Aspect A1: Emissions **層面A1：排放物**	Management on sewage discharge into water and others related to water resources 向水排污及其他與水資源相關的管理	Water Law of the PRC 《中華人民共和國水法》 Water Pollution Prevention and Control Law of the PRC 《中華人民共和國水污染防治法》 Regulation on Urban Drainage and Sewage Treatment 《城鎮排水與污水處理條例》 Marine Environment Protection Law of the PRC 《中華人民共和國海洋環境保護法》 Regulation of the PRC on the Control over Dumping Wastes into the Ocean 《中華人民共和國海洋傾廢管理條例》 Regulation on the Prevention and Control of Vessel-induced Pollution to the Marine Environment 《防治船舶污染海洋環境管理條例》 Administrative Regulation on the Prevention of Environmental Pollution Caused by Dismantling of Vessels 《防止拆船污染環境管理條例》 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 《防止傾倒廢物及其他物質污染海洋的公約》 Regulation of the PRC on the Control of Pollution Damage to Marine Environment by Land-based Pollutants 《中華人民共和國防治陸源污染物污染損害海洋環境管理條例》	Strictly abided by and did not violate laws and regulations that have a significant impact on the Group regarding air and GHG emissions, sewage discharge into water and land, and waste generation and disposal 嚴格遵守且無違反對本集團有重大影響的有關廢氣和溫室氣體排放、向水及土地排污、廢棄物產生及處置的法律及規例

Aspect of ESG Reporting Guide ESG報告指引層面	Laws and regulations complied with by the Group that have a significant impact on the Group 本集團遵守對本集團有重大影響的法律及規例		Performance during the Year 於本年度表現
Aspect A1: Emissions **層面A1：排放物**	Management on sewage discharge into land and others related to land resources 向土地排污及其他與土地資源相關的管理	Land Administration Law of the PRC 《中華人民共和國土地管理法》 Water and Soil Conservation Law of the PRC 《中華人民共和國水土保持法》 Soil Pollution Prevention and Control Law of the PRC 《中華人民共和國土壤污染防治法》	Strictly abided by and did not violate laws and regulations that have a significant impact on the Group regarding air and GHG emissions, sewage discharge into water and land, and waste generation and disposal 嚴格遵守且無違反對本集團有重大影響的有關廢氣和溫室氣體排放、向水及土地排污、廢棄物產生及處置的法律及規例
	Hazardous and non-hazardous waste generation and disposal 有害及無害廢棄物產生及處置	Directory of National Hazardous Wastes 《國家危險廢物名錄》 Standard for Pollution Control on Hazardous Waste Storage 《危險廢物貯存污染控制標準》 The Measures for the Administration of Permit for Operation of Dangerous Wastes 《危險廢物經營許可證管理辦法》 Law of the PRC on the Prevention and Control of Environmental Pollution by Solid Waste 《中華人民共和國固體廢物污染環境防治法》 Law of the PRC on Prevention and Control of Radioactive Pollution 《中華人民共和國放射性污染防治法》 Regulation on the Safety Management of Radioactive Waste 《放射性廢物安全管理條例》 Regulation on the Safety Management of Hazardous Chemicals 《危險化學品安全管理條例》 Regulations on the Administration of Recovery and Disposal of Waste Electrical and Electronic Products 《廢棄電器電子產品回收處理管理條例》 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal 《控制危險廢物越境轉移及其處置巴塞爾公約》	
	Noise pollution emission 噪聲污染排放	Law of the PRC on the Prevention and Control of Pollution From Environmental Noise 《中華人民共和國環境噪聲污染防治法》	

Aspect of ESG Reporting Guide ESG報告指引層面	Laws and regulations complied with by the Group that have a significant impact on the Group 本集團遵守對本集團有重大影響的法律及規例		Performance during the Year 於本年度表現
B. Social Area **B. 社會範疇**			
Aspect B1: Employment **層面B1：僱傭**	General applicable laws and regulations 一般適用的法律及規例	Labour Law of the PRC 《中華人民共和國勞動法》 Labour Contract Law of the PRC 《中華人民共和國勞動合同法》 Employment Promotion Law of the PRC 《中華人民共和國就業促進法》 Social Insurance Law of the PRC 《中華人民共和國社會保險法》 Labour Dispute Mediation and Arbitration Law of the PRC 《中華人民共和國勞動爭議調解仲裁法》 Regulation on the Implementation of the Employment Contract Law of the PRC 《中華人民共和國勞動合同法實施條例》 Mandatory Provident Fund Schemes Ordinance 《強制性公積金計劃條例》 Employment Ordinance 《僱傭條例》 Employees' Compensation Ordinance 《僱員補償條例》	Strictly abided by and did not violate laws and regulations that have a significant impact on the Group regarding compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare 嚴格遵守且無違反對本集團有重大影響的有關薪酬及解僱、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法律及規例
	Compensation and dismissal, recruitment and promotion, working hours and rest periods 薪酬及解僱、招聘及晉升、工作時數及假期	Minimum Wage Ordinance 《最低工資條例》 Regulation on Paid Annual Leave for Employees 《職工帶薪年休假條例》 Measures for Public Holidays for National Annual Festival and Memorial Days 《全國年節及紀念日放假辦法》	

Aspect of ESG Reporting Guide ESG報告指引層面	Laws and regulations complied with by the Group that have a significant impact on the Group 本集團遵守對本集團有重大影響的法律及規例		Performance during the Year 於本年度表現
Aspect B1: Employment **層面B1：僱傭**	Equal opportunities, diversity and anti-discrimination 平等機會、多元化及反歧視	Law of the PRC on the Protection of Disabled Persons 《中華人民共和國殘疾人保障法》 Law of the PRC on the Protection of Rights and Interests of Women 《中華人民共和國婦女權益保障法》 Regulations on the Employment of the Disabled 《殘疾人就業條例》	Strictly abided by and did not violate laws and regulations that have a significant impact on the Group regarding compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare 嚴格遵守且無違反對本集團有重大影響的有關薪酬及解僱、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法律及規例

Aspect of ESG Reporting Guide ESG報告指引層面	Laws and regulations complied with by the Group that have a significant impact on the Group 本集團遵守對本集團有重大影響的法律及規例		Performance during the Year 於本年度表現
Aspect B2: Health and Safety **層面B2：健康與安全**	Provide a safe working environment and protect employees from occupational hazards 提供安全工作環境及保障僱員避免職業性危害	Labour Law of the PRC 《中華人民共和國勞動法》 Fire Protection Law of the PRC 《中華人民共和國消防法》 Production Safety Law of the PRC 《中華人民共和國安全生產法》 Law of the PRC on the Prevention and Treatment of Occupational Diseases 《中華人民共和國職業病防治法》 Emergency Response Law of the PRC 《中華人民共和國突發事件應對法》 Measures for the Administration of Contingency Plans for Work Safety Accidents 《生產安全事故應急預案管理辦法》 Regulation on Work-related Injury Insurances 《工傷保險條例》 Regulation on the Safety Management of Hazardous Chemicals 《危險化學品安全管理條例》 Regulations on the Reporting, Investigation and Disposition of Work Safety Accidents 《生產安全事故報告和調查處理條例》 Regulation on Labour Protection in Workplaces Involving Use of Toxic Substances 《使用有毒物品作業場所勞動保護條例》 Convention concerning Occupational Safety and Health and the Working Environment 《職業安全和衛生及工作環境公約》 Occupational Safety and Health Ordinance 《職業安全及健康條例》 Fire Safety (Commercial Premises) Ordinance 《消防安全（商業處所）條例》	Strictly abided by and did not violate laws and regulations that have a significant impact on the Group regarding the provision of a safe working environment and the protection of employees from occupational hazards 嚴格遵守且無違反對本集團有重大影響的有關提供安全工作環境及保障僱員避免職業性危害的法律及規例

Aspect of ESG Reporting Guide ESG報告指引層面	Laws and regulations complied with by the Group that have a significant impact on the Group 本集團遵守對本集團有重大影響的法律及規例		Performance during the Year 於本年度表現
Aspect B4: Labour Principles **層面B4：勞工準則**	Prevention of child or forced labour 防止童工或強制勞工	Labour Law of the PRC 《中華人民共和國勞動法》 Law of the PRC on the Protection of Minors 《中華人民共和國未成年人保護法》 Provisions on the Prohibition of Using Child Labour 《禁止使用童工規定》 Convention Concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour 《禁止和立即行動消除最惡劣形式的童工勞動公約》 Employment of Children Regulations 《僱用兒童規例》 Employment of Young Persons (Industry) Regulations 《僱用青年（工業）規例》	Strictly abided by and did not violate laws and regulations that have a significant impact on the Group regarding the prevention of child labour or forced labour 嚴格遵守且無違反對本集團有重大影響的有關防止童工或強制勞工的法律及規例

Aspect of ESG Reporting Guide ESG報告指引層面	Laws and regulations complied with by the Group that have a significant impact on the Group 本集團遵守對本集團有重大影響的法律及規例		Performance during the Year 於本年度表現
Aspect B6: Product Responsibility **層面B6：產品責任**	Health, safety and privacy of the products and services provided 所提供產品和服務的健康與安全及私隱事宜	Standardization Law of the PRC 《中華人民共和國標準化法》 Product Quality Law of the PRC 《中華人民共和國產品質量法》 Law of the PRC on Import and Export Commodity Inspection 《中華人民共和國進出口商品檢驗法》 Law of the PRC on the Protection of Consumer Rights and Interests 《中華人民共和國消費者權益保護法》 Property Management Services Ordinance 《物業管理服務條例》 Personal Data (Privacy) Ordinance 《個人資料（私隱）條例》	Strictly abided by and did not violate laws and regulations that have a significant impact on the Group regarding the health and safety of products and services provided, privacy matters and the maintenance and protection of intellectual property rights; the Company's business did not involve advertising and product labeling activities, and the related laws and regulations have no significant impact on us 嚴格遵守且無違反對本集團有重大影響的有關所提供產品和服務的健康與安全、私隱事宜及維護和保障知識產權的法律及規例；公司業務不涉及廣告及產品標籤活動，與其相關的法律及規例亦對我們無重大影響
	Safeguard and protect intellectual property rights 維護和保障知識產權	Patent Law of the PRC 《中華人民共和國專利法》 Copyright Law of the PRC 《中華人民共和國著作權法》 Tort Law of the PRC 《中華人民共和國侵權責任法》 Regulation on the Implementation of the Trademark Law of the PRC 《中華人民共和國商標法實施條例》 Rules for the Implementation of the Patent Law of the PRC 《中華人民共和國專利法實施細則》 Enterprise Intellectual Property Management Standard 《企業知識產權管理規範》 World Intellectual Property Organization Copyright Treaty 《世界知識產權組織版權條約》	

Aspect of ESG Reporting Guide ESG報告指引層面	Laws and regulations complied with by the Group that have a significant impact on the Group 本集團遵守對本集團有重大影響的法律及規例		Performance during the Year 於本年度表現
Aspect B7: Anti-corruption **層面B7：反貪污**	Prevention of bribery, extortion, fraud and money laundering 防止賄賂、勒索、欺詐及洗黑錢	Criminal Law of the PRC 《中華人民共和國刑法》 Supervision Law of the PRC 《中華人民共和國監察法》 Company Law of the PRC 《中華人民共和國公司法》 Anti-Money Laundering Law of the PRC 《中華人民共和國反洗錢法》 Anti-Monopoly Law of the PRC 《中華人民共和國反壟斷法》 Anti-Unfair Competition Law of the PRC 《中華人民共和國反不正當競爭法》 The Bidding Law of the PRC 《中華人民共和國招標投標法》 Regulation on the Implementation of the Bidding Law of the PRC 《中華人民共和國招標投標法實施條例》 Prevention of Bribery Ordinance 《防止賄賂條例》 Competition Ordinance 《競爭條例》	Strictly abided by and did not violate laws and regulations that have a significant impact on the Group regarding the prevention of bribery, extortion, fraud and money laundering 嚴格遵守且無違反對本集團有重大影響的有關防止賄賂、勒索、欺詐及洗黑錢的法律及規例

Appendix II: Overview of Environmental, Social and Governance Key Performance Indicators
附錄二：環境、社會及管治關鍵績效指標總覽

ENVIRONMENTAL MANAGEMENT[9] 環境管理[9]

	2021	2020	2019
Use of Resources – Energy **資源使用－能源**			
Offices **辦公室**			
Electricity (MWh) 電力（兆瓦時）	331.22	270.86	351.08
Gasoline (MWh) 汽油（兆瓦時）	0.25	32.77	2,847.55
Power Plants **電站**			
Electricity (MWh) 電力（兆瓦時）	37,914.71	27,431.02	25,379.15
Natural gas (MWh) 天然氣（兆瓦時）	20.55	43.39	63.98
Gasoline (MWh) 汽油（兆瓦時）	5,730.11	1,182.53	841.21
Diesel (MWh) 柴油（兆瓦時）	533.39	105.33	181.32
Offices and Power Plants **辦公室及電站**			
Total consumption (MWh) 消耗總量（兆瓦時）	44,530.23	29,065.90	29,664.29
Consumption intensity (MWh per GWh electricity generated) 消耗強度（兆瓦時／千兆瓦時發電量）	11.48	10.40	10.78

9 Environmental KPIs stated in this report are calculated with reference to "Appendix 2: Reporting Guidance on Environmental KPIs" of "How to Prepare an ESG Report" published by HKEX.
本報告所披露的環境關鍵績效指標乃參照香港交易所發佈的《如何編備環境、社會及管治報告》附錄二之《環境關鍵績效指標匯報指引》。

	2021	2020	2019
Use of Resources - Water **資源使用－水**			
Offices **辦公室**			
Water (Tons) 水（噸）	756	700	961
Power Plants **電站**			
Water (Tons) 水（噸）	46,851	17,928	35,742
Offices and Power Plants **辦公室及電站**			
Total consumption (Tons) 消耗總量（噸）	47,607	18,628	36,703
Water consumption intensity (Tons per GWh electricity generated) 耗水強度（噸／千兆瓦時發電量）	12.27	6.66	13.34
Emissions **排放**			
Greenhouse Gas Emission[10] **溫室氣體排放[10]**			
Total greenhouse gas emission (tCO_2e) 溫室氣體排放總量（噸二氧化碳當量）	25,316	17,240	19,259
Scope 1: Direct emissions (tCO_2e) 範圍1：直接排放（噸二氧化碳當量）	1,980	335	1,183
Scope 2: Indirect emission (tCO_2e) 範圍2：間接排放（噸二氧化碳當量）	23,336	16,905	18,076
Emission intensity (tCO_2e per GWh electricity generated) 排放強度（噸二氧化碳當量／千兆瓦時發電量）	6.53	6.17	7.00

10 The calculation scope of greenhouse gas emission (Scope 1) includes natural gas combustion and fuel use of automobiles. The calculation scope of greenhouse gas emission (Scope 2) includes the indirect emission caused in the production process through purchased electricity in Hong Kong and Mainland China. The calculation method and related emission coefficients of greenhouse gas emissions from electricity use in Mainland China and Hong Kong in 2021 respectively refer to the "Corporate Greenhouse Gas Emissions Accounting Methods and Reporting Guidelines – Power Generation Facilities" published by the Ministry of Ecology and Environment of the People's Republic of China in 2021 and the Sustainability Report 2020 issued by HK Electric Investments.
溫室氣體排放（範圍1）的計算範圍包括天然氣燃燒及汽車的燃料使用。溫室氣體排放（範圍2）的計算範圍包括中國香港及內地外購電力在生產過程中造成的間接排放。2021年中國內地及香港的電力使用產生的溫室氣體排放的計算方法及相關排放系數乃分別參考中國生態環境部2021年發佈的《企業溫室氣體排放核算方法與報告指南發電設施》及港燈電力投資發佈的《2020年可持續發展報告》。

	2021	2020	2019
Air[11]			
廢氣[11]			
Sulphur oxide (kg) 硫氧化物（公斤）	10.4	3.7	6.1
Nitrogen oxide (kg) 氮氧化物（公斤）	2,818.3	477.5	530.4
Carbon monoxide (kg) 一氧化碳（公斤）	–	1,462.9	–
Particulate matter (kg) 顆粒物（公斤）	254.2	13.2	47.5
Wastewater			
廢水			
Wastewater discharge (Tons per GWh electricity generated) 廢水排放量（噸／千兆瓦時發電量）	31,587	2,153.4	2,321.5
Emission intensity (Tons per GWh electricity generated) 排放強度（噸／千兆瓦時發電量）	8.14	0.77	0.84
Solar panels			
太陽能電池板			
Solar panels (recycled) (Tons) 已回收太陽能電池板（噸）	42.49	5.97	6.30
Hazardous waste			
有害廢棄物			
Waste circuit board (Tons) 廢線路板（噸）	0.00	0.00	0.22
Waste oil (Tons) 廢油（噸）	1.60	2.75	0.25
Total waste generated (Tons) 產生廢棄物總量（噸）	1.60	2.75	0.47
Waste intensity (kg per GWh electricity generated) 產生廢棄物強度（公斤／千兆瓦時發電量）	0.41	0.98	0.17

11 The calculation scope of air pollutant emission includes natural gas combustion and fuel use of automobiles.
大氣污染物排放的計算範圍包括天然氣燃燒及汽車的燃料使用。

	2021	2020	2019
Non-hazardous waste **無害廢棄物**			
Recyclable waste (Tons) 可回收廢棄物（噸）	19.70	18.10	5.90
Non-recyclable waste (Tons) 不可回收廢棄物（噸）	1.53	1.22	15.19
Total waste generated (Tons) 產生廢棄物總量（噸）	21.23	19.32	21.09
Waste intensity (kg per GWh electricity generated) 產生廢棄物強度（公斤／千兆瓦時發電量）	5.47	6.91	7.66

EMPLOYEE MANAGEMENT 員工管理

	2021	2020	2019
Labour Profile **勞工分佈**			
Total workforce **僱工總數**	752	436	412
By Gender **按性別**			
Male 男性	611 (81.2%)	365 (83.7%)	346 (84.0%)
Female 女性	141 (18.8%)	71 (16.3%)	66 (16.0%)
By Region **按地區**			
Mainland China 中國內地	715 (95.1%)	409 (93.8%)	391 (94.9%)
Hong Kong, China 中國香港	24 (3.2%)	27 (6.2%)	21 (5.1%)
Overseas 海外	13 (1.7%)	–	–
By Employee Type **按僱傭類型**			
Full-time 全職	752	436	412
Part-time 兼職	0	0	0

	2021	2020	2019
By Employee Contract			
按僱傭合同			
Fixed	752	436	412
固定			
Temporary	0	0	0
臨時			
By Employee Category			
按僱員類型			
Senior management personnel	8 (1.1%)	8 (1.9%)	10 (2.4%)
高級管理人員			
Middle management personnel	56 (7.4%)	42 (9.6%)	38 (9.2%)
中級管理人員			
General employee	688 (91.5%)	386 (88.5%)	364 (88.3%)
普通僱員			
By Age Group			
按年齡組別			
30 or below	225 (29.9%)	143 (32.8%)	171 (41.5%)
30歲或以下			
31–40	392 (52.1%)	222 (50.9%)	195 (47.3%)
31歲至40歲			
41 or above	135 (18.0%)	71 (16.3%)	46 (11.2%)
41歲或以上			
By Education Background			
按教育背景			
Doctor	3 (0.4%)	1 (0.2%)	2 (0.5%)
博士			
Master	119 (15.8%)	42 (9.6%)	29 (7.0%)
碩士			
Bachelor	316 (42.0%)	232 (53.2%)	185 (44.9%)
學士			
Non-tertiary qualification and below	314 (41.8%)	161 (37.0%)	196 (47.6%)
大專及以下學歷			

	2021	2020	2019
Employee turnover and turnover rate **流失僱員總數及僱員流失比率**			
By Gender **按性別**			
Male 男性	52 (8.5%)	55 (12.6%)	82 (19.9%)
Female 女性	5 (3.5%)	14 (3.2%)	25 (6.1%)
By Region **按地區**			
Mainland China 中國內地	53 (7.4%)	59 (13.5%)	91 (22.1%)
Hong Kong, China 中國香港	4 (16.7%)	10 (2.3%)	16 (3.9%)
Overseas 海外	–	–	–
By Age **按年齡**			
30 or below 30歲或以下	18 (8.0%)	22 (5.0%)	43 (10.4%)
31–40 31歲至40歲	30 (7.7%)	33 (7.6%)	53 (12.9%)
41 or above 41歲或以上	9 (6.7%)	14 (3.2%)	11 (2.7%)
Total number of new hire employees and ratio **新入職僱員總數及比例**			
By Gender **按性別**			
Male 男性	296 (79.4%)	74 (79.6%)	87 (85.3%)
Female 女性	77 (20.6%)	19 (20.4%)	15 (14.7%)

	2021	2020	2019
By Region **按地區**			
Mainland China 中國內地	358 (96.0%)	80 (86.0%)	94 (92.2%)
Hong Kong, China 中國香港	2 (0.5%)	13 (14.0%)	8 (7.8%)
Overseas 海外	13 (3.5%)	–	–
By Age **按年齡**			
30 or below 30歲或以下	139 (37.3%)	27 (29.0%)	61 (59.8%)
31–40 31歲至40歲	185 (49.6%)	37 (39.8%)	33 (32.4%)
41 or above 41歲或以上	49 (13.1%)	29 (31.2%)	8 (7.8%)
Return and retention rates after parental leave **育嬰假後的返崗及留任**			
By Gender **按性別**			
Male 男性	100%	100%	100%
Female 女性	100%	100%	100%
Total number of ethnic minority employees and ratio **少數民族僱員總數及比例**			
By Gender **按性別**			
Male 男性	59 (77.6%)	32 (80.0%)	19 (79.2%)
Female 女性	17 (22.4%)	8 (20.0%)	5 (20.8%)

	2021	2020	2019
Health and Safety **健康與安全**			
Occupational Health and Safety Performance ***職業健康與安全表現***			
By Accident Category **按事故類型**			
Number of safety accidents 安全事故數量	0	0	0
Number of first level accidents 一類事故數量	0	0	0
Number of mis-operation accidents 誤操作事故數量	0	0	0
Number of near-miss accidents 未遂事故數量	0	0	0
Number of fire accidents 火災事故數量	0	0	0
Number of traffic accidents 交通事故數量	0	0	0
Work-related injury and fatalities **工傷及因工亡故情況**			
Work-related injuries per 1,000 workers 每千名僱員的工傷數	0	0	0
Lost days due to work-related injury 因工傷損失工作日數	0	0	0
Number of work-related fatalities in each of the past three years (including the reporting year) 過去三年(包括匯報年度)每年因工亡故人數	0	0	0
Rate of work-related fatalities in each of the past three years (including the reporting year) 過去三年(包括匯報年度)每年因工亡故比率	0	0	0
Health examination **健康檢查情況**			
Proportion of employees undergoing health examination 接受健康檢查的僱員比例	100%	100%	99%

	2021	2020	2019
Education on Occupational Health and Safety **職業健康與安全教育**			
Health and safety training **健康與安全培訓情況**			
Total person-times training 培訓總人次	752	380	987
Total training hours 培訓總時數	3,012	2,763	1,128
Percentage of employees trained 受訓僱員比例	100%	76%	97%
Development and Training **發展及培訓**			
Percentage of employees trained ***受訓僱員比例***			
By Gender[12] **按性別**[12]			
Male 男性	96%	93%	91%
Female 女性	80%	66%	68%
By Employee Category[13] **按僱員類型**[13]			
Senior management 高級管理人員	100%	60%	80%
Middle management 中級管理人員	92%	66%	90%
General staff 普通僱員	96%	94%	88%

12 The proportion of trained employees by gender is calculated by dividing the number of trained employees of each gender by the corresponding total number of employees.
按性別劃分的受訓僱員比例的計算方法為按性別劃分的僱員培訓人次除以相對應僱員總數。

13 The proportion of trained employees by employee type is calculated by dividing the number of trained employees of each employee type by the corresponding total number of employees.
按僱員類型劃分的受訓僱員比例的計算方法為按僱員類型劃分的僱員培訓人次除以相對應僱員總數。

	2021	2020	2019
Average training hours of employees (hours)			
僱員受訓平均時數（小時）			
By Gender			
按性別			
Male	10	12	25
男性			
Female	8	7	8
女性			
By Employee Category			
按僱員類型			
Senior management	7	5	25
高級管理人員			
Middle management	3	5	208
中級管理人員			
General staff	2	12	8,431
普通僱員			
Total number of employees trained			
受訓僱員總人次			
By Gender			
按性別			
Male	6,605	6,031	6,661
男性			
Female	467	153	235
女性			
By Employee Category			
按僱員類型			
Senior management	107	39	16
高級管理人員			
Middle management	468	85	120
中級管理人員			
General staff	6,497	6,060	6,760
普通僱員			

	2021	2020	2019
Training expenses per employee (RMB) 僱員人均培訓開支（人民幣元）	2,121	81	537
Supply Chain Management 供應鏈管理			
Number of suppliers *供應商數目*			
By Region 按地區			
Mainland China 中國內地	480	370	340
Regions other than Mainland China 中國內地以外的其他地區	7	1	0
Community investment 社區投資			
Total social investment 社會投資總額	14,000,000 (RMB) （人民幣）	10,000 (RMB) （人民幣）	10,000 (HKD) （港元）

Appendix III: GRI and HKEX ESG Content Index
附錄三：GRI及香港交易所ESG內容索引

GENERAL DISCLOSURES:
一般披露：

Disclosure Aspect 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/Remarks 頁碼／備註
Organisational Profile 組織概況	102-1	–	Name of the organisation 組織名稱	P. 3
	102-2	–	Activities, brands, products, and services 活動、品牌、產品和服務	P. 7
	102-3	–	Location of headquarter 總部位置	P. 7
	102-4	–	Location of operations 經營位置	P. 7
	102-5	–	Ownership and legal form 所有權與法律形式	P. 7
	102-6	–	Markets served 服務的市場	P. 7
	102-7	–	Scale of the organisation 組織規模	P. 7-8, P. 10-11 and details of types of customers and beneficiaries are set out on P. 41 of the 2021 Annual Report P. 7-8, P. 10-11及客戶和受益人類型詳見二零二一年年報第41頁
	102-8	B1.1	Information on employees and other workers 關於僱員和其他工作者的信息	P. 56-57, P. 88-89
	102-9	B5	Supply chain 供應鏈	P. 53-56, P. 95
	102-10	–	Significant changes to the organisation and its supply chain 組織及其供應鏈的重大改變	No significant changes occurred to the organisation and its supply chain during the Year 於本年度，組織及其供應鏈於無發生重大改變
	102-11	–	Precautionary principle or approach 預警原則或方針	P. 34
	102-12	–	External initiatives 外部倡議	P. 9
	102-13	–	Membership of associations 協會的成員資格	P. 9

Disclosure Aspect 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/Remarks 頁碼／備註
Strategy **戰略**	102-14	–	Statement from senior decision-makers 高級決策者的聲明	P. 13-14
Ethics and Integrity **道德和誠信**	102-16	–	Values, principles, standards, and norms of behaviour 價值觀、原則、標準和行為規範	P. 73-75
Governance **管治**	102-18		Governance structure 管治架構	P. 16-17 and details of our corporate governance structure are set out on P. 47 of the 2021 Annual Report P. 16-17及企業管治架構詳見二零二一年年報第47頁
Stakeholder Engagement **利益相關方參與**	102-40	–	List of stakeholder groups 利益相關方群體列表	P. 18-21
	102-41	–	Collective bargaining agreements 集體談判協議	We did not sign any collective bargaining agreements with employees 我們並未和僱員簽署集體談判協議
	102-42	–	Identifying and selecting stakeholders 利益相關方的識別和遴選	P. 22
	102-43	–	Stakeholder engagement approach 利益相關方參與方針	P. 18, P. 22-23
	102-44	–	Key topics and concerns raised 提出的主要議題和關切問題	P. 18-21

Disclosure Aspect 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 説明	Page Number/Remarks 頁碼／備註
Reporting Practice 報告實踐	102-45	–	Entities included in the consolidated financial statements 合併財務報表中所涵蓋的實體	P. 241-249 of the 2021 Annual Report 二零二一年年報第241至249頁
	102-46	–	Defining report content and topic boundaries 界定報告內容和議題邊界	P. 3-5
	102-47	–	List of material topics 實質性議題列表	P. 23
	102-48	–	Restatements of information 信息重述	No restatements of information 無信息重述
	102-49	–	Changes in reporting 報告變化	No significant change 無重大變化
	102-50	–	Reporting period 報告期	P. 5
	102-51	–	Date of most recent report 最近報告日期	17 May 2021 2021年5月17日
	102-52	–	Reporting cycle 報告周期	Once a year 一年一次
	102-53	–	Contact point for questions regarding the report 有關本報告問題的聯繫人信息	Feedback 背面反饋表格
	102-54	–	Claims of reporting in accordance with the GRI Standards 符合GRI標準進行報告的聲明	P. 3
	102-55	–	GRI content index GRI內容索引	P. 96-106
	102-56	–	External assurance 外部鑒證	The Company will seek external assurance when appropriate 本公司將適時尋求外部鑒證

SPECIFIC STANDARDS DISCLOSURE - MATERIAL TOPICS:
特定標準披露－實質性議題：

Disclosure Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/Remark 頁碼／備註
1. Environmental 環境				
Environmental Compliance 環境合規	103	A1	Management approach 管理方針	P. 34-35
	307-1	A1	Non-compliance with environmental laws and regulations 違反環境法例及規例	During the Year, we were not aware of any significant non-compliance 於本年度，我們並不知悉任何重大不合規情況
Opportunities Regarding Clean Energy 清潔能源機遇	103	A3	Management approach 管理方針	P. 26-27
	304-2	A3.1	Description of 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	P. 27-31
2. Social 社會				
Operational Compliance 經營合規	103	B1 B2 B4 B6 B7	Management approach 管理方針	P. 56-59 P. 65-67 P. 59-60 P. 45-53 P. 73-75
	419-1	B1 B2 B4 B6 B7	Non-compliance with laws and regulations in the social and economic area 違反社會及經濟範疇的法例及規例	During the Year, we were not aware of any significant non-compliance 於本年度，我們並不知悉任何重大不合規情況

Disclosure Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/Remark 頁碼／備註
Employee Health and Safety 員工安全與健康	103	B2	Management approach 管理方針	P. 69-71
	403-9 403-10	B2.1	Number and rate of work-related fatalities in each of the past three years 過去三年每年因工亡故的人數及比率	P. 67
		B2.2	Lost days due to work injury 因工傷損失工作日數	P. 67
	403	B2.3	Description of occupational health and safety measures adopted, and 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	P. 69-71
Prevention of Child Labour and Forced Labour 預防童工及強制勞工	103	B4	Management approach 管理方針	P. 59-60
	408-1 409-1	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	P. 59-60
	408-1 409-1	B4.2	Description of steps taken to eliminate such non-compliance when discovered 描述在發現違規情況時消除有關情況所採取的步驟	P. 59-60

Disclosure Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/Remark 頁碼／備註
Product Responsibilities 產品責任	103	B6	Management approach 管理方針	P. 45-53
	416-2	B6	Incidents of non-compliance concerning the health and safety impacts of products and services 涉及產品和服務的健康與安全影響的違規事件	During the Year, we were not aware of any significant non-compliance 於本年度，我們並不知悉任何重大不合規情況
	–	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	The Group is engaged in power supply service, with no physical product, thus involving no such issues as product recall 本集團從事供電服務，沒有實體產品，故不涉及產品回收等問題
	418-1	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	During the Year, we have not received any complaint 於本年度，我們並無接獲任何投訴
	–	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	P. 53
	–	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	The Group is engaged in power supply service, with no physical product, thus involving no such issues as product recall 本集團從事供電服務，沒有實體產品，故不涉及產品回收等問題
	418-1	B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored 描述消費者資料保障及私隱政策，以及相關執行及監察方法	P. 49-51
Business Ethics 商業道德	103	B7	Management approach 管理方針	P. 73-75
	102-16	–	Values, principles, standards, and norms of behaviour 價值觀、原則、標準和行為規範	P. 73-75

Disclosure Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/Remark 頁碼／備註
Anti-corruption 反貪腐	103	B7	Management approach 管理方針	P. 73-75
	205-3	B7.1	Confirmed incidents of corruption and actions taken 經確認的腐敗事件和採取的行動	During the Year, we were not aware of any significant non-compliance 於本年度，我們並不知悉任何重大不合規情況
	103	B7.2	Description of preventive measures and whistle-blowing procedures, and 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	P. 74
	205-2	B7.3	Description of anti-corruption training provided to directors and staff 描述向董事及員工提供的反貪污培訓	P. 74

OTHER TOPICS:
其他議題：

Disclosure Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/Remark 頁碼／備註
1. Environmental 環境				
Climate Change 氣候變化	103	A4	Management approach 管理方針	P. 32-33
	201-2	A4.1	Description of the significant climate related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them 描述已經及可能會對發行人產生影響的重大氣候相關事宜，及應對行動	P. 32-33
Materials 材料	103	A2	Management approach 管理方針	P. 34-35
	301-1	A2.5	Total packaging material used for finished products and with reference to per unit produced 製成品所用包裝材料的總量及每生產單位佔量	There is no consumption of packaging materials involved in our operations 我們營運並不涉及包裝材料的耗用
Energy 能源	103	A2	Management approach 管理方針	P. 36-38
	302-1 302-3	A2.1	Direct and/or indirect energy consumption by type in total and intensity 按類型劃分的直接及／或間接能源總耗量及密度	P. 38-39
	302-4	A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them 描述所訂立的能源使用效益目標及為達到這些目標所採取的步驟	P. 35-38

Disclosure Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/Remark 頁碼／備註
Emissions 排放	103	A1	Management approach 管理方針	P. 41-43
	305-7	A1.1	The types of emissions and respective emissions data 排放物種類及相關排放數據	P. 41
	305-1 305-2 305-4	A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions and intensity 直接（範圍1）及能源間接（範圍2）溫室氣體排放量及密度	P. 39
	305-5	A1.5	Description of emission target(s) set and steps taken to achieve them 描述所訂立的排放量目標及為達到這些目標所採取的步驟	P. 35, P. 41-43
Water 水	103	A2	Management approach 管理方針	P. 36-37
	303-5	A2.2	Water consumption in total and intensity 總耗水量及密度	P. 40
	303-1	A2.4	Description of issue in sourcing water, water efficiency target(s) set and steps taken to achieve them 描述求取適用水源上可有任何問題，以及所訂立的用水效益目標及為達到這些目標所採取的步驟	P. 35-37
Effluents and Waste 污水和廢棄物	103	A1	Management approach 管理方針	P. 41-43
	306-3	A1.3	Hazardous waste produced and intensity 所產生有害廢棄物及密度	P. 43
	306-3	A1.4	Non-hazardous waste produced and intensity 所產生無害廢棄物及密度	P. 43
	306-4	A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction target(s) set and steps taken to achieve them 描述處理有害及無害廢棄物的方法，及描述所訂立的減廢目標及為達到這些目標所採取的步驟	P. 35, P. 43

Disclosure Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/Remark 頁碼／備註
3. Social 社會				
Employment 僱傭	103	B1	Management approach 管理方針	P. 56-58
	405-1	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	P. 56-57, P. 88-89
	401-1	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	P. 58-59, P. 90-91
Training and Education 培訓與教育	103	B3	Management approach 管理方針	P. 62-64
	–	B3.1	Percentage of employees trained by gender and employee category 按性別及僱員類別劃分的受訓僱員百分比	P. 64, P. 93
	404-1	B3.2	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	P. 64, P. 94
Supply Chain 供應鏈	103	B5	Management approach 管理方針	P. 53-56
	102-9	B5.1	Number of suppliers by geographical region 按地區劃分的供應商數目	P. 54, P. 95
	103	B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored 描述有關聘用供應商的慣例，向其執行有關慣例的供應商數目，以及相關執行及監察方法	P. 54-55
	308-1 414-1	B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored 描述有關識別供應鏈每個環節的環境及社會風險的慣例，以及相關執行及監察方法	P. 54-55
	308-2	B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored 描述在揀選供應商時促使多用環保產品及服務的慣例，以及相關執行及監察方法	P. 56

Disclosure Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/Remark 頁碼／備註
Local Communities 當地社區	103	B8	Management approach 管理方針	P. 75
	203-1	B8.1	Focus areas of contribution 專注貢獻範疇	P. 75
	201-1	B8.2	Resources contributed to the focus area 在專注範疇所動用資源	P. 75

Feedback
意見反饋

Dear reader,

Thank you for taking the time to read the 2021 ESG Report of Beijing Energy International Holding Co., Ltd.. In order to further enhance our ESG management and improve the quality of this report, your comments and suggestions are highly appreciated. We will take your comments and suggestions into full consideration and promise that all information provided will be kept confidential.

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May 2022

尊敬的讀者：

非常感謝您在百忙之中閱覽《北京能源國際控股有限公司2021年ESG報告》。為進一步提升ESG管理工作和報告的質量，我們誠摯邀請您對本報告提出寶貴的意見與建議。我們將充分考慮您的意見與建議，並承諾妥善保護您的信息不被第三方獲取。

您可通過以下方式聯繫我們：

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報告編寫組
2022年5月

Please rate your level of agreement with the following statements from 1 to 5 (1 being strongly disagree and 5 being strongly agree):

請以1至5表示您是否同意下列陳述（1為完全不同意，5為完全同意）：

1. I am satisfied with this report. 我對此報告感到滿意。	
2. This report reflects the Company's impacts on the environment and the society. 這份報告反映本公司對環境及社會之影響。	
3. I am satisfied with the ESG performance of the Company. 我對本公司的ESG實踐成效感到滿意。	
4. I am satisfied with the disclosure level of this report. 對此報告的信息披露程度感到滿意。	
5. I am satisfied with the format and design of this report. 我對此報告的版式及設計感到滿意。	

Other comments: 請您在此提出其他意見與建議：

Your Contact Information:
您的聯繫資料：

Name:
姓名：

Company:
工作單位：

Tel:
電話：

Email:
電子郵件：

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