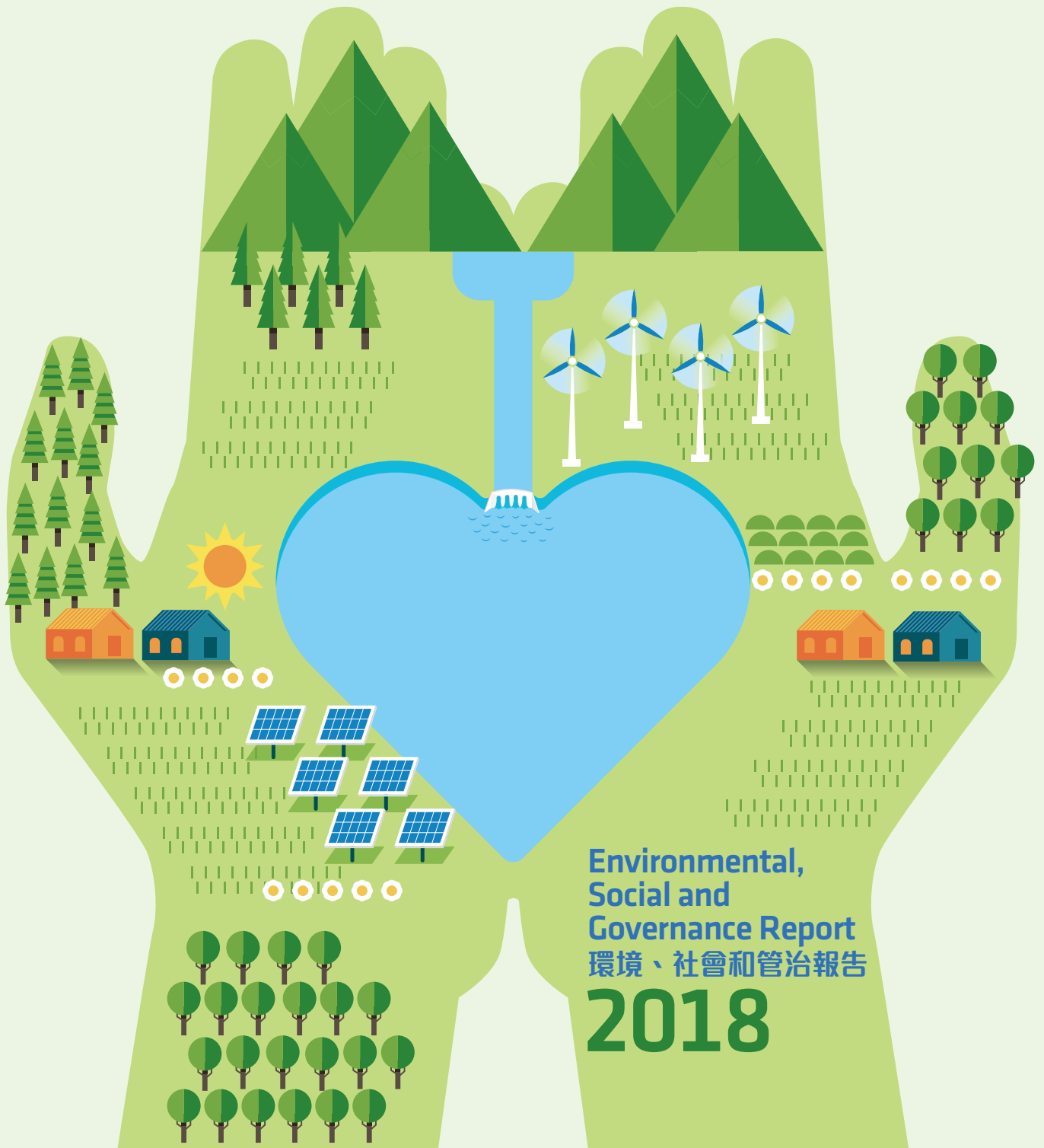




熊猫绿色能源集团有限公司  
Panda Green Energy Group Limited

Stock Code 香港股份代號 : 00686.HK



Environmental,  
Social and  
Governance Report  
環境、社會和管治報告  
2018



## VISION

To bring clean energy to the world as a leading eco-development solutions provider

## 願景

作為全球領先的生態發展解決方案供應商，  
為全世界帶來清潔能源

## MISSION

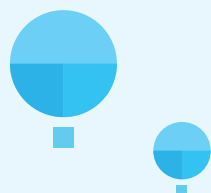
To build a green home, and let out Panda smiles around the world

## 使命

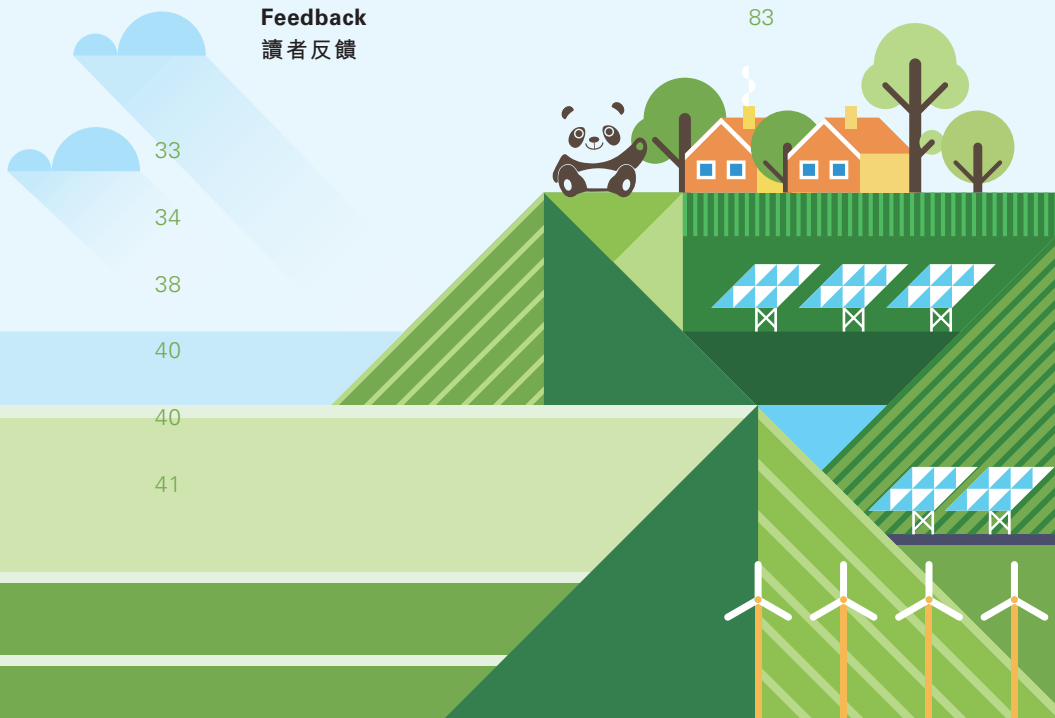
共同建設綠色家園，讓熊貓的微笑走遍世界各地

# Contents

## 目錄



<b>About This Report</b>	2	<b>Talent Management</b>	
關於本報告		人才管理	
<b>About Panda Green</b>	4	Training and Development	43
關於熊貓綠能		培訓與發展	
<b>Letter to Stakeholders</b>	10	Career Development	46
致利益相關者的信		職業發展	
<b>Sustainability Management Approach</b>	14	Occupational Health and Safety	46
可持續管理方針		職業健康與安全	
		Our People	50
		員工	
		Employee Rights and Welfare	52
		僱員權利及福利	
		Employee Communication	53
		員工溝通	
		<b>Relationships with the Community</b>	
		社區關係	
		Nurturing Future Leaders for Climate Action	55
		培養未來氣候行動領袖	
		PV Poverty Alleviation Initiatives	56
		光伏扶貧計劃	
		Continued Support to the Community	57
		持續支持社區	
		<b>Performance Data Summary</b>	58
		績效數據摘要	
		<b>GRI &amp; HKEX ESG Content Index</b>	68
		全球報告倡議組織及聯交所ESG內容索引	
		<b>Feedback</b>	83
		讀者反饋	
<b>Environmental Sustainability</b>			
環境可持續發展			
Providing Clean Energy	23		
提供清潔能源			
Caring for Land	24		
土地關懷			
Environmental Management	25		
環境管理			
Energy Consumption	27		
能源消耗			
Water Consumption	28		
水資源消耗			
Resources Conservation	29		
資源節約			
Waste Management	30		
廢棄物管理			
Effluent Management	31		
污水管理			
Air Emissions Management	31		
廢氣排放管理			
<b>Operational Excellence</b>			
卓越運營			
Leading-edge Technology	33		
尖端技術			
Responsible Supply Chain	34		
負責任之供應鏈			
Quality Management	38		
質量管理			
Data Privacy and Security	40		
資料私隱及安全			
Intellectual Property Protection	40		
知識產權保護			
Anti-corruption	41		
反貪污			





## About this Report 關於本報告

This is the fourth Environmental, Social and Governance (“ESG”) Report of Panda Green Energy Group Limited (hereafter referred to as “Panda Green”, the “Company”, and collectively with its subsidiaries, the “Group”), presenting Panda Green’s management approach and performance in respect of environmental and social issues. This report should be read in conjunction with the Group’s 2018 Annual Report. For the corporate governance section, please refer to our Annual Report on Pages 29 to 54.

The Board of Directors acknowledges its responsibility for ensuring the integrity of the report and, to the best of its knowledge, this report addresses all relevant material issues and fairly presents the ESG performance of the Group. The Board of Directors confirms that it has reviewed and approved the report.

## REPORTING GUIDELINES

This report was prepared in accordance with the Core Option of the Global Reporting Initiative’s Sustainability Reporting Standards (“GRI Standards”), and in compliance with the ESG Reporting Guide set out in Appendix 27 to the Rules Governing the Listing of Securities on the Main Board of The Stock Exchange of Hong Kong Limited (“HKEX”). Where applicable, the Group aligns with the Sustainable Development Goals (“SDGs”) when addressing its material ESG topics.

## REPORTING BOUNDARY AND PERIOD

This report encompasses business operations of the Group and its associates and joint ventures, unless otherwise stated, from 1 January 2018 to 31 December 2018 (“FY2018”).

本報告是熊貓綠色能源集團有限公司(下文簡稱為「熊貓綠能」、「本公司」, 連同其附屬公司統稱為「本集團」)的第四份環境、社會和管治(「ESG」)報告。本報告呈列熊貓綠能在環境及社會方面的管理方針及表現。本報告應與本集團2018年年報一併閱讀。有關企業管治一節, 請參閱我們的年報第29至54頁。

董事會確認其有責任確保本報告的完整性, 且就其所深知, 本報告闡述了所有相關重大問題, 並公平呈列本集團的ESG績效。董事會確認, 其已審閱及批准本報告。

## 報告指引

本報告乃依循全球報告倡議組織《可持續發展報告標準》(「GRI標準」)的「核心」符合方案, 並遵循香港聯合交易所有限公司(「聯交所」)主板證券上市規則附錄二十七所載的《環境、社會及管治報告指引》而編製。當適用時, 本集團於其處理重大ESG問題時參考可持續發展目標(「SDGs」)。

## 報告範圍及期間

如無特別說明, 於2018年1月1日至2018年12月31日(「2018財政年度」), 本報告涵蓋本集團及其聯營公司以及合營企業之業務營運。

## FEEDBACK

This report is published in both Chinese and English. In case of any conflicts between the two versions, the English version shall prevail. Dedicated to interacting with stakeholders, responding to their concerns and improving the comprehensiveness of this report, we welcome your thoughts and feedback through the feedback form which is accessible here: <http://www.pandagreen.com/index.php/list-24.html>.

## 反饋

本集團同時發佈中、英文版, 兩版之間若有衝突, 以英文版本為準。為致力於與利益相關者保持互動、回應彼等之關注並提高本報告之全面性, 歡迎通過 <http://www.pandagreen.com/index.php/list-24.html> 的反饋表反映您的想法及反饋。



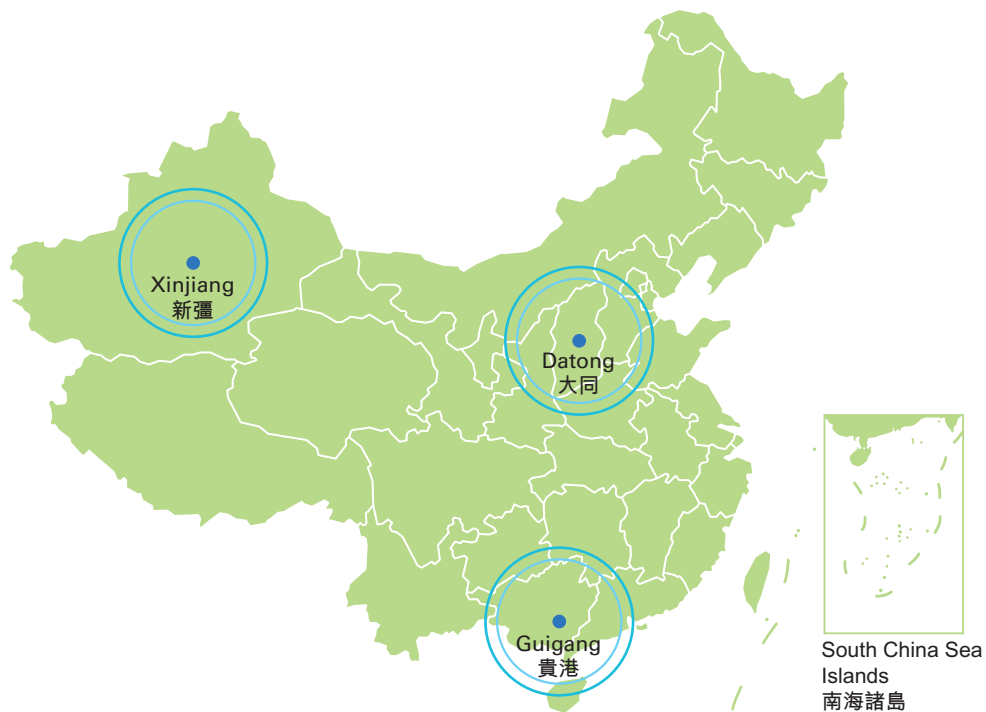
# About Panda Green 關於熊貓綠能

Panda Green is principally engaged in the development, investment, operation and management of solar power plants and other renewable energy projects.

Transforming the concept of clean energy into tangible results, Panda Green and its associates and joint ventures operate 74 renewable energy power plants, with the total electricity generation of 3,192,630 MWh in 2018. As at the end of 2018, the aggregate installed capacity of Panda Green and its associates and joint ventures surpassed 2,329.6 MW.

熊貓綠能主要從事太陽能發電站及其他可再生能源項目的開發、投資、經營及管理。

為將清潔能源的概念轉化為實質成果，熊貓綠能、其聯營公司以及合營企業共經營74間可再生能源發電廠，2018年的總發電量為3,192,630兆瓦時。截至2018年末，熊貓綠能、其聯營公司及合營企業擁有的總裝機容量超過2,329.6兆瓦。

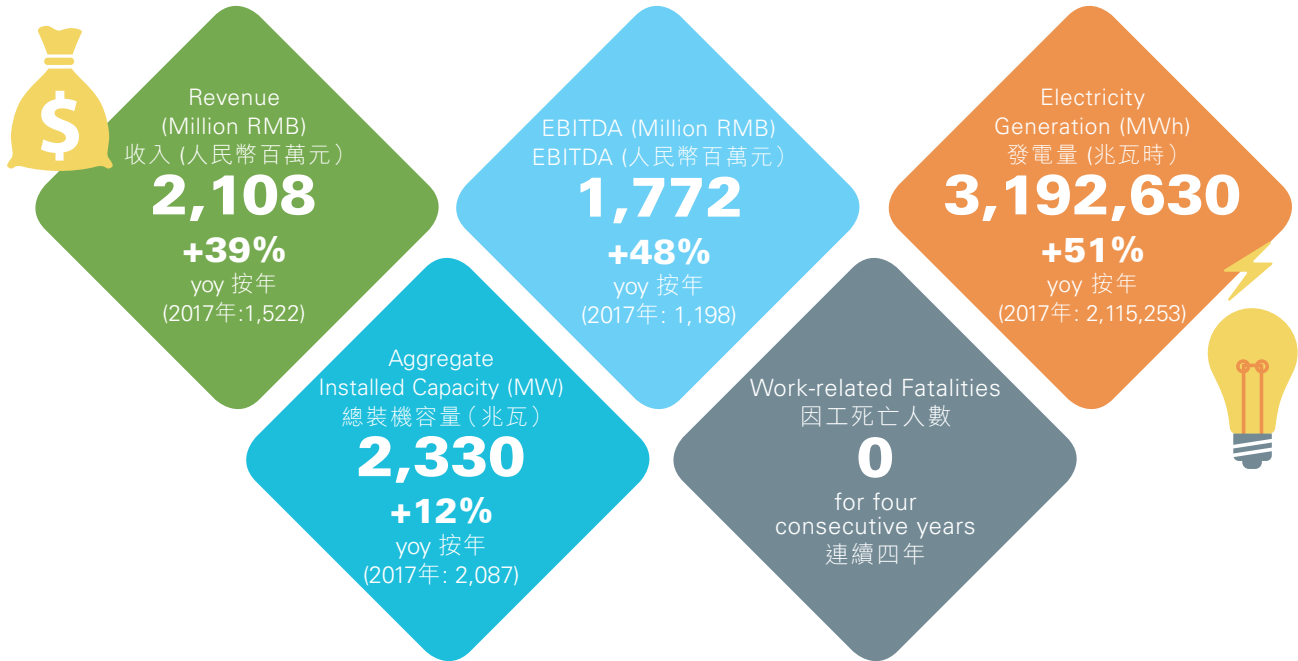


Implemented by the National Energy Administration and launched in 2015, Top-Runner projects aim to promote state-of-the-art technology in the development and operation of solar power plant projects. With its leading technical capability and comprehensive strength, in June 2018, Panda Green won the bid for the Changzhi 250MW Photovoltaic Super Top-Runner Project with the world's largest crystal silicon manufacturer LONGi Green Energy Technology Company Limited. This is the first Super Top-Runner Project in China. At this point, Panda Green has won bids for four "Top-Runner" projects in Datong, Shanxi, Baotou, Inner Mongolia, Lianghuai, Anhui and Changzhi, Shanxi.

由國家能源局實施並於2015年推出的「領跑者」項目旨在提升開發及營運太陽能發電站項目的尖端技術。熊貓綠能憑借領先的技術能力及綜合實力，於2018年6月熊貓綠能與全球最大的單晶硅製造商隆基綠能科技股份有限公司中標長治250兆瓦的光伏「超級領跑者」項目，此為中國的首個「超級領跑者」項目。就此而言，熊貓綠能已於山西省大同市、內蒙古自治區包頭市、安徽省兩淮地區及山西省長治市中標四項「領跑者」項目。

## KEY FACTS AND FIGURES FOR FY2018

## 2018財政年度關鍵數據



## PROMOTING LOW-CARBON CLEAN ENERGY

## 推動低碳清潔能源

The total electricity generation volume for 2018 is **3,192,630 MWh**, equivalent to:  
2018年的總發電量為 **3,192,630兆瓦時**，相當於：



Saving **1.02 Million Tons** of Standard Coal  
節約**102萬噸**標準煤



Reducing **1,567 Tons** of Soot Emission  
減排**1,567噸**煙塵



Reducing **2.68 Million Tons** of Carbon Dioxide Emission  
減排**268萬噸**二氧化碳



Planting **144 Million** of Trees  
種植樹**14,400萬**棵



Reducing **26 Thousand Tons** of Nitrogen Oxide  
減排**26千噸**氮氧化合物



**1,720,000** Household's Electricity Consumption in a year  
**1,720,000**戶居民一年的用電量



## AWARDS AND RECOGNITIONS

The Group has been bestowed with awards and recognitions in 2018 for its outstanding performance and contribution in fields of sustainability and clean energy, some of which are listed below:



## EXTERNAL COMMITMENTS

Panda Green has been taking part in initiatives supporting the development of the photovoltaic industry. As a member of the Photovoltaic Green-ecosystem Organization (“PGO”), the Group is committed to engaging with other industry stakeholders on propelling industry development, leading technological advancement and promoting good practices within the industry.

## 獎項及榮譽

本集團因其於可持續發展及清潔能源領域的傑出表現及所做之貢獻而於2018年獲授予獎項及榮譽，其中包括：

## 對外承諾

熊貓綠能一直積極參與支持光伏行業的發展。作為光伏綠色生態合作組織(「PGO」)的一員，本集團努力與其他行業利益相關者合作，推動行業發展、引領科技進步及促進行業內的良好實踐。

## OUR BUSINESS MODEL 我們的業務模式

Understanding the creation of value 了解價值創造的模式

### KEY INPUTS 主要投入



#### Financial capital 資本資源

- Obtained through various channels including new shares placement, issue of senior notes, medium-term notes, corporate bonds, bank borrowings and financial lease
- 透過多種渠道獲得，包括配售新股，發行優先票據、中期票據、公司債券、銀行借款及融資租賃



#### Manufactured capital 生產資源

- Property, plant and equipment of RMB17,115 million
- 物業、廠房及設備，總值人民幣17,115百萬元



#### Intellectual capital 知識資源

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



#### Human capital 人力資源

- Full-time permanent employees: 30 employees in Hong Kong and 388 employees in PRC
- Site safety inspection and evaluation system
- Safety hazards prevention measures implemented on various stages ranging from research, design, manufacture, operation and maintenance
- 全職僱員：香港30名僱員及中國388名僱員
- 地盤安全監督及評估系統
- 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 stakeholders include employees, suppliers, business partners, Photovoltaic Green-ecosystem Organization ("PGO"), and governments, etc.
- 我們的利益相關者包括僱員、供應商、業務夥伴、光伏綠色生態合作組織（「PGO」）及政府等



#### Natural capital 自然資源

- Water consumption: 1,273 tons in offices and 20,652 tons in power plants
- Energy consumption in offices and power plants: 101,560 GJ
- 用水量：辦公室1,273噸及電站20,652噸
- 辦公室及電站能源耗量：101,560千兆焦耳



## OUR ACTIVITIES 經營活動



## OUTCOMES FOR FY2018 2018財政年度經營成果

- Revenue for the year ended 31 December 2018: RMB2,108 million
- EBITDA: RMB1,772 million
- 截至2018年12月31日止年度收益：人民幣2,108百萬元
- EBITDA：人民幣1,772百萬元

- Total number of on-grid solar and wind power plants: 74
- Total electricity generated: approximately 3,192,630 MWh
- Officially launched the "Panda Operation and Maintenance System" which has carried out 66 operation and maintenance projects in China
- 已併網的太陽能及風力發電站總數：74個
- 總發電量：約3,192,630兆瓦時
- 正式推出「熊貓運維」，已於中國進行66個運維項目

- Awarded a new patent licence of invention (Patent No: ZL201510095679.1)
- Awarded four utility model patent licenses for grape-photovoltaics integration
- 獲授一項新的發明專利許可證（專利編號：ZL201510095679.1）
- 葡光互補技術獲授四項實用新型專利許可證

- Quantum of employees training: 7,238 person-times
- Work-related fatalities: 0
- Lost days due to work-related injury: 0
- Percentage of employees who received physical health check-ups: 97%
- Obtained OHSAS 18001 occupational health and safety management systems certification for our major solar power plants
- 員工培訓總數：7,238人次
- 因工作關係死亡人數：0
- 因工傷損失的工作日數：0
- 接受健康檢查的僱員比例：97%
- 我們的主要太陽能電站獲得OHSAS 18001職業健康與安全管理體系認證證書

- Partnered with UNDP to host the second Youth Leadership Summer Camp for Climate Action to promote stronger leadership
- 與聯合國開發計劃署合作舉辦第二屆「培養未來氣候行動領袖」夏令營

- Greenhouse gas emissions: 18,888 tCO<sub>2</sub>e
- Hazardous waste: 0.94 tons
- Non-hazardous waste: 37.24 tons
- Solar panels recycled: 20.36 tons
- 溫室氣體排放：18,888噸二氧化碳當量
- 有害廢棄物：0.94噸
- 無害廢棄物：37.24噸
- 回收太陽能電池板：20.36噸



# Letter to Stakeholders

## 致利益相關者的信

### Dear Valued Stakeholders,

2018 was a pivotal year in pushing forward China's energy revolution. As one of the Five Major Development Concepts put forward by the 13th Five-Year Plan, the promotion of "green development" is fundamental to China's societal reforms towards sustainability. Panda Green understands the necessity and urgency of constructing an ecologically sustainable civilisation, promoting cutting-edge green energy technologies and spreading green development through projects such as Panda Power Plants, photovoltaic poverty alleviation projects and Top-runner Projects. During the year, two of our Panda Power Plants have successfully connected to the grid. Together with commencement of other power plants, the aggregate installed capacity of the Group has surpassed 2,329.6 MW.

Sustainable development requires taking care of needs of different stakeholders, including employees, investors, customers, suppliers, NGOs and the community. We value the relationships with our stakeholders and understand that their engagement is vital to help us identify the risks and opportunities associated with the Group's sustainability issues. We communicate with our stakeholders through a range of channels, identify their emerging issues of concern and act to respond to them.

Providing a stable and clean energy source and maximising the value brought to our stakeholders, we are committed to safeguarding the quality of operation and maintenance of our power plants. During the year, the 100 MW Top-Runner project in Anhui Province has connected to the grid, showcasing technological innovation in complementarity of our PV plants and the local fishery industry. Through our Panda Operation and Maintenance System which was newly launched in the year, we leverage innovative technology and rich experience in the operation and maintenance of our plants to provide comprehensive solutions to energy plants globally.

### 各位尊敬的利益相關者：

2018年是推行中國能源改革的關鍵一年。作為十三五規劃提出的五大發展理念之一，促進「綠色發展」對中國社會可持續發展改革至關重要。熊貓綠能明白透過熊貓電站、光伏扶貧項目及領跑者項目等項目建設生態可持續發展文化、提升先進綠色能源技術及傳播綠色發展的必要性及緊迫性。年內，我們兩個熊貓電站已成功併網。加上其他開始發電的電站，本集團的總裝機容量已超過2,329.6兆瓦。

可持續發展需要關注不同利益相關者的需求，包括僱員、投資者、客戶、供應商、非政府組織及社區。我們重視與利益相關者的關係並了解到彼等的參與對幫助我們識別本集團可持續發展事宜的相關風險及機遇至關重要。我們透過多個渠道與利益相關者進行溝通、發現彼等關注的新問題並作出應對。

為了提供穩定、清潔的能源來源以及為利益相關者帶來最大回報，我們致力保障電站運維的質量。年內，安徽省100兆瓦領跑者項目已併網，展示了我們的光伏電站與當地漁業互補的技術創新。透過年內新推出的熊貓運維，我們利用在電站運維方面的創新技術及豐富經驗為全球能源電站提供綜合解決方案。

We believe we will not be able to achieve long-term and sustainable business development without the support of our dedicated employees. Maintaining an open and fair workplace, as well as a positive work culture ensures our employees thrive. While we have continued to record zero occupational incidents for four consecutive years, we never lose sight of the need for strengthening our occupational health and management system, ensuring our employees receive appropriate and adequate safety training.

In view of the more stringent environmental protection requirements in China, the Group is devoted to investing more resources in managing its power plants and the land in the vicinity, avoiding irresponsible consumption of resources and negative impacts to the land. The Group's flood control facilities have effectively protected the power plants and the surrounding ecology from floods and other natural disasters. While our energy and water consumption have increased due to the 9 newly added power plants, we ensure effective management of power plant operations through our environmental management system. Our electricity consumption in 2018 represents less than 1% of the total energy generated by the Group's power plants.

Committing to bear our share of social responsibility, we focus on helping the disadvantaged communities and promoting environmental awareness of the youth by utilising its resources, expertise and business operations. In 2018, in addition to our charitable contributions of about RMB 2 million, we collaborated with the UNDP in launching the second Youth Leadership Camp for Climate Action, aiming to encourage the younger generation to play a more pronounced role in initiating sustainable development actions. Various PV poverty alleviation projects were also carried out during the year to promote regional economy and improve the living quality of the local people.

我們相信，我們能實現長期可持續業務發展離不開我們盡職僱員的支持。維持公開公平的工作環境以及積極的工作文化能確保我們的僱員茁壯成長。儘管我們已連續四年錄得零職業事故，但我們從未忽視加強職業安全及管理系統的必要性，確保我們的僱員接受適當及充分的安全培訓。

鑒於中國的環保要求日益嚴格，本集團致力投入更多資源管理其電站及附近的土地，避免不負責任地消耗資源及對土地帶來負面影響。本集團的防洪設施已有效保護電站及周邊生態免受洪水及其他自然災害的影響。儘管我們的能源及水資源消耗因九個新加電站而有所增加，但我們透過環境管理系統確保有效管理電站運營。我們於2018年的耗電量佔本集團電站所產生能源總量不足1%。

我們致力承擔我們應盡的社會責任，專注於幫助弱勢群體，並通過運用資源、專業知識及業務營運，提升年輕人的環境意識。於2018年，我們除捐贈約人民幣2百萬元的慈善捐款外，我們還攜手聯合國開發計劃署舉辦第二屆「培養未來氣候行動領袖」夏令營，旨在鼓勵年輕一代在踐行可持續發展行動中扮演更重要的角色。於本年度內，我們亦開展多個光伏扶貧項目，以推動地區經濟發展及提升當地人民的生活水平。



Looking forward, Panda Green will continually adhere to its core business of offering clean and affordable energy to the world, contributing to popularisation and promotion and development of an ecologically sustainable civilisation. Throughout the year, the Group has received extensive attention and support from all walks of life. On behalf of the Board and management, I would like to express my sincere thanks to all our staff, business partners and the wider community for their contribution and support along our sustainability journey.

展望未來，熊貓綠能將繼續堅持其為世界提供清潔廉價能源的核心業務，同時為普及、推動及發展生態可持續發展文明貢獻力量。於本年度內，本集團得到社會各界的廣泛注意及支持。本人謹代表董事會及管理層，藉此感謝全體員工、業務夥伴及廣大社區在我們的可持續發展道路上的傑出貢獻及不懈支持。

**Lu Zhenwei**

*Chairman of the Board and Executive Director*

**Panda Green Energy Group Limited**

熊貓綠色能源集團有限公司

董事會主席兼執行董事

盧振威





# Sustainability Management Approach

## 可持續管理方針



Panda Green has been upholding the concept of sustainable development in its operations, driving positive changes in society through engaging with stakeholders, managing its material issues and responding to calls from the United Nations.

熊貓綠能一直秉承可持續發展的經營理念，透過與利益相關者溝通、管理其實質性議題並響應聯合國的號召，推動社會正向發展。

## SUSTAINABLE DEVELOPMENT GOALS



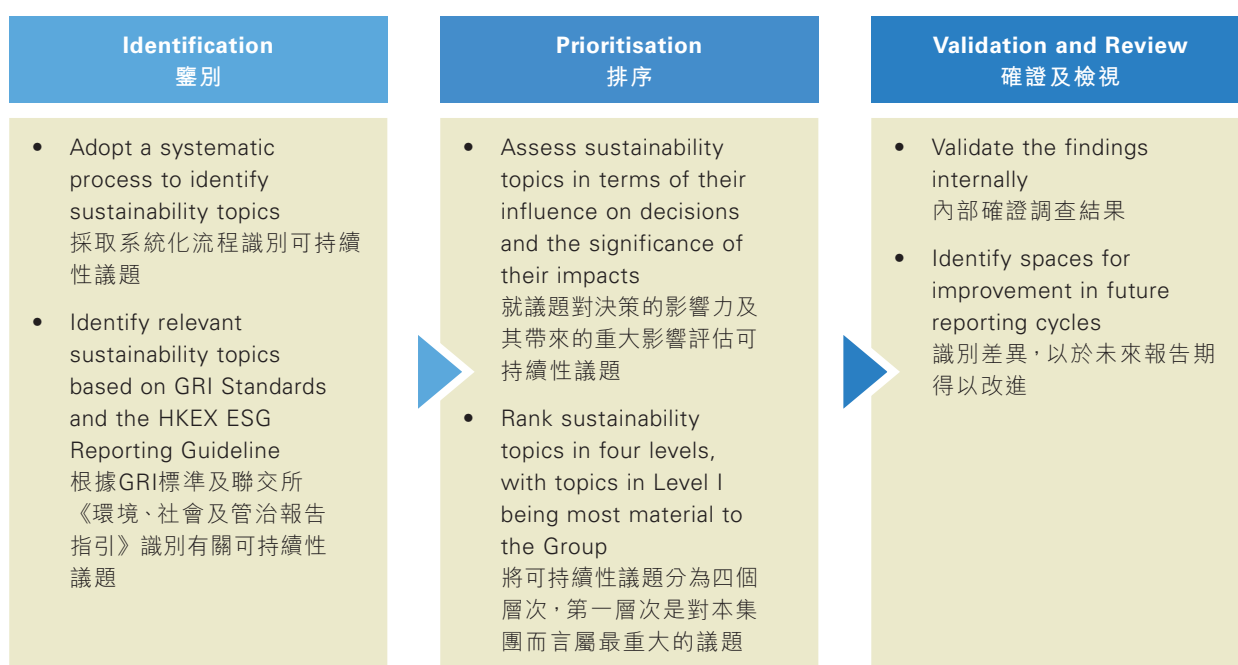
- |                      |                       |                     |
|----------------------|-----------------------|---------------------|
| <b>1</b> 無貧窮         | <b>2</b> 零饑餓          | <b>3</b> 良好健康與福祉    |
| <b>4</b> 優質教育        | <b>5</b> 性別平等         | <b>6</b> 清潔飲水和衛生設施  |
| <b>7</b> 經濟適用的清潔能源   | <b>8</b> 體面工作和經濟增長    | <b>9</b> 產業、創新和基礎設施 |
| <b>10</b> 減少不平等      | <b>11</b> 可持續城市和社區    | <b>12</b> 負責任消費和生產  |
| <b>13</b> 氣候行動       | <b>14</b> 水下生物        | <b>15</b> 陸地生物      |
| <b>16</b> 和平、正義與強大機構 | <b>17</b> 促進目標實現的夥伴關係 |                     |

Sustainability is fundamental to the Group's operations and management. At Panda Green, sustainability related functions and ESG matters are managed by our cross-department ESG Reporting Team, overseen by the CEO. To better manage the Group's sustainability issues, we have adopted an integrated system – Quality Environmental and Occupational Safety Management System ("QEMS"), which is designed and implemented according to three international standards: ISO 9001:2015 Quality Management System, ISO 14001:2015 Environmental Management System, and ISO 18001:2007 Occupational Health and Safety Management System.

可持續發展是本集團經營管理的根本。在熊貓綠能，可持續發展相關職能及ESG事務由跨部門的ESG報告團隊管理並由首席執行官監督。為更好管理本集團的可持續性事務，我們已採納質量、環境及職業安全管理體系三位一體的綜合體系（「三體系」），該體系乃根據ISO 9001:2015質量管理體系、ISO 14001:2015環境管理體系及ISO 18001:2007職業健康安全體系等三項國際準則設計及實施。

## MATERIALITY REVIEW

The materiality assessment of the Group follows a four-step approach of Identification, Prioritisation, Validation and Review. This exercise provides us an opportunity to understand how our stakeholders perceive the relevance and significance of the impact of each topic, and what we can do to address their concerns. The identified material topics are the points of emphasis which the Group's ESG reports are trying to encompass and respond to.



Following an extensive materiality assessment in FY2017, we conducted an assessment during the year of 2018 to review the relevance of our material topics, identified any shifts in priorities among the stakeholders and recognised emerging areas of concern.

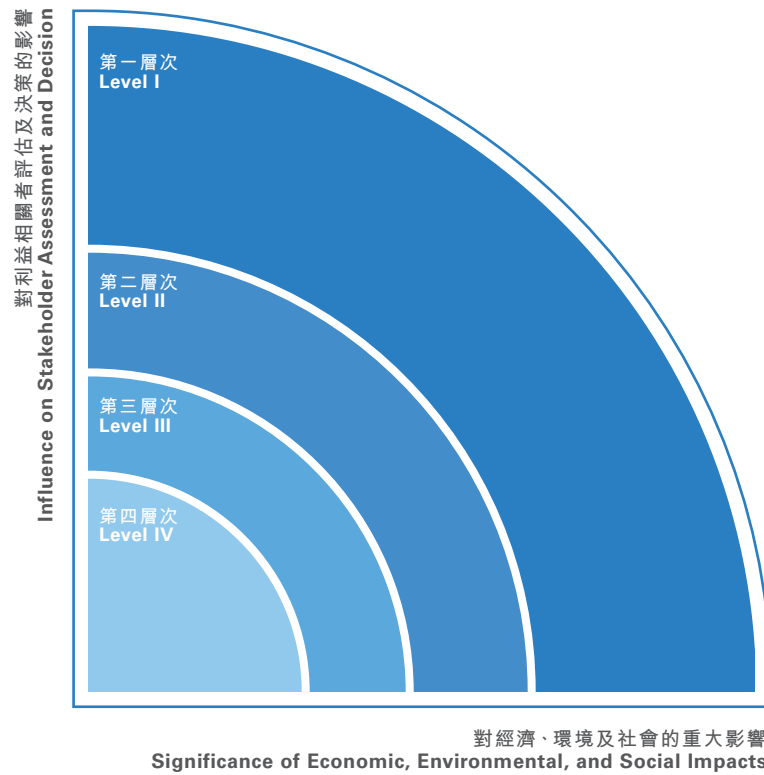
## 實質性回顧

本集團的實質性評估遵循鑒別、排序、確證及檢視的四步方法。我們可藉此了解到利益相關者如何認知各議題的相關性及其影響的重要性，以及我們為回應彼等所關注的問題而可採取的行動。所識別出的實質性議題乃本集團ESG報告的論述重點。

於2017財政年度進行詳盡的實質性評估後，我們於2018年進行評估以檢討實質性議題的相關性、識別利益相關者關注議題的排序變化以及明確新的關注範疇。

## MATERIALITY MATRIX

## 實質性矩陣



### Level I 第一層次

- |                            |           |
|----------------------------|-----------|
| • Environmental compliance | • 環境合規    |
| • Green products           | • 綠色產品    |
| • Employee communication   | • 僱員溝通    |
| • Carbon emissions         | • 碳排放     |
| • Energy consumption       | • 能源消耗    |
| • Product health & safety  | • 產品健康與安全 |
| • Employment compliance    | • 僱傭合規    |
| • Business ethics          | • 商業道德    |

### Level II 第二層次

- |                                  |           |
|----------------------------------|-----------|
| • Training & development         | • 培訓與發展   |
| • Occupational health and safety | • 職業健康與安全 |
| • Anti-discrimination            | • 反歧視     |
| • Equal pay                      | • 同工同酬    |
| • Talent management              | • 人才管理    |
| • Product compliance             | • 產品合規    |
| • Supply chain management        | • 供應鏈管理   |
| • Air emissions                  | • 廢氣排放    |

### Level III 第三層次

- |  |               |
|--|---------------|
| • Economic value generated and distributed | • 所產生和分配的經濟價值 |
| • Diversity & equal opportunity            | • 多元化與機會平等    |
| • Wastewater                               | • 廢水          |
| • Ecological conservation                  | • 生態保護        |
| • Data privacy                             | • 資料私隱        |
| • Human rights                             | • 人權          |
| • Environmental expenditure                | • 環保投入        |
| • Community engagement                     | • 社區參與        |
| • Customer satisfaction                    | • 客戶滿意度       |
| • Oligopoly                                | • 寡頭市場壟斷      |

### Level IV 第四層次

- |                     |        |
|---------------------|--------|
| • Waste management  | • 廢物管理 |
| • Raw materials     | • 原材料  |
| • Water consumption | • 用水   |

We believe the most pertinent topics (Level I) of the Group are the eight topics mentioned below, with emphasis being put on the environment pillar. These topics are addressed in corresponding sections of this ESG report.

我們認為，本集團最相關的議題（第一層次）為以下所述的八個議題，著眼點在於環境方面。該等議題在本ESG報告的對應章節中論述。

Material Topics 實質性議題	External Stakeholders 外部利益相關者	Corresponding Section 對應章節
1. Environmental compliance 環境合規	Suppliers 供應商	Environmental Sustainability 環境可持續發展
2. Green product 綠色產品	Customers, Business Partners 客戶、業務夥伴	Environmental Sustainability; Operational Excellence 環境可持續發展； 卓越運營
3. Employee communication 僱員溝通	– –	Talent Management 人才管理
4. Carbon emissions 碳排放	Suppliers 供應商	Environmental Sustainability 環境可持續發展
5. Energy consumption 能源消耗	Suppliers 供應商	Environmental Sustainability 環境可持續發展
6. Product health & safety 產品健康與安全	Customers 客戶	Operational Excellence 卓越運營
7. Employment compliance 僱傭合規	Suppliers 供應商	Talent Management 人才管理
8. Business ethics 商業道德	– –	Anti-corruption 反貪污

## RESPONDING TO STAKEHOLDERS' CONCERNS

Panda Green understands the importance of not only listening to its stakeholders, but also using their feedback to act and improve. We are fully committed to on-going engagements with our stakeholders through channels and platforms such as annual reports, ESG reports, surveys, seminars, meetings and our WeChat public account. While addressing the key concerns of our stakeholders, we attempt to respond to the UN calls-to-action by aligning our activities with the SDGs.

## 回應利益相關者的關注事項






熊貓綠能不僅明白聆聽其利益相關者反饋的重要性，更深知要運用反饋作出行動及改進的重要性。我們通過年報、ESG報告、調研、研討會、會議及微信公眾號等渠道及平台，全面致力於與利益相關者進行持續的交流。在回應利益相關者重點關注事項的同時，我們試圖將我們的活動與可持續發展目標一致化，從而響應聯合國的行動號召。

Stakeholder Groups 利益相關者組別	Key Topics and Concerns 關鍵議題及關注事項	Our Response in 2018 2018年回應	Corresponding SDGs aligned 對應的可持續發展目標
<b>Employees</b> 僱員 	<ul style="list-style-type: none"> <li>Employment Compliance 僱傭合規</li> <li>Employee Communication 僱員溝通</li> <li>Talent Management 人才管理</li> <li>Training &amp; Development 培訓與發展</li> <li>Occupational Health and Safety 職業健康與安全</li> </ul>	<ul style="list-style-type: none"> <li>Provide a working environment free from inequality, harassment and discrimination 提供平等、零騷擾及零歧視的工作環境</li> <li>Ensure that employees' voices are heard through various communication channels 確保可通過多種溝通渠道聆聽僱員意見</li> <li>Arranged a "train the trainer" programme to enhance the overall effectiveness of our internal training programmes 安排「培訓講師培訓」計劃，提升內部培訓計劃的整體效果</li> <li>A 40% increase in total training person-times compared to 2017 總培訓人次較2017年增加40%</li> <li>Recorded zero occupational health and safety accident for four consecutive years 連續四年錄得零職業健康安全事故</li> <li>Upgraded the three-level safety monitoring management system to four levels 將三級安全監控管理系統升為四級</li> </ul>	 <p>Gender equality 性別平等</p>  <p>Reduced inequalities 減少不平等</p>  <p>Decent work and economic growth 體面工作和經濟增長</p>

<sup>1</sup> Sustainable Development Goals ("SDGs") is a set of 17 universal goals adopted by the United Nations to balance the three dimensions of sustainable development: the economic, social and environmental, aiming to promote prosperity while addressing social issues such as gender equality, quality education and protecting the planet through tackling climate change.

<sup>1</sup> 可持續發展目標（「可持續發展目標」）乃聯合國為平衡經濟、社會及環境三個方面的可持續發展所採用的17項全球目標，旨在促進繁榮的同時解決性別平等、素質教育等社會問題及通過應對氣候變化保護地球。

Stakeholder Groups 利益相關者組別	Key Topics and Concerns 關鍵議題及關注事項	Our Response in 2018 2018年回應	Corresponding SDGs aligned 對應的可持續發展目標
<b>Environmental NGOs</b> 從事環保工作的非政府組織 	<ul style="list-style-type: none"> <li>Ecological Conservation 生態保護</li> <li>Carbon and Other Air Emissions 碳及其他大氣排放</li> <li>Energy and Water Consumption 能源及水消耗</li> </ul>	<ul style="list-style-type: none"> <li>The floating power plants in the Anhui 100 MW Top-Runner project have successfully connected to the grid. This project integrates the photovoltaic industry with local fishery industry and reduces reliance of PV plants on land resources 安徽100兆瓦領跑者項目的漂浮式電站成功併網發電。該項目將光伏產業與當地漁業相結合，並減少光伏電站對土地資源的依賴</li> <li>Communicate closely with local governments, prioritise areas with lower land use e.g. coal mining subsidence areas to reduce land degradation 與當地政府密切溝通，首選土地使用價值較低的地區（如採煤沉陷區）以減少土地退化</li> <li>The QEMS of the Company was certified as conforming to the standards of ISO 9001, ISO 14001 and OHSAS 18001 本公司三體系已獲ISO 9001、ISO 14001及OHSAS 18001標準的認證</li> </ul>	 Climate action 氣候行動  Life on land 陸地生物
<b>Customers</b> 客戶 	<ul style="list-style-type: none"> <li>Green Product 綠色產品</li> <li>Environmental Compliance 環境合規</li> <li>Product Health &amp; Safety 產品健康與安全</li> <li>Customer Satisfaction 客戶滿意度</li> </ul>	<ul style="list-style-type: none"> <li>Expanded the provision of renewable energy to wind power and hydropower 將可再生能源的供應擴展至風能及水能</li> <li>Generated renewable energy to offset the carbon emissions emanating from burning of fossil fuels 產生可再生能源，以抵銷燃燒化石燃料產生的碳排放</li> <li>Conducted customer satisfaction survey 開展客戶滿意度調查</li> </ul>	 Affordable and clean energy 經濟適用的清潔能源

Stakeholder Groups 利益相關者組別	Key Topics and Concerns 關鍵議題及關注事項	Our Response in 2018 2018年回應	Corresponding SDGs aligned 對應的可持續發展目標
<p><b>Suppliers</b> 供應商</p> 	<ul style="list-style-type: none"> <li>Supply Chain Management 供應鏈管理</li> <li>Environmental Compliance 環境合規</li> </ul>	<ul style="list-style-type: none"> <li>Conducted technology exchanges with equipment and component suppliers during the tendering process 於投標過程中與設備及零部件供應商進行技術交流</li> </ul>	 <p>Partnerships for the goals 促進目標實現的伙伴關係</p>
<p><b>Community</b> 社區</p> 	<ul style="list-style-type: none"> <li>Community Investment 社區投資</li> <li>Economic Value Generated and Distributed 所產生和分配的經濟價值</li> <li>Ecological Conservation 生態保護</li> </ul>	<ul style="list-style-type: none"> <li>Partnered with UNDP to host the second Youth Leadership Summer Camp for Climate Action to promote stronger leadership of the young generation for combating climate change 與聯合國開發計劃署合作舉辦第二屆「培養未來氣候行動領袖」夏令營，旨在促進加強年輕一代應對氣候變化的領導力</li> <li>Propelled several photovoltaic poverty alleviation initiatives in Guangdong and Sichuan, China 推動中國廣東、四川等地多項光伏扶貧行動</li> <li>Donated RMB 2 million 捐贈人民幣2百萬元</li> </ul>	 <p>Climate action 氣候行動</p>
<p><b>Investors</b> 投資者</p> 	<ul style="list-style-type: none"> <li>Operational Excellence 卓越運營</li> <li>Compliance 合規</li> <li>Business Ethics 商業道德</li> </ul>	<ul style="list-style-type: none"> <li>Launched the Panda Operation and Maintenance System which serves as a comprehensive solution for the intelligent operation and maintenance for global new energy plants 推出熊貓運維，作為全球新能源電站智慧化運維的綜合解決方案</li> </ul>	



# Environmental Sustainability 環境可持續發展



As a leading supplier of ecological solutions mainly focused on renewable energy, we are devoted to establishing a photovoltaic green ecosphere by employing a low-carbon and sustainable model, bringing clean energy to millions of families.

## PROVIDING CLEAN ENERGY

As at 31 December 2018, the Group and its associates/joint ventures owned 74 on-grid solar and wind power plants, 9 of which were added during the year. The total installed capacity was 2,329.6 MW and the annual electricity generation was 3,192,630 MWh, a 51% increase as compared to 2,115,253 MWh in 2017.

Under the threats of climate change, switching to the use of clean energy is the way forward. The electricity generated from the Group's power plants is sufficient to support one-year electricity usage of 1,720 thousand households. The table below shows the positive environmental impacts of the Group's renewable energy generation.

作為主力發展可再生能源的生態發展方案領先供應商，我們致力於透過採用低碳及可持續發展模式建造綠色光伏生態圈，以將清潔能源帶入千家萬戶。

## 提供清潔能源

於2018年12月31日，本集團及其聯營公司／合營企業擁有74個已併網的太陽能發電站及風力發電站，年內新增9個電站。總裝機容量為2,329.6兆瓦，而年度發電量較2017年的2,115,253兆瓦時增加51%至3,192,630兆瓦時。

於氣候變化的威脅下，轉向使用清潔能源為未來的方向。本集團的電站發電量足夠為約172萬戶居民供應整年的電力使用。下表列示本集團可再生能源發電對環境帶來的正面影響。

	2013	2014	2015	2016	2017	2018
Total Electricity Generation (MWh) 總發電量 (兆瓦時)	34,939	485,046	859,730	1,345,830	2,115,253	3,192,630
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
Carbon Dioxide Emission 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
Nitrogen Oxides Emission Reduced (tons) 減少氮氧化物排放 (噸)	269	3,735	6,620	10,363	16,287	26,000
Smoke and Dust Emission Reduced (tons) 減少煙塵排放 (噸)	17	243	430	673	1,058	1,567

## CARING FOR LAND

The Group is aware of negative impacts of its renewable energy projects on land, such as interfering with land use and causing soil erosion. Thus, we aim to minimise such environmental impacts through proper management and effective mitigation measures.

### Cautious Site Selection

We believe that cautious site selection is the most important approach for minimising negative impacts on land. For every project, we conduct an environmental impact assessment which consists of detailed evaluation on the natural environment of the selected site such as current status of soil erosion, vegetation coverage and biodiversity. We assess the project's impact on its surroundings and ensure the corresponding mitigation measures are implemented.

To minimise disturbance on existing land uses, we prioritise unused lands for our projects. Some of the power plants are built on wastelands, deserts and coal mining subsidence areas. If the use of relatively valuable land such as farmland or woodland is unavoidable, we try our best to maintain the original landscape and closely communicate with the local government to fulfil the local agricultural and forestry requirements.

### Reverse Land Degradation

Desertification is recognised as a major threat to biodiversity. In view of this, we strive to combat sandification and desertification at our operational sites. With installation of low-standing and high-standing sand barriers, we effectively prevent sandification. In addition, the use of water for cleaning solar panels can moisturise the surrounding areas and facilitate soil remediation.

To prevent soil erosion, we plant plenty of trees in our power stations. The soil and water conservation monitoring reports by accredited consultancy firms show that the soil and water conservation measures taken by our projects have been effective to improve project area's ecological environment and meet national requirements.

## 土地關懷

本集團深知其可再生能源項目對土地造成的負面影響，如干擾土地使用及導致土壤侵蝕。因此，我們旨在透過適當的管理及有效的紓緩措施將有關環境影響降至最低。

### 審慎選址

為減少對土地的負面影響，我們認為審慎選址是最重要的方法。我們對每個項目開展環境影響評估，包括對選定地點的自然環境（如土壤侵蝕的現狀、植被覆蓋率及生物多樣性）進行詳細評估。我們評估項目對其周邊環境的影響及確保相應緩解措施得到實施。

為減少對現有土地用途的干擾，我們的項目首選閒置土地。部分電站建設在荒地、沙漠及採煤沉陷區。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，以滿足當地農林業的規定。

### 逆轉土地退化

沙漠化被認為是生物多樣性的主要威脅。有鑒於此，我們致力在我們的運營地點對抗土地沙化及沙漠化。我們透過安裝低立式及高立式沙障有效地防治沙化。此外，用水清潔太陽能電池板可以滋潤周圍地區，促進土壤修復。

為防止土壤侵蝕，我們於電站種植大量樹木。經認可諮詢公司的水土保持監測報告顯示，我們項目所採取的水土保持措施已有效地改善項目地區的生態環境並符合國家規定。

## Integration of Photovoltaic Development and Local Industries

In addition to industry integration of PV + Agriculture, PV + Fisheries and other models, we started exploration of “PV +” model as in PV + tourism, PV + cultivation, PV + poverty alleviation in 2018 to broaden the integration of various industries and drive the transformation and development. We believe that such integration can maximise utilisation of land resources and achieve mutual benefits.

## ENVIRONMENTAL MANAGEMENT

Responsible environmental management creates value for the communities where we operate as well as for our stakeholders. We strive to meet and exceed relevant environmental standards through stepping up efforts in environmental management.

The Group manages its environmental impacts through implementing an Environmental Management System (“EMS”) in accordance with ISO 14001. In 2018, 17 power plants of the Group were certified with ISO 14001 and we plan to have 8 more power plants certified in 2019.

We have compiled an environmental management manual which outlines our EMS, environmental objectives and indicators. This serves as a code of conduct for employees. The Group’s CEO takes the lead in formulating the environmental policy, identifying stakeholders’ expectations, addressing risks and opportunities and so on; while management representative is responsible to identify and evaluate environmental factors, raise the Group’s environmental awareness, monitor and measure environmental performance, etc. Other departments including Project Construction Command Centre, Engineering Department and Safety Production Department also take part in our EMS, jointly improving the Group’s environmental performance.

## 光伏發展與當地產業相結合

除光伏+農業、光伏+漁業等多產業的融合外，我們於2018年開始嘗試探索「光伏+旅遊」、「光伏+養殖」、「光伏+扶貧」等模式，繼續拓寬產業的跨界融合，為轉型發展提供新動力。我們認為，此種融合可最大限度地利用土地資源，實現互利共贏。

## 環境管理

負責任的環境管理可為我們營運所在社區及利益相關者創造價值。我們致力透過加強環境管理以達至甚至超出相關環境標準。

本集團透過實施符合ISO 14001的環境管理體系管理其環境影響。於2018年，本集團的17個電站獲ISO 14001認證，且我們計劃於2019年取得另外8個發電站的認證。

我們已編製環境管理手冊，羅列我們的環境管理體系、環境目標及指標，以作為僱員的行為守則。本集團行政總裁領編環境政策，識別利益相關者期望，解決風險與機遇問題等，管理層代表則負責識別及評估環境因素，提升本集團的環境意識，監督及衡量環境表現等。項目建設指揮中心、工程部及安全生產部等其他部門亦參與環境管理體系，共同改善本集團的環境表現。

Internal and external audits of EMS were conducted to ensure continuous improvement. During the year, we carried out audits on 17 power plants and no non-compliance case was found.

To ensure compliant operations, we identify and implement the latest environmental laws and regulations and conduct regular evaluation of our compliance status. Evaluations include compliance with pollutants discharge standards, implementation of “Three Simultaneities” system, and compliance with laws and regulations related to important environmental factors.

The Group’s operations strictly comply with all applicable environmental laws and regulations in all material aspects, including Environmental Protection Law of the PRC, Atmospheric Pollution Prevention and Control Law of the PRC, Water Pollution Prevention and Control Law of the PRC, Law of the PRC on the Prevention and Control of Environmental Pollution by Solid Wastes, Law of the PRC on Appraising of Environment Impacts, Cleaner Production Promotion Law of the PRC, Energy Conservation Law of the PRC, Environmental Protection Tax Law of the PRC, Regulations on the Administration of Construction Project Environmental Protection. During the year, the Group was not aware of any non-compliance of relevant laws and regulations 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.

我們對環境管理體系進行內部及外部審核，以確保其持續改善。年內，我們對17個發電站進行審核，並無發現任何不合規事件。

為確保合規營運，我們識別並遵守最新的環境法律法規，定期評估我們的合規狀況。評估包括遵守污染物排放標準、實行「三同時」制度及遵守重要環境因素相關的法律法規。

本集團之營運於所有重大方面嚴格遵守所有適用環境法律法規，包括中國環境保護法、中國大氣污染防治法、中國水污染防治法、中國固體廢物污染環境防治法、中國環境影響評價法、中國清潔生產促進法、中國節約能源法、中國環境保護稅法、建設項目環境保護管理條例。年內，本集團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法規事宜。

## ENERGY CONSUMPTION

The Group's energy consumption<sup>1</sup> comprises of electricity, gas and fuel oil in its offices and power plants. During the year, we consumed a total of 101,560 GJ of energy, as compared to 76,679 GJ in 2017. Consumption of electricity, natural gas, gasoline and diesel accounted for 93.87%, 0.10%, 5.47% and 0.56% respectively of the total energy consumption. Energy intensity<sup>2</sup> was 31.8 GJ per GWh electricity generated.

The increase in electricity consumption was on account of the 9 newly added power plants during the year. The electricity usage of the year is equivalent to approximately 0.63% of the total energy generated by the Group's power plants.

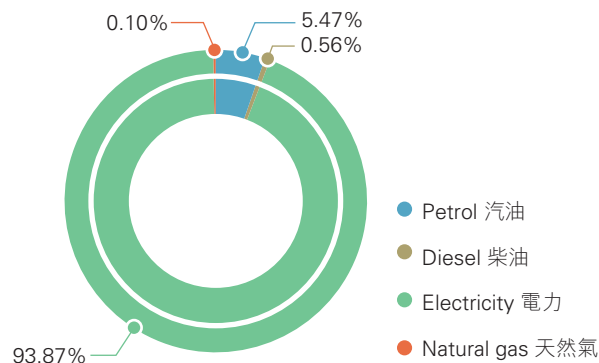
## 能源消耗

本集團的能源消耗<sup>1</sup>包括辦公室及電站使用的電力、燃氣及燃油。年內，我們消耗合共101,560千兆焦耳的能源，而2017年則為76,679千兆焦耳。電力、天然氣、汽油及柴油的消耗分別佔總能耗的93.87%、0.10%、5.47%及0.56%。能源強度<sup>2</sup>為每千兆瓦時發電量31.8千兆焦耳。

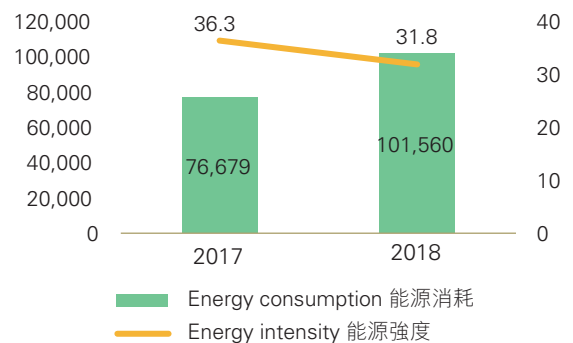
電力消耗增加乃由於年內新增的9個電站。年度用電量相當於本集團電站總發電量的約0.63%。

Energy Consumption 能源消耗	Unit 單位	2017	2018
Electricity 電力	kWh 千瓦時	20,013,284	26,482,005
Natural gas 天然氣	Cubic metres 立方米	4,865	2,684
Gasoline 汽油	Litres 公升	133,187	174,260
Diesel 柴油	Litres 公升	5,506	15,806
Energy Intensity 能源強度	GJ per GWh electricity generated 千兆焦耳／千兆瓦時發電量	36.3	31.8

**Energy Consumption in FY2018 (GJ)**  
2018財政年度的能源消耗（千兆焦耳）



**Energy Consumption (GJ) and Intensity (GJ per GWh electricity generated)**  
能源消耗（千兆焦耳）及強度（千兆焦耳／千兆瓦時發電量）



<sup>1</sup> The total energy consumption is composed of fuel consumption within the organisation from non-renewable sources.

<sup>2</sup> The energy intensity is computed using electricity generated as the organisation-specific metrics since the Group's core business is generation of electricity from renewable sources.

<sup>1</sup> 能源總消耗量由組織內的不可再生能源的燃料消耗組成。

<sup>2</sup> 由於本集團的主要業務為生產可再生電能，故計算能源強度時使用生產的電能作特定的組織度量標準。

## GHG Emissions

In 2018, the Group's total greenhouse gas ("GHG") emissions<sup>3</sup> amounted to 18,888 tonnes of carbon dioxide equivalent ("tCO<sub>2</sub>e"), of which, direct emissions (Scope 1) and indirect emissions (Scope 2)<sup>4</sup> were 512 tCO<sub>2</sub>e and 18,376 tCO<sub>2</sub>e respectively. Emission intensity was computed as 5.9 tCO<sub>2</sub>e per GWh electricity generated.

## WATER CONSUMPTION

Water is sourced from the mains supply. Major part of water consumption is for cleaning the solar panels, besides water usage in offices. During the year, total water consumption was 21,925.3 tonnes with a consumption intensity of 6.9 tonnes per GWh electricity generated. The increase in water consumption was mainly due to the 9 newly added power plants. The Group did not have any issue in sourcing water that is fit for the purpose.

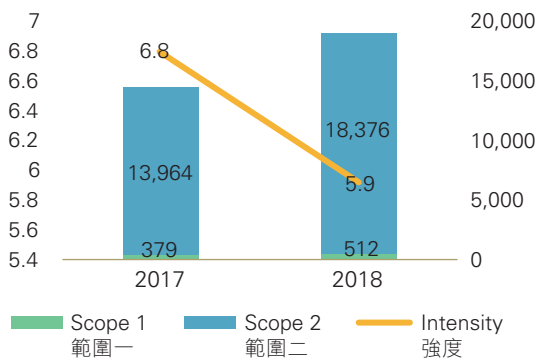
## 溫室氣體排放

2018年，本集團的總溫室氣體（「GHG」）排放量<sup>3</sup>為18,888噸二氧化碳當量，其中直接排放（範圍一）及間接排放（範圍二）<sup>4</sup>分別為512噸二氧化碳當量及18,376噸二氧化碳當量。排放強度為每千兆瓦時發電量排放5.9噸二氧化碳當量。

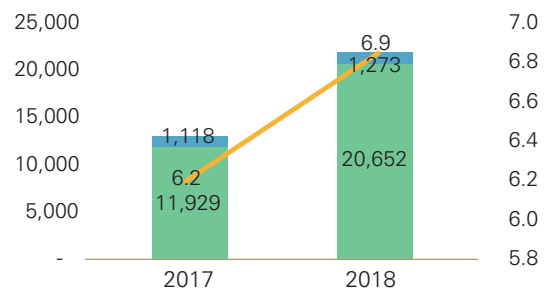
## 水資源消耗

水資源的使用主要來自城市自來水。主要用水量包括辦公室用水及清洗太陽能電池板用水。年內，總用水量為21,925.3噸，消耗強度為每千兆瓦時發電量消耗6.9噸水資源。水資源消耗增加主要由於9個新增電站所致。本集團並無任何獲取適用水源上的問題。

**GHG Emissions (tCO<sub>2</sub>e) and Intensity (tCO<sub>2</sub>e per GWh electricity generated)**  
溫室氣體排放(噸二氧化碳當量)及強度(噸二氧化碳當量/千兆瓦時發電量)



**Water Consumption (Tons) and Intensity (Tonnes per GWh electricity generated)**  
水資源消耗(噸)及強度(噸/千兆瓦時發電量)



<sup>3</sup> CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O are included in the calculation. The global warming potential rates are based on GHG Protocol. The emissions factor of electricity in Hong Kong is based on sourcing from HK Electric, while the emissions factor of electricity in PRC is based on the publication from National Development and Reform Commission.

<sup>3</sup> 二氧化碳、甲烷、一氧化二氮被納入計算。全球暖化潛勢參照溫室氣體核算體系，香港的電力排放係數依據為香港電燈，中國內地電力排放係數依據為國家發展和改革委員會公開資料。

<sup>4</sup> The computation of GHG emissions arising from purchased electricity of Tibet Grid is based on the emission factor of China Southern Power Grid since emission factor of Tibet Grid is not available.

<sup>4</sup> 由於西藏電網未有可用的排放係數，故西藏電網購買電量產生的溫室氣體排放量乃根據中國南方電網的排放係數計算。

## RESOURCES CONSERVATION

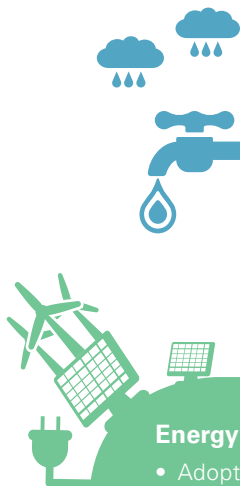
Panda Green continuously explores new technologies to improve operational efficiency of its power plants, aiming to reduce the use of non-renewable resources. We also implement green measures in our offices as far as practicable.

The Human Resources Department, Engineering Department and Safety Production Department collaborate to ensure proper resources management. The Group also conducts employee training to raise energy conservation awareness among employees and advocate responsible use of resources. With implementation of a variety of measures, our employees have realised the importance of effectively managing resources usage at operations and collaborating at all levels to achieve responsible and sustainable resources usage.

## 資源節約

熊貓綠能不斷探索新的技術以提升其電站的營運效率，力求降低不可再生能源的使用。我們亦盡可能地在辦公室內部推行環保措施。

人力資源部、工程部及安全生產部相互合作以確保資源的妥善管理。本集團亦開展僱員培訓以提高僱員節能意識，並提倡負責任地使用資源。隨著一系列措施的落實，我們的僱員已全面意識到於營運過程中有效管理資源使用的重要性，並在各層面上進行協作以實現負責任及可持續的能源使用。



### Water Saving 節約水資源

- Formulate water use plans and conduct daily inspection according to the plans
- Regularly inspect water supply pipes to prevent water leakage
- Maintain monthly record and suggest remedial measures in case of abnormal water usage
- Explore opportunities to reuse water
- 制定用水計劃及根據計劃進行日常監督
- 定期檢查供水管道以防止漏水
- 保存月度記錄並提出整改措施以防止不當用水
- 探尋循環利用水資源的可能

### Energy Saving 節約能源

- Adopt cutting-edge technology e.g. thin film and monocrystalline silicon technology, electric panel steering technology, etc., to improve power generation and transmission efficiency and reduce energy loss
- Adopt LED lightings with automatic switches in some of the power plant sites
- Switch off lights, air conditioning and other idling electronic appliances when not in use
- Give priority to equipment with high energy efficiency during the procurement process and gradually phase out high energy-consuming equipment
- 採用薄膜及單晶矽技術、電板轉向技術等前沿科技提升發電及輸電效率，以減少能源損耗
- 於部份電站基地採用帶有自動開關的LED燈
- 關閉並無使用的照明設備、空調及其他閒置電器
- 於採購過程中優先採購高能效設備，逐步淘汰高能耗設備

### Paper Saving 節約用紙

- Maintain monthly record of paper consumption to spot any abnormal usage
- Set up waste collection bins to recycle wastepaper
- Advocate digitalised communication to reduce the use of paper
- 保存月度用紙記錄，以發現任何異常使用情況
- 設置回收桶回收廢紙
- 提倡電子通訊以減少用紙



## WASTE MANAGEMENT

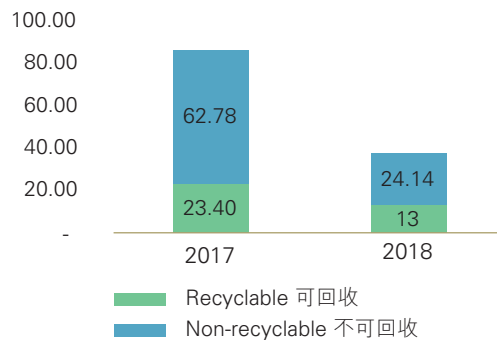
Major hazardous wastes generated by the Group's operations includes waste circuit boards, waste oil, waste batteries, toner cartridges, ink cartridges, ribbons and fluorescent lamp tubes. In 2018, the Group generated 0.94 tonnes of hazardous wastes, consisting of 0.29 tonnes of waste circuit boards and 0.65 tonnes of waste oil. Total non-hazardous wastes generated, including living wastes, construction waste, waste packaging cartons and waste parts, etc., was 37.24 tonnes, of which 13.11 tonnes was recyclable and 24.14 tonnes was non-recyclable.

## 廢棄物管理

本集團運營過程中產生的主要有害廢棄物包括廢舊線路板、廢油、廢棄電池、碳粉匣、墨匣、色帶及熒光燈管。於2018年，本集團共產生0.94噸有害廢棄物，包括0.29噸廢舊線路板及0.65噸廢油。產生的無害廢棄物（包括生活廢物、建築廢物、廢棄包裝紙箱及廢棄零件等）總量為37.24噸，其中13.11噸為可回收廢棄物及24.14噸為不可回收廢棄物。

### Non-hazardous Waste Generation (Tons)

無害廢棄物產生量  
(噸)



The Group has adopted a systematic approach for waste management. All wastes are clearly labelled and stored separately according to different categories. Designated departments inspect the waste storage on a weekly basis to ensure the surroundings are not contaminated.

本集團已就廢棄物管理採納系統化的方法。所有廢棄物根據類別作清晰標識及分開儲存。指定部門每週檢查廢棄物儲存情況以確保未對周邊環境造成污染。

We recycle wastes with useful value to minimise waste of resources. For instance, we have set up a battery recycling bin to foster the recycling culture within the Group. We also trade old toner cartridges and ink cartridges with new ones. Old solar panels are sent back to manufacturers for recycling. During the year, 52% of our scrapped solar panels were recycled, amounting to 20.36 tonnes.

我們回收有使用價值的廢棄物以盡可能減少資源浪費。舉例而言，我們已設置電池回收箱以推進本集團的回收文化。我們亦以廢舊碳粉匣及墨匣換取新的碳粉匣及墨匣。廢舊太陽能電池板寄回生產商以供回收。年內，我們52%的廢棄太陽能電池板均獲回收，合共20.36噸。

For wastes that cannot be reused or recycled, we appoint qualified waste collection specialists to handle such waste. For hazardous wastes such as scrapped solar panels, they are handled only by certified parties approved by our environmental department.

對於不可重複使用或回收的廢棄物，我們已委聘合資格的廢棄物收集專家處理該等廢棄物。對於廢棄太陽能電池板等有害廢棄物，僅可由經我們的環境部門批准的認證機構處理。



**CASE STUDY**  
案例分析

We have set up three-stage clarification tanks for the sewage treatment system of five power plants in South China. After sedimentation and clarification, the water is reused for irrigation.

我們已為華南地區五所電站的污水處理系統安裝三級澄清池。經過沉澱及澄清，廢水可循環利用於灌溉。

## EFFLUENT MANAGEMENT

The wastewater generated by the Group consists of domestic sewage and production sewage. The domestic sewage mainly comes from toilet water used in offices and construction sites, while production sewage mainly consists of water used for cleaning solar panels.

In terms of domestic sewage, we control sewage discharge by ensuring the sewage flow and setting up draining ditches and sedimentation tanks. Pouring of food residues, chemicals, oil and other contaminants in domestic sewage sewer is strictly prohibited. Toilet sewage has to go through sedimentation in septic tanks before discharging into municipal sewage pipeline. For domestic sewage at construction sites, we adopt grease traps and buried integrated biological wastewater treatment facilities. The treatment ensures the sewage meets the Integrated Wastewater Discharge Standard in the PRC.

Our production sewage consists of relatively small amount of suspended matters which is insignificant to the environment. Hence, we allow it to naturally evaporate without any treatment. Nevertheless, we continue to explore new approaches to reduce sewage discharge. Since 2017, we have launched a pilot project in Datong Panda Power Plant to adopt a waterless component cleaning robot for cleaning the solar panels which greatly reduces water consumption as well as sewage generation during solar panel cleaning process.

## AIR EMISSIONS MANAGEMENT

The Group's operations involve emissions of sulphur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>) and particulate matter (PM) generated by fuel consumption of vehicles. During the year, the Group's SO<sub>x</sub>, NO<sub>x</sub> and PM emissions were 2.8 kg, 870.9 kg and 75.2 kg respectively. Although the Group's air emissions are not material, we strive to manage their impacts by adopting emission reduction measures.

## 污水管理

本集團產生的廢水包括生活污水及生產污水。生活污水主要來自辦公室及建築工地的廁所用水，而生產污水主要包括清潔太陽能電池板的用水。

就生活污水而言，我們透過確保污水流量及設立排水管及沉澱池來控制污水排放。嚴格禁止食物殘渣、化學物、廢油及其他污染物進入生活污水下水道。廁所污水須經過化糞池的沉澱才能排放進入市政污水管道。就建築工地的生活污水而言，我們採用隔油池及地埋式一體化生物污水處理設施。該處理方式確保污水符合中國污水綜合排放標準。

我們的生產污水包含相對較少的懸浮物，對環境影響並不重大，因此我們允許其於不作任何處理的情況下自然蒸發。然而，我們繼續探索新的方式以減少污水排放。自2017年起，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，大幅減少太陽能電池板清洗過程中的水資源消耗以及污水產生量。

## 廢氣排放管理

本集團的運營涉及汽車燃油消耗產生的硫氧化物、氮氧化物及顆粒物排放。年內，本集團產生的硫氧化物、氮氧化物及顆粒物排放量分別為2.8公斤、870.9公斤及75.2公斤。儘管本集團的廢氣排放量並不重大，我們仍致力透過減排措施管理該等廢氣排放物的影響。



Operational  
Excellence  
卓越運營

Excellence in operations is paramount to achieving long-term success. Panda Green attaches great importance to the quality of its operations and maintenance of each power plant, striving to drive continuous improvement in operations management and maximise the value brought to our stakeholders.

## LEADING-EDGE TECHNOLOGY

Panda Green is committed to fostering upgradation of the photovoltaic industry and supporting the development of other industries through the application of advanced technology. After successfully developing the 100 MW solar power plant in Datong, Shanxi, in 2016, the Group has won another “100 MW floating power plants” Top-Runner project in Anhui Province in the same year. These floating solar power plants have successfully connected to the grid in 2018.

The “100 MW floating power plants” Top-Runner project showcased technological innovation in the complementarity of PV power plants and the fishery industry, realising the environmental transformation and comprehensive utilisation of abandoned water ponds in the coal mining subsidence area to construct a self-regulating aquatic ecosystem.

卓越運營對取得長遠成功至關重要。熊貓綠能重視各電站運維質量，致力持續改善運營管理，為利益相關方創造最大價值。

## 尖端技術

熊貓綠能致力於透過應用先進技術，促進光伏行業升級，支持其他行業發展。本集團於2016年在山西大同成功開發100兆瓦太陽能發電站，此後同年在安徽省競得另一個「100兆瓦水面發電站」領跑者項目。該等水面太陽能發電站已於2018年成功併網。

「100兆瓦水面發電站」領跑者項目展現了漁光互補的技術創新，實現採煤沉陷地區廢棄池塘的環境改造及綜合利用，從而建設一個自行調節的水生生態系統。

### High-performance dual glass module 高性能雙玻璃模組

- Use of high-water resistant EVA and POE in the high-performance dual glass module
- The life expectancy of the module can be up to 30 years, 20% higher than the industry average
- 高性能雙玻璃模組使用高耐水性EVA及POE
- 模組的預期壽命最長可達30年，高於行業平均水平20%

### HDPE floating module HDPE 水面模組

- Use of food grade materials to reduce impacts to the aquatic ecosystem
- 採用食品級材料，減少對水生生態系統的影響

### High power and high energy density box type substation 大功率、高能量密度箱式變電站

- Use of box type substations as voltage transformers
- Prevent possible oil leakage and contamination from traditional oil-immersed transformers
- 採用箱式變電站作為變壓器
- 防止傳統油浸式變壓器可能出現的漏油及油污問題



### Low density layout 低密度排列

- Reduce algae photosynthesis and inhibiting excessive algae reproduction
- 減少藻類光合作用，防止藻類過度繁殖



## Panda Operation and Maintenance System

Leveraging on its innovative technology and rich experience in operation and maintenance of new energy power plants, Panda Green officially launched the “Panda Operation and Maintenance System” at the 12th SNEC Photovoltaic (“PV”) Power Expo Exhibition in Shanghai in May 2018. This system serves as a comprehensive solution for intelligent operation and maintenance for new energy plants globally, which helps to integrate resources, improve operations and maintenance efficiency, and increase profit for the new energy industry.

## RESPONSIBLE SUPPLY CHAIN

Panda Green remains committed to driving environmental, social and ethical performance across its entire supply chain. We select suppliers with good quality, accurate delivery and reasonable price based on the Group’s established policies for procurement and tendering. We assess and monitor supplier performance and at the same time aid them in meeting our requirements.

Our suppliers mainly provide products and services related to the construction and maintenance of PV equipment. As of 31 December 2018, the Group had a total of 325 suppliers, 267 of which are in mainland China, 37 in Hong Kong and 21 from overseas. Aiming to boost the development of local suppliers, the Group has adopted a localised procurement strategy for goods consumed in daily operations. This has helped improve efficiency of the procurement process and has led to better after-sales arrangements.

## 熊貓運維系統

依託在新能源發電站運維方面的創新技術及豐富經驗，熊貓綠能於2018年5月在上海SNEC第12屆國際太陽能光伏與智慧能源大會暨展覽會正式發佈「熊貓運維系統」。該系統為全球新能源電站提供一個綜合的智慧運維解決方案，有助於整合資源、提高運維效率及增加新能源行業的盈利。

## 負責任之供應鏈

熊貓綠能一直致力於提高整個供應鏈的環境、社會及道德表現。我們根據本集團既有的採購及競標政策挑選準確交付且價格合理的優質供應商。我們評估及監督供應商表現，同時協助彼等達到我們的要求。

我們的供應商主要提供有關建造及維護光伏設備的產品及服務。於2018年12月31日，本集團共有325家供應商，其中267家位於中國大陸、37家位於香港及21家位於海外。為推動本地供應商的發展，本集團日常營運所消耗的物品採納本地化採購策略。此舉有助於提高採購流程效率及優化售後安排。

## Supplier Qualification

The Group's Procurement Department selects competitive suppliers based on principles of reliability, financial situation, reputation, price and service quality. On top of this, priority is given to suppliers with sound management regarding ESG issues. The Group's Quality Control Team ensures legal compliance of suppliers whose operations require special qualifications (e.g. hazardous chemical handling) by conducting strict examinations, including site visits and sample tests, in accordance with relevant national regulations and other requirements.

Encouraging suppliers to follow responsible ESG practices when delivering high-quality products, we include a "Compliance with Social Responsibility Code of Ethics Agreement" in the procurement contract. The agreement articulates our expectations of the suppliers in the fields of labour rights, occupational health and safety and environmental protection. Only candidates who are willing to undertake their social and environmental responsibilities are considered as the Group's qualified suppliers.

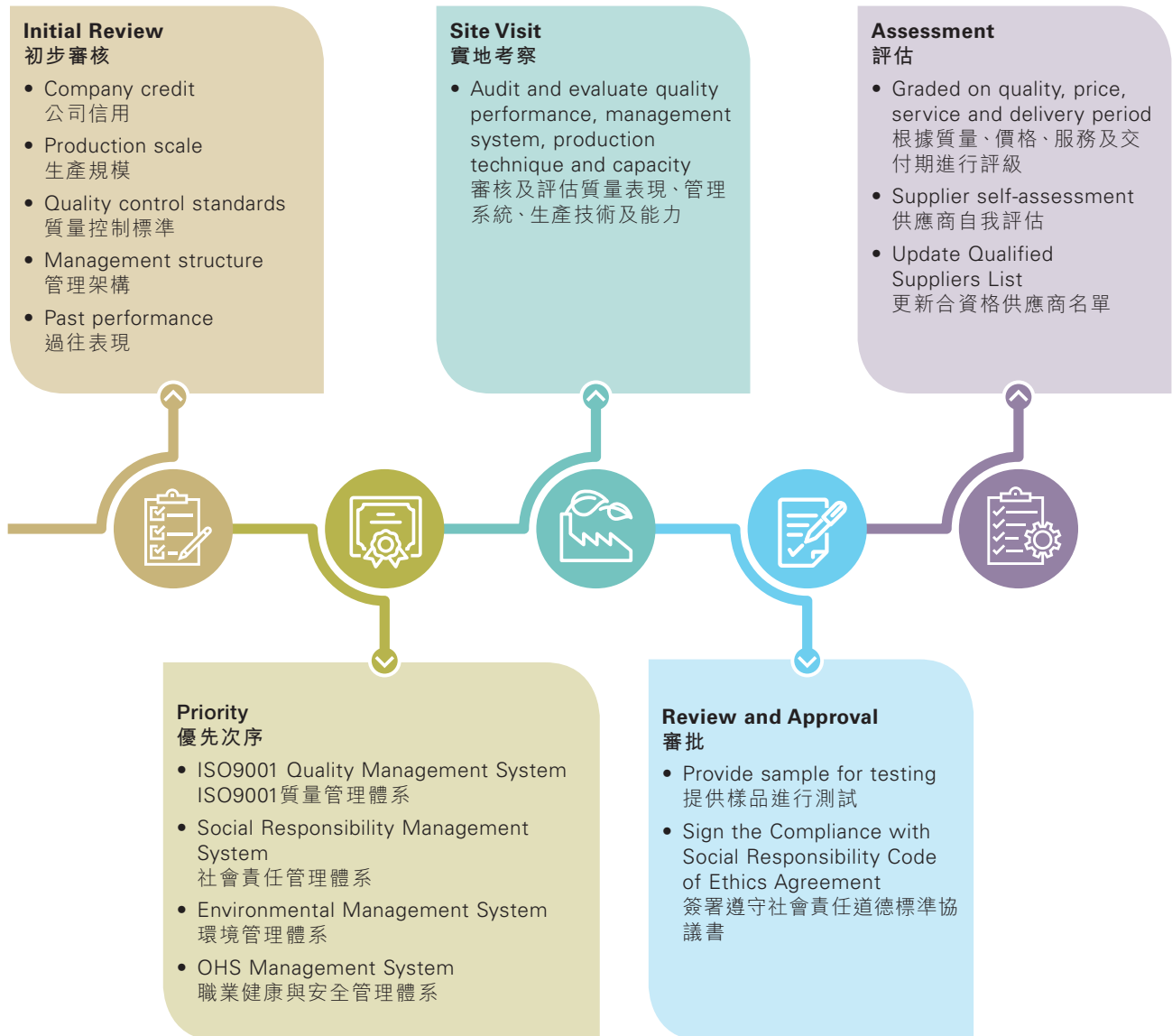
## 供應商資格

本集團採購部根據可靠性、財務狀況、聲譽、價格及服務質素的原則甄選具競爭力的供應商。除此之外，亦會優先選擇ESG事宜管理良好的供應商。本集團質控組根據有關國家法規及其他規定進行實地考察及抽樣測試等嚴格審查，確保需特殊資格（如危險化學品處理）方可運營的供應商符合法律要求。

為鼓勵供應商在交付高質量產品時遵循負責任的ESG慣例，我們將「遵守社會責任道德標準協議書」納入採購合約。該協議書列明我們在勞動者權利、職業健康與安全及環境保護領域對供應商的期望。願意承擔社會及環境責任的候選人方可作為本集團的合資格供應商。



## Supplier Selection Process 供應商甄選流程



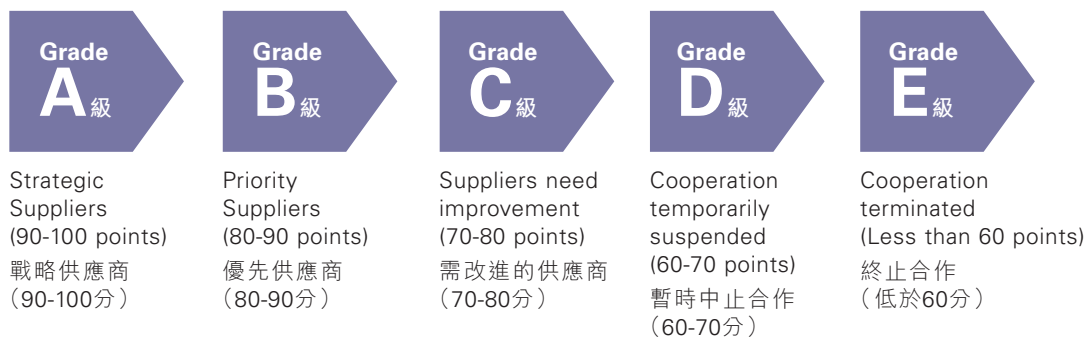
## Supplier Assessment

The Procurement Department regularly conducts supplier assessment at the end of each year and grades them based on quality, price, service and delivery period. To facilitate communication, we invite suppliers to conduct self-assessment and suggest solutions for future improvement. The Group takes into account the suppliers' annual grading in future procurement activities, with priority given to grade A suppliers.

## 供應商評估

採購部於每年年底對供應商進行定期評估並根據質量、價格、服務及交付期進行評級。為促進交流，我們邀請供應商進行自我評估並提出建議解決方案以於日後作改進。本集團會於未來的採購活動考慮供應商的年度評級，優先考慮A級供應商。

### Supplier Grading System 供應商評級系統



When suppliers fail to deliver on-time or in cases of quality problems, the Group performs irregular supplier assessments and asks suppliers for rectification. The Group considers suspension or termination of contracts with unethical suppliers or grade E suppliers.

供應商如無法按時交付或出現質量問題，本集團會對供應商進行不定期評估並要求供應商整改。本集團考慮與缺乏職業道德的供應商或E級供應商暫停或終止合約。

## Supplier Communication

Panda Green maintains amicable relationships with the industry's first echelon suppliers to ensure supply of high-quality goods. We engage with suppliers through a variety of channels including phone calls, emails, visits, inspections and technology exchanges.

## 供應商溝通

熊貓綠能與行業第一梯隊供應商保持友好的合作關係，確保供應高質量商品。我們透過多種渠道與供應商溝通，包括電話、電郵、訪問、視察及技術交流。

During the year, the Group conducted technology exchanges with its equipment and component suppliers during the tendering process. Through understanding the technical background, production capacity and other aspects of both parties, the Group strives to maintain mutually beneficial, stable and long-term partnerships with its strategic suppliers.

於本年度，本集團於招標流程中與其設備及零部件供應商進行技術交流。經了解訂約雙方的技術背景、生產能力及其他方面，本集團致力與其戰略供應商維持互利、穩定及長期的合作夥伴關係。

## QUALITY MANAGEMENT

Insistent upon guaranteeing superior service quality, Panda Green monitors its operations through a comprehensive set of internal policies, striving to deliver high-quality services to customers.

Despite the fact that Panda Green does not involve in the construction of its owned power plants, we understand our responsibility to ensure the quality of power plants at every stage. We carry out quality management for our power plants as early as during the construction phase, and throughout the operations phase.

### Construction Phase 建設階段

The Group's Operations Department has set up an acceptance inspection committee, which arranges quality inspections at the construction phase. The committee comprises personnel from various departments, facilitating cross-departmental coordination for ensuring project quality, environmental and safety performance at the construction site, as well as the effectiveness of the quality management process.

Upon completion of the construction, the acceptance inspection committee assesses the power plant based on initial requirements on the design, environmental performance, safety and quality. The power plant must get approval from the committee before commencement of operations.

本集團的營運部門已設立驗收委員會，在建設階段安排質量檢查。委員會由來自各個部門的人員組成，可促進跨部門協作，以確保項目質量、施工現場的環境及安全表現，以及質量管理流程的有效性。

建設完成後，驗收委員會根據對設計、環境表現、安全及質量的初始要求對發電站進行評估。在投入運營之前，發電站必須通過委員會的審批。

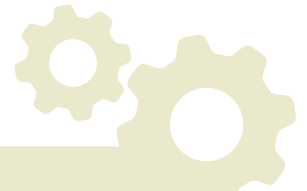
## 質量管理

熊貓綠能始終如一地保證卓越的服務質量，通過一整套內部政策監控其營運，努力為客戶提供優質服務。

儘管熊貓綠並無參與其自有發電站的建設，但我們明白我們有責任確保發電站於每個階段的質量。我們早在建設階段及整個營運階段就對我們的發電站進行質量管理。





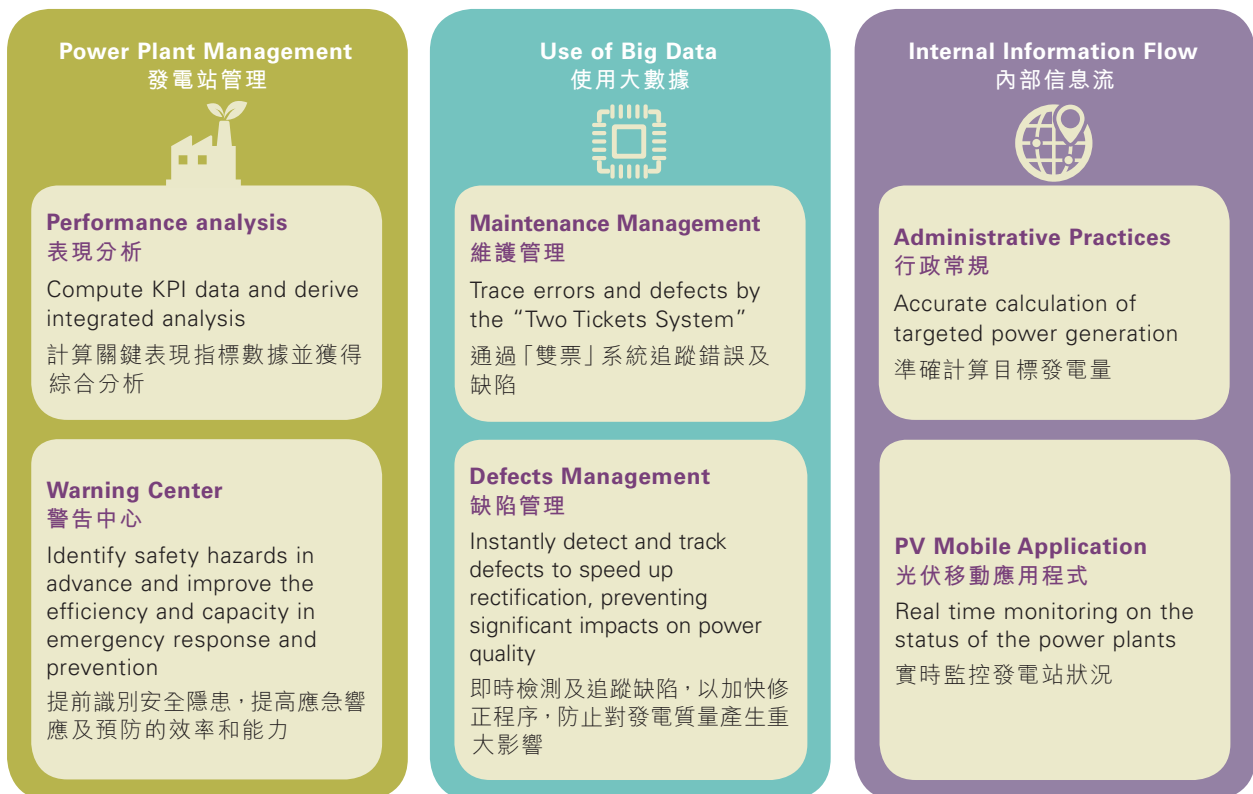


## Operations Phase 營運階段

Quality management of operating power plants is secured by our Global Smart PV Cloud Management Centre, which centralises aspects of power plant management including performance analysis, maintenance management, and defect management. The Group's Safe Production Department monitors the operating parameters of each power plant to secure stable power supply and compliance with national requirements and industry standards.

我們的全球光伏電站智能營維雲中心確保運行中發電站的質量管理，其集中了發電站管理的各個方面，包括表現分析、維護管理及缺陷管理。本集團的安全生產部門監控各發電站的運行參數，以確保穩定的電力供應及符合國家規定和行業標準。

## Global Smart PV Cloud Management Center 全球光伏電站智能營維雲中心



## Improving Customer Satisfaction

To continually improve the service quality, the Project Development Department maintains effective communication with customers in the process of pre-sales and after-sale, including reporting progress on the project, collecting and responding to customer feedback, and properly handling complaints to achieve continuous customer satisfaction. The Group conducts customer satisfaction surveys every year, keeping track of performance in terms of service quality, supply capacity, price, grid stability and grid safety to identify gaps for improvement.

## 提高客戶滿意度

為不斷提高服務質量，項目開發部門在售前及售後過程中與客戶保持有效溝通，包括匯報項目進展、收集及回應客戶反饋，以及妥當處理投訴以實現持續的客戶滿意度。本集團每年進行客戶滿意度調查，跟踪服務質量、供應能力、價格、電網穩定性及電網安全方面的表現，以找出需要改進的地方。

## DATA PRIVACY AND SECURITY

Security and privacy threats continue to escalate in the digital era. As the Group adopts smart technologies and cloud systems in management of its power plants, it is fundamental to strengthen cybersecurity risk management. All information at the cloud systems of the Global Smart PV Cloud Management Centre and our power plants is encrypted and isolated from external networks. The transfer of data is possible only with authorisation from local grid companies, and the transfer must comply with the national laws including Cybersecurity Law of the PRC.

To protect data privacy of the Group and its customers, an internal policy is in place to regulate the management of confidential information including commercial secrets, developing technologies, customer information, etc., according to the sensitivity level of the information. Employees are required to sign a confidentiality agreement to confirm their responsibility to protect the Group's sensitive information and avoid any intentional and unintentional disclosure. The daily operations of the Group strictly comply with national and local regulations designed to protect data privacy, including the Personal Data (Privacy) Ordinance of Hong Kong.

## INTELLECTUAL PROPERTY PROTECTION

Being a member of the renewable energy industry, the Group encourages innovations that lead to enhancement of its core competitiveness. We reward employees for outstanding contributions in creating and maintaining intellectual property, as well as protecting the Group from intellectual property infringement.

During the year, the Group has been awarded a new patent licence for invention and four utility model patent licenses for grape-photovoltaics integration, regulated under the Patent Law of the PRC and the Rules for Implementation of the Patent Law of the PRC. The Group also made two applications for copyrights. The Group's patent, trademarks and copyrights are managed by the Group's Legal Department. During the year, the Group was not involved in any litigation relating to infringement of any intellectual property rights.

## 資料私隱及安全

數碼年代的安全及私隱威脅不斷升級。由於本集團在發電站管理中採用智能技術及雲系統，因此加強網絡安全風險管理至關重要。全球光伏電站智能營維雲中心及我們發電站雲系統中的全部資料乃經加密並與外部網絡隔離。數據的傳輸僅在當地電網公司批准之後，方可進行，且數據傳輸須遵守包括《中華人民共和國網絡安全法》在內的國家法律。

為保護本集團及其客戶的資料私隱，已制定內部政策，根據資料的敏感程度規範機密資料，包括商業機密、開發中技術及客戶資料等的管理。員工須簽署保密協議，以確認彼等有責任保護本集團的敏感資料，並避免任何有意及無意的披露。本集團的日常營運嚴格遵守旨在保護資料私隱的國家及地方法規，包括香港《個人資料（私隱）條例》。

## 知識產權保護

作為可再生能源行業的一員，本集團鼓勵可提升其核心競爭力的創新。我們獎勵員工在創造及維護知識產權以及保護本集團免受知識產權侵權方面做出的杰出貢獻。

年內，本集團獲得一項新發明專利授權及四項葡光互補實用新型專利授權，受《中華人民共和國專利法》及《中華人民共和國專利法實施細則》規管。另外亦有兩項軟件著作權的申請。本集團的專利、商標及版權由本集團的法務部門管理。於本年度，本集團並無牽涉任何有關侵犯任何知識產權的訴訟。



The Group focuses on operation and management of renewable energy plants and does not involve in advertising nor in labelling. The impacts of these aspects to the Groups' operations are minimal. During the year, the Group was not aware of any violation of relevant laws and regulations that have a significant impact on the Group relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.

## ANTI-CORRUPTION

Panda Green is committed to upholding high moral and ethical principles and conducting business with due regard to honesty, integrity and respect. We expect employees at all levels to share these values.

Actions of our employees are subject to internal policies and guidelines. It is the policy of the Group to prohibit directors and employees from soliciting any advantages from clients, vendors or any person in connection with the Group's business. They should also decline advantages offered in connection with their duties if the acceptance could affect their objectivity or induce them to act against the Group's interests. Under no circumstances does an employee or director offers bribe to anyone for the purpose of obtaining or retaining business.

Employees whose behaviors are found to violate ethical standards are subject to disciplinary actions, including termination of the employment contract. Besides, employees are obliged and are encouraged to report any suspected cases of legal violation. To help employees understand the Group's Code of Conduct and to raise their awareness with regard to corruption, the Group conducts training on prevention of bribery for its employees from time to time.

The Group conforms to the Prevention of Bribery Ordinance in Hong Kong and relevant laws and regulations of the PRC and regions where it has operations. During the year, 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. The Group was not involved in any corruption cases.

本集團專注可再生能源發電站的營運及管理，並不涉及廣告或標籤，故該等方面對本集團營運的影響甚微。於本年度，本集團並不知悉任何違反有關所提供產品和服務的健康與安全、廣告、標籤及私隱事宜以及補救方法的並對本集團有重大影響的相關法律及法規事宜。

## 反貪污

熊貓綠能致力於恪守崇高的道德原則，並在適當考慮誠實、正直及尊重的情況下開展業務。我們希望各級員工分享該等價值觀。

我們僱員的行為受內部政策及指引規限。本集團設有政策禁止董事及僱員向本集團業務相關的客戶、供應商或任何人士索要任何利益。倘有相關利益收受可能影響僱員客觀性或致使彼等作出違背本集團利益的行為，僱員亦須謝絕有關利益。在任何情況下，僱員或董事均不得為了獲取或保留業務而向任何人行賄。

倘發現員工的行為違反道德標準，其將受紀律處分，包括終止聘約。此外，僱員有責任報告任何疑似違法的事宜，我們亦鼓勵僱員作出該等舉動。為幫助僱員了解本集團的行為守則及提高彼等的反貪腐意識，本集團不時為其僱員進行防止賄賂培訓。

本集團遵守香港防止賄賂條例以及中國及其所經營地區的相關法律及法規。年內，本集團並無知悉任何違反有關賄賂、勒索、欺詐和洗黑錢而對本集團有重大影響的相關法律及法規事宜。本集團亦無涉及任何貪腐個案。



# Talent Management 人才管理

With the human resources management philosophy of “respect the value, develop the potential and sublimate the mind”, Panda Green cultivates talents and strives to achieve synergy between the growth of the Group and its employees.

People serve as the foundation for the success of our business. It is, therefore, critical for us to not only attract and retain talents, but also develop talents by offering career prospects and learning opportunities to our staff.

The Group provides a platform for the talents who are qualified. Under the Group’s annual developmental plan, we engage potential candidates from different backgrounds through internal and external channels. We hope to drive further growth and create value for Panda Green through nurturing diverse, competent and reliable talents.

在人力資源管理政策秉承「尊重價值、開發潛力、升華心靈」的理念下，熊貓綠能培養人才並致力達致本集團與其僱員增長的協同效應。

員工是我們業務成功的基石。因此，對我們來說至關重要的不僅是吸引及延攬人才，而且為員工提供職業前景及學習機會而培養人才。

本集團為合資格人才提供平台。根據本集團的年度發展計劃，我們透過內部及外部渠道委聘不同背景的潛在候選人。我們希望透過培養多元化、專業及可靠的人才以進一步推動熊貓綠能的增長並為其創造價值。



## TRAINING AND DEVELOPMENT

The Group invests in training and development of its employees to keep its people abreast of the latest industrial developments and help them to realise their potentials. The “4+1” training system is established with an online learning platform. It consists of basic, professional, advanced and professional quality training, with a points-based training management. The points are one of the factors when considering rewards, performance reviews and promotions.

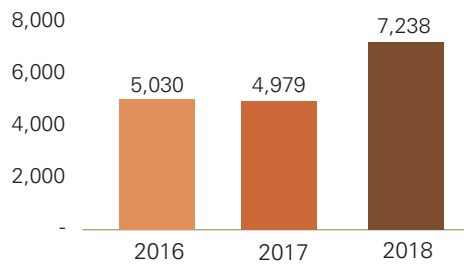
## 培訓與發展

本集團投放資源於僱員的培訓及發展，以期他們跟上最新的行業發展，並幫助彼等意識其潛力。我們已建立「4+1」培訓體系配以線上學習平台，該體系由基礎、專業、進階及專業素質培訓，以及一個培訓積分制管理方式組成。積分乃為獎勵、年終績效考核及職位晉升的考量因素之一。

Under the system, we provide three major training programmes and have set clear career development plans for employees at all levels. During the year under review, there were 7,238 person-times of training.

根據該體系，我們提供三個主要培訓計劃並為所有級別的僱員制定清晰的職業發展規劃。於回顧年度內，已有7,238培訓人次。

**Total Training Person-times**  
培訓總人次



### Position Specific Training: Hot Mark Testing on Solar Panels

In 2018, the power plant operation and maintenance personnel received training on testing hot marks on solar panels. Hot marks are formed when the panels are covered by objects, which reduce the effectiveness of solar energy generation. The trained employees can help monitor the operation of solar panels and maximise generation by the panels.

### 崗位專項培訓：太陽能電池板熱斑測試

於2018年，電站運維人員已接受太陽能電池板的熱斑測試培訓。當電池板被覆蓋時產生熱斑，其降低太陽能產能的效益。經培訓的僱員可幫助監控太陽能電池板的營運情況，提高電池板的產能。



The Group encourages internal knowledge transfer by experienced and qualified employees. To monitor the quality of our internal trainers, we have arranged training programme operated by professional training organisations. Employees are welcome to apply for external training courses related to their departmental needs.

本集團鼓勵符合資格的資深僱員進行內部知識傳遞。為監控我們內部培訓講師的質素，我們已安排由專業培訓機構開展的培訓教育計劃。我們支持員工使用與彼等部門需求相關的外部培訓課程。





## CAREER DEVELOPMENT

The Group not only provides training programmes to employees, but also develops talents and nurtures their professional growth with the dual-career development channel and the promotion mechanism, offering a transparent career developmental ladder for professional and management aspects. Employees can make flexible decisions with reference to the Group's developmental needs, personal qualities and interests. It is operated for the purpose of better cultivation of talents.

Our employees contribute directly to our service quality. The Group, therefore, has formulated a comprehensive promotion mechanism to recognise efforts. We review the mechanism and optimise it when necessary. All levels of employees are evaluated based on their working performance, professionalism, experience, and other criteria. The results are applicable for salary adjustment, training provision and economic rewards. We motivate talents to keep pace with the Group's growth.

## OCCUPATIONAL HEALTH AND SAFETY

Panda Green views employees' health and safety as one of its top priorities, taking a people-oriented approach in managing safety-related issues. During the year, we have strictly complied with the Occupational Safety and Health Ordinance in Hong Kong as well as the Law of the PRC on Prevention and Control of Occupational Diseases in China.

### Safety Principles 安全準則



**Safety First**  
安全第一



**Hazard Prevention**  
防災



**Integrated Management**  
綜合管理

In addition to obtaining OHSAS 18001 certification for Occupational Health and Safety Management System in our power plants, the Group has newly formulated a four-level safety monitoring management system, with the involvement of individual teams (班組), to handle important operation and maintenance works in a comprehensive manner. Supervisors are responsible for monitoring their subordinates in relation to safety.

## 職業發展

本集團不僅向僱員提供培訓計劃，亦藉雙軌制職業發展通道及晉升體制培養人才，促進彼等的專業發展，為專業人才及管理層方面提供透明的職業發展階梯。為更妥善培養人才，僱員可根據本集團的發展需求、個人質素及興趣作靈活的決定。

僱員直接關係到我們的服務質素。因此，本集團已制定全面的晉升機制以認同其努力，我們檢閱該機制並於必要時進行優化。所有級別的僱員均根據彼等的工作表現、專業程度、經驗及其他標準評估。該等結果適用於薪酬調整、培訓提供及經濟獎勵。我們激勵人才以跟上本集團的成長步伐。

## 職業健康與安全

熊貓綠能視僱員的健康與安全為首要任務之一，採取以人為本的方法管理安全相關問題。年內，我們已嚴格遵守《香港職業安全及健康條例》及《中華人民共和國職業病防治法》。

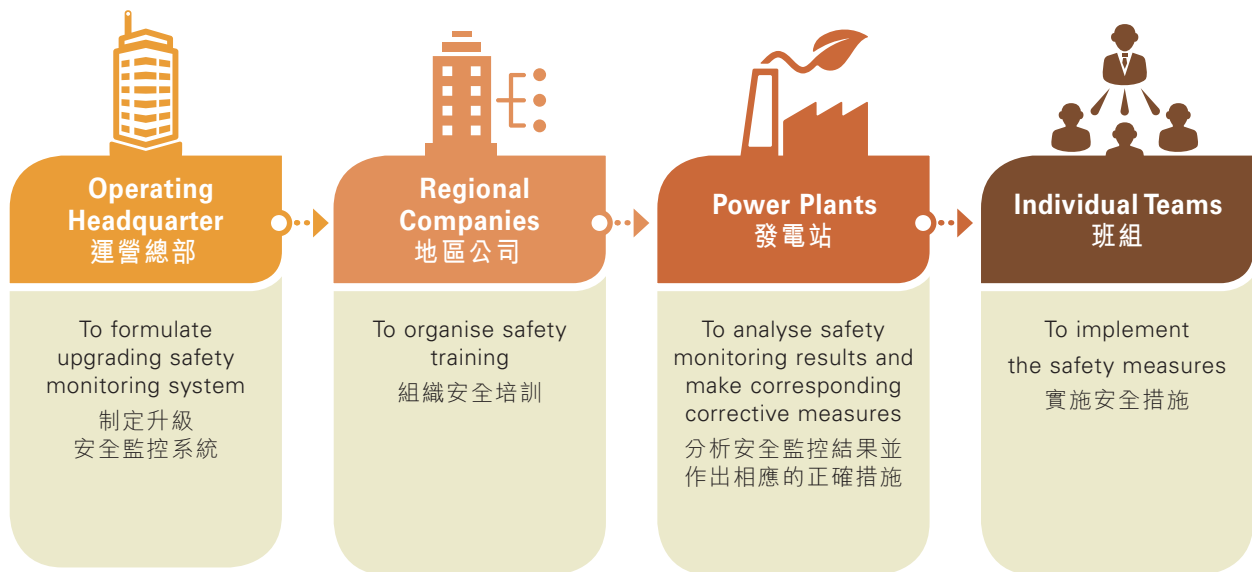
除了於我們的發電站取得OHSAS 18001職業健康安全管理體系認證外，本集團已新建立四級安全監控管理系統，新增班組的參與以全面處理重要營運及維護工作。上級負責監控彼等下屬的安全。



The Safety Production Department at the operating headquarters is responsible for establishing and monitoring implementation of safety policies at operational sites. We maintain regular communication between departments at different levels to enhance the effectiveness of safety management. Through having tight cooperation, each department performs its own duties and we can minimise the safety risk of employees.

於營運總部的安全生產部門負責建立及監控營運場所安全政策實施。我們於不同級別的部門保持定期溝通，以提升安全管理成效。透過緊密的合作，各部門履行其各自職責，讓我們可盡量降低僱員的安全風險。

### Four-level Safety Monitoring Management System 四級安全監控管理系統



In 2018, there were no incidents of occupational illness or working days lost due to work injury, and no work-related fatalities were reported. This is our fourth consecutive year to achieve zero occupational incidents.

於2018年，我們並無發生職業病或因工傷損失工作日數的事故，亦無因工死亡的個案。這是我們連續第四年實現零職業事故。

During the year under review, the Group was not aware of any violation of relevant laws and regulations that have a significant impact on the Group relating to providing a safe working environment and protecting employees from occupational hazards.

於回顧年度內，本集團並不知悉有任何違反有關提供安全的工作環境及保護員工免受職業性危害且對本集團有重大影響的相關法律法規。

## Safety Hazard Prevention

Panda Green is committed to cultivating a strong safety culture by encouraging all employees to embrace safety as a personal and collective responsibility. The Group places priority on hazard prevention and proactively conducts safety monitoring measures to minimise the risk of occupational incidents.

### Identification

The Group continuously evaluates and identifies the safety hazards at different stages to minimise the risk of occupational health and safety. Every department has to form a risk evaluation team for conducting assessment. The hazards are categorised into different areas, and corresponding measures are implemented. We have a re-evaluation whenever there are changes in governmental laws and regulations or the Group's safety goals, to ensure our operations are lawful.

Damages on facilities may pose an occupational danger to employees. The power plant operation and maintenance personnel are required to inspect and test the facilities periodically to ensure smooth operation of facilities. With standardisation of safety production, we have revised the "two tickets", which are "task approval" and "procedure approval" during the year under review, providing the workflow and standard for ensuring smooth maintenance of equipment. When the operators discover any damages of facilities, they should report the issues to their supervisors immediately.

### Monitoring

We understand that employees at power plants are exposed to a certain level of risk of occupational injuries. Policy on regulating the procurement, usage and storage of personal protective equipment is established and updated. Employees are required to wear the equipment provided during operations and the Safety Production Departments of each regional company has the responsibility to monitor the usage of these equipment irregularly.

## 預防安全隱患

熊貓綠能致力通過鼓勵所有員工將安全視為個人及集體責任，培養堅固的安全文化。本集團重視隱患預防工作，積極採取安全監控措施，以盡量降低職業事故風險。

### 識別

本集團持續評估及識別不同級別的安全隱患，以盡量降低職業健康與安全風險。各部門均須成立風險評估團隊，負責開展評估工作。相關隱患按不同範疇歸類，並實施相應措施。我們會於政府法律法規或本集團安全目標發生變化時進行重新評估，以確保我們業務營運屬合法。

設施損壞可能會使員工面臨職業危險。電站運維人員必須定期對設施進行檢查及測試，以確保設施運行暢順。通過規範安全生產，我們於回顧年度內已修訂「兩票制」（即「工作票」及「操作票」），為確保設備順利進行維護工作提供了工作流程和規範。當操作者發現設施有任何損壞時，彼等應立即向其主管報告事宜。

### 監控

我們了解電站的員工存在一定程度的職業傷害風險，因此已制定及更新監控設備採購、使用及儲存個人防護設備的政策。員工在操作時必須佩戴獲提供的設備，而各區域公司安全生產部門有責任不定期監控該等設備的使用情況。

To further encourage employees to be aware of workplace safety issues, the Group has adopted an economic responsibility system. A points-based evaluation system is formulated. According to the employees' performance in terms of compliance to safety-related governmental laws and internal regulations, they have to pass the evaluation. Those who fail the evaluation receive warnings or position readjustment. They have to resolve the problems within an assigned period of time. In contrast, workers with outstanding performance are economically rewarded.

### Safety Training

To strengthen the employees' safety-related knowledge and skills, the Group has formulated an annual safety training plan and courses are regularly provided. We organise different training programmes according to the positions of the employees. In 2018, we stressed on the effectiveness and practicality of safety training courses, and arranged programmes related to emergency handling and techniques enhancement.

During the year under review, 98% of the total workforce participated in safety training, which accounted for 1,195 person-times and 986 training hours.








為進一步提高員工對工作場所安全事宜意識，本集團已採納經濟責任制制定積分評估系統。根據員工在遵守安全相關的政府法律及內部法規上的表現，彼等必須通過評估。未能通過評估的員工會收到警告或調崗，並需在指定的時間內解決問題。反之，表現優異的員工將獲得經濟獎勵。

### 安全培訓

為加強員工的安全相關知識及技能，本集團已制定年度安全培訓計劃及定期提供相關課程。我們針對員工的崗位設置不同的培訓課程。於2018年，我們注重安全培訓課程的效能及實際可行性並安排與應急處理及提升技術相關的課程。

於回顧年度內，98%的員工已接受相關安全培訓，共開展培訓1,195人次，培訓時數達986小時。

#### Safety Training Organised in 2018 2018年已組織的安全培訓

 <b>New Production Staff</b> 新招聘的生產崗位人員	 <b>New Operation &amp; Maintenance Staff</b> 新招聘的運維人員	 <b>Transferees &amp; In-service Staff</b> 調崗及在職人員	
<ul style="list-style-type: none"> <li>• Safe-working regulations 工作安全規定</li> <li>• Potential on-site dangers 潛在工作危險</li> <li>• Preventive measures 相關預防措施</li> </ul>	<ul style="list-style-type: none"> <li>• On-site examination 現場考核</li> </ul>	<ul style="list-style-type: none"> <li>• Latest safety laws and regulations 最新的相關法律法規</li> <li>• Positions' safety requirements 崗位的安全要求</li> </ul>	
 <p>First-aid Training 急救培訓</p>	 <p>Fire Drill 火災演習</p>	 <p>Electric Shock Drill 電擊演習</p>	 <p>Anti-terrorism Drill 反恐演習</p>

## OUR PEOPLE

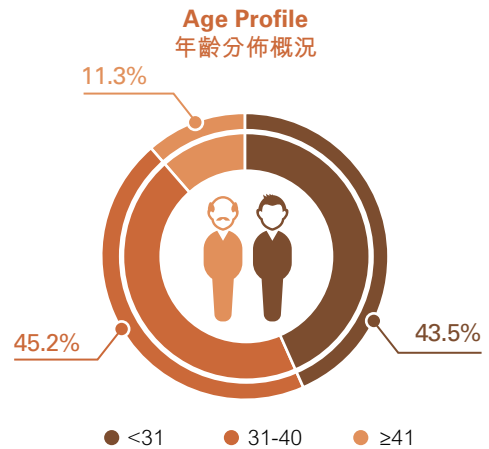
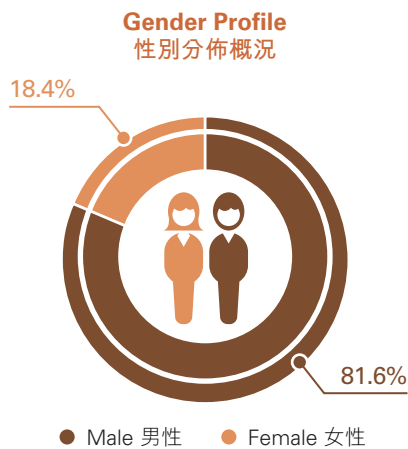
As of the end of December 2018, Panda Green employed 418 full-time staff, of which 30 or 7.2% are based in Hong Kong and 388 or 92.8% are based in mainland China. The proportion of male to female employees is 81.6% and 18.4% respectively. As we value youth employment, we provide them with career opportunities; 43.5% and 45.2% of our employees are aged below 31 and 31-40 respectively.

In terms of educational profile, 60% of our employees hold tertiary or above qualifications. Of these, 52.4% hold a bachelor's degree, 7.4% hold a master's degree, and 0.2% hold a doctor's degree. 40% of our employees have non-tertiary qualifications. Our team comprises of 2.7% of senior managers, 11.2% of middle managers and the rest is general staff.

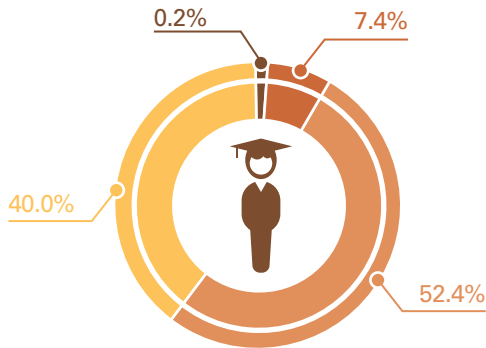
## 員工

截至2018年12月底，熊貓綠能僱用418名全職員工，其中30名（或7.2%）位於香港及388名（或92.8%）位於中國內地。以性別劃分，男性及女性員工分別佔比81.6%及18.4%。由於我們重視青年員工，故為彼等提供就業機會；31歲以下及31至40歲的員工比例分別為43.5%及45.2%。

以教育程度劃分，60%或以上員工為本科或以上學歷，其中52.4%持有學士學位，7.4%持有碩士學位，0.2%持有博士學位。40%員工持有大專及以下學歷。我們的團隊中2.7%為高層管理人員，11.2%為中層管理人員，其餘為普通員工。

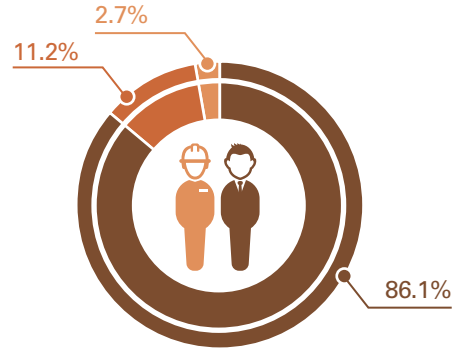


**Education Levels Profile**  
教育程度分佈概況



- Doctor 博士
- Master 碩士
- Bachelor 學士
- Non-tertiary qualifications 大專及以下學歷

**Position Levels Profile**  
崗位分佈概況

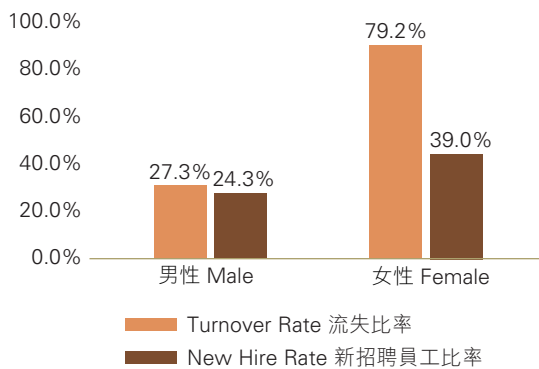


- General staff 普通員工
- Middle management team 中層管理人員
- Senior management team 高層管理人員

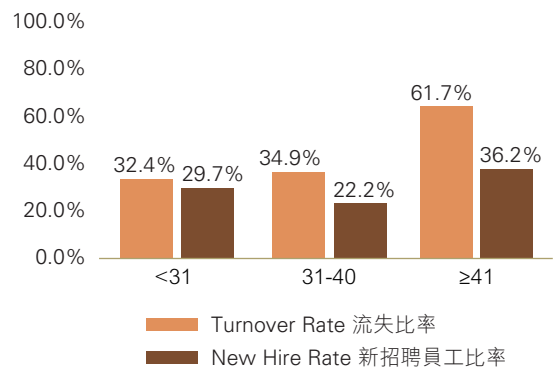
In 2018, the overall turnover rate was 36.8% or 154 people, of which approximately 87% resigned voluntarily. Due to organisational restructuring, the turnover rate was higher than that in 2017 (8% or 39 people). The overall new hire rate is 27% or 113 people, including 12 male and 5 female ethnic minority employees. The distribution of turnover and new hire rates by gender and age categories are presented in charts below.

於2018年，熊貓綠能的整體員工流失比率為36.8%（或154人），其中約87%為自願離職。由於架構重組，故員工流失率遠高於2017年的8%（或39人）。整體新招聘員工比率為27%（或113人），其中包括12名男性及5名女性少數民族僱員。下表載列按性別及年齡劃分的流失比率及新招聘員工比率。

**Turnover and New Hire Rates by Gender**  
按性別劃分的流失比率及新招聘員工比率



**Turnover and New Hire Rates by Age**  
按年齡劃分的流失比率及新招聘員工比率



## EMPLOYEE RIGHTS AND WELFARE

The Group respects each individual and has created a working atmosphere free of discrimination and harassment. We have zero tolerance on any forms of discrimination, on the grounds of age, gender, marital status, sexual orientation, race, religion, disability, or political background. We have strictly complied with local laws and regulations in places of operations, such as the Labour Law of the PRC, the Labour Contract Law of the PRC, and the Employment Ordinance, the Employees' Compensation Ordinance, the Sex Discrimination Ordinance, the Disability Discrimination Ordinance and other anti-discrimination ordinances in Hong Kong.

Procedures for employee recruitment and dismissal are regulated by internal policies. The Human Resources Department is responsible for establishing and terminating labour contracts. The contracts are formed based on mutual agreements between the Group and the employees. We take rigorous measures to prohibit child labour or forced labour in our business, strictly complied with relevant laws and regulations including Provisions on the Prohibition of Using Child Labour in the PRC and Employment of Children Regulations in Hong Kong. There was no reported case regarding child or forced labour in 2018.

To attract, motivate and retain quality employees, we provide competitive remuneration and welfare packages. Employees' remuneration includes basic salary and performance bonus, and it is reviewed annually to reward and motivate individual performance. Welfare measures such as free annual health checks, cash subsidies and benefits, subsidised leisure activities and other extra benefits are offered. In 2018, 97% of our employees enjoyed free health checks and received the corresponding health advice. We also provide maternity and paternity leaves to our employees, and all of them returned to their positions during the year under review.

We arrange the working hours and rest periods of our employees based on their position's requirements and relevant laws, such as the Labour Law of the PRC, the Regulation on Paid Annual Leave for Employees, the Regulation on Public Holidays for National Annual Festivals and Memorial Days and the Employment Ordinance in Hong Kong. In 2018, we increased the number of annual leaves and paid sick leaves of our employees.

## 僱員權利及福利

本集團尊重每名員工，並創造無歧視無騷擾的工作環境。我們嚴格禁止基於年齡、性別、婚姻狀況、性傾向、種族、宗教信仰、殘疾或政治背景等一切形式的歧視。我們嚴格遵守《中華人民共和國勞動法》、《中華人民共和國勞動合同法》、香港《僱傭條例》、《僱員補償條例》、《性別歧視條例》、《殘疾歧視條例》及其他反歧視條例。

僱員招聘及解僱之程序受內部政策規管。人力資源部負責訂立及終止勞動合同。有關合同乃基於本集團與員工雙方的約定訂立。我們採取嚴格的措施防止在業務經營中僱用童工或強制勞工，並嚴格遵守相關法律法規，包括中華人民共和國《禁止使用童工規定》及香港《僱用兒童條例》。於2018年，並無接獲有關童工及強制勞工的報告。

為吸引、激勵及延攬合資格員工，我們提供具競爭力的薪酬及福利待遇。員工薪酬包括基本薪金及績效獎金，並每年進行檢討，以獎勵及激勵個人表現。本集團為員工提供諸如免費的年度健康檢查、各種現金補貼和福利及休閒活動補助等額外福利。於2018年，97%的員工已享受免費健康檢查及獲得相應的健康諮詢。於回顧年度內，我們亦為員工提供產假及陪產假，彼等均已返回崗位。

我們按員工的崗位要求及《中華人民共和國勞動法》、《職工帶薪年休假條例》、《全國年節及紀念日放假辦法》和香港《僱傭條例》等相關法律安排彼等的工作時間和休假。於2018年，我們增加了員工的年假及帶薪病假天數。



During the year under review, the Group was not aware of any non-compliance of relevant laws and regulations that have a significant impact on the Group relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.

## EMPLOYEE COMMUNICATION

We value effective communication with our employees and ensure that their opinions are heard through various communication channels, such as weekly meetings, mailbox, email and WeChat. During the year, we continued to undertake initiatives that care for employees and enrich their leisure life, for example, skiing, outings and other team-building activities. These not only help strengthen morale but also improve the mental and physical health of employees so that they can attain work-life balance.

於回顧年度內，本集團並無獲悉任何違反有關薪酬及解僱、招聘及晉升、工作時間、休假、平等機會、多元化、反歧視及其他待遇及福利且對本集團有重大影響的相關法律及規例的情況。

## 員工溝通

我們重視與員工有效溝通，透過每週例會、郵箱、電郵及微信等多種溝通渠道確保聽取彼等的意見。年內，我們持續推行關愛員工活動，豐富他們業餘生活，如滑雪、遠足及其他團建活動，加強員工士氣，同時增進員工身心健康，以便彼等維持工作與生活平衡。





## Relationships with the Community

### 社區關係



We aim to utilise our resources and expertise to economically and socially empower the community, creating shared value for everyone in the communities where we have operations.

## NURTURING FUTURE LEADERS FOR CLIMATE ACTION

People are living through challenging times as the threats of climate change have never been closer. To navigate this changing future, we need a new generation of leaders who use their influence to lead the globe to a greener and more sustainable future. In the mid-August of 2018, Panda Green launched the second Youth Leadership Camp for Climate Action in cooperation with the United Nations Development Program (“UNDP”). This summer camp engaged youth on issues encompassing climate change, aiming to promote stronger leadership of the young generation for sustainable development action.

During the summer camp, 50 young participants explored the challenges and existing solutions of climate change through a series of interactive activities covering topics of the SDGs. Officials from the United Nations and business leaders from the clean energy and technology industries also participated and shared their expertise and views on climate related actions. Through the camp, we aimed to create a unique opportunity for youth to engage in sustainability and cultivate innovative thinking, preparing them as key collaborators for achieving future development goals.

我們致力於利用自身的資源及專業知識，推動社區在經濟及社會方面的發展，為我們營運所在社區的每個人創造共享價值。

## 培養未來氣候行動領袖

由於氣候變化的威脅前所未有地臨近，人們正在度過充滿挑戰的時期。為應對日益變化的未來，我們需要新一代領袖，運用其影響力將全球引領至更加綠色和可持續的未來。於2018年8月中旬，熊貓綠能與聯合國開發計劃署攜手推出第二屆「培養未來氣候行動領袖」夏令營。該夏令營組織青少年探討氣候變化問題，旨在促進加強年輕一代有關可持續發展行動的領導力。

於夏令營期間，50名小營員們參與了一系列涵蓋可持續發展目標議題的互動活動，探索氣候變化的挑戰及現有解決方案。聯合國官員及清潔能源及技術行業的商業領袖亦參與其中，分享他們有關氣候相關行動的專業知識及意見。透過該夏令營，我們致力於為青少年參與可持續發展創造獨特的機會及培養創新思維，助力彼等成為實現未來發展目標的關鍵合作者。



Affordable and clean energy  
經濟適用的清潔能源



Climate action  
氣候行動



## PV POVERTY ALLEVIATION INITIATIVES

Photovoltaics poverty alleviation is a joint initiative co-governed by the State Council Group Office of Poverty Alleviation and Development and the National Energy Administration. The purpose is to drive local income and employment in poverty-stricken areas through the development of village-level PV power plant systems.

In 2018, Panda Green carried out various PV poverty alleviation projects. The construction of 75 MW PV plant project in Yangchun City, Guangdong helps promote development of the regional economy, resolves employment problems and improves the living quality of the local people. It is expected that the project will increase the income of 3,000 households, which will bring a total of RMB9 million of income to the poor every year.



During the year, two agricultural PV plant projects with a total installed capacity of 50 MW located in Ganzi Prefecture, Sichuan have been completed and connected to the grid. The projects secured an increase of income of the poverty-stricken population by more than RMB1,000 per person per year. As a result, approximately 4,600 underprivileged will be benefited from the Ganzi projects.

## 光伏扶貧計劃

光伏扶貧為由國務院扶貧開發領導小組辦公室及國家能源局共同監管的聯合舉措，旨在透過發展村級光伏電站系統帶動貧困地區的當地收入及就業。

於2018年，熊貓綠能開展了多個光伏扶貧項目。於廣東省陽春市75兆瓦光伏電站項目的建設有助於推動區域經濟發展、解決就業問題及提高當地人民的生活質量。預期該項目將增加3,000戶貧困戶的收入，每年將為貧困家庭帶來合共人民幣9百萬元的收入。

年內，位於四川甘孜州的總裝機容量50兆瓦的兩個農業光伏電站項目已完成及併網。該等項目確保貧困地區人口收入每年每人增加超過人民幣1,000元。因此，約4,600個貧困人口將受惠於甘孜項目。

## CONTINUED SUPPORT TO THE COMMUNITY

Panda Green has been doing its utmost to make contributions to society, with focus on supporting the poor and children in communities where we have operations.

## 持續支持社區

熊貓綠能一直盡其最大努力為社會作貢獻，專注於支持我們營運所在社區的貧困人口及兒童。



Donation of school uniform for 390 primary school students in Duzhuang Township Central School (杜莊鄉中心學校) in Datong, Shanxi.  
向山西大同杜莊鄉中心學校的390名小學生捐贈校服。



Donation of RMB114 thousand of study tools and other necessities to students of the Daliang Shan Mawei Children's Performing Group at the 6th China Charitable Program Exchange Exhibition.

於第六屆中國慈善項目交流展示會上向大涼山瑪薇少兒藝術團的學生捐贈價值人民幣114,000元的學習用品及其他必需品。



# Performance Data Summary

## 績效數據摘要

	2017	2018
<b>Total Headcount</b> 總人數	459	418
<b>By Geographical Distribution</b> (full-time) 按地理分佈 (全職)		
Hong Kong 香港	51	30
Mainland China 中國內地	408	388
<b>By Age</b> 按年齡		
<31	(41.0%) 188	(43.5%) 182
31-40	(47.1%) 216	(45.2%) 189
≥41	(12.0%) 55	(11.3%) 47
<b>By Gender</b> 按性別		
Male 男性	(76.5%) 351	(81.6%) 341
Female 女性	(23.5%) 108	(18.4%) 77
<b>By Educational Background</b> 按教育背景		
Doctor 博士	(0.4%) 2	(0.2%) 1
Master 碩士	(13.3%) 61	(7.4%) 31
Bachelor 學士	(46.6%) 214	(52.4%) 219
Non-tertiary qualification and below 大專及以下學歷	(39.7%) 182	(40.0%) 167

**Workforce  
Demographics**  
僱員統計

		2017	2018
<b>Workforce Demographics</b> 僱員統計	<b>By Employee Category</b> 按僱員類別		
	General staff 普通員工	(85.6%) 393	(86.1%) 360
	Middle management team 中級管理團隊	(12.0%) 55	(11.2%) 47
	Senior management team 高級管理團隊	(2.4%) 11	(2.7%) 11
	<b>Employee Turnover Rate (Retirement and Contract Termination)</b> 僱員流失率(退休及合約終止)		
	Male 男性	0.0%	0.0%
	Female 女性	0.9%	1.3%
	<b>Employee Turnover Rate (Resignation)</b> 僱員流失率(辭任)		
	Male 男性	7.7%	24.3%
	Female 女性	9.3%	66.2%
	<b>Employee Turnover Rate (Dismissed)</b> 僱員流失率(解僱)		
	Male 男性	0.3%	2.9%
	Female 女性	0.0%	11.7%

2017

2018

**New Hire Employees by Age**

新聘員工，按年齡

<31	(45.1%) 87	(47.8%) 54
31-40	(42.0%) 81	(37.2%) 42
≥41	(12.9%) 25	(15.0%) 17

**New Hire Employees by Gender**

新聘員工，按性別

Male 男性	(76.7%) 148	(73.5%) 83
Female 女性	(23.3%) 45	(26.5%) 30

**Workforce  
Demographics**  
僱員統計**Return to Work and Retention Rates After Parental  
Leave, by Gender**

育嬰假後的返崗及留任比率，按性別

Male 男性	100%	100%
Female 女性	100%	100%

**Number of Ethnic Minority Employees by Gender**

少數民族僱員人數，按性別

Male 男性	2	12
Female 女性	1	5
Total 總計	(0.65%) 3	(4.07%) 17



		2017	2018
<b>Employees Training</b> 僱員培訓	<b>Percentage of Employees Attending Training by Gender</b> 受訓僱員比例，按性別		
	Male 男性	78%	81%
	Female 女性	75%	74%
	<b>Percentage of Employees Attending Training by Function</b> 受訓僱員比例，按職能		
	General staff 普通員工	78%	79%
	Middle management team 中級管理團隊	81%	56%
	Senior management team 高級管理團隊	36%	30%
	<b>Employees Average Training Hours by Gender (Hours)</b> 僱員受培訓平均時數，按性別（小時）		
	Male 男性	18	26
	Female 女性	9	6

2017

2018

**Employees Average Training Hours  
by Function (Hours)**

僱員受培訓平均時數，按職能（小時）

General staff 普通員工	17	24
Middle management team 中級管理團隊	14	3
Senior management team 高級管理團隊	6	0.5

**Number of Employees Training  
by Gender (Person-times)**

受培訓僱員人次，按性別（人次）

**Employees  
Training  
僱員培訓**

Male 男性	4,431	6,901
Female 女性	538	337

**Number of Employees Training  
by Function (Person-times)**

受培訓僱員人次，按職能（人次）

General staff 普通員工	4,628	7,148
Middle management team 中級管理團隊	312	86
Senior management team 高級管理團隊	39	4

**Total Employee Training Cost Per person (RMB)**

僱員培訓成本總額（每人）（人民幣元）

996

931



2017

2018

**Occupational Health and Safety Performance**

**職業健康與安全表現**

Number of safety accidents 安全事故數量	0	0
Number of first level accidents 一類事故數量	0	0
Number of mis-operation accidents 誤操作事故數量	0	0
Number of near-miss accidents 未遂事故數量	0	0
Number of fire accidents 火災事故數量	0	0
Number of traffic accidents 交通事故數量	0	0
Work-related injuries per 1,000 workers 每1,000名員工的工傷數	0	0
Lost days due to work-related injury 因工傷損失工作日數	0	0
Work-related fatalities 因工作關係死亡人數	0	0
Percentage of employees who received physical health check-ups 接受健康檢查的僱員比例	95%	97%

**Health and  
Safety**  
健康與安全

**Education on Occupational  
Safety and Health**

**職業安全與健康教育**

Total person-times training 培訓總人次	978	1,195
Total training hours 培訓總時數	1,121	986
Percentage of employees trained 受培訓僱員比例	97%	98%

2017

2018

**Total Resources Consumption  
in Offices****辦公室總資源消耗量**

Electricity (kWh) 電力 (千瓦時)	511,320	498,062
Gasoline (Litres) 汽油 (公升)	16,680	49,627
Water (Tonnes) 水 (噸)	1,118	1,273

**Total Resources Consumption  
in Power Plants****電站總資源消耗量**

Electricity (kWh) 電力 (千瓦時)	19,501,964	25,983,943
Natural gas (m <sup>3</sup> ) 天然氣 (立方米)	4,865	2,684
Gasoline (Litres) 汽油 (公升)	116,507	124,633
Diesel (Litres) 柴油 (公升)	5,506	15,806
Water (Tonnes) 水 (噸)	11,929	20652.4

**Environment  
環境****Total Energy Consumption in Offices  
and Power Plants (GJ)****辦公室及電站總能源消耗量 (千兆焦耳)**

Energy intensity (GJ per GWh electricity generated) 耗能強度 (千兆焦耳 / 千兆瓦時發電量)	36.3	31.8
--	------	------

**Total Water Consumption in Offices  
and Power Plants (Tonnes)****辦公室及電站總用水量 (噸)**

Water intensity (Tonnes per GWh electricity generated) 用水強度 (噸 / 千兆瓦時發電量)	6.2	6.9
--	-----	-----

		2017	2018
Environment 環境	<b>Emissions</b> 排放物		
	<b>Air Pollutant<sup>5</sup></b> 大氣污染物 <sup>5</sup>		
	SOx (kg) 硫氧化物 (公斤)	2.0	2.8
	NOx (kg) 氮氧化物 (公斤)	447.1	870.9
	PM (kg) 懸浮微粒 (公斤)	40.6	75.2
	<b>Waste</b> 廢棄物		
	Photovoltaic panels (recycled) (Tonnes) 光伏電池板 (已回收) (噸)	14.59	20.36
	Hazardous waste (Tonnes) 有害廢棄物 (噸)	0.87	0.94
	Intensity (kg per GWh electricity generated) 強度 (公斤 / 千兆瓦時發電量)	0.4	0.3
	Waste circuit board (Tonnes) 廢電路板 (噸)	0.21	0.29
	Waste oil (Tonnes) 廢油 (噸)	0.66	0.65
	Non-hazardous waste (Tonnes) 無害廢棄物 (噸)	86.18	37.24
	Intensity (kg per GWh electricity generated) 強度 (公斤 / 千兆瓦時發電量)	40.7	11.7
	Recyclable waste (Tonnes) 可回收廢棄物 (噸)	23.40	13.11
Non-recyclable waste (Tonnes) 不可回收廢棄物 (噸)	62.78	24.14	

<sup>5</sup> The emission factors are based on the Hong Kong Environmental Protection Department's EMFAC-HK Vehicle Emission Calculation model and the United States Environmental Protection Agency's Vehicle Emission Modeling Software – MOBILE6.1.

<sup>5</sup> 排放因子根據香港環境保護署EMFAC-HK汽車排放計算模型及美國環境保護署的汽車排放建模軟件—MOBILE6.1計算。

2017

2018

**Greenhouse Gases Emissions and Intensity****溫室氣體排放量及強度**

GHG emissions (tCO <sub>2</sub> e) 溫室氣體排放(噸二氧化碳當量)	14,344	18,888
Scope I (tCO <sub>2</sub> e) 範圍一(噸二氧化碳當量)	379	512
Scope II <sup>6</sup> (tCO <sub>2</sub> e) 範圍二 <sup>6</sup> (噸二氧化碳當量)	13,964	18,376
Emission intensity (tCO <sub>2</sub> e Per GWh electricity generated) 排放強度(噸二氧化碳當量/千兆瓦時發電量)	6.8	5.9

**Environment**  
環境**Environmental Benefits****環境效益**

Total photovoltaic electricity generation (MWh) 總光伏發電量(兆瓦時)	2,072,315	3,093,322
Total wind power electricity generation (MWh) 總風力發電量(兆瓦時)	42,938	99,308
Equivalent to standard coal saved (Tonnes) 相當於節約標準煤(噸)	700,000	1,020,000
Equivalent to carbon dioxide emission reduced (Tonnes) 相當於減少二氧化碳排放(噸)	1,815,000	2,680,000

<sup>6</sup> The computation of GHG emissions arising from the purchased electricity of Tibet Grid is based on the emission factor of China Southern Power Grid due to unavailable emission factor of Tibet Grid.

<sup>6</sup> 由於西藏電網未有可用的排放係數，故西藏電網購買電量產生的溫室氣體排放量乃根據中國南方電網的排放係數計算。

		2017	2018
<b>Environment</b> 環境	Equivalent to NO <sub>x</sub> emission reduced (Tonnes) 相當於減少氮氧化物排放 (噸)	16,287	26,000
	Equivalent to smoke and dust emission reduced (Tonnes) 相當於減少煙塵排放 (噸)	1,058	1,567
	Equivalent to number of trees planted (Million) 相當於種植樹木數目 (百萬)	99.2	144
	Equivalent to number of household's electricity consumed in a year 相當於居民一年用電量之用戶數目	1,175,000	1,720,000
<b>Community</b> 社區	<b>Donation (RMB '000)</b> 捐贈 (人民幣千元)	3,000	2,000

# GRI & HKEX ESG Content Index

## 全球報告倡議組織及聯交所 ESG內容索引

The Content Index below reflects the outcomes of our materiality assessment and links together the location of each indicator and its reference to the GRI Standards and the HKEX ESG Reporting Guide.

以下內容索引反映我們重要性評估的結果並連接各指標的位置及對GRI準則及聯交所ESG報告指引的引用。

### GENERAL DISCLOSURES

### 一般標準披露

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼/備註
<b>Organizational Profile</b> 組織概況	102-1	-	Name of the organization 組織名稱	Cover page 封面
	102-2	-	Activities, brands, products, and services 活動、品牌、產品及服務	P.4-9 第4至9頁
	102-3	-	Location of headquarters 總部位置	Hong Kong, Shenzhen 香港、深圳
	102-4	-	Location of operations 營運位置	Annual Report P.6 年報第6頁
	102-5	-	Ownership and legal form 所有權及法律形式	Listed on the HKEX 於聯交所上市
	102-6	-	Markets served 服務的市場	Annual report P.131 年報第131頁
	102-7	-	Scale of the organization 組織規模	Annual report P.6 年報第6頁
	102-8	B1.1	Information on employees and other workers 有關僱員及其他工作者的資料	P.50-51 第50至51頁
	102-9	B5.1	Supply chain 供應鏈	P.34-37 第34至37頁
	102-10	-	Significant changes to the organization and its supply chain 組織及其供應鏈的重大變動	No significant change 並無重大變動
	102-11	-	Precautionary Principle or approach 預防原則或方法	P.24-25 第24至25頁
	102-12	-	External initiatives 外部倡議	P.55 第55頁

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼 / 備註
	102-13	-	Membership of associations 協會的成員資格	P.7 第7頁
Strategy 策略	102-14	-	Statement from senior decision-maker 高級決策者報告	P.10-13 第10至13頁
Ethics and Integrity 道德與誠信	102-16	-	Values, principles, standards, and norms of behaviour 價值、原則、標準及行為規範	P.40-41 第40至41頁
Governance 管治	102-18		Governance structure 管治架構	Annual Report P.30 年報第30頁
Stakeholder Engagement 利益相關者參與	102-40	-	List of stakeholder groups 利益相關群體列表	P.19-21 第19至21頁
	102-41	-	Collective bargaining agreements 集體談判協定	None of our employees are covered by collective bargaining agreements 我們的僱員概無獲集體談判協議保障
	102-42	-	Identifying and selecting stakeholders 利益相關方的識別和遴選	P.16-18 第16至18頁
	102-43	-	Approach to stakeholder engagement 利益相關者參與方針	P.19-21 第19至21頁
	102-44	-	Key topics and concerns raised 提出的主要議題和關切問題	P.19-21 第19至21頁
Reporting practice 報告常規	102-45	-	Entities included in the consolidated financial statements 綜合財務報表中所涵蓋的實體	Annual report P.146-148 年報第146至148頁
	102-46	-	Defining report content and topic boundaries 界定報告內容與議題邊界	P.18 第18頁
	102-47	-	List of material topics 實質性議題列表	P.17-18 第17至18頁
	102-48	-	Restatements of information 信息重述	No restatement 無重述
	102-49	-	Changes in reporting 報告變化	No significant change 無重大變動
	102-50	-	Reporting period 報告期	P.3 第3頁

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼/備註
	102-51	-	Date of most recent report 最近報告日期	13/7/2018 2018年7月13日
	102-52	-	Reporting cycle 報告週期	P.3 第3頁
	102-53	-	Contact point for questions regarding the report 有關本報告問題的連絡人資訊	P.3 第3頁
	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 第3頁
	102-55	-	GRI content index GRI內容索引	P.68-82 第68至82頁
	102-56	-	External assurance 外部審核	The company will seek external assurance when appropriate 本公司將適時尋求外部審核



**SPECIFIC STANDARDS DISCLOSURE – MATERIAL TOPICS**

**特定標準披露 – 實質性議題**

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼 / 備註
<b>1. Environmental 環境</b>				
Energy 能源	103	A2*	Report how the organization manages the material aspect or its impacts 說明機構如何管理該實質性層面或其影響	P.25-26, 29 第25至26頁、第29頁
	302-1	A2.1*	Energy consumption within the organization 組織內部的能源消耗量	P.27 第27頁
	302-3	A2.1*	Energy intensity 能源密度	P.27 第27頁
	–	A2.3*	Reduction of energy consumption 減少能源消耗	P.29 第29頁
Emissions 排放	103	A1*, A3*	Report how the organization manages the material aspect or its impacts 說明機構如何管理該實質性層面或其影響	P.25-26, 29 第25至26頁、第29頁
	305-1	A1.1*, A1.2*	Direct (Scope 1) GHG emissions 直接溫室氣體排放 (範疇一)	P.28 第28頁
	305-2	A1.1*, A1.2*	Energy indirect (Scope 2) GHG emissions 能源間接溫室氣體排放 (範疇二)	P.28 第28頁
	305-4	A1.2*	GHG emissions intensity 溫室氣體排放密度	P.28 第28頁
	–	A1.5*	Reduction of GHG emissions 減少溫室氣體排放	P.23 第23頁
	305-7	A1.1*	Nitrogen oxides (NO <sub>x</sub> ), sulfur oxides (SO <sub>x</sub> ), and other significant air emissions 氮氧化物、硫氧化物及其他主要大氣排放	P.31 第31頁
Environmental Compliance 環境合規	103	A1(b)* A3*	Report how the organization manages the material aspect or its impacts 說明機構如何管理該實質性層面或其影響	P.25-26 第25至26頁

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼／備註
	307-1	A1(b)*	Non-compliance with environmental laws and regulations 不符合環境法例及規例	We were not aware of any significant non-compliance in 2018 我們並不知悉在2018年發生任何重大不合規情況
Green Product 綠色產品	103	A3*	Report how the business involves in developing green product 說明業務如何融入發展綠色產品工作	P.6 第6頁
	-	A3.1*	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them. 描述業務活動對環境及天然資源的重大影響及已採取管理有關影響的行動	P.24-25 第24至25頁
<b>2. Social</b>				
<b>社會</b>				
Socioeconomic Compliance 社會經濟合規	419-1	B1(b)*, B2(b)*, B4(b)*, B6(b)*, B7(b)*	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	We were not aware of any significant non-compliance in 2018 我們並不知悉在2018年發生任何重大不合規情況

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼／備註
Employment Communication 員工溝通	103	-	Report how the organization manages the material aspect or its impacts 說明機構如何管理該實質性層面或其影響	P.53 第53頁
Product Health and Safety 產品健康與安全	103	B6*	Report how the organization manages the material aspect or its impacts 說明機構如何管理該實質性層面或其影響	P.38-39 第38至39頁
	416-2	B6*	Non-compliance concerning the health and safety impacts of products and services 有關產品及服務健康與安全的違規情況	We were not aware of any significant non-compliance in 2018 我們並不知悉在2018年發生任何重大不合規情況
Business ethics 商業道德	103	B7*	Report how the organization manages the material aspect or its impacts 說明機構如何管理該實質性層面或其影響	P.41 第41頁

## SPECIFIC STANDARDS DISCLOSURE – NON-MATERIAL TOPICS

## 特定標準披露－非實質性議題

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼／備註
<b>1. Economic</b>				
經濟				
Economic Performance 經濟績效	201-2	-	Financial implications and other risks and opportunities due to climate change 氣候變化導致的財務影響以及其他風險及機會	P55 第55頁
<b>2. Environmental</b>				
環境				
Materials 材料	-	A2*	Policies on efficient use of resources including energy, water and other raw materials 有效使用資源（包括能源、水及其他原材料）的政策	P29 第29頁
	-	A2.5*	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced 製成品所用包裝材料的總量（以噸計算）及（如適用）每生產單位估量	Our business mainly includes development, operation and management of renewable energy plants. There is no consumption of packaging materials involved in our operations. 我們的業務主要包括發展、經營及管理可再生能源電站。我們的營運並不涉及包裝材料的耗用。

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼／備註
Water 水	-	A2*	Policies on efficient use of resources including energy, water and other raw materials 有效使用資源（包括能源、水及其他原材料）的政策	P.29 第29頁
	303-1	A2.2*	Water withdrawal by source 按源頭劃分的總用水量	P.28 第28頁
	-	A2.4*	Issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved 求取適用水源上的問題、提升用水效益計劃及所得成果	P.28-29 第28至29頁
Effluents and Waste 污水和廢棄物			Information on:  (a) the policies; and  (b) compliance with relevant laws and regulations that have a significant impact on the issuer	P.25-26, P.30-31 第25至26頁、 第30至31頁
	-	A1*	Relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste  有關廢氣及溫室氣體排放、向水及土地的排污、有害及無害廢棄物的產生等的：  (a) 政策；及  (b) 遵守對發行人有重大影響的相關法律及規例的資料	

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼／備註
Effluents and Waste 污水和廢棄物	306-2	A1.3*	Total hazardous waste produced (in tonnes) and, where appropriate, intensity 所產生有害廢棄物總量（以噸計算）及（如適用）密度	P30 第30頁
	306-2	A1.4*	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility) 所產生無害廢棄物總量（以噸計算）及（如適用）密度（如以每產量單位、每項設施計算）	P30 第30頁
	-	A1.6*	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved 描述處理有害及無害廢棄物的方法、減低產生量的措施及所得成果	P30-31 第30至31頁

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼／備註
<b>3. Social – Labour Practices and Decent Work</b> 社會－勞工實踐和體面工作				
Employment 僱傭			Information on:  (a) the policies; and  (b) compliance with relevant laws and regulations that have a significant impact on the issuer  Relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare  有關薪酬及解僱、招聘及晉升、工作時數、假期、平等機會、多元化、反歧視以及其他待遇及福利的：  (a) 政策；及  (b) 遵守對發行人有重大影響的相關法律及規例的資料	P.52-53 第52至53頁
	–	B1*		
	401-1	B1.2	New employee hires and employee turnover 新聘僱員及僱員流失	P.51 第51頁

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼／備註
Occupational Health and Safety 職業健康與安全			Information on:  (a) the policies; and  (b) compliance with relevant laws and regulations that have a significant impact on the issuer	P.46-49 第46至49頁
	-	B2*	Relating to providing a safe working environment and protecting employees from occupational hazards  有關提供安全工作環境及保障僱員避免職業性危害的：  (a) 政策；及  (b) 遵守對發行人有重大影響的相關法律及規例的資料	
	-	B2.1	Number and rate of work-related fatalities 因工作死亡的人數及比率	P.47 第47頁
	-	B2.2	Lost days due to work injury 因工傷損失工作日數	P.47 第47頁
	-	B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored 描述所採納的職業健康安全措施，以及相關執行及監察方法	P.46-49 第46至49頁



Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼/備註
Training and Education 培訓與教育	404-2	B3*	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. 有關提升僱員履行工作職責的知識及技能的政策。描述培訓活動。	P.43-46 第43至46頁
	-	B3.1	The percentage of employees trained by employee category (e.g. senior management, middle management, etc.) 按僱員類別(如高級管理層、中級管理層等)劃分的受訓僱員比例	P.62 第62頁
	404-1	B3.2	Average hours of training per year per employee 每名僱員每年平均培訓時間	P.62 第62頁
<b>4. Social – Human Rights</b> 社會—人權				
Child Labour 童工			Information on:  (a) the policies; and  (b) compliance with relevant laws and regulations that have a significant impact on the issuer	
	-	B4*	Relating to preventing child or forced labour.  有關防止童工或強制勞工的：  (a) 政策；及  (b) 遵守對發行人有重大影響的相關法律及規例的資料。	P.52 第52頁

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼／備註
<b>5. Social – Society</b> 社會－社會				
Supply Chain 供應鏈	-	B5*	Policies on managing environmental and social risks of the supply chain 管理供應鏈的環境及社會風險政策	P.34-37 第34至37頁
	-	B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored 描述有關聘用供應商的慣例，向其執行有關慣例的供應商數目，以及有關慣例的執行及監察方法	P.34-37 第34至37頁
Anti-Corruption 反貪腐			Information on:  (a) the policies; and  (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering  有關防止賄賂、勒索、欺詐及洗黑錢的：  (a) 政策；及  (b) 遵守對發行人有重大影響的相關法律及規例的資料	P.41 第41頁
	205-3	B7(b)*, B.7.1	Confirmed incidents of corruption and actions taken 已確認貪腐事件及所採取措施	We were not aware of any reported incident in 2018 我們並不知悉在2018年有任何已報告的事件
	-	B.7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored 描述防範措施及舉報程序，以及相關執行及監察方法	P.41 第41頁

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼/備註
Local Communities 當地社區	-	B8*	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests 有關以社區參與來了解發行人營運所在社區需要及確保其業務活動會考慮社區利益的政策	P.55-57 第55至57頁
	-	B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport) 專注貢獻範疇(如教育、環境事宜、勞工需求、健康、文化、體育)	P.55-57 第55至57頁
	-	B8.2	Resources contributed (e.g. money or time) to the focus area 在專注範疇所動用資源(如金錢或時間)	P.57 第57頁
<b>6. Social – Product Responsibility</b> 社會 – 產品責任				
Product Responsibility 產品責任	417-2 417-3	B6*	Information on:  (a) the policies; and  (b) compliance with relevant laws and regulations that have a significant impact on the issuer  Relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress  有關所提供產品和服務的健康與安全、廣告、標籤及私隱事宜以及補救方法的：  (a) 政策；及  (b) 遵守對發行人有重大影響的相關法律及規例的資料	P.38-41 第38至41頁

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 說明	Page Number/ Remarks 頁碼／備註
Product Responsibility 產品責任	418-1	B6.2	Substantiated complaints concerning breaches of customer privacy and losses of customer data 經證實關於侵犯客戶隱私及遺失客戶資料的投訴	We were not aware of any complaints related to breaches of data to breaches of data 我們並不知悉任何有關侵犯資料的投訴
	–	B6.5	Description of consumer data protection and privacy policies, 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.40 第40頁
	–	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.40-41 第40至41頁

\* HKEX Appendix 27 “Comply or explain” provisions

\* 聯交所附錄二十七「不遵守就解釋」條文

# Feedback 讀者反饋

Dear reader,

Thank you for taking the time to read the Panda Green Energy Group Limited 2018 ESG Report. In order to further improve our ESG management and report quality, your comments and suggestions are very much appreciated. We will take your comments into consideration and all information provided will be kept confidential.

You may contact us via:

Address: Unit 1012, 10/F., West Tower, Shun Tak Centre, 168-200  
Connaught Road Central, Hong Kong  
Tel: +852 3112 8461  
Email: ird@pandagreen.com  
Fax: +852 3112 8410

Report Team  
July 2019

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

1. I am satisfied with this report. 我對此報告感到滿意。	
2. This report reflects Panda Green's impacts on the environment and the society. 這份報告反映了熊貓綠能對環境及社會之影響。	
3. I am satisfied with the ESG performance of Panda Green. 我對熊貓綠能的ESG實踐成效感到滿意。	
4. I am satisfied with the disclosure level of this report. 我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。	

尊敬的讀者：

您好！

非常感謝您在百忙之中閱覽《熊貓綠色能源集團有限公司2018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：

聯繫地址：香港干諾道中168-200號  
信德中心西翼10樓1012室  
聯繫電話：+852 3112 8461  
電子郵件：ird@pandagreen.com  
傳真：+852 3112 8410

報告編寫組  
2019年7月

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）：

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：



**熊猫绿色能源集团有限公司**  
**Panda Green Energy Group Limited**

Unit 1012, 10/F, West Tower, Shun Tak Centre  
168-200 Connaught Road Central, Hong Kong

香港干諾道中168-200號  
信德中心西翼10樓1012室

[www.pandagreen.com](http://www.pandagreen.com)