

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

Hong Kong Stock Code 香港股份代號: 00686.HK

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

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 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

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About this Report 關於本報告

This is the third Environmental, Social and Governance ("ESG") Report of Panda Green, aiming to disclose Panda Green's management approach and performance on environmental and social aspects. The ESG report should be read in conjunction with Panda Green's 2017 Annual Report ("Annual Report"). For the corporate governance section, please refer to our Annual Report on p.44 to 64.

Addressing material topics identified, this report is published in both Chinese and English. In case of any conflicts between the two versions, the English version shall prevail. The Board of Directors confirms that they have reviewed and approved this report.

REPORTING GUIDELINE

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").

REPORTING BOUNDARY AND PERIOD

This report covers the period from 1 January to 31 December 2017 ("FY2017"). Unless otherwise stated, all cases and data disclosed are collected from the Group and its associates/joint ventures. During the year, a total of 33 solar power plants and one wind power plant had been added to our reporting boundary due to business expansion.

本報告是熊貓綠能的第三份環境、社會和管 治(「ESG」)報告。本報告旨在披露熊貓綠能 在環境及社會方面的管理方針及表現。本ESG 報告應與熊貓綠能2017年年報(「年報」)一併 閱讀。有關企業管治一節,請參閱我們的年報 第44至64頁。

本報告涵蓋已識別的實質性議題,同時發佈 中、英文版,兩版之間若有衝突,以英文版本 為準。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。

報告範圍及期間

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本報告涵蓋期間為2017年1月1日至12月31日 (「2017財政年度」)。如無特別説明,本報告 所披露的所有情況與數據均來自本集團及其 聯營公司/合營企業。於本年度,因業務擴 張,報告範圍增加共33個太陽能發電站及一 個風力發電站。

FEEDBACK 反饋

You are welcome to download the feedback form at http://www.pandagreen.com/index.php/ list-24.html to submit your comments and ideas regarding the content and the information delivered in this report, which will help us continuously improve our work.

若您對本報告所提供的內容及傳達的信息有任何意見或建議,歡迎您於 http://www.pandagreen.com/index.php/list-24.html下載「讀者反饋」表, 向我們提交您的反饋,以幫助我們持續改進。

About Panda Green 關於熊貓綠能

Panda Green Energy Group Limited (the "Company", "Panda Green", or "We", collectively with its subsidiaries, the "Group") is principally engaged in development, investment, operation, construction and management of solar power plants and other renewable energy projects.

As a leading global eco-development solutions provider, Panda Green is the first Hong Kong listed company to win the national "Top Runner" project located at Datong, Shanxi, which was successfully connected to grid in June 2017. And our second Panda Power Plant successfully commenced operations in Guigang,

Guangxi, during the year, with a total installed capacity of 60MW. As at the end of 2017, the aggregate installed capacity of Panda Green and its associates and joint ventures was approximately 2,087.3MW.

Located at Guigang, Guangxi, our second Panda Power Plant has a total installed capacity of 60MW. 第二個熊貓電站落地廣西貴港,總裝機容量為60 兆瓦。

KEY FACTS AND FIGURES FOR FY2017 2017財政年度關鍵數據

EBITDA (Million RMB) EBITDA (人民幣百萬元)

1,198 +41% ^{yoy 按年} (2016年: 848) 熊貓綠色能源集團有限公司(「本公司」、「熊 貓綠能」或「我們」,連同其附屬公司統稱為 「本集團」)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、建設及管 理。

作為全球領先的生態發展解決方案供應商, 熊貓綠能是首家獲得位於中國山西大同的 國家「領跑者」項目的香港上市公司,該項 目已於2017年6月成功併網。年內,我們第二 個熊貓電站成功落地廣西貴港,總裝機容量



為60兆瓦。截至 2017年末,熊貓 綠能、其聯營公 司及合營企業擁 有的總裝機容量 約2,087.3兆瓦。



Electricity Generation (MWh) 發電量 (兆瓦時)

2,115,253 +57% ^{yoy 按年} (2016年: 1,345,830)

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

1,522

+53% yoy 按年 (2016年: 998)

> **2,087** +62% ^{yoy 按年} (2016年: 1,291)

Donation (Thousands RMB) 捐款 (人民幣千元)

3,000 +275%(2016年: 800) Work-related Fatalities 因工死亡人數

● 連續三年

PROMOTING LOW-CARBON CLEAN ENERGY

推動低碳清潔能源



AWARDS AND RECOGNITIONS

The Group has received a number of awards and recognitions in connection to its performance in environmental protection and social responsibilities in 2017, some of which are listed below:

獎項及榮譽

本集團於2017年榮獲多項有關其環境保護與 社會責任表現獎項及榮譽,其中包括:



CONTRIBUTING TO "BELT AND ROAD" INITIATIVE

The "Belt and Road" (the "B&R") is a strategic initiative launched by the People's Republic of China ("PRC") for enhancing connectivity between China and the world, achieving mutual benefits and deepening cultural exchange through infrastructure projects. In response to the grand vision of the PRC government, we strive to be one of the active contributors to this initiative by offering affordable clean energy.

In May 2017, the "Panda Power Plant Project" was officially incorporated into the Action Plan of the Advancement on the "Belt and Road" Initiative by the PRC government and the United Nations Development Programme ("UNDP"). As laid out in the plan, the project is now an essential contributor to China's national strategy as well as the realization of the United Nation's Sustainable Development Goals ("SDGs"). We aspire to be the leader of Chinese enterprises in embracing and achieving the SDGs through partnerships and are planning to invite countries along the "B&R" to pay on-site visits and explore the ideal models for developing suitable renewable energy plants locally.

助力推動「一帶一路」倡議

「一帶一路」是中華人民共和國(「中國」)提 出的戰略倡議,旨在通過基建項目聯通中國 與世界,實現互惠互利及加強文化交流。我們 積極響應中國政府號召,致力通過提供可負 擔的清潔能源,為實現「一帶一路」的宏大願 景獻力。

於2017年5月,「熊貓電站項目」被正式納入 中國政府與聯合國開發計劃署簽署的《關於 共同推進「一帶一路」建設的行動計劃》項目 清單,成為助力中國國家戰略及推動實現聯合 國可持續發展目標落地的重要項目。我們計 劃邀請「一帶一路」沿線國家進行實地考察, 共同探尋在當地因地制宜開發可再生能源發 電站的最佳模式,致力成為中國企業通過搭 建合作推進實現可持續發展目標的領導者。



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COLLABORATING WITH UNDP

The Group co-organized the "Low-carbon development and financing solutions – South-south cooperation" conference with the UNDP to share its model of operating the "Panda Power Plants", and received positive response and strong interest from participating countries in our project. We will continue to explore opportunities for collaboration, providing clean and renewable energy to not only countries along the "Belt and Road" but also to other countries in the Global South.

Panda Green exerts itself as the vanguard of building partnerships for promoting national and global sustainability initiatives. The "Panda Power Plant Project" was launched jointly with the UNDP.

At the 2017 United Nations Climate Change Conference (COP23) held in Bonn, Germany, we were honoured to be commissioned by the United Nations ("UN") to design and build specialized power plants for promoting the SDGs. The Group has confirmed partnership with World Wide Fund for Nature and Shenzhen One Planet Foundation in implementing the project. The proposed power plant will have a capacity of 100MW, with a total area of approximately 3,000 acres.

與聯合國開發計劃署合作

本集團與聯合國開發計劃署攜手舉辦「南南 合作下的低碳發展及投融資解決方案國際論 壇」,分享「熊貓電站」經營模式,獲得積極的 反響,引起參與國家代表對我們項目的濃厚 興趣。我們將繼續探尋合作機會,將清潔及可 再生能源帶到「一帶一路」沿線國家以及其他 發展中國家。

熊貓綠能在通過合作推進實現國家及全球可 持續發展戰略中發揮先鋒作用。我們與聯合 國開發計劃署合作,共同推出「熊貓電站項 目」。

在德國波恩舉辦的2017年聯合國氣候變化大 會(COP23)上,我們獲授權為聯合國(「聯合 國」)設計建造特製發電站,全力協助聯合國 推動其實現可持續發展目標。同時,本集團亦 與世界自然基金會及深圳市一個地球自然基 金會簽署了項目合作協議,擬建發電站總裝 機容量100兆瓦,佔地約3,000畝。





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 finance 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 RMB15,567 million
- 物業、廠房及設備,總值人民幣15,567百萬元



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: 51 employees in Hong Kong and 408 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51名僱員及中國408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: 1,118 tons in offices and 11,929 tons in power plants
- Energy consumption in offices and power plants: 76,679 GJ
- 用水量:辦公室1,118噸及電站11,929噸
- ,辦公室及電站能源耗量:76,679千兆焦耳





OUR ACTIVITIES 經營活動

發展 Development

全球領先的 生態發展方案 供應商

The World's Leading Ecodevelopment Solutions **Provider**

認認

S Operation



OUTCOMES 經營成果

- Profit attributable to shareholders of the Company : RMB153 million
- Basic earnings per share : RMB1.91 cents
- Diluted earnings per share : RMB1.59 cents
- •本公司股東應佔溢利:人民幣 153 百萬元
- 每股基本盈利:人民幣 1.91 分
 每股攤薄盈利:人民幣 1.59 分
- Total number of on-grid solar and wind power plants: 65
- Total electricity generated: approximately 2,115,253 MWh
- 已併網的太陽能及風力發電站總數:65 個
 總發電量:約 2,115,253 兆瓦時
- Total number of patents: 10
 - Entered into the New Material Technology Strategic Cooperation Agreement with AVIC BIAM New Material to jointly develop and research grapheme VCI anti-corrosion materials
- 專利總數:10 個 與中航新材簽訂新材料技術戰略合作協議 · 共同開發研製石墨烯VCI防腐
- Quantum of employee training: 4,979 person-times Work-related fatalities: 0
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- Lost days due to work-related injury: 0 Percentage of employees who received physical health checkup: 95% Obtained OHSAS 18001 occupational health and safety management

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- g工培訓總數:4,979人次 因工作關係死亡人數:0 因工作關係死亡人數:0 因工傷損失作日數:0 接受健康檢查的僱員比例:95% 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 認證書 •

- Greenhouse gas emissions: 14,344 tCO₂e Hazardous waste: 0.87 tons
- Non-hazardous waste: 86.18 tons
- 溫室氣體排放:14,344 噸二氧化碳當量 有害廢棄物:0.87 噸 無害廢棄物:86.18 噸 回收太陽能電池板:14.59 噸



Letter to Stakeholders 致利益相關者的信



Dear Stakeholders,

2017 continues to be a significant year for development of solar power in China. China has been leading the world in installation of new solar capacity and aggregate installed capacity for five and three consecutive years respectively. We have contributed great effort to this progress. The world's first Panda Power Plant located at Datong, Shanxi has been connected to the grid and our second Panda Power Plant successfully commenced operation in Guigang, Guangxi, with a total installed capacity of 60MW. In conjunction with our other acquisitions completed in 2017, our total installed capacity rose to 2,087.3MW, a 62% increase year-on-year, making us one of the leading companies in China's clean energy industry.

Building on this, the Panda Power Plant project was formally incorporated into the Action Plan of the Advancement of the "Belt and Road" Initiative by the Government of the People's Republic of China and the United Nations Development Programme ("UNDP"). Leveraging on technological innovations, we are poised to expand our Panda Power Plants along the "B&R" routes. One of the most important steps taken during the year to realise this is the investment in a holding company in Tibet Autonomous Region which owns development rights in hydropower, solar power and wind power, showcasing power transmission from Tibet to Beijing and other countries along the "B&R" routes.

各位尊敬的利益相關者:

2017年仍是中國太陽能發展的重要一年。中 國的新裝太陽能裝機容量已連續五年居於世 界領先地位,而在總裝機容量方面,其已連續 三年居於領先地位。我們為這一進步作出了 巨大努力。全球首個熊貓電站位於山西大同 並已成功併網發電,而第二個熊貓電站已成 功在廣西貴港投入運營,總裝機容量為60兆 瓦。連同本集團於2017年完成的其他收購事 項,我們總裝機容量已增至2,087.3兆瓦,同比 增長62%,使我們成為中國清潔能源行業的 領先企業之一。

在此基礎上,熊貓電站項目被正式納入中華 人民共和國政府與聯合國開發計劃署(「聯合 國開發計劃署」)簽署的《關於共同推進「一 帶一路」建設的行動計劃》。憑藉技術創新, 我們將在「一帶一路」沿線建設熊貓電站。年 內就此採取的最重要舉措之一為在西藏自治 區投資一間控股公司,該公司擁有水力、太陽 能及風力發電的開發權,可將能源從西藏輸 送到北京及「一帶一路」沿線國家及地區。



Internally, we have been embedding environmental and social elements into our strategic decision-making process. During the year, our efforts to combat desertification were continued. We aim to select unused lands such as wastelands, deserts and coalmining subsidence areas for power plants and use water consumed for cleaning panels to moisturise the surrounding areas. While our energy and water consumption have increased due to additional of 34 power plants, we make sure the power plants have management systems and initiatives in place to conserve resources, e.g. we have adopted a waterless component cleaning robot to reduce water usage. Our electricity consumption is less than 1% of the total electricity we generate. Recognising the importance of creating shared value, in 2017, we continued to promote and implement the idea of "Photovoltaic ("PV") +", such as "PV + Agriculture" and "PV + Fisheries", capitalising on the synergies across different industries.

We recognise the importance of collaboration with other industry players along the value chain. Photovoltaic Green-ecosystem Organisation ("PGO"), where the Group is one of the leaders and an active member, is the platform to lead the development of the industry. This year, we cherished the establishment of the Photovoltaic Green-ecosystem Cooperation Technical Committee by China Society of Inspection and Quarantine which has significant implications for setting of industry standards and enforcing industry best practices. During the year, six industry standards on technical specifications were drafted and published.

Competition for talent is stiff in our industry. We make sure we continue to provide and maintain a safe and fair workplace, and a work culture that values the development of our staff. Significant resources have been put in for talent acquisition and retention by enriching the talent pool and optimising career paths. Regarding employees' health and safety, zero occupational incidents were recorded for three consecutive years and we will continue to strengthen our occupational health and safety management system, such as ensuring all employees will receive relevant safety training according to their positions.

我們已將環境及社會要素納入我們內部戰略 決策過程。年內,我們持續致力於防沙治沙。 我們側重選擇閒置土地(例如荒地、荒漠及 採煤沉陷區)建設電站並使用電池板的清潔 用水保持周邊地區的濕度。由於電站的數量 增加了34個,能源消耗量及用水量均有所增 加,惟我們確保電站設有節約能源的管理系 統及措施,例如,我們採用無水部件清潔機器 人以減少用水。我們的總耗電量少於總發電 量的1%。我們認可創造共享價值的重要性, 並於2017年持續推進實施「光伏+」理念,例 如「光伏+農業」及「光伏+漁業」,以利用不 同行業產生的協同效應。

我們深明與價值鏈上的其他行業參與者合作 的重要性。本集團為光伏綠色生態合作組織 (「PGO」)的領導者之一及活躍成員,該組織 是一個引領行業發展的平台。我們重視年內 由中國檢驗檢疫學會成立的光伏綠色生態合 作專業技術委員會,其對制定行業標準及實 施行業最佳常規具有重大影響。年內已起草 及頒佈了六項有關技術規範的行業標準。

行業人才競爭激烈。我們確保我們一直塑造 及維持安全及公平的工作環境以及珍視員工 發展的企業文化。諸多資源已投入至增加人 才儲備及優化職業規劃的行動中,以招募及 挽留人才。就僱員健康及安全而言,我們連續 三年錄得零職業事故,並將不斷改進職業健 康與安全管理系統,例如,確保所有僱員將接 受適用於彼等相關職位的安全培訓。



Panda Green is committed to giving back to the communities where we have operations. During the year, in addition to charity donations to alleviate poverty in Yongren Prefecture, Yunnan, we have aligned the goal of operating our core business and youth education, launching the Youth Leadership Summer Camp for Climate Action. Collaborating with the UNDP, the camp aims to promote youth innovation, foster future climate action leaders, and bring positive change to the society.

To achieve what we are committed to do, we are fully aware that we have to do it with the support of our stakeholders including investors, employees, business partners, customers, government agencies, etc. Our Environmental, Social and Governance ("ESG") report is one of the platforms where we communicate our sustainability performance to our stakeholders. Earlier this year, we received accolades for the "ESG Report of the Year" in the smallcap category and the 2017 China "Outstanding Contribution on Belt and Road" Award. We are honoured to have been recognised in these ways as they tell us that we are on the right track.

We will not stop here. Now that the the National People's Congress of the People's Republic of China has written the goal of ecological civilisation into the national constitution, our strategic plan is to align our core business with the goal of offering affordable and clean energy to the world, one of the 17 UN's Sustainable Development Goals, simply because we believe there is no plan B to combat climate change. On behalf of the Board and the Management, I would like to thank all our staff, partners and the wider community along this sustainability journey and look forward to your continuous support. 熊貓綠能致力於回饋營運所在的社區。年內, 除於雲南永仁縣扶貧慈善捐款外,我們亦使 經營核心業務與青年教育的目標保持一致, 與聯合國開發計劃署攜手推出「培養未來氣 候行動領袖」夏令營。夏令營旨在促進青年創 新,培養未來氣候行動領袖,為社會帶來積極 變化。

為達致我們的承諾,我們深明必須獲得利益 相關者的支持,包括投資者、僱員、業務夥 伴、客戶、政府機構等。環境、社會和管治 (「ESG」)報告為我們與利益相關者溝通可 持續發展表現的平台之一。本年初,我們於 主板小型股組別中脱穎而出,榮獲「ESG年度 大獎」及2017中國「一帶一路傑出貢獻企業 獎」。我們很榮幸能夠獲得如此的認可,這讓 我們知道正走在正確的道路上。

我們不會就此停步。全國人民代表大會已將 生態文明寫入國家憲法,我們的戰略規劃使 我們的核心業務與聯合國的17個可持續發展 目標之一保持一致,即向世界提供可負擔的 清潔能源,僅因為我們相信氣候變化並沒有 其他應對方案。本人謹代表董事會及高級管 理層,感謝所有員工、合作夥伴及廣大社區在 可持續發展道路上的不懈支持並期待諸位的 繼續支持。

> Li, Alan Chairman, Chief Executive Officer Panda Green Energy Group Limited 李原 熊貓綠色能源集團有限公司 主席兼首席執行官

Sustainability Management Approach 可持續發展管理方針

The burgeoning sustainable energy industry is the one that drives transformational change in our society. The heart of our sustainability approach is, therefore, to place stakeholder engagement on the highest pedestal.

蓬勃發展的可持續能源行業是推動社會轉 型的動力。因此,我們可持續方法的核心是 將利益相關者的參與視為重中之重。

At Panda Green, sustainability is managed by our ESG Reporting team which consists of representatives from various departments of the Group. The team reports to our CEO who oversees ESG matters. We have implemented an integrated system – Quality, Environmental and Occupational Safety Management System ("QEMS"), to manage relevant sustainability issues, according to the international standards of ISO 9001:2015 Quality Management System, ISO 14001:2015 Environmental Management System and OHSAS 18001:2007 Occupational Health and Safety Management System. During the year, 17 power plants owned by the Group and its associates have attained QEMS accreditation. We target to expand the implementation of QEMS in all power plants, ensuring our businesses maintain high product and service quality as well as environmental and social responsibility.

MATERIALITY ASSESSMENT

During the materiality review in 2017, we conducted a materiality assessment through an online survey administered to 43 respondents from both internal and external stakeholder groups. We then revisited our materiality matrix to examine whether the identified topics remained relevant to our business and those of our key stakeholder groups. We adopted the four step approach as listed below: 在熊貓綠能,可持續性是由本集團各部門代 表組成的ESG報告團隊管理,並向監察ESG事 務的首席執行官報告。根據ISO 9001:2015質 量管理體系、ISO 14001:2015環境管理體系 及OHSAS 18001:2007職業健康安全管理體 系等國際準則,我們已實施質量、環境及職業 健康安全管理體系三位一體的綜合體系(「三 體系」),以管理相關的可持續性事務。本年 度,本集團及其聯營公司旗下之17座電站已 取得三體系的認證。我們致力於將三體系的 實施範圍擴大到所有電站,確保我們的業務 持續提供高品質的產品和服務以及履行環境 和社會責任。

實質性評估

於2017年實質性回顧期間,我們透過向43名 內部及外部利益相關者進行網上調查以進行 實質性評估。隨後,我們重新審視實質性矩 陣,以檢查已識別議題是否仍與我們的業務 及我們關鍵利益相關者組別相關。我們採取 如下四步方法:

Identification 鑒別

 Adopted a systematic process to determine sustainability topics

採取系統化流程釐定可持 續性議題

 Identified 29 relevant sustainability topics in the GRI Standards and HKEX ESG Reporting Guide 識別29個GRI指標及聯交所 《環境、社會及管治報告指 引》之有關可持續性議題

Prioritization 排序

 Assessed sustainability topics in terms of their influence on decisions and the significance of topics' impacts

就議題對決策的影響力及其 帶來的重大影響評估可持續 性議題

• Ranked sustainability topics in four levels, with Level I indicating topics that are most material to the Group

將可持續性議題分為四個層 次,第一層次是對本集團而 言屬最重大的議題

Validation and Review 確證及檢視

- Validated findings internally 內部確證調查結果
- Identified deviations for improvement in future reporting cycles
 識別差異,以於未來報告 期得以改進

The process revealed that most identified topics were still relevant and ranked in Level I and II. The material topics and their external impact location are listed below: 該流程顯示,大部分已識別議題仍相關,並列 為第一層次及第二層次。實質性議題及其外 部影響的對象載列如下:

Material Topics		Corresponding Section	External Impact Location
實質性		對應章節	外部影響對象
1.	Environmental compliance	Environmental Sustainability	Suppliers
	環境合規	環境可持續發展	供應商
2.	Green product 綠色產品	Environmental Sustainability; Operational Excellence 環境可持續發展; 卓越運營	Customers, Business Partners 客戶、業務夥伴
3.	Employee communication 僱員溝通	^{主國建國} Talent Development 人才發展	-
4.	Greenhouse gas ("GHG") emissions 溫室氣體排放(「GHG」)	Environmental Sustainability 環境可持續發展	Suppliers 供應商
5.	Energy consumption	Environmental Sustainability	Suppliers
	能源消耗	環境可持續發展	供應商
6.	Product health & safety	Operational Excellence	Customers
	產品健康與安全	卓越運營	客戶
7.	Employment compliance	Talent Development	Suppliers
	僱傭合規	人才發展	供應商
8.	Business ethics 商業道德	Anti-corruption 反貪污	-





OUR MATERIALITY MATRIX



對經濟、環境及社會的重大影響 Significance of Economic, Environmental, and Social Impacts

The findings of the materiality assessment have been plotted in the materiality matrix based on their significance of impacts to the Group, and against their influence on stakeholders' assessment and decision.

A few new topics - energy consumption, product health and safety, employment compliance, and business - have emerged from this year's assessment. Economic value generated and distributed and diversity & equal opportunity are now rated in Level III, lower in significance compared to their previous rankings.

我們的實質性矩陣

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

Level II 第二層次	Level	П	第二	層次
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• 商業道德

 Training & development Occupational health and safety 	 培訓與發展 職業健康 與安全
and salety	 一 一 一 一 一 一 一 一 一 一 一 一 一 一 一 一 一 一 一
 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

 Air emissions 	
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Level III 第三	層次
 Economic value generated and distributed Diversity & equal opportunity Wastewater Ecological conservation Data privacy Human rights Environmental expenditure Community engagement Customer satisfaction Oligopoly 	 所產生和價與和分配 多元會水 生資水 生資料權 人權 資人權 投與 人環區戶頭市場壟斷

Level IV	′ 第四層次
 Waste management 	 ● 廢物管理
 Raw materials 	• 原材料
 Water consumption 	• 用水

實質性評估結果已根據其對本集團影響的重 要性及其對利益相關者評估及決策之影響繪 製於實質性矩陣。

本年度評估中新增幾項新議題一能源消耗、 產品健康與安全、僱傭合規及業務。所產生和 分配的經濟價值及多元化與機會平等現列為 第三層次,重要性較先前排名為低。

OUR RESPONSE TO STAKEHOLDER CONCERNS AND UN'S SDGs

Panda Green, as a leading eco-development solutions provider, acts proactively to support sustainable development. By gradually incorporating SDGs into our business strategies, we have been striving to align our responses to stakeholders with the relevant SDGs.

回應利益相關者的關注與聯合 國可持續發展目標

作為領先的生態發展解決方案供應商,熊貓 緣能採取積極的措施支持可持續發展。除逐 漸將可持續發展目標納入業務戰略之外,我 們致力於將向利益相關者的回應與相關可持 續發展目標一致化。

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 2017 2017年回應	Corresponding SDGs'aligned 對應一致的可持續發展目標 ¹
Employees 僱員	 Employment Compliance 僱傭合規 Employee Communication 僱員溝通 Talent Management 人才管理 Training & Development 培訓與發展 Occupational Health and Safety ("OHS") 職業健康與安全 (「職業健康與安全」) 	 Foster an environment of open communication by providing incentives for staff to make suggestions 獎勵僱員提供建議,營造開放式交流環境 Provide a working environment free from harassment and discrimination 提供零騷擾、零歧視的工作環境 Ensure both male and female employees are treated equally 確保男女僱員平等對待 Actively retain female staff by providing maternity leave as there is a 100% return rate 通過提供產假積極挽留女性僱員,返回崗位的比 率為100% Celebrated the International Women's Day with our female staff. All female staff in Hong Kong received gifts and those in mainland China enjoyed a half-day statutory holiday 與女性僱員共同慶祝國際婦女節。所有於香港之 女性僱員均會獲贈禮物,而於中國大陸的女性僱 員享有半天法定假期 Nurture talent through training point requirements 按培訓積分要求培養人才 Launched an online learning platform, providing more than 170 courses to all our staff 推出在線學習平台,為全體僱員提供逾170節課程 Total OHS training hours increased almost 8 times 職業健康與安全培訓總時數增加近八倍 Recorded zero accident for three consecutive years 連續三年無事故發生 	5 ERNER (空) 10 ERNEALINE (空) Gender equality 性別平等 Reduced inequalities 減少不平等 8 ECENT WORK AND Economic growth 擅面工作和經濟增長

- 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.
 - 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 2017 2017年回應	Corresponding SDGs'aligned 對應一致的可持續發展目標 ¹
Environmental NGOs 從事環保工作的非 政府組織	 Ecological Conservation 生態保護 Carbon and Other Air Emissions 碳及其他大氣排放 Energy and Water Consumption 能源及水消耗 	 Communicate closely with the local government, and prioritizes wastelands, deserts and coal mining subsidence areas during the site selection progress, aiming to help restore the eco-system and reverse land degradation 於選址過程中與當地政府密切溝通,並優先考慮 荒地、沙漠及採煤沉陷地區,旨在幫助恢復生態系 統及扭轉土地退化 Launched first water surface floating power plant to reduce reliance on land resources 建成第一座水面漂浮式電站以減少對土地資源的 倚賴 Conducted an innovative pilot project to adopt a waterless component cleaning robot 進行創新試點項目,採用無水清洗機器人 Pioneer into innovative modalities that integrate the photovoltaic industry with local developments such as fisheries and agriculture 開拓創新模式,將光伏行業與當地發展(如漁業及 農業)相結合 The Quality, Environmental and Occupational Safety Management System of the Company and 17 power plants were certified as conforming the standards of ISO 9001, ISO 14001 and OHSAS 18001 本公司及17座電站的質量、環境及職業健康 安全管理體系已獲ISO 9001、ISO 14001及 OHSAS 18001標準的認證 	13 REARE Limate action 魚 候行動
Customers 客戸	 Green Product 綠色產品 Environmental Compliance 環境合規 Product Health & Safety 產品健康與安全 Customer Satisfaction 客戶滿意度 	 OHSAS 18001標準的認證 Play actively in research and development to continue to offer advanced products e.g. New Material Technology Strategic Cooperation Agreement 積極研發以繼續推出先進產品,如新材料技術戰 略合作協議 Expand the "Panda Power Plant" project, introducing clean energy by building solar power plants along the "Belt and Road" countries 擴展「熊貓電站」計劃,通過建立太陽能電站將清潔能源引入「一帶一路」沿線國家 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 Met performance expectations in terms of service quality, supply capacity, price, grid stability, and safety indicated by the annual customer satisfaction survey 年度客戶滿意度調查顯示,我們在服務質量、供應能力、價格、電網穩定性及安全方面的表現達到預期 	1 AFFORMABLE AND EXAMPLE AND EXAMPLE AND EXAMPLE 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 2017 2017年回應	Corresponding SDGs¹ aligned 對應一致的可持續發展目標¹
Photovoltaic Green-ecosystem Organization ("PGO") 光伏縁色生態合作 組織(「PGO」)	 Green Product 綠色產品 Environmental Expenditure 環保投入 GHG Emissions 溫室氣體排放 	 Became the chairman of the Photovoltaic Green-ecosystem Cooperation Technical Committee of the China Society of Inspection and Quarantine ("CSIQPTC") 正式成為中國檢驗檢疫學會光伏綠色生態合作專 業技術委員會(「專委會」)的會長單位 Initiated and organized the members of CSIQPTC to draft, approve and publish six industry standards on technical specifications 發起並組織專委會內部成員單位完成起草、審定 和發佈六個行業技術規範 Held our First Photovoltaic Operation and Maintenance Personnel Competition, allowing exchange of best practices across partners 我們舉行首屆光伏運維人員競賽,允許合作夥伴 交流最佳範例 	17 PARTNERSHIPS for THE GAALS Partnerships for the goals 促進目標實現的 伙伴關係
Suppliers 供應商	 Supply Chain Management 供應鏈管理 Environmental Compliance 環境合規 	 Ongoing supplier assessments encourage continuous improvement – over 80% of the assessed suppliers achieved grade B or above this year 持續進行的供應商評估促使彼等不斷完善一超過 80%經評估的供應商於本年度達到B級或以上 Enabled suppliers to gain better understanding of our business by conducting 7 training sessions and one on-site tour 共進行7次培訓會議及一次實地考察,令供應商更 了解我們的業務 	17 PARTNERSSHIPS FOR THE GDALS Partnerships for the goals 促進目標實現的 伙伴關係
Community 社區	 Community Investment 社區投資 Economic Value Generated and Distributed 所產生和分配的經濟價值 Ecological Conservation 生態保護 	 Partnered with UNDP to host the Youth Leadership Summer Camp for Climate Action, aiming to promote youth education on combating climate change 與聯合國開發計劃署合作舉辦「培養未來氣候行 動領袖」夏令營,旨在向青少年推廣預防氣候變化 的教育 Generated renewable energy to offset the carbon emissions emanating from burning of fossil fuels 產生可再生能源,以抵消燃燒化石燃料產生的碳 排放 Donated RMB3 million – almost four times of that in 2016 捐贈人民幣3百萬元-近2016年的四倍 	7 AFFORDABLE AND したれ Extension 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 2017 2017年回應	Corresponding SDGs ¹ aligned 對應一致的可持續發展目標 ¹
Investors 投資者	 Operational Excellence 卓越運營 Compliance 合規 Business Ethics 商業道徳 	 Panda Power Plant Project has been incorporated into the Action Plan of the Advancement on the "Belt and Road" Initiati by the Government of the PRC and the UND 熊貓電站項目被納入中國政府及聯合國開發言 簽署的《關於「一帶一路」建設的行動計劃》 Leading-edge technology to monitor and analyze plant data – piloted enhancements to our smart cloud systems 監控及分析電站數據的尖端技術一對智慧雲系 行改進 Conducted employee training on anti-bribery 開展有關反賄賂的員工培訓 	P 計劃署 Decent work and economic growth 體面工作和經濟增長 D



Environmental Sustainability 環境可持續發展

H.

Striving to build a green community by providing affordable and clean energy, we aim to achieve this by reversing land degradation, minimizing land use, and taking the lead in environmental stewardship.

我們致力於透過逆轉土地退化、 減少土地使用及帶頭參與環境保護 努力達致構建綠色社區、提供可負擔 的清潔能源的目標。



PROVIDING CLEAN ENERGY

As at 31 December 2017, the Group and its associates/joint ventures owned 65 on-grid solar and wind power plants, with 34 power plants added during the year. The total installed capacity has increased by approximately 62% as compared to 2016, amounting to 2,087.3MW (2016: 1,291.4MW) while the annual electricity generation has increased by approximately 57% to 2,115,253MWh (2016: 1,345,830MWh).

The electricity generated from our power plants is sufficient to supply one-year electricity usage for approximately 1,175 thousand households. By generating electricity from renewable energy sources, we significantly reduce the environmental impacts arising from consumption of traditional fossil fuel, which helps combat climate change. The table below shows the positive environmental impacts by photovoltaic and wind power electricity generation.

提供清潔能源

於2017年12月31日,本集團及其聯營公司/ 合營企業擁有65個已併網的太陽能發電站及 風力發電站,年內新增34個電站。總裝機容 量較2016年增加約62%至2,087.3兆瓦(2016 年:1,291.4兆瓦),而年度發電量增加約57% 至2,115,253兆瓦時(2016年:1,345,830兆瓦 時)。

我們的電站發電量足夠為約117.5萬戶居民供 應整年的電力使用。透過可再生能源發電,我 們大量減少消耗傳統化石燃料對環境產生的 影響,有助應對氣候變化。下表列示透過光伏 發電及風力發電對環境造成的正面影響。

	2013 2013年	2014 2014年	2015 2015年	2016 2016年	2017 2017年
Total Electricity Generation (MWh) 總發電量 (兆瓦時)	34,939	485,046	859,730	1,345,830	2,115,253
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
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
Sulfur Dioxide Emission Reduced (tons) 減少二氧化硫排放 (噸)	290	4,026	7,136	11,170	17,557
Nitrogen Oxide Emission Reduced (tons) 減少氮氧化物排放 (噸)	269	3,735	6,620	10,363	16,287
Soot Emission Reduced (tons) 減少煙塵排放 (噸)	17	243	430	673	1,058

CARE FOR LAND

We aim to combat desertification, reverse land degradation and minimize biodiversity loss in locations where we have operations.

To minimize negative impact on the environment, we believe that cautious site selection is of paramount importance. We are committed to strengthening our leading industry position while taking care of land use of our construction and operation sites. For every project, we conduct an environmental impact assessment to assess the projects' impact on its surroundings and ensure the corresponding mitigation measures are implemented.

We prioritize unused lands for our projects. Some of the power plants are built on wastelands, deserts and coal mining subsidence areas. In case the use of relatively valuable land such as farmland or woodland is unavoidable, we strive to maintain the original landscape and closely communicate with the local government to fulfil the local agricultural and forestry requirements.

土地關懷

我們致力於在營運所在地區對抗沙漠化[,]逆 轉土地退化及減少生物多樣化的喪失。

為極力減少對環境的負面影響,我們認為審 慎選址尤為重要。我們致力於強化行業領先 地位,同時關懷我們建設及營運所在地的土 地使用。我們對每個項目開展環境影響評估, 以評估項目對其周邊環境的影響及確保實施 相應緩解措施。

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。



Floating Power Plant to Save Land Use 建設漂浮式電站以節約土地使用

The 100MW water surface floating power plant in Huainan, Auhui, is the first water surface floating plant of the Group. During the construction process, we fully utilized the grid resources in coal mining subsidence area and the unused water surface. Compared to the traditional solar power plant, it reduces the use of land resources and evaporation of water surface which is helpful to inhibit algal reproduction. We believe this can be a demonstration unit for future water surface floating power plant projects.

安徽淮南的100兆瓦水面漂浮式電站為本集團首個水面漂浮式電站。於建設過程中,我們充分利用採礦沉陷區的電 網資源及未動用的水面區域。與傳統太陽能電站相比,它減少了土地資源的使用及水面蒸發,有利於抑制藻類的繁 殖。我們相信其可以成為未來水面漂浮式電站項目的示範。







Prevention and control plan of sandification 防沙治沙方案

Striving to reverse land degradation, we are committed to combating sandification and desertification at our power plants. With the installation of low-standing and high-standing sand barriers, we effectively prevent sandification. The use of water for cleaning panels can moisturise the surrounding areas, which is helpful for rehabilitation of these sandy desertified lands.

Integrating the local industry's development along with photovoltaic development, the Group has been pioneering in innovative modalities such as "Photovoltaic + Agriculture" and "Photovoltaic + Fisheries", maximizing utilization of land resources which is mutually beneficial.

為努力逆轉土地退化,我們致力於在我們的 電站對抗土地沙化及沙漠化。透過安裝低立 式及高立式沙障有效地防治沙化。用水清潔 面板可以滋潤周圍地區,有利於沙漠化土地 的恢復。

透過將當地產業發展與光伏發展相結合,本 集團得以在「光伏+農業」及「光伏+漁業」等 創新模式上佔據領先地位,最大限度地利用 土地資源,互惠互利。

CASE STUDY 案例分析

"Photovoltaic + Grape Integrated Project" – 0.2MW Solar Power Plant in Turpan, Xinjiang 「葡光互補項目」─新疆吐魯番0.2兆瓦太陽能電站

In the third quarter of 2017, the Grape-Photovoltaics Integrated Project of the Group, located at Turpan, Xinjiang, successfully connected to the grid and obtained approval in the national level appraisal. The grape scaffolding was retrofitted for solar power generation. By leveraging the reasonable density arrangement of photovoltaic panels and control of the light receiving surface area of the vineyard, the project enhanced the environment for the grapes, and facilitated the growth of grape vines in the hot seasons.

2017年第三季度,本集團旗下位於新疆吐魯番 市的葡光互補項目成功併網,並獲得國家級鑒 定。為了實現太陽能發電,該項目對葡萄棚架進 行了改造。該項目利用合理的光伏板佈置密度, 控制光伏板下葡萄園受光面積,改善了葡萄生 長的環境,利於高溫季節葡萄樹的生長發育。







ENVIRONMENTAL MANAGEMENT

As we continue to expand our operations, we will step up our efforts to mitigate the environmental impacts.

We actively monitor and manage business operations by implementing an Environmental Management System ("EMS") in accordance with the international standard ISO 14001. With strict monitoring of environmental performance, the Group was not aware of any material non-compliance of laws and regulations that have a significant impact on the Group relating to air and greenhouse gas emissions, discharge into water and land, and generation of hazardous and non-hazardous waste.

The Group is committed to identifying the environmental factors in its business activities, products and services, ensuring all material environmental factors are properly managed and monitored. Each department is obligated to identify environmental factors related to its functions.

construction sites by inspections, facility monitoring, statistical analysis and other applicable methods. For the identified

environmental factors, depending on the risk assessment, we

adopt elimination, substitution, operations guidelines, designated

procedures and other feasible measures to minimize the potential

environmental hazards. To ensure traceability of monitoring and measurement records, all records are kept properly, adhering to the

"Document Management Control Procedure".

By considering internal and external environmental factors, regulatory requirements, stakeholders' expectation, etc, we establish management targets and monitoring measures to control the Group's environmental performance. "Power Plant Project Construction Service Control Procedure" and "Project Construction Monitoring and Measurement Control Procedure" are implemented to manage the environmental performance in the

10 环境管理体系认证证书 #猫绿色能源集团有限公司 导动管理体系符合 188 CNAS -

Deten 环境管理体系认证证书 希腊绿色能源集团有限公司 180 IAF

我們透過考慮內 部及外部環境因 素、監管要求、利 益相關者的期望 等建立管理目標 及監控措施,以控 制本集團的環境 表現。本集團實施 「電站項目工程建 設服務控制程序」 及「項目施工監 視和測量控制程 序」,透過檢查、

設施監測、統計數據分析及其他適用方法,對 施工現場的環境表現進行管理。對於已確定 的環境因素,根據風險評估,我們採用消除、 替代、操作指南、指定程序及其他可行措施, 以減少潛在的環境風險。為了確保監視及測 量記錄的可追溯性,所有記錄均遵循「文檔管 理控制程序」妥為存置。



環境管理

隨著我們業務的持續擴展,我們將加大力度 推進減少環境影響。

我們透過實施符合國際標準ISO 14001的環 境管理體系(「EMS」)積極監察及管理業務 營運。透過嚴格監察環境表現,本集團並不知 悉有任何對本集團有嚴重影響,並且違反有 關廢氣及溫室氣體排放、向水及土地排污以 及產生有害及無害廢棄物的重大法律法規事 件。

本集團致力於識別其業務活動、產品及服務 的環境因素,確保所有重大環境因素得到妥 善管理及監測。每個部門都有義務識別與其 職能相關的環境因素。

Responsibility of departments 部門職責



"Emergency Preparedness and Response Control Procedure" is in place to address emergency events such as environmental accidents happening in the offices, construction sites and power plant operation and maintenance sites. We have established an emergency plan which identifies potential accidents, specifies the person in charge, identifies the equipment required, and sets up related control measures, investigation and handling methods. 本集團設有「應急準備和響應控制程序」用來 處理緊急事件,例如辦公室、建築工地及電站 運行及維護點發生的環境事故。我們已制定 應急預案用以辨識潛在事故,指定負責人,確 定所需設備,建立相關的控制措施、調查及處 理方法。





Resources Consumption

Energy Consumption

Energy consumption includes the usage of electricity, gas and fuel oil in offices and power plants. In 2017, the total energy consumption² was 76,679 Gigajoules ("GJ"), comprising 20,013,284 kWh of electricity usage (94% of total energy consumption), combustion of 4,865 cubic meters of natural gas, 133,187 litres of gasoline and 5,506 litres of diesel. Energy intensity³ was 36.3 GJ per gigawatt hour ("GWh") electricity generated.

Since the number of power plants increased by 34 during the year, electricity consumption rose substantially. Our electricity usage is equivalent to approximately 0.95% of the total electricity generated by the Group's power plants.

In 2017, our total greenhouse gas ("GHG") emissions⁴ amounted to 14,344 tons of carbon dioxide equivalent ("tCO₂e"), of which, direct emissions (Scope 1) and indirect emissions (Scope 2)⁵ were 379 tCO₂e and 13,964 tCO₂e respectively. Emission intensity was computed as 6.8 tCO₂e per GWh electricity generated. The Group takes feasible measures to reduce the energy usage which help mitigate GHG emissions. Please refer to section of 'Resources Conservation' for details.

資源消耗

能源消耗

能源消耗包括辦公室及電站使用的電力、 燃氣及燃油。於2017年,能源總消耗量²為 76,679千兆焦耳(「千兆焦耳」),包括用 電量20,013,284千瓦時(佔能源總消耗量 的94%),燃燒天然氣4,865立方米、汽油 133,187公升以及柴油5,506公升。能源強度³ 為每千兆瓦時(「千兆瓦時」)發電量36.3千兆 焦耳。

於本年度由於電站的數量增加34個,因此用 電總量大幅上升。我們的用電量相當於本集 團電站總發電量的約0.95%。

於2017年,我們的總溫室氣體(「溫室氣體」) 排放量⁴為14,344噸二氧化碳當量,其中直接 排放(範圍一)及間接排放(範圍二)⁵分別為 379噸二氧化碳當量及13,964噸二氧化碳當 量。排放強度為每千兆瓦時發電量排放6.8噸 二氧化碳當量。本集團採取可行的措施減少 能源消耗,從而有助於減輕温室氣體排放量。 詳情請參閱「資源節約」的章節。



- ² The total energy consumption composed of the fuel consumption within the organization from non-renewable sources and is computed based on the conversion factors of China Energy Statistical Yearbook. 能源總消耗量由組織內的非可再生能源的燃料消耗組成,並根據中國能源統計年鑑的轉換係數進行換算。
- ³ The energy intensity is computed using electricity generated as the organization-specific metric (the denominator) since the Group's major business is electricity generation from renewable sources. 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(分母)。
- ⁴ CO₂, CH₄, N₂O are included in the calculation. The global warming potential rates are based on GHG Protocol. The emission factors of electricity in Hong Kong is based on the source from HK Electric, while the emission factors of electricity in PRC is based on the publication from National Development and Reform Commission. 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。
- ⁵ 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. 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。

To propel the development of China's carbon trading market, the Group has actively participated in Chinese Certified Emission Reduction ("CCER") program with three of its projects entered into the emission reduction verification phase and another 17 projects entered into project validation phase. Our CCER credited emission reductions will be traded on the Shenzhen Emissions Exchange. For oversea projects, the Group will continue conducting research and investigating, exploring the possibilities for Clean Development Mechanism project.

Water Consumption

Water is sourced from the mains supply. During the year, the Group did not have any issue in sourcing water that is fit for the purpose. The major water consumption consists of office water usage and cleaning water for solar panels. We consumed 1,118 tons of water in offices and 11,929 tons of water in power plants, representing a decline of 2% and increase of 137% in water consumption in offices and power plants respectively, compared to 2016. The increase in water consumption in power plants was mainly due to new power plants included in 2017.

為促進中國碳交易市場的發展,本集團積極 參與中國核證減排量(「CCER」)項目,其中 三個項目進入減排量核証階段,另有十七個 項目進入項目審定階段。我們經CCER核證的 減排量將於深圳排放權交易所買賣。海外項 目方面,本集團將繼續進行相關研究調查,探 索清潔發展機制項目的可行性。

水資源消耗

水資源的使用主要來自城市自來水。於本年 度,本集團並無任何獲取適用水源上的問題。 主要用水量包括辦公室用水及清洗太陽能電 池板用水。我們消耗辦公室用水量1,118噸及 電站用水量11,929噸,相當於較2016年辦公 室及電站用水量分別減少2%及增加137%。 電站用水量的增加主要因2017年計入新電站 所致。





Resources Conservation

Energy Saving

At Datong power plant, we have adopted the latest technology such as thin film and monocrystalline silicon technology, electric panel steering technology, etc., which enhance power generation and transmission efficiency and reduce energy loss.

To optimise electricity consumption of the Group, we regularly conduct inspections and record electricity usage. We have adopted various measures to manage the use of electricity. For example, all employees are required to turn off their computers and monitors at the end of the work day. Prior to holiday, we turn off all operational equipment, unless it is necessary to operate, in order to minimize the use of energy. Idle operation of electrical equipment and electric heating equipment is strictly forbidden. During the year, the Group did not measure the electricity saved since no large-scale energy reduction project was implemented.

In procurement of equipment, the Group gives priority to equipment with advanced technology and low energy consumption. In case our existing equipment has high energy consumption, we gradually phase out that model.

Water Saving

We regularly conduct inspections of water supply pipes in order to prevent water leakage. Besides, we maintain monthly record of water consumption and in case of abnormal water usage, we investigate and suggest remedial measures. To raise water saving awareness of our employees, we conduct training to introduce water saving knowledge and related measures. Through a reward system, our employees are motivated to implement water saving measures. As a result, 2% of total water consumed in the offices was reduced in 2017 compared to the previous year. At the construction sites, depending on the construction process, we turn off the water tap if no water consumption is required.

Paper Saving

To prevent excessive use of paper in office, we record monthly paper consumption to spot any abnormal usage and take corrective measures. Employees are encouraged to use both sides of paper except for confidential documents, recycle the used paper by recycling bins and disseminate information by electronic means.

資源節約

節約能源

於大同電站,我們已採納最新的技術如薄膜 及單晶體硅技術、電板轉向技術等,提升發電 及輸送效率以及減少能源損耗。

為優化本集團用電量,我們定期檢查及記錄用 電量。我們已採取各種措施以管理用電量。例 如,全體僱員須於工作日結束後關閉電腦及 顯示屏。我們會於節假日之前關掉所有運行 中設備(除非有必要運行)以盡可能降低能源 用量。嚴禁電氣設備及電熱設備空轉。年內, 本集團由於沒有開展大型節能工程,故未計 量所節省的電力。

於採購設備時,本集團優先選擇配備先進技 術及低能耗的設備。倘我們的現有設備能耗 較高,我們會逐步淘汰該型號。

節約水資源

我們定期檢查供水管道以避免漏水。此外,我 們保存用水量的月度記錄,倘出現異常的用 水量,我們會進行調查並提出補救措施。為提 高我們僱員的節水意識,我們進行培訓介紹 節水知識及相關措施,透過獎勵制度激勵僱 員落實節水措施。因此,2017年辦公室的總 用水量相較上年度減少2%。於施工現場,按 照施工過程的需求,倘毋須用水我們則會關 閉水龍頭。

節約紙張

為避免辦公室過度用紙,我們記錄每月紙張 消耗量以偵測任何異常使用情況及採取糾正 措施。我們鼓勵僱員雙面用紙(惟機密文件除 外),且透過回收箱進行紙張回收。我們提倡 透過電子方式傳遞資訊以節省更多紙張。

Effluent and Waste Management

Waste Management

The Group has adopted a systematic approach for waste management. Hazardous waste in relation to the Group's operation mainly consists of waste circuit boards, waste oil, waste batteries, toner cartridges, ink cartridges, ribbons, and fluorescent lamp tubes. The Group generated 0.87 tons of hazardous waste, consisting of 0.21 tons of waste circuit boards and 0.66 tons of waste oil. Total non-hazardous waste generated, including living wastes, construction waste, waste packaging cartons and waste parts, etc., was 86.18 tons, of which 23.40 tons was recyclable and 62.78 tons was non-recyclable, with an increase of 56% and 49% respectively compared to that of 2016. All wastes are clearly labelled and stored separately according to the categories. Designated departments inspect the waste storage on a weekly basis to ensure the surroundings are not contaminated. Qualified waste collection specialists are appointed to handle our waste. For waste that has significant environmental impacts, such as scrapped solar panels, they are handled only by certified parties approved by our environmental department.

Exploring the potential value of waste battery, we have set up a battery recycling bin to foster the recycling culture in 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, all our scrapped solar panels were recycled, amounting to 14.59 tons.



Waste circuit board 廢舊線路板

污水及廢棄物管理

廢棄物管理



Scrapped solar panels 廢棄太陽能電池板

本集團已就廢棄物管理採納系統化的方法。 本集團運營中涉及的有害廢棄物主要包括廢 舊線路板、廢油、廢棄電池、碳粉匣、墨匣、色 帶及熒光燈管。本集團產生0.87噸有害廢棄 物,包括0.21噸廢舊線路板及0.66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86.18 噸,其中23.40噸為可回收廢棄物及62.78噸 為不可回收廢棄物,較2016年分別增加56% 及49%。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 况以確保未對周邊環境造成污染。合資格的 廢棄物收集專家獲委任處理我們的廢棄物。 對環境有重大影響的廢棄物,如廢棄的太陽 能電池板,僅可由經我們的環境部門批准的 認證機構處理。

為探索廢棄電池的潛在價值,我們已設立電池 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。於 本年度,我們所有廢棄太陽能電池板均獲回 收,合共14.59噸。


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 as well as construction sites. We control sewage discharge by ensuring the sewage flow, through setting up a draining ditch 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 PRC. For our 65 power plants, the Group has installed 6 sewage treatment plants, 49 septic tanks and the remaining 10 power plants do not generate sewage.

Production sewage mainly consists of water used for cleaning of solar panels. Since this consists of little suspended matters that are insignificant to the environment, we allow it to naturally evaporate without any treatment. However, we continue to explore new ways to reduce the water usage as well as the sewage produced. In 2017, we launched a pilot project in Datong Panda Power Plant to adopt a waterless component cleaning robot for cleaning the solar panels.

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。我們透過確保污水流量,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。 就我們的65個電站而言,本集團已設有6間污 水處理廠、49個化糞池,而剩餘10個電站均不 產生污水。

生產污水主要包括太陽能電池板的清洗用 水。由於此包含少量懸浮物,對環境影響較 少,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 用水量及產生的污水。於2017年,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。



Waterless component cleaning robot 無水清洗機器人

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Operational Excellence 卓越運營

We believe innovation and technological advancement are the core drivers of our industry's development. Through long-term partnership with our peers and internal capacity building, we strive to benefit our communities by becoming the leading provider of reliable solar power. Ħ

我們相信創新及技術進步是我們行業發展 的核心驅動力。透過與同業的長期合作及 內部能力建設,我們致力於成為可靠太陽 能的領先供應商,為我們的社區謀福利。



LEADING-EDGE TECHNOLOGY

Since the Group operates renewable energy plants across a vast area, smart technologies has become our main approach when managing the power plants effectively and thus, maintaining the quality of energy supply.

With the close collaboration with a global leader in internet technologies, our Global Smart PV Cloud Management Center (the "Center") has become the hub that centralizes power plants management in aspects such as production, human resources, assets and data. We have fully utilized the FusionSolar Smart PV Management System, which provides a platform for storing, computing and analyzing operational data through the cloud system, as well as connecting the management systems between the Group level and power plant level. In Qinghai, we began to test the feasibility of shifting the two-level management systems to a three-level design, grouping power plants into regional systems to allow better allocation of specialist staff. This plan will be extended into other provinces in 2018.

尖端技術

本集團廣泛經營可再生能源電站,智能技術 已成為我們有效管理發電站的主要技術,保 持我們的能源供應質量。

憑藉與全球互聯網技術領先企業的緊密合 作,我們的全球光伏電站智能營維雲中心 (「該中心」)已成為集生產、人力資源、資產 及數據等方面的發電站管理樞紐。我們全面 採用FusionSolar智能光伏管理系統,此為透 過雲系統提供存儲、計算及分析營運數據的 平台,並連接集團層面與發電站層面的管理 系統。在青海,我們開始測試將兩層管理轉為 三層面的可行性,將發電站整合至區域系統 以更好地分配專業人員。此計劃將於2018年 推廣至其他省份。





The smart system has digitalized and automated production management and administrative procedures, which ensures operational efficiency. The system is more than a database. It monitors and analyzes data of power plant performance such as voltage and power. It also manages and warns about defects in advance. The system is also flexible in terms of generating data reports and statistics, as well as sending notifications on needs for procurement and cleaning. This allows our staff to take prompt and appropriate actions for handling operations issues. The table below summarizes the major features of the smart system. 智能系統配備數據化及自動化的生產管理及 行政程序,確保營運效率。該系統不僅僅是一 個數據庫,更可監控及分析發電站性能數據, 如電壓及功率,亦可管理及提前警告缺陷。該 系統亦可靈活地生成數據報告及統計、發送 採購及清潔需求通知。其令我們的員工可迅 速採取適當措施處理營運問題。下表概述智 能系統的主要特點。

Power plant management 發電站管理	Power plant performance analysis 發電站表現分析 Computing KPI data and conducting integrated analysis of plants' performance. 計算關鍵表現指標數據及綜合分析發 電站表現。	Warning center 警告中心 Identify and warn about safety hazards in advance, improving efficiency and capacity by prompt emergency prevention and response. 提前識別及警告安全隱患,透過緊急預 防及應對提升效率及能力。
Use of big data 使用大數據	Maintenance management 維護管理 Informatization of "Two tickets" system. Tracing errors and defects, which save 50% of time required for rectifying them. 「雙票」系統的信息化。追蹤錯誤及 缺陷,節省50%修正所需時間。	Defects Management 缺陷管理 Immediate detection, tracing and analysis of errors and defects, speeding up rectification process and preventing significant impact on power quality. 即時檢測、追蹤及分析錯誤及缺陷, 加快修正程序及防止對發電質量 產生重大影響。
Strengthened internal information flow 強化內部信息流	Administrative practices 行政常規 Enable accurate calculation of targeted power generation and expenditure on maintenance, cleaning and procurement. 能夠準確計算目標發電量及維護、 清潔及採購開支。	PV mobile app 光伏移動應用程式 Allow staff to monitor the status of the power plant in real-time, with informative graphs and images. 藉助信息性圖表及影像,讓員工實時 監控發電站狀況。





LEADING THE INDUSTRY DEVELOPMENT

2017 was an important year for the Photovoltaic Greenecosystem Organization ("PGO"); China Society of Inspection and Quarantine ("CSIQ") has officially permitted establishment of the Photovoltaic Green-ecosystem Cooperation Technical Committee.

This implies that the framework of the CSIQ will be applied for setting industry standards, which provide professional guidance on standards setting. This is an important step for PGO in leading the technological advancement and good practices in the photovoltaic industry. We will continue to strengthen our partnerships in striving towards this goal.

As an alliance of state-owned and listed companies in the photovoltaic industry, PGO aims to promote a healthy industry ecosystem through close cooperation and exchange. The work of the PGO covers a wide range of aspects, including investment, design, construction, operation and certification of solar power plants. The organization facilitates pooling and sharing of resources among member enterprises to achieve efficient use of resources, innovation and mutual benefits.

As one of the leaders and an active member of PGO, the Group participates in initiatives for developing best practices. With efforts made by the member enterprises, 6 industry standards on technical specifications were drafted and published during the year. For the second consecutive year, the organization has also published the PGO Purchasing Price Index, arousing awareness on maintaining a stable and favourable business environment. The index consists of price indices of engineering, procurement and construction, as well

as components used for power generation. The long-term aim is to make these indices reliable indicators that reflect the market situation of the industry.

引領行業發展

2017年是光伏綠色生態合作組織(「PGO」) 重要的一年;中國檢驗檢疫學會(「CSIQ」) 已正式批准成立光伏綠色生態合作專業技術 委員會。

這意味著CSIQ的架構將應用於設定行業標準,為標準設定提供專業指引。這亦是PGO 引領光伏行業技術進步及良好常規的關鍵一步。我們將繼續加強合作關係向此目標邁進。

作為光伏行業的國有及上市公司聯盟,PGO 旨在透過緊密合作及交流促進健康產業生態 系統。PGO的工作範圍甚廣,包括太陽能發 電站投資、設計、建造、營運及認證等。該組 織促使各企業成員間資源匯集及共享,以實 現有效利用資源、創新及互惠互利。

作為PGO的領導者及活躍成員之一,本集團 參與制訂最佳常規的倡議。在企業成員的共 同努力之下,年內已草擬並發佈了6項行業技 術規範標準。連續第二年,組織亦已發佈PGO 採購價格指數,提高企業對維持穩定及有利 營商環境的意識。指數包括工程、採購及建造 以及發電組件的價格指數。長期目標為使該 等指數成為反映行業市場狀況的可靠指標。





SUPPLY CHAIN MANAGEMENT

We strive to maintain stable and mutually beneficial partnerships with suppliers. Our suppliers mainly provide photovoltaic equipment, products and services for construction and maintenance and information technology. As at 31 December 2017, the Group has a total of 209 suppliers, with 151 of them located in mainland China, 37 located in Hong Kong and 21 from overseas. We select, assess and monitor suppliers stringently, and at the same time collaborate and provide assistance to them in meeting our requirements. The Group has established management systems for managing suppliers, procurement and tendering, ensuring fairness of the process and quality of the products and services provided by suppliers.

Supplier Assessment

The Group procures only from suppliers that provide reliable products, comply with regulations and have positive reputation in the industry. Our Procurement Department plays the key role in managing and coordinating the procurement process. The needs and types of procurement are first identified. Large scale procurement decisions are made by the Procurement and Tendering Committee, consisting of professionals from procurement, financial and technical departments.

After potential suppliers are identified, the selection process begins with suppliers prioritization according to qualifications and certifications. Suppliers which are required to have special qualifications, such as waste, hazardous chemicals handling, measurement equipment and safety equipment, need to be examined strictly according to the national regulations and other related requirements.

供應鏈管理

我們致力於與供應商維持穩定及互惠互利的 合作關係。我們的供應商主要提供有關建造 及維護的光伏設備、產品及服務以及信息技 術。於2017年12月31日,本集團共有209家供 應商,其中151家位於中國大陸、37家位於香 港及21家位於海外。我們嚴格甄選、評估及監 察供應商,同時與彼等合作並協助彼等達到 我們的要求。本集團已建立管理系統管理供 應商、採購及招標,確保過程公平及供應商所 提供產品及服務的質量。

供應商評估

本集團僅向提供產品可靠、遵守法規及於業 內擁有良好聲譽的供應商作出採購。我們的 採購中心於管理及協調採購流程中發揮重要 作用。採購時會首先識別採購需求及類型。大 規模採購決定由採購及招標委員會作出,而 採購及招標委員會由採購、財務及技術部的 專業人員組成。

物色潛在供應商後,我們根據供應商資質及 認證排名啟動篩選程序。對於須具備專項資 格(如廢棄物、有害化學物處理、測量設備及 安全設備等)的供應商,須嚴格按照國家法規 及其他相關規定進行核准。



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Site visits and sample tests are also conducted during the process to further evaluate the suitability of the supplier. Requirements on managing quality, environment, occupational health and safety ("OHS") and social responsibility are important factors in making procurement decisions. In order to encourage suppliers to be environmentally and socially responsible for their impacts, our procurement contract includes a "Compliance with Social Responsibility Code of Ethics Agreement", with terms clearly articulating our requirements on labour issues such as prohibition on child and forced labour, non-discrimination, OHS, employee welfare and compliance. Only suppliers who pass the assessment are added to the Qualified Suppliers List. 在進一步評估供應商合適性的過程中,我們亦 進行實地調查及樣品檢測。有關管理質量、環 境、職業健康與安全(「職業健康與安全」)的 規定及社會責任亦是作出採購決定的重要考 量因素。為鼓勵供應商承擔彼等的環境及社 會影響責任,我們將「遵守社會責任道德標準 協議書」納入採購合約,條款清晰列明有關勞 工問題的規定,如禁止童工及強制勞工、反歧 視、職業健康與安全、僱員福利及合規事宜。 只有通過評估的供應商方可納入合資格供應 商名單內。



To monitor our suppliers on meeting our requirements, we assess existing suppliers regularly, grading them according to quality, price, services and delivery period. The assessment results are sent to the suppliers for self-assessment, allowing suppliers to provide feedback and solutions for improvement before determining the final score. This facilitates communication with suppliers on their performance. The scores lead to the final grading of suppliers in range from grade A to E, which implies differences in procurement priority and future relationship development (See Grading System below). We do not tolerate any unethical behaviour from suppliers and terminate cooperation immediately if such behaviour is discovered. During the year, annual assessments have been conducted for 146 suppliers, over 80% of which achieved grade B or above. The Group maintains a database containing all information of suppliers, which are revised regularly with the latest updates.

Grading System

Grade A級 Grade B級 Grade C級 Grade

Strategic Suppliers (90-100 points) 戰略供應商 (90-100分)

Priority Suppliers (80-90 points) 優先供應商(80-90分)

Suppliers need improvement (70-80 points) 需改進的供應商(70-80分)

Cooperation temporarily suspended (60-70 points) 暫時終止合作(60-70分)

Grade **E**級 終止者

Cooperation terminated (Less than 60 points) 終止合作(低於60分) 為確保供應商滿足我們的需求,我們會定期 評估現有供應商,並根據質量、價格、服務及 交付期將其進行分級。我們將評估結果寄發 予各供應商以供彼等自我評估,並在釐定最 終分數前允許彼等作出反饋及改進。這促進 了我們與供應商關於其表現的交流。供應商 最終會根據分數劃分為A至E五個等級,意味 著採購優先次序及未來關係發展的差異(見 下文評級系統)。我們絕不容忍供應商的任何 不道德行為,並在發現該等行為時即時終止 與彼等的合作。於本年度,我們對146家供應 商進行了年度評估,其中超過80%的供應商 的評級達致B級或以上。本集團維護一個內含 所有供應商資料的數據庫,並定期更新最新 數據。

評級系統







Supplier engagement

We maintain regular communication with suppliers through halfyear and annual meetings with PGO core suppliers to reinforce industry best practices. Training is also offered to suppliers for boosting their knowledge and skills. During the year, 7 training sessions were held for suppliers of inverters. Through giving participants a tour at our power plants, we introduced various aspects of our operations such as solar power solution designs, equipment installation, maintenance and monitoring process of power plants, so as to allow suppliers and their employees to provide better products and services for supporting the solar power plant operations.

DELIVERING HIGH-QUALITY SERVICE

Maintaining service quality, protecting data privacy and intellectual properties are crucial not only for the core interests of the Group but also for our stakeholders. The Group has adopted stringent policies and regulations to monitor these aspects.

Quality Management

To ensure smooth and sustainable operation of power plants, management system and procedures are established for construction and operation of the power plants. For power plant construction, inspections are carried out during and after the construction period. An acceptance inspection committee is set up to facilitate cross-department coordination of the inspection. Assessment of power plants is based on initial requirements on overall design, environment, fire safety and quality of the structure. Approval must be obtained from the acceptance inspection committee before commencement of operations.

供應商溝通

我們透過與PGO核心供應商的半年度及年度 會議與供應商保持定期溝通,以加強行業最 佳慣例。我們亦向供應商提供培訓以提升彼 等的知識及技能。於本年度,我們共向逆變 器供應商提供7場培訓。通過參觀我們的發電 站,供應商及其僱員了解我們業務營運的諸 多方面,如發電站的太陽能發電解決方案設 計、設備安裝、維修及監控程序,藉此使他們 提供更優質的產品及服務,以支持太陽能發 電站營運。

提供高品質服務

保持服務質素、保護資料私隱及知識產權不 僅對本集團核心利益尤為重要,對利益相關 者亦然。本集團已通過嚴謹的政策和規定,對 各項議題進行監督。

質量管理

為確保發電站的穩定及可持續發展,我們為發 電站的建造及運營建立了管理系統及程序。 就發電站建造而言,我們會於建造工程施工 過程中及完工後進行視察。我們已成立驗收 委員會推動各部門驗收工作的協調。發電站 的評估乃基於整體設計、環境、消防安全及建 築物質量的初步要求。發電站開始投入營運 前須獲得驗收委員會批准。 Once a power plant commences operations, procedures are established to monitor each process of power generation. Detailed work instructions are formulated and distributed to each power plant about the management procedures for all equipment and components, from checking, testing, handling defects and malfunctioning, as well as maintenance and repair etc. We are committed to implementing these procedures stringently to ensure stable power quality.

To continually improve our service quality, we conduct customer satisfaction survey annually. The results show that our customers are satisfied with our performance in terms of service quality, supply capacity, price, grid stability and grid safety. Besides, the Group's senior management visits the customers regularly to understand their future expectations of the Group. We also take reference from market information to draw plans for enhancing customer satisfaction.

As we provide services of developing, operating and managing the renewable energy plants, our business does not involve in advertising and product packaging activities. Therefore, we assert that these aspects do not have significant impact on our operations. During the year, there are no reported incidents on infringement of laws and regulations regarding these two aspects.

Privacy

The Group respects and recognizes the importance of protecting data privacy and information confidentiality. We take responsibility of protecting the Group's sensitive and proprietary information from disclosure, including but not limited to customer information and commercial secrets. To ensure compliance with the Personal Data (Privacy) Ordinance in Hong Kong and other relevant laws and regulations in the regions we have operations, we adopt internal confidentiality management regulations which define confidentiality measures according to levels of classification. Employees are required to sign a confidentiality agreement depending on the scope of their duties. To avoid unintentional disclosure, employees must not discuss such information with any person outside the Group, or with any unrelated person inside the Group.

發電站投入營運後,我們會落實程序監控發電 的各個流程。我們就所有設備及零部件的管 理程序(包括檢查、測試、處理缺陷及故障, 以及養護及維修等)制定了詳細的內部規例 並分發予各發電站。我們嚴格執行該等程序 以確保穩定發電。

為持續提升我們的服務質素,我們每年進行 客戶滿意度調查。調查結果顯示客戶滿意我 們服務質量、供應能力、價格、電網穩定性及 電網安全性的表現。此外,本集團高級管理層 會定期拜訪客戶以了解其對本集團的未來期 望。我們亦參考市場資料擬定可提升客戶滿 意度的計劃。

由於我們提供的服務包括發展、經營及管理 可再生能源電站,業務並不涉及廣告及產品 包裝等活動。因此,我們認為這些方面沒有對 我們的運營構成重大影響。年內,並無獲報有 關這兩方面違反法律及法規的事件。

隱私

本集團尊重並重視數據隱私及資料保密。我 們有責任保護本集團敏感及專有資料防止外 泄,包括但不限於客戶資料及商業機密。為保 證合符香港《個人資料(私隱)條例》及我們 經營所在地區的其他相關法律法規,我們制 定內部保密管理規定,按資料的保密等級規 範相應措施。僱員須根據其職責簽署保密協 議。為避免無意披露,僱員不可與任何本集團 外部人員或任何本集團內部無關人員討論有 關資料。





The Group has also implemented an internal policy to reinforce the management of information center. The information center has a security system for controlling personnel moving in and out of the center. Only authorized persons with access permission card cannot be lent to other personnel. In case the access permission card is lost, the cardholder must report to information department and inform human resources department to suspend the usage right of the lost card. Information at the cloud systems of the Global Smart PV Cloud Management Center ("Cloud Center") and each power plant is encrypted and isolated from external networks. The transfer of data of Cloud Center and each power plant is only proceeded with the authorisation from local grid companies after their assessment, including the confirmation of compliance with the Cybersecurity Law of the PRC and other relevant laws and regulations.

Intellectual Property Protection

Solar power development cannot be successful without technological innovation. The Group supports and encourages innovative designs and inventions. Rewards are given to employees whose new technologies or inventions are successfully granted with patents. The Group currently has a total of 10 patents, which are regulated under the Patent Law of the PRC and Rules for Implementation of the Patent Law of the PRC. Upholding the principles of respecting intellectual achievements and safeguarding the Group's interests, we protect intellectual properties through systematically managing existing patents and conducting research and development ("R&D") on new products. Our legal department monitors the use of the patents, trademarks and copyrights and takes necessary actions in case of any violations. There were no cases of infringement of intellectual property rights reported during the year.

本集團亦執行內部政策以加強資料中心的管 理。資料中心設有一套安全系統以監控中心進 出人員。僅持有訪問權限卡的授權人士可進 入資料中心。訪問權限卡不得轉借予他人。倘 訪問權限卡丢失,持卡人須向資料部呈報並 知會人力資源部暫停丢失卡片的使用權。全 球光伏電站智能營維雲中心(「雲中心」)及各 發電站的資料乃經加密並與外部網絡隔離。 雲中心與各電站的數據的傳輸方案需要在當 地電網公司審核通過之後,包括確認合符中 國網絡安全法及其他相關法律及法規,方可 實施。

知識產權保護

太陽能發電發展的成就建基於技術創新。本 集團支持並鼓勵創新設計及發明。我們向為 成功獲得專利的新技術或發明作出貢獻的僱 員提供獎勵。本集團現有10項專利,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。秉承尊重知識成果及 維護本集團利益的原則,我們透過系統地管 理現有專利來保護知識產權並研發(「研發」) 新產品。我們的法務部門監控專利、商標及版 權的使用,並對任何違規行為採取必要措施。 於本年度,我們並無接到報告反映有侵犯知 識產權的案件。

Anti-corruption

The Group always conducts its business with due regard to the highest moral and ethical standards. Adherence to such standards is never compromised in favour of financial or other business objectives. Employees whose behaviours are found to violate ethical standards are subject to disciplinary actions including, where appropriate, termination of employment contract. The Group has established an effective Compliance Manual, which lays out the code of conduct and company policies against unethical behaviors such as bribery and conflict of interests. All employees are responsible and are encouraged to report any suspected legal violations or concerns. We comply with all relevant laws and regulations that have a significant impact on the Group relating to bribery, extortion, fraud and money laundering. There was no report on violation of anti-corruption laws and regulations during the year.

The Group highly conforms to legal standards including but not limited to bribery, and insider dealing. All employees must comply with the Prevention of Bribery Ordinance in Hong Kong, and relevant laws and regulations of the PRC and the regions we have operations, which prohibits bribery and sets out the minimum standards of integrity for employees when they are conducting their businesses. Employees are prohibited from soliciting any advantages from clients, vendors or any person in connection with the Group's business. They should refuse advantages offered in connection with their duties if the acceptance of such advantages could affect their objectivity or induce them to act against the Group's interests or lead to complaints of bias.

反貪污

本集團始終以最高的道德標準開展業務。不 得因有利於財務或其他業務目標而對有關標 準讓步。倘發現行為違反道德標準的員工,其 將受紀律處分,包括終止聘約(如適用)。本 集團已制定有效的合規手冊,當中列明行為 守則及公司政策以打擊賄賂及利益衝突等不 道德行為。全體僱員有責任報告任何疑似違 法的行為或事宜,我們亦鼓勵僱員作出該等 舉動。於本年度,我們並無接獲任何有關貪污 的任何案件。我們遵守所有有關防止賄賂、勒 索、欺詐及洗黑錢,並對本集團有重大影響的 法律及法規。年內,並無違反反貪污法律及法 規的報告。

本集團嚴格遵守法律標準,包括但不限於有 關賄賂及內幕交易。全體僱員均須遵守香港 防止賄賂條例及中國相關法律及法規,有關 法律法規杜絕賄賂行為並規定了僱員開展業 務時的最低誠信標準。本集團禁止僱員向本 集團業務相關的客戶、供應商或任何人士招 攬任何利益。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或 導致有關偏見行為的投訴,僱員必須謝絕有 關利益。





During the year, the Group conducted training on prevention of bribery, raising the employees' awareness on corruption and strengthening the appropriate approach to handle such circumstances. To comply with the PRC's economic and financial laws and regulations, the Group conducts internal auditing in accordance with its strategic objectives. By regulating internal auditing, it has strengthened operations and management at all levels, including its subsidiaries as well as improving internal supervision and risk control.

Ethical procedures are applicable to the tendering process, too. We ensure fair and open tendering by laying out the ethical conduct that employees are responsible for the process should follow. Unethical behaviours such as collusion with bidders, favouritism towards a bidder and participating in bid evaluation under conflict of interests etc. are strictly forbidden. Such cases are reported to the related authorities once discovered. The Group reserves the right for legal action for its interests. 於本年度,本集團已進行防止賄賂培訓,提高 僱員反貪腐的意識並加強宣導有關情況的妥 當處理方法。為遵守中國經濟及財務法律法 規,本集團根據其戰略目標進行內部審核。通 過規管內部審核,本集團在各層次加強營運 及管理,包括其附屬公司以及增強內部監督 及風險控制。

道德程序亦適用於招標流程。我們通過制定 僱員在招標過程中應遵守的道德操守以確保 招標的公平及公開。嚴禁與投標人合謀、偏袒 另一方及參與有利益衝突的評標等不道德行 為。一旦發現有關案例隨即呈報予相關機構。 本集團保留訴訟權以保護本集團利益。



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Talent Development 人才發展

Panda Green supports the growth of its employees, continues to attract and cultivates talents, strengthens the development of qualified personnel, gradually optimizing our talent structure.

熊貓綠能支持僱員的成長、持續吸引 及培養人才、推動合資格人員的 發展、逐步優化我們的人才結構。



TALENT MANAGEMENT

Panda Green, as a leading global eco-development solutions provider, recognizes talents as one of the most important factors of the Group's long-lasting development. We are committed to attracting and cultivating talents continuously through a comprehensive recruitment process and training programs.

With the philosophy of "respect the value, develop the potential and sublimate the mind", Panda Green embraces diversity. We are aiming to provide a platform for those who are qualified. As one of the industry leaders, Panda Green has attracted capable talents from different backgrounds to join its professional teams. We will continue to engage potential candidates and offer excellent career path to our current employees.

人才管理

作為一家全球領先的生態發展解決方案供應 商[,] 熊貓綠能認為人才乃本集團長期發展的 最重要因素之一。我們持續透過全面的招募 流程及培訓計劃吸引及培養人才。

秉承「尊重價值、開發潛力、升華心靈」的理 念,熊貓綠能擁抱多樣性。我們旨在向合資格 人士提供一個平台。作為行業領軍企業,熊貓 綠能已吸引來自不同背景的能人志士加入其 專業團隊。我們將持續聘請潛在候選人並向 我們當前的僱員提供卓越的職業發展道路。



Employee Training 僱員培訓

The "4+1" training system is established for employees to improve and realize their value for future development

建立「4+1」培訓系統,以提 高及實現僱員價值,為未來 發展做好準備

Career Development 職業發展

We develop and nurture talents through a dual career development channel and promotion mechanism

我們透過雙軌職業發展通道 及晉升機制培訓及培養人才

Talent Pool 人才庫

The talent pool consists of both internal and external talents, which provides a pool of potential candidates and employees for us to engage based on the Group's needs

建立人才庫,覆蓋內部及外 部人才,根據本集團需求,提 供可供我們僱傭的潛在候選 人及提拔的員工



Talents are vital to our continuous growth in the industry. Based on the Group's yearly development strategy, operation goals and yearly developmental plan, we engage potential candidates externally through various recruitment channels, including the internet, recruitment meetings, employees' referrals, headhunting and campus recruitment. We retain the appropriate graduating students from outstanding high schools for preparation as our future management leaders.

To retain high-end talents, the managerial staff recommends suitable and qualified existing employees for key training and priority of promotion. We are aiming to enhance the capacity of our internal talents through nurturing diverse, competent and reliable talents that drive further growth and create value for Panda Green.

Training and Development

Training and education help employees to improve and realize their values, which facilitates further progress in daily work. Therefore, we have allocated resources to establish training programs for staff under the "4+1" training system. We have set clear career development plans for employees at all levels according to two major lines, professional and management. During the year, there were 4,979 person-times that had received training (2016: 5,030 person-times) held by the Group. The average training time per employee by position category is presented in the graph below. As there was a larger proportion of newcomers in 2016 than in 2017, the average training time last year was higher.

人才對我們在行業內的持續增長至關重要。 根據本集團年度發展戰略、運營目標及年度 發展計劃,我們透過多種招募渠道(包括互聯 網、招聘會、僱員轉介、獵頭及校園招聘)吸 引外部潛在候選人。我們聘用合適的名校應 屆畢業生,作為我們的未來管理層幹部的儲 備。

為挽留高端人才,管理層人員推薦合適及合 資格的在職僱員進行重點培養和優先提拔。 我們旨在透過提供員工培訓以提升我們的內 部人才能力水平,致力培養多元化、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。

培訓及發展

培訓及教育有助於僱員提高及實現其價值, 推動日常工作取得新的進展。因此,我們已分 配資源為「4+1」培訓體系下的員工設立培訓 計劃。我們根據兩大主線(即技術及管理)為 各層級的僱員制定明確的職業發展規劃。本 年度,接受本集團組織的培訓人數達4,979人 次(2016年:5,030人次)。下圖呈列按職業類 別劃分的僱員平均培訓時間。由於2016年的 新員工較2017年為多,故去年平均培訓時間 較多。



* The average of mainland China and Hong Kong

為中國內地及香港平均值



The "4+1" system is composed of four training categories, basic, professional, advanced and professional quality training, as well as a points-based training management. The table below indicates the training points requirement for our employees based on their positions. The staff can earn training points by participating in training courses and being internal trainers. The points are one of the factors when considering rewards, performance reviews and promotions.

「4+1」體系由四種培訓類別(即基礎、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。下表展示根據相關職位對僱 員提出的培訓積分要求。員工可透過參與培 訓課程及作為內部培訓講師獲得培訓積分。 積分乃為獎勵、年終績效考核及職位晉升的 考量因素之一。

Annual Training Targets for Our Employees in China and Hong Kong

中國及香港僱員的年度培訓目標

Target Groups 培訓對象	China Operations 中國營運	Hong Kong Operations* 香港營運*
Professional employees and junior management personnel 專業僱員及基層管理人員	20 training points 20點培訓積分	10 training points 10點培訓積分
Power plant operation and maintenance personnel 電站運維人員	20 training points 20點培訓積分	N/A 不適用
Middle to senior management personnel 中高層管理人員	15 training points 15點培訓積分	7.5 training points 7.5點培訓積分



As there are requirements of continuing professional development by professional associations in Hong Kong, the assessment criteria are different among these operations.

由於香港各專業學會對持續專業培訓已有相關規定,我們的評量標準有所不同。



To help newly-joined members to adapt to the working environment, there are two mentorship programs that serve as basic training. The experienced employees are the mentors. For power plant operation and maintenance mentorship programs, the training goals and plans are tailor made for each newcomer based on the position requirements and his or her professional skills. There is a mutual evaluation for both mentors and mentees. Assessment results of the mentees are applied to one of the considerations to salary adjustment and economic rewards for the mentors. We had a two-month training this year for managerial staff in power plants for enhancing personal quality and working performance by peer learning. 為幫助新加入的成員適應工作環境,我們設 有兩項導師計劃作為基礎培訓。經驗豐富的 僱員擔當導師。就電站運維導師計劃而言,將 根據職位要求及各新成員的專業技能,為其 量身定制培訓目標及規劃。導師及學員可相 互評估。學員的評估結果將用於決定導師調 薪及經濟獎勵考量因素之一。於本年度,我們 為電站管理層人員開設為期兩個月的培訓, 透過互相學習以提高個人質素及工作表現。

The First Photovoltaic Operation and Maintenance Personnel Competition 首屆光伏運維人員競賽

To foster a culture of peer learning, there were about 30 operation and maintenance personnel from different regional companies and power plants to join the first competition. During the three-day competition, they needed to utilize their theoretical knowledge and operational techniques to complete tasks. Leaders of the Group raised corrective measures for improvements on the aspects of learning, innovation and competitiveness.

為培養互相學習的文化氛圍,來自不同地區公司及電站約30名運維人員參加是次首屆比賽。在為期三天的競賽中, 他們須使用理論知識及操作技術完成任務。本集團領導人就提高學習、創新及競爭性提出改進措施。





For the general newcomer mentorship programs, experienced employees are responsible to guide the new members in understanding the Group's culture, development strategies, management policies and procedures. There is an evaluation after completion of this one-month training, and the results are evaluated when making decisions on job offer and promotion. The mentorship programs not only assist the newcomers to adapt to our work culture and environment, but also to strengthen the bond between the experienced and the new members.

We have organized position specific trainings for professional employees and power plant operation and maintenance personnel. Our entire professional workforce is required to participate in training sessions for technical skills and knowledge enhancement. In particular, the training for power plant operation and maintenance personnel addresses information on the photovoltaic system and safety, which is formulated every quarter. The three-month training held this year put more focus on technical skills and integrated skills enhancement. The trained employees are considered to contribute to the Group's development particularly on technical issues when we are expanding our business in the future.

We have also established advanced training programs for managerial staff based on the Group's developmental goals, management policies, and major occupational health and safety issues. The purpose of the management trainings is to reinforce management qualities and techniques, especially on safety concerns. We organized a specific training for junior and middle managers this year, aiming at strengthening interactions between different regional companies for more effective learning. For the middle and senior management teams, they receive trainings focused more on leadership skills and operational strategies with an aim to enhancing their management capability. 就普通新成員導師計劃而言,經驗豐富的僱 員有責任指引新成員了解本集團文化、發展 戰略、管理政策及程序。為期一個月的培訓完 成後將對新成員進行評估,有關結果會於作 出工作邀請及晉升決定時予以評估。導師計 劃不僅協助新成員適應我們的工作文化及環 境,亦增進了新舊員工間的關係。

我們為專業僱員及電站運維人員組織崗位專 項培訓。我們全體專業員工須參與有關技術 技能及知識提升的培訓會。特別是,每個季度 舉辦一次對電站運維人員的培訓,討論光伏 系統及安全性。本年度舉辦的為期三個月的 培訓更專注於技術技能及綜合技能的提高。 我們認為,受培訓僱員可在我們未來擴張業 務時為本集團的發展(尤其是在解決技術問 題方面)作出貢獻。

根據本集團發展目標、管理政策及主要職業 健康與安全事項,我們亦已為管理層員工制 定進階培訓計劃。管理層培訓的目的,乃為增 強管理層尤其是安全方面的質素及技術。我 們於年內為基層及中層管理人員組織專項培 訓,旨在加強來自不同地區的公司間的交流, 提高學習成效。就中高層管理層團隊而言,彼 等的培訓更專注於領導力及營運策略,以提 高其管理能力。

"Belt and Road" Strategy Training for Managerial Staff 為管理層員工提供「一帶一路」戰略培訓

On 2 March 2017, all managerial staff, including the CEO and department heads of the Group participated in this training on "National Energy Strategy and International Energy Cooperation". Mr. Zou Yiqiao, former Director of the Department of International Cooperation of National Energy Administration of the PRC, General Consultant for company strategy's on "Belt and Road" and chairman of Strategic Committee of the Company, presented opportunities offered by "Belt and Road" for our further development on renewable energy. Through in-depth analysis of "National Energy Strategy and International Energy Cooperation" issues, Mr. Zou analyzed the situation of international energy cooperation China is facing and pointed out the national strategy and key layout. This training motivated employees to grasp the opportunities adapting to the national trend, contributing to the rapid development of renewable energy.

於2017年3月2日,所有管理層員工,包括首席執行官及本集團各部門主管,參與是次有關「國家能源戰略與國際能源 合作」的培訓。中國國家能源局國際合作司前司長、「一帶一路」公司戰略總顧問及本公司戰略委員會主席鄒逸橋先 生展示了「一帶一路」為我們可再生能源的進一步發展所帶來的機會,深入剖析「國家能源戰略與國際能源合作」問 題,分析中國能源國際合作方面面臨的形勢,引出當前的國家策略與重點佈局。是次培訓激勵員工順應國家趨勢, 把握機遇,為可再生能源飛速發展貢獻力量。



All employees are required to participate in professional quality trainings on problem solving, communication and presentation skills taught by external professional consulting organizations. They can attend the courses through the newly launched online learning system for efficient education. The participants do not only acquire business techniques that facilitate their daily work, but also develop soft skills such as positive mindset for professional competency enhancement. 所有僱員均須參與由外部專業諮詢機構主講 的有關問題解決、溝通及表達能力的專業素 質培訓。員工亦可透過年內新推出的線上學 習系統參與課程,達致有效教學。參與者不僅 能學習經營技術以促進日常工作的開展,亦 能培養軟技能,如對提高專業能力的積極心 態。



During the year, we launched an online learning platform for all employees to facilitate training and education under the "4+1" training system. Complementing face-to-face trainings, there are more than 170 different courses provided on the online platform which ensures that learning is no longer restricted by location and time, especially since our employees are spatially-scattered in different regions. Participants can get the learning materials instantly, receive assessments and check their training points on the online platform. We have received positive feedbacks from our employees with its effectiveness and efficiency in delivering training courses. 年內,我們為全體僱員推出線上學習平台, 推動「4+1」培訓體系下的培訓及教育。線上 平台提供170多種不同的課程作為面對面培 訓的補充,確保培訓不再受區域和時間限制 (尤其是我們分佈在不同地區的僱員)。參與 者可從線上平台即時取得學習材料,進行評 估並且核對培訓積分。我們已收到僱員有關 培訓平台開展培訓課程的效果及效率的正面 反饋。

The Second Operation and Maintenance Meeting and Production Management Training Camp 第二次運維會議及生產管理培訓營

The Group organized a four-day training camp and meeting for 67 production management staff. This training was aimed at enhancing their operation and maintenance management skills through group sharing and promoting team spirit by having face-to-face communication. It is expected such regular meetings will help us work together to better manage each power plant in terms of cost control and talent management.

本集團為67名生產管理員工組織為期四天的培訓營及會議。是次培訓旨在透過不同電站運維人員的面對面交流以 提高運維管理技能並透過團建活動提升團隊精神。定期會議的開展可令我們保持同心協力,更好地在成本控制、人 才管理等方面管理各電站。



The training and education programs consist of internal and external trainings. To monitor the quality of our internal trainers, we have arranged a "train the trainer" education program operated by professional training organizations. When the internal trainers have been qualified, they receive higher economic rewards and certificates for encouragement. Our employees can apply for external training courses related to their departmental needs. The Group believes that training is an effective way to enhance employees' qualities and facilitate career development and therefore, we put in the effort and resources for arranging courses for them. 培訓及教育計劃包括內部及外部培訓。為監 控內部培訓師的質素,我們已安排由專業培 訓機構開展的「培訓講師培訓」教育計劃。當 內部培訓師達致合格標準後,彼等可獲取較 高的經濟獎勵及證書,以資鼓勵。我們的僱員 可申請與部門需求相關的外部培訓課程。本 集團相信,培訓可有效提高僱員質素並促進 職業發展,因此,我們投入精力與資源為彼等 安排課程。



Career Development

We highly encourage our employees to realize their full potential and have subsequently put in place numerous policies designed to develop talents and nurture their professional growth, such as the dual-career development channel and the promotion mechanism.

The Group's management model offers an open working environment. Employees are selected in a fair and just manner such that they are provided with sufficient opportunities to develop. Through the dual-career development channel, our employees can develop themselves in professional and management aspects. There is a transparent career developmental ladder for each aspect and employees can make flexible plans based on the Group's needs, personal qualities and interests. This dualcareer development channel is operated for the purpose of better cultivation of talents.

Employees' passion and contribution is an inexhaustible source for the success of Panda Green. We have a comprehensive promotion mechanism to recognise their efforts and motivate them to keep the same pace with the Group. All levels of employees are assessed from time to time, and the results are considered for salary adjustment, training provision and economic rewards. Those with excellent working performance and developmental potential, as well as good personalities, are provided with promotion opportunities. Internal employees are prioritized to be in charge of overseas projects. It is one of the programs for internal optimization this year.

職業發展

我們高度鼓勵僱員充分發揮潛能,並制定了 許多發展人才及促進專業成長的政策,例如 雙軌制職業發展通道及晉升機制。

本集團的管理模式提供了開放的工作環境, 以公平公正的方式甄選僱員,為僱員提供充 足的發展機會。通過雙軌制職業發展通道,我 們的僱員可選擇在專業或管理方面發展。每 個方面均有透明的職業發展階梯,僱員可根 據本集團的需求、個人質素及興趣制定靈活 的計劃。該雙軌制職業發展通道的運作乃為 更好地培養人才。

僱員的熱誠及貢獻是熊貓綠能成功的不竭動 力。我們有全面的晉升機制以表彰彼等的努 力,並激勵彼等與本集團保持同樣的前進步 調。我們會不時對所有級別的僱員進行評估, 評估結果會作為薪酬調整、培訓提供及經濟 獎勵的考量。具有出色工作表現、發展潛力以 及良好品格的僱員將獲得晉升機會。內部僱 員會被優先考慮負責海外項目。這是今年內 部優化的項目之一。





OCCUPATIONAL HEALTH AND SAFETY

Employees' safety and health is always one of our top priorities. Panda Green advocates a strong safety culture and strives for a zero-harm workplace by encouraging all employees to embrace safety as a personal and collective responsibility.

Safety Governance Structure

We believe that the establishment and implementation of a sound occupational health and safety management system is an important way to care for our employees and therefore, the Group has an internal production safety monitoring policy. Under the policy, the seniors have the responsibility of monitoring the juniors for safety. Also, a three-level safety monitoring management system is established in the Group, for ensuring compliance with the relevant laws and regulations.

We are committed to providing a safe workplace for all employees by gradually attaining OHSAS 18001 Occupational Health and Safety Management Systems certification for our major solar plants, and 17 power plants were certified this year. By strictly complying with employees' safety related laws and regulations, such as the Law of the People's Republic of China on Prevention and Control of Occupational Diseases in China and the Occupational Safety and Health Ordinance in Hong Kong, we ensured that there were no fatalities or working days lost due to work injury, and no reports on violation of relevant laws and regulations in 2017. This is our third consecutive year to achieve the result with zero occupational incidents.

職業健康與安全

僱員的安全及健康始終是我們的重中之重。 熊貓綠能倡導堅固的安全文化,致力通過鼓 勵所有僱員將安全視為個人及集體責任以實 現零危害工作場所。

安全管治架構

我們認為,建立及實施健全的職業健康與安 全管理體系是關愛僱員的重要方式,因此, 本集團制定內部安全生產監控政策。在該項 政策下,高級僱員有責任監督初級僱員的安 全。此外,本集團亦設立三級安全監控管理系 統,以確保遵守有關法律法規。

我們致力為全體僱員提供一個安全的工作 場所,逐步就我們的主要太陽能電站取得 OHSAS 18001職業健康安全管理體系認證, 且今年有17座發電站獲得認證。通過嚴格遵 守有關僱員安全的法律法規(例如《中華人 民共和國職業病防治法》及《香港職業安全 及健康條例》),我們確保於2017年概無任何 因工死亡或損失工作日之情況及無相關違反 法律及法規的報告。這是我們連續第三年取 得零職業事故的成績。





The Three-level Safety Monitoring Management 三級安全監控管理系統 System

The Safety Production Department of the operating headquarter is responsible for formulating safety-related policies for the Group, including but not limited to issues related to fire prevention, electric shock prevention, working at height and working with lifting appliances. The Safety Production Departments of regional companies are responsible for implementing the regulations and monitoring the power plants' daily operations, while safety technicians of each of the power plants have to strictly follow the safety regulations. In 2017, we were not aware of any material noncompliance of laws and regulations that have a significant impact on the Group relating to occupational health and safety.

Safety Monitoring Measures

Panda Green is dedicated to cultivating the safety culture so that the awareness of our employees is improved. The Group places priority on prevention and proactively conducts safety monitoring measures to minimize the risk of occupational incidents. 運營總部的安全生產部門負責制定本集團的 安全相關政策,包括但不限於消防措施、防止 觸電、高空作業及起重機作業等相關事宜。區 域公司的安全生產部門負責執行規定並監控 電站的日常運行,而各電站的安全技術人員 必須嚴格遵守安全規定。於2017年,我們並不 知悉有任何嚴重違反對本集團職業健康與安 全有重大影響的法律及法規。

安全監控措施

熊貓綠能致力於培養安全文化,以提高僱員 的意識。本集團重視預防工作,積極採取安全 監控措施,以儘量降低職業事故風險。



As we continue to grow, we are persistently making efforts in safety hazards prevention. Potential safety and security issues related to solar power plants built in recent years have been under effective control. The Group has evaluated and identified existing safety hazards in its power plants, which are categorized into natural, technical, installation, human and material risks. Corresponding measures are implemented during stages of research, design, manufacture and operation and maintenance. For example, the "two tickets", which are "task approval" and "procedure approval", provide the workflow and standard for monitoring working procedures in different processes.

During the operation and maintenance stage, a series of standardized procedures are listed clearly on the "work shifting system", and our employees are required to follow it strictly whether off-duty or on-duty. Also, we have a series of safety routine work which involve a three-level monitoring, aiming to raise our employees' awareness of occupational safety issues. 隨著我們不斷發展壯大,我們一直努力做好安 全隱患預防工作。近年建造太陽能電站產生的 潛在安全及安保問題已得到有效控制。本集 團已評估並確定其電站的現有安全隱患,可 歸類為自然、技術、安裝、人為及材料風險, 並已於研究、設計、製造及運維階段實施相應 的措施,例如,「工作票」及「操作票」組成的 「兩票制」,為監控不同流程中的工作程序提 供了工作流程和規範。

於運維層面,「交接班制」清晰地列出了一系 列標準化程序,我們的僱員不論是休班或值 班都必須嚴格遵守。此外,我們還開展了一系 列涉及三級監控的日常安全工作,旨在提高 僱員對職業安全問題的意識。





Safety Hazards Prevention Measures by Stages

不同階段的安全隱患預防措施

Stages 階段	Research 研究	Design 設計	Procurement 採購	Operation & Maintenance 運維
Prevention measures 預防措施	 Local meteorological stations consultation 諮詢當地氣象台 Site visit inspection 現場考察 	 Anti-corrosive, fire-preventive design 防腐、防火設計 Desert-areas adaptive design: anti-corrosive, wind-and heat-resistant 沙漠地區適應性設計:防腐、防風及耐熱 Topographical adaptive design 地形適應性設計 	 Strict quality control 嚴格的質量控制 Comprehensive monitoring policy and system 全面的監控政策及制度 	 Regular checking 定期檢查 Real-time monitoring 實時監控 Operation & maintenance personnel regular training 運維人員定期培訓
Areas of safety hazard 安全隱患領域	Natural 自然 Wind storm 風暴	Atural & Technical 自然及技術	Installation 安裝	Human & Material 人為及材料 Muman-induced fire 人為火災
	Flooding 洪水			Cracking of the base 底座裂開



We understand that employees at power plants are exposed to a certain level of risk of electric shock and therefore, policies for monitoring the procurement, usage and storage of equipment are established. Under the regulations, operation and maintenance personnel are required to wear personal protective equipment provided, while the Human Resources and Administrative Department has the responsibility to monitor the usage of these equipment periodically. Also, we provide safety apparatus including insulated equipment and general protective apparatus, especially for employees working on inspection and maintenance of electrical circuits. When the operators discover any damages of facilities, they should report the issues to their supervisors and regional companies immediately. To ensure smooth operation of facilities and equipment, the Group has established "rotating systems of regular equipment testing" and "patrol inspection system". The power plant operation and maintenance personnel are required to inspect and test the equipment by following the procedures stated in these regulations, so that the chances of damages of equipment are greatly reduced.

我們了解電站的僱員存在一定程度的觸電風 險,因此制定了監控設備採購、使用及儲存的 政策。根據規定,運維人員必須佩戴獲提供的 個人防護設備,而人力資源和行政部門有責 任定期監控該等設備的使用情況。此外,我們 還提供包括絕緣設備及一般保護裝置在內的 安全設備,特別是對從事電路檢查及維護的 僱員。當操作者發現設施損壞時,應立即向主 管及區域公司報告。為保證設施及設備運行 暢順,本集團建立「定期設備試驗輪換制」及 「巡迴檢查制」。電站運維人員必須按照本規 定訂明的下列程序對設備進行檢查及測試, 以大幅降低設備損壞的可能性。



Safety Work Routinely Conducted

日常安全工作



In addition to installation of fire detection and alarm systems in all our power plants according to the national code, the Group has set up fire-fighting systems in the office premises. We have organized corresponding emergency teams for handling fire and electricity shock at the operating headquarters. We have also established an emergency contingency plan for anti-terrorism in Xinjiang, including setting up a specific team. There are drills for these accidents annually for raising employees' consciousness. We have implemented site-specific monitoring and handling measures for protecting our staff.

To further inspire and motivate our employees to care for self and others to achieve a zero-harm workplace, the Group has implemented an economic responsibility system for its daily operations. All employees are required to strictly follow the safetyrelated governmental laws and the Group's regulations. We have a points-based evaluation system for assessing safety performance periodically. If they cannot pass the evaluation, the responsible person will receive a warning and will need to resolve the problems within an assigned period of time. They may be punished with position readjustment in case of serious cases. Those with outstanding safety performance will receive economic rewards and will be appraised. It is hoped that the employees' awareness of workplace safety will be enhanced through punishment and reward system.

Safety Inspection and Evaluation

The Group continuously evaluates and identifies safety hazards during the operations to minimize the risk of occupational health and safety. To evaluate the level of risks facing, every department has to form a risk evaluation team for conducting assessment. For those not complying with applicable laws and regulations, or not taking corrective measures after identifying risks, we will classify them as risky operations. For potentially dangerous operations, we evaluate them based on operating conditions risk assessment method. The Safety Operation Department is responsible for adopting corrective measures once the operations with significant risks have been identified, which are recorded for future reference. We have a re-evaluation whenever there are changes in governmental laws and regulations or the Group's safety goals, to ensure we are complying with all the relevant laws. 除根據國家法規在所有電站安裝火災探測及 報警系統外,本集團已於各辦公室設立了消 防系統。我們已於運營總部安排相應的應急 小組以處理火災及電擊事故。我們亦已於新 疆制定一套反恐緊急應變計劃,包括成立一 支特定小組。為提高僱員的意識,每年都會進 行針對該等事故的演習。我們已實施針對特 定地點的監控及處理措施,以保護我們的員 工。

為進一步激發及激勵僱員關心自我及他人以 實現零危害工作場所,本集團已就日常運營 實施經濟責任制。所有僱員必須嚴格遵守安 全相關的政府法律及本集團規定。我們有一 套基於積分的評估系統定期評估安全表現。 倘彼等未能通過評估,負責人會收到警告,並 需在指定的時間內解決問題。案件嚴重的情 況下,彼等可能會受到職位調整的處罰。具有 出色安全表現的人員會獲得經濟獎勵並受到 鼓勵。我們希望通過獎懲制度提高僱員的工 作場所安全意識。

安全監督與評估

本集團持續評估及辨識營運過程中的安全隱 患,致力將職業健康與安全風險降至最低。為 評估面臨的風險水平,各部門需成立風險評 估小組,負責進行評估工作。我們將不符合適 用法律法規或識別風險後未採取糾正措施的 情況,歸類為危險作業。對潛在的危險作業, 採取作業條件危險性評價法進行評估。對發 現屬重大的危險作業,由安全生產部門負責 採取糾正措施,並對有關情況進行記錄以供 日後參考。我們會在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 我們遵守所有相關法律。



Safety Training

Adhering to the "safety first" principle, the Group provides safety training courses and examinations regularly to enhance our employees' knowledge, skills and most importantly, awareness. In 2017, 97% of our total workforce received relevant safety training and education, which represented 978 person-times and 1,121 training hours.

The Group organizes different training courses according to the positions of the employees. New production staff is required to pass the three-level safety education before working on-sites. Training topics include safe-working regulations, potential on-site dangers and their preventive measures. The new operation and maintenance staff can commence duty only after they pass the on-site examinations. For the transferees and in-service employees, trainings and assessments are provided to ensure their understanding on the new positions' safety requirements and the latest relevant laws and regulations. All courses are aided with audio and past experience as case studies, for a higher effectiveness in safety awareness enhancement.

安全培訓

本集團堅持「安全第一」的原則,定期開展安 全培訓及考核,以提高員工的知識、技能以及 意識。於2017年,97%的員工已接受相關安 全培訓及教育,共開展培訓978人次,培訓時 數達1,121小時。

本集團針對員工的崗位設置不同的培訓課 程。新招聘的生產崗位人員須通過三級安全 教育後才能上崗。培訓課題包括工作安全規 定、潛在工作危險及相關預防措施。新招聘的 運維人員須通過現場考核後才能上崗。調崗 及在職人員須接受培訓及考核,以確保了解 新崗位的安全要求及最新的相關法律法規。 所有課程均輔以音頻教學及過往經驗案例研 究,以更有效地提高員工的安全意識。



Drill on Emergency Handling 應急處理演習

Drills are regularly organized on occupational health and safety issues, for example, fire, food poisoning, electric shocks, falling from height, etc. The Emergency Handling Team evaluates and proposes improvements based on the performance in the drills. Every department in the Group keeps a close connection with local government departments.

定期開展針對職業健康與安全問題的演習,例如火災、食物中毒、電撃、高空墜落應急演習等。應急處理小組對演 習中的表現進行評估及提出改進建議。本集團各部門與當地政府部門保持密切聯繫。 64

OUR PEOPLE

Panda Green is committed to developing a motivated and united workforce to drive further growth by valuing their contribution, adhering to fair employment practices and offering competitive remuneration packages.

Employee Composition

Panda Green employs 459 full-time staff, of which 51 or 11.1% are based in Hong Kong and 408 or 88.9% are based in mainland China. The proportion of male and female employees is 76.5% and 23.5% respectively. Among newcomers, the female staff accounted for 23.3% of the total, slightly higher than 2016 (19.2%). We value the career development of young people and actively provide them with employment opportunities. Among all our employees, almost 47% and 41% are aged between 31 and 40 years and below 31 years respectively. In terms of educational profile, approximately 60% of the employees have tertiary qualifications and above. Of these, 46.6% hold a bachelor's degree, 13.3% have a master's degree and 0.4% have doctorate qualifications. Our dedicated workforce comprises of 2.4% senior management team, 12% middle management team, and the rest is our general staff.

員工

熊貓綠能重視員工的貢獻、實踐公平的僱傭 慣例並提供具競爭力的薪酬待遇,致力建立 積極進取、團結合作的員工隊伍以助力進一 步發展。

僱員組成

熊貓綠能共僱用459名全職員工,其中51名 (或11.1%)位於香港及408名(或88.9%)位 於中國內地。以性別劃分,男性及女性員工分 別佔比76.5%及23.5%。新員工中,女性員工 佔23.3%,略高於2016年的19.2%。我們重視 青年職業發展,積極為青年提供就業機會。 全部員工中,31至40歲及31歲以下的員工比 例分別接近47%及41%。以教育程度劃分, 約60%員工為本科或以上學歷,其中46.6% 為學士學位,13.3%為碩士學位,0.4%為博 士學位。僱員中2.4%為高層管理人員,12% 為中層管理人員,其餘為普通員工。



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In 2017, the overall employee turnover rate at Panda Green was 8% or 39 people, which is much lower than that in 2016, 33.8% or 94 people, of which about 95% resigned voluntarily. The overall new hire rate is 42%, including 2 male and 1 female ethnic minority employees. The distribution of turnover and new hire rates by gender and age categories are presented in charts below.

於2017年,熊貓綠能的員工流失比率為8% (或39人),遠低於2016年的33.8%(或94 人),其中約95%為自願離職。整體新招聘員 工比率為42%,其中包括2名男性及一名女性 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。







Employees' Rights and Welfare

To ensure equal employment opportunity and prevent from all kinds of discrimination against any employees, we strictly comply with the Labour Law of the People's Republic of China, the Labour Contract Law of the People's Republic of China, and the Employment Ordinance, the Employees' Compensation Ordinance, the Sex Discrimination Ordinance, the Disability Discrimination Ordinance and other anti-discrimination ordinances in Hong Kong, and other relevant local laws and regulations in places with operations. During the year under review, we were not aware of any non-compliance relating to labour practices that have a significant impact to the Group, nor cases of hiring child and forced labour.

The Group strives to provide a working environment free from harassment and we treat all employees with dignity and respect. We have zero tolerance on any forms of discrimination, on grounds such as age, gender, marital status, sexual orientation, race, religion, disability, or political background. We also take rigorous measures to prohibit child and forced labour in our business. All labour contracts are formulated based on mutual agreements between the Group and the employees. There was no cases on violation of labour-related laws and regulations reported in 2017.

Besides, in order to retain talents and recognize their contribution to the Group, we offer competitive remuneration packages for our employees. These include basic salary and performance bonus. Employees are remunerated according to the nature of their positions, work performance, individual qualifications and experiences and market trends, with merit incorporated in the annual remuneration review to reward and motivate individual performance.

The working hours and rest periods of our PRC's employees are established based on the Labour Law of the People's Republic of China, the Regulation on Paid Annual Leave for Employees and the Regulation on Public Holidays for National Annual Festivals and Memorial Days.

We provide welfare to employees in all operating locations at levels not lower than the statutory requirements. Apart from the statutory benefits, the Group also offers additional welfare such as free annual health checks, cash subsidies and benefits, subsidised leisure activities and other extra benefits. About 95% of our employees enjoyed the health checks and received corresponding advice based on their physical examination results.

員工權益與福利

為確保為員工提供平等的就業機會及杜絕一 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,以及我們經營所在地區的其他 當地法律法規。於回顧年度內,我們並無獲悉 任何違反對本集團有重大影響的勞工常規的 情況,亦無發現僱用童工或強制勞工的案件。

本集團努力創造無騷擾的工作環境,以顧及 尊嚴及尊重的態度對待所有員工。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。我們亦採取嚴格的措施防止在業務經 營中使用童工及強制勞工。所有勞動合同均 基於本集團與員工雙方的約定訂立。於2017 年,並無接獲有關違反勞工規定的報告。

此外,為延攬人才及肯定員工對本集團的貢 獻,我們為員工提供具競爭力的薪酬待遇。員 工薪酬包括基本薪金及目標績效獎金。員工 薪酬乃根據職位性質、工作表現、個人資歷和 經驗及市場趨勢釐定,並於每年薪酬檢討時 考慮勞績,以獎勵及激勵個人表現。

我們的中國員工的工作時間和休息休假均按 《中華人民共和國勞動法》、《職工帶薪年休 假條例》和《全國年節及紀念日放假辦法》 所訂立。

我們亦按照經營所在地的規定為員工提供不 低於法定水平的福利。除法定福利外,本集團 亦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,約95%的員工已享受健康檢查及根據體 檢結果獲得健康諮詢。



Employee Communication

Our continuous growth is mainly driven by the contribution of our dedicated and professional talents. Fostering a culture of innovation through collaboration, we encourage employees to initiate new ideas to the Group.

To establish an effective grievance mechanism for reporting any employment issues, we promote an open communication environment where employees can directly raise any concerns with their supervisors through different channels, such as email and WeChat. Employees can get extra bonus if their suggestions regarding the Group's development and governance are adopted. Through this mechanism, we are able to maintain mutual communication between the Group and the workforce.

Recognizing that work-life balance promotes a motivated and dedicated workforce, Panda Green continues to drive initiatives that care for employees and enrich their leisure life. These activities not only help them relieve from stress, but also bolster organization cohesiveness.

員工溝通

我們的持續增長主要有賴於敬業而專業的人 才隊伍。為培養鼓勵合作創新的文化,我們設 有針對性的措施,鼓勵員工向本集團提出新 想法。

我們致力打造開放的溝通環境,建立有舉報僱 備問題的申訴機制,員工可透過郵件及微信 等多種渠道直接向主管提出任何關注。員工 提出的有關本集團發展及管治的意見如獲採 納,可獲得額外獎勵。通過建立這些平台,我 們成功維持本集團與員工之間的相互溝通。

我們深知維持工作與生活平衡對打造積極進 取、熱誠敬業的員工隊伍至關重要。我們持續 推行關愛員工、豐富員工業餘生活的活動,幫 助員工緩釋工作壓力,同時提高企業凝聚力。





Annual Meeting and Annual Dinner

In the annual meeting and the annual dinner, we reviewed the achievements in business development and social responsibilities in 2017, and awarded certain outstanding employees from different regional companies and departments and expressed thankfulness to all our employees for their hard work. They had a great time and the bonding within the Group was strengthened.

年度工作會議及年度晚宴

我們為員工舉辦了年度會議及年度晚宴,藉 機回顧我們在2017年中業務發展和社會責任 方面的成果,表彰各個區域公司、部門的優秀 員工,並感謝員工們年內的辛勤工作。員工度 過了愉快的時光,同時亦加強了集團內部的 凝聚力。



Annual Meeting 年度會議





International Women's Day

We celebrated the International Women's Day with our female staff. All female staff in Hong Kong received fragrance as presents and those in mainland China enjoyed a half-day statutory holiday.

國際婦女節

我們與女性員工共同慶祝國際婦女節。香港 公司的全體女性員工收到香薰禮包,而中國 內地公司的女性員工享受法定半日假期。



Team Building Activities

The Group has provided various team-building opportunities to its workforce in mainland China, such as sailing training, which brings better understanding among the team to promote cooperation in work.

團建活動

本集團為中國內地的員工提供帆船培訓等豐 富的團建活動,有效加深團隊默契,促進日後 更好的工作配合。

> Greenhouse planting 溫室種植







Environmental protection charity activity 公益環保活動



Leisure Activities

Employees have actively participated in different kinds of activities including badminton and basketball, watching movies and playing games. They are not only being relieved from stress, but also establishing a harmonious relationship among the colleagues.

休閒活動

員工積極參與我們組辦的羽毛球及籃球等體 育活動、觀賞電影及開展遊戲等各種活動。透 過多樣的休閒活動,讓員工在工作之餘放鬆 身心,同時促進同事間的融洽關係。



Playing games 遊戲活動

Movie-watching 電影觀賞活動


Long-term Service Award and Excellent Staff Award

Panda Green would not have been successful without the contribution from our dedicated teams. Therefore, we are pleased to convey our sincere thanks to the talents and those who have served in the Group for years.

長期服務獎及優秀員工獎

熊貓綠能的成功離不開團隊的竭誠奉獻。因 此,我們向表現出色的優秀員工及為集團服 務多年的員工頒發獎項,答謝他們對本集團 的貢獻。







Excellent Staff Award 優秀員工獎



Onboarding Anniversary Celebration 入職週年慶祝會



Community Care 關懷社區

Panda Green is committed to giving back to the communities where we have operations, striving to create shared value. We always adhere to the concept of bringing positive change to the local economy, environment and communities by actively taking advantage of our own technical and resource-related superiority.

熊貓綠能致力於回饋其營運所在的社區,努力創造 共享價值。我們利用自身於技術及資源相關的優勢, 貫徹為當地經濟、環境及社區帶來正面改變的理念。



GIVING BACK TO THE COMMUNITIES

The Group is committed to supporting domestic communities where we have operations. While we have been focusing on environmental protection charity activities, we aim to align corporate social responsibility with our core business by promoting youth education on fighting climate change as we believe teenagers are the owners, users and policy makers of the environment in the future. Their growth has always been a key issue in the long-term development agenda in China and around the world.

Youth Leadership for Climate Action

In the mid-August of 2017, Panda Green organized the Youth Leadership Summer Camp for Climate Action (the "Camp") collaborated with the UNDP. Located in the first Panda Power Plant, in Datong, Shanxi, the Camp is a platform to promote youth innovation and foster the future climate action leaders, while every country is paying attention to combating climate change.

The newly adopted giant panda, Qiyi, the mascot of the Group, was selected as the active animal ambassador of the Camp. It is desired that the consciousness on environmental issues among young people can be enhanced. Fifty teenagers from all over the country including Hong Kong and Macau regions spent 9 days together. They learnt about climate change and green energy innovation progress through the sharing from the energy and technology leaders such as the officers from the UNDP and the environmental protection department of China.

回饋社區

本集團致力於支持其營運所在的當地社區。 我們一直專注於環境保護慈善活動,目標是 將企業社會責任與我們的核心業務相結合, 對青少年開展應對氣候變化的宣傳教育,此乃 由於我們深信青少年是未來的環境所有者、 使用者及政策制定者。彼等的成長始終是中 國乃至世界長期發展議程的關鍵議題。

培養未來氣候行動領袖

於2017年8月中旬,熊貓綠能攜手與聯合國開 發計劃署組織「培養未來氣候行動領袖」夏令 營(「夏令營」)。夏令營位於山西大同的首座 熊貓電站,是一個提升年輕人創新意識及培 養未來氣候行動領袖的平台,契合當下世界 各國關注應對氣候變化的形勢。

本集團新近認養大熊貓「奇一」作為其吉祥 物,並獲選為夏令營的活潑動物大使,希冀其 能夠提升青少年有關環境問題方面的意識。 來自包括港澳在內的全國各地的五十名青少 年共聚9天時光,彼等通過聯合國開發計劃署 及中國環保部門官員等能源及技術領導的分 享介紹,了解到氣候變化及綠色能源創新過 程的知識。





Also, there were several interactive workshops to cultivate a stronger sense of responsibility to combat climate change and develop their soft skills such as innovative thinking, organization ability, teamwork capability and communication skills. To encourage teenagers' innovative thinking, we hope to adopt the power plant designs drawn by the participants which are considered as the suitable ones. The Camp not only provides learning opportunities to the young generation, but also cultivates them into climate action leaders.

此外,我們舉辦數次互動研討會,加深培養應 對氣候變化的責任意識,並開發彼等有關創 新思維、組織能力、團隊合作學習及溝通技巧 等軟技能。為鼓勵青少年進行創新,參與者繪 製其理想的電站設計,而我們希望從中採納 合適的設計。夏令營不僅為年輕一輩提供學 習機會,更將彼等培育為氣候行動的領袖。





Other Charitable Initiatives

During the year, the Group has made donations of approximately RMB3 million, which is almost four times of that in 2016 (RMB800,000). It includes facility donations to the Yongren Prefecture for Promotion of the Guangcai Program, which is an association for poverty alleviation in mainland China. We not only subsidized the charitable events, but also visited the villagers in Tibet to send staple food.

其他慈善活動

年內,本集團捐贈約人民幣3百萬元,約2016 年(人民幣800,000元)的四倍,其中包括為 永仁縣光彩事業促進會(中國內地的扶貧組 織)捐贈的設備。我們不僅為慈善活動出資, 亦探訪西藏村民並贈送主食。



Donations to the Yongren Prefecture for Promotion of the Guangcai Program 為永仁縣光彩事業促進會捐資

We encourage our employees to actively participate in charitable activities. The employees in Shenzhen and their family members joined an environmental conservation activity for garbage cleaning along the Merlin Reservoir, an example of protecting the environment to our next generation. Our staff in Hong Kong joined the walkathon of Volunteer Space in March 2017. The donations collected were used for subsidizing poverty alleviation programs in China and overseas. We are committed to supporting society and co-developing with the communities to achieve sustainable development. In the future, we will put more effort on community investment. 我們鼓勵僱員積極參與慈善活動。深圳的員 工及彼等之家庭成員參與清理梅林水庫周邊 垃圾的環保活動,為下一代樹立保護環境的 榜樣。香港的員工亦於2017年3月參加無國界 義工的慈善步行籌款,比賽所收捐款用於資 助中國及海外的扶貧項目。我們致力於支持 社會並與社區共同發展,以望實現可持續發 展。未來,我們將對社區投資作出更多努力。



An environmental conservation activity in Shenzhen 深圳環保活動

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Performance Data Summary 績效數據摘要

		Unit 單位	2017 2017年	2016 2016年
	Total Headcount 總人數		459	305
	By Geographical Distribution (full-time) 按地理分佈 (全職)			
	Hong Kong 香港		51	41
	Mainland China 中國內地		408	264
	By Age 按年齡			
	<31		(41.0%) 188	(44.9%) 137
Workforce	31-40		(47.0%) 216	(44.9%) 137
Demographics	≥41		(12.0%) 55	(10.2%) 31
僱員統計	By Gender 按性別			
	Male 男性		(76.5%) 351	(76.1%) 232
	Female 女性		(23.5%) 108	(23.9%) 73
	By Gender (Senior Management Team) 按性別 (高級管理團隊)			
	 Male 男性		(72.7%) 8	(66.7%) 8
	Female 女性		(27.3%) 3	(33.3%) 4



		Unit 單位	2017 2017年	2016 2016年
	By Educational Background 按教育背景			
	Doctor 博士		(0.4%) 2	(0.7%) 2
	 Master 碩士		(13.3%) 61	(16.1%) 49
	Bachelor 學士		(46.6%) 214	(47.9%) 146
	Non-tertiary qualification and below 大專 (及以下) 學歷		(39.7%) 182	(35.3%) 108
Workforce	By Employee Category 按僱員類別			
Demographics 僱員統計	General staff 普通員工		(85.6%) 393	(82.3%) 251
	Middle management team 中級管理團隊		(12.0%) 55	(13.8%) 42
	Senior management team 高級管理團隊		(2.4%) 11	(3.9%) 12
	Employee Turnover Rate (Retirement and Contract Termination) 僱員流失率 (退休及合約終止)			
	Male 男性		0.0%	0.0%
	Female 女性		0.9%	0.0%

		Unit 單位	2017 2017年	2016 2016年
	Employee Turnover Rate (Resignation) 僱員流失率(辭任)			
	Male 男性		7.7%	15.19
	Female 女性		9.3%	35.6%
	Employee Turnover Rate (Dismissed) 僱員流失率 (解僱)			
	Male 男性		0.3%	8.6%
Workforce Demographics	Female 女性		0.0%	17.89
僱員統計	New Hire Employees by Age 新聘員工 [,] 按年齡			
	<31		(45.1%) 87	
	31-40		(42.0%) 81	
	≥41		(12.9%) 25	
	New Hire Employees by Gender 新聘員工 [,] 按性別			
	Male 男性		(76.7%) 148	(80.8%) 15
	Female 女性		(23.3%) 45	(19.2%) 3



		Unit 單位	2017 2017年	2016 2016年
	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%
Workforce Demographics 僱員統計	Number of Ethnic Minority Employees by Gender 少數民族僱員人數 [,] 按性別			
	Male 男性		2	0
	Female 女性		1	1
	Total 總計		(0.65%) 3	(0.33%) 1



		Unit 單位	2017 2017年	2016 2016年
	Employees Training 僱員培訓 Percentage of Employees Trained by Gender 受訓僱員比例 [,] 按性別			
	Male 男性		78%	-
	Female 女性		75%	_
Employees	Percentage of Employees Trained by Function 受訓僱員比例 [,] 按職能			
Training 僱員培訓	General staff 普通員工		78%	-
	Middle management team 中級管理團隊		81%	-
	Senior management team 高級管理團隊		36%	-
	Employees Average Training Hour by Gender 僱員受培訓平均時數 [,] 按性別	S		
	Male 男性	Hours 小時	18	26
	Female 女性	Hours 小時	9	10



		Unit	2017	2010
		Unit 單位	2017 2017年	2016 2016年
	Employees Average Training Hou	Irs		
	by Function			
	僱員受培訓平均時數 [,] 按職能			
	General staff	Hours	17	29
	普通員工	小時		
	Middle management team	Hours	14	18
	中級管理團隊	小時		
	Senior management team	Hours	6	14
	高級管理團隊	小時		
	Number of Employees Training			
	by Gender			
	受培訓僱員人次 [,] 按性別			
	Male	Person-times	4,431	4,035
Employees	男性	人次		
Training 僱員培訓	Female	Person-times	548	995
准实力则	女性	人次		
	Number of Employees Training			
	by Function			
	受培訓僱員人次,按職能			
	General staff	Person-times	4,628	4,317
	普通員工	人次		
	Middle management team	Person-times	312	642
	中級管理團隊	人次		
	Senior management team	Person-times	39	71
	高級管理團隊	人次		
	Total Employee Training Cost	RMB	996	2,036
	(Per person)	人民幣		
	僱員培訓成本總額(每人)			



		Unit 單位	2017 2017年	2016 2016年
	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
Health and Safety	Number of fire accidents 火災事故數量		0	0
健康與安全	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 checkup 接受健康檢查的僱員比例		95%	100%



		Unit 單位	2017 2017年	2016 2016年
	Education on Occupational Safety and Health 職業健康與安全教育			
Health and Safety	Total person-times training 培訓總人次		978	1,091
健康與安全	Total training hours 培訓總時數		1,121	130
	Percentage of employees trained 受培訓僱員比例		97%	100%
	Total Resources Consumption in Offices 辦公室總資源消耗量			
	Electricity 電力	kWh 千瓦時	511,320	463,439
	Gasoline 汽油	Litres 公升	16,680	16,400
	Water 水	Tons 噸	1,118	1,143
Environment 環境	Total Resources Consumption in Power Plants 電站總資源消耗量			
	Electricity 電力	kWh 千瓦時	19,501,964	8,893,050
	Natural gas 天然氣	m³ 立方米	4,865	5,106
	Gasoline 汽油	Litres 公升	116,507	119,717
	Diesel 柴油	Litres 公升	5,506	2,999
	Water 水	Tons 噸	11,929	5,031

		Unit 單位	2017 2017年	2016 2016年
	Total Energy Consumption in Office and Power Plants 辦公室及電站總能源消耗量	s GJ 千兆焦耳	76,679	38,327
	Energy intensity 耗能強度	GJ per GWh electricity generated 千兆焦耳/每千兆	36.3	28.5
	Total Water Consumption in Offices and Power Plants 辦公室及電站總用水量	瓦時發電量 Tons 噸	13,047	6,174
Environment 環境	Water intensity 用水強度	Tons per GWh electricity generated 噸/每千兆瓦時發 電量	6.2	4.6
	Emissions 排放物 Air Pollutant ⁷	七王		
	大氣污染物 ⁷ Sulfur Oxides ("SOx") 硫氧化物(「硫氧化物」)	kg 公斤	2.0	-
	Nitrogen Oxides ("NOx") 氮氧化物(「氮氧化物」)	kg 公斤	447.1	_
	Particulate Matter ("PM") 懸浮微粒(「懸浮微粒」)	kg 公斤	40.6	_

⁷ 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 Particulate Emission Factor Model—MOBILE6.1.

⁷ 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夥粒排放系數模式一MOBILE6.1計算。



		Unit 單位	2017 2017年	2016 2016年
	Waste 廢棄物			
	Solar panels 太陽能電池板	Tons 噸	14.59 (recycled) (已回收)	8.51
	Hazardous waste 有害廢棄物	Tons 噸	0.87	-
	Intensity 強度	kg per GWh electricity generated 公斤/千兆瓦時 發電量	0.4	-
Environment	Waste circuit board 廢電路板	Tons 噸	0.21	-
環境	Waste oil 廢油	Tons 噸	0.66	_
	Non-hazardous waste 無害廢棄物	Tons 噸	86.18	57
	Intensity 強度	kg per GWh electricity generated 公斤/千兆瓦時 發電量	40.7	42.4
	Recyclable waste 可回收廢棄物	Tons 噸	23.40	15
	Non-recyclable waste 不可回收廢棄物	Tons 噸	62.78	42

		Unit 單位	2017 2017年	2016 2016年
	Greenhouse Gases Emissions and Intensity 溫室氣體排放量及強度			
Environment	GHG emissions 溫室氣體排放	tCO₂e 噸二氧化碳當量	14,344	6,551 ⁸
	Scope I 範圍—	tCO₂e 噸二氧化碳當量	379	382 ⁸
	Scope II ⁹ 範圍二 ⁹	tCO₂e 噸二氧化碳當量	13,964	6,169
	Emission intensity 排放強度	tCO ₂ e Per GWh electricity generated 噸二氧化碳當量/ 千兆瓦時發電量	6.8	4.9
環境	Environmental Benefits 環境效益			
	Total photovoltaic electricity generation 總光伏發電量	MWh 兆瓦時	2,072,315	1,345,830
	Total wind power electricity generation 總風力發電量	MWh 兆瓦時	42,938	-
	Equivalent to standard coal saved 相當於節約標準煤	Tons 噸	700,000	444,124
	Equivalent to carbon dioxide emission reduced 相當於減少二氧化碳排放	Tons 噸	1,815,000	1,154,722

⁸ The figure was rectified to ensure comparability.

8 此數據經修改以確保可比性。

⁹ 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.

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。



		Unit 單位	2017 2017年	2016 2016年
	Equivalent to sulfur dioxide emission reduced 相當於減少二氧化硫排放	Tons 噸	17,557	11,170
	Equivalent to nitrogen oxides emission reduced 相當於減少氮氧化物排放	Tons 噸	16,287	10,363
Environment 環境	Equivalent to soot emission reduced 相當於減少煙塵排放	Tons 噸	1,058	673
	Equivalent to number of trees planted 相當於種植樹木數目	Million 百萬	99.2	63.1
	Equivalent to number of household's electricity consumption in a year 相當於居民一年用電量之用戶數目		1,175,000	748,000
Community 社區	Donation 捐贈	RMB'000 人民幣千元	3,000	800

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 説明	Page Number/ Remarks 頁碼/備註
Organizational Profile 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.4-11 第4至11頁
	102-3	-	Location of headquarters 總部位置	Annual Report P.8-9 年報第8至9頁
	102-4	-	Location of operations 營運位置	Annual Report P.10 年報第10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.135 年報第135頁
	102-7	_	Scale of the organization 組織規模	Annual Report P.8-10 年報第8至10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.64-65 第64至65頁
	102-9	B5.1	Supply chain 供應鏈	P.40-43 第40至43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.26-28 第26至28頁
	102-12	-	External initiatives 外部倡議	P.8-9 第8至9頁
	102-13	_	Membership of associations 協會的成員資格	P.39 第39頁



Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 説明	Page Number/ Remarks 頁碼/備註
Strategy 策略	102-14	-	Statement from senior decision-maker 高級決策者報告	P.12-15 第12至15頁
Ethics and Integrity 商業倫理與誠信	102-16	-	Values, principles, standards, and norms of behaviour 價值、原則、標準及行為規範	P.44-47 第44至47頁
Governance 管治	102-18		Governance structure 管治架構	Annual Report P.45 年報第45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.20-23 第20至23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	-	ldentifying and selecting stakeholders 利益相關方的識別和遴選	P.17-18 第17至18頁
	102-43	-	Approach to stakeholder engagement 利益相關者參與方針	P.20-23 第20至23頁
	102-44	_	Key topics and concerns raised 提出的主要議題和關切問題	P.20-23 第20至23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.148-152 年報第148至152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.18-19 第18至19頁
	102-48	_	Restatements of information 信息重述	P.86 第86頁
	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 説明	Page Number/ Remarks 頁碼/備註
	102-51	-	Date of most recent report 最近報告日期 Reporting cycle	25/July/2017 2017年7月25日 P.3
	102-53	_	報告週期 Contact point for questions regarding the report 有關本報告問題的連絡人資訊	第3頁 P.3, back cover 第3頁 · 封底
	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.88-102 第88至102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

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SPECIFIC STANDARDS DISCLOSURE – MATERIAL TOPICS

特定標準披露--實質性議題

Disclosures Aspects	GRI Indicator	ESG Guide	Description	Page Number/ Remarks
, 披露層面	GRI指標	ESG指引	. 説明	頁碼/備註
1. Environmental 環境				
Energy 能源	103	A2*	Report how the organization manages the material aspect or its impacts 説明機構如何管理該實質性議題或其影響	P.33 第33頁
	302-1	A2.1*	Energy consumption within the organization 組織內部的能源消耗量	P.31 第31頁
	302-3	A2.1*	Energy intensity 能源密度	P.31 第31頁
	-	A2.3*	Reduction of energy consumption 减少能源消耗	P.33 第33頁
missions 非放	103	A1*, A3*	Report how the organization manages the material aspect or its impacts 説明機構如何管理該實質性議題或其影響	P.31-33 第31至33頁
	305-1	A1.1*, A1.2*	Direct (Scope 1) GHG emissions 直接溫室氣體排放 (範疇一)	P.31 第31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.31 第31頁
	305-4	A1.2*	GHG emissions intensity 溫室氣體排放密度	P.31 第31頁
	_	A1.5*	Reduction of GHG emissions 減少溫室氣體排放	P.25 第25頁
	305-7	A1.1*	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions 氮氧化物、硫氧化物及其他主要大氣排放	P.84 第84頁

Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 説明	Page Number/ Remarks 頁碼/備註
Environmental Compliance 環境合規	103	A1(b)* A3*	Report how the organization manages the material aspect or its impacts 説明機構如何管理該實質性議題或其影響	P29-30 第29至30頁
	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 2017 我們並不知悉在2017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 報告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.26-28 第26至28頁
2. Social 社會				
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 2017 我們並不知悉在2017年發 生任何重大不合規情況
Employment Communication 員工溝通	103	-	Report how the organization manages the material aspect or its impacts 説明機構如何管理該實質性議題或其影響	P.67 第67頁



Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 説明	Page Number/ Remarks 頁碼/備註
Product Health and Safety 產品健康與安全	103	B6*	Report how the organization manages the material aspect or its impacts 説明機構如何管理該實質性議題或其影響	P.43-44 第43至44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 nor compliance in 2017 我們並不知悉在2017年 生任何重大不合規情》
Business ethics 商業道德	103	B7*	Report how the organization manages the material aspect or its impacts 説明機構如何管理該實質性議題或其影 響	P.46-47 第46至47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 説明	Page Number/ Remarks 頁碼/備註
1. Economic 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	P.9 第9頁
2. Environmental 環境				
Materials 材料	_	A2*	Policies on efficient use of resources 有效使用資源的政策	P.33 第33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)每生產單位佔量	Our business mainly includes development, operation and management of renewable energy plants. There is no consumption of packaging materials involved in our operation. 我們的主要業務包括發 展、經營及管理可再生創 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 説明	Page Number/ Remarks 頁碼/備註
Water zk	-	A2*	Policies on efficient use of resources 有效使用資源的政策	P.33 第33頁
	303-1	A2.2*	Water withdrawal by source 按源頭劃分的總用水量	P.32 第32頁
	_	A2.4*	lssue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved 求取適用水源上的問題,以及提升用水效益計 劃及所得成果	P32-33 第32至33頁
Effluents and Waste 污水和廢棄物			Information on:	
			(a) the policies; and	
	_	A1*	(b) compliance with relevant laws and regulations that have a significant impact on the issuer	P.29, 34-35 第29 [,] 34至35頁
			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 説明	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	P.34 第34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)	P.34 第34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	P.34-35 第34至35頁



Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 説明	Page Number/ Remarks 頁碼/備註
3. Social – Labour Practices and Decent Work 社會一勞工實踐和體面: 作				
Employment 雇傭			Information on:	
			(a) the policies; and	
			(b) compliance with relevant laws and regulations that have a significant impact on the issuer	
	-	B1*	Relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare	P.66-71 第66至71頁
			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	
	401-1	B1.2	New employee hires and employee turnover 新聘僱員及僱員流失	P.65 第65頁



Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 説明	Page Number/ Remarks 頁碼/備註
Occupational Health and Safety 職業健康與安全			Information on:	
顺未 陡凉			(a) the policies; and(b) compliance with relevant laws and regulations that have a significant impact on the issuer	
	_	B2*	Relating to providing a safe working environment and protecting employees from occupational hazards	P.57-63 第57至63頁
			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.57 第57頁
	_	B2.2	Lost days due to work injury 因工傷損失工作日數	P.57 第57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與安全措施,以及相關 執行及監察方法	P.57-63 第57至63頁



Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 説明	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.49-56 第49至56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.80 第80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.50 第50頁
4. Social – Human Rig 社會一人權指標	hts			
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.	P.66 第66頁
			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	



Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 説明	Page Number/ Remarks 頁碼/備註
5. Social – Society 社會一社會指標				
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.40-43 第40至43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:40-43 第40至43頁
Anti-Corruption 反貪腐	-	B7*	 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.46-47 第46至47頁
	205-3	B7(b)*, B7.1	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 2017 我們並不知悉在2017年 有任何已報告的事件



Disclosures Aspects 披露層面	GRI Indicator GRI指標	ESG Guide ESG指引	Description 説明	Page Number/ Remarks 頁碼/備註
	_	B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored 描述防範措施及舉報程序,以及相關執行及監 察方法	P.46-47 第46至47頁
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 要和確保其業務活動會考慮社區利益的政策	ities sure P.73-75 the 第73至75頁 區需
	_	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.73-75 第73至75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.75 第75頁



Disclosures Aspects 披露層面 6. Social – Product Responsibility 社會一產品責任	GRI Indicator GRI指標	ESG Guide ESG指引	Description 説明	Page Number/ Remarks 頁碼/備註
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.43-45 第43至45頁
	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	any complaints related to breaches of data
	_	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.44-45 第44至45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:45 第45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,

尊敬的讀者:

您好!

Thank you for taking the time to read the Panda Green Energy Group Limited 2017 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:

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非常感謝您在百忙之中閲覽《熊貓綠色能源 集團有限公司2017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
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Report Team July 2018 報告編寫組 2018年7月

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

請以1至5表示您是否同意下列陳述(1為完 全不同意・5為完全同意):--

1.	l 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重大影響。	
3.	l 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.	l 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.	l am satisfied with the format and design of this report. 我對此報告的版式及設計感到滿意。	

Other comments: 請您在此提出其他意見與建議:

Your Contact Information: 您的聯繫資料:	
Name:	Company:
姓名:	工作單位:
Tel:	Email:
電話 :	電子郵件:



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