

國電科技環保集團股份有限公司

(於中華人民共和國註冊成立的股份有限公司) (a joint stock limited liability company incorporated in the People's Republic of China)

Stock Code 股份代號: 01296

www.01296.hk



MILESTONES OF GUODIAN TECH IN THE FIRST HALF OF 2017 國電科環2017年中期大事記

- 1. In January, Guodian United Power Technology Co., Ltd. ("United Power") participated in the project "Key Technology and Application of New Energy Power Generation Dispatching and Operation", which won the second prize of the 2016 National Science and Technology Progress Award, indicating the overall innovative capacity and research and development ("R&D") strength of United Power and representing the strong competitiveness and brand influence of United Power in the manufacturing of new energy equipment.
- 2. In March, "Double Circulation Limestone Gypsum Wet Desulfurization Technology" of Beijing Guodian Longyuan Environmental Engineering Co., Ltd. ("Longyuan Environmental") won the second prize of the Electric Power Construction Science and Technology Advancement Award 2017.
- 3. In May, the Guodian Hami Danan Lake Coal Electricity Integrated 2×660MW Project constructed by Guodian Longyuan Power Technology and Engineering Co., Ltd. ("Longyuan Power Technology and Engineering") won the prize of the China Electric Power Premium Project Award 2017, further indicating the great strength of the Company in the general contracting for green power stations
- 4. On 12 May, Longyuan Environmental ranked the first place in terms of the 5 indicators, i.e. total desulfurization, denitrification and dedusting units of thermal power plant put into operation in 2016, flue gas desulfurization units newly put into operation in 2016, and the capacity of the denitrification units in operation under entrustment. The company has achieved excellent statistical results in these aspects for 12 years successively.
- In June, Beijing Lucency Environment and Technology Co., Ltd. ("Lucency") won the prize of the First Water China "Starlight Award" 2017.
- 6. In June, the delegation led by Li Ganjie, secretary of the Party Leadership Group of the Ministry of Environmental Protection, and Xie Zhenhua, special representative of China for climate change affairs, visited and guided the exhibition booth of the Company at the 15th China International Environmental Protection Exhibition and Conference ("CIEPEC"). At CIEPEC, the Company further promoted its environmental protection technologies and products to the world and the industry.
- 7. In July, Chen Feng from Beijing Guodian Zhishen Control Technology Co., Ltd ("Guodian Zhishen") was elected as the delegate to the 19th CPC National Congress from the Central enterprise system.

- 1. 1月,國電聯合動力技術有限公司(「聯合動力」)參加研究的「新能源發電調度運行關鍵技術及應用」項目獲得2016年度國家科技進步二等獎,是公司創新能力和研發實力的綜合體現,標誌着公司在新能源裝備製造領域具有非常強勁的競爭力和品牌影響力。
- 2. 3月,北京國電龍源環保工程有限公司(「龍源環保」)「雙循環石灰石石膏濕法脱硫技術」榮獲2017年度電力建設科學技術進步二等獎。
- 3. 5月,國電龍源電力技術工程有限公司(「龍源工程」)所承建的國電哈密大南湖煤電一體化2×660MW工程項目榮獲2017年度中國電力優質工程獎,進一步展現出公司在綠色電站總承包業務領域的強勁實力。
- 4. 5月12日,龍源環保在中國電力企業聯合會發佈的2016年度火電廠累計投運脱硫、脱硝、除塵機組、2016年新投運煙氣脱硫及在運的火電廠脱硝委託運營機組容量5項指標中名列第一,這是公司連續12年在該統計中取得優異成績。
- 6月,北京朗新明環保科技有限公司(「朗新明」)榮獲2017第一屆水業中國「星光獎」。
- 6. 6月,中國環境保護部黨組書記李干傑、中國氣候變化事務特別代表解振華一行莅臨第十五屆中國國際環保展覽會公司展台進行參觀指導,進一步向世界和行業推廣公司的環保技術和產品。
- 7月,北京國電智深控制技術有限公司(「國電智深」)陳峰同志當選中央企業系統黨的十九大代表。

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CORPORATE INFORMATION 公司資料

Directors

Executive Directors

Mr. CHEN Dongqing (Chairman)⁽¹⁾
Mr. ZHANG Jun (General Manager)⁽²⁾

Mr. TANG Chaoxiong

Non-executive Directors

Mr. WANG Zhongqu

Mr. ZHANG Wenjian

Mr. GU Yuchun⁽³⁾

Mr. YAN Andrew Y.

Independent Non-executive Directors

Mr. SHEN Xiaoliu

Mr. QU Jiuhui

Mr. XIE Qiuye

Mr. YEUNG Chi Tat(4)

Supervisors

Mr. LUAN Baoxing (Chairman)(5)

Mr. XU Xingzhou⁽⁶⁾

Mr. YANG Xiangbin⁽⁷⁾

Ms. HE Lili

Mr. LI Wei

Legal Advisors

International

King & Wood Mallesons (as to Hong Kong law)

13/F, Gloucester Tower

The Landmark

15 Queen's Road Central, Central

Hong Kong

PRC

Beijing King & Capital Law Firm (as to PRC Law) 23rd Floor, Tower C, Office Park, No. 5 Jinghua South Street, ChaoYang District

Beijing, PRC, 100020

董事

執行董事

陳冬青先生(*主席*)⁽¹⁾ 張 軍先生(*總經理*)⁽²⁾ 唐超雄先生

非執行董事

王忠渠先生 張文建先生 顧玉春先生⁽³⁾ 閻 焱先生

獨立非執行董事

申曉留先生 曲久輝先生 謝秋野先生 楊志達先生⁽⁴⁾

監事

樂寶興先生(主席)⁽⁶⁾ 許興洲先生⁽⁶⁾ 楊向斌先生⁽⁷⁾ 何麗麗女士 李 偉先生

法律顧問

國際

金杜律師事務所(有關香港法律) 香港中環 皇后大道中15號 置地廣場 告羅士打大廈13樓

中國

北京市京都律師事務所(有關中國法律) 中國北京市朝陽區景華南街5號 遠洋 ● 光華國際C座23層(100020)

CORPORATE INFORMATION (CONTINUED)

公司資料(續)

Auditors

International

KPMG Certified Public Accountants 8th Floor, Prince's Building 10 Chater Road, Central Hong Kong

PRC

Union Power Certified Public Accountants (Special General Partnership) 15/F, Building No. 7 Block No.16 Xi Si Huan Zhong Road Haidian District, Beijing, PRC

Joint Company Secretaries

Mr. CAI Zhaowen⁽⁸⁾ Ms. MOK Ming Wai

Authorized Representatives

Mr. CHEN Dongqing(1) Ms. MOK Ming Wai

Legal Address

Suite 1101, 11/F, Building No. 1 Block No. 16 Xi Si Huan Zhong Road Haidian District, Beijing, PRC

Head Office in PRC

Building No. 1 Block No. 16 Xi Si Huan Zhong Road Haidian District, Beijing, PRC

Principal Place of Business in Hong Kong

Flat L, 15/F, Hong Kong Mansion, 1 Yee Wo Street Causeway Bay, Hong Kong

Nomination Committee

Mr. XIE Qiuye (Chairman) Mr. QU Jiuhui

Mr. TANG Chaoxiong

核數師

國際

畢馬威會計師事務所 執業會計師 香港中環 遮打道10號 太子大廈8樓

中國

中審眾環會計師事務所 (特殊普通合夥) 中國北京市海淀區 西四環中路16號院 7號樓15層

聯席公司秘書

蔡兆文先生(8) 莫明慧女士

授權代表

陳冬青先生(1) 莫明慧女士

法定地址

中國北京市海淀區 西四環中路16號院 1號樓11層1101室

中國主要辦事處

中國北京市海淀區 西四環中路16號院 1號樓

香港主要營業地點

香港銅鑼灣怡和街1號 香港大廈15樓L室

提名委員會

謝秋野先生(主席) 曲久輝先生 唐超雄先生

CORPORATE INFORMATION (CONTINUED) 公司資料(續)

Audit Committee

Mr. YEUNG Chi Tat (Chairman)(4)

Mr. SHEN Xiaoliu Mr. ZHANG Wenjian

Remuneration and Appraisal Committee

Mr. QU Jiuhui (Chairman)

Mr. XIE Qiuye

Mr. WANG Zhonggu

Strategic Committee

Mr. CHEN Dongqing (Chairman)(1)

Mr. SHEN Xiaoliu

Mr. GU Yuchun⁽³⁾

Mr. YAN Andrew Y.

Mr. ZHANG Jun⁽²⁾

H Share Registrar

Computershare Hong Kong Investor Services Limited

Website Address

www.01296.hk

Principal Banks

Industrial and Commercial Bank of China Limited
(Beijing Wukesong Olympic Sub-branch)
Bank of Communications Corporation Limited (Hong Kong Branch)

Notes:

(1) Mr. Chen Dongqing, an executive director of the Company, was elected as the chairman of the Board of directors (the "Board") of the Company on 3 May 2017 and was appointed as the chairman of the strategic committee of the Company ("Strategic Committee") and the authorized representative of the Company under Rule 3.05 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("HKSE") ("Listing Rules"). At the first extraordinary general meeting in 2017 held on 8 August 2017, Mr. Chen Dongqing was elected as the executive director of the third session of Board and subsequently, he was elected as the chairman of the third session of Board by the Board, and was appointed as the chairman of the strategic committee. For more details, please refer to the announcement of the Company dated 4 May 2017 and 8 August 2017.

審計委員會

楊志達先生*(主席)⁽⁴⁾* 申曉留先生 張文建先生

薪酬與考核委員會

曲久輝先生(主席) 謝秋野先生 王忠渠先生

戰略委員會

陳冬青先生(主席)(1) 申曉留先生 顧玉春先生(3) 閻 焱先生 張 軍先生(2)

H股證券登記處

香港中央證券登記有限公司

網址

www.01296.hk

主要往來銀行

中國工商銀行股份有限公司 (北京五棵松奧體支行) 交通銀行股份有限公司(香港分行)

附註:

(1) 本公司執行董事陳冬青先生於2017年5月3日 獲選為本公司董事會(「董事會」)董事長,並獲 委任為本公司戰略委員會(「戰略委員會」)主席 及香港聯合交易所有限公司證券上市規則(「上 市規則」)第3.05條而言的本公司授權代表。於 2017年8月8日召開的2017年第一次臨時股東大 會上,陳冬青先生獲選舉為本公司第三屆董事 會執行董事,及後獲董事會選舉為第三届董事 會董事長,及獲委任為戰略委員會主席。有關 詳情請參閱本公司日期為2017年5月4日及2017 年8月8日的公告。

CORPORATE INFORMATION (CONTINUED)

公司資料(續)

On 3 May 2017, Mr. Yang Guang resigned from chairman and executive director of the Board as well as the chairman of the Strategic Committee and the authorized representative of the Company under Rule 3.05 of the Listing Rules, and was elected as the non-executive director of the Company at the same day. After the expiration of the second session of Board on 8 August 2017, Mr. Yang Guang did not participate in the election for the third session of Board. For more details, please refer to the announcement of the Company dated 4 May 2017 and 8 August 2017

- (2) At the first extraordinary general meeting in 2017 held on 8 August 2017, Mr. Zhang Jun was elected as the executive director of the third session of Board. Subsequently, he was appointed by the Board as the member of the Strategic Committee. For more details, please refer to the announcement of the Company dated 8 August 2017.
- (3) At the first extraordinary general meeting in 2017 held on 8 August 2017, Mr. Gu Yuchun was elected as the non-executive director of the third session of the Board. Subsequently, he was appointed by the Board as the member of the Strategic Committee.
 - Mr. Feng Shuchen, former non-executive director, after the expiration of the tenure for the second session of the Board of directors, did not participate in the election for the third session of the Board of directors of the Company. For more details, please refer to the announcement of the Company dated 8 August 2017.
- (4) At the first extraordinary general meeting in 2017 held on 8 August 2017, Mr. Yeung Chi Tat was elected as the independent non-executive director of the third session of the Board of the Company. Subsequently, he was appointed by the Board as the chairman of the audit committee of the Company ("Audit Committee").
 - Mr. Fan Renda Anthony, former independent non-executive director of the Company, after the expiration of the tenure for the second session of the Board of directors, did not participate in the election for the third session of the Board of directors of the Company. For more details, please refer to the announcement of the Company dated 8 August 2017.
- (5) At the first extraordinary general meeting in 2017 held on 8 August 2017, Mr. Luan Baoxing was elected as the supervisor of the third session of Board of supervisors of the Company. For more details, please refer to the announcement of the Company dated 8 August 2017.
- (6) At the first extraordinary general meeting in 2017 held on 8 August 2017, Mr. Xu Xingzhou was elected as the supervisor of the third session of Board of supervisors of the Company. For more details, please refer to the announcement of the Company dated 8 August 2017.
- (7) At the first extraordinary general meeting in 2017 held on 8 August 2017, Mr. Yang Xiangbin was elected as the supervisor of the third session of Board of supervisors of the Company. For more details, please refer to the announcement of the Company dated 8 August 2017.
- (8) At the second meeting of the second session of the Board for 2017 held on 30 March 2017, Mr. Cai Zhaowen was appointed as the joint company secretary of the Company. For more details, please refer to the announcement of the Company dated 30 March 2017.

陽光先生於2017年5月3日辭任本公司董事長及 執行董事職務,並不再擔任戰略委員會主席及 上市規則第3.05條而言的本公司授權代表,同 日調任為本公司非執行董事。於2017年8月8日 的第二屆董事會任期屆滿後,陽光先生未有參 與本公司第三屆董事會重選,有關詳情請參閱 本公司日期為2017年5月4日及2017年8月8日的 公告。

- ② 張軍先生於2017年8月8日召開的2017年第一次 臨時股東大會上獲選舉為本公司第三屆董事會 執行董事。及後獲董事會委任為戰略委員會委 員,有關詳情請參閱本公司日期為2017年8月8 日的公告。
- (3) 顧玉春先生於2017年8月8日召開的2017年第一 次臨時股東大會上獲選舉為本公司第三屆董事 會非執行董事。及後獲董事會委任為戰略委員 會委員。
 - 本公司原非執行董事馮樹臣先生於2017年8月8日的第二屆董事會任期屆滿後,未有參與本公司第三屆董事會重選。有關詳情請參閱本公司日期為2017年8月8日的公告。
- (4) 楊志達先生於2017年8月8日召開的2017年第一次臨時股東大會上獲選舉為本公司第三屆董事 會獨立非執行董事。及後獲董事會委任為審計 委員會([審計委員會])主席。
 - 本公司原獨立非執行董事范仁達先生於2017年8 月8日的第二屆董事會任期屆滿後,未有參與本公司第三屆董事會重選。有關詳情請參閱本公司日期為2017年8月8日的公告。
- (5) 藥寶興先生於2017年8月8日召開的2017年第一次臨時股東大會上獲選舉為本公司第三屆監事會監事。有關詳情請參閱本公司日期為2017年8月8日的公告。
- (7) 楊向斌先生於2017年8月8日召開的2017年第一次臨時股東大會上獲選舉為本公司第三屆監事會監事。有關詳情請參閱本公司日期為2017年8月8日的公告。
- (8) 蔡兆文先生於2017年3月30日召開的第二屆董事會2017年第二次會議上獲聘任為本公司聯席公司秘書。有關詳情請參閱本公司日期為2017年3月30日的公告。

CORPORATE PROFILE 公司介紹

Guodian Technology & Environmental Group Corporation Limited (the "Company", "our Company" or "Guodian Tech"), formerly Guodian Technology & Environment Group Co., Ltd., was converted into a joint stock limited liability company on 16 May 2011 and listed on the Main Board of HKSE on 30 December 2011. The Company, together with its subsidiaries (the "Group" or "our Group"), is the flagship platform for environmental protection and energy conservation solutions and renewable energy equipment manufacturing and solutions businesses within China Guodian Corporation (the "Guodian") and its subsidiaries and associates.

The principal businesses of the Company are carried out under two segments, namely, the environmental protection and energy conservation solutions business, and the renewable energy equipment manufacturing and services business. The Company is a leading market player in the PRC in these industries given its advanced technology and diversified business models.

In its environmental protection and energy conservation solutions business, the Group is the largest supplier of technology and integrated systems solutions to coal-fired power plants in the PRC, providing innovative and advanced technology designed to reduce pollutant emissions and to maximize efficiencies in resource utilization, with overall objectives of reducing the environmental impact of coal-fired power generation and maximizing cost-efficiencies and profitability for its customers. Leveraging on its comprehensive environmental protection and energy conservation technologies and solutions for all aspects of coal-fired power plants (with the core business lines being SO2 and NOx emissions reductions, water treatment, plasma-assisted ignition and combustion stabilization, and energy management contracts), the Group is capable of providing "onestop shop" solutions to its customers tailored for their specific needs. The Group is also one of the leading manufacturers of wind power generation equipment in the PRC in its renewable energy equipment manufacturing and services business, with well-established brands, and is well known for its product quality and performance. In line with its strategic focus on providing integrated solutions and services, the Group also provides renewable-energy related services, such as the maintenance and repair of wind turbine generators.

國電科技環保集團股份有限公司(簡稱「公司」、「本公司」或「國電科環」)前身為國電科技環保集團有限公司,於2011年5月16日正式改製成為股份有限公司並於2011年12月30日在香港聯合交易所有限公司(簡稱「聯交所」)主板上市。本公司及附屬公司(簡稱「本集團」)是中國國電公司(簡稱「國電」)及其附屬公司和聯營公司致力於環保節能解決方案和可再生能源設備製造及解決方案業務的旗艦平台。

本公司之主營業務分為兩部份,即環保及節能解 決方案業務和可再生能源設備製造及服務業務。 本公司憑藉其先進的技術和多元化的業務模式躋 身於國內行業領先地位。

於環保節能解決方案業務方面,本集團為中國最 大的燃煤電廠技術及集成系統解決方案供貨商, 提供為減少污染物排放及提升資源利用效率而設 計的創新和先進技術,整體目標為減少燃煤發電 帶來的的環境影響,並最大化客戶的成本效益及 盈利能力。憑藉其為燃煤電廠各方面提供的綜合 環保節能技術及解決方案(核心業務為脱硫、脱 硝、水處理、等離子體點火穩燃及合同能源管 理),本集團有能力為客戶量身訂製以提供滿足其 特定需求的[一站式]解決方案。於可再生能源設 備製造及服務業務方面,本集團亦為中國領先的 風力發電設備製造商之一,並建立了良好的品牌 形象,以其產品質量及性能著稱。與其提供集成 解決方案及服務的戰略重點一致,本集團亦提供 可再生能源相關服務,如風力發電機組的保養、 維修業務。

CORPORATE PROFILE (CONTINUED) 公司介紹(續)

Focusing on technology innovation and industrial applications, the Group has achieved significant technology and product innovation results through original innovation, resources integration innovation and technology introduction and innovation. Among its various forms of technology at the forefront in the PRC or global market, the Group's plasma ignition technology ranked first in the world. In the domestic market, the Group possesses a leading position in technology, including wet flue gas desulfurization, seawater desulfurization, furnace combustion De-NO_v and flue gas denitrification. The Group's brand names, such as Longyuan Environmental, Yantai Longyuan Power Technology Co., Ltd., United Power and Guodian Zhishen have gained significant brand recognition in the PRC. As at 30 June 2017, the Group had established 4 national scientific research platforms, 2 provincial key laboratories, 11 provincial scientific research platforms and 1 post-doctoral scientific research workstations. The Group had undertaken 37 national science and technology projects, among which there are 14 "863" and "973" projects of the Ministry of Science and Technology of the PRC, 6 "National Sci-Tech Support Plan" projects, 1 "National Key R&D Plan" project, 4 projects of the National Development and Reform Commission of the PRC, 5 projects of the National Energy Administration of the PRC, 1 project of the State Oceanic Administration of the PRC, 2 projects of the Ministry of Finance of the PRC, 1 project of the Ministry of Environmental Protection of the PRC and 3 international science and technology cooperation projects. In the first half of 2017, the Group obtained 63 new patents including 25 invention patents.

本集團專注於科技創新和產業化應用,通過原始 創新、資源集成創新與技術引進並再創新,取得 了重大科技創新成果,有多項技術達到國際、國 內領先水平,其中本集團的等離子體點火技術水 準居世界第一位。本集團的煙氣濕法脱硫、海水 脱硫、鍋爐燃燒降氮及煙氣脱硝技術始終保持國 內領先地位。龍源環保、煙台龍源電力技術股份 有限公司、聯合動力和國電智深已成為享譽中國 的知名品牌。截至2017年6月30日,本集團擁有 4個國家級科研平台、2個省級重點實驗室、11個 省級科研平台及1個博士後科研工作站。本集團累 計承擔國家級科技項目37項,其中承擔國家科技 部「863」和「973」計劃項目14項;承擔國家科技 支撐計劃項目6項、國家重點研發計劃1項,國家 發改委課題4項,國家能源局5項,國家海洋局1 項,國家財政部2項,國家環保部1項,國際科技 合作項目3項。2017年上半年,本集團新獲專利 63項,包括發明專利25項。

The Company believes that its strategic focus on investing in and promoting technological research and development as a core activity to support the development of its various businesses has yielded substantial returns, allowing it to maintain its established position at the forefront of technological advancements in the environmental protection, energy conservation and renewable energy industries, and to develop innovative, practical and cost-efficient solutions and applications and high-quality products in these industries. The Company also believes that these industries are expected to play a key role in the sustainable growth and development of the PRC energy and power sector, which is integral to sustainable economic growth and development in the PRC. Going forward, the Company expects to leverage on its business in the PRC to expand internationally, with the objective of becoming a top tier supplier of integrated clean energy technology solutions and services.

本公司相信,以投資和促進技術研發為核心來支持公司多元化業務發展的戰略已經得到了重大回報,使其能夠保持在環保、節能和可再生能源行業中已有的技術領先地位,使其研發出在相關行業中具有創新性、實用性且成本效益好的解決方案和技術應用以及高質量的產品。本公司持續增長和發展起到關鍵作用,而這又是中國經濟可增長和發展起到關鍵作用,而這又是中國經濟可持續增長和發展不可或缺的部份。展望未來、公司將以成為一流的綜合清潔能源技術解決方案和服務供貨商為目標,力爭充分利用其在中國的業務拓展國際市場。

INTERIM RESULTS HIGHLIGHTS 中期業績摘要

- For the six months ended 30 June 2017, the revenue from continuing operations of the Group was approximately RMB4,989.7 million, representing a decrease of approximately 18.1% compared to that for the corresponding period last year; the revenue from discontinued operation of the Group was approximately RMB1.4 million, representing a decrease of approximately 99.2% compared to that for the corresponding period last year.
- 截至2017年6月30日止6個月,本集團的 持續經營業務收入約為人民幣4,989.7百萬 元,比去年同期減少約18.1%;本集團已 終止經營業務收入約人民幣1.4百萬元, 比去年同期減少約99.2%。
- For the six months ended 30 June 2017, the gross profit from continuing operations of the Group was approximately RMB1,172.8 million, representing a decrease of approximately 15.8% compared to that for the corresponding period last year; the gross loss from discontinued operation of the Group was approximately RMB5.2 million, representing a decrease of approximately 121.5% compared to the gross profit for the corresponding period last year.
- 截至2017年6月30日止6個月,本集團的 持續經營業務毛利約為人民幣1,172.8百萬 元,比去年同期減少約15.8%;本集團已 終止經營業務毛虧約人民幣5.2百萬元, 比去年同期毛利減少約121.5%。
- For the six months ended 30 June 2017, the operating profit from continuing operations of the Group was approximately RMB619.8 million, representing a decrease of approximately 6.7% compared to that for the corresponding period last year; the operating loss from discontinued operation of the Group was approximately RMB76.9 million, representing a decrease of approximately 38.1% compared to that for the corresponding period last year.
- 截至2017年6月30日止6個月,本集團的 持續經營業務經營利潤約為人民幣619.8 百萬元,比去年同期減少約6.7%;本集團 已終止經營業務經營虧損約人民幣76.9百 萬元,比去年同期減少約38.1%。
- For the six months ended 30 June 2017, profit attributable to equity shareholders of the Company was approximately RMB139.7 million, representing an increase of approximately 155.4% as compared to profit attributable to equity shareholders of the Company for the corresponding period last year.
- 截至2017年6月30日止6個月,本公司權益股東應佔利潤約為人民幣139.7百萬元,較去年同期權益股東應佔利潤增加約155.4%。
- For the six months ended 30 June 2017, earnings per share of the Group (excluding non-controlling interests) was approximately RMB2.3 cents.
- 截至2017年6月30日止6個月,本集團每 股盈利(不包括非控股權益)約為人民幣 2.3分。
- The Board does not recommend the payment of any interim dividend for the six months ended 30 June 2017.
- 董事會並不建議派發截至2017年6月30日 止6個月的任何中期股息。

MANAGEMENT DISCUSSION AND ANALYSIS 管理層討論及分析

Certain statistical data and other information relating to the PRC and the industries in which the Group operates contained in, for instance, the section titled "Key Industry Developments" in this interim report, have been derived from various publicly available official publications. The Company believes that the sources of these information are appropriate sources for such information and has taken reasonable care in extracting and reproducing such information. The Company has no reason to believe that such information is false or misleading or that any fact has been omitted that would render such information false or misleading. The information has not been independently verified by the Company or any other relevant party and no representation is given as to its accuracy. The Company makes no representation as to the accuracy of the information contained in such sources, which may not be consistent with other information compiled within or outside the PRC. Accordingly, the industry information and statistics contained herein may not be accurate and should not be unduly relied upon for your investment in the Company.

本中期報告中如「主要行業發展」部分所載有關中國及本集團所經營行業的若干統計數據及其他資料乃摘自不同的官方公開刊物。本公司相信有關資料來源為恰當的資料來源並已合理謹慎地摘錄及轉載有關資料。本公司並無理由相信有關資料屬虛假或誤導性的資料。有關資料並未經本公司或相關各方獨立核實且並無對其準確性發表任何聲明。本公司並沒有就該等來源所載資料的準確性發表任何聲明,而該等資料可能與中國境內外編製的其他資料不一致。因此,本中期報告所載有關行業資料及統計數據未必準確,閣下投資於本公司時不應過度依賴上述資料和統計數據。

This interim report contains certain forward-looking statements and information relating to the Group or the Company that are based on the management's belief and assumptions. The words "anticipate", "believe", "expect", "going forward" and similar expressions, as they relate to the Company, the Group or the Group's management, are intended to identify forward-looking statements. Such statements reflect the current views of the Company's management with respect to future events and are subject to certain risks, uncertainties and assumptions. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, the Group's financial condition may be adversely affected and may vary materially from those described herein as anticipated, believed or expected.

本中期報告載有基於管理層的信念及假設作出有關本集團或本公司的若干前瞻性陳述及資料。「預 計」、「相信」、「預期」、「今後」及類似表述,當 用於本公司、本集團或本集團管理層時,即指前 瞻性陳述。此陳述反映出本公司管理層對未來事 件的當前觀點,並受若干風險、不明朗因素及假 設的影響。倘一項或多項該等風險或不明朗因素 成真,或倘相關假設被證實為不正確,本集團的 財務狀況或會受不利影響且可能與本中期報告所 述的預計、相信或預期的財務狀況大不相同。

管理層討論及分析(續)

Industry and Business Overview in the First Half of 2017

Key Industry Developments

In the first half of 2017, the PRC government continued to introduce new regulations and policy initiatives applicable to the PRC power and power-related industries amid significant challenges to sustainable economic growth.

For the purpose of this interim report, the "PRC" refers to the People's Republic of China, excluding Taiwan, the Macau Special Administration Region of the PRC and the Hong Kong Special Administration Region of the PRC.

Set forth below are the key regulations and policy initiatives issued by the PRC government and other relevant regulatory authorities that are expected to have a material effect on the Group's businesses, operations and financial condition:

1. The State Council of the PRC has issued the Comprehensive Work Plan for Energy Conservation and Emission Reduction in the "Thirteenth Five-year Plan" Period ("Work Plan"), clearly setting forth the main target and key tasks for the work of energy conservation and emission reduction in the "Thirteenth Five-year Plan" Period and generally deploying the national work of energy conservation and emission reduction.

Main target: By 2020, the total energy consumption per RMB10,000 GDP will be 15% lower than that of 2015, and the total energy consumption will be controlled within 5BT standard coal. The national total COD, ammonia nitrogen, sulfur dioxide and nitrogen oxides emissions will be controlled within 20.01Mton, 2.07Mton, 15.80Mton and 15.74Mton, representing a decrease of 10%, 10%, 15% and 15% respectively from those of 2015. The total amount of volatile organic compounds emitted in China will be decreased by more than 10% from that of 2015.

2017年上半年行業和業務回顧

主要行業發展

2017年上半年,面臨經濟發展新常態下的風險挑戰,中國政府陸續出台了適用於中國電力及與電力相關行業的新法規及政策措施。

就本中期報告而言,中國是指中華人民共和國, 並不包括台灣、中國澳門特別行政區及中國香港 特別行政區。

以下為中國政府及其他有關監管機構頒佈的主要 法規及政策措施,預期該等法規及政策措施將 對本集團的業務、經營和財務狀況產生實質性影響:

國務院印發《「十三五」節能減排綜合工作方案》(「方案」),明確了「十三五」節能減排工作的主要目標和重點任務,對全國節能減排工作進行全面部署。

主要目標:到2020年,全國萬元國內生產總值能耗比2015年下降15%,能源消費總量控制在50億噸標準煤以內。全國化學需氧量(COD)、氨氮、二氧化硫、氮氧化物排放總量分別控制在2,001萬噸、207萬噸、1,580萬噸、1,574萬噸以內,比2015年分別下降10%、10%、15%和15%。全國揮發性有機物排放總量比2015年下降10%以上。

The Work Plan proposes the promotion and development of key energy-saving projects. The Work Plan proposes the implementation of key energy-saving projects such as comprehensive upgrading of coal-fired boiler energy saving system, upgrading of motor system energy efficiency, utilization of waste heat for people, green lighting, energy-saving technology and equipment industrialization demonstration, energy system optimization, coal consumption reduction and replacement, comprehensive energy efficiency upgrading of key energy consumers, promotion of contract-based energy management, urbanization energy conservation upgrading and reconstruction, natural gas distributed energy demonstration, etc.; the Work Plan also proposes the promotion of the comprehensive cascade utilization of energy and the achievement of energy conservation up to 300Mton standard coal; the Work Plan requires that, by 2020, the production value of the energy conservation service industry should be doubled of that of 2015.

方案中提出,推進發展節能重點工程。組織實施燃煤鍋爐節能環保綜合提升、電機系統能效提升、餘熱暖民、綠色照明、節能技術裝備產業化示範、能量系統優化、煤炭消費減量替代、重點用能單位綜合能效提升、合同能源管理推進、城鎮化節能升級改造、天然氣分佈式能源示範工程等節能重點工程,推進能源綜合梯級利用,形成3億噸標準煤左右的節能能力,到2020年節能服務產業產值比2015年翻一番。

The Work Plan proposes the construction of key projects for the emission reduction of main air pollutants. The Work Plan proposes the implementation of super-low emission and energy conservation reconstruction projects for coal-fired power plants, the realization of super-low emission reconstruction for accumulatively 580 million kw units by 2020 and the phasing out, within the specified time, of 20 million kw units with inferior production capacity and which do not conform to the applicable compulsory standards. The Work Plan also proposes the implementation of pollution control projects for emission fully in line with standards in key industries such as electricity, steel, cement, petrochemical, flat glass, non-ferrous metal, etc..

主要大氣污染物重點減排工程。實施燃煤電廠超低排放和節能改造工程,到2020年累計完成5.8億千瓦機組超低排放改造任務,限期淘汰2,000萬千瓦落後產能和不符合相關強制性標準要求的機組。實施電力、鋼鐵、水泥、石化、平板玻璃、有色金屬等重點行業全面達標排放治理工程。

The Work Plan pushes forward contract-based energy management mode. The Work Plan proposes the implementation of contractbased energy management and promotion projects and encourages energy conservation service companies to innovate their service modes so as to provide users with "one-stop" integrated contractbased energy management services covering energy conservation consultation, diagnosis, design, financing, reconstruction, hosting, etc.. The Work Plan abolishes the energy conservation service company review and filing system; therefore, any local government or authority shall not restrict energy conservation service companies in their business on the pretext that they do not have the corresponding qualification. The Plan implements the taxation preference policy for energy conservation service companies and encourages the governments at all levels to enhance the support to contract-based energy management. The Work Plan supports energy conservation service companies to issue green bonds. The Work Plan encourages energy conservation service companies to innovate the integration of investment, bond and financing so as to promote the development of contract-based energy management.

推行合同能源管理模式。實施合同能源管理 推廣工程,鼓勵節能服務公司創新服務模 式,為用戶提供節能諮詢、診斷、設計、 資、改造、託管等[一站式]合同能源管理 綜合服務。取消節能服務公司審核備案理 度,任何地方和單位不得以是否具備節能服 務公司審核備案資格限制企業開展業務。落 實節能服務公司稅收優惠政策,鼓勵各級的 府加大對合同能源管理的支持力度。支持合 能服務公司發行綠色債券。創新投債貸結合 促進合同能源管理業務發展。

管理層討論及分析(續)

2. The National Development and Reform Commission and the State Energy Administration of the PRC have formally issued the "Thirteenth Five-year" Plan for Energy Development ("**Plan**").

According to the Plan, the layout of wind power and PV projects shifts the focus onto East China and Central China. As the market space in the main energy consumption areas in the "New Normal" state shrinks, the Plan has adjusted the energy development layout for the "Thirteenth Five-year Plan" Period, mainly shifting the focus on wind power and PV projects onto East China and Central China. For newly installed wind power units, East and Central China will take up approximately 58%; for newly installed solar power units, East and Central China will take up approximately 56%. The mode of distributed development and local consumption will be dominant.

According to the Plan, China will complete the super-low emission reconstruction of 420 million kw coal-fired units and energy conservation reconstruction of 340 million kw coal-fired units. In respect of the problems such as low comprehensive efficiency of energy supply, the Plan has presented four measures: Firstly, the Plan proposes to eliminate the excess capacity on the basis of safety, environmental protection, technology, quality standards, etc.. Secondly, the Plan proposes to enhance the peaking capability of electric power system, strengthen the construction of branch conduits and promote the construction of urban distribution power grids. Thirdly, the Plan pushes forward the super-low emission and energy-saving reconstruction for coal-fired power plants. According to the Plan, in the "Thirteenth Five-year Plan" Period, China will complete the super-low emission reconstruction of 420 million kw coal-fired units and energy conservation reconstruction of 340 million kw coal-fired units. Fourthly, the Plan proposes to control the scale of the new coal-fired power plants being put into operation and to control the installed capacity of coal-fired units within 1.1 billion kw.

3. In February 2017, the State Energy Administration of the PRC issued the Guidance for Energy Work 2017 ("**Guidance**").

The Guidance proposes that the energy consumption of unit GDP will decrease by above 5.0% from that of the corresponding period in 2016. The average power supply coal consumption of coal-fired power plants will be 314g standard coal per kwh, 1g less than that of the corresponding period in 2016. The energy conservation reconstruction will be 60 million kw.

2. 國家發改委、能源局正式發佈《能源發展 「十三五」規劃》。

風電、光伏佈局向東中部轉移。因新常態下主要能源消費地區市場空間萎縮,《規劃》調整了「十三五」時期能源發展佈局,主要將風電、光伏佈局向東中部轉移,新增風電裝機中,中東部地區約佔58%,新增太陽能裝機中,中東部地區約佔56%,並以分佈式開發、就地消納為主。

煤電機組超低排放改造4.2億千瓦,節能改造3.4億千瓦。對於能源供應綜合效率不高等問題,《規劃》提出四個方面的對策,一是依靠安全、環保、技術、質量等標準淘汰過剩產能。二是增強電力系統調峰能力,加強支線管網建設,推進城鎮配電網建設。三是推進煤電超低排放和節能改造。「十三五」期間要完成煤電機組超低排放改造4.2億千瓦,節能改造3.4億千瓦。四是控制新投產煤電規模,煤電裝機控制在11億千瓦以內。

3. 2017年2月,國家能源局發佈2017年能源工 作指導意見。

該意見提出,單位國內生產總值能耗較2016年同期下降5.0%以上。燃煤電廠平均供電煤耗314克標準煤/千瓦時,較2016年同期減少1克。完成煤電節能改造規模6,000萬千瓦。

Stable Development of Wind Power. The Guidance proposes to optimize wind power construction and development layout and shift the focus of new projects onto Central China, East China and South China. The Guidance proposes strict controls over new power grid synchronization projects in the regions with severe abandoning of wind power, issue of pre-warning information for the wind power industry in 2017 and suspension of the new wind power projects of any province with the rate of abandoning wind power of more than 20%. The Guidance proposes the orderly promotion of the planning and construction of such wind power bases around Beijing. Tianjin and Hebei, at the valleys of the Jinsha River and the Yalong River, etc.. The Guidance proposes to speed up the development and utilization of offshore wind power. The Guidance proposes to steadily push forward the construction of wind power projects, by commencing 25 million kw construction and adding installed capacity of 20 million kw in 2017. The Guidance requires the stable promotion of the preliminary work for the wind power projects in some regions with the project scale of 25 million kw.

穩步發展風電。優化風電建設開發佈局,新增規模重心主要向中東部和南方地區傾斜。嚴格控制棄風限電嚴重地區新增併網項目,發佈2017年度風電行業預警信息,對棄風率超過20%的省份暫停安排新建風電規模。有序推動京津冀週邊、金沙江河谷和雅礱江河谷風光水互補等風電基地規劃建設工作。加快海上風電開發利用。穩步推進風電項目建設,年內計劃安排新開工建設規模2,500萬千瓦,新增裝機規模2,000萬千瓦。紮實推進部分地區風電項目前期工作,項目規模2,500萬千瓦。

Coal-fired Power Super-low Emission and Energy Conservation Reconstruction. The Guidance proposes to further push forward reconstruction and plans to complete 80 million kw super-low emission reconstruction and 60 million kw energy conservation reconstruction within 2017.

煤電超低排放和節能改造。繼續深入推進改造工作,年內計劃完成超低排放改造規模8,000萬千瓦,完成節能改造規模6,000萬千瓦。

4. In February 2017, the State Energy Administration of the PRC printed and issued the circular on the Issue of the Wind Power Investment Monitoring and Pre-warning Results 2017 ("Circular"). Six provinces and autonomous regions are classified as red pre-warning areas. In such areas, importance is attached to the settlement of the problem of abandoning wind power, new wind power projects shall not be approved in 2017 and the permission for the new wind power grid synchronization projects and new power generation projects shall be suspended.

4. 2017年2月,國家能源局印發《關於發佈 2017年度風電投資監測預警結果的通知》, 六省區被劃定為紅色預警區域,這些省區需 着力解決棄風問題,2017年不得核准建設 新的風電項目,風電項目新增併網和新的發 電業務許可被停止。

管理層討論及分析(續)

The Circular indicated that, according to the wind power investment monitoring and pre-warning results of 2017, Inner Mongolia, Heilongjiang, Jilin, Ningxia, Gansu, Xinjiang (including Xinjiang Production and Construction Corps), etc. are the red pre-warning areas for wind power development and construction. According to the Circular, such red pre-warning provinces (autonomous regions) must not approve the construction of new wind power projects and shall take effective measures to solve the problem of abandoning wind power. Any power grid enterprise must not accept the application for power grid synchronization of any new wind power project from any such red pre-warning province (autonomous region)(including projects that are under construction, approved and incorporated into the plan), and the representative office of any such power grid enterprise must not issue new power generation licenses to any newly constructed wind power project of any such red pre-warning province (autonomous region). In addition, the Circular suspends the construction of Xinjiang east Junggar Basin Wind Power Project, Turpan Baili Wind Area Wind Power Project and Jiuquan Phase II Wind Power Project, and requires that the power transmission grids which have been put into operation or are under construction should be mainly used to consume the power from the stock wind power projects.

該通知指出,根據2017年風電投資監測預警結果顯示,內蒙古、黑龍江、吉林、夏、甘肅、新疆(含新疆生產與建設兵團)等省(區)為風電開發建設紅色預警區域。要紅色預警的省(區)不得核准建設新的風電別,並要採取有效措施着力解決棄風問題電網企業不得受理紅色預警的省(區)風電別人的新建風電項目發放新區化至業務百里,暫緩建設新疆准東、吐魯預入的許可。同時,暫緩建設新疆准東,吐魯投入的許可。同時,暫緩建設新疆准東,中已投風區、酒泉二期第二批風電項目,存量風區、在建的輸電通道重點用於消納存量風電項目。

Key Business Developments

Environmental Protection Business

As at 30 June 2017, the Group's desulfurization and denitrification projects under construction were as follows:

主要業務發展

環保業務

截至2017年6月30日,本集團在建脱硫脱硝項目情況如下表所示:

Projects	項目	Number 數量	Installed capacity 裝機容量 <i>(MW)</i>
		(個)	(兆瓦)
Desulfurization projects under construction	在建脱硫項目	30	26,555
Desulfurization reconstruction projects	脱硫改造項目	18	14,990
Desulfurization reconstruction EPC projects	脱硫改造EPC項目	15	11,070
Desulfurization concession reconstruction	脱硫改造特許項目		,
projects		3	3,920
Newly built desulfurization projects	脱硫新建項目	12	11,565
Newly built desulfurization EPC projects	脱硫新建EPC項目	11	10,245
Newly built desulfurization concession project	t 脱硫新建特許項目	1	1,320
Denitrification projects under construction	在建脱硝項目	23	16,305
Denitrification reconstruction projects	脱硝改造項目	13	6,560
Denitrification reconstruction EPC projects	脱硝改造EPC項目	11	5,880
Denitrification concession reconstruction	脱硝改造特許項目		
projects		2	680
Newly built denitrification projects	脱硝新建項目	10	9,745
Newly built denitrification EPC projects	脱硝新建EPC項目	9	8,425
Newly built denitrification concession project	脱硝新建特許項目	1	1,320

管理層討論及分析(續)

Currently, the models of concession operations of the Group's environmental protection business are categorized into three types: general concession model, the operation and maintenance model of general contracting for tariff (generating income from tariff for desulfurization, and assuming the responsibility for the supply of materials and the disposal of desulfurization by-products in addition to general operation and maintenance) and the operation and maintenance model (generating income from general operations and maintenance). As at 30 June 2017, the desulfurization concession operation of the Group had an aggregate installed capacity of 15,890 MW, the operating units of denitrification concession operation had an aggregate installed capacity of 11,100 MW; the desulfurization generating units under the model of general contracting for tariff had an installed capacity of 2,020 MW; the desulfurization generating units under the operation and maintenance model had an installed capacity of 17,430 MW.

目前,本集團環保業務特許經營模式分為三種:一般特許經營模式、電價總包運維模式(獲得脱硫電價收益,除負責一般性運維外還負責物耗供應及脱硫副產物的處置)及運維模式(獲得一般性運維收益)。截至2017年6月30日,本集團脱硫特許經營在運機組裝機總容量為15,890兆瓦,脱硝特許經營在運機組裝機總容量為11,100兆瓦;電價總包運維模式脱硫機組為2,020兆瓦;運維模式脱硫機組為17,430兆瓦。

As at 30 June 2017, the annual production capacity of denitrification catalysts, the key material for denitrification service of the Group was $24,000 \, \text{m}^3$.

截至2017年6月30日,本集團脱硝服務的關鍵材料一脱硝催化劑的年產能為24,000立方米。

As at 30 June 2017, the Group processed approximately 89,740,000 tons of sewage (including reclaimed water) and reduced the cumulative chemical oxygen demand ("COD") emissions by approximately 36,000 tons.

截至2017年6月30日,本集團的污水處理(含中水)量約為8,974萬噸,化學需氧量(COD)累計減排量約為3.6萬噸。

Energy Conservation Solutions Business

節能解決方案業務

For the Group's energy conservation solutions business, the market expansion of plasma ignition business has been greatly affected by the decline of the new infrastructure coal market, and the saturation of the market for low-nitrogen combustion retrofitting. The Group formed by integration the business structure with pulverized coal combustion technology as the core, the whole process of production in coal-fired power plants of energy-saving products with reduced emission as the pillar, and supplemented by relevant technical service and industrial investments in the first half of 2017 and focused on building a leading company providing "one-stop" comprehensive energy-saving retrofitting services, which has effectively become the new focal point for growth of the Group's business. The Group has been actively following the Shizuishan, Changzhou power plants and other energy-saving reconstruction projects, and has currently entered into contracts with total value of approximately RMB222.0 million.

在節能業務方面,本集團等離子點火業務市場開拓受新增基建煤電市場下滑影響較大,低氮燃燒改造業務市場趨於飽和。本集團於2017年上半年整合形成以煤粉燃燒技術為核心、燃煤電廠生產過程節能減排產品為支柱、相關技術服務和產業投資為補充的業務結構,着力打造「一站式」綜合節能改造服務的龍頭企業,有效形成了本集團新的業務增長點;積極跟蹤石嘴山、常州電廠等節能改造項目,目前已簽約金額約為人民幣2.22億元。

管理層討論及分析(續)

Wind Power Products and Services Business

The Group's wind turbine generator ("**WTG**") sales volumes by product type during the first half year of 2017 and the corresponding period in 2016 are set forth below:

風電產品及服務業務

本集團於2017年上半年及2016年同期按產品類型 劃分的風機銷量如下:

		Completed Sales Orders		Order	s
		完成銷售		訂單	
		(units)		(units)
		(套)		(套)	
	For the six months For the six months		nonths		
		ended 30 June 截至6月30日止6個月		ended 30 Ju 截至2017年6月3	
				Confirmed	Successful
		2017	2016	Orders	Tenders
				已確認訂單	成功競標
1.5MW	1.5兆瓦	102	120	597	2
2.0MW	2.0兆瓦	206	256	938	193
3.0MW	3.0兆瓦	2	_	20	
Total	總數	310	376	1,555	195

The Group is now actively developing into the wind power operation and maintenance market, relying on professionalism and technical means to provide value-added services for WTG sales business so as to explore new business models.

本集團目前積極開拓風電運維市場。通過依靠專業化水平和技術手段,為風機銷售業務提供增值 服務,探索新的商業模式。

Steady Expansion of the Domestic Market

For the first half of 2017, the marketing system of every unit actively coped with every challenge and difficulty, and thus made new achievements and breakthroughs, achieving the new orders of the Group of approximately RMB5,688 million, including:

- The total value of the signed orders of Longyuan Power Technology and Engineering (except Guodian Longyuan Energy Saving Technology Co., Ltd. ("Guodian Longyuan Energy Saving")) for the first half of 2017 amounted to approximately RMB200 million; moreover, Longyuan Power Technology and Engineering took the initiative to activate the idle resources by becoming the external bidding agent for Guohong Pulandian Thermal Power Plant.
- The total value of the new orders of United Power for the first half of 2017 amounted to approximately RMB3,410 million with a year-on-year growth rate of 10.3%. United Power was the stable contributor of orders for the Group in the first half of 2017.

穩步拓展國內市場

於2017年上半年,各單位市場營銷體系積極面對 挑戰,迎難而上,取得了新成績、新突破,本集 團新簽訂單約人民幣56.88億元。其中:

- 龍源工程於2017年上半年簽約訂單約人民幣2億元(不含國電龍源節能技術有限公司(「節能公司」)),同時,龍源工程主動盤活閒置資源,取得國宏普蘭店熱電廠系統外招標代理業務。
- 聯合動力於2017年上半年合計新簽訂單人 民幣約34.1億元,較同期增長10.3%,是本 集團上半年訂單的穩定貢獻者。

- Guodian Longyuan Energy Saving effectively integrated its resources and was successfully awarded the contract for the first large-scale coal-fired power unit comprehensive energy conservation reconstruction project in China with the contract price over RMB400 million.
- 節能公司有效發揮資源整合合力,中標國內 首例大型火電機組綜合節能改造項目,單項 合同額超人民幣4億元。

Actively Expansion of the Overseas Market

In the first half year of 2017, the Group took the lead in organizing the participation in large domestic and foreign exhibitions such as Kazakhstan's World Expo, India Power-gen, State Power Technology Exchange Meeting of Iran and China International Environmental Protection Exhibition. The Group, by means of forum exchange, site recommendation, etc., further promoted the environmental protection technologies and products of the Group. At the same time, the Group assigned marketing personnel to India, Iran, Vietnam, Kazakhstan, etc.; Longyuan Environmental was responsible for establishing overseas subsidiaries in India and it has currently appointed 5 permanent representatives; Guodian Technology & Environment Group Hong Kong Corporation Limited was responsible for establishing representative offices in Iran, Vietnam and Kazakhstan with 1 chief representative assigned, as well as carrying out relevant marketing.

Guodian Zhishen made great effort to explore the offshore markets in Indonesia, India, etc. and was successfully awarded the contract for four bid sections such as Shenhua Java certain type of Coal-fired Power Generation Engineering DCS Main and Auxiliary Integration Project in Indonesia, etc. with the total bid-winning amount of approximately RMB12 million, which represented a historical breakthrough of the DCS business of the Group and was also the first offshore 1,000MW coal-fired power generation DCS project contracted by the domestic enterprise.

In the first half of 2017, Longyuan Environmental independently completed bids for 11 offshore desulfurization and denitration projects (totaling 21 units, with a total installed capacity of about 12 million kilowatts). In addition, the Group actively attempted to establish strategic cooperative relationships with famous enterprises such as Power Construction Corporation of China, China Machinery Engineering Corporation* (中國機械設備工程股份有限公司) and Harbin Electric International Company Limited and increase the joint efforts in offshore operations.

Continuously Dedicating to Technological Innovation and Research and Development

The Group dedicated to technological innovation and research and development in order to enhance its core competitiveness. In the first half of 2017, the Group obtained 63 new patents, including 25 invention patents.

積極拓展海外市場

於2017年上半年本集團牽頭組織參加了哈薩克斯坦世博會、印度電力展、伊朗「國電技術交流會」及中國國際環保展等國內外大型展會。結合論壇交流、現場推介等形式進一步向世界和行業推廣本集團的環保技術和產品。同時,在印度、伊朗、越南、哈薩克斯坦等國家派駐市場人員,由龍源環保負責在印度成立海外子公司,目前已安排常駐代表5人:由國電科技環保集團香港有限公司負責在伊朗、越南、哈薩克斯坦設立代表處,已派駐1名首席代表,並開展有關市場工作。

國電智深全力以赴開拓印尼、印度等海外市場,成功中標神華印尼爪哇某燃煤發電工程DCS主輔一體化等四個標段項目,中標金額約為人民幣1,200萬元,實現了本集團DCS業務的歷史性突破,同時也是國內廠家承攬的首個海外1,000兆瓦級燃煤發電DCS項目。

於2017年上半年龍源環保獨立完成了共計11個海外脱硫脱硝項目(共計21台機組,總裝機容量約1,200萬千瓦)的投標工作。此外本集團還積極嘗試與中國電力建設集團有限公司、中國機械設備工程股份有限公司、哈爾濱電氣國際工程有限責任公司等知名企業建立戰略合作關係,加大聯合出海力度。

不斷致力於科技創新及研發

本集團為增強核心競爭力,在科技創新及研發方面努力不懈。2017年上半年,本集團新獲專利63項,包括發明專利25項。

^{*} For identification purpose only

管理層討論及分析(續)

Analysis of Financial Results for the First Half of 2017

Please read this section in conjunction with the unaudited interim results of the Group as at, and for the six months ended 30 June 2017.

Analysis of consolidated results

Revenue

Consolidated revenue of the Group during the first half of 2017 was approximately RMB4,991.1 million, representing a decrease of approximately 20.4% from approximately RMB6,270.5 million in the first half of 2016. The Group's decrease in consolidated revenue was primarily due to the industry and market influence which resulted in a decline in business volume of each business segment. As compared to the first half of 2016, revenues from environmental protection business, energy conversation solutions business, wind power products and services business, and solar energy products and services business (discontinued operation) decreased by approximately RMB157.8 million, RMB334.7 million, RMB529.0 million and RMB178.5 million respectively, representing decreases of approximately 6.6%, 44.1%, 19.4% and 99.2% respectively. The decrease in revenue generated from environmental protection business was mainly due to a drop in revenue from the NO, emission reduction business. The decrease in revenue from the energy conservation solution business was primarily due to the decrease in the revenue from the business of general contracting for power stations and the energy management contract business. The decrease in revenue from the wind power products and services business was primarily attributable to a decline in the number of wind turbines of which the transfer testing was completed by the Group in the first half of 2017. The decrease in revenue from the solar power products and services business (discontinued operation) was primarily attributable to the discontinuation of such business.

2017年上半年財務業績分析

閱讀本節時請一併閱讀於2017年6月30日及截至 該日止6個月期間本集團未經審核的中期業績。

合併業績分析

收入

2017年上半年,本集團合併收入約為人民幣 4,991.1百萬元,與2016年上半年的約人民幣 6,270.5百萬元相比,減少約20.4%。本集團合併 收入減少的主要原因是受行業和市場影響,各業 務板塊業務量減少所致。與2016年上半年相比, 環保業務、節能解決方案業務、風電產品及服務 業務和太陽能產品及服務業務(已終止經營)收入 分別減少約人民幣157.8百萬元、人民幣334.7 百萬元、人民幣529.0百萬元及人民幣178.5百 萬元,減少率分別約為6.6%、44.1%、19.4%及 99.2%。環保業務產生的收入下降主要是由於脱 硝業務的收入減少,節能解決方案收入減少主要 是由於電站建設總承包業務及合同能源管理業務 的收入下降,風電產品及服務業務產生的收入下 降主要是由於2017年上半年本集團完成調試測試 的風機數量有所下降,太陽能產品及服務業務(已 終止經營)產生的收入減少主要是由於終止經營所

The following table sets out the Group's revenues by segments and as a percentage of total consolidated revenue of the Group for the six months ended 30 June 2017 and 2016 respectively:

下表分別載列截至2017年及2016年6月30日止6個 月按分部劃分的本集團收入及其佔本集團合併收 入的百分比:

		For the six months ended 30 June 截至6月30日止6個月			
		2017		2016	
		(RMB million)	%	(RMB million)	%
		(人民幣百萬元)	%	(人民幣百萬元)	%
Environmental Protection and	環保及節能解決方案:				
Energy Conservation Solutions:					
Environmental protection	環保	2,219.6	44.5	2,377.4	37.9
Energy conservation solutions	節能解決方案	423.9	8.5	758.6	12.1
Sub-total	合計	2,643.5	53.0	3,136.0	50.0
Renewable Energy Equipment	可再生能源設備				
Manufacturing and Services:	製造及服務:				
Wind power products and	風電產品及服務				
services		2,192.5	43.8	2,721.5	43.4
Solar power products and	太陽能產品及服務				
services (discontinued	(已終止經營)				
operation)		1.4	0.1	179.9	2.9
Sub-total	合計	2,193.9	43.9	2,901.4	46.3
All others	所有其他	153.7	3.1	233.1	3.7
Total	總計	4.991.1	100.0	6.270.5	100.0

Cost of sales 銷售成本

For the six months ended 30 June 2017, consolidated cost of sales for the Group decreased by approximately RMB1,030.2 million, or 21.2%, from approximately RMB4,853.7 million for the corresponding period in 2016 to approximately RMB3,823.5 million. This decrease was primarily due to the decrease in cost of sales of each business segment of the Group, which was consistent with the declining trend of revenues from those businesses.

The following table sets out the Group's cost of sales by segments and as a percentage of total consolidated cost of sales of the Group for the six months ended 30 June 2017 and 2016 respectively:

截至2017年6月30日止6個月,本集團合併銷售成本約為人民幣3,823.5百萬元,較2016年同期的約人民幣4,853.7百萬元減少約為人民幣1,030.2百萬元或21.2%。下降的主要原因是本集團各業務板塊的銷售成本均有所減少,與該等業務收入下降趨勢相一致。

下表分別載列截至2017年及2016年6月30日止6個月按分部劃分的本集團銷售成本及其佔本集團合併銷售成本的百分比:

		For the six months ended 30 June 截至6月30日止6個月			
		2017		2016	
		(RMB million) (人民幣百萬元)	% %	(RMB million) (人民幣百萬元)	% %
Environmental Protection and Energy Conservation Solutions:	環保及節能解決方案:				
Environmental protection Energy conservation	環保 節能解決方案	1,776.2	46.5	1,969.1	40.6
solutions		314.4	8.2	592.6	12.2
Sub-total	合計	2,090.6	54.7	2,561.7	52.8
Renewable Energy Equipment Manufacturing and Services:	可再生能源設備 製造及服務:				
Wind power products and services	風電產品及服務	1,642.6	43.0	2,034.0	41.9
Solar power products and services (discontinued	太陽能產品及服務 (已終止營業)	1,5 12.0	10.0	2,00 1.0	11.0
operation)		6.6	0.1	155.7	3.2
Sub-total	合計	1,649.2	43.1	2,189.7	45.1
All others	所有其他	83.7	2.2	102.3	2.1
Total	總計	3,823.5	100.0	4,853.7	100.0

Gross profit and gross profit margin

For the foregoing reasons, consolidated gross profit of the Group decreased by approximately RMB249.2 million, or 17.6%, from approximately RMB1,416.8 million for the six months ended 30 June 2016 to approximately RMB1,167.6 million for the corresponding period in 2017. The average gross profit margin of the Group across all segments of the Group increased from 22.6% in the first half of 2016 to 23.4% for the corresponding period in 2017. The increase in gross profit margin was primarily attributable to the increase in gross profit margin for the environmental protection and energy conservation solutions segment.

The following table sets out the Group's gross profit and gross profit margins by segments for the six months ended 30 June 2017 and 2016 respectively:

毛利及毛利率

鑒於上述原因,本集團截至2017年6月30日止6個月的合併毛利約為人民幣1,167.6百萬元,與上年同期的約人民幣1,416.8百萬元相比減少約人民幣249.2百萬元或17.6%。本集團所有分部平均毛利率從2016年上半年的22.6%增加至2017年同期的23.4%。毛利率增加主要是因為環保及節能解決方案的毛利率增加所致。

下表分別載列截至2017年及2016年6月30日止6個 月按分部劃分的本集團毛利和毛利率:

	For the six months ended 30 June 截至6月30日止6個月					
		2017		2016	16	
		(RMB million)	%	(RMB million)	%	
		(人民幣百萬元)	%	(人民幣百萬元)	%	
Environmental Protection and Energy Conservation Solutions:	環保及節能解決方案:					
Environmental protection	環保	443.4	20.0	408.3	17.2	
Energy conservation solutions	節能解決方案	109.5	25.8	166.0	21.9	
Sub-total	슴計	552.9	20.9	574.3	18.3	
Renewable Energy Equipment	可再生能源設備製造及					
Manufacturing and Services:	服務:					
Wind power products and services	風電產品及服務	549.9	25.1	687.5	25.3	
Solar power products and services	太陽能產品及服務	(5.2)	(371.4)	24.2	13.5	
Sub-total	合計	544.7	24.8	711.7	24.5	
All others	所有其他	70.0	45.5	130.8	56.1	
Total	總計	1,167.6	23.4	1,416.8	22.6	

管理層討論及分析(續)

Other revenue

Other revenue from continuing operations of the Group increased by approximately RMB17.4 million, or 14.1%, from approximately RMB123.3 million for the six months ended 30 June 2016 to approximately RMB140.7 million for the six months ended 30 June 2017, which was primarily due to the increase in interest income; other revenue of the Group's discontinued operation decreased by approximately RMB39.4 million, or 93.4%, from approximately RMB42.2 million for the six months ended 30 June 2016, to approximately RMB2.8 million, which was primarily due to the decrease in subsidies from the PRC government.

Other net income

The other net income from continuing operations of the Group was approximately RMB547.6 million for the six months ended 30 June 2017, representing an increase of approximately RMB394.1 million, or 256.7%, from approximately RMB153.5 million for the corresponding period in 2016. This increase was primarily due to the increase of the net income from the disposal of subsidiaries; the other net income from the Group's discontinued operation was approximately RMB98.8 million, representing an increase of approximately RMB33.1 million, or 50.4%, from approximately RMB65.7 million for the corresponding period in 2016. This increase was mainly due to the disposal of subsidiaries by the Group for the period.

Selling and distribution expenses

The selling and distribution expenses of the Group's continuing operations decreased by approximately RMB1.0 million, or 0.2%, from approximately RMB434.2 million for the six months ended 30 June 2016 to approximately RMB433.2 million for the corresponding period in 2017; the selling and distribution expenses of the Group's discontinued operation increased by approximately RMB9.4 million, or 109.3%, from approximately -RMB8.6 million for the six months ended 30 June 2016 to approximately RMB0.8 million for the corresponding period in 2017, which was mainly due to the decrease in relevant expenses as a result of the decrease in sales and there is no reversal of expired warranty for the period.

其他收入

截至2017年6月30日止6個月,本集團持續經營業務的其他收入約為人民幣140.7百萬元,較截至2016年6月30日止6個月的約人民幣123.3百萬元增加約人民幣17.4百萬元或14.1%,主要原因是利息收入增加;本集團已終止經營業務的其他收入約為人民幣2.8百萬元,較2016年6月30日止6個月的約人民幣42.2百萬元減少約人民幣39.4百萬元或93.4%,主要原因是來自中國政府的補助減少。

其他收益淨額

截至2017年6月30日止6個月,本集團持續經營業務其他收益淨額約人民幣547.6百萬元,較2016年同期的約人民幣153.5百萬元增加約人民幣394.1百萬元或256.7%,主要是由於處置附屬公司淨收益的增加;本集團已終止經營業務的其他收益淨額約人民幣98.8百萬元,較2016年同期其他收益淨額約人民幣65.7百萬元增加約人民幣33.1百萬元或50.4%,主要是由於本期本集團處置附屬公司所致。

銷售及分銷開支

截至2017年6月30日止6個月,本集團持續經營業務銷售及分銷開支約人民幣433.2百萬元,較2016年同期的約人民幣434.2百萬元減少約人民幣1.0百萬元或0.2%;本集團已終止經營業務銷售及分銷開支約人民幣0.8百萬元,較2016年同期的約人民幣負8.6百萬元增加約人民幣9.4百萬元或109.3%,主要是由於銷售額的減少導致相關費用的下降以及本期無質保金到期沖回。

Administrative expenses

The administrative expenses of the Group's continuing operations increased by approximately RMB237.2 million, or 41.6%, from approximately RMB570.8 million for the six months ended 30 June 2016 to approximately RMB808.0 million for the corresponding period in 2017, which was primarily due to the increase in assets impairment losses; the administrative expenses of the Group's discontinued operation decreased by approximately RMB92.6 million, or 34.9%, from approximately RMB265.0 million for the six months ended 30 June 2016 to approximately RMB172.4 million for the corresponding period in 2017, which was primarily due to the decrease in depreciation and assets impairment losses.

Operating profit/(loss) and operating profit margin

As a result of the foregoing factors, the operating profit of the Group's continuing operations decreased by approximately RMB44.6 million, or 6.7%, from approximately RMB664.4 million for the first half of 2016 to approximately RMB619.8 million for the corresponding period in 2017; the operating loss of the Group's discontinued operation decreased by approximately RMB47.3 million, or 38.1%, from approximately RMB124.2 million for the first half of 2016 to approximately RMB76.9 million for the corresponding period in 2017.

Finance costs

The finance costs of the Group's continuing operations increased by approximately RMB54.3 million, or 23.4%, from approximately RMB231.9 million for the six months ended 30 June 2016 to approximately RMB286.2 million for the corresponding period in 2017, which was primarily due to the increase in the average borrowing size; the finance costs of the Group's discontinued operation decreased by approximately RMB125.3 million, or 96.1%, from approximately RMB130.4 million for the six months ended 30 June 2016 to approximately RMB5.1 million for the corresponding period in 2017, which was primarily due to the significant decrease in the average borrowing size.

Profit/(loss) before taxation

As a result of the foregoing factors, the profit before taxation of the Group's continuing operations decreased by approximately RMB106.3 million, or 22.3%, from approximately RMB477.6 million for the six months ended 30 June 2016 to approximately RMB371.3 million for the corresponding period in 2017; the loss before taxation of the Group's discontinued operation decreased by approximately RMB172.6 million, or 67.8%, from approximately RMB254.6 million for the six months ended 30 June 2016 to approximately RMB82.0 million for the corresponding period in 2017.

行政開支

截至2017年6月30日止6個月,本集團持續經營業務行政開支約人民幣808.0百萬元,較2016年同期的約人民幣570.8百萬元增加約人民幣237.2百萬元或41.6%,主要是資產減值損失的增加;本集團已終止經營業務行政開支約人民幣172.4百萬元,較2016年同期的約人民幣265.0百萬元減少約人民幣92.6百萬元或34.9%,主要是折舊及資產減值損失的減少。

經營利潤/(虧損)及經營利潤率

鑒於上述原因,本集團持續經營業務的經營利潤由2016年上半年的約人民幣664.4百萬元減少至2017年同期的約人民幣619.8百萬元,減少約人民幣44.6百萬元或6.7%;本集團已終止經營業務的經營虧損由2016年上半年的約人民幣124.2百萬元減少至2017年同期的約76.9百萬元,減少約人民幣47.3百萬元或38.1%。

財務成本

截至2017年6月30日止6個月,本集團持續經營業務的財務成本約人民幣286.2百萬元,較2016年同期的約人民幣231.9百萬元增加約人民幣54.3百萬元或23.4%,增加的原因主要是由於平均借款規模增加;本集團已終止經營業務的財務成本約人民幣5.1百萬元,較2016年同期的約人民幣130.4百萬元減少約125.3百萬元或96.1%,主要是由於平均借款規模大幅降低。

税前利潤/(虧損)

鑒於上述原因,本集團持續經營業務的稅前利潤從截至2016年6月30日止6個月的約人民幣477.6百萬元減少至2017年同期的約人民幣371.3百萬元,減少約人民幣106.3百萬元或22.3%;本集團已終止經營業務的稅前虧損從截至2016年6月30日止6個月的約人民幣254.6百萬元減少至2017年同期的約人民幣82.0百萬元,減少約人民幣172.6百萬元或67.8%。

管理層討論及分析(續)

Income tax

The income tax for the Group's continuing operations increased by approximately RMB35.8 million, or 33.9%, from approximately RMB105.5 million for the six months ended 30 June 2016 to approximately RMB141.3 million for the corresponding period in 2017. The effective tax rate for the Group's continuing operations increased from 22.1% for the six months ended 30 June 2016 to 38.0% for the corresponding period in 2017, which was primarily due to the increase in deductible tax loss not being recognized as deferred income tax assets by the Group for the period and the provision of under-provision of income tax in respect of prior years.

Profit for the period

As a result of the foregoing factors, the Group recorded a profit of approximately RMB146.5 million for the six months ended 30 June 2017, whereas a profit of approximately RMB117.4 million was recorded for the corresponding period in 2016.

Profit attributable to non-controlling interests

Profit attributable to non-controlling interests of the Group for the six months ended 30 June 2017 amounted to approximately RMB6.8 million, representing a decrease of approximately RMB55.9 million, or 89.2%, from approximately RMB62.7 million for the corresponding period in 2016. The decrease was primarily attributable to the disposal of certain partially owned subsidiaries of the Group for the period.

Profit attributable to equity shareholders of the Company

As a result of the foregoing factors, profit attributable to equity shareholders of the Company for the six months ended 30 June 2017 amounted to approximately RMB139.7 million, whereas profit attributable to equity shareholders of the Company for the corresponding period in 2016 amounted to approximately RMB54.7 million.

所得税

本集團持續經營業務的所得稅由2016年6月30日 止6個月的約人民幣105.5百萬元增加至2017年同 期的約人民幣141.3百萬元,增加約人民幣35.8 百萬元或33.9%。本集團持續經營業務的實際稅 率從截至2016年6月30日止6個月的22.1%增加至 2017年同期的38.0%,主要是由於本集團本期未 確認為遞延所得稅資產的可抵扣虧損額增加以及 補提以前年度少提所得稅。

本期利潤

鑒於上述原因,截至2017年6月30日止6個月,本 集團錄得利潤約人民幣146.5百萬元,而2016年 同期錄得利潤約人民幣117.4百萬元。

歸屬於非控股權益利潤

本集團截至2017年6月30日止6個月的歸屬於非控股權益利潤約人民幣6.8百萬元,較2016年同期的約人民幣62.7百萬元減少約人民幣55.9百萬元,或89.2%,主要是由於本期本集團處置若干非全資附屬公司所致。

歸屬於本公司權益股東利潤

鑒於上述原因,本公司截至2017年6月30日止6個月的歸屬於本公司權益股東利潤約人民幣139.7百萬元,而2016年同期錄得歸屬於本公司權益股東利潤約人民幣54.7百萬元。

Analysis of Segment Results

分部業績分析

The following table sets out the Group's segment revenues, gross profit and operating profit for the six months ended 30 June 2017 and 2016 respectively, and each as a percentage of total revenues, gross profit, and operating profit of the Group for such periods:

下表分別載列截至2017年及2016年6月30日止6個 月本集團的分部收入、毛利和經營利潤以及各自 佔相關期間本集團收入、毛利和經營利潤總額的 百分比:

		For the six months ended 30 June 截至6月30日止6個月			
		2017		2016	
		(RMB million)	%	(RMB million)	%
		(人民幣百萬元)	%	(人民幣百萬元)	%
Environmental protection and	環保及節能解決方案				
energy conservation solutions					
Environmental protection:	環保:				
Revenue	收入	2,219.6	44.5	2,377.4	37.9
Gross profit	毛利	443.4	38.0	408.3	28.8
Operating profit	經營利潤	498.2	91.8	382.3	70.8
Energy conservation solutions:	節能解決方案:				
Revenue	收入	423.9	8.5	758.6	12.1
Gross profit	毛利	109.5	9.4	166.0	11.7
Operating (loss)/profit	經營(虧損)/利潤	(19.5)	(3.6)	35.7	6.6
Segment revenues	分部收入	2,643.5	53.0	3,136.0	50.0
Segment gross profit	分部毛利	552.9	47.4	574.3	40.5
Segment operating profit	分部經營利潤	478.7	88.2	418.0	77.4
Renewable energy equipment	可再生能源設備				
Wind power products and services:	風電產品及服務:				
Revenue	收入	2,192.5	43.8	2,721.5	43.4
Gross profit	毛利	549.9	47.1	687.5	48.5
Operating profit	經營利潤	148.4	27.3	189.6	35.1
Solar energy products and services (discontinued operation):	太陽能產品及服務: (已終止經營)				
Revenue	收入	1.4	0.1	179.9	2.9
Gross profit	毛利	(5.2)	(0.4)		1.7
Operating loss	經營虧損	(76.9)	(14.2)		(23.0)
Segment revenues	分部收入	2,193.9	43.9	2,901.4	46.3
Segment gross profit	分部毛利	544.7	46.7	711.7	50.2
Segment operating profit	分部經營利潤	71.5	13.1	65.4	12.1

Environmental Protection and Energy Conservation Solutions

Environmental protection

Revenue

Revenue from the environmental protection business decreased by approximately RMB157.8 million, or 6.6%, from approximately RMB2,377.4 million for the six months ended 30 June 2016 to approximately RMB2,219.6 million for the corresponding period in 2017. The decrease was mainly attributable to the decrease in the Group's revenue generated from NO $_{\rm X}$ emission reduction business. As compared to the corresponding period in 2016, the Group's revenue generated from NO $_{\rm X}$ emission reduction business decreased by approximately RMB163.4 million, or 36.2%. The decrease in the Group's NO $_{\rm X}$ emission reduction business was mainly due to excess power production capacity, the stringent national controls and reduction in scale of new thermal power, and the upcoming completion of the ultra-low emission reconstruction of majority of units in the existing market, which significantly shrank the market for thermal power NO $_{\rm Y}$ emission reduction upgrading and reconstruction.

The following table sets out the revenues from the business lines included in the Group's environmental protection business and each as a percentage of the revenue from this business for the six months ended 30 June 2017 and 2016 respectively.

環保及節能解決方案

環保

收入

環保業務於截至2017年6月30日止6個月收入約人民幣2,219.6百萬元,與2016年同期的約人民幣2,377.4百萬元相比減少約人民幣157.8百萬元或6.6%。主要是由於脱硝業務收入減少所致。與2016年同期相比,本集團脱硝業務收入減少所致。與2016年同期相比,本集團脱硝業務收入減少約人民幣163.4百萬元,降幅約為36.2%。本集團脱硝業務的減少主要是因為電力產能過剩,國家嚴控和壓縮新建火電規模,而現有市場中大部分機組超低排放改造即將完成,火電脱硝升級改造市場萎縮嚴重。

下表分別載列截至2017年及2016年6月30日止6個月包括在本集團環保業務中各業務線的收入,以及各自佔該業務收入的百分比。

		For the six months ended 30 June 截至6月30日止6個月				
		2017		2016	2016	
		(RMB million)	%	(RMB million)	%	
		(人民幣百萬元)	%	(人民幣百萬元)	%	
SO ₂ emission reduction	脱硫	1,240.5	55.9	1,214.1	51.1	
NO _x emission reduction	脱硝	288.4	13.0	451.8	19.0	
Low NO _x combustion equipment	低氮燃燒設備	32.2	1.4	55.7	2.3	
Water treatment	水處理	445.4	20.1	513.6	21.6	
Ash removal	除塵	213.1	9.6	142.2	6.0	
Total	總計	2,219.6	100.0	2,377.4	100.0	

Cost of sales

Cost of sales for the environmental protection business was approximately RMB1,776.2 million for the six months ended 30 June 2017, representing a decrease of RMB192.9 million, or 9.8%, as compared with that of approximately RMB1,969.1 million for the corresponding period in 2016. The decrease was consistent with the decrease in revenue generated from such business line and was mainly due to the decrease in the cost of sales for the NO_{X} emission reduction business.

銷售成本

環保業務截至2017年6月30日止6個月的銷售成本約人民幣1,776.2百萬元,與上年同期的約人民幣1,969.1百萬元相比減少192.9百萬元或9.8%。這與該業務線的收入下降一致,主要原因是脱硝業務所產生的銷售成本減少所致。

Gross profit and gross profit margin

As a result of the foregoing reasons, gross profit attributable to the environmental protection business increased by approximately RMB35.1 million, or 8.6%, from approximately RMB408.3 million for the six months ended 30 June 2016 to approximately RMB443.4 million for the corresponding period in 2017. The profit margin of this business increased from approximately 17.2% for the first half of 2016 to approximately 20.0% for the first half of 2017, mainly due to the increase in gross profit margin of SO $_{\alpha}$ emission reduction business and low NO $_{\alpha}$ combustion business.

The following table sets out the changes in gross profit margins for the business lines included in the Group's environmental protection business for the six months ended 30 June 2017 as compared with the corresponding period in the previous year:

毛利及毛利率

鑒於上述原因,環保業務產生的毛利從截至2016年6月30日止6個月的約人民幣408.3百萬元增長至2017年同期的約人民幣443.4百萬元,增長約人民幣35.1百萬元或8.6%。此業務的毛利率從2016年上半年的約17.2%增加至2017年上半年的約20.0%,主要因為脱硫業務和低氮燃燒業務的毛利率增加。

下表載列截至2017年6月30日止6個月構成本集 團環保業務的業務線毛利率與上年同期相比的變 化:

		For the six months ended 30 June		
		截至6月30日止6個	5月	
		2017	2016	
		(%)	(%)	
SO ₂ emission reduction	脱硫	21.2	12.7	
NO _x emission reduction	脱硝	29.7	39.2	
Low NO _x combustion equipment	低氮燃燒設備	27.6	11.8	
Water treatment	水處理	16.7	18.2	
Ash removal	除塵	12.6	21.1	

Energy conservation solutions

Revenue

Revenue from the energy conservation solutions business decreased by approximately RMB334.7 million, or 44.1%, from approximately RMB758.6 million for the first half of 2016 to approximately RMB423.9 million for the corresponding period in 2017. The decrease in revenue was mainly due to the decrease in revenue generated from the general contracting business of power station construction, given that the two projects in Hami of Xinjiang and Ledong of Hainan undertaken by the general contracting business of power station construction of the Group were both in their final stages.

節能解決方案

收入

節能解決方案業務的收入從2016年上半年的約人民幣758.6百萬元減少至2017年同期的人民幣約423.9百萬元,減少約人民幣334.7百萬元或44.1%。收入減少主要是因為電站建設總承包業務線收入下降,這是本集團電站建設總承包業務建的新疆哈密和海南樂東兩個項目進入結算收尾階段所致。

The following table sets out the revenues from the business lines comprising the Group's energy conservation solutions business, each as a percentage of the revenue from this business, for the six months ended 30 June 2017 and 2016 respectively.

下表分別載列截至2017年及2016年6月30日止6個月包括在本集團節能解決方案各業務線的收入, 以及各自佔該業務收入的百分比。

	For the six months ended 30 June 截至6月30日止6個月				
		2017		2016	
		(RMB million)	%	(RMB million)	%
		(人民幣百萬元)	%	(人民幣百萬元)	%
Plasma-assisted coal ignition and	等離子體點火及穩燃				
combustion stabilization		134.1	31.6	141.2	18.6
Waste heat recovery	餘熱回收	94.1	22.2	_	_
General contracting for power	電站建設總承包				
stations		195.7	46.2	506.0	66.7
Others ⁽¹⁾	其他(1)		_	111.4	14.7
Total	總計	423.9	100.0	758.6	100.0

Note(1):

Others include steam turbine flow passage retrofitting and maintenance, energy management contract (EMC) and boiler comprehensive utilization and retrofitting.

Cost of sales

Cost of sales for the energy conservation solutions business decreased by approximately RMB278.2 million, or 46.9%, from approximately RMB592.6 million for the first half of 2016 to approximately RMB314.4 million for the corresponding period in 2017. Such decrease was consistent with the decrease in revenue from this business line.

Gross profit and gross profit margins

As a result of the foregoing factors, gross profit attributable to the energy conservation solutions business decreased by approximately RMB56.5 million, or 34.0%, from approximately RMB166.0 million for the first half of 2016 to approximately RMB109.5 million for the corresponding period in 2017. Gross profit margins for this business increased from approximately 21.9% for the first half of 2016 to approximately 25.8% for the corresponding period in 2017. This increase was primarily due to the growth in gross profit margins of general contracting for power stations business and plasma-assisted coal ignition and combustion stabilization business which had contributed to a relatively large percentage of revenue.

附註(1):

其他包括汽輪機通流改造及維修、合同 能源管理(EMC)、鍋爐綜合利用改造業 務。

銷售成本

節能解決方案業務的銷售成本從2016年上半年的 約人民幣592.6百萬元減少至2017年同期的約人 民幣314.4百萬元,減少約人民幣278.2百萬元或 46.9%,這與該業務線的收入下降趨勢一致。

毛利及毛利率

鑒於上述原因,節能解決方案業務的毛利從2016年上半年的約人民幣166.0百萬元下降至2017年同期的約人民幣109.5百萬元,減少約人民幣56.5百萬元或34.0%。此業務的毛利率從2016年上半年的約21.9%上升至2017年同期的約25.8%。增加的主要原因是因為收入所佔比例較大的電站建設總承包業務及等離子體點火及穩燃餘熱回收業務的毛利率上升。

The following table sets out the changes in gross profit margins for the business lines comprising the Group's energy conservation solutions business for the six months ended 30 June 2017 as compared with the six months ended 30 June 2016:

下表載列截至2017年6月30日止6個月構成本集團 節能解決方案業務的業務線毛利率與截至2016年 6月30日止6個月相比的變化:

		For the six months ende 截至6月30日止6個	
		2017	2016
		(%)	(%)
Plasma-assisted coal ignition and	等離子體點火及穩燃		
combustion stabilization		31.5	22.2
Waste heat recovery	餘熱回收	22.1	_
General contracting for power stations	電站建設總承包	24.1	18.3
Others ⁽¹⁾	其他(1)	-	41.6

Note(1):

Others include steam turbine flow passage retrofitting and maintenance, energy management contract (EMC) and boiler comprehensive utilization and retrofitting.

附註(1): 其他包括汽輪機通流改造及維修、合同能

源管理(EMC)、鍋爐綜合利用改造業務。

Renewable energy equipment manufacturing and services

Wind power products and services

Revenues

Revenue attributable to the wind power products and services business decreased by approximately RMB529.0 million, or 19.4%, from approximately RMB2,721.5 million for the first half year of 2016 to approximately RMB2,192.5 million for the corresponding period in 2017. The decrease was mainly attributable to the slight decrease in number of wind turbines of the Group which completed testing.

Cost of sales

Cost of sales attributable to the wind power products and services business decreased by approximately RMB391.4 million, or 19.2%, from approximately RMB2,034.0 million for the first half of 2016 to approximately RMB1,642.6 million for the corresponding period in 2017. Such decrease was consistent with the downward trend of revenue from these businesses.

Gross profit and gross profit margin

As a result of the foregoing reasons, gross profit attributable to the wind power products and services business decreased by approximately RMB137.6 million, or 20.0%, from approximately RMB687.5 million for the first half of 2016 to approximately RMB549.9 million for the corresponding period of 2017. Gross profit margin for this business for the first half in 2017 was 25.1%, basically the same as 25.3% for the first half of 2016.

可再生能源設備製造及服務

風電產品及服務

收入

風電產品及服務業務的收入從2016年上半年的約 人民幣2,721.5百萬元下降至2017年同期的約人民 幣2,192.5百萬元,減少約人民幣529.0百萬元或 19.4%。下降的主要原因是本集團完成調試測試 的風機數量有所下降。

銷售成本

風電產品及服務業務的銷售成本從2016年上半年的約人民幣2,034.0百萬元下降至2017年同期的約人民幣1,642.6百萬元,減少約人民幣391.4百萬元或19.2%,這與該等業務的收入下降趨勢一致。

毛利及毛利率

鑒於上述原因,風電產品及服務業務的毛利從2016年上半年的約人民幣687.5百萬元下降至2017年同期的約人民幣549.9百萬元,減少約人民幣137.6百萬元或20.0%。此業務2017年上半年的毛利率為25.1%,與2016年上半年的25.3%基本持平。

管理層討論及分析(續)

Solar power products and services (discontinued operation)

Revenues

Revenue attributable to the solar power products and services business (discontinued operation) significantly decreased by approximately RMB178.5 million, or 99.2%, from approximately RMB179.9 million for the first half of 2016 to approximately RMB1.4 million for the corresponding period in 2017, which was mainly due to the discontinuation of solar power products and services business.

Cost of sales

Cost of sales attributable to the solar power products and services business (discontinued operations) decreased by approximately RMB149.1 million, or 95.8%, from approximately RMB155.7 million for the first half of 2016 to approximately RMB6.6 million for the corresponding period in 2017, consistent with a trend of decrease in revenue from this business.

Gross profit/(loss) and gross profit/(loss) margin

As a result of the foregoing reasons, the solar power products and services(discontinued operation) business of the Group recorded a gross loss of approximately RMB5.2 million for the six months ended 30 June 2017, representing a decrease of approximately RMB29.4 million or 121.5% as compared with the gross profit of approximately RMB24.2 million for the corresponding period in 2016. This business decreased significantly from a gross profit margin of 13.5% for the first half of 2016 to a gross loss margin of 371.4% for the first half of 2017.

Liquidity and Capital Resources

The following table sets out the net cash flows of the Group for the six months ended 30 June 2017 and 2016 respectively:

太陽能產品及服務(已終止經營)

收入

太陽能產品及服務業務(已終止經營)的收入從2016年上半年的約人民幣179.9百萬元大幅下降至2017年同期的約人民幣1.4百萬元,減少約人民幣178.5百萬元或99.2%,主要是由於太陽能產品及服務業務已終止經營所致。

銷售成本

太陽能產品及服務業務(已終止經營)的銷售成本從2016年上半年的約人民幣155.7百萬元減少至2017年同期的約人民幣6.6百萬元,下降約人民幣149.1百萬元或95.8%,成本下降與該業務的收入減少趨勢一致。

毛利/(毛虧)及毛利率/(毛虧率)

鑒於上述原因,本集團截至2017年6月30日止6個月太陽能產品及服務(已終止經營)業務的毛虧約為人民幣5.2百萬元,較2016年同期的毛利約人民幣24.2百萬元減少約人民幣29.4百萬元或121.5%。此業務從2016年上半年的毛利率13.5%大幅下降至2017年上半年的毛虧率371.4%。

流動資金和資本來源

下表分別載列截至2017年和2016年6月30日止6個月,本集團的現金流量淨額:

		For the six months e 截至6月30日山	
		2017 <i>(RMB million)</i> (人民幣百萬元)	2016 (RMB million) (人民幣百萬元)
Net cash used in operating activities Net cash generated from/(used in)	經營活動使用的現金淨額 投資活動產生/(使用)的現金淨額	(290.4)	(1,954.2)
investing activities Net cash (used in)/generated from	融資活動(使用)/產生的現金淨額	152.4	(77.8)
financing activities		(2,434.7)	1,105.1
Cash and cash equivalents as at 30 June	於6月30日的現金及現金等價物	1,805.4	1,396.5

Net cash used in operating activities

In the first half of 2017, net cash used in operating activities of the Group was approximately RMB290.4 million, while that of the same period in 2016 was approximately RMB1,954.2 million. The decrease in the net cash flow used in operating activities was mainly due to the decrease in the settlement of accounts payable of the Group for the period as compared with the same period in the previous year.

Net cash generated from/(used in) investing activities

Net cash generated from the Group's investing activities for the first half of 2017 was approximately RMB152.4 million, while net cash used in investing activities for the same period in 2016 was approximately RMB77.8 million. The increase in the net cash generated from investing activities was mainly due to the collection of part of considerations from the disposal of subsidiaries in the first half of 2017.

Net cash (used in)/generated from financing activities

Net cash used in financing activities of the Group for the first half of 2017 was approximately RMB2,434.7 million, while net cash generated from financing activities for the same period in 2016 was approximately RMB1,105.1 million, mainly due to the repayments of borrowings of the Group in the first half of 2017.

Working capital

As at 30 June 2017, the Group's cash and cash equivalents were approximately RMB1,805.4 million, representing a decrease of approximately RMB2,577.3 million, or 58.8%, as compared to RMB4,382.7 million as at 31 December 2016. The decrease was mainly attributable to the cash outflow for repayment of the Group's indebtedness being higher than the cash inflow of the borrowed indebtedness during the period.

The Group's gearing ratio, which is calculated by dividing net debt (including interest-bearing other payables and interest-bearing bank loans, less cash and cash equivalents) by the sum of total equity plus net debt, increased to 55.31% as at 30 June 2017 as compared to that of 53.80% as at 31 December 2016. The increase was mainly attributable to the decrease in the Group's cash and cash equivalents being higher than the decrease in the indebtedness.

Net current assets

As at 30 June 2017, the Group's net current assets were approximately RMB3,008.8 million, representing an increase of approximately RMB235.8 million, as compared to net current assets of approximately RMB2,773.0 million as at 31 December 2016.

As at 30 June 2017, the unutilised banking facilities of approximately RMB21,514.2 million could fulfil its future capital commitments for payment and other financial requirements. The Directors are of the opinion that the Group will possess necessary working capital to meet its working capital and capital expenditure requirements.

經營活動使用的現金淨額

本集團2017年上半年經營活動使用的現金淨額約為人民幣290.4百萬元,而2016年同期則約為人民幣1,954.2百萬元。經營活動使用的現金流量淨額減少主要是由於本集團本期應付賬款支付金額較去年同期有所下降導致。

投資活動產生/(使用)的現金淨額

本集團2017年上半年投資活動產生的現金淨額約為人民幣152.4百萬元,而2016年同期投資活動使用的現金淨額則約為人民幣77.8百萬元。投資活動產生的現金淨額增加,主要是由於本集團2017年上半年處置附屬公司而收回部份對價款所致。

融資活動(使用)/產生的現金淨額

本集團2017年上半年融資活動使用的現金淨額約 為人民幣2,434.7百萬元,而2016年同期融資活動 產生的現金淨額則約為人民幣1,105.1百萬元。主 要是由於本集團2017年上半年償還借款所致。

運營資金

於2017年6月30日,本集團的現金及現金等價物 約為人民幣1,805.4百萬元,較2016年12月31日 的人民幣4,382.7百萬元減少約人民幣2,577.3百萬 元或58.8%。主要是由於本期本集團償還債項的 現金流出大於借入債項的現金流入所致。

本集團的資產負債率,由淨債務(包括帶利息其他應付款項和帶利息銀行貸款減現金及現金等價物)除以總權益與淨債務之和而計算得出,與2016年12月31日的53.80%相比,上升至2017年6月30日的55.31%,上升主要是由於本集團現金及現金等價物減少大於債項減少所致。

流動資產淨額

於2017年6月30日,本集團流動資產淨額約為人民幣3,008.8百萬元,較2016年12月31日流動資產淨額約人民幣2,773.0百萬元增加約人民幣235.8百萬元。

於2017年6月30日,本集團未動用銀行授信約為人民幣21,514.2百萬元,可滿足其未來資本承付款項及其他財務需求。董事們認為,本集團將擁有必要的流動資金滿足其營運資金及資本開支要求。

管理層討論及分析(續)

Inventory Analysis

The inventories of the Group were approximately RMB2,609.4 million as at 30 June 2017, which decreased by approximately RMB112.8 million, or 4.1%, from approximately RMB2,722.2 million as at 31 December 2016. The decrease was primarily attributable to the decrease in finished goods of wind turbine manufacturing equipment and the decrease in raw materials for energy conservation solutions business.

Trade and bills receivables

Trade and bills receivables of the Group decreased by approximately RMB641.6 million, or 4.6%, from approximately RMB14,036.6 million as at 31 December 2016 to approximately RMB13,395.0 million as at 30 June 2017. The decrease was mainly attributable to the decrease in the balance of trade receivable as a result of the decrease in sales revenue from the wind turbine sale of the Group for the period and the decrease in the balance of bills receivables in the environmental protection business.

Deposits, prepayments and other receivables

The Group's deposits, prepayments and other receivables increased by approximately RMB415.4 million or 17.4%, from approximately RMB2,392.9 million as at 31 December 2016 to approximately RMB2,808.3 million as at 30 June 2017. The increase was primarily attributable to the increase in prepayments for general contracting construction of the Lanzhou power station EPC project for the period.

Trade and bills payables

Trade and bills payables of the Group decreased by approximately RMB633.4 million, or 5.9%, from approximately RMB10,821.8 million as at 31 December 2016 to approximately RMB10,188.4 million as at 30 June 2017. The decrease was primarily due to decrease in trade and bills payables in relation to the procurement of wind turbine raw materials and environmental protection sub-contracting engineering payment and equipment payment of the Group.

Indebtedness

The Group's total indebtedness decreased by approximately RMB1,849.8 million, or 13.6%, from approximately RMB13,593.6 million as at 31 December 2016 to approximately RMB11,743.8 million as at 30 June 2017. This is mainly because the Group reduces financing scale for the period. The proportion of long-term indebtedness to the total indebtedness increased from approximately 37.4% as at 31 December 2016 to approximately 42.7% as at 30 June 2017. The proportion of long-term indebtedness increased and the increase was primarily attributable to the decrease in the Group's short-term indebtedness for the period and the long-term indebtedness are not due for repayments.

存貨分析

本集團於2017年6月30日存貨約為人民幣2,609.4 百萬元,較於2016年12月31日的存貨約人民幣 2,722.2萬元減少約人民幣112.8百萬元或4.1%, 主要是由於風機製造設備的產成品減少以及節能 業務原材料減少。

應收賬款及票據

本集團於2017年6月30日的應收賬款及票據約為人民幣13,395.0百萬元,較於2016年12月31日的約人民幣14,036.6百萬元減少約人民幣641.6百萬元或4.6%,主要是由於本期本集團風機銷售收入下降導致的應收賬款減少及環保業務應收票據餘額減少所致。

按金、預付款項及其他應收款項

本集團的按金、預付款項及其他應收款項從於2016年12月31日的約人民幣2,392.9百萬元增加至於2017年6月30日的約人民幣2,808.3百萬元,增加約人民幣415.4百萬元或17.4%,主要是由於本期本集團預付蘭州電站EPC項目總包建設款增加所致。

應付賬款及票據

本集團於2017年6月30日的應付賬款及票據約為人民幣約10,188.4百萬元,較於2016年12月31日的約人民幣10,821.8百萬元減少約人民幣633.4百萬元或5.9%,主要是由於本集團風機原材料採購和環保分包工程款及設備款有關的應付賬款及票據減少所致。

債項

本集團於2017年6月30日的總債項約為人民幣 11,743.8百萬元,較於2016年12月31日的約人 民幣13,593.6百萬元減少約人民幣1,849.8百萬 元或13.6%,主要是由於本期本集團壓降融資規 模所致。其中長期債項佔總債項的比例從2016 年12月31日的約37.4%增加至2017年6月30日的 約42.7%,長期債項的比例有所增加,主要是由 於本期本集團短期債項減少,長期債項未到期償 還。

All of the Group's borrowings are denominated in RMB.

In the first half of 2017, the effective interest rate of the Group (determined by dividing total interest expenses by the average value of the sums of outstanding borrowings and other interest-bearing payables as at 1 January 2017 and 30 June 2017) was approximately 4.7%, while the effective interest rate of the Group for the same period in 2016 was approximately 4.4%. The increase in the Group's effective interest rate was primarily due to higher interest rate of the new short-term indebtedness of the Group for the period.

本集團所有借款都以人民幣計價。

本集團2017年上半年的實際利率(以總利息開支除以2017年1月1日與2017年6月30日的未償還借款及其他帶息應付款項總額的平均值釐定)約為4.7%,而本集團2016年同期的實際利率約為4.4%。本集團實際利率上升主要是由於本期本集團新增的短期債項利率較高。

Pledged assets

As at 30 June 2017, the long-term interest-bearing borrowings of the Group were pledged by concession operation assets and trade and bills receivables with an aggregate carrying amount of approximately RMB1,258.3 million.

已抵押資產

於2017年6月30日,本集團長期帶息借款以賬面 值合共約人民幣1,258.3百萬元的特許經營權資 產、應收賬款及票據為抵押。

Contingent liabilities

The Group's contingent liabilities decreased by approximately RMB439.1 million, or 16.4%, from approximately RMB3,116.4 million as at 31 December 2016 to approximately RMB2,677.3 million as at 30 June 2017. The Group's contingent liabilities at the end of the period primarily consisted of bids, performance and litigation guarantees.

或有負債

本集團的或有負債從2016年12月31日的約人民幣3,116.4百萬元下降至2017年6月30日的約人民幣2,677.3百萬元,減少約人民幣439.1百萬元,或16.4%。本集團期末的或有負債主要包括投標保函、履約保函及訴訟擔保。

Material investments

During the six months ended 30 June 2017, the Group did not make any material investments.

重大投資

於截至2017年6月30日止6個月內,本集團無任何 重大投資。

Material Acquisitions and disposals

Acquisitions

During the six months ended 30 June 2017, the Group did not make any material acquisitions.

重大收購與出售

收購

於截至2017年6月30日止6個月內,本集團無任何 重大收購。

Disposals or deemed disposals

On 2 November 2016, Longyuan Environmental disposed of 51% equity interest in its subsidiary Beijing Longyuan Environmental Engineering Co., Ltd. ("Beijing Longyuan") in a public listing process through China Beijing Equity Exchange at a consideration of RMB385.0 million. On 13 January 2017, both parties entered into a sale and purchase agreement. Upon completion of the disposal, Beijing Longyuan was no longer a subsidiary of the Group.

出售或視為出售

於2016年11月2日,龍源環保通過北京產權交易所以人民幣385.0百萬元的對價公開掛牌出售附屬公司北京龍源環保工程有限公司(「北京龍源」)51%股權,雙方於2017年1月13日簽署買賣協議。出售事項完成後,北京龍源不再為本集團之附屬公司。

Save as disclosed above, during the six months ended 30 June 2017, the Group did not make any other material disposals or deemed disposals.

除以上所披露者,於截至2017年6月30日止6個月內,本集團無任何其他重大出售或視為出售。

管理層討論及分析(續)

Market risk

The Group is exposed to various risks associated with its business operations, including credit and counterparty risk, interest rate risk, exchange rate risk, risks affecting the power and related industries within the PRC generally and volatility risk relating to raw materials and components used in its production activities.

Credit and counterparty risk

The Group's credit risk is primarily attributable to its bank deposits and cash in-hand, trade and bills receivables, deposits, prepayments and other receivables, gross amounts due from customers from construction contracts and other non-current assets. The Group has an internal credit policy in place to monitor its exposure to its counterparty credit risk on an ongoing basis.

Substantially all of the Group's cash is deposited in state-owned or state-controlled PRC banking institutions. The Directors consider counterparty risks in transactions with PRC banks insignificant.

The Group performs credit evaluations on all of its customers, and monitors outstanding receivables due from such customers on an ongoing basis. The Group's credit evaluation focuses on a customer's payment history and his ability to pay and takes into account industry and customer-specific considerations, as well as the general macroeconomic climate. The Group generally requires its customers to settle progress billings and other debts in accordance with agreed contractual terms.

Interest rate risk

The Company has significant borrowings and its operational activities are significantly dependent on the availability of credit facilities at competitive rates. Substantially all the Company's borrowings are denominated in RMB and are owed to PRC bank lenders and financial institutions, which are subject to adjustments in interest rates based on changes in the applicable regulations of the People's Bank of China. Accordingly, fluctuations in interest rates may have a significant impact on the Group's business, operations and financial conditions.

The Group does not currently hedge its interest rate risks through any derivative instruments or other hedging arrangements. The Board will continue to monitor the interest rate risks and will consider hedging potential material interest rate risks should the need arises.

市場風險

本集團面臨着與其業務經營有關的多種風險,包括信貸和交易對手風險、利率風險、匯率風險、 普遍影響中國電力及相關產業的風險及與生產活動所用原材料和零件相關的波動風險。

信貸和交易對手風險

本集團信貸風險主要歸因於銀行存款及庫存現 金、應收賬款及票據、按金、預付款項和其他應 收款項、應收建造合同客戶款項總額及其他非流 動資產。本集團定有內部信貸政策,並以持續的 方式對其交易對手方信貸風險進行監控。

基本上本集團所有現金都存於中國國有或國有控 股的銀行機構中。董事認為在與中國銀行的交易 中對手風險並不重大。

本集團對其所有客戶進行信用評估,並持續監控 應收該等客戶的未償還應收款項。本集團的信用 評估注重客戶的付款記錄、付款能力,並考慮行 業和客戶的具體因素,以及整體宏觀經濟環境。 本集團一般要求其客戶按照合約協議條款支付進 度付款和其他債務。

利率風險

本公司有重大借款,其經營活動顯著依賴於以具有競爭力的利率獲得信貸。本公司借款基本上以人民幣計價,且都是向中國的貸款銀行和金融機構借貸,這些銀行和金融機構根據中國人民銀行的適用政策變化而調整其利率。因此,利率波動可能會對本集團的業務、營運和財務狀況產生重大影響。

本集團目前尚未通過任何衍生工具或其他對沖安 排對沖其利率風險。董事會會持續監控利率風 險,如有需要將考慮對可能產生的重大利率風險 予以對沖。

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

管理層討論及分析(續)

Liquidity risk

The Group's operating cash flows are subject to significant irregularity, given the nature of the businesses in which it is engaged. The Group's business includes the water treatment business carried out under the build-operate-transfer ("BOT") business model. While the Group believes that such business model generate steady cash flows and revenues for the Group over extended periods, such business models require more up-front capital investment and a longer period to fully recoup such investments as compared to the traditional business model of engineering procurement construction ("EPC"). Accordingly, while the Group aims to ensure that it has sufficient working capital to meet its operational requirements or has access to sufficient bank credit facilities to continue its operations without disruption, the cash flow position of the Group may vary with its continuous growth and expansion.

Exchange risk

The continued development and expansion of the Group's international operations is expected to result in increased exposure to exchange rate risk, arising primarily through export sales which would typically be denominated in foreign currencies. The Group expects that its future export sales will principally be denominated in either United States dollar, Euros or Hong Kong dollar. During the six months ended 30 June 2017, the Group's exchange loss was approximately RMB2.6 million. The Directors consider HKSE rate risk to be insignificant. The Group does not currently hedge its exchange rate risk.

The RMB is not a freely convertible currency, and the PRC Government may at its discretion restrict access to foreign currencies for current account transactions in the future. Changes in such foreign exchange controls may adversely affect the Group's international operations and sales, and may prevent the Group from satisfying its foreign exchange denominated obligations. In addition, the Group may be restricted from paying dividends on its listed H-shares to shareholders by any such changes in regulations.

Subsequent events

Since 30 June 2017 and up to the date of this interim report, there was no event that had a significant impact on the Group's operational, financial or business prospects.

流動資金風險

鑒於其所經營的業務性質,本集團的經營現金流量具有顯著的不規則性。本集團業務包含BOT運營模式下的水處理業務。本集團認為,該種運營模式將在較長時期為本集團帶來穩定的現金流量以及收入。然而,這樣的運營模式相比傳統的EPC業務模式需要的前期資本投資更多,資金完全回籠的時限也更久。因此,本集團旨在確保其有足夠營運資金以達到其經營需求,或者能夠獲得充足的銀行信貸以不中斷地持續運營。本集團的現金流量狀況或會隨着其持續發展和擴張而轉變。

匯率風險

本集團國際業務的持續發展和擴張預計將導致其面臨的匯率風險增加,增加主要來自於通常以外幣計價的出口銷售。本集團預計其未來的出口銷售將主要以美元、歐元或港幣計價。本集團於截至2017年6月30日止6個月發生匯率損失約人民幣2.6百萬元。董事認為匯率風險不重大。本集團目前未對沖其匯率風險。

人民幣並不是自由兑換的貨幣,未來中國政府可能會酌情決定限制經常賬戶交易的外匯準入。對外幣兑換管控的變化可能會對本集團的國際業務和銷售帶來負面影響,也可能會限制本集團滿足其外匯計價義務。此外,由於任何該等法規變化,本集團向其股東支付上市的H股的股息可能會被限制。

期後事項

自2017年6月30日起截至本中期報告日期止,未發生對本集團營運、財務或經營前景產生重大影響的事件。

CORPORATE GOVERNANCE 企業管治

The Company has been committed to improving the standard of its corporate governance, which is considered as an essential part to the creation of values for shareholders. The Company has established a modern corporate governance structure, which comprises a number of independently-operated and effectively-balanced bodies, including general meetings of shareholders, the Board of Directors, the Board of Supervisors and senior management, by referring to the code provisions as set out in the Corporate Governance Code and Corporate Governance Report in Appendix 14 to the Listing Rules. The Company has adopted the Corporate Governance Code as its own corporate governance practices.

本公司始終致力於提升企業管治水平,視企業管治為為股東創造價值不可或缺的一部份,本公司參照上市規則附錄十四所載《企業管治守則》及《企業管治報告》所載的守則條文,建立了由股東大會、董事會、監事會及高級管理層有效制衡、獨立運作的現代公司治理架構。本公司亦採納《企業管治守則》作為本公司的企業管治常規。

During the six months ended 30 June 2017, the Group had established a standardized and sound corporate governance structure in accordance with the applicable laws and regulations, as well as the requirements of domestic and offshore regulatory authorities, including the Company Law of the PRC, Securities Law of the PRC, the Listing Rules, and having considered the Company's actual situation, continued its efforts to maintain a high standard of corporate governance with a view to maximize shareholders' benefits in the long term.

截至2017年6月30日止6個月內,本集團按照《中華人民共和國公司法》、《中華人民共和國證券法》、上市規則等相關法律法規和境內外監管機構的規定,結合本公司實際情況建立了規範、完善的公司管治結構,不斷致力於維持高水平的公司管治以提高股東的長遠利益。

(1) Compliance with the Corporate Governance Code

The Group is dedicated to adhering to a high standard of corporate governance, and adopts the best practices for corporate governance set forth in Appendix 14 to the Listing Rules under appropriate circumstances. For the six months ended 30 June 2017, the Group had complied with the code provisions in the Corporate Governance Code in Appendix 14 to the Listing Rules.

To facilitate long-term and steady development of the Group, the Group has been standardizing its structure of corporate governance based on relevant laws and regulations in the PRC, the requirements of HKSE, and other regulatory requirements, and has been improving the standard of its corporate governance.

(1) 遵守《企業管治守則》

本集團矢志奉行高水平企業管治,並在適當的情況下採納上市規則附錄十四所載的最佳公司治理常規。截至2017年6月30日止6個月內,本集團一直遵守上市規則附錄十四所載的《企業管治守則》的守則條文。

為了促進本集團長遠、穩定發展,根據中國 相關的法律、法規、聯交所的要求以及其他 監管要求,本集團不斷規範公司治理結構, 不斷提升公司治理水平。

CORPORATE GOVERNANCE (CONTINUED) 企業管治(續)

(2) Compliance with the Model Code for Securities Transactions by Directors and Supervisors of the Listed Companies

The Company has adopted a code of conduct prepared in accordance with the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code") set out in Appendix 10 to the Listing Rules as the code of conduct regarding transactions involving securities of the Company by the Directors and Supervisors. The terms of the code currently adopted by the Company comply with the requirements of the Model Code. The Company has made specific enquiries to all of its Directors and Supervisors, each of whom confirmed that he or she had complied with requirements of the Model Code for the six months ended 30 June 2017. To ensure the compliance with relevant requirements under the Listing Rules and to protect shareholders' interests, the Board will examine the corporate governance practices and the operations of the Company from time to time.

(3) Audit Committee

The Group established the Audit Committee ("Audit Committee") according to the Listing Rules, the responsibilities of which include providing suggestions to the appointment, re-appointment and dismissal of external independent auditors, and monitor their work. The Company has appointed an adequate number of independent non-executive directors with appropriate professional qualification, or appropriate accounting or related financial management expertise according to the Listing Rules. The Audit Committee consisted of two independent non-executive directors and one non-executive director. Before the expiration of the session of all the directors and supervisors of the Company on 8 August 2017, the members of the Audit Committee were Mr. Fan Ren Da Anthony (chairman of the Audit Committee, independent non-executive director), Mr. Zhang Wenjian (non-executive director) and Mr. Shen Xiaoliu (independent non-executive director). After the expiration of the session of all the directors and supervisors of the Company on 8 August 2017, the members of the Audit Committee were Mr. Yeung Chi Tat (chairman of the Audit Committee, independent non-executive director), Mr. Zhang Wenjian (non-executive director) and Mr. Shen Xiaoliu (independent non-executive director). The new session of the Audit Committee has reviewed the unaudited interim report of the Group as at and for the six months ended 30 June 2017 and the unaudited interim financial statements for the six months ended 30 June 2017 prepared in accordance with No. 34 "Interim Financial Reporting" of International Financial Reporting Standards ("IFRS").

(2) 遵守上市公司董事及監事進行證 券交易的標準守則

本公司已採納根據上市規則附錄十《上市發行人董事進行證券交易的標準守則》(「標準守則」)而制定的操守守則,作為董事及監事進行涉及本公司證券交易的操守守則。本公司現時採納的守則所載條款符合標準守則的規定。本公司對所有董事及監事作出明確查詢後,截至2017年6月30日止6個月內,全體董事及監事均確認嚴格遵守《標準守則》所訂之標準。董事會將不時檢查本公司的公司治理及運作,以確保符合上市規則有關規定並保障股東的利益。

(3) 審計委員會

本集團已根據上市規則的規定成立審計委 員會(「審計委員會」),職責包括就外聘獨 立核數師的委任、重新委任及罷免向董事 會提出建議,並監督他們的工作。本公司 已根據上市規則的規定委任足夠數目、並 具備適當的專業資格、或具備適當的會計 或相關財務管理專長的獨立非執行董事。 審計委員會由兩名獨立非執行董事及一名 非執行董事組成,2017年8月8日董監事整 體換屆前,其成員為范仁達先生(審計委員 會主席,獨立非執行董事)、張文建先生 (非執行董事)和申曉留先生(獨立非執行董 事)。2017年8月8日則換屆為楊志達先生 (審計委員會主席,獨立非執行董事)、張 文建先生(非執行董事)和申曉留先生(獨立 非執行董事)。換屆後的審計委員會已審閱 於2017年6月30日及截至該日止6個月本集 團未經審核的中期報告,以及按照《國際財 務報告準則》(「國際財務報告準則」)第34號 「中期財務報告」的規定編製的截至2017年6 月30日止6個月的未經審核中期財務報表。

CORPORATE GOVERNANCE (CONTINUED) 企業管治(續)

(4) Disseminating Information through the Internet

In order to enhance the standard of corporate governance and transparency, the Group uses its website (www.01296.hk) as a media to publish information. The Group implements procedures to review information to be published on its website and also monitors its website to ensure that all published information is up-to-date and accurate.

(5) Overseas Regulatory Announcement

As Yantai Longyuan Power Technology Co., Ltd., a subsidiary of the Company, is a public company listed on the Shenzhen Stock Exchange, the Group has complied with the relevant requirements regarding overseas regulatory announcement in accordance with Rule 13.10(B) of the Listing Rules.

Furthermore, as the corporate bonds of the Company are listed on the Shanghai Stock Exchange, the Group has complied with the relevant requirements regarding overseas regulatory announcement in accordance with Rule 13.10(B) of Listing Rules in this regard.

(6) Risk Management and Internal Control

The Company places prime importance to risk management and internal control. An internal control system has been established to protect the Shareholders' and the Company's interests.

The Board is responsible for the internal control and risk management systems of the Company and its subsidiaries, reviewing and approving significant policies and reviewing the effectiveness of the internal control and risk management systems. Such systems are designed to mitigate risks inherent in our business faced by the Group to an acceptable level, but not eliminating all risks. Accordingly, such systems can only provide reasonable and not absolute assurance against material misstatement in financial information or financial loss.

Internal Control

The Company has set up a set of internal control rules, including "Rules and Procedures of the General Meeting", "Rules and Procedures of the Board Meeting", "Rules and Procedures of the Supervisor Meeting", "Terms of References for the Strategic Committee of the Board", "Terms of References for the Audit Committee of the Board", "Terms of References for the Nomination Committee of the Board", "Terms of References for the Remuneration and Appraisal Committee of the Board", "Provisions on Information Disclosure", "Administrative Measures on Connected Transactions", and "Internal Control Principle Policy."

(4) 互聯網信息發佈的管理工作

為提升企業管治水平和增加企業透明度,本 集團將其網站(www.01296.hk)作為發佈信息的媒介,制定程序審閱即將登載在互聯網上的信息,同時監察本集團網站,以確保所有公佈的資料都是最新和正確的。

(5) 於其他海外監管市場發佈的公告

由於本公司的附屬公司煙台龍源電力技術股份有限公司是一家深圳證券交易所的上市公司,本集團遵守上市規則第13.10(B)條中關於海外監管公告的相關規定。

此外,由於本公司的公司債券於上海證券交易所上市,本集團也遵守上市規則第13.10(B)條中關於海外監管公告的相關規定。

(6) 風險管理及內部控制

本公司高度重視風險管理及內部控制工作, 已建立了一套內部控制體系,以保障股東利 益和本公司利益。

董事會對本公司及其附屬公司的內部監控及 風險管理系統負有責任,審閱及批准重大政 策以及檢討內部監控及風險管理系統的有效 性。該等系統旨在緩解本集團在業務中面臨 的內在風險至可接受的程度,而非消除所有 風險。因此,該等系統僅對可防範財務資料 中的重大失實陳述或財務損失提供合理而非 絕對保證。

內部控制

本公司建立了一套內部控制規程,包括《股東大會議事規則》、《董事會議事規則》、《董事會職事規則》、《監事會議事規則》、《董事會戰略委員會工作細則》、《董事會提名委員會工作細則》、《董事會薪酬與考核委員會工作細則》、《信息披露事務管理規定》、《關連交易管理辦法》、及《內部控制基本制度》。

CORPORATE GOVERNANCE (CONTINUED)

企業管治(續)

The Company has also established the Finance and Property Department, the Audit Department and the Supervision Department and has sufficient personnel in each department in charge of financial operations, risk management, internal auditing and anticorruption work. Besides, the Company has provided regular training at its own expenses to the Group's employees whose duties relate to finance, risk management and internal auditing so as to ensure that they are well qualified and experienced.

Each department of the Company is able to smoothly submit to the Board the information required. Being the most senior point of contact for each department of the Company, the President has the duty to effectively report to the Board in relation to the operations of each department, and to coordinate and mobilize the demands of each department to promote reasonable decision-making within the Company. The Audit Committee is responsible for reviewing the financial control, internal control and risk management systems of the Company; discussing the internal control system with the management to ensure that the management has fulfilled its duties to establish an effective internal control system; taking the initiatives or appointed by the Board to make researches on important findings of and the management's responses on internal control matters.

The Group communicated in time on the identified flaws of significant internal control and carefully assessed the potential risks. The department which was in charge of the supervision put forward corrective actions, and obtained the approval from the leadership prior to its implementation. Leadership and the audit department monitored its implementation to ensure monitoring flaws solved timely and properly.

本公司已設立了財務產權部、審計部和監察部,並為各個部門配備了充足的人員,負責財務運作、風險管理、內部審計、反腐敗等具體工作。此外,本公司已定期自費為本集團內部負責財務、風險管理、內部審計的員工提供培訓,確保其擁有足夠的資質和經驗。

本集團及時就所識別的重大內部監控瑕疵 進行溝通,並審慎評估潛在風險。身為監 控責任人的部門提出糾正措施,並於實施 前獲得領導層批准。領導層及審計部監察 實施情況,確保及時妥善解決監控瑕疵。

CORPORATE GOVERNANCE (CONTINUED) 企業管治(續)

Risk Management

The overall risk management of the Group is gradually on track, the management mechanism is becoming more and more sound, and the risk management concept is becoming more and more popular. Through the annual score and assessment of Leaders, middle-level cadres and grassroots employees of the Company collectively, the Group comprehensively considered the internal and external business environment and the influences of policy changes it may face next year, and having been approved by the office meeting, identified the major risks of that year and developed the relevant risks management strategies. At the same time, the Group submitted risk monitoring indicators monthly and released risk analysis reports quarterly to comprehensively analyze major risks and put forward countermeasures recommendations. The Group aims to establish a risk management system with comprehensive coverage, key control and pre-developed measures through risk control pilot.

During the reporting period, the Board has assessed the internal control systems of the Company and its subsidiaries and is not aware of any material weaknesses nor any material defaults in respect of financial, operational and compliance controls and risk management. The Board believes that the current monitoring system of the Company is effective and adequate and considers that the resources, qualifications and experiences of the staff of the Company's accounting and financial reporting functions, its training programs and budgets thereof are adequate. The Board will continue to monitor the risk management and internal control systems in the following year.

Management of Inside Information

In order to promote fairness, transparency, accountability and responsibility, which are the core principles of good corporate governance, the Group notifies HKSE and discloses to Shareholders and other holders of its listed securities of the Group's inside information in a timely manner pursuant to the Listing Rules and Part XIVA of the Securities and Futures Ordinance (cap 571) (the "SFO").

風險管理

本集團的全面風險管理工作逐漸步入正 軌,管理機制日趨健全,風險管理理念漸 入心。每年通過公司領導、中層幹部、 基層員工共同打分評估,綜合考慮下一程 度本集團可能面臨的內外部經營環境 變化影響,並經辦公會審議通過險管理 該年度重大風險並制定相關的風險管理 略。同時按月報送風險監控指標、按國險 發佈風險分析報告,全面分析輕大風險險 體控試點工作,建立一套全面覆蓋、重點 管控試點工作,建立一套全面覆蓋、重點 管控、措施前置的風險管理體系。

董事會已於報告期內對本公司及附屬公司的財務監控、運作監控、合規監控及風險管理等內控系統進行評估,期內未發現出內部控制存在任何重大弱項公司司內部控制存在任何重大失誤。董事會認為本內可認為來公司在會計及財務匯報職能方面的計劃及財務匯報職能方面計劃計劃及財務匯報職的人方部監控體系是有效及足夠的方面的為本公司在會計及財務匯報職能方面的計劃及財務匯報報的人方面,其實方面是足夠的。董事會於來年數額預算方面是足夠的。董事會於來年數額預算方面是足夠的人前對於不能

內幕消息管理

為推行良好公司管治的核心原則,即公正、透明、問責及負責,本集團會適時根據上市規則及《證券及期貨條例》(香港法例第571章)(「《證券及期貨條例》」)第XIVA部向聯交所、股東及其上市證券的其他持有人披露本集團的內幕信息。

CORPORATE GOVERNANCE (CONTINUED)

企業管治(續)

In order to monitor and regulate potential insider trading activities, and to ensure the confidentiality of inside information, the Company has established a set of "Management Rules on Inside Information of Guodian Technology & Environment Group Corporation Limited" in accordance with the Company Law of the PRC, the SFO, the Listing Rules and other relevant laws and regulations and the requirements of the articles of association of the Company. The registration and management of the inside information is carried out by the Board and its daily offices, the Department of Securities Financing and Legal Affairs (the Board of Directors Office).

為監管和規範潛在內幕交易行為,確保內幕信息保密工作,本公司根據《中華人民共和國公司法》、《證券及期貨條例》、上市規則等有關法律法規及本公司《公司章程》的規定,制定《國電科技環保集團股份有限公司內幕信息管理辦法》。內幕信息的登記管理工作由董事會及其日常辦事機構、證券融資與法律事務部(董事會辦公室)負責。

(7) Connected Transaction Management

In order to strengthen the Company's management of connected transactions, the Company has established the "Management Rules on the Conduct of Connected Transactions of Guodian Technology & Environment Group Corporation Limited" and has designated the Board of Directors Office to be responsible for the management of connected transactions with assistance from the Securities and Finance Division and Finance and Property Division. In order to ensure that the Company's connected transactions are carried out in accordance with applicable rules and system and that the aggregate transaction amounts do not exceed the annual caps, the Group has notified all subsidiaries and divisions regarding the applicable continuing connected transaction caps, allocated monitoring obligations to specific subsidiaries and divisions and required such subsidiaries or divisions to report to the senior management regarding the connected transactions. The Company has provided regular training to the Company's internal staff in relation to connected transactions from time to time, and has designated specialized personnel to make every effort to ensure full compliance with the relevant Listing Rules.

(7) 關連交易管理

OTHER INFORMATION 其他資料

Review of Interim Report

The Audit Committee of the Company has reviewed the Company's interim report. The interim financial report for the six months ended 30 June 2017 was unaudited, but was reviewed by KPMG, in accordance with Hong Kong Standard on Review Engagements 2410 "Review of interim financial information performed by the independent auditor of the entity", issued by the Hong Kong Institute of Certified Public Accountants. A copy of such unmodified review report is included in this interim report.

Share Capital

As at 30 June 2017, the total issued share capital of the Company was RMB6,063,770,000, divided into 6,063,770,000 shares of RMB1.0 each, including 4,754,000,000 domestic shares and 1,309,770,000 H shares. There had been no change in the share capital of the Company during the six months ended 30 June 2017.

Purchase, Sale or Redemption of the Company's Listed Securities

Neither the Company nor any of its subsidiaries had purchased, sold or redeemed any shares of the Company for the six months ended 30 June 2017.

Material Legal Proceedings

During the six months ended 30 June 2017, the Company was not involved in any material litigation or arbitration.

Interim Dividends

The Board does not recommend the distribution of interim dividends for the six months ended 30 June 2017.

Changes of Information of Directors, Supervisors and Chief Executive

Save as disclosed in this interim report, as at the date of this interim report, there is no change of information about the Directors, supervisors or chief executive of the Company which shall be disclosed pursuant to 13.51(2) of the Listing Rules.

Interests and Short Positions of the Directors, Supervisors and Senior Management in the Shares, Underlying Shares and Debentures

As at 30 June 2017, Mr. YAN Andrew Y., a non-executive Director of the Company, was interested in 288,200,000 shares of the Company. Please refer to the paragraph headed "Substantial Shareholders' Interests in the Shares" for more information. Save as disclosed above, none of the Directors, Supervisors and senior management of the Company had any interests or short positions in the shares, underlying shares and debentures of the Company or any of its associated corporations (within

中期報告審閱

本公司審計委員會已對本公司的中期報告進行了審閱。截至2017年6月30日止6個月的中期財務報告未經審核,但已由畢馬威會計師事務所按照香港會計師公會所頒佈的《香港審閱工作準則》第2410號「獨立核數師對中期財務資料的審閱」進行審閱,其不附修訂結論的審閱報告已載列於本中期報告內。

股本

於2017年6月30日,本公司股本總數為人民幣6,063,770,000元,分為6,063,770,000股每股面值人民幣1.0元的股份,其中內資股4,754,000,000股及H股1,309,770,000股。在截至2017年6月30日止6個月期間,本公司股本並未發生變化。

購買、出售或贖回本公司上市證券

截至2017年6月30日止6個月內,本公司及其附屬公司並未購買、出售或贖回任何本公司的股份。

重大法律程序

於截至2017年6月30日止6個月內,本公司並無涉及任何重大訴訟或仲裁。

中期股息

董事會並不建議派發截至2017年6月30日止6個月的中期股息。

董事、監事及高級管理人員的變動

除本中期報告所披露外,截至本中期報告日期 止,本公司無有關董事、監事及本公司行政總裁 之任何資料變動須根據上市規則第13.51(2)條予 以披露。

董事、監事及高級管理人員於股份、 相關權證及債券的權益及淡倉

於2017年6月30日,本公司非執行董事閻焱先生持有本公司的288,200,000股股份。更多資料請見「主要股東於股份之權益」。除上文所披露者之外,本公司各董事、監事及高級管理人員概無在本公司或其任何相聯法團(定義見《證券及期貨條例》第XV部)的股份、相關股份或債權證中擁有任何根據《證券及期貨條例》第XV部第7及8分部須

OTHER INFORMATION (CONTINUED) 其他資料(續)

the meaning of Part XV of the SFO) which would have to be notified to the Company and HKSE pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they were taken or deemed to have under such provisions of the SFO) or which were required, pursuant to Section 352 of the SFO, to be registered in the register referred to therein, or which would fall to be disclosed to the Company and HKSE pursuant to the Model Code.

知會本公司及聯交所的權益或淡倉(包括根據《證券及期貨條例》的該等條文被當作或視為擁有的權益或淡倉),或根據《證券及期貨條例》第352條登記於該條所指登記冊的權益或淡倉,或根據《標準守則》須知會本公司及聯交所的權益或淡倉。

Substantial Shareholders' Interests in the Shares

As at 30 June 2017, to the best knowledge of the Directors, the following persons (save as otherwise disclosed, and other than the Directors, Supervisors and senior management of the Company) had interests or short positions in the shares or underlying shares of the Company which would fall to be disclosed to the Company pursuant to Divisions 2 and 3 of Part XV of the SFO (the table has been updated according to the records of CCASS and the latest information in the Company's possession):

主要股東於股份之權益

於2017年6月30日,就董事所知,下列人士(除另有披露外,及本公司董事、監事及高級管理人員除外)於本公司股份或相關股份中擁有根據《證券及期貨條例》第XV部第2及3分部須向本公司披露之權益或淡倉(該表已根據中央結算系統持股記錄及本公司掌握最新情況更新):

Name of Shareholders	Class of Share	Capacity	Number of Shares/ Underlying Shares Held 持有股份/	Percentage in the Relevant Class of Share Capital ⁽¹⁾ 佔有關股本類別	Percentage in the Total Share Capital ⁽¹⁾ 佔股本總數
股東姓名/名稱	股份類別	身份	相關股份數目 (Share) (股)	之百分比 ⁽¹⁾ %	之百分比 ⁽¹⁾ %
Guodian 國電	Domestic shares 內資股	Interests of beneficial owner and controlled corporation 實益擁有人及受控公司之權益	4,754,000,000 ⁽²⁾ (Long position) (好倉)	100.00	78.40
GD Power 國電電力	Domestic shares 內資股	Interests of beneficial owner 實益擁有人之權益	2,376,500,000 ⁽²⁾ (Long position) (好倉)	49.99	39.19
Mr. YAN Andrew Y. 閻焱先生	H shares H股	Interests of beneficial owner and controlled corporation 實益擁有人及受控公司之權益	288,200,000 ⁽³⁾ (Long position) (好倉)	22.00	4.75
SAIF IV GP Capital Ltd.	H shares H股	Interests of beneficial owner and controlled corporation 實益擁有人及受控公司之權益	288,200,000 ⁽³⁾ (Long position) (好倉)	22.00	4.75
SAIF IV GP LP	H shares H股	Interests of beneficial owner and controlled corporation 實益擁有人及受控公司之權益	288,200,000 ⁽³⁾ (Long position) (好倉)	22.00	4.75
SAIF Partners IV L.P.	H shares H股	Interests of beneficial owner 實益擁有人之權益	288,200,000 ⁽³⁾ (Long position) (好倉)	22.00	4.75

OTHER INFORMATION (CONTINUED) 其他資料(續)

Name of Shareholders	Class of Share	Capacity	Number of Shares/ Underlying Shares Held 持有股份/	Percentage in the Relevant Class of Share Capital ⁽¹⁾ 佔有關股本類別	Percentage in the Total Share Capital ⁽¹⁾ 佔股本總數
股東姓名/名稱	股份類別	身份	相關股份數目 (Share) (股)	之百分比 ⁽¹⁾ %	之百分比(1)
State Grid International Development Limited 國家電網國際發展有限公司	H shares H股	Interests of beneficial owner 實益擁有人之權益	89,505,000 (Long position) (好倉)	6.83	1.48
National Council for Social Security Fund of the PRC 全國社會保障基金理事會	H shares H股	Interests of beneficial owner 實益擁有人之權益	77,310,000 (Long position) (好倉)	5.90	1.27

Notes:

- (1) This percentage is calculated on the basis of the number of underlying shares/total shares that had been issued by the Company as at 30 June 2017. As at June 30 2017, the total number of shares of the Company is 6,063,770,000,of which 4,754,000,000 shares are domestics shares and 1,309,770,000 shares are H shares.
- (2) The Guodian holds, directly or indirectly, 100.0% of the domestic shares of the Company via GD Power Development Co., Ltd. ("GD Power"). As at 30 June 2017, Guodian had 46.00% of the interests directly in the total shares of GD Power and GD Power had 49.99% of the domestic shares of the Company. Therefore, Guodian is deemed to be interested in the domestic shares of the Company held by GD Power.
- (3) Mr. YAN Andrew Y. holds 22.00% of the H shares indirectly via SAIF Partners IV L. P. through SAIF IV GP Capital Ltd. and SAIF IV GP LP. Mr. YAN Andrew Y. is the controlling shareholder of SAIF IV GP Capital Ltd., SAIF IV GP LP, and SAIF Partners IV L.P.. SAIF IV GP Capital Ltd. is the controlling shareholder of SAIF IV GP LP. SAIF IV GP LP is the controlling shareholder of SAIF Partners IV L.P.. SAIF Partners IV L.P. has 22.00% of the H shares. Therefore, Mr. YAN Andrew Y., SAIF IV GP Capital Ltd., and SAIF IV GP LP are deemed to be interested in the H shares held by SAIF Partners IV L.P.

Employees and Remuneration Policy

As at 30 June 2017, the Group had a total of 7,208 employees. The remuneration of employees of the Group comprises basic salary, performance payment and bonus payment. Performance payment is made with reference to the Company's financial results and the performance appraisal on the individual employee. The bonus payment is made with reference to the level of completion of the Company's annual major tasks.

附註:

- (1) 該百分比是以本公司於2017年6月30日已發行的相關股份數目/總股份數目為基礎計算。截至2017年6月30日,本公司之股份總數為6,063,770,000,其中4,754,000,000股為內資股,1,309,770,000股為H股。
- (2) 國電透過國電電力發展股份有限公司(「**國電電力**)直接及間接持有本公司100.0%的內資股。於2017年6月30日,國電於國電電力股份總額中直接持有46.00%的權益,國電電力擁有本公司49.99%的內資股。因此,國電被視作為擁有國電電力所持有的本公司內資股的權益。

員工及薪酬政策

於2017年6月30日,本集團共聘用7,208名僱員。 本集團員工薪酬由基本工資、績效工資和獎勵工 資組成,績效工資依據公司財務業績及員工個人 的績效考核情況確定,獎勵工資依據公司年度專 項重點工作完成情況確定。

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

Since its establishment, the Group has always paid great attention to the business operation, and the sustainable development of our society and environment; by virtue of its status as a hi-tech and environmental protection enterprise, the Group has been actively carrying out its corporate vision of "green technology for the whole world" and also integrating such conception into its day-to-day business activities.

自成立以來,本集團一直重視企業經營和社會、 環境的可持續發展,利用科技環保企業的優勢, 積極踐行「綠色科技全球共享」的企業願景,將這 種觀念融入日常經營活動中。

I. Environmental Protection, Energy Conservation and Emission Reduction

In 2017, the Group continued to take advantage of its position in the environmental industry and has made prominent contribution to the fields of environmental protection, energy conservation and pollutants emission reduction.

1. Business of environmental protection

As at 30 June 2017, the total installed capacity of the franchised desulfurization projects of the Company was 15,890 MW and the total installed capacity of franchised de-NO $_{\rm X}$ projects was 11,100 MW. For the first half of 2017, the reduced sulfur dioxide emission amounted to 190,800 ton and the reduced nitise oxide emission amounted to 37,000 ton. The franchised desulfurization and franchised de-NO $_{\rm X}$ projects in the construction process strictly implemented environmental protection requirements and the national "3-synchronous" regulations on environmental protection facilities, namely, environmental protection facilities shall be designed synchronously, constructed synchronously and commissioned synchronously with the main works, so as to achieve emission standards.

The water product of the sewage treatment plant of Lucency, a subsidiary of the Company after reaching the emission and reuse standards in the applicable laws, regulations and standards such as the Discharge Standard of Pollutants for Urban Sewage Treatment Plant (GB18918-2002), the Reuse of Urban Recycling Water - Water Quality Standard for Urban Miscellaneous Water Consumption (GB/T19820-2002), etc., or was further processed and reused for industrial enterprises such as power plants, etc.. The production wastewater and domestic sewage produced in the sewage treatment plant, after being collected, enter the sewage treatment system without external discharge, thus causing no environmental pollution. By means of effective water operation, in the first half of 2017, the sewage treatment plant treated accumulatively 89.74Mton sewage (including reclaimed water) and reduced accumulatively 36,000 ton COD emission. In addition, the sewage treatment plant also oxidized and decomposed the organic pollutants in the exhaust gas pollutants, and finally discharged them according to standards. In terms of solid waste, the rest sludge was generally treated and reused as compost for farmland or buried at landfill; the other pollutants such as gate slag, grit, etc. were transported to landfills and buried there.

一. 環境保護、節能減排

2017年本集團繼續發揮環保產業優勢,為 環境保護及節能減排工作做出了突出貢獻。

1. 環保業務

截至2017年6月30日止,本公司所屬脱硫特許經營項目的總裝機容量為15,890兆瓦,所屬脱硝特許經營項目的總裝機容量為11,100兆瓦。於2017年上半年減排二氧化硫量達到了19.08萬噸,減排氮氧化物3.70萬噸。脱硫脱硝特許經營項目在施工過程中,嚴格執行項目的環保要求,以及國家環保設施「三同時」即環保設施與主體工程同時設計、同時施工、同時投產的規定,均實現達標排放。

本集團附屬公司朗新明下屬的污 水處理廠的產品水在達到國家頒 佈的《城鎮污水處理廠污染物排 放標準(GB18918-2002)》、《城 市污水再生利用城市雜用水水質 (GB/T19820-2002)》等相關法律規 範中要求的排放、回用標準後排放, 或進一步再生處理後回用到電廠等工 業企業。污水處理廠內產生的生產廢 水和生活污水收集後進入污水處理系 統,不作外排,不會產生環境污染。 通過水務運營方式,於2017年上半 年年處理污水(含中水)8,974萬噸, 化學需氧量(COD)累計減排量3.6萬 噸。同時,污水處理廠還對廢氣污染 物中的有機污染物進行氧化分解,最 終達標排放;在固體廢棄物方面,對 於剩餘污泥一般採用處理後堆肥回用 農田或填埋處理,其他如柵渣、沉砂 等運到垃圾填埋廠進行填埋。

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT (CONTINUED) 環境、社會及管治報告(續)

2. Business of energy conservation solution

In terms of contract-based energy management, oil-saving ignition, etc., the Group also paid attention to the key role of science and technology advancement in energy conservation and emission reduction and made full use of its advantages in technology industry and management.

In respect of contract-based energy management, the Group focused on energy conservation technologies in relation to retrofit of steam turbine, retrofit of steam seal, seal retrofitting of air pre-heater, residual heat and pressure utilization, motor system energy conservation, combustion optimization, etc.; in total, the Group has cumulatively completed 117 contract-based energy management reconstruction projects, saving approximately 93,800 ton standard coal per year. In the first half of 2017, it completed 2 contract-based energy management reconstruction projects, thereby saving 1,900 ton standard coal.

The oil-saving ignition products of the Company maintained industry leading position and the Company was the only enterprise from China with offshore plasma ignition business. The Company continued to carry out small-scale plasma ignition system design optimization, and constantly reduced system costs and enhanced product competitiveness. Moreover, it speed up the "Go-out" strategy and continuously expanded the international market for its oil-saving ignition business. The projects in progress included the plasma ignition projects in Turkey, Vietnam, etc. and the micro-oil ignition project in India. The Company aimed at India low-grade coal and high moisture lignite for ignition technology research and development and it is expected to expand the application of fuel-efficient ignition technology and broaden the adaptability of coal. The Company, on basis of ensuring the leading position in the traditional oil-saving product industry, actively developed micro-gas ignition technology. At present, it has completed the industrial application of such technology. and is increasing its marketing efforts while continuing to perfect system design. In terms of residual heat utilization, the Company completed the residual heat recovery projects of Guodian Langfang Power Plant and Guodian Jinneng Onshore Thermal Power Plant. The Company steadily expanded its comprehensive boiler reconstruction business. In the first half of 2017, it completed Jingmen MGGH Project and Oriental Bypass Flue Project. The projects in progress include Jiujiang MGGH Project, the bypass flue projects in Fengcheng, Penglai, etc.. To date, all the projects have been progressing well. In addition, the Company conducted work related to "new efficient MGGH technology research and development".

2. 節能解決方案分部

在合同能源管理、節油點火等節能業 務中,本集團也重視科技進步在節能 減排中的關鍵作用,充分發揮技術產 業和管理優勢。

在合同能源管理方面,以汽輪機通流 改造、汽封改造、空預器密封改造、 餘熱餘壓利用、電機系統節能、燃燒 優化等各項節能技術為主,累計完 成合同能源管理改造項目117項,年 節約標準煤約9.38萬噸以上。其中, 2017年上半年完成2項,節約標煤 0.19萬噸以上。

本公司節油點火產品繼續保持行業領 先地位,並且是行業內唯一擁有海外 等離子體點火業績的企業。本公司持 續進行小型化等離子體點火系統設計 優化,不斷降低系統成本,提升產品 競爭力。同時加快「走出去」戰略, 持續拓展節油點火業務在國際市場空 間。在施工項目有土耳其、越南等離 子體點火工程,印度微油點火工程。 針對印度劣質煤及高水分褐煤進行點 火技術研發,有望拓展節油點火技術 的應用範圍,拓寬煤種適應性。在保 證傳統節油產品行業領先的基礎上, 積極研發微氣點火技術,目前已經完 成了工業應用,在繼續完善系統設計 的同時將加大市場推廣力度。餘熱利 用業務方面,完成了國電廊坊電廠和 國電津能濱海熱電的餘熱回收項目。 鍋爐綜合改造業務穩步發展,於2017 年上半年完成了荊門MGGH項目和東 方旁路煙道項目。正在實施的有九江 MGGH項目,豐城、蓬萊等旁路煙道 項目,截止目前進展順利。同時展開 了「新型高效MGGH技術研發」的相關 工作。

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT (CONTINUED) 環境·社會及管治報告(續)

3. Business of WTG products and services

In the first half of 2017, United Power produced 208 units of WTG (including 25 units of 1.5MW WTG, 182 units of 2MW WTG and 1 unit of 3MW WTG, total 404.5MW), making a great contribution to the development of green energy. The waste water from the WTG manufacture of fans at the production bases in Jiangsu, Inner Mongolia and Hebei was discharged via the pipeline into the municipal sewage treatment plant and uniformly discharged according to applicable standards; the exhaust pollution sources were equipped with ventilation system with filtration of activated carbon, causing no pollution on environment; other wastes all were sold to metal recycling companies for recycling.

For the first half of 2017, Guodian Technology & Environment Group Corporation Limited Chifeng Wind Power Company, a subsidiary of the Company, accumulatively generated 110,718,600 kwh wind power and PV power, equivalent to reduction of the emission of 111,800 ton greenhouse gas.

II. Working Environment and Employees

1. Employees

The Group always insists on the philosophy that employees are the most precious assets and the source for the sustainable development of the enterprise. It actively creates good conditions for the career development and physical and mental health of employees; it has established clear and transparent human resources system and flow; and by establishing the employees congress system, it allows the employees to actively participate in the operation activities of the Group. Through perfect and multidirectional communication mechanism and transparent information platform, it enables the employees to clearly understand the strategy, operation target, etc. of the Group and practically ensures the right of the employees to know, to participate and to supervise.

As at 30 June 2017, the Group has 7,208 employees in total, including 3,216 workers, and 1,531 technicians, accounting for 38.4% of the non-worker employees. There are 5,193 male employees and 2,015 female employees.

3. 風機產品及服務業務

於2017年上半年本公司附屬公司聯合動力生產風機208台(其中1.5MW風機25台,2MW風機182台,3MW風機1台,合計404.5MW),為發展綠色能源做出了貢獻。位於江蘇、內蒙古、河北的生產基地在風機製造過程中所產生的廢水經管網排入市政污水處理廠,統一處理達標排放;廢氣污染源加裝採用活性炭過濾處理的通風系統,對環境未造成污染;其他廢棄物全部銷售給金屬回收公司回收利用。

於2017年上半年本公司附屬公司國 電科技環保有限公司赤峰風電公司 累計風力和光伏發電11,071.86萬千 瓦時,相當於減排溫室氣體11.18萬 噸。

二. 工作環境及員工

1. 僱員情況

本集團始終堅持員工是最寶貴的財 高,是企業可持續發展的源泉,積良 為員工事業發展和身心健康創造內 條件,建立了清晰、透明的人力 制度和程序,並通過建立職工集 會制度,讓員工積極參與到本 經營活動中;通過健全的、多向員 經營活動中;通過健全的,,使員 經營制與透明的信息平台,,使營目標 通機制與了解本集團戰略、經營目標 清晰地了解本集團戰略、經營目標 信息,切實保障員工的知情權、參與權和監督權。

於2017年6月30日,本集團共有員工7,208人,其中工人3,216人,技術人才1,531人,佔非工人人員總量的38.4%。男性僱員5,193人,女性僱員2,015人。

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT (CONTINUED) 環境、社會及管治報告(續)

2. Health and Safety

The Company always strictly executes the applicable national laws, regulations and standards in respect of production safety and occupational disease prevention, continuously establishes and perfects working environmental management and occupational health and safety management system and creates the working environment and conditions in line with the applicable national occupational safety and health standards and health requirements for its employees. By providing the employees with eligible labor health and protection articles, the Company prevents, controls and eliminates occupational disease hazards and protects the health and relevant interests of its employees.

In order to reinforce the occupational health supervision and management of the workplace of every unit of the Group, the whole company has established the safety, occupational health assurance system while every grass roots unit has respectively taken the following measures:

- Establish the table of hazard sources and the table of major hazard sources, and take specific measures and emergency management plans for hazard sources, in particular major hazard sources;
- (2) Regularly organize the employees to participate in the knowledge training with regard to occupational health and occupational disease prevention, promote their self-protection awareness and regularly organize them to participate in physical checks;
- (3) Keep improving the working environment of the workplace;
- (4) Actively cooperate with the relevant departments in epidemic prevention.

The Group has conducted safety checks, emergency accident drills and safety education activities in multiple forms. For the first half of 2017, the overall safety situation was stable and there were no incidents of major safety and personal casualty accidents.

2. 健康與安全

公司一貫嚴格執行國家關於安全生產 和職業病預防工作的法律法規、標 準,不斷建全和完善工作環境管理和 職業健康安全管理體系,為員工創造 了符合國家職業安全衛生標準和衛生 要求的工作環境和條件。通過向員工 提供合格的勞動衛生保護用品,預 防、控制和消除職業病的危害,保護 了員工健康及相關權益。

為加強本集團各單位作業場所的職業 健康監督與管理工作,公司自上而下 建立了安全、職業健康保證體系,各 基層單位分別制定了以下措施:

- (1) 編製危險源列表和重大危險源 列表,對於各危險源,特別是 重大危險源,採取有針對性的 應對措施和緊急管理方案;
- (2) 定期組織員工參加相關職業健康和預防職業病的知識培訓,提高員工的自我保護意識,並定期組織員工參加體檢;
- (3) 不斷改善作業場所的工作環境:
- (4) 積極配合防疫部門做好傳染性 疾病的預防工作。

本集團開展了多種形式的安全檢查、 應急事故演練及安全教育活動,於 2017年上半年安全局勢總體平穩,沒 有發生重大安全和人身事故。

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT (CONTINUED) 環境·社會及管治報告(續)

3. Personal Development and Training

This Group fully implements the strategy of "strengthen the enterprise with human resources"; therefore, it continually promotes its systematic education and training, enhances the career development of the employees and boosts the comprehensive skill and quality of the employees. The Group has established the "3+1" whole staff training system in line with its future development demand and based on the cultivation of leadership, competence, implementation capacity and professional skill; and it carries out the hierarchical, classified and customized talent cultivation plan. In addition, it has established the corporate internal trainer system; it enhances the internal sharing of knowledge, skill and experience and also provides talents with more platforms for flexible communication and expression.

4. Employment Rules

This Group strictly implements the Labor Law of the PRC and the Law of the PRC on Employment Contracts and enters into the employment contract with all employees, setting forth work content, work place, work time, remuneration, etc.. This Group respects the freedom of any employee at work and firmly avoids restricting the physical freedom of any employee or forcing any employee to work during employment. Since the establishment of the Group, it has never had any major breach of the applicable laws and regulations in respect of operation activities and employment practices (including but not limited to recruitment, working hours, health and safety, use of child workers and forced labor).

5. Employee Care

The Group, via multiple forms of activities, unified all staff to work hard and created good family cultural atmosphere, for example, it actively carried out activities such as "Read and Learn", "Read Happily as Youth", "Talks of Youth", etc., advocating all staff to read and learn. It established and perfected work help and support mechanism, provided daily care for poor employees and kept improving the warmth-giving program. The Group actively constructed people-benefited programs, organized staff to participate in tennis matches organized by Guodian, held innovation and originality events of Guodian, held the "Guodian Tech" Badminton Match and the 1st Guodian Technology "Work Healthily and Live Happily" brisk walking. In addition, the Group fully upgraded the construction of the "Romantic Guodian" APP online platform, and held totally 2 offline fellowship events with more than 30 person-times participating in the first half of 2017 in order to solve the life problems of young employees and to fully expand their exchange space.

3. 個人發展及培訓

本集團全面實施人才強企戰略,不斷提升公司系統教育培訓工作水平,強化員工的崗位成長,提升員工的高位成長,提升員了符合企技能與素質。本集團建立基於領導持不來發展需要,建立基於領導培養,實施分層、對大能力力和等數,實施分層、大定制化的人才培養規劃。探索部式,定制化的人才培養規劃。探京建立企業內訓師制度,加強企業內對於大能及經驗共享,為各類人才提供更加靈活的溝通展示平台。

4. 勞動準則

5. 員工關愛

本集團通過開展多種形式活動,凝心 聚力、團結拼搏,營造良好的家園文 化氛圍:積極開展「讀書促學」、「青 春悦讀」、「青年説」等活動,倡導全 員閱讀、全員學習理念;建立健全工 會幫扶工作機制,做好貧困職工的日 常慰問,不斷深化送溫暖工程;積極 開展惠民工程建設,組織參加國電的 網球比賽,承辦國電創新創意活動大 賽,並舉辦了「科環盃」羽毛球比賽及 國電科環首屆「健康工作快樂生活」健 步走活動;全面升級了「浪漫國電」 APP線上平台建設,於2017年上半 年共舉辦2次線下聯誼活動,參加人 數達30餘人次,關注青年員工現實生 活問題,充分拓寬了青年員工聯繫交 流。

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT (CONTINUED) 環境、社會及管治報告(續)

III. Operation Management

1. Purchase and Supplier Management

The Group strictly implemented the applicable national laws and regulations such as Law of the People's Republic of China on Tenders and Bids, the applicable regulations of the Group and the original procurement rules and regulations of the Group. In the first half of 2017, on such basis of the applicable rules and regulations of Guodian, the Group further issued three rules, i.e., the Measures for the Implementation of Bidding Procurements, the Detailed Implementation for the Emergency Procurements in the Construction Period of Contracted Projects and the Measures for the Supervision and Management of Procurements. The procurement of the Group insists on the "4-Uniform" principle of Guodian, i.e. uniform plan, uniform standard, uniform process and uniform platform. In procurement process, the members of the Bid Evaluation Committee and the Review Group were required to strictly implement the applicable rules and regulations of Guodian on confidentiality disciplines and application for avoidance. The affiliates of the Group further optimized annual procurement plans, learnt the advanced experience in the industry, optimized the manufacturing enterprise supplier development process, and timely adjusted development plans; they also introduced excellent suppliers of top enterprises in the industry, appropriately reduced development steps; in addition, they also accelerated the step to verify and test new developed suppliers.

2. Product Responsibility

The Group has passed the ISO90001 quality system certification and the annual routine certification throughout the years; and it has established quality and safety management system and effectively organizes and supervises the strict implementation of the same by its subsidiaries. In terms of contracts, it strictly performs the contractual terms, fulfills contractual obligations and provides relevant after-sale services.

三. 運營管理

1. 採購與供應商管理

在嚴格執行《中華人民共和國招標投 標法》等相關國家法規和國電相關規 定以及本集團原有採購制度的基礎 上,2017年上半年,本集團結合國電 相關制度,進一步細化下發了三項制 度,分別為:招標採購實施辦法、承 攬類業務工期緊急採購實施細則及採 購業務監督管理辦法。本集團採購工 作堅持國電採購工作的四個統一:統 一計劃、統一標準、統一流程、統一 平台。採購過程中,嚴格要求評標委 員會、評審小組成員執行國電相關保 密紀律和申請迴避規定。附屬公司進 一步優化年度採購方案,學習行業內 先進經驗,優化製造企業合格供應商 開發流程,並及時調整開發計劃;引 進行業內排名靠前的企業的優秀供應 商,適當減少開發環節;加快新開發 供應商驗證試用環節。

2. 產品責任

本集團已通過了國際ISO90001的質量體系認證,並通過了歷年的年度例行認證檢查,同時建立了質量、安全管理制度,並組織、督導附屬公司嚴格執行;在相關合同執行過程中,嚴格執行合同條款,履行合同義務,並做好相關售後服務工作。

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT (CONTINUED) 環境·社會及管治報告(續)

3. Anticorruption

In order to regulate employees' occupational behavior, prevent the occurrence of corruption, the Company keeps the establishment of a "three-in-one" officer pre-office integrity education system. The Company had strict pre-office integrity review and any officer to be promoted should receive integrity review. The Company had strict pre-office integrity examination, required the candidate leaders and middle-level officers to participate in the pre-office integrity examination and had strict pre-office integrity talks with them. In the first half of 2017, the Disciplinary Inspection Committee had pre-office integrity talks with 23 new leaders to be promoted, requiring each them to be a "person sensible politically, person clean economically, person with decent style and bellwether on the work".

As at 30 June 2017, the units under the Company had 32 efficiency supervisory inspections in the key and hard work such as bidding and tendering, engineering management, eight item expenses, supplier management, etc., and brought forward 29 pieces of supervisory suggestions, benefiting the healthy development of the enterprises.

IV. Social Welfare

While making effort to develop its own economy, the Group, within its capability, actively participates in social welfare activities in the local region such as joint construction by local government and enterprise, construction of spiritual civilization, construction of science, education and health, construction of community, donations to schools, poverty relief, etc., promoting the economic development and social harmony of the local region.

3. 反貪污

為規範員工的職業行為,預防腐敗發生,本公司持續構建「三位一體」幹部員工任前廉潔教育體系。嚴格任前廉潔審核,對擬提任領導幹部的黨風廉政情況進行審核。嚴格任前廉潔若行任前廉政法規考試,嚴格進行任前廉政法規考試,嚴格進行任前廉政法規考試,嚴格進行任前廉政法規考試,嚴格進行任前廉認該話。於2017年上半年,國電科環紀委對23名新提任領導幹部進行了任前談話,要求其做「政治上的明白人、經濟上的清白人、作風上的正派人、工作上的帶頭人」。

截至2017年6月30日止,公司所屬各單位圍繞招投標、工程管理、八項費用、供應商管理等重點、難點工作開展效能監察32項,提出效能監察建議29條,有利促進企業的健康發展。

四. 社會公益

本集團在努力發展自身經濟的同時,在力 所能及的範圍內,積極參加所在地區的地 企共建、精神文明建設、科教衛生、小區 建設、捐資助學、扶貧濟困等社會公益活 動,促進了所在地區的經濟發展和社會和 諧。

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT (CONTINUED) 環境、社會及管治報告(續)

The Company made effort to establish the voluntary service organization with its own feature, and by participating in social activities, it spread the concept of green energy and built up its corporate image. Guodian Tech Green Ribbon Youth Volunteer Association organized the technical backbone of the Company to form a propaganda group, which served society with the advantage of the exhibition hall. After being named as one of the 2nd Batch of Capital "Learn from Lei Feng" Voluntary Service Stations by the Civilization Office of SASAC of the State Council in 2016, Guodian Tech Science and Technology Exhibition Hall successively organized the students from schools such as Yuying Secondary School, etc. to visit and study the Company. The Communist Youth League of Guodian Tech and Chifeng Communist Youth League jointly launched the "Youth Lights Micro Wish." Poverty Alleviation Volunteer Program and helped 212 poor children to realize their micro wishes. The Company also had "My Energy Dream" program and had a face-to-face exchange with the 50 freshmen of the Thermal Engineering Department of Tsinghua University, kindling their enthusiasm in professional learning. The Communist Youth League of Lucency entered into a third-party agreement with the Communist Youth League working committee of Wanshou Road in respect of helping the juveniles of the poor families and, according to this agreement, donated 511 articles including books and bags and helped 210 juvenile in one-to-one manner. In addition, the Company provided voluntary services for Beijing International Long-distance Run Festival, Guodian Tech Walk and other large events with 283 persons participating.

公司努力創建富有本企業特色的志願服務 組織,通過參與社會活動,傳播綠色能源 理念,樹立了企業形象。國電科環綠絲帶 青年志願者協會組織公司技術骨幹組成宣 講團,利用展廳的優勢資源服務社會,續 2016年「國電科環科技展廳」成為國務院國 資委文明辦命名的[第二批首都學雷鋒志願 服務站」後,陸續組織育英中學等學校學生 到公司參觀學習; 國電科環團委與赤峰團 委聯合開展「青春點亮微心願」共青團助力 扶貧志願活動,為212名貧困兒童送去微心 願;開展「我的能源夢」活動,與清華大學 熱能工程系50名新生面對面活動,點燃專 業學習熱情; 朗新明團委與萬壽路團工委 簽訂了生活貧困家庭青少年幫扶對接三方 協議等,捐贈書籍、書包等各類物品511 件,一對一幫扶210對;為北京國際長跑節 以及國電科環健步走等大型活動提供志願 活動,參與達283人次。

REVIEW REPORT 審閱報告



Review report to the board of directors of Guodian Technology & Environment Group Corporation Limited

(a joint stock company incorporated in the People's Republic of China with limited liability)

Introduction

We have reviewed the interim financial report set out on pages 55 to 92 which comprises the consolidated statement of financial position of Guodian Technology & Environment Group Corporation Limited (the "Company") as at 30 June 2017 and the related consolidated statement of profit or loss, consolidated statement of profit or loss and other comprehensive income and consolidated statement of changes in equity and condensed consolidated cash flow statement for the sixmonth period then ended and explanatory notes. The Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited require the preparation of an interim financial report to be in compliance with the relevant provisions thereof and International Accounting Standard 34, *Interim financial reporting*, issued by the International Accounting Standards Board. The directors are responsible for the preparation and presentation of the interim financial report in accordance with International Accounting Standard 34.

Our responsibility is to form a conclusion, based on our review, on the interim financial report and to report our conclusion solely to you, as a body, in accordance with our agreed terms of engagement, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Scope of Review

We conducted our review in accordance with Hong Kong Standard on Review Engagements 2410, *Review of interim financial information performed by the independent auditor of the entity*, issued by the Hong Kong Institute of Certified Public Accountants. A review of the interim financial report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Hong Kong Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

審閲報告

致國電科技環保集團股份有限公司董事會

(於中華人民共和國註冊成立的股份有限公司)

引言

我們已審閱列載於第55頁至第92頁國電科技環保集團股份有限公司(「貴公司」)的中期財務報告,此中期財務報告包括於2017年6月30日的合併財務狀況表與截至該日止6個月期間的合併損益表、合併損益及其他全面收益表及合併權益變動表和簡明合併現金流量表以及附註解釋。《香港聯合交易所有限公司證券上市規則》要求符合其相關規定和國際會計準則理事會頒佈的《國際會計準則》第34號「中期財務報告」的規定編製中期財務報告。董事須負責根據《國際會計準則》第34號編製及列報中期財務報告。

我們的責任是根據我們的審閱對中期財務報告作出結論,並按照我們雙方所協定的業務條款,僅向全體董事會報告我們的結論。除此以外,我們的報告書不可用作其他用途。我們概不就本報告書的內容,對任何其他人士負責或承擔法律責任。

審閲範圍

我們已根據香港會計師公會頒佈的《香港審閱工作準則》第2410號[獨立核數師對中期財務資訊的審閱]進行審閱。中期財務報告審閱工作包括主要向負責財務會計事項的人員詢問,並實施分析和其他審閱程式。由於審閱的範圍遠較按照《香港審計準則》進行審核的範圍為小,所以不能保證我們會注意到在審核中可能會被發現的所有重大事項。因此我們不會發表任何審核意見。

REVIEW REPORT (CONTINUED) 審閱報告(續)

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the interim financial report as at 30 June 2017 is not prepared, in all material respects, in accordance with International Accounting Standard 34, *Interim financial reporting*.

結論

根據我們的審閱工作,我們並沒有注意到任何事項使我們相信於2017年6月30日的中期財務報告在所有重大方面沒有按照《國際會計準則》第34號「中期財務報告」的規定編製。

KPMG

Certified Public Accountants 8th Floor, Prince's Building 10 Chater Road Central, Hong Kong

28 August 2017

畢馬威會計師事務所

執業會計師 香港中環 遮打道10號 太子大廈8樓

2017年8月28日

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

合併損益表

For the six months ended 30 June 2017 – unaudited 截至2017年6月30日止6個月-未經審計 (Expressed in Renminbi) (以人民幣列示)

			Six months end 截至6月30日	
			2017	エ り 両ろ 2016
		Note	RMB'000	RMB'000
		附註	人民幣千元	人民幣千元
Continuing operations	持續經營業務			
Revenue	收入	4	4,989,689	6,090,608
Cost of sales	銷售成本		(3,816,896)	(4,698,017)
Gross profit	毛利		1,172,793	1,392,591
Other revenue	其他收入	5	140,663	123,316
Other net income	其他收益淨額	5	547,617	153,453
Selling and distribution expenses	銷售及分銷開支		(433,227)	(434,237)
Administrative expenses	行政開支		(808,018)	(570,757)
Profit from operations	經營利潤		619,828	664,366
Finance costs	財務成本	6	(286,169)	(231,897)
Share of profits less losses of associates	應佔聯營公司利潤減虧損		37,600	45,084
Profit before taxation from continuing operations	來自持續經營業務之税前利潤	7	371,259	477,553
Income tax	所得税	8	(141,314)	(105,546)
Profit for the period from continuing operations	本期來自持續經營業務之利潤		229,945	372,007
Discontinued operation	已終止經營業務			
Loss for the period from discontinued operation	本期來自已終止經營業務之虧損	9	(83,460)	(254,583)
Profit for the period	本期利潤		146,485	117,424

CONSOLIDATED STATEMENT OF PROFIT OR LOSS (CONTINUED) 合併損益表(續)

For the six months ended 30 June 2017 – unaudited 截至2017年6月30日止6個月-未經審計 (Expressed in Renminbi)(以人民幣列示)

			Six months end 截至6月30日	
			2017	2016
		Note	RMB'000	RMB'000
		附註	人民幣千元	人民幣千元
Attributable to:	歸屬於:			
Equity shareholders of the Company	本公司權益股東		139,654	54,721
Non-controlling interests	非控股權益		6,831	62,703
Profit for the period	本期利潤		146,485	117,424
Basic and diluted earnings/(loss) per	每股基本及攤薄盈利/(虧損)	10		
share (Expressed in RMB)	(以人民幣列示)			
- Continuing and discontinued operations	-持續經營業務		0.023	0.009
	和已終止經營業務			
 Continuing operations 	-持續經營業務		0.036	0.051
 Discontinued operation 	已終止經營業務		(0.013)	(0.042)

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

合併損益及其他全面收益表

For the six months ended 30 June 2017 – unaudited 截至2017年6月30日止6個月-未經審計 (Expressed in Renminbi) (以人民幣列示)

		Six months end 截至6月30日	
		2017	2016
		RMB'000	RMB'000
		人民幣千元	人民幣千元
Profit for the period	本期利潤	146,485	117,424
Other comprehensive income for the period (after tax and reclassification adjustments):	本期其他全面收益(税後及重新分類 調整後):		
Items that may be reclassified subsequently to profit or loss:	其後將重分類計入損益的項目:		
 Exchange differences on translation of financial statements of operations outside the People's Republic of China ("PRC") 	一換算中華人民共和國(「 中國 」)境外 業務財務報表產生的匯兑差額	(212)	301
Other comprehensive income for the period	本期其他全面收益	(212)	301
Total comprehensive income for the period	本期全面收益總額	146,273	117,725
Attributable to:	歸屬於:		
Equity shareholders of the Company	本公司權益股東	139,442	55,022
Non-controlling interests	非控股權益	6,831	62,703
Total comprehensive income for the period	本期全面收益總額	146,273	117,725

CONSOLIDATED STATEMENT OF FINANCIAL POSITION 合併財務狀況表

As at 30 June 2017 – unaudited 於2017年6月30日 – 未經審計 (Expressed in Renminbi) (以人民幣列示)

			At 30 June	At 31 Decembe
			6月30日	12月31日
			2017	2016
		Note	RMB'000	RMB'000
		附註	人民幣千元	人民幣千元
Non-current assets	非流動資產			
Property, plant and equipment	物業、廠房及設備	11	4,605,258	4,855,89 ⁻
nvestment properties	投資性物業		241,543	246,039
ease prepayments	預付土地租賃款		327,484	330,736
ntangible assets	無形資產		1,144,583	1,196,279
Goodwill	商譽		57,591	57,59
nterests in associates	對聯營公司的投資		399,656	412,80
Other equity investments	其他權益投資		162,187	162,187
Other non-current assets	其他非流動資產		4,205,094	4,004,969
Deferred tax assets	遞延税項資產		671,485	612,382
Total non-current assets	非流動資產總額		11,814,881	11,878,875
Current assets	流動資產			
nventories	存貨		2,609,429	2,722,19
Gross amounts due from customers for contract work	應收建造合同客戶款項總額		1,379,588	1,443,384
Trade and bills receivables	應收賬款及票據	12	13,394,957	14,036,57
Deposits, prepayments and other receivables	按金、預付款項及其他應收款項		2,808,258	2,392,860
Tax recoverable	可收回税項		101,085	151,72
Restricted deposits	受限制存款		448,347	171,539
Cash at bank and on hand	銀行存款及庫存現金	13	2,713,437	4,603,662
Assets held for sale	持作待售資產	14	1,082,261	2,699,889
Total current assets	流動資產總額		24,537,362	28,221,827
Current liabilities	流動負債			
Borrowings	借款	15	6,732,461	8,478,005
Trade and bills payables	應付賬款及票據	16	10,188,419	10,821,789
Other payables	其他應付款項	. •	3,233,909	3,624,852
Gross amounts due to customers for	應付建造合同客戶款項總額		1,050,137	1,022,644
contract work			,,	.,,0 .
ncome tax payable	應付所得税		21,917	49,959
Provision for warranty	質保金撥備		221,569	255,29
_iabilities held for sale	持作待售負債	14	80,165	1,196,294

The notes on pages 63 to 92 form part of this interim financial report.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED) 合併財務狀況表(續)

As at 30 June 2017 - unaudited 於2017年6月30日 - 未經審計 (Expressed in Renminbi) (以人民幣列示)

				At 31 December
			6月30日	12月31日
			2017	2016
		Note	RMB'000	RMB'000
		附註	人民幣千元	人民幣千元
Net current assets	流動資產淨額		3,008,785	2,772,990
Total assets less current liabilities	總資產減流動負債		14,823,666	14,651,865
Non-current liabilities	非流動負債			
Borrowings	借款	15	5,011,387	5,115,637
Deferred income	遞延收益		368,614	374,952
Deferred tax liabilities	遞延税項負債		197,888	205,338
Provision for warranty	質保金撥備		801,398	737,796
Other non-current liabilities	其他非流動負債		415,658	222,932
Total non-current liabilities	非流動負債總額		6,794,945	6,656,655
NET ASSETS	資產淨額		8,028,721	7,995,210
CAPITAL AND RESERVES	資本及儲備			
Share capital	股本		6,063,770	6,063,770
Reserves	儲備		(1,005,497)	(1,144,939)
Total equity attributable to equity shareholders of the Company	歸屬於本公司權益股東的權益總額		5,058,273	4,918,831
Non-controlling interests	非控股權益		2,970,448	3,076,379
TOTAL EQUITY	權益總額		8,028,721	7,995,210

董事會於2017年8月28日批准並授權刊發。 Approved and authorised for issue by the board of directors on 28 August 2017.

> Mr. CHEN Dongqing 陳冬青 Executive Director 授權董事

Mr. TANG Chaoxiong 唐超雄 Executive Director 授權董事

The notes on pages 63 to 92 form part of this interim financial report.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

合併權益變動表

For the six months ended 30 June 2017 – unaudited 截至2017年6月30日止6個月-未經審計 (Expressed in Renminbi) (以人民幣列示)

			Attributa	able to equity sha 歸屬於本公	reholders of the 司權益股東	e Company			
				PRC	門惟皿以木			- Non-	
		Share	Capital	statutory	Exchange	Accumulated		controlling	Tota
		capital	reserve	reserve	reserve	losses	Sub-total	interests	equity
		股本	資本儲備	中國法定公積 匯兑儲備	累計虧損	小計	非控股權益	權益總額	
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
		人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元
Balance at 1 January 2016	2016年1月1日結餘	6,063,770	1,062,980	129,332	1,014	(2,650,632)	4,606,464	3,296,489	7,902,953
Changes in equity for the six months	截止2016年06月30日止								
ended 30 June 2016:	6個月權益變動:								
Profit for the period	本期利潤	_	_	_	_	54,721	54,721	62,703	117,424
Other comprehensive income	其他全面收益	-	-	-	301	-	301	-	301
Total comprehensive income	本期全面收益總額				301	54,721	55,022	62,703	117,72
Disposal of a subsidiary	處置附屬公司	_	_	_	_	_	_	(5,460)	(5,460
Disposal of equity interest in a subsidiary to	向非控股權益所有者處置								
non-controlling equity owners	附屬公司權益	_	8,727	-	-	-	8,727	(8,727)	
Dividends paid by subsidiaries to non-	附屬公司向非控股權益								
controlling equity owners	所有者支付股息		-	-	-	-	-	(51,425)	(51,425
Balance at 30 June 2016	2016年6月30日結餘	6,063,770	1,071,707	129,332	1,315	(2,595,911)	4,670,213	3,293,580	7,963,793
Balance at 1 July 2016	2016年7月1日結餘	6,063,770	1,071,707	129,332	1,315	(2,595,911)	4,670,213	3,293,580	7,963,793
Changes in equity for the six months	截止2016年12月31日止								
ended 31 December 2016:	6個月權益變動:								
Profit/(loss) for the period	本期利潤/(虧損)	-	-	-	-	247,651	247,651	(111,624)	136,027
Other comprehensive income	其他全面收益		-	-	967	-	967	-	967
Total comprehensive income	本期全面收益總額	-	-		967	247,651	248,618	(111,624)	136,994
Disposal of a subsidiary	處置附屬公司	-	-	-	-	-	-	(5,053)	(5,053
Dividends paid by subsidiaries to non-	附屬公司向非控股權益								
controlling equity owners	所有者支付股息	-	-	-	-	-	-	(100,524)	(100,524
Appropriation to reserves	提取盈餘公積	-	-	24,383	-	(24,383)	-	-	-
Balance at 31 December 2016	2016年12月31日結餘	6,063,770	1,071,707	153,715	2,282	(2,372,643)	4,918,831	3,076,379	7,995,210

The notes on pages 63 to 92 form part of this interim financial report.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED) 合併權益變動表(續)

For the six months ended 30 June 2017 – unaudited 截至2017年6月30日止6個月-未經審計 (Expressed in Renminbi) (以人民幣列示)

		Attributable to equity shareholders of the Company 歸屬於本公司權益股東							
				PRC				Non-	
		Share	Capital	statutory	Exchange	Accumulated		controlling	Total
		capital	reserve	reserve	reserve	losses	Sub-total	interests	equity
		股本	資本儲備	0 RMB'000	匯兑儲備 <i>RMB'000</i>	累計虧損 <i>RMB'000</i>	小計 <i>RMB'000</i>	非控股權益 <i>RMB'000</i>	權益總額 RMB'000
		RMB'000	RMB'000						
		人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元
Balance at 1 January 2017	2017 年1月1日結餘	6,063,770	1,071,707	153,715	2,282	(2,372,643)	4,918,831	3,076,379	7,995,210
Changes in equity for the six months ended 30 June 2017:	截止2017年06月30日止 6個月權益變動:								
Profit for the period	本期利潤	_	_	_	_	139,654	139,654	6,831	146,485
Other comprehensive income	其他全面收益	-		-	(212)		(212)		(212)
Total comprehensive income	本期全面收益總額	<u>-</u>	<u>-</u>	<u>-</u>	(212)	139,654	139,442	6,831	146,273
Disposal of subsidiaries	處置附屬公司	-	-	-	-	-	-	(112,762)	(112,762
Balance at 30 June 2017	2017年6月30日結餘	6,063,770	1,071,707	153,715	2,070	(2,232,989)	5,058,273	2,970,448	8,028,721

CONDENSED CONSOLIDATED CASH FLOW STATEMENT 簡明合併現金流量表

For the six months ended 30 June 2017 – unaudited 截至2017年6月30日止6個月-未經審計 (Expressed in Renminbi) (以人民幣列示)

			Six months end 截至6月30日	
			2017	2016
		Note	RMB'000	RMB'000
		附註	人民幣千元	人民幣千元
Operating activities	經營活動			
Cash used in from operations	經營中使用的現金		(103,915)	(1,809,474
Income tax paid	已付所得税		(186,480)	(144,680
Net cash used in operating activities	經營活動使用的淨現金		(290,395)	(1,954,154
Investing activities	投資活動			
Payment for the purchase of property, plant and equipment, lease prepayments and	採購物業、廠房及設備、預付土地 租賃款及無形資產支出			
intangible assets			(62,452)	(229,475
Proceeds from disposal of subsidiaries Other cash flows arising from investing	處置附屬公司所得款項 來自投資活動的其他現金流		685,122	-
activities			(470,274)	151,636
Net cash generated from/(used in)	投資活動產生/(使用)的淨現金			
investing activities	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		152,396	(77,839
Financing activities	籌資活動			
Proceeds from borrowings	借款所得款項		4,510,500	8,186,956
Proceeds from issuing private placement	發行私人配售債務融資工具			
notes	所得款項		-	1,387,400
Decrease in restricted deposits	受限制存款的減少		54,036	151,520
Repayment of borrowings	償還借款		(6,423,829)	(8,090,593
Interest paid	已付利息		(237,431)	(254,336
Increase in restricted deposits	受限制存款的增加		(329,974)	(128,742
Other cash flows arising from financing activities	來自籌資活動的其他現金流		(8,000)	(147,073
Net cash (used in)/generated from	籌資活動(使用)/產生的淨現金			
financing activities	RAMIN (CITY) PETROTION		(2,434,698)	1,105,132
Net decrease in cash and cash	現金及現金等價物的淨減少額			
equivalents	70 E 70 70 E 31 15 10 H3 13 17 17 HX		(2,572,697)	(926,861
Cash and cash equivalents at 1 January	於1月1日的現金及現金等價物	13	4,382,654	2,325,469
Effect of foreign exchanges	外匯匯率變動的影響			
rate changes			(4,520)	(2,107
Cash and cash equivalents at 30 June	於6月30日的現金及現金等價物	13	1,805,437	1,396,501
			-,,	.,555,00

The notes on pages 63 to 92 form part of this interim financial report.

NOTES TO THE UNAUDITED INTERIM FINANCIAL REPORT 未經審計的中期財務報告附註

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

1 Organisation

Guodian Technology & Environment Group Corporation Limited (the "Company") was formerly known as Guodian Technology & Environment Group Limited Liability Company and was established on 6 April 2001 as a state-owned enterprise with limited liability. The Company was converted into a joint stock company with limited liability in the PRC on 16 May 2011(the "Conversion"). On 30 December 2011, the Company's H shares were listed on The Stock Exchange of Hong Kong Limited ("HKSE").

2 Basis of preparation

This interim financial report has been prepared in accordance with the applicable disclosure provisions of the Rules Governing the Listing of Securities on HKSE, including compliance with International Accounting Standards ("IAS") 34, Interim financial reporting, issued by the International Accounting Standards Board ("IASB"). It was authorised for issue on 28 August 2017.

The interim financial report has been prepared in accordance with the same accounting policies adopted in the 2016 annual financial statements, except for the accounting policy changes that are expected to be reflected in the 2017 annual financial statements. Details of any changes in accounting policies are set out in note 3.

The preparation of an interim financial report in conformity with IAS 34 requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses on a year to date basis. Actual results may differ from these estimates.

This interim financial report contains condensed consolidated financial statements and selected explanatory notes. The notes include an explanation of events and transactions that are significant to an understanding of the changes in financial position and performance of the Company and its subsidiaries (the "Group") since the 2016 annual financial statements. The condensed consolidated interim financial statements and notes thereon do not include all of the information required for full set of financial statements prepared in accordance with International Financial Reporting Standards ("IFRSs") issued by the IASB.

This interim financial report is unaudited, but has been reviewed by KPMG in accordance with Hong Kong Standard on Review Engagements 2410, *Review of interim financial information performed by the independent auditor of the entity*, issued by the Hong Kong Institute of Certified Public Accountants. KPMG's independent review report to the board of directors is included on page 53 to 54.

1 組織

國電科技環保集團股份有限公司(「本公司」)前身為國電科技環保集團有限公司, 為國有有限責任企業及成立於2001年4月6日。本公司於2011年5月16日轉制為中國股份有限公司(「轉制」)。2011年12月30日,本公司的H股在香港聯合交易所有限公司(「香港聯交所」)上市。

2 編製基礎

本中期財務報告已依據《香港聯合交易所有限公司證券上市規則》的相關披露條文編製,包括遵守由國際會計準則理事會(「國際會計準則理事會」)頒佈的《國際會計準則》」(「《國際會計準則》」)第34號「中期財務告」。本中期財務報告於2017年8月28日經授權發出。

除預計將在2017年年度財務報表中體現的會計政策變化外,本中期財務報告的編製依據為2016年年度財務報告所採納的相同會計政策。有關會計政策變化詳情,請參見附註3。

按照《國際會計準則》第34號編製中期財務報告要求管理層作出判斷、估計和假設,而該等判斷、估計和假設會影響政策的應用、資產、負債、今年迄今為止的收入與支出的呈報金額。實際結果可能有別於該等估計。

本中期財務報告內含簡明合併財務報表及選定的解釋性註釋。註釋包括對瞭解本公司及其附屬公司(「本集團」)自2016年度財務報表以來財務狀況和經營情況變動有重要作用的各項事件和交易所作的説明。簡明合併中期財務報表及其註釋並未將根據國際會計準則理事會發佈的《國際財務報告準則》(「《國際財務報告準則》」)編製的完整財務報表所需的全部資訊包括在內。

本中期財務報告未經審計,但已由畢馬威會計師事務所按照香港會計師公會頒佈的《香港審閱工作準則》第2410號「獨立核數師對中期財務資訊的審閱」進行了審閱。畢馬威會計師事務所致董事會的獨立審閱報告載於第53頁至第54頁。

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

2 Basis of preparation (continued)

This interim financial report has been prepared assuming the Group will continue as a going concern notwithstanding the net cash used in operating activities of RMB290,395,000 for the six-month period ended 30 June 2017. The Group has unutilised banking facilities of RMB21,514,222,000 as at 30 June 2017 to fulfil its future capital commitments and other financial requirements. The directors are satisfied that the Group will have necessary liquid funds to finance its working capital and capital expenditure requirements. Accordingly, the directors are of the opinion that it is appropriate to prepare the interim financial report on a going concern basis.

3 Changes in accounting policies

The IASB has issued several amendments to IFRSs that are first effective for the current accounting period of the Group. None of these developments has had a material effect on how the Group's results and financial position for the current or prior periods have been prepared or presented in this interim financial report.

The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period.

4 Revenue and segment reporting

(a) Revenue

The Group is principally engaged in manufacturing and sale of wind turbines, solar cells and modules, plasma ignition equipment and other related electric equipment for power plants, construction engineering of desulfurization, denitrification, water treatment, solar energy and other environmental protection and energy conservation projects, rental of desulfurization and denitrification facilities and provision of integrated services relating to environmental protection, energy conservation and renewable energy businesses.

Revenue represents the sales value of goods supplied to customers, revenues from construction contracts, rendering of services, service concession arrangement and rental income. Revenue is presented net of value added tax, if any.

2 編製基礎(續)

儘管本集團於2017年6月30日截至的六個月內在經營活動中使用的淨現金為人民幣290,395,000元,本中期財務報告是以假設本集團持續經營的基礎編製。於2017年6月30日,本集團擁有金額為人民幣21,514,222,000元的未動用銀行授信以滿足其未來的資本需求及其他財務需要。董事們認為,本集團將擁有能滿足其營運資金及資本開支需要所必需的流動資金。因此,董事們認為基於持續經營假設基礎編製合併財務報告是恰當的。

3 會計政策變更

國際會計準則理事會頒佈了數項《國際財務報告準則》之修訂,它們在本集團及本公司現行會計期間首次生效。這些變動對此中期財務報告中已編製或列示之本集團當期或前期的經營成果和財務狀況並沒有重大影響。

本集團並未採用任何本會計期間尚未生效的 新的準則或詮釋。

4 收入及分部報告

(a) 收入

本集團主要從事風力發電機、太陽能電池組件、等離子點火裝置及發電廠其他相關電氣設備的製造和銷售、以及脱硫、脱硝、水處理、太陽能和其他環保和節能工程的建造施工、脱硫脱硝設備租賃及提供與環保、節能和可再生能源業務相關的綜合服務。

收入指向客戶出售的商品銷售價值、 建造合同、提供服務及服務特許權協 議取得的收入和租賃收入。收入以扣 除增值税后的淨額列示,如有。

NOTES TO THE UNAUDITED INTERIM FINANCIAL REPORT (CONTINUED)

未經審計的中期財務報告附註(續)

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

4 Revenue and segment reporting (continued)

4 收入及分佈報告(續)

(a) Revenue (continued)

(a) 收入(續)

The amount of each significant category of revenue from continuing operations and discontinued operation recognised during the period is as follows:

本期內確認的持續經營業務及已終止 經營業務的各重大類別收入的金額列 舉如下:

				Six months e 截至6月30	nded 30 June 日止6個月		
		Continuing operations 持續經營業務		Discontinued operation 已終止經營業務		Total 總計	
		2017	2016	2017	2016	2017	2016
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
		人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元
Sales of goods (note (i))	銷售商品 <i>(附註(i))</i>	2,558,305	3,214,921	_	25,978	2,558,305	3,240,899
Revenue from construction contracts	建造合同收入	1,788,619	2,104,831	_	116,216	1,788,619	2,221,047
Rental income from operating leases	經營租賃的租賃收入						
(note (ii))	(附註(ii))	379,921	393,103	-	-	379,921	393,103
Rendering of services	提供服務	144,197	215,788	1,447	37,712	145,644	253,500
Service concession arrangement revenue	服務特許權協議收入	118,647	161,965	-	-	118,647	161,965
		4,989,689	6,090,608	1,447	179,906	4,991,136	6,270,514

Notes:

附註:

- (i) Revenue from sales of goods amounting to RMBNil (six months ended 30 June 2016: RMB57,672,000) is sale of wind turbines to contractors who are engaged to construct wind farms for China Guodian Corporation ("Guodian"), the parent company of the Company, and related parties under Guodian.
- (ii) The amount mainly represents income related to service arrangements entered into by the Group with power plants to operate the desulfurization and denitrification facilities for the treatment of sulphur dioxide and nitrogen oxide generated by power plants during their electricity generation. The Group acquires or constructs the facilities and then maintains and operates the facilities to provide pollutant treatment services to power plants during the useful lives of power plants. The service charge is based on the volume of electricity sold by the power plant and a tariff determined by the National Development and Reform Commission of the PRC. These arrangements are not in the legal form of leases, but are deemed as operating leases based on their terms and conditions.
- (i) 銷售商品收入中人民幣零元(截至 2016年6月30日止6個月:人民幣 57,672,000元)為向本公司母公司 中國國電公司(「國電」)及其下屬的 關聯方建造風力發電廠的承包商銷 售風力發電機的金額。
- (ii) 該金額主要為與本集團與電廠簽訂的負責脱硫及脱硝設施的運行工作以在發電過程中處理電廠生成的二氧化硫及氮氧化物之服務安排所相關的收入。本集團購買或建造設施,之後在電廠運行期負責運行設施以向電廠提供污染物處理服務。根據電廠售出的電量以及中國國大學大學展與改革委員會制定的收費標準收取服務費用。此等安排雖並不是法律形式上的租賃學租賃。

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

4 Revenue and segment reporting (continued)

(b) Segment reporting

The Group manages its businesses by its subsidiaries, which are organised by business lines (products and services). In a manner consistent with the way in which information is reported internally to the Group's most senior executive management for the purposes of resource allocation and performance assessment, the Group has four reportable segments.

The operation of solar power products and services segment has been discontinued since November 2015. Please refer to note 9 for further details.

The Group combined other business activities that are not reportable in "All others". Revenue included in this category is mainly from the wind and solar power generation and sale of other electric power control system related products.

(i) Segment results, assets and liabilities

The measure used for reporting segment profit is the gross profit. In addition to receiving segment information concerning the gross profit, management is also provided with segment information concerning depreciation and amortisation, interest income, finance costs, impairment of assets, inventories write-down and additions to segment non-current assets.

4 收入及分佈報告(續)

(b) 分部報告

本集團以附屬公司管理其業務,該等附屬公司以經營項目(產品和服務)組織。本集團按照作分配資源、評估業績之用途而向本集團最高級行政管理人員進行內部匯報所一致的方式列報四個可呈報分部。

本集團已於2015年11月終止運營太陽 能產品以及服務分部,更多資訊請參 考附註9。

本集團將未呈報的其他經營業務歸為 「所有其他」。在此類別中的收入主要 源於風力與太陽能發電控制系統和銷 售其他電能相關產品。

(i) 分部業績·資產及負債

用於衡量可呈報分部利潤的指標為毛利。除了收到有關毛利的分部資訊外,管理人員還收到有關折舊及攤銷、利息收入、財務成本、資產減值、存貨撇減以及添置分部非流動資產的分部資訊。

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

4 Revenue and segment reporting (continued)

4 收入及分佈報告(續)

(b) Segment reporting (continued)

(b) 分部報告(續)

(i) Segment results, assets and liabilities (continued)

(i) 分部業績、資產及負債(續)

Information regarding the Group's reportable segments as provided to the Group's most senior executive management for the purposes of resource allocation and assessment of segment performance for the six months ended 30 June 2017 and 2016 is set out below:

提供給本集團最高級行政管理 人員用作進行資源分配並對截 至2017年及2016年6月30日止 6個月的分部業績作出評估的關 於本集團可呈報分部的資訊如 下:

		As at/for the six months ended 30 June 2017 於2017年6月30日/截至2017年6月30日止6個月						
			Continuing operations 持續經營業務			Discontinued operation 已終止經營業務	operation	
			Energy	Wind power		Solar power		
		Environmental	conservation	products and		products and		
		protection	solutions	services	All others	services	Total	
			節能	風電		太陽能產品		
		環保	解決方案	產品及服務	所有其他	及服務	總計	
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	
		人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	
Revenue from external customers	外部客戶收入	2,219,607	423,880	2,192,493	153,709	1,447	4,991,136	
Inter-segment revenue	分部間收入	2,768	-	950	23,154	401	27,273	
	22 11 13 23 1	_,						
Reportable segment revenue	可呈報分部收入	2,222,375	423,880	2,193,443	176,863	1,848	5,018,409	
Reportable segment profit/(loss)	可呈報分部利潤/(虧損)							
(gross profit/(loss))	(毛利/(毛虧))	430,554	107,883	550,750	80,503	(5,234)	1,164,456	
Depreciation and amortisation	折舊及攤銷	136,055	13,057	61,417	46,640	7,227	264,396	
(Reversal of impairment)/impairment of property		100,000	.0,001	• .,	10,010	- ,==-		
plant and equipment	MAN MANAGEMENT MANAGEM	(6,538)	_	_	_	65,328	58,790	
Impairment of intangible assets	無形資產減值	31,968	_	_	_	_	31,968	
Impairment of trade and other receivables	應收賬款及其他應收款項減值	134,581	29,429	45,535	610	16,528	226,683	
Impairment of other non-current assets	其他非流動資產減值	, <u> </u>	-	_	_	28,107	28,107	
Impairment of assets held for sale	持有待售非流動資產減值	_	_	_	_	17,988	17,988	
Interest income	利息收入	19,327	18,721	1,294	803	141	40,286	
Finance costs	財務成本	57,964	2,460	66,795	93	5,094	132,406	
Reportable segment assets	可呈報分部資產	13,071,829	4,332,805	13,474,932	2,188,146	1,745,535	34,813,247	
Additions to reportable segment non-current	本期可呈報分部非流動資產的增加							
assets during the period		86,300	1,809	18,962	1,410	-	108,481	
Reportable segment liabilities	可呈報分部負債	9,021,216	2,515,535	10,559,443	643,531	5,575,008	28,314,733	

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

4 Revenue and segment reporting (continued)

4 收入及分佈報告(續)

(b) Segment reporting (continued)

(b) 分部報告(續)

(i) Segment results, assets and liabilities (continued)

(i) 分部業績、資產及負債(續)

		As at/for the six months ended 30 June 2016 於2016年6月30日/截至2016年6月30日止6個月					
		Continuing operations 持續經營業務			Discontinued operation 已終止經營業務		
		Environmental	Energy conservation	Wind power products and		Solar power products and	
		protection	solutions	services	All others	services 太陽能產品	Total
		環保	節能解決方案	風電產品及服務	所有其他	及服務	總計
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
		人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元
Revenue from external customers	外部客戶收入	2,377,424	758,636	2,721,462	233,086	179,906	6,270,514
Inter-segment revenue	分部間收入	91	2,076	3,198	20,680	_	26,045
Reportable segment revenue	可呈報分部收入	2,377,515	760,712	2,724,660	253,766	179,906	6,296,559
Reportable segment profit (gross profit)	可呈報分部利潤(毛利)	400,877	158,368	688,614	144,793	24,129	1,416,781
Depreciation and amortisation	折舊及攤銷	188,068	15,514	84,877	36,349	70,480	395,288
Impairment of property, plant and equipment	物業、廠房及設備減值	_	_	_	-	132,065	132,065
Reversal of impairment of lease prepayments	預付土地租賃款減值轉回	-	-	-	-	(11,897)	(11,897
(Reversal of impairment)/impairment of trade a	nd 應收賬款及其他應收款項						
other receivables	(轉回)/減值	(4,277)	39,754	31,383	-	57,587	124,447
Interest income	利息收入	12,248	11,864	4,671	1,799	186	30,768
Finance costs	財務成本	120,547	1,193	81,527	225	130,367	333,859
		As at/for the year ended 31 December 2016 於2016年12月31日/截至2016年12月31日止年度					
						Discontinued	

		Continuing operations 持續經營業務				Discontinued operation 已終止經營業務		
		Environmental	Energy conservation	Wind power products and		Solar power products and		
		protection	solutions	services	All others	services 太陽能產品	Total	
		環保	節能解決方案	風電產品及服務	所有其他	及服務	總計	
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	
		人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	
Reportable segment assets	可呈報分部資產	15,951,078	4,436,178	14,040,541	2,327,934	2,095,126	38,850,857	
Additions to reportable segment non-current assets during the year	本期可呈報分部非流動資產的增加	242,176	3,846	54,632	9,980	-	310,634	
Reportable segment liabilities	可呈報分部負債	11,475,428	2,688,695	11,120,004	627,518	6,420,143	32,331,788	

NOTES TO THE UNAUDITED INTERIM FINANCIAL REPORT (CONTINUED)

未經審計的中期財務報告附註(續)

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

4 Revenue and segment reporting (continued)

4 收入及分佈報告(續)

(b) Segment reporting (continued)

- (b) 分部報告(續)
- (ii) Reconciliations of reportable segment revenue, profit, assets and liabilities
- (ii) 可呈報分部收入、利潤、資產 和負債的調節

		Six months ended 30 June 截至6月30日止6個月					
		Continuing operations Discontinued oper 持續經營業務 已終止經營業務		•	on Total 總計		
				已終止經營業務			
		2017	2016	2017	2016	2017	2016
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
		人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元
Revenue	收入						
Reportable segment revenue	可呈報分部收入	5,016,561	6,116,653	1,848	179,906	5,018,409	6,296,559
Elimination of inter-segment revenue	分部間收入抵銷	(26,872)	(26,045)	(401)	_	(27,273)	(26,045
Consolidated revenue	合併收入	4,989,689	6,090,608	1,447	179,906	4,991,136	6,270,514
Profit/(loss)	利潤/(虧損)						
Reportable segment profit/(loss)	可呈報分部利潤/(虧損)	1,169,690	1,392,652	(5,234)	24,129	1,164,456	1,416,781
Elimination of inter-segment loss/(profit)	分部間虧損/(利潤)抵銷	3,103	(61)		80	3,103	19
Reportable segment profit/(loss) derived	取得自集團外的可呈報分						
from the Group's external customers	部利潤/(虧損)	1,172,793	1,392,591	(5,234)	24,209	1,167,559	1,416,800
Other revenue	其他收入	140,663	123,316	2,795	42,248	143,458	165,564
Other net income	其他收益淨額	547,617	153,453	98,780	65,699	646,397	219,152
Selling and distribution expenses	銷售及分銷開支	(433,227)	(434,237)	(823)	8,603	(434,050)	(425,634
Administrative expenses	行政開支	(808,018)	(570,757)	(172,433)	(264,975)	(980,451)	(835,732
Finance costs	財務成本	(286,169)	(231,897)	(5,094)	(130,367)	(291,263)	(362,264
Share of profits less losses of associates	應佔聯營公司利潤減虧損	37,600	45,084		_	37,600	45,084
Consolidated profit/(loss) before taxation	合併税前利潤/(虧損)	371,259	477,553	(82,009)	(254,583)	289,250	222,970

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

4 Revenue and segment reporting (continued)

4 收入及分佈報告(續)

(b) Segment reporting (continued)

(b) 分部報告(續)

(ii) Reconciliations of reportable segment revenue, profit, assets and liabilities (continued)

(ii) 可呈報分部收入、利潤、資產 和負債的調節(續)

		At 30 June 6月30日 2017 <i>RMB'000</i> 人民幣千元	At 31 December 12月31日 2016 <i>RMB'000</i> 人民幣千元
Assets	資產		
Reportable segment assets	可呈報分部資產	34,813,247	38,850,857
Inter-segment elimination	分部間抵銷	(944,965)	(1,112,427
		33,868,282	37,738,430
Interests in associates	對聯營公司的投資	399,656	412,801
Other equity investments	其他權益投資	162,187	162,187
Tax recoverable	可收回税項	101,085	151,722
Deferred tax assets	遞延税項資產	671,485	612,382
Unallocated head office and	未分配總部及行政資產		
corporate assets		1,149,548	1,023,180
Consolidated total assets	合併資產總額	36,352,243	40,100,702
Liabilities	負債		
Reportable segment liabilities	可呈報分部負債	28,314,733	32,331,788
Inter-segment elimination	分部間抵銷	(799,029)	(966,491
		27,515,704	31,365,297
Income tax payable	應付所得稅	21,917	49,959
Deferred tax liabilities Unallocated head office and	遞延税項負債 未分配總部及行政負債	197,888	205,338
corporate liabilities		588,013	484,898
Consolidated total liabilities	合併負債總額	28,323,522	32,105,492

未經審計的中期財務報告附註(續)

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

Other revenue and other net income

其他收入及其他收益淨額

				•	nded 30 June 日止6個月		
		-	operations		ed operation		otal
		持續經	營業務	已終止統	涇營業務	40	計
		2017	2016	2017	2016	2017	2016
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
		人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元
Other revenue	其他收入						
Government grants	政府補助	56,498	61,492	_	34,151	56,498	95,643
Interest income	利息收入	45,172	31,366	141	186	45,313	31,552
Dividend income from unquoted equity	非上市權益投資股息收入						
investments		_	4,822	_	_	_	4,822
Others	其他	38,993	25,636	2,654	7,911	41,647	33,547
		140,663	123,316	2,795	42,248	143,458	165,564
Other net income	其他收益淨額						
Net gain/(loss) on sales of raw materials	原材料銷售收益/(虧損)						
	淨額	7,952	11,131	(434)	(2,141)	7,518	8,990
Net gain on disposal of subsidiaries	出售附屬公司收益淨額	485,864	251	98,268	_	584,132	251
Net gain on debt settlement	債務重組收入淨額	_	_	45	67,822	45	67,822
Net gain on disposal of property, plant and	出售物業、廠房及設備收益						
equipment and intangible assets	淨額	51,008	140,909	_	24	51,008	140,933
Net foreign exchange (losses)/gains	匯兑(虧損)/收益淨額	(2,555)	2,019	_	7	(2,555)	2,026
Others	其他	5,348	(857)	901	(13)	6,249	(870)
		547,617	153,453	98,780	65,699	646,397	219,152

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

6 Finance costs

6 財務成本

					ended 30 June 0日止6個月		
		Continuing operations 持續經營業務		Discontinued operation 已終止經營業務		Total 總計	
		2017	2016	2017	2016	2017	2016
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
		人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元
Interest on bank and other borrowings Less: interest expenses capitalised into property, plant and equipment and	銀行及其他借款利息 減:資本化在物業、廠房及 設備及建造合同中的	290,812	238,713	5,094	130,367	295,906	369,080
construction contracts	利息開支	(4,643)	(6,816)	_	_	(4,643)	(6,816)
		286,169	231,897	5,094	130,367	291,263	362,264

7 Profit before taxation

7 税前利潤

Profit/(Loss) before taxation is arrived at after charging/(crediting):

税前利潤/(虧損)已扣除/(計入):

					ended 30 June 0日止6個月		
		_	j operations 營業務	Discontinued operation 已終止經營業務		Total 總計	
		2017	2016	2017	2016	2017	2016
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
		人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元
Amortisation	攤銷						
 lease prepayments 	- 預付土地租賃款	3,252	5,565	_	2,592	3,252	8,157
- intangible assets	-無形資產	27,994	35,463	483	1,630	28,477	37,093
Depreciation	折舊						
- investment properties	一投資性物業	4,496	3,692	-	-	4,496	3,692
- property, plant and equipment	-物業、廠房及設備	221,427	291,609	6,744	66,258	228,171	357,867
(Reversal of impairment)/impairment on	(減值轉回)/減值虧損						
- property, plant and equipment	-物業、廠房及設備	(6,538)	-	65,328	132,065	58,790	132,065
 lease prepayments 	-預付土地租賃款	-	-	-	(11,897)	-	(11,897)
- intangible assets	-無形資產	31,968	-	-	-	31,968	-
- trade and other receivables	- 應收賬款及其他應收款項	210,155	66,860	16,528	57,587	226,683	124,447
- other non-current assets	- 其他非流動資產	-	-	28,107	-	28,107	-
- assets held for sale	一持有待售非流動資產	-	-	17,988	-	17,988	-
Research and development costs	研發成本	62,278	37,676	-	-	62,278	37,676

未經審計的中期財務報告附註(續)

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

8 Income tax

8 所得税

					ended 30 June 0日止6個月		
		-	operations		ed operation		tal
		持續紹	^፻ 營業務	已終止;	經營業務	總計	
		2017	2016	2017	2016	2017	2016
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
		人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元
Current tax	本期税額						
Provision for the period	本期撥備	127,828	92,336	_	_	127,828	92,336
Under-provision in respect of prior years	過往年度撥備不足	79,796	8,841	1,451		81,247	8,841
		207,624	101,177	1,451	-	209,075	101,177
Deferred tax	遞延税項						
Origination and reversal of temporary	暫時性差異的產生及轉回						
differences		(66,310)	4,369			(66,310)	4,369
		141,314	105,546	1,451	-	142,765	105,546

Note:

The charge for PRC enterprise income tax for the Group's subsidiaries established in the PRC is calculated at the statutory rate of 25% (six months ended 30 June 2016: 25%) on the estimated assessable profit of the period determined in accordance with relevant enterprise income tax rules and regulations, except for certain subsidiaries of the Group, which are tax exempted or taxed at preferential rates of 12.5% or 15% (six months ended 30 June 2016: 12.5% or 15%).

Taxation for subsidiaries incorporated in Hong Kong or overseas countries is charged at the appropriate rate of taxation ruling in the relevant jurisdiction.

The current tax for the six months ended 30 June 2017 included tax payments totaling RMB81,247,000 in respect of prior years according to tax assessments concluded by local tax bureaus.

9 Discontinued operation

During the year ended 31 December 2015, management decided to abandon all of the Group's operations under the solar power products and services segment, which constitute a major line of business of the Group, due to the challenging market conditions in the solar industry. As such, the results of the Group's operations under the solar power products and services segment were presented as discontinued operation in the condensed consolidated financial statements.

附註:

本集團於中國成立的附屬公司的中國企業所得稅支出是按照相關企業所得稅規則和法規確定的在本期估計的應課稅溢利基礎上按25%(截至2016年6月30日止6個月:25%)的法定稅率進行計算,但本集團的若干附屬公司享受免稅政策或享受12.5%或15%(截至2016年6月30日止6個月:12.5%或15%)的優惠稅率。

本集團於香港或海外成立的附屬公司根據相關 地域的適用税率繳納税款。

截至到2017年6月30日6個月的本期税項包括根據地税局評估的以前年度納税調整而支付的税款,約為人民幣81,247,000元。

9 已終止經營業務

於截至2015年12月31日止年度,由於太陽能行業嚴峻的市場環境,管理層決定終止太陽能產品和服務分部的所有經營業務,該分部是本集團的一個主要經營業務。因此,本集團在太陽能產品及服務分部的經營成果在合併財務報表中列示為已終止經營業務。

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

9 Discontinued operation (continued)

The Company entered into a sale and purchase agreement with certain counter-party during the year ended 31 December 2016, pursuant to which the Company proposed to dispose of the main assets/liabilities of solar power products and services segment. Such assets and liabilities were presented as non-current assets and disposal groups held for sale in the consolidated statement of financial position.

As at the date of this interim financial report, the disposal of aforementioned assets/liabilities is in progress.

9 已終止經營業務(續)

截至2016年12月31日止本公司與交易方簽署了買賣協議,提議處置太陽能產品及服務分部的主要資產/負債。於報告期末,該部分資產及負債在合併財務報表中以持作待售的非流動資產及出售組別列示。

截至此中期財務報告日,上述提及的資產/ 負債的處置仍在進行中。

			Six months ended 30 June 截至6月30日止6個月		
			截至6月30日 2017	は 6個月 2016	
		Note	2017 RMB'000	2016 2016 2016	
		附註	人民幣千元	人民幣千元	
Revenue	收入	4	1,447	179,906	
Cost of sales	銷售成本		(6,681)	(155,697	
Gross (loss)/profit	(毛虧)/毛利		(5,234)	24,209	
Other revenue	其他收入	5	2,795	42,248	
Other net income	其他收益淨額	5	98,780	65,699	
Selling and distribution expenses	銷售及分銷開支		(823)	8,603	
Administrative expenses	行政開支		(172,433)	(264,975)	
Loss from operation	經營虧損		(76,915)	(124,216)	
Finance costs	財務成本	6	(5,094)	(130,367)	
Loss before taxation from discontinued	已終止經營業務的税前虧損				
operation		7	(82,009)	(254,583)	
Income tax	所得税	8	(1,451)		
Loss for the period from discontinued	已終止經營業務的本期虧損				
operation			(83,460)	(254,583)	
Attributable to:	歸屬於:				
Equity shareholders of the Company	本公司權益股東		(81,793)	(257,665)	
Non-controlling interests	非控股權益		(1,667)	3,082	
Loss for the period from discontinued	已終止經營業務的本期虧損				
operation			(83,460)	(254,583)	

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

9 Discontinued operation (continued)

9 已終止經營業務(續)

The net cash flows incurred by the discontinued operation are as follows:

已終止經營業務產生的淨現金流如下:

		Six months ended 30 June 截至6月30日止6個月		
		2017	2016	
		RMB'000	RMB'000	
		人民幣千元	人民幣千元	
Net cash used in operating activities	經營活動中使用的淨現金	(25,534)	(258,561)	
Net cash generated from investing activities Net cash (used in)/generated from	投資活動中產生的淨現金 融資活動中(使用)/產生的淨現金	40,452	-	
financing activities		(26,211)	281,316	
Net cash (outflow)/inflow	淨現金(流出)/流入	(11,293)	22,755	

10 Earnings/(loss) per share

The calculation of basic earnings/(loss) per share is based on the profit attributable to ordinary equity shareholders of the Company of RMB139,654,000 (six months ended 30 June 2016: RMB54,721,000) and the weighted average of 6,063,770,000 ordinary shares (six months ended 30 June 2016: 6,063,770,000 ordinary shares) in issue during the interim period.

There were no dilutive potential ordinary shares in existence during the six months ended 30 June 2017 and 2016.

Profit/(loss) attributable to ordinary equity shareholders of the Company used in the basic and diluted earnings/(loss) per share calculations:

10 每股盈利/(虧損)

每股基本盈利/(虧損)的計算依據為歸屬於本公司普通股股東的盈利人民幣139,654,000元(截至2016年6月30日止6個月:人民幣54,721,000元)以及本期內發行在外普通股的加權平均數6,063,770,000股(截至2016年6月30日止6個月:6,063,770,000股普通股)。

截至2017年及2016年6月30日止6個月,本公司不存在稀釋性潛在普通股。

在計算基本及攤薄每股盈利/(虧損)時使用的歸屬於本公司普通股股東的盈利/(虧損)為:

		Six months ended 30 June 截至6月30日止6個月	
		2017	
		RMB'000	RMB'000
		人民幣千元	人民幣千元
 From continuing operations 	 持續經營業務	221,447	312,386
- From discontinued operation	一已終止經營業務	(81,793)	(257,665)
		139,654	54,721

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

11 Property, plant and equipment

(a) Acquisitions and disposals

During the six months ended 30 June 2017, the Group acquired items of property, plant and equipment with a cost of RMB43,698,000 (six months ended 30 June 2016: RMB78,442,000). Items of property, plant and equipment with a net book value of RMB1,973,000 were disposed of during the six months ended 30 June 2017 (six month ended 30 June 2016:RMB2,575,711,000), resulting in a loss on disposal of RMB2,326,000 (six months ended 30 June 2016: a profit of RMB140,933,000), which is included in "other net income" in the consolidated statement of profit or loss.

(b) Impairment losses

During the six months period ended 30 June 2017, due to the continuous depressed solar power products and services business in the PRC, the directors of the Company concluded further impairment losses on the property, plant and equipment related to the Group's solar power products and services segment are required.

The directors of the Company determined recoverable amount of the solar power products and serviced segment on the basis of fair value less cost of disposal. Accordingly, impairment loss of RMB58,790,000 on the Group's property, plant and equipment were recognised for the six months ended 30 June 2017.

11 物業、廠房及設備

(a) 購置與處置

截至2017年6月30日止6個月,本集團購置物業、廠房及設備的成本為人民幣43,698,000元(截至2016年6月30日止6個月:人民幣78,442,000元):同期處置的物業、廠房及設備的賬面淨值為人民幣1,973,000元(截至2016年6月30日止6個月:人民幣2,575,711,000元),導致處置收益為人民幣2,326,000元(截至2016年6月30日止6個月:人民幣140,933,000元)並計入合併損益表中的「其他收益淨額」。

(b) 減值虧損

截至二零一七年六月三十日止六個月期間,由於中國太陽能發電產品及服務業務持續下滑,公司董事對本集團太陽能發電產品及服務的物業,廠房及設備認為有必要進行進一步減值。

本公司董事會根據公允價值減去出售 成本確定太陽能產品和服務分部的可 收回金額。因此,截至2017年6月30 日止6個月,本集團確認物業、廠房 及設備的減值損失人民幣58,790,000 元。

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

12 Trade and bills receivables

12 應收賬款及票據

		At 30 June 6月30日 2017 <i>RMB'000</i> 人民幣千元	At 31 December 12月31日 2016 <i>RMB'000</i> 人民幣千元
Trade receivables for contract work due from:	合同工程的應收賬款:		
 related parties under Guodian 	- 國電下屬的關聯方	2,304,626	1,813,687
associates	- 聯營公司	26,534	43,418
- third parties	– 第三方	3,348,713	3,236,559
		5,679,873	5,093,664
Bills receivable for contract work due from: - related parties under Guodian - third parties	合同工程的應收票據: - 國電下屬的關聯方 - 第三方	667,750 168,863	1,664,723 228,836
		836,613	1,893,559
Trade receivables for operating leases due from:	經營租賃的應收賬款:		
- related parties under Guodian	- 國電下屬的關聯方	223,651	110,933
- third parties	- 第三方	50,667	33,511
		274,318	144,444
Trade receivables for sale of goods and rendering of services due from:	銷售商品及提供服務應收賬款:		
– Guodian	- 國電	15,751	740
 related parties under Guodian 	- 國電下屬的關聯方	2,193,754	3,130,531
- associates	- 聯營公司	41,559	27,789
- third parties		5,146,389	4,906,013
		7,397,453	8,065,073
Bills receivable for sale of goods and rendering of services due from:	銷售商品及提供服務的應收票據:		
 related parties under Guodian 	- 國電下屬的關聯方	896,884	263,058
- third parties	– 第三方	457,417	634,971
		1,354,301	898,029
		15,542,558	16,094,769
Less: allowance for doubtful debts	減:呆壞賬撥備	(2,147,601)	(2,058,195

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

12 Trade and bills receivables (continued)

All trade and bills receivables (net of impairment losses for doubtful debts) are expected to be recovered within one year.

Trade receivables are required to be settled in accordance with contract terms and are generally due immediately without credit period.

As of the end of the reporting period, the aging analysis of trade and bills receivables, based on invoice date (or date of revenue recognition, if earlier) and net of allowance for doubtful debts, is as follows:

12 應收賬款及票據(續)

所有應收賬款及票據(扣除呆壞賬的減值虧 損)預計將於一年之內收回。

應收賬款按照合同條款支付,一般不設信 用限期並於出具發票當日立即到期.

於報告期末,基於發票日期(或收入確認之日,以較早者為準)的應收賬款及票據及減 呆壞賬撥備的賬齡分析如下:

		At 30 June	At 31 December
		6月30日	12月31日
		2017	2016
		RMB'000	RMB'000
		人民幣千元	人民幣千元
Within 1 year	1年以內	8,290,665	9,637,710
Between 1 to 2 years	1-2年內	3,306,598	3,575,045
Between 2 to 3 years	2-3年內	1,577,938	629,585
Over 3 years	3年以上	219,756	194,234
		13,394,957	14,036,574

The movement in the allowance for doubtful debt during the period/year, including both specific and collective loss components, is as follows:

本期/年度呆壞賬撥備(包括個別和整體損失)的變動如下表所示:

		Six months	Year ended
		ended 30 June	31 December
		截至6月30日	截至12月31日
		止6個月	止年度
		2017	2016
		RMB'000	RMB'000
		人民幣千元	人民幣千元
At 1 January	於1月1日	2,058,195	2,306,664
Impairment losses recognised	確認的減值虧損	111,270	472,067
Reversal of impairment losses	減值虧損轉回	(8,940)	(520,554)
Uncollectible amounts written-off	無法收回金額撇減	(12,924)	(196,957)
Disposal of a subsidiary	出售附屬公司		(3,025)
At 30 June/31 December	於6月30日/12月31日	2,147,601	2,058,195

未經審計的中期財務報告附註(續)

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

13 Cash at bank and on hand

13 銀行存款及庫存現金

		At 30 June 6月30日 2017 <i>RMB'000</i> 人民幣千元	At 31 December 12月31日 2016 <i>RMB'000</i> 人民幣千元
Cash on hand	庫存現金	100	61
Cash at bank	銀行存款	1,523,335	2,855,495
Cash at other financial institutions	其他金融機構存款	1,190,002	1,748,106
		2,713,437	4,603,662
Representing:	包括:		
cash and cash equivalentsdeposits with banks over three months of	一現金及現金等價物 一初始到期日三個月以上	1,805,437	4,382,654
original maturity	的銀行存款	908,000	221,008
		2,713,437	4,603,662

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

14 Disposal groups and non-current assets held for sale

(a) Assets and liabilities of disposal groups and noncurrent assets held for sale

The disposal groups and non-current assets held for sale were stated at the lower of carrying amount and fair value less costs to sell at the end of the reporting period, comprising the following assets and liabilities.

14 分類為持作待售的出售組別和非 流動資產

(a) 持作待售的非流動資產及出售組別 的資產及負債

出售組別以及持作待售的非流動資產 以報告期末的賬面金額和公允價值減 去出售成本兩者中的孰低者確認,由 以下資產及負債組成:

		At 30 June 6月30日 2017 <i>RMB'000</i> 人民幣千元	At 31 December 12月31日 2016 <i>RMB'000</i> 人民幣千元
Property, plant and equipment	物業、廠房及設備	726,430	1,464,815
Lease prepayments	預付租賃款項	279,129	373,913
Other non-current assets	其他非流動資產	73,036	137,079
Trade and other receivables	應收及其他應收款項	3,505	360,298
Other current assets	其他流動資產	161	612,260
Less: inter-company receivables eliminated in the consolidated financial	減:於綜合財務報表中對銷的 公司間應收款項		
statements		_	(248,476)
Assets held for sale	持作出售之資產	1,082,261	2,699,889
Trade and other payables	應付及其他應付款項	79,833	1,310,789
Other current liabilities	其他流動負債	_	192,904
Other non-current liabilities	其他非流動負債	9,650	117,371
Less: inter-company payables eliminated	減:於綜合財務報表中對銷的		
in the consolidated financial	公司間應付款項		
statements		(9,318)	(424,770)
Liabilities held for sale	持作出售之負債	80,165	1,196,294

未經審計的中期財務報告附註(續)

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

14 Disposal groups and non-current assets held for sale (continued)

(a) Assets and liabilities of disposal groups and noncurrent assets held for sale (continued)

Note:

The balance as at 30 June 2017 mainly represents the assets/liabilities of solar power products and services segment held for sale.

Pursuant to the announcement published by the Company on 3 May 2016 and 4 July 2016, the Company entered into a cooperation framework agreement and sale and purchase agreement with Tianjin Zhonghuan Semiconductor Co., Ltd. ("Zhonghuan") on 3 May 2016 and 1 July 2016 respectively to dispose 90% of equity interest in GD Solar to Zhonghuan. GD Solar will cease to be a subsidiary of the Company upon completion of the disposal. As at the date of the consolidated financial statements, the disposal has not yet been completed as Zhonghuan is listed on the Shenzhen Stock Exchange and the completion of the disposal is subject to the approval of certain regulatory authorities relevant to Zhonghuan. Based on all facts and circumstance, management of the Group is of the view that the completion of the sale is highly probable and expects the disposal will be completed in the second half of 2017.

(b) Cumulative income or expenses include in other comprehensive income

There are no cumulative income or expenses included in other comprehensive income relating to these disposal groups.

14 分類為持作待售的出售組別和非 流動資產(續)

(a) 持作待售的非流動資產及出售組別 的資產及負債(續)

附註:

截止到2017年6月30日,非流動資產的餘額指代持作待售的太陽能產品和服務的資產/負債。

根據2016年5月3日及2016年7月4日發佈的公告,本公司分別於5月3日及7月1日與天津中環半導體股份有限公司(「中環」)訂立合作框架協定和買賣協議。國電光伏之90%股權。本公司對國電光伏之時不再是本公司於該處置完成之時不再是本表日的附屬公司。截止到合併財務報表不明證券交易所掛牌上市,處置完成情況需要由中環相關的監管機構批准。根據所有事實和情況,本集團管理層認為銷售完成的幾率是極高的並且預期將在2017年下半年內完成處置。

(b) 計入其他綜合收益的累計收入或費 用

本公司並無與此出售組別相關的計入 其他綜合收益的累計收入或費用。

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

15 Borrowings

15 借款

(a) The long-term interest-bearing borrowings comprise:

(a) 長期帶息借款包括:

		5,011,387	5,115,637
Less: current portion of long-term borrowings	減:長期借款的即期部分	(1,441,963)	(1,314,008)
		6,453,350	6,429,645
Corporate bonds	公司債券	2,911,094	2,843,245
Private placement notes	私人配售債務融資工具	2,438,159	2,441,370
- financial institutions (secured) (note)	- 金融機構(抵押) <i>(附註)</i>	474,207	508,129
related parties under Guodian (secured) (note)	- 國電下屬的關聯方 (抵押 <i>)(附註)</i>	194,000	97,000
Other loans	其他貸款		
– unsecured	- 無抵押	239,630	337,631
- secured (note)	- 抵押 <i>(附註)</i>	196,260	202,270
Bank loans	銀行貸款		
		人民幣千元	人民幣千元 ————————————————————————————————————
		RMB'000	RMB'000
		2017	2016
		6月30日	12月31日
		At 30 June	At 31 December

Note:

Secured long-term interest-bearing borrowings as at 30 June 2017 were guaranteed and/or secured by concession assets, trade and bills receivables and long-term service concession receivables with carrying value totalling RMB1,258,260,000 (31 December 2016: RMB1,133,865,000) and income stream of certain subsidiaries.

附註:

於2017年6月30日,抵押的長期帶息借款 為已擔保及/或以賬面價值總額為人民 幣1,258,260,000元(2016年12月31日: 人民幣1,133,865,000元)的特許經營權 資產、應收賬款及票據及服務特許權長 期應收款作抵押。

未經審計的中期財務報告附註(續)

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

15 Borrowings (continued)

15 借款(續)

The short-term interest-bearing borrowings comprise:

(b) 短期帶息借款包括:

		At 30 June	At 31 December
		6月30日	12月31日
		2017	2016
		RMB'000	RMB'000
		人民幣千元	人民幣千元
Bank loans	銀行貸款		
secured (note)	- 抵押 <i>(附註)</i>	3,000	520,000
unsecured	- 無抵押	4,687,498	6,043,997
Other loans from Guodian (unsecured)	來自國電的其他貸款(無抵押)	600,000	600,000
Current portion of long-term borrowings	長期借款的即期部分	1,441,963	1,314,008
		6,732,461	8,478,005

Note:

Secured short-term interest-bearing borrowings as at 30 June 2017 were secured by bills receivables with carrying value RMB3,000,000 (31 December 2016: RMBNil).

Guarantees are provided by a non-controlling equity owner of a subsidiary for the Group's borrowings amounting to RMBNil (31 December 2016: RMB20,000,000).

16 Trade and bills payables

All trade and bills payables are expected to be settled within one year.

17 Dividends

Dividend payable to equity shareholders in respect of the interim period

The board of directors of the Company does not recommend the payment of any interim dividend for the six months ended 30 June 2017 and 2016.

Dividends payable to equity shareholders in respect of the previous financial period, approved during the interim period

The directors of the Company did not approve or pay any dividend in respect of the previous financial period during the six months ended 30 June 2017 and 2016.

附註:

在2017年6月30日,賬面價值為人民幣 3,000,000元的應收票據為有抵押的短 期附息借款提供了擔保(2016年12月31 日:零元)。

一家附屬公司的一位非控股股東為本集 團金額為人民幣零元(2016年12月31 日:人民幣20,000,000元)的借款提供了 擔保。

16 應付賬款及票據

預計所有應付賬款及票據將在一年內結 清。

17 股息

就中期應向權益股東支付的股息 (a)

> 截至2017年及2016年6月30日止6個 月,本公司董事會不建議支付任何中 期股息。

(b) 於中期經批准的就上一個財年應向 權益股東支付的股息

> 截至2017年及2016年6月30日止6個 月,本公司董事會未批准或支付任何 上一個財年的股息。

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

18 Fair value measurement of financial instruments

Fair values of financial assets and liabilities carried at other than fair value

The carrying amounts of the Group's financial instruments carried at cost or amortised cost are not materially different from their values as at 31 December 2016 and 30 June 2017 except for the following financial instruments, for which their carrying amounts and fair value are disclosed below:

18 金融工具的公允價值計量

以非公允價值列賬的金融資產和負債的 公允價值

本集團以成本或攤餘成本計量的金融工具的賬面價值與其於2016年12月31日和於2017年6月30日的價值並無重大差異,但以下金融工具除外,其賬面價值與公允價值如下所示:

		At 30 June 2017 2017年6月30日		At 31 Decei 2016年12	
		Carrying		Carrying	
		amount	Fair value	amount	Fair value
		賬面價值	公允價值	賬面價值	公允價值
		RMB'000	RMB'000	RMB'000	RMB'000
		人民幣千元	人民幣千元 ————————————————————————————————————	人民幣千元 ————————————————————————————————————	人民幣千元
Long-term receivables	長期應收款項	2,275,215	2,161,257	2,274,893	2,008,699
Fixed rate long-term bank loans Private placement notes and	固定利率長期銀行貸款 私人配售債務融資工具	(1,012,919)	(1,017,975)	(1,155,303)	(1,160,845)
corporate bonds	和公司債券	(5,349,253)	(5,345,910)	(5,284,615)	(5,248,821)
Other non-current liabilities	其他非流動負債	(415,658)	(396,810)	(222,932)	(212,823)

19 Capital commitments outstanding not provided 19 for in the interim financial report

中期財務報告中未列出的資本承擔

		At 30 June	At 31 December
		6月30日	12月31日
		2017	2016
		RMB'000	RMB'000
		人民幣千元	人民幣千元 ————————————————————————————————————
Contracted for	已訂約	40,445	576
Authorised but not contracted for	已授權但未訂約	328,135	281,910
		368,580	282,486

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

20 Contingent liabilities

20 或有負債

(a) Guarantees issued

As of the end of the reporting period, the Group provided bid and performance guarantees to customers for construction contracts and sale of wind turbines and litigation guarantees in respect of the Group's application for assets preservation against debtors as follows:

(a) 擔保款項

於報告期末,本集團關於建造合同, 風機銷售而向客戶作出的投標及履約 擔保,以及本集團關於申請債務人資 產保護作出的訴訟擔保,如下所述:

		At 30 June 6月30日 2017 <i>RMB'000</i> 人民幣千元	At 31 December 12月31日 2016 <i>RMB'000</i> 人民幣千元
Bid guarantees provided to: - related parties under Guodian - third parties	向如下公司提供的投標擔保: — 國電下屬的關聯方 — 第三方	38,525 1,300	32,874 15,880
Performance guarantees provided to: - related parties under Guodian - third parties	向如下公司提供的履約擔保: – 國電下屬的關聯方 – 第三方	1,133,072 1,304,655	1,569,812 1,298,079
Litigation guarantees provided to: - third parties	向如下公司提供的訴訟擔保: - 第三方	199,782	199,782
		2,677,334	3,116,427

As of the end of the reporting period, the directors do not consider it probable that a claim will be made against the Group under any of the guarantees.

於報告期末,董事們認為根據所提供 的任何擔保向本集團或本公司提出索 賠的機會不大。

(b) Litigation contingencies

The Group is the defendant in certain lawsuits as well as the plaintiff in other proceedings arising in the ordinary course of business.

While the outcomes of the above contingencies lawsuits or other proceedings cannot be determined at present, management believes that any results will not have a material adverse effect on the financial position, operating results and business of the Group. No provision has been recognised by the Group for these claims.

(b) 訴訟或有事項

本集團還是某些法律訴訟的被告,以 及產生於日常經營過程中的其他訴訟 程序的原告。

雖然上述或有事項,訴訟或其他法律 程序的結果目前仍無法確定,但管理 層相信任何因此產生的結果不會對本 集團的財務狀況,經營業績及業務產 生重大不利影響。本集團未因此索賠 確認預計負債。

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

21 Material related party transactions

21 重大關聯方交易

(a) Transactions with related parties

The Group is part of a larger group of companies under Guodian and has significant transactions and relationships with Guodian and related parties under Guodian.

The principal transactions which were carried out in the ordinary course of business are as follows:

(a) 與關聯方交易

本集團是國電下屬的眾多公司的一部 分,與國電及國電下屬的關聯方之間 具有重大交易量及重要關係。

在正常業務過程中與關聯方的主要交 易如下所述:

		Six months ended 30 June 截至6月30日止6個月	
		2017 <i>RMB'000</i>	2016 <i>RMB'000</i>
		人民幣千元	人民幣千元
Sale of goods to	出售貨物予		
Guodian	國電	23,983	_
Related parties under Guodian	國電下屬的關聯方	1,459,246	1,772,487
Associates	聯營公司	7,255	5,496
Construction service provided to	提供建造服務予		
Related parties under Guodian	國電下屬的關聯方	1,396,122	1,347,890
Associates	聯營公司	21,927	33,001
Service provided to	提供服務予		
Related parties under Guodian	國電下屬的關聯方	139,081	142,094
Associates	聯營公司	-	11,620
Lease to	出租予		
Related parties under Guodian	國電下屬的關聯方	335,081	343,729
Lease from	出租自		
Related parties under Guodian	國電下屬的關聯方	3,081	19,000
Purchase of goods from	購買商品自		
Related parties under Guodian	國電下屬的關聯方	65,463	220,906
Associates	聯營公司	5,158	14,441
Service provided by	服務提供自		
Related parties under Guodian	國電下屬的關聯方	46,088	46,648
Sale of property, plant and	銷售物業,廠房,設備以		
equipment and inventories to	及存貨予		
Related parties under Guodian	國電下屬的關聯方	-	2,798,366

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

21 Material related party transactions (continued)

21 重大關聯方交易(續)

(a) Transactions with related parties (continued)

(a) 與關聯方交易(續)

		Six months ended 30 June 截至6月30日止6個月	
		2017	2016
		RMB'000	RMB'000
		<i>人民幣千元</i> ————————————————————————————————————	人民幣千元
Working capital provided to	提供周轉資金予		
Associates	聯營公司	36,969	142,588
Working capital received from	償還周轉資金自		
Associates	聯營公司	2,760	98,000
Working capital repaid to	償還周轉資金予		
Associates	聯營公司	_	102,156
Loans received from	貸款借取自		
Guodian	國電	600,000	201,000
Related parties under Guodian	國電下屬的關聯方	100,000	399,600
Loans repaid to	償還貸款予		
Guodian	國電	600,000	200,000
Related parties under Guodian	國電下屬的關聯方	3,000	300,000
Interest expenses paid to	支付利息費用予		
Guodian	國電	10,020	4,789
Related parties under Guodian	國電下屬的關聯方	4,643	6,549
Interest income received from	收取利息收入自		
Related parties under Guodian	國電下屬的關聯方	9,559	11,642
Net deposits withdrawn from	支取存款淨額自		
Related parties under Guodian	國電下屬的關聯方	1,893,493	849,157
Purchase wealth-management products from	購買理財產品自		
Related parties under Guodian	國電下屬的關聯方	553,000	553,000

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

21 Material related party transactions (continued)

21 重大關聯方交易(續)

(b) Balances with related parties

Except as disclosed in notes 12, 15 and 16 in the interim financial report, as of the end of the reporting period the Group's significant balances with related parties are as follows:

(b) 與關聯方的餘額

除本中期財務報告附註12,15和16的披露外,於報告期末,本集團與關聯方的重大餘額如下:

		At 30 June 6月30日 2017 <i>RMB'000</i> 人民幣千元	At 31 December 12月31日 2016 <i>RMB'000</i> 人民幣千元
Other non-current assets	其他非流動資產		
Related parties under Guodian	國電下屬的關聯方	1,265,913	1,226,879
Gross amount due from customers for contract work	應收建造合同客戶款項總額		
Related parties under Guodian Associates	國電下屬的關聯方 聯營公司	798,536 235	666,884 29,249
Deposits, prepayments and other receivables	按金、預付款項及其他 應收款項		
Guodian	<i>應收款均</i> 國電	115	_
Related parties under Guodian	國電下屬的關聯方	505,131	605,966
Associates	聯營公司	1,211,143	1,190,799
Cash at bank and on hand	銀行存款及庫存現金		
Related parties under Guodian	國電下屬的關聯方	1,926,177	3,819,670
Trade and bills payables	應付賬款及票據		
Related parties under Guodian	國電下屬的關聯方	175,856	126,207
Associates	聯營公司	16,401	11,607
Other payables	其他應付款項		
Guodian	國電	605,690	606,363
Related parties under Guodian	國電下屬的關聯方	819,659	720,967
Associates	聯營公司	1,330	2,669
Gross amount due to customers for contract work	應付建造合同客戶款項總額		
Related parties under Guodian	國電下屬的關聯方	818,756	675,882
Associates	聯營公司	7,546	313

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

21 Material related party transactions (continued)

21 重大關聯方交易(續)

(c) Commitments with related parties

As of the end of the reporting period, the Group's commitments with related parties that have been contracted for but not yet been recognised in this interim financial report were as follows:

(c) 與關聯方的承擔

於報告期末,本集團與關聯方之間已 訂約但在本中期財務報告中尚未確認 的承擔如下:

		At 30 June	At 31 December
		6月30日	12月31日
		2017	2016
		RMB'000	RMB'000
		人民幣千元	人民幣千元
Sale of goods to Related parties under Guodian	<i>出售商品予</i> 國電下屬的關聯方	6,838,251	8,497,809
Construction service to be provided to Related parties under Guodian	<i>提供建造服務予</i> 國電下屬的關聯方	4,235,542	4,814,671

(d) Contribution to defined contribution retirement plans

The Group participates in various defined contribution retirement plans organised by relevant local government authorities and Guodian for its staff. As at 30 June 2017 and 31 December 2016, there was no material outstanding contribution to post-employment benefit plans. The Group's contributions to defined contribution retirement plans for the six months ended 30 June 2017 amounted to RMB61,248,000 (six months ended 30 June 2016: RMB55,935,000).

(d) 界定供款退休計劃的供款

本集團參加了相關政府機構及國電內部組織的各種界定供款退休計劃。於2017年6月30日和2016年12月31日,在退休福利計劃項下,沒有重大未支付供款。截至2017年6月30日止6個月,本集團對界定供款退休計劃的供款金額為人民幣61,248,000元(截至2016年6月30日止6個月:人民幣55,935,000元)。

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

21 Material related party transactions (continued)

(e) Transactions with other government-related entities in the PRC

The Group operates in an economic regime currently dominated by entities directly or indirectly controlled, jointly controlled or significantly influenced by the PRC government and numerous government authorities and agencies (collectively referred to as "government-related entities"). Guodian, the parent and ultimate holding company of the Company, is a PRC state-owned enterprise and these government-related entities are also considered as related parties of the Group in this respect.

Apart from transactions with Guodian and related parties under Guodian mentioned above, the Group conducts a majority of its business activities with other government-related entities in the ordinary course of business. These transactions are carried out at terms similar to those that would be entered into with non-government-related entities.

The Group prices its services and products based on the commercial negotiations. The Group has also established its approval process for sales of goods, provision of services, purchase of products and services and its financing policy for borrowings. Such approval process and financing policy do not depend on whether the counterparties are government-related entities or not.

Having considered the potential for transactions to be impacted by related party relationships, the Group's approval processes and financing policy, and what information would be necessary for an understanding of the potential effect of the relationship on this interim financial report, the directors are of the opinion that further information about the following transactions that are collectively significant is required for disclosure:

Sales of goods and provision of construction services;

The Group sells its goods and provide construction services to a wide range of government-related power companies and manufacturing enterprises. These transactions individually are not significant to the Group.

21 重大關聯方交易(續)

(e) 與中國其他政府相關實體之間的交易

在本集團目前從業的經濟體制下,主 導企業是由中國政府及各種政府機關 及機構直接或間接控制、共同控制或 重大影響的實體(合稱為政府相關實 體)。國電(本公司的母公司及最終控 股公司)是中國的國有企業,此等政 府相關實體因此也視為本集團的關聯 方。

除上述與國電及國電下屬關聯方之間 的交易外,在正常業務過程中,本集 團大部分業務活動是與其他政府相關 實體交易的。此等交易的執行條款與 非政府相關實體的交易條款相似。

本集團根據市場談判條件對服務及產品定價。關於貨物銷售、服務提供、 產品及服務的購買,本集團已建立了 審批程序,並建立了關於借款方面的 融資政策。此等審批程序及融資政策 並不考慮交易對方是否是政府相關實 體。

考慮到關聯方關係對交易的潛在影響、本集團的審批程序以及融資政策,以及為了解關聯關係對本中期財務報告的潛在影響而需要的資訊,董事們認為,對於整體而言重大的如下交易,需要披露進一步的詳細資訊:

貨物銷售及建造服務的提供;

本集團向各種政府相關電力公司及製造企業銷售貨物並提供 建造服務。此等交易個別而言 對本集團並不重大。

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

21 Material related party transactions (continued)

(e) Transactions with other government-related entities in the PRC (continued)

Deposits and borrowings;

The Group deposits most of its cash in government-related financial institutions, and also obtains short-term and long-term loans from these financial institutions in the ordinary course of business. The interest rates of the bank deposits and loans are regulated by the People's Bank of China.

Purchase of materials and receiving construction services; and

The Group purchases materials and receives construction services from a wide range of government-related manufacturing enterprises and construction contractors. These transactions individually are not significant to the Group.

Service concession arrangements;

The Group entered into a number of service concession agreements with local governments to construct and operate water treatment plants during the concession period. All transactions under the service concession arrangements were made with local governments and carried out at terms set out in the respective service concession arrangements.

Ⅰ 重大關聯方交易(續)

(e) 與中國其他政府相關實體之間的交易(續)

存款及借款;

本集團的大部分現金存於政府 相關的金融機構,且在正常業 務過程中也從此等金融機構獲 取短期及長期貸款。銀行存款 及貸款利率由中國人民銀行制 定。

材料購買及獲得建造服務;及

本集團向各種政府相關製造企 業購買材料並向各種政府相關 建造承包商獲取建造服務。此 等具體交易個別而言對本集團 不重大。

- 服務特許權安排;

本集團已與當地政府簽訂了多項服務特許權協議,在特許期限之內,負責建設以及經營水處理廠。服務特許權安排下的所有交易均與地方政府作出,且在各自的服務特許權安排中規定了交易執行條款。

(Expressed in Renminbi unless otherwise indicated) (除非另有説明,以人民幣列示)

21 Material related party transactions (continued)

(f) Key management personnel remuneration

Key management personnel are those persons holding positions with authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including the Company's directors.

Remuneration for key management personnel, including amounts paid to the Company's directors and supervisors is as follows:

21 重大關聯方交易(續)

(f) 重要管理人員薪酬

重要管理人員指對其所處職位具有權 利與責任、可直接或間接地規劃、領 導以及控制本集團的活動的個人,包 括本公司董事們。

重要管理人員薪酬(包括支付給本公司董事和監事們的費用)的詳情如下:

		Six months ended 30 June 截至6月30日止6個月	
		2017	2016
		RMB'000	RMB'000
		人民幣千元	人民幣千元
Salaries and other emoluments	工資和其他酬金	2,342	2,030
Retirement scheme contributions	rement scheme contributions 退休計劃供款	353	343
		2,695	2,373

22 Accounting judgements and estimates

The Group believes that the critical accounting judgements and estimates as disclosed in the 2016 annual financial statements are material to an understanding of this interim financial report.

22 會計判斷及估計

本集團相信在2016年年度財務報表中所披露的關鍵會計判斷及估計對於理解本中期財務報告是重要的。

PROSPECTS FOR THE SECOND HALF OF 2017 2017年下半年業務展望

Accelerating asset restructuring and promoting quality and efficiency enhancement

In accordance with the plan to dispose of assets of low or no efficiency, the Group intends to accelerate the disposal of the assets of low or no efficiency, optimize asset structure and reduce operating pressure. It will vigorously promote quality and efficiency enhancement in three aspects: first, strengthening enterprise management and comprehensively enhancing the operation level of existing assets; second, strengthening internal management and increasing the comprehensive governance efforts for enterprises facing difficulties; third, highlighting corporate governance mechanism, isolating risks and reducing financial risk.

Being market-oriented and improving innovation in science and technology

The Group, on the one hand, adheres to being market-oriented and enterprise-based. It will give full play to the subjective initiative, strengthen internal coordination and external cooperation, and improve the market-orientation operating mechanism. It will also launch the corporate marketing system and management and control model reform pilot plan, make an all-out effort to expand the internal and external markets, and further improve the construction of the marketing incentive and restraint mechanism. On the other hand, the Group intends to vigorously implement the innovation-driven strategy, enhance the innovation capability, strengthen the support and impetus of technological innovation and strengthen the planning of science and technological research and development. With science and technology planning, the Group will focus on the sustainable development of the Company in the future.

Strengthening centralized management and control and effectively avoiding operational risks

The Group strictly implements the "three-important and one-great" system. It organically combines the controlling shareholder's interests, corporate governance and the Listing Rules to improve the corporate governance system and procedure for proceedings, and further enhance the quality of proceedings and the level of decision-making. It will promote the construction of law-based enterprise governance capability, and further deepen and implement centralized management and control over the following four aspects: first, improving the system construction; second, further optimizing the procurement process; third, actively implementing the supportive policy of cooperative insurance; fourth, giving full play to the role of centralized management and control of financial sharing center.

加速瘦身健體,紮實推進提質增效

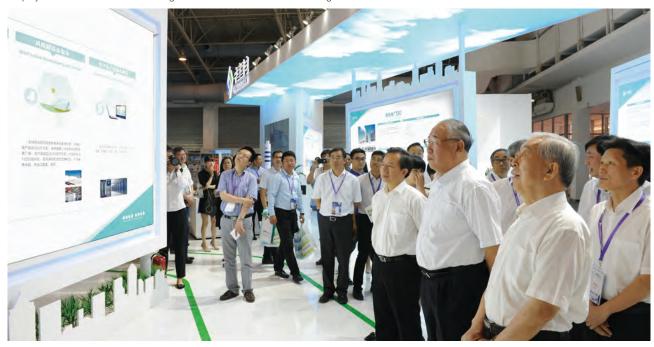
本集團按照低效無效資產處置計劃,加快低效無效資產處置,優化資產結構,減輕經營壓力。紮實開展推進提質增效工作,一是強化企業管理,全面提升現有資產經營水平;二是強化內部管理,加大困難企業綜合治理力度;三是突出法人治理機制,做好風險隔離,降低財務風險。

堅持市場導向,增強科技創新能力

本集團一方面堅持市場為導向,堅持企業為主體,發揮主觀 能動性,加強內部協同和外部協作,完善市場化經營機制, 啟動公司營銷體系組織及管控模式改革試點,全力以赴開拓 內、外部市場,並進一步完善市場勞銷激勵約束機制建設。 另一方面大力實施創新驅戰略,提升創新能力,努力增強 科技創新的支撐和推動作用,加強科技研發的規劃引領,以 科技創劃為指引,著眼於公司未來持續發展。

加強集中管控,有效規避經營風險

本集團嚴格執行「三重一大」制度,將控股股東權益、公司法 人治理與上市規則有機結合,健全完善公司法人治理體系和 議事流程,進一步提升議事質量和決策水平。推進依法治企 能力建設,並繼續深化落實「四個集中管控」,一是完善體系 建設,二是進一步優化採購流程,三是積極落實協同護保政 策支持,四是發揮財務共享中心集中管控作用。



On 15 June, leaders of the Ministry of Environmental Protection visited and guided the exhibition booth of Guodian Tech at the 15th CIEPEC. 6月15日,環境保護部領導莅臨第十五屆中國國際環保展覽會國電科環展台進行參觀指導。



國電科技環保集團股份有限公司

GUODIAN TECHNOLOGY & ENVIRONMENT GROUP CORPORATION LIMITED*

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