中国国电
CHINA GUODIAN
国电科技环保集团股份有限公司
GUODIAN TECHNOLOGY & ENVIRONMENT GROUP CORPORATION LIMITED

国电科技环保集团股份有限公司
2012 年年度报告

重要提示

本公司董事会及其董事保证本报告所载资料不存在任何虚假记载、误导性陈述或者重大遗漏，并对其内容的真实性、准确性和完整性承担个别及连带的责任。

一、 本公司概况

（一）在本年度报告中，

本公司或公司是指： 国电科技环保集团股份有限公司

本集团是指： 国电科技环保集团股份有限公司及其附属公司

（二）**公司法定中文名称：** 国电科技环保集团股份有限公司

英文名称： GUODIAN TECHNOLOGY & ENVIRONMENT GROUP CORPORATION LIMITED

香港股票代号： 01296.HK

企业类型： 股份有限公司

经营范围： 请参考附件公司年度报告

（三）**公司法定代表人：** 朱永芃先生

（四）**董事会秘书：**汤得军先生

电话：010-5765 9881

传真：010-5765 9800

（五）**公司注册地址：**北京市海淀区西四环中路16号院1楼11层1101。

公司联系地址：北京市海淀区西四环中路16号院1楼11层1101。

公司网站：http://www.01296.hk

（六）**登载本年度报告的中国证监会指定网站：**www.sse.com.cn

（七）**公司债券上市交易所：**上海证券交易所

（八）**公司首次注册登记日期、地点：**

2011年5月16日、北京市工商行政管理局。

公司最后一次注册登记日期、地点：

2012年6月8日、北京市工商行政管理局。

企业法人营业执照注册号：110000005014429

税务登记号码：110108102099718

二、 本公司经审计的2012年年度财务报告

本公司经毕马威会计师事务所审计的2012年度财务报告见附件一：国电科技环保集团股份有限公司2012年年度报告。其中的财务报告为根据《国际财务报告准则》及香港《公司条例》的披

露规定而编制。

三、 已发行债券情况

国电科技环保集团股份有限公司2012年公司债券

1、**债券简称：** 12科环01（3年期品种）、12科环02（5年期品种）、12科环03（10年期品种）。

2、**债券代码：** 122177（3年期品种）、122178（5年期品种）、122179（10年期品种）

3、**债券发行规模：** 人民币40亿元。其中3年期品种发行规模为10亿元，5年期品种发行规模为10亿元，10年期品种发行规模为20亿元。

4、**债券利率：** 3年期品种票面利率为4.30%，5年期品种票面利率为4.65%，10年期品种票面利率为5.15%。

5、**还本付息方式：** 按年付息、到期一次还本。利息每年支付一次，最后一期利息随本金一起支付。年度付息款项自付息日起不另计利息，本金自本金兑付日起不另计利息。

6、**债券信用级别：** 经联合信用评级有限公司综合评定，发行人主体信用等级为AAA级，本期债券信用等级为AAA级。

7、**债券发行首日：** 2012年8月20日。

8、**债券上市时间：** 2012年9月20日。

9、**债券上市地点：** 上海证券交易所。

10、**债券担保：** 中国国电集团公司为本期债券提供全额无条件的不可撤销连带责任保证担保。

11、**保荐人、簿记管理人、债券受托管理人：** 瑞银证券有限责任公司。

12、**债券联席主承销商：** 瑞银证券有限责任公司、宏源证券股份有限公司、中国国际金融有限公司。

四、已发行债券兑付、兑息情况、银行借款是否逾期情况以及未来是否存在债券按期兑付、兑息风险情况的说明

自2012年1月1日至本年度报告出具日，本公司已发行债券兑付、兑息不存在违约情况；本公司的银行借款本息未发生逾期情况；尽本公司所知，目前没有迹象表明本公司未来存在债券按期兑付、兑息存在风险。

五、债券跟踪评级情况说明

发行人上述公司债券于2012 年8 月20 日发行，截至目前，评级机构尚未出具跟踪评级报告。

六、涉及和可能涉及影响债券按期偿付的重大诉讼事项

截至2012年12月31日，本公司没有正在进行的或未决的会对本公司的财务状况和运营业绩产生重大不利影响的任何诉讼、仲

裁或行政程序，并且尽本公司所知，亦不存在任何潜在的可能产生重大不利影响的诉讼、仲裁或行政程序涉及或可能涉及影响已发行债券的按期偿付。

七、已发行债券变动情况

截至2012年12月31日，本公司未获知任何需要向债权人报告的债券变动情况。

八、其他事项

无。

国电科技环保集团股份有限公司

董事会

二〇一三年四月三十日

國電科技環保集團股份有限公司

GUODIAN TECHNOLOGY & ENVIRONMENT GROUP CORPORATION LIMITED*

(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

Annual Report 年報
2012

* For identification purpose only
謹供識別

CORPORATE CULTURE
國電科環家園文化理念體系

I. Core Concepts

Core Values : Strict, Efficient, Upstraight, Harmonious;
Corporate Spirit: A Never Ending Pursuit of Excellence;
Vision : Home • Stage • Dream;
Ethical Code : Integrity, Responsibility, Loyalty and Dedication.

一、核心理念

企業核心價值觀：嚴格、高效、正義、和諧；
企業精神：永無止境、創造一流；
企業願景：家園 • 舞台 • 夢；
職業道德觀：誠信盡責、忠誠敬業。

II. Strategic Thinking

Strategic Objective: To develop into a top-notch industry group specialized in clean energy;
Business Policy : Being Pragmatic and Innovative, Larger and Stronger, Being Strategic and Energetic, Innovative and Effective.

二、戰略理念

戰略目標：打造一流的清潔能源產業集團；

經營方針：大企業、大發展、大市場、大集團，新企業、新機制、新活力、新作為。

III. Management Ideology

Safety : Safety first, Life foremost;
Human Capita: Provide a stage for everyone to unleash their talents;
Responsibility : Link position with duty and value both rewards and punishment;

三、管理理念

安全理念：安全第一、生命至上；
人才理念：人人能成才、個個有舞台；
責任理念：職責對等、獎懲並重；

IV. Logo of Cultural Communication

Green technology for a better world

四、文化傳播用語

綠色科技 全球共享

This annual report is printed on environmentally friendly paper.
此年度報告以環保紙張印製。

When the first China Beijing International Fair for Trade in Services was held in China in May 2012, Wen Jiabao, the then Premier of the State Council and Member of the Standing Committee of the Political Bureau of the CPC Central Committee, visited the exhibition room of China Guodian Corporation.

首屆中國(北京)國際服務貿易交易會隆重開幕。中共中央政治局常委、國務院總理溫家寶參觀了國電集團。

2012 CORPORATION MEMORABILIA
本年度企業大事記

February 2012

According to the statistics on thermal power plant flue gas desulfurization and denitrification industry and thermal power plant flue gas desulfurization concession released by China Electricity Council in February 2012, Longyuan Environmental, a wholly-owned subsidiary of this corporation group, ranked first in seven categories, leaving other domestic counterparts far behind. Since 2005, Longyuan Environmental has been at the top of the list for seven years in a row.

May 2012

When the first China Beijing International Fair for Trade in Services was held in China in May 2012, Wen Jiabao, the then Premier of the State Council and Member of the Standing Committee of the Political Bureau of the CPC Central Committee, visited the exhibition room of China Guodian Corporation and asked about the development of the environmental science and technology service industry, fully affirming the achievements this corporation had made.

July 2012

In July 2012, this corporation signed a cooperation framework agreement with Russia's Irkutsk Electric Power Company and discussed about such technical problems as plasma ignition, bag-type dust collector, blower frequency conversion, boiler decoking, heat pump, and DCS, hoping that both sides could take this opportunity to carry out in-depth exchanges and cooperation in future.

July 2012

On the 2012 ranking of China's top 500 enterprises published in July 2012, this corporation came in 215th with the operation revenue up to RMB 18.76 billion Yuan.

August 2012

In August 2012, this corporation issued a domestic corporate bond in an aggregate principal amount of RMB 4 billion Yuan.

August 2012

In August 2012, the opening ceremony of Guodian Galaxy Water Co., Ltd., a holding subsidiary of Lucency Enviro-Tech which is a wholly-owned subsidiary of this corporation, was held in Qingdao. This corporation constantly accelerates the efforts in merging and reorganization by means of equity merging and asset acquisition so as to optimize the industrial organization structure and occupy the commanding heights of market development.

December 2012

As of the end of 2012, this corporation established five national key laboratories, five provincial R&D platforms, and six corporate technology R&D centers, making a series of breakthroughs in technological innovation and speeding up the pace of industrialization.

2012年2月

中國電力企業聯合會公佈的2011年度火電廠煙氣脱硫、脱硝產業及火電廠煙氣脱硫特許經營，本集團全資擁有的龍源環保公司獲得7項排名第一，遙遙領先於其他環保企業。自2005，龍源環保公司已連續7年名列前茅。

2012年5月

首屆中國(北京)國際服務貿易交易會隆重開幕。中共中央政治局常委、國務院總理溫家寶參觀了國電集團展廳，瞭解科技環保服務產業發展情況並給予充分肯定。

2012年7月

公司與俄羅斯伊爾庫茨克電力公司簽署了合作框架協議，就等離子點火、布袋除塵器、風機變頻、鍋爐除焦、熱泵、DCS等技術進行了交流探討，希望以此為契機深入開展交流合作。

2012年7月

2012年中國企業500強排行榜發佈，榜單顯示公司以187.6億元的營業收入排名第215位。

2012年8月

公司完成本金總額為人民幣40億元的境內公司債發行。

2012年8月

本集團全資擁有的朗新明公司控股子公司國電銀河水務股份有限公司在青島舉行揭牌儀式。公司不斷通過合併和股權、資產收購等多種形式加快兼並重組步伐，優化產業組織結構，搶佔市場發展制高點。

至2012年底

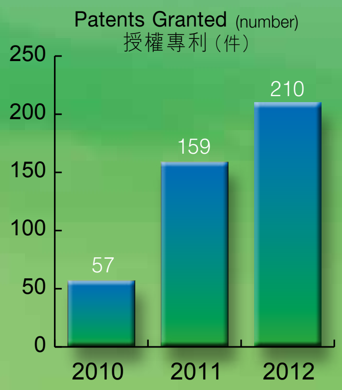
公司共擁有5個國家級重點實驗室、5個省級研發平台、6個企業技術研發中心，科技創新取得突破，並加速推進產業化。

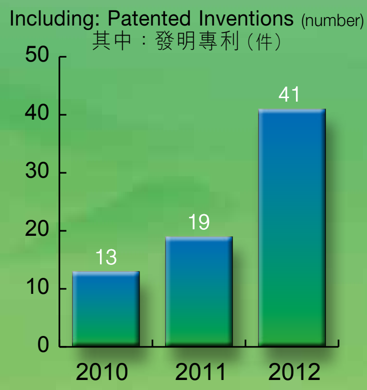
AWARDS & PRIZES TO GUODIAN TECH
國電科環所獲主要獎勵集錦

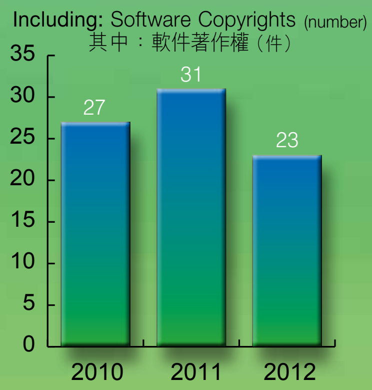
210 patents were granted in 2012, including 41 patented inventions, 2 international patents. At present, the Company has accumulated 533 patents, including 107 patented inventions, 10 international patents. An amount of RMB47,393,400 of government subsidy for technology has been received and RMB300 million of Capital Operation Budget Fund for State-owned Enterprises was granted for three technology industrialization projects. In addition, the Group was approved by the government to participate in 1 project under the national 863 Program and 2 projects under the national 973 Program. The capability of the Group in research, development and technology is highly recognized, it participated in the establishment of 1 international standard, 14 national standards and 5 industrial standards, of which 3 standards have already been promulgated. The Company has received 3 Second Prizes and 1 Third Prize of Technology Advancement from the National Energy Administration; 1 Second Prize of Technology Advancement from the Ministry of Environmental Protection; 1 First Prize and 1 Third Prize of Power Technology Advancement from Chinese Society of Electrical Engineering and 4 First Prizes, 2 Second Prizes and 1 Third Prize of Technology Advancement from Guodian Group. The National Centre for the General Utilization, Research and Development of Energy, Lignite and Low-rank Coals (國家能源褐煤低階煤綜合利用研發中心) has passed the hearing of the National Energy Administration.

2012年獲批專利210項，其中發明專利41項，國外專利2項；目前公司累計專利533項，其中發明專利107項，國外專利10項。政府科技資助到位資金4739.34萬元，三個科技成果轉化項目獲得中央企業資本經營預算資金3億元。獲批國家“863”課題1項，國家“973”課題2項。研發和技術能力得到普遍認可，本年度參與制訂國際標準1項、國家標準14項、行業標準5項，其中3項標準已經頒布。獲得國家能源局科技進步 二等 3項，三等 1項；國家環保部科技進步二等 1項；電機學會電力科技進步 一等 1項，三等 1項；獲得國電集團科技進步一等 4項，二等 2項，三等 1項。國家能源褐煤低階煤綜合利用研發中心通過了國家能源局答辯。

Patents and Software Copyrights Granted 2010 ～ 2012: 獲批專利和軟件著作權情況 2010 ～ 2012:







2011 Annual Report of Guodian Tech Wins the International Mercury Award
國電科環2011年年報獲國際 MERCURY 獎

Guodian Tech won the bronze award of the holding company group. The board of directors give special thanks to the joint efforts made by all staff, legal advisors and the intermediary agents, the board of directors managed to cope with managing various kinds of connected transactions after the corporation went public. In such a short period, the company still gained international awards for its first annual report. Actually, it was not only a praise for the annual report, but also recognition for all the work the corporation had done.

The Mercury Award was established by MerComm, Inc., the only independent awarding body in the world, in 1987 in order to encourage and spread the outstanding achievements in various sectors. The jury was composed of 28 specialists respectively hailing from Canada, Chile, Republic of Korea, Mexico, Singapore and the USA. A total of over 790 firms from 21 countries and regions including Austria, Canada, Germany, Hong Kong, Italy, Japan, British and the USA, participated in this event. Guodian Tech won the bronze award of the holding company group.

國電科環此次榮獲的是該 項控股公司組別的銅 。董事會感謝公司同仁們以及律師團隊和中介公司的共同努力下，公司上市後董事會應對各類關連交易等情況，以極短的時間，依然能夠做出獲國際 的第一份年報，是對年報工作的肯定，更是對公司各項業績的認可。

據悉，年度MERCURY 項由世界上唯一的獨立頒 機構MerComm, Inc.於1987年設立，設立本 項用於弘揚各傳播領域的卓越之處。由來自加拿大、智利、韓國、墨西哥、新加坡和美國的28位專家參與了此次評審。來自包括奧地利、加拿大、德國、香港、意大利、日本、英國和美國等21個國家的790多個公司報名參加了評比活動。國電科環此次榮獲的是該 項控股公司組別的銅 。

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目錄

CORPORATE INFORMATION
公司資料

Directors

Non-executive Directors
Mr. ZHU Yongpeng
Mr. YANG Guang
Mr. FENG Shuchen
Mr. YAN Andrew Y.

Executive Directors
Mr. YE Weifang
Mr. LI Hongyuan
Ms. WANG Hongyan

Independent Non-executive Directors
Mr. LU Yanchang
Mr. ZHAI Ligong
Mr. SHI Dinghuan
Mr. FAN Ren Da Anthony

Supervisors

Mr. QIAO Baoping
Mr. CHEN Bin
Mr. XU Xingzhou
Mr. GUAN Xiaochun
Mr. LI Wei

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Auditors

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Beijing

Joint Company Secretaries

Mr. TANG Dejun
Mr. WONG Ki Yan Davhen *(CPA, FCCA)*

董事

非執行董事
朱永芃先生
陽　光先生
馮樹臣先生
閻　焱先生

執行董事
葉偉芳先生
李宏遠先生
王鴻艷女士

獨立非執行董事
陸延昌先生
翟立功先生
石定環先生
范仁達先生

監事

喬保平先生
陳　斌先生
許興洲先生
關曉春先生
李　偉先生

法律顧問

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核數師

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執業會計師
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聯席公司秘書

湯得軍先生
黃基恩先生*(CPA, FCCA)*

CORPORATE INFORMATION
公司資料

Authorized Representatives
Mr. YE Weifang
Mr. WONG Ki Yan Davhen

授權代表
葉偉芳先生
黃基恩先生

Compliance Advisor
China International Capital Corporation Hong Kong Securities Limited

合規顧問
中國國際金融香港證券有限公司

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法定地址及中國主要辦事處
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西四環中路16號院
1號樓11層1101室

Principal Place of Business in Hong Kong
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Hong Kong

香港主要營業地點
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Nomination Committee
Mr. LU Yanchang *(Chairman)*
Mr. ZHAI Ligong
Ms. WANG Hong Yan

提名委員會
陸延昌先生*(主席)*
翟立功先生
王鴻艷女士

Audit Committee
Mr. FAN Ren Da Anthony *(Chairman)*
Mr. ZHAI Ligong
Mr. YANG Guang

審計委員會
范仁達先生*(主席)*
翟立功先生
陽　光先生

Remuneration and Appraisal Committee
Mr. ZHAI Ligong *(Chairman)*
Mr. ZHU Yongpeng
Mr. LU Yanchang

薪酬與考核委員會
翟立功先生*(主席)*
朱永芃先生
陸延昌先生

Strategic Committee
Mr. ZHU Yongpeng *(Chairman)*
Mr. FENG Shuchen
Mr. YE Weifang
Mr. LI Hongyuan
Mr. ZHAI Ligong

戰略委員會
朱永芃先生*(主席)*
馮樹臣先生
葉偉芳先生
李宏遠先生
翟立功先生

H Share Registrar
Computershare Hong Kong Investor Services Limited

H股證券登記處
香港中央證券登記有限公司

Website Address
www.01296.hk

網址
www.01296.hk

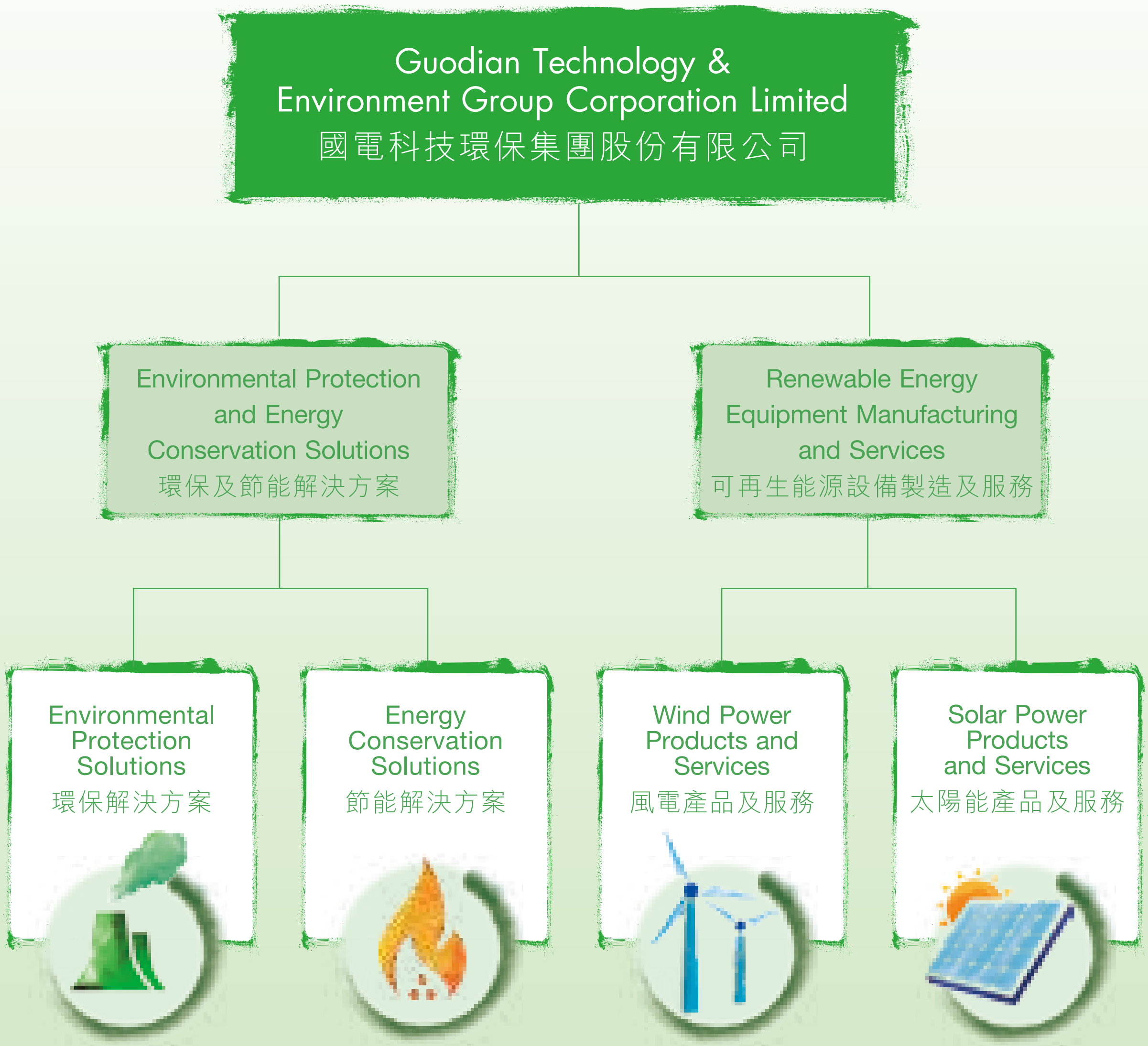
Principal Banks
China Construction Bank Corporation
Bank of Communications Co., Ltd. (Hong Kong Branch)
Wing Lung Bank Limited (Hong Kong Branch)

主要往來銀行
中國建設銀行股份有限公司
交通銀行股份有限公司(香港分行)
永隆銀行有限公司(香港分行)

CORPORATE PROFILE
公司介紹

The following chart illustrates the Group's business segments and sub-segments:

下表列示本集團的業務分部及其分部：



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 May 16, 2011 and listed on the Main Board of the Hong Kong Stock Exchange (the "**Exchange**") on December 30, 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 the China Guodian Group (the "**Guodian Group**") and its subsidiaries and associates.

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日正式改制成為股份有限公司並於2011年12月30日在香港證券交易所(簡稱「**交易所**」)主板上市。本公司及附屬公司(簡稱「**本集團**」)是中國國電集團公司(簡稱「**國電集團**」)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。

The principal businesses of the Company are carried out under two segments, namely, the environmental protection and energy conservation solutions, and the renewable energy equipment manufacturing and services. The Company is a leading market player in the PRC in these industries given its advanced technology and diversified business models. In 2012, the Company ranked the 25th among Top 500 Global New Energy Enterprises.

本公司主營業務分為兩部分，即環保節能解決方案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。2012年，本公司入選全球新能源企業500強，排名第25位。

Desulfurization tower against the blue sky
藍天下的脱硫塔

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 SO_2 and NOx emissions reductions, water treatment, plasma ignition and combustion stabilization, and energy management contracts), the Group is capable of providing "One-stop Shop" solutions to its customers tailored for their specific needs. The Group is also one of the leading manufacturers of wind and solar 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 and solar power station engineering, procurement and construction business.

Focusing on technology innovations and industrial applications, the Group has achieved significant technology and product innovations through original ideas, resources consolidation and technology renovation. Among its leading technologies in the PRC or globally, the Group's plasma ignition technology is ranked first in the world. In the domestic market, the Group keeps a leading position in many technologies, including wet flue gas desulfurization, seawater desulfurization, furnace combustion De-Nox and flue gas denitrification. The Group's brand names, such as Longyuan Environmental, Longyuan Technology, United Power, Longyuan Cooling, Guodian Zhishen and GD Solar, have gained significant brand recognitions in the PRC. As of December 2012. the Group has obtained 523 patents, including 10 international patents and 103 patented inventions. The Company has received more than 40 science and technology awards at national or ministry level and participated in nine projects under the 863 Program and two sub-projects under the 973 Special Project. The Group has established five national laboratories, five provincial-level research and development ("**R&D**") platforms and six intra-group technology R&D centers.

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儘量提升資源利用效率而設計的創新和先進的技術，整體目標為減低燃煤發電相關的環境影響，以及儘量提升其客戶的成本效益及盈利能力。憑藉其為燃煤電廠提供的全方面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），本集團能為其客戶提供「一站式」的解決方案，量身訂制滿足其客戶的特定需要。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電及太陽能發電設備製造商之一，已建立穩固的品牌，並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，如風力發電機組保養及維修以及太陽能電站工程、採購及建造合同業務。

本集團專注於科技創新和產業化並舉，通過原始創新、資源集成創新與技術引進並再創新，取得了一大批科技創新成果，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、煙氣脱硝技術始終保持國內領先地位，龍源環保、龍源技術、聯合動力、龍源冷卻、國電智深、國電光伏已成為享譽中國的知名品牌。截至2012年12月，國電科環擁有專利成果523項，其中國際專利10項，發明專利103項，國家及省部級科技獎項40多項。承擔國家「863」計劃項目九個和「973」項目子課題兩個。本集團共擁有五個國家級重點實驗室、五個省級研究與開發（「**研發**」）平台和六個集團內技術研發中心。

CORPORATE PROFILE
公司介紹

The Company believes that its strategic focus on investing in and promoting technological R&D 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 the sustainable economic growth and development in the PRC. Going forward, the Company expects to leverage on its operations in the PRC to expand internationally, with the objective of becoming a top tier supplier of integrated clean technology solutions and services.

本公司相信，以投資和促進技術研發作為中心活動來支持公司多元化業務的重點戰略已經得到了重大回報：使其能夠保持其在環保、節能和可再生能源行業中的主導地位；使其研發出在相關行業中具有創新性、實用性、節約成本的解決方案和技術應用以及高質量的產品。本公司也相信，這些行業將對中國能源及電力產業的可持續發展起到關鍵作用，而能源的可持續發展又是中國經濟可持續發展不可或缺的部分。展望未來，本公司將以成為世界一流的綜合清潔能源技術解決方案和服務提供商為目標，力爭充分利用其在中國的業務拓展國際市場。

Guodian Technology & Environmental Group Corporation Limited
國電科技環保集團股份有限公司

CORPORATE STRUCTURE 公司架構

- 100% Guodian Longyuan Power Technology and Engineering Co., Ltd. 國電龍源電力技術工程有限責任公司
  - 100% Guodian Longyuan Energy Saving Technology Co., Ltd. 國電龍源節能技術有限公司
  - 58.2% Beijing Guodian Longyuan Hangguo Lankun Energy Engineering Technology Co., Ltd. 北京國電龍源杭鍋藍琨能源工程有限責任公司
- 51% Guodian Longyuan Electrical Co., Ltd. 國電龍源電氣有限公司
  - 100% Baoding Longyuan Electrical Device Co., Ltd. 保定龍源電氣有限公司
- 100% Guodian Solar (Jiangsu) Co., Ltd. 國電光伏(江蘇)有限公司
  - 50% Guodian Solar System Technology (Shanghai) Co., Ltd. 國電太陽能系統科技(上海)有限公司
  - 51% Jiangsu Zhaojing Optoelectronics Technology Co., Ltd. 江蘇兆晶光電科技發展有限公司
    - 100% Fenghua Xikou Jinlv Ecological Agriculture Company 奉化市溪口金旅生態農業發展公司
- 70% Guodian United Power Technology Co., Ltd. 國電聯合動力技術有限公司
  - 51% United Power Technology Yangtze (Jiangsu) Co., Ltd. 聯合動力長江(江蘇)有限公司
  - 100% Guodian United Power Technology (Changchun) Co., Ltd. 國電聯合動力技術(長春)有限公司
  - 100% Guodian United Power Technology (Zhanhua) Wind Power Equipment Co., Ltd. 國電聯合動力技術(沾化)風電設備有限公司
  - 87.5% Guodian United Power Technology (Jiangsu) Co., Ltd. 國電聯合動力技術(江蘇)有限公司
  - 100% Beijing Guodian Sida Technology Co., Ltd. 北京國電思達科技有限公司
  - 100% Guodian United Power Technology (Baoding) Co., Ltd. 國電聯合動力技術(保定)有限公司
    - 60% Zhangbei Guodian United Power Anta Wind Power Equipment Co., Ltd. 張北國電聯合動力安塔風電設備有限公司
  - 100% Guodian United Power Technology (Lianyungang) Co., Ltd. 國電聯合動力技術(連雲港)有限公司
    - 40% Zhangbei Guodian United Power Anta Wind Power Equipment Co., Ltd. 張北國電聯合動力安塔風電設備有限公司
  - 60% Beijing Longwei Power Generation Technology Co., Ltd. 北京龍威發電技術有限公司
  - 55.38% Guodian United Power Technology (Baotou) Co., Ltd. 國電聯合動力技術(包頭)有限公司
  - 100% Guodian United Power Technology (Chifeng) Co., Ltd. 國電聯合動力技術(赤峰)有限公司
  - 85% Guodian United Power Technology (Yixing) Co., Ltd. 國電聯合動力技術(宜興)有限公司
  - 100% Guodian United Power Technology (Jiuquan) Co., Ltd. 國電聯合動力技術(酒泉)有限公司
  - 100% Guodian United Power America LLC 國電聯合動力美國有限公司
  - 60% Guodian United Power Technology (Weifang) Co., Ltd. 國電聯合動力技術(濰坊)有限公司
- 23.25% Yantai Longyuan Power Technology Co., Ltd. 煙台龍源電力技術股份有限公司
  - 51% Shanghai Yinguo Thermal Power Equipment Co., Ltd. 上海銀鍋熱能設備有限公司
  - 51% Sichuan Longyuan Keneng Electric Power Technology Co., Ltd. 四川龍源科能電力科技有限公司
  - 100% Shenyang Longyuan Power Plant Combustion Technology Co., Ltd. 瀋陽龍源電站燃燒技術有限公司
  - 100% Guodian Longyuan Technologies USA Corporation 國電龍源技術(美國)有限公司
  - 65% Yantai Longyuan Heat Exchange Equipment Co., Ltd. 烟台龍源換熱設備有限公司

Environmental Protection 環保

Energy Conservation Solutions 節能解決方案

Wind Power Products and Services 風電產品及服務

Solar Power Products and Services 太陽能產品及服務

China Guodian Corporation
中國國電集團公司

52.13% → **GD Power Development Co., Ltd. ("GD Power")**
國電電力發展股份有限公司(「國電電力」)

Public 公眾 — 20.02%

China Guodian Corporation 中國國電集團公司 — 39.21%

GD Power Development Co., Ltd. ("GD Power") 國電電力發展股份有限公司(「國電電力」) — 39.19%

National Social Security Fund Council of the PRC ("NSSF") 中華人民共和國全國社會保障基金理事會(「社保基金」) — 1.58%

Guodian Technology & Environment Group Corporation Limited
國電科技環保集團股份有限公司

100% Beijing Lucency Environment and Technology Co., Ltd. 北京朗新明環保科技有限公司

- 51% Dalian Delang Water Treatment Co., Ltd. 大連德朗水務有限公司
- 100% Dalian Lucency Environmental Engineering Co., Ltd. 大連朗新明環境工程有限公司
  - 100% Guodian Lucency Puyang Water Co., Ltd. 國電朗新明濮陽水務有限公司
- 80% Taiyuan Lucency Sewage Treatment Co., Ltd. 太原朗新明污水處理有限公司
- 55% Inner Mongolia Lucency Environment and Technology Co., Ltd 內蒙古朗新明環保科技有限公司
- 70% Taizhou Lucency Environment and Technology Co., Ltd 泰州朗新明環保科技有限公司
- 51% Shanxi Xinyuan Environment Protection Recource Development Co., Ltd. 山西新源環保資源開發有限責任公司
  - 60% Shanxi Tianrun Water Supply Co., Ltd. 山西天潤供水有限責任公司
- 70% Guodian Galaxy Water Co., Ltd. 國電銀河水務股份有限公司
  - 100% Galaxy Water (Tengzhou Jisuo) Co., Ltd. 銀河水務(滕州級索)有限公司
  - 100% Galaxy Water (Tengzhou Xigang) Co., Ltd. 銀河水務(滕州西崗)有限公司
  - 100% Galaxy Water (Jiaonan) Co., Ltd. 銀河水務(膠南)有限公司
  - 100% Galaxy Water (Tengzhou) Co., Ltd. 銀河水務(滕州)有限公司
  - 100% Galaxy Water (Dezhou) Co., Ltd. 銀河水務(德州)有限公司
  - 100% Galaxy Water (Qingdao Development Zone) Co., Ltd. 銀河水務(青島開發區)有限公司
  - 100% Galaxy Water (Tengzhou Mushi) Co., Ltd. 銀河水務(滕州木石)有限公司
  - 100% Galaxy Water (Tengzhou Dawu) Co., Ltd. 銀河水務(滕州大塢)有限公司
  - 100% Jining Galaxy Sewage Treatment Co., Ltd. 濟寧銀河污水處理有限公司
  - 100% Qingdao Galaxy Environment Protection South Village Sewage Treatment Co., Ltd. 青島銀河環保南村污水處理有限公司
  - 100% Qingdao Galaxy Water Technology Management Co, Ltd. 青島銀河水務技術管理有限公司
  - 69.44% Zhucheng Galaxy Sewage Treatment Co., Ltd. 諸城銀河污水處理有限公司
  - 63.57% Jining Galaxy Water Co., Ltd. 濟寧銀河水務有限公司
  - 100% Galaxy Water (Changle) Co., Ltd. 銀河水務(昌樂)有限公司
  - 100% Qingdao Lianwanhe Water Co., Ltd. 青島鐮灣河水務有限公司
  - 100% Cao County Sijihe Sewage Treatment Co., Ltd. 曹縣四季河污水處理有限公司
  - 100% Shan County Jiadanhe Sewage Treatment Co., Ltd. 單縣嘉單河污水處理有限公司
  - 100% Galaxy Water (Shouguang) Co., Ltd. 銀河水務(壽光)有限公司

90% Beijing Huadian Tianren Power Controlling Technology Co., Ltd. 北京華電天仁電力控制技術有限公司

- 100% Guan Huadian Tianren Power Control Equipment Co., Ltd. 固安華電天仁控制設備有限公司

100% Beijing Guodian Longyuan Environmental Engineering Co., Ltd. 北京國電龍源環保工程有限公司

- 100% Tonghua Guodian Longyuan Environment Engineering Co., Ltd. 通化國電龍源環境技術有限公司
- 100% Guodian Longyuan Oceanic Construction Science and Technology Development (Beijing) Co., Ltd. 國電龍源海洋建設科技發展(北京)有限公司
- 70% Hanchuan Longyuan Boqi Environmental Technology Co., Ltd. 漢川龍源博奇環保科技有限公司
- 70% Puyang Guodian Longyuan Water Treatment Co., Ltd. 濮陽國電龍源水務有限公司
- 100% Jiangsu Longyuan Catalyst Co., Ltd. 江蘇龍源催化劑有限公司
- 100% Bengbu Guodian Longyuan Environmental Development Co., Ltd. 蚌埠國電龍源環保發展有限公司
- 60% Nanjing Longyuan Environmental Co., Ltd. 南京龍源環保有限公司
  - 40% → Guodian Longyuan Nanjing Membrane Technology Co., Ltd.
- 60% Guodian Longyuan Nanjing Membrane Technology Co., Ltd. 國電龍源南京膜技術有限公司
- 60% Jiangsu Deke Environment Equipment Co., Ltd. 江蘇德克環保設備有限公司
- 51% Beijing Longyuan Environmental Engineering Co., Ltd. 北京龍源環保工程有限公司
  - 60% Zhoushan Longxi Environment Engineering Co., Ltd. 舟山龍熹環保工程有限公司
- 100% Guodian Longyuan Changzhou Environment and Technology Co., Ltd. 國電龍源常州環保科技有限公司
- 100% Guodian Longyuan Taizhou Co., Ltd. 國電龍源泰州有限公司

100% Guodian Technology & Environment Group (Hong Kong) Co., Ltd. 國電科技環保集團香港有限公司

100% Chifeng Wind Company of Guodian Technology & Environment Group Co., Ltd. 國電科技環保集團有限公司赤峰風電公司

財務業績概要

SUMMARY OF FINANCIAL RESULTS

Green Aspirations by SHI Xiaohong
綠色暢想　史小紅作品

SUMMARY OF FINANCIAL RESULTS
財務業績概要

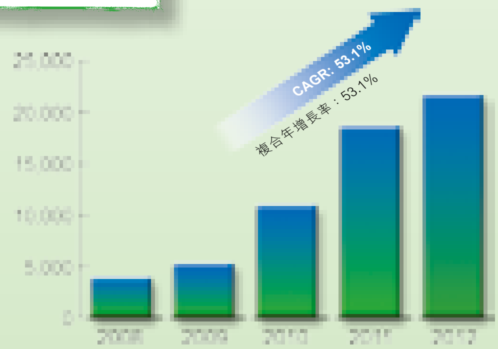
		2008 RMB'000 人民幣千元	2009 RMB'000 人民幣千元	2010 RMB'000 人民幣千元	2011 RMB'000 人民幣千元	**2012** **RMB'000** **人民幣千元**
Revenue	收入	3,966,148	5,349,651	10,998,908	18,706,980	**21,776,510**
Profit before taxation	税前利潤	241,272	247,792	680,465	1,271,574	**1,263,905**
Income tax	所得税	(41,123)	(53,337)	(118,639)	(107,161)	**(229,934)**
Profit for the year	本年利潤	200,149	194,455	561,826	1,164,413	**1,033,971**
Attributable to:	歸屬於：					
Equity owners/shareholders of the Company	本公司權益所有者／股東	90,854	95,545	350,359	840,681	**692,947**
Non-controlling interests	非控股權益	109,295	98,910	211,467	323,732	**341,024**
Profit for the year	本年利潤	200,149	194,455	561,826	1,164,413	**1,033,971**
Basic and diluted earnings per share (RMB cents)	每股基本及攤薄盈利（人民幣分）	1.9	2.0	7.2	17.3	**11.4**
Total non-current assets	非流動資產總額	1,847,198	6,272,829	13,371,840	14,730,958	**20,345,067**
Total current assets	流動資產總額	5,620,230	9,632,862	19,096,520	27,324,740	**25,950,620**
Total assets	資產總額	7,467,428	15,905,691	32,468,360	42,055,698	**46,295,687**
Total current liabilities	流動負債總額	(4,769,651)	(11,411,443)	(21,219,909)	(29,118,663)	**(26,763,084)**
Total non-current liabilities	非流動負債總額	(424,792)	(1,414,323)	(3,148,420)	(1,940,956)	**(7,391,477)**
Net assets	資產淨額	2,272,985	3,079,925	8,100,031	10,996,079	**12,141,126**
Total equity attributable to equity owners/shareholders of the Company	權益總額歸屬於本公司權益所有者／股東	1,715,595	2,332,040	6,157,176	8,771,546	**9,281,884**
Non-controlling interests	非控股權益	557,390	747,885	1,942,855	2,224,533	**2,859,242**
Total equity	權益總額	2,272,985	3,079,925	8,100,031	10,996,079	**12,141,126**

SUMMARY OF FINANCIAL RESULTS
財務業績概要

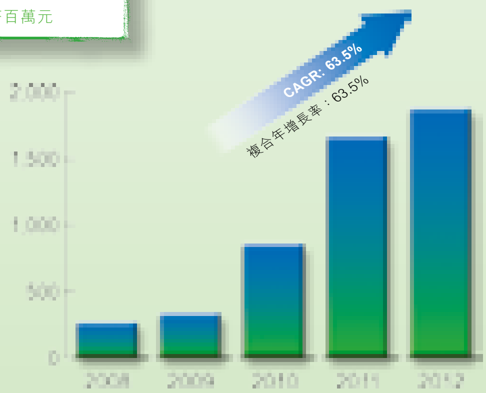
- For the year ended December 31, 2012, the Group recorded consolidated revenue of approximately RMB21,776.5 million, representing an increase of approximately 16.4% over last year;
- For the year ended December 31, 2012, the Group's gross profit was approximately RMB3,380.6 million, representing an increase of approximately 21.5% over last year;
- For the year ended December 31, 2012, the Group's operating profit was approximately RMB1,871.9 million, representing an increase of approximately 12.6% over last year;
- For the year ended December 31, 2012, profit attributable to equity shareholders/owners of the Company was approximately RMB693.0 million, representing a decrease of approximately 17.6% over last year;
- For the year ended December 31, 2012, earnings per share of the Group (excluding non-controlling interests) were approximately RMB11.4 cents, representing a decrease of approximately 34.1% over last year; and
- The Board recommends the distribution of a final dividend of RMB2.0 cents per share (before tax) for the year ended December 31, 2012.

- 截至2012年12月31日止年度，本集團的合併收入約為人民幣21,776.5百萬元，比去年增長約16.4%；
- 截至2012年12月31日止年度，本集團的毛利約為人民幣3,380.6百萬元，比去年增長約21.5%；
- 截至2012年12月31日止年度，本集團的營業利潤約為人民幣1,871.9百萬元，比去年增長約12.6%；
- 截至2012年12月31日止年度，本公司股東應佔純利約為人民幣693.0百萬元，比去年減少約17.6%；
- 截至2012年12月31日止年度，本集團每股盈利（不包括非控股權益）約為人民幣11.4分，比去年下降約34.1%；以及
- 董事會建議派發截至2012年12月31日止年度的末期股息為每股人民幣2.0分（稅前）。

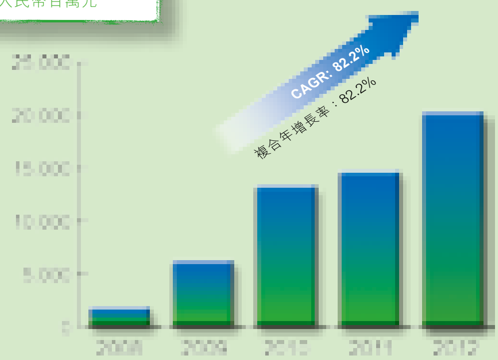
Revenue
收入
RMB million 人民幣百萬元



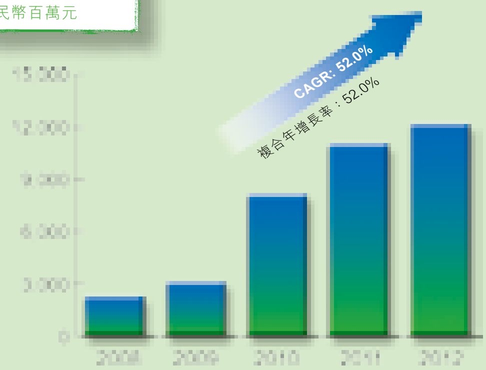
Operation Profit
經營利潤
RMB million 人民幣百萬元



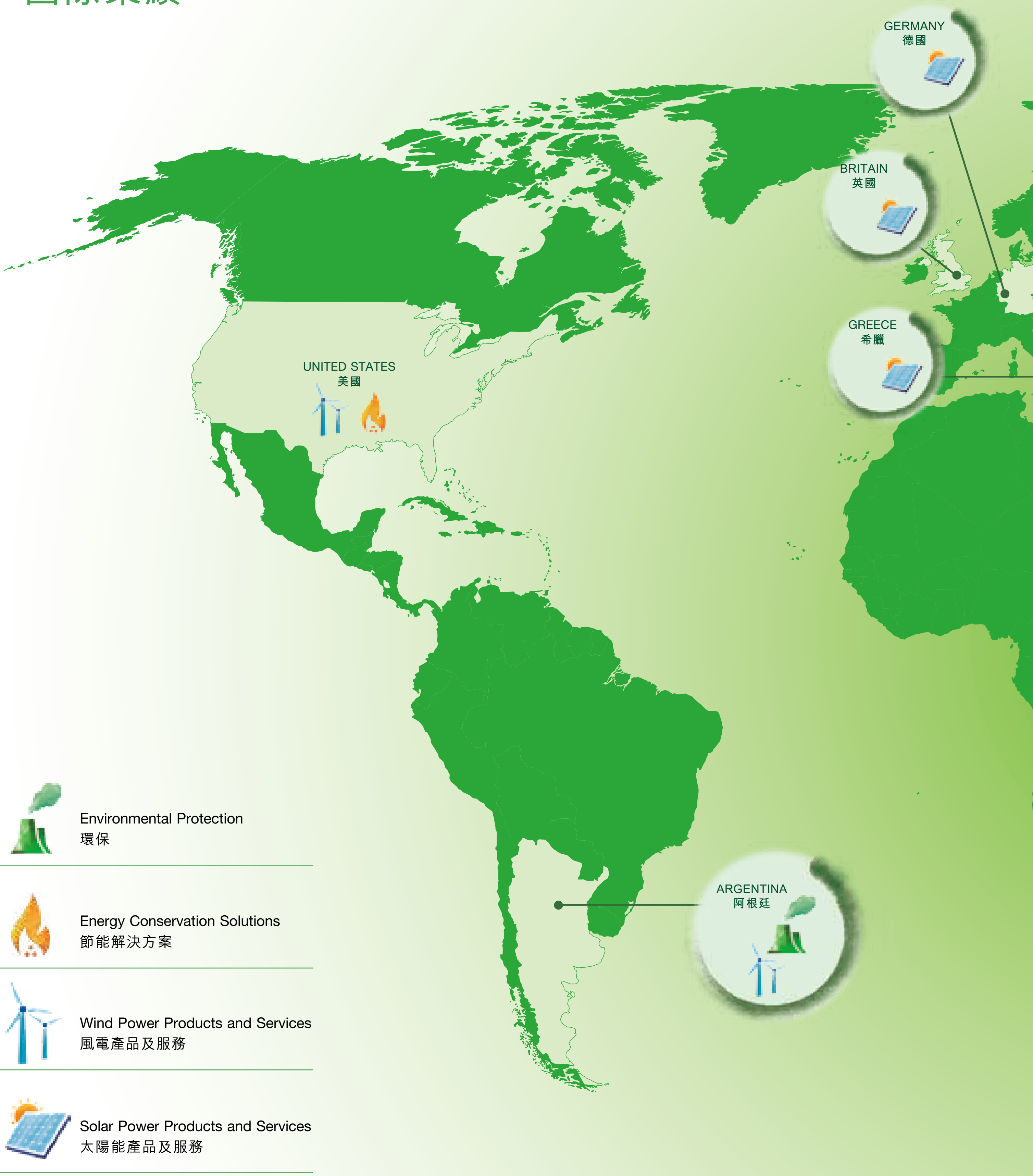
Total Non-Current Assets
非流動資產總額
RMB million 人民幣百萬元



Net Asset
資產淨額
RMB million 人民幣百萬元

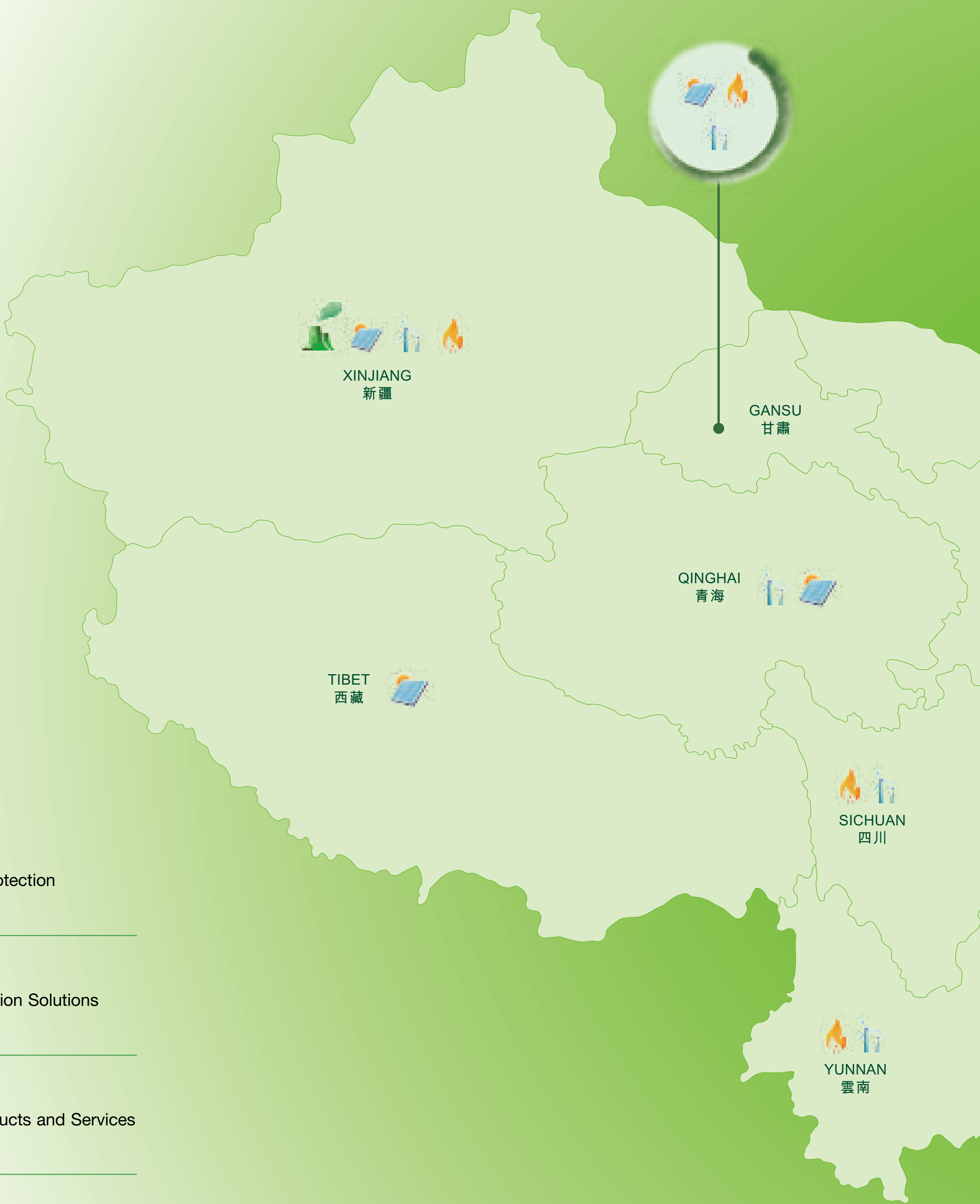


INTERNATIONAL FOOTPRINT
國際業績




BULGARIA
保加利亞
TURKEY
土耳其
RUSSIA
俄羅斯
KOREA
韓國
CHINA
中國
CHINA
TAIWAN
中國臺灣
INDIA
印度
HONG
KONG
香港
THAILAND
泰國
VIETNAM
越南
PHILIPPINES
菲律賓
SRI LANKA
斯里蘭卡
CAMBODIA
柬埔寨
INDONESIA
印尼
AUSTRALIA
澳大利亞

DOMESTIC FOOTPRINT
國內業績



Environmental Protection
環保

Energy Conservation Solutions
節能解決方案

Wind Power Products and Services
風電產品及服務

Solar Power Products and Services
太陽能產品及服務


HEILONGJIANG
黑龍江
JILIN
吉林
LIAONING
遼寧
INNER MONGOLIA
內蒙古
BEIJING
北京
HEBEI
河北
NINGXIA
寧夏
SHANXI
山西
SHANDONG
山東
JIANGSU
江蘇
SHAANXI
陝西
HENAN
河南
ANHUI
安徽
SHANGHAI 上海
HUBEI
湖北
CHONGQI
重慶
ZHEJIANG
浙江
JIANGXI
江西
GUIZHOU
貴州
HUNAN
湖南
FUJIAN
福建
DIAOYU
ISLAND
釣魚島
TAIWAN
台灣
GUANGXI
廣西
GUANGDONG
廣東
HONG
KONG
香港
MACAU
澳門

CHARITY FUNCTION
公益活動一覽表

Charity function
公益活動

有關國電科環2012年度公益活動 您可以使用手機掃一掃二維碼觀看，或登錄網站 www.01296.hk 查看詳情。

HEILONGJIANG
黑龍江
向巴林右旗
大板鎮中心小學捐贈
向赤峰市松山區北窪子村
內的11戶特困村民捐贈
向聯合動力赤峰公司特困
員工高劍、於東東、高術
博捐贈
捐贈聯合動力包頭公司
員工刀春平
向北京市
懷柔區育才打工
子弟學校留守兒童
捐贈
懷柔雁棲湖植樹
“學雷鋒獻愛心無償
獻血“活動
JILIN
吉林
向長春興隆山鎮
敬老院老人
捐贈
INNER MONGOLIA
內蒙古
LIAONING
遼寧
向遼寧省莊河市
敬老院捐贈
和植樹
BEIJING
北京
HEBEI
河北
向保定
高新區花莊小學、
大邊坨小學農民工
子女捐贈
向保定市受洪澇災
害地區受害人員
捐贈
NINGXIA
寧夏
SHANXI
山西
向煙台
開發區實驗小學捐贈
貴州省息烽縣青山新華
希望小學優秀學生代表
訪問煙台龍源技術公司
向煙台開發區八角
辦事處捐贈
SHANDONG
山東
JIANGSU
江蘇
HENAN
河南
ANHUI
安徽
SHAANXI
陝西
向宜興
消防大隊捐贈
向武警8692部隊捐贈
“保護環境 消除安全隱
患”秋季廠區
除草互動
HUBEI
湖北
SHANGHAI 上海
向河南省滎陽市孤
寡老人院捐贈
CHONGQI
重慶
ZHEJIANG
浙江
JIANGXI
江西
向井岡山石市口
希望小學捐贈
GUIZHOU
貴州
HUNAN
湖南
FUJIAN
福建
獻血
向福建福州福清宏
路敬老院捐贈
TAIWAN
台灣
GUANGXI
廣西
GUANGDONG
廣東
HONG
KONG
香港
MACAU
澳門
香港公益基金
向貴州省息烽縣青
山新華希望小學
捐贈

CHAIRMAN'S STATEMENT
董事長致辭

Mr. ZHU Yongpeng
朱永芃先生
Chairman
董事長

After years of rapid development, the Company has become the core brand within China Guodian Corporation. The Company is widely recognized for its risk resistance and innovation capacities, and has established its reputation within the PRC electric power industry. The Company has achieved distinctive competitive advantages, thanks to its advanced technologies, diversified business models and a team of employees with strong business sensitivity.

經過多年的高速發展，本公司已經成為中國國電集團公司的骨幹企業，本公司的抗風險能力與創新能力已經得到市場的廣泛認可，在中國電力行業中享有盛譽。本公司擁有先進的技術、多元化的業務模式和一支具有較強市場意識的幹部員工隊伍，賦予它獨特的競爭優勢。

Dear Shareholders:

On behalf of the board of directors (the "**Board**") of the Company, I am honored to present to you the 2012 annual report of the Group (the "**Annual Report**").

The world economy in 2012 continued to experience volatility and change. The increasingly complex challenges of energy security issues and the adverse effects caused by the climate change are threatening the further development and prosperity of human society. A revolution in the energy sector is, therefore, inevitable. Nowadays, in order to attain energy conservation, environmental protection and sustainability of China's economic growth, the PRC government is committed to accelerating the reform of economic growth model, promoting ecology awareness and education and advancing the energy production and consumption revolution. The "green and intelligent" concept has been introduced into the electric power industry, along with a series of scientific and technical innovations.

尊敬的股東：

我很榮幸代表本公司董事會(下稱「**董事會**」)向各位股東公佈本集團2012年年度報告(下稱「**年報**」)。

2012年，世界經濟繼續動蕩、變化。日益嚴峻複雜的國際能源安全問題和氣候變化所造成的不利影響正在威脅人類社會的進一步發展和繁榮。因此，能源領域勢必需要一場革命。如今，為了節約資源、保護環境、實現經濟的可持續發展，中國政府一直致力於加快轉變經濟發展模式，大力推進生態文明建設，推動能源生產和消費革命。電力產業也已引入「綠色、智能」概念以及一系列科技創新成果。

CHAIRMAN'S STATEMENT
董事長致辭

After years of rapid development, the Company has become the core brand within China Guodian Corporation. The Company is widely recognized for its risk resistance and innovation capacities, and has established its reputation within the PRC electric power industry. The Company has achieved distinctive competitive advantages, thanks to its advanced technologies, diversified business models and a team of employees with strong business sensitivity.

Looking forward, the Company will continue to leverage on the platform and resources provided by its controlling shareholder, the China Guodian Corporation and further develop into a globally recognized supplier of products and services in environmental protection and energy conservation solutions and renewable energy equipment and solutions. The Company will strive to become a global leader in the provision of integrated clean technology solutions, to maximize returns to its shareholders as well as to contribute further to the society with its extraordinary performance.

Finally, on behalf of the Board, I would like to extend our sincere gratitude to all the shareholders for their support and trust and to all our staff for their unremitting efforts and relentless pursuit.

經過多年的高速發展，本公司已經成為中國國電集團公司的骨幹企業，本公司的抗風險能力與創新能力已經得到市場的廣泛認可，在中國電力行業中享有盛譽。本公司擁有先進的技術、多元化的業務模式和一支具有較強市場意識的幹部員工隊伍，賦予它獨特的競爭優勢。

展望未來，本公司將繼續利用其控股股東國電集團所提供的平台和資源，進一步發展壯大，成為全球公認的環保與節能解決方案及可再生能源設備與解決方案領域的產品和服務提供商。本公司將力爭成為提供綜合清潔技術解決方案的全球領導者，並以優異的經營業績回報股東，回報社會！

最後，我代表董事會向全體股東致以衷心的謝意，感謝諸位對我們的支持與信任，也感謝全體員工的不懈努力和追求。

Mr. ZHU Yongpeng 朱永芃先生
Chairman 董事長

PRESIDENT'S STATEMENT
總經理致辭

Mr. LI Hong Yuan
李宏遠先生
President
總經理

After years of cultivation, the Company has developed a series of well-known brands, such as Longyuan Environmental Protection, Longyuan Technology, United Power, Longyuan Cooling and Guodian Zhishen. The Group has developed into an integrated group of companies with diversified business segments and strong synergies and built up a reputable brand name as the largest provider of coal-fired power plant-related environmental protection and energy conservation services and renewable energy products and services in the PRC.

經過多年的精心培育，公司已經擁有龍源環保、龍源技術、聯合動力、龍源冷卻、國電智深等一系列享譽社會的知名品牌，發展成為一家擁有強大協同優勢、多元化業務部門的集團化企業，是中國最大的火電節能環保及可再生能源綜合服務企業和行業知名品牌。

Dear Shareholders:

It has been a full year since the Company was listed on the Main Board of the Hong Kong Stock Exchange on December 30, 2011. During last year, the Company has adhered to the concept of "Aiming to Become A Great Enterprise and Group with A Wide Development Sphere and Market" and the development strategy of "Being Strategic and Energetic, Innovative and Effective". The Company continued to deepen its internal incentive mechanism reform, optimize and integrate its business assets, promote its corporate culture, and achieve new technological and operational breakthroughs. The Group has made great progress in various aspects.

The Group has overcome multiple challenges on many fronts in 2012: the slowed-down investments in the coal-fired power industry in the PRC, the declined construction scale of wind power, the intensified market competition and the trade barriers for exporting photovoltaic products. The Group has recorded revenues of approximately RMB21.78 billion and gross profits of RMB3.38 billion for 2012.

尊敬的股東：

自公司2011年12月30日在香港聯交所主板上市已經整整一年。在過去的一年中，本公司按照「大企業、大發展、大市場、大集團」的發展理念和「新企業、新機制、新活力、新作為」的發展戰略，繼續深化激勵機制改革，優化整合業務資產，持續推進企業文化，在技術和運營方面實現新突破，各項業績均取得長足進步。

2012年，集團積極克服中國火電行業投資放緩、風電建設規模大幅下滑、市場競爭加劇以及光伏產品出口遭受貿易壁壘等多重困難，實現收入約人民幣217.8億元，毛利約人民幣33.8億元。

In addition, the Group also achieved significant operational growth. For example, the total installed capacity of flue gas desulfurization projects of the Group reached approximately 100 GW, a leading position in the industry. The Group's in-furnace denitrification technology also has a leading position in the world market. Furthermore, the Group's contracted water processing capacity reached 1.5 million tons per day. In addition, the Group successfully produced and connected to grid its 6MW double-fed offshore wind turbine with its proprietary intellectual property rights, a major technological breakthrough in the wind power industry.

此外，集團還取得了顯著的運營增長。例如，集團的煙氣脱硫工程總裝機容量達到接近1億千瓦，始終處於行業領先地位。集團的爐內脱氮技術達到國際領先標準。而且，本集團水務擁有量達到150萬噸／天。此外，集團利用其自主知識產權成功生產出單機容量最大的6兆瓦雙饋海上風力發電機組並實現併網，這是風電行業的一次重大技術突破。

After years of cultivation, the Company has developed a series of well-known brands, such as Longyuan Environmental Protection, Longyuan Technology, United Power, Longyuan Cooling and Guodian Zhishen. The Group has developed into an integrated group of companies with diversified business segments and strong synergies and built up a reputable brand name as the largest provider of coal-fired power plant-related environmental protection and energy conservation services and renewable energy products and services in the PRC.

經過多年的精心培育，公司已經擁有龍源環保、龍源技術、聯合動力、龍源冷卻、國電智深等一系列享譽社會的知名品牌，發展成為一家擁有強大協同優勢、多元化業務部門的集團化企業，是中國最大的火電節能環保及可再生能源綜合服務企業和行業知名品牌。

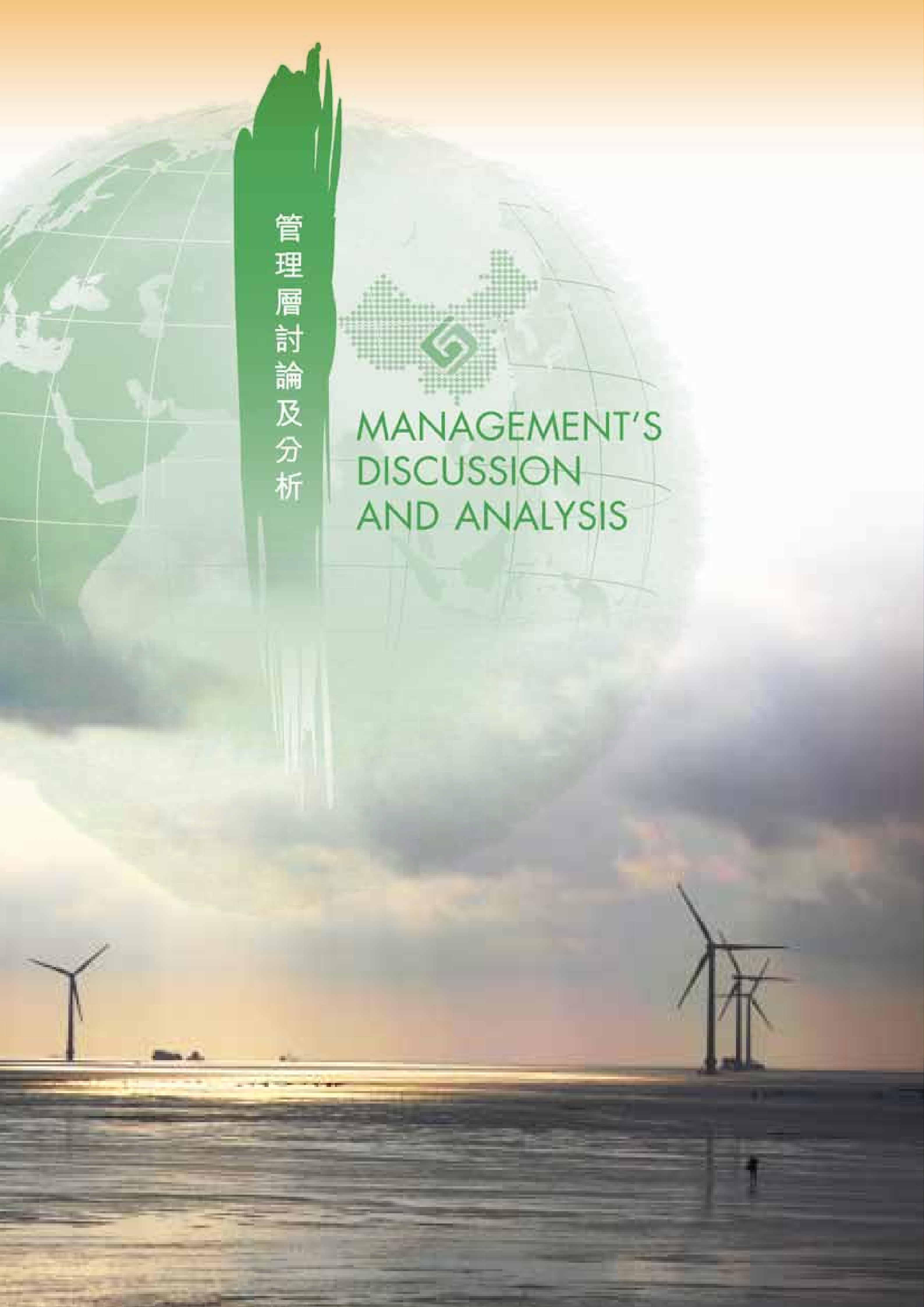
Looking ahead, the Company will strive to seize opportunities presented by the market, continue to maintain its leading positions in the various industries in the PRC, become a dynamic and innovative clean energy technology provider and make additional contributions to the construction of a green and beautiful China.

展望未來，公司將緊緊抓住市場機遇，繼續保持在中國多行業的領先地位，力爭成為一家充滿活力和創新的清潔能源技術提供商，並為中國的碧水藍天做出更大貢獻。

Mr. LI Hong Yuan 李宏遠先生
President *總經理*

管理層討論及分析

MANAGEMENT'S DISCUSSION AND ANALYSIS



Golden Mirage by ZHAO Xiaoshuo
金色韻象　趙霄爍作品

MANAGEMENT'S DISCUSSION AND ANALYSIS
管理層討論與分析

Certain statistical data and other information relating to the PRC and the industries in which we operate contained in, for instance, the section entitled "Key Industry Developments" in this Annual Report, have been derived from various publicly available official publications. The Company believes that the sources of this information are appropriate sources for such information and have 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.

本年報中如「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信息乃摘自不同的官方公開刊物。本公司相信有關數據源為恰當的數據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或遺漏任何事實致使該等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信息的準確性發表任何聲明，而該等信息可能與中國境內外編製的其他信息不一致。因此，本年報所載有關行業信息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信息和統計數據。

This Annual 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

本年報載有基於本公司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、本集團或本公司的管理層時，即指前瞻性陳述。此類陳述反映出本公司管理層對未來事件的當

The ceremony held in the USA for the first overseas wind power project's completion
在美舉行首個海外風電項目竣工慶典

reflect the Company's management's current views 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.

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業績年報所述的預計、相信或預期的的財務狀況大不相同。

2012 INDUSTRY AND BUSINESS OVERVIEW

2012年行業和業務回顧

Key Industry Developments

主要行業發展

In 2012, the PRC government continued to introduce new regulatory initiatives applicable to the PRC power and power-related industries, mainly aiming to diversify the PRC energy supply structure by encouraging the development of the renewable energy sector and to reduce environmental pollution by promoting the development of environmental protection and energy conservation industry and setting specific targets for emission reductions.

2012年，中國政府陸續出台了適用於中國電力及電力相關行業的一系列新法規措施，主要目的在於通過鼓勵支持可再生能源行業的發展以實現能源供應結構的多元化，以及通過推動環保節能產業的發展和設定減排的具體目標從而減少環境污染。

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

僅為了本年報的目的，「**中國**」是指中華人民共和國，這裏不包括台灣、中國澳門特別行政區及中國香港特別行政區。

The on-grid connection of the first batch of 3MW wind turbines on land made in China
首批國產陸地型3MW風機併網

The furnace on trial operation 鍋爐實驗

The followings are the key regulations issued by the PRC Government and regulatory authorities which are expected to have a material effect on the Group's business, operation and financial conditions:

12th Five-year Plan for Development of New Materials Industry (《新材料產業「十二五」發展規劃》) (the "**Plan for New Materials Industry**") and *the Guidance Catalogue of Self-relied Innovation of Major Technical Equipment for 2012 (《重大技術裝備自主創新指導目錄(2012年)》)* (the "**Guidance Catalogue for 2012**"). On January 22, 2012, the PRC Ministry of Industry and Information Technology, the Ministry of Science and Technology, the Ministry of Finance and the State-owned Assets Supervision and Administration Commission jointly issued the Plan for New Materials Industry and the Guidance Catalogue for 2012. The Plan for New Materials Industry estimates that during the 12th Five-year Plan period, in the area of new energy, China's newly installed capacity of wind power, total installed capacity of solar power stations built during the period, and the installed capacity of nuclear power would reach 60.0 GW, 10.0 GW and 40.0 GW, respectively. In addition, the innovation focus projects listed in the Guidance Catalogue for 2012 include flue gas and NOx integrated control equipment and electric-bag composite fly ash removal equipment for coal-fired power plants.

以下為中國政府及相應監管機構頒佈的一系列主要法規，預期能對本集團的業務、經營和財務狀況產生實質性影響：

《新材料產業「十二五」發展規劃》(「**《新材料產業規劃》**」)及*《重大技術裝備自主創新指導目錄(2012年)》*(「**《指導目錄(2012年)》**」)。2012年1月22日，中國工業與信息化部、科技部、財政部和國有資產監督管理委員會聯合發佈了《新材料產業規劃》及《指導目錄(2012年)》。《新材料產業規劃》預計「十二五」期間，在新能源領域，我國新增風電裝機容量、建成太陽能電站總裝機容量、核能運行裝機容量將分別達到6,000萬千瓦、1,000萬千瓦、4,000萬千瓦。此外，《指導目錄(2012年)》中所列舉的重點創新項目包括煙氣脱硝、NOx集成控制裝備以及用於燃煤電站的電袋複合除塵設備。

The production line for the final assembly of wind turbines
風機總裝生產線

12th Five-year Plan for Development of Energy Conservation and Environmental Protection Industry (《「十二五」節能環保產業發展規劃》) (the "**Plan for Energy Conservation and Environmental Protection Industry**"). In June 2012, the PRC State Council issued the Plan for Energy Conservation and Environmental Protection Industry. The Plan for Energy Conservation and Environmental Protection Industry specifically stipulates that during the 12th Five-year Plan period, energy conservation and environmental protection industries should achieve an average year-on-year growth rate of at least 15.0%. It also stipulates that by 2015, the gross production of the environmental protection and energy conservation industries would reach approximately RMB4.5 trillion, with the amount of the increment being equal to approximately 2.0% of the PRC GDP. According to this Plan, the key measures to promote the energy conservation and environmental protection industries include tightening air pollution control, researching, developing and promoting flue gas denitrification technology and equipment for key industries, demonstrating and promoting flue gas desulfurization technology and equipment, upgrading flue gas desulfurization technology and equipment used by existing coal-fired power plants and large and medium scale industrial furnaces and accelerating the demonstration and application of the filter bag ash removal equipment, electric-bag fly ash removal technology and fine fly ash control technology.

《「十二五」節能環保產業發展規劃》（「**《節能環保產業規劃》**」）。2012年6月，中國國務院頒佈《節能環保產業規劃》，明確了在「十二五」期間，節能環保產業產值年均增長至少應在15.0%以上。到2015年，節能環保產業總值應達到人民幣約4.5萬億元，增加值佔國內生產總值的2.0%左右。《節能環保產業規劃》在節能環保產業領域的關鍵舉措是加大對大氣污染的控制力度，研發推廣重點行業煙氣脫硝技術與裝備，示範推廣非電行業煙氣脫硫技術與裝備，改造提升現有燃煤電廠、大中型工業鍋爐窯爐煙氣脫硫技術與裝備，加快先進袋式除塵器、電袋複合式除塵技術及細微粉塵控制技術的示範應用。

The generator of the 6MW double-fed offshore WTG
6MW海上雙饋風電機組發電機

12th Five-year Plan on Energy Conservation and Emission Reduction (《節能減排「十二五」規劃》) (the "**Plan for Energy Conservation and Emission Reduction**"). In September 2012, the PRC State Council promulgated the Plan for Energy Conservation and Emission Reduction. Among others, the Plan for Energy Conservation and Emission Reduction sets out the following targets: the amount of national SO_2 emissions in the PRC would be reduced by 8.0% from approximately 22.7 million tons in 2010 to approximately 20.9 million tons in 2015; and the amount of national NOx emissions in the PRC would be reduced by 10.0% from approximately 22.7 million tons in 2010 to approximately 20.5 million tons in 2015. Furthermore, the Plan for Energy Conservation and Emission Reduction stipulated that the amount of SO_2 emissions attributed to coal-fired power industry would be reduced by 16.0% from approximately 9.6 million tons in 2010 to approximately 8.0 million tons in 2015; and the amount of NOx emissions attributed to coal-fired power industry would be reduced by 29.0% from approximately 10.6 million tons in 2010 to approximately 7.5 million tons in 2015.

《節能減排「十二五」規劃》(「**《節能減排規劃》**」)。2012年9月，中華人民共和國國務院發佈《節能減排規劃》。《節能減排規劃》設定了以下目標：到2015年中國境內的二氧化硫和氮氧化物排放量將分別控制在大約20.9百萬噸和大約20.5百萬噸左右，比2010年的大約各22.7百萬噸左右分別減少8.0%和10.0%。《節能減排規劃》另行強調，到2015年中國境內火電行業二氧化硫和氮氧化物的排放量分別控制在800萬噸和750萬噸左右，相應地比2010年其各自排放量的9.6百萬噸和10.6百萬噸左右分別減少16.0%和29.0%左右。

12th Five-year Plan on Prevention and Control of Air Pollution in Key Areas (《重點區域大氣污染防治「十二五」規劃》) (the "**Plan on Prevention and Control of Air Pollution**"). In October 2012, the PRC Ministry of Environmental Protection, National Development and Reform Commission (the "**NDRC**") and the Ministry of Finance jointly issued the Plan on Prevention and Control of Air Pollution. It applies

《重點區域大氣污染防治「十二五」規劃》(「**《大氣污染防治規劃》**」)。2012年10月，國家環保部、國家發展與改革委員會(「**發改委**」)、財政部聯合發佈《重點區域大氣污染防治「十二五」規劃》。《大氣污染防治規劃》共涉及全國範圍內被選定為重點防治區

The first batch of low-NOx swirl chamber produced in 2012
2012年首批低氮旋流燃燒器

Environmental friendly factory under blue sky
藍天下的環保工廠

to 19 provinces which are designated to be the key areas for prevention and control of air pollution and requires SO_2 emission in the coal-fired industry must be further controlled. All coal-fired power generators must install the desulfurization equipment. The desulfurization equipment which is unable to comply with the emission standards stably must be upgraded. The overall effective desulfurization rate of the coal-fired power plants must reach 90.0% or above. Furthermore, the Plan on Prevention and Control of Air Pollution requires acceleration of the upgrade of low-NOx combustion equipment and installation of denitrification equipment of coal-fired power generators. It also requires that all current operating coal-fired power generators with unit capacity of more than 0.2 GW and operating history within 20 years shall have the effective denitrification rate and overall effective denitrification rate of more than 85.0% and 70.0%, respectively.

域的19個省份，強調深化對火電行業二氧化硫排放的治理：燃煤機組需全部安裝脱硫設施，對不能穩定達到排放標準的脱硫設備一必須進行升級改造以確保各火電站綜合脱硫效率達到90.0%或以上。另外，《大氣污染防治規劃》還要求加快燃煤機組低氮燃燒設備改造升級及脱硝設施建設，單機容量20萬千瓦及以上；投運年限20年內的現役燃煤機組全部配套脱硝設施，脱硝效率和綜合脱硝效率應分別達到85.0%及70.0%以上。

Notice on Several Issues Relating to Expand the Pilot Areas of Denitrification Tariff Subsidy Policy (《關於擴大脱硝電價政策試點範圍有關問題的通知》) (the "**Denitrification Tariff Notice**"). In December 2012, the NDRC issued the Denitrification Tariff Notice. The Denitrification Tariff Notice allowed coal-fired power generators nationwide with installed denitrification equipment to receive the denitrification tariff subsidy, which expanded the recipient group from those generators located in 14 provinces or cities to all over the country, effective from January 1, 2013. The standard amount of denitrification tariff subsidy remains to be RMB0.008/kWh.

《關於擴大脱硝電價政策試點範圍有關問題的通知》（「**《脱硝電價通知》**」）。2012年12月，國家發改委發佈《脱硝電價通知》。《脱硝電價通知》允許自2013年1月1日起對全國範圍內所有安裝脱硝設施的火電機組進行電價補貼，接受補貼的群體由14個省市擴大到全國。脱硝電價補貼標準仍為人民幣0.008元／千瓦時。

The first retrofitting project of low-NOx combustion furnaces completed in the USA
完成在美首個鍋爐低氮燃燒改造項目

The generator of the 6MW double-fed offshore WTG
6MW海上雙饋風電機組發電機

12th Five-year Plan for Implementation of Cleaner Industrial Production (《工業清潔生產推行「十二五」規劃》) (the "**Plan for Cleaner Production**"). In March 2012, the PRC Ministry of Industry and Information Technology, the Ministry of Science and Technology and the Ministry of Finance jointly issued the Plan for Cleaner Production. The Plan for Cleaner Production aims to further promote cleaner industrial production systems and production services. It sets the targets that in China, by 2015, through the implementation of projects and emission reduction of principal pollutants, more than 70.0% of the PRC companies in key industries (including the power industry) must achieve the "Advanced Cleaner Production Enterprise" status. When applied to the thermal power industry, criteria for Advanced Cleaner Production Enterprise mainly refer to (i) quantitative evaluations, based on factors including the power stations' energy and resources consumptions, comprehensive resources utilization and pollutant emission; and (ii) qualitative evaluations, based on factors including the power stations' use of the encouraged cleaner production technologies and cleaner production management, establishment of environmental management system and compliance with environmental regulations.

《工業清潔生產推行「十二五」規劃》(「**《清潔生產規劃》**」)。2012年3月，中國工業與信息化部、科技部和財政部聯合頒佈了《清潔生產規劃》。《清潔生產規劃》旨在進一步健全工業領域清潔生產機制，完善生產服務體系，以期到2015年，通過工程的實施及主要污染物排放量的減少，使得所有重點行業(包括電力)中70.0%以上的中國公司達到「清潔生產先進企業」水平。就火電行業而言，清潔生產先進企業的主要標準為：(i)定量評價指標，包括能源資源消耗指標、資源綜合利用指標和污染物排放指標；及(ii)定性評價指標，包括政策支持的清潔生產技術的應用、清潔生產管理及環境監管體系的確立以及相關環境法規的實際實施。

The deposition of amorphous silicon thin-film
非晶硅薄膜沉積

Opinions of the State Council on Implementing the Most Rigorous Water Resources Management System (《國務院關於實行最嚴格水資源管理制度的意見》) (the "**Opinions**"). In January 2012, the State Council issued the Opinions of the State Council on Implementing the Most Rigorous Water Resources Management System. The Opinions emphasize the importance to use and to conserve water resources efficiently and effectively in the PRC and establish national "red lines" (i.e. rigorous standards and targets) for 2015, 2020 and 2030, respectively, for the quantity and efficiency of water resources use and development, reducing water pollution and improving the water quality. The Opinions also require all PRC governments to establish an effective implementing mechanism to achieve the various targets relating to water resources management and to encourage the development of water conservation and water treatment businesses.

《國務院關於實行最嚴格水資源管理制度的意見》(「《**最嚴格水資源管理制度意見**》」)。2012年1月，國務院發佈《最嚴格水資源管理制度意見》。《最嚴格水資源管理制度意見》強調必須在中國境內對水資源進行有效地利用和保存。該意見在全國範圍內分別為水資源利用和開發的質量和效率、水資源污染程度限定及水資源質量的提升設定了2015年度、2020年度和2030年度的「紅線」(即設定了嚴格標準和指標)。同時，為了完成上述與水資源管理相關的指標，意見要求中國各政府部門建立高效的實施機制，鼓勵水資源保護和水處理行業的發展。

12th Five-year Plan for Development of Wind Power (《風電發展「十二五」規劃》) (the "**Plan for Wind Power Development**"). In July 2012, the PRC National Energy Administration issued the Plan for Wind Power Development. Among others, the Plan for Wind Power Development sets specific targets for PRC wind power development during the 12th Five-year Plan period: (1) total wind power cumulative installed capacity having commenced operation must reach 100.0 GW, among which the cumulative installed capacity of offshore wind power must reach 5.0 GW by 2015; (2) breakthroughs must be made in Wind Turbine Generators ("**WTGs**") designs; key components manufacturing technologies and the manufacturing capabilities of offshore wind power equipment must be enhanced. The Plan for Wind Power Development further provides that the scale development of wind power industry must be promoted continuingly after the 12th Five-year period and by 2020, total wind power cumulative installed capacity must be more than 200.0 GW, among which the cumulative installed capacity of offshore wind power must reach 30.0 GW.

《風電發展「十二五」規劃》(「《**風電發展規劃**》」)。2012年7月，國家能源局頒佈了《風電發展規劃》。《風電發展規劃》為「十二五」期間中國風電發展制定了具體指標：(1)到2015年，已運行的風電累計裝機容量需達到1億千瓦，其中海上風電累計裝機容量需達到500萬千瓦；(2)中國風電機組整機設計需取得實質性突破，增強風電機組核心部件和海上風電設備製造能力。《風電發展規劃》進一步規定，要在「十二五」後繼續推動風電行業的規模化發展，到2020年，風電累計總裝機容量需超過2億千瓦，其中海上風電累計裝機容量需達到3,000萬千瓦。

12th Five-year Plan for Development of Solar Photovoltaic Industry (《太陽能光伏產業「十二五」發展規劃》) (the "**Plan for Solar Photovoltaic Industry**"). In February 2012, the PRC Ministry of Industry and Information Technology promulgated the Plan for Solar Photovoltaic Industry as a guidance for the development of solar photovoltaic industry during the 12th Five-year period. The Plan for Solar Photovoltaic Industry states that China's solar photovoltaic industry has experienced rapid development and has become one of a few industries in the PRC capable to compete in the international market and potentially to hold a market leading position globally. Promoting the development of solar photovoltaic industry has great importance to industrial transformation and upgrade, energy structure adjustments, energy conservation and emission reduction for the PRC. The PRC Government has listed solar photovoltaic industry as a strategic emerging industry which China intends to develop further in the future. The main objectives for the solar photovoltaic power industry during the 12th Five-year Plan period include developing critical technologies relating to the photovoltaic grid connected systems and energy storage equipment and significantly reducing photovoltaic power generation cost, which is expected to be reduced to RMB0.8/kWh by 2015.

《太陽能光伏產業「十二五」發展規劃》(「《**光伏產業規劃**》」)。2012年2月，中國工信部公佈《光伏產業規劃》，作為我國「十二五」期間光伏產業發展的指導性文件。該規劃認為中國太陽能光伏產業發展迅速，已成為我國為數不多的、可以同步參與國際競爭、並有望達到國際領先水平的行業。加快太陽能光伏產業的發展，對於實現我國工業轉型升級、能源結構調整、推進節能減排均具有重要意義。中國政府已將太陽能光伏產業視為極具戰略性意義的新興產業並有望在未來得到長足發展。「十二五」期間，光伏產業要實現的主要目標包括：開發光伏併網、儲能設備等關鍵性技術；與此同時，大幅降低光伏發電成本，以期到2015年，發電成本下降到人民幣0.8元／千瓦時。

12th Five-year Plan for Development of Solar Power Generation (《太陽能發電發展「十二五」規劃》) (the "**Plan for Solar Power Development**"). In September 2012, the PRC National Energy Administration issued the Plan for Solar Power Development. According to the Plan for Solar Power Development, by 2015, total installed capacity of solar power must reach 21.0 GW and power generated per year must reach 25.0 billion kW/h. The Plan estimates that a total investment of approximately RMB250.0 billion is needed in order to achieve the above targets. The Plan for Solar Power Development further requires that the scale development of the solar power industry must be promoted continuously after the 12th Five-year Plan period and that the total installed capacity of solar power must reach 50.0 GW by 2020.

《太陽能發電發展「十二五」規劃》（「**《太陽能發電發展規劃》**」）。2012年9月，國家能源局發佈《太陽能發電規劃》。根據《太陽能發電規劃》，到2015年底，太陽能發電裝機總容量需達到2,100萬千瓦，年發電量需達到250億千瓦時。上述目標的實現預計需要投資約人民幣2,500億元。該《太陽能發電規劃》進一步要求在第十二個五年計劃的目標實現後應繼續推動太陽能產業的規模化發展，到2020年太陽能發電總裝機容量需達到5,000萬千瓦。

Key Business Developments

Effective capturing of growth opportunities arising from regulatory changes and continuing expansion of production and operation scales in the environmental protection and energy conservation solutions businesses. The issuance of new regulatory initiatives by the PRC Government and regulatory authorities on environmental protection and energy conservation applicable to PRC power and power related industries described in the section headed "Key Industry Developments" stimulated the demand for our Group's environmental protection and energy conservation solutions, creating significant growth opportunities for the Group's businesses. The Group entered into new desulfurization engineering, procurement and construction ("**EPC**") contracts with capacities at approximately 7,100.0 MW in 2012. The cumulative installed capacity of desulfurization concession operations of the Group as of December 31, 2012 reached to 30,890.0 MW, representing an increase of 4,960.0 MW, or 19.1%, from 25,930.0 MW as of December 31, 2011. During 2012, the Group also entered into new denitrification EPC contracts and denitrification concession operation contracts with capacities of approximately 27,290.0 MW and 1,600.0 MW, respectively. The Group also entered into new low-NOx combustion contracts with a total contract value of more than RMB1.0 billion in 2012. As of December 31, 2012, the Group's production capacity of SCR denitrification catalysts reached 16,000.0 m^3 per year.

The Group's build-own-transfer ("**BOT**") water treatment capacity increased to approximately 1.5 million tons per day as of December 31, 2012, as a result of the Group's acquisition of Galaxy Water Treatment Limited Company (銀河水務股份有限公司) ("**Galaxy Water**") in May 2012. For its energy conservation business, the Group in 2012 entered into 27 new energy management contracts ("**EMC**") with the total amount of contract value of approximately RMB623.6 million. Furthermore, in 2012, in the overseas market, the Group successfully completed its low-NOx denitrification retrofitting project located in the United States of America, which passed all technical parameters specified by the project owner. The Group also entered into a comprehensive energy conservation and environmental protection retrofitting cooperation agreement in Russia to provide its plasma-assisted coal combustion technology, frequency conversion technology, heat pump and filter bags ash removal products and solutions. The Group also entered into new plasma-assisted coal combustion services contracts in Korea and Turkey.

主要業務發展

努力抓住政策監管變動帶來的發展機遇，不斷擴張在環保及節能解決方案業務的生產經營規模。「主要行業發展」一節所闡述的中國政府及監管機構頒佈的多項適用於中國電力及與電力相關行業的關於環保和節能的新法規刺激了本集團環保節能各項解決方案的市場需求，為本集團的業務增長帶來重要契機。2012年，本集團新簽訂了總量約7,100.0兆瓦的脱硫工程、採購及建造（「**EPC**」）合約。截至2012年12月31日，本集團脱硫特許經營的累計裝機總量達到30,890.0兆瓦，比2011年12月31日的25,930.0兆瓦增加4,960.0兆瓦，即增加19.1%。2012年，本集團還簽訂了新的脱硝EPC合約及新的脱硝特許經營合約，裝機容量分別為27,290.0兆瓦和1,600.0兆瓦左右。此外，2012年度內，本集團簽署了多份低氮燃燒合同，總的合同價值超過了人民幣10億元。截至2012年12月31日，本集團SCR脱硝催化劑的年產能達到16,000立方米。

自2012年5月本集團完成了對銀河水務有限公司（「**銀河水務**」）的收購，本集團的水務運營能力大幅提升。截至2012年12月31日，本集團的日均建設、營運及移交（「**BOT**」）水務擁有量增至大約150萬噸／天。關於節能業務，2012年，本集團新簽訂合同能源管理（「**EMC**」）合同27個，合同總金額約合人民幣623.6百萬元。此外，在海外市場方面，2012年，本集團成功完成了在美國的低氮改造項目，項目涉及的所有技術指標均達到了業主指定要求。本集團還在俄羅斯簽署了綜合節能環保改造合作協議，以提供等離子點火技術、變頻技術以及熱泵和布袋除塵等產品和解決方案。同時本集團也在韓國和土耳其簽訂了新的等離子體點火合同。

Steady growth of the wind power products and services business despite challenging market conditions. 2012 was a challenging year for WTG manufacturers in the PRC, with a reduction in investment in the PRC wind power industry, caused by unresolved issues of wind power curtailment and on-grid connection. In 2012, the Group's wind power products and services business recorded an increase in revenue of approximately RMB1,951.3 million, or 21.2%, as compared to 2011, due to the Group's continuing efforts in promoting this business and its competitive advantages in the WTG technologies, access to its clientele, brand name, and the quality of its products and after-sales services. The Group's WTG sales volumes by product types during the years are set forth below:

面對不理想的市場條件，風電產品及服務的業務穩定增長。對於中國風機製造商而言，2012年是具有挑戰性的一年。因為中國風電限電和併網困難的問題，風力發電行業增長緩慢，投資減少。憑藉本集團在提升業務上的不斷努力以及在風機技術、客戶渠道、風力發電機組良好質量以及出色的售後服務上的競爭優勢，在2012年，本集團風電產品及服務業務的收入較2011年增長人民幣約1,951.3百萬元，增長21.2%。本集團在近兩年的風力發電機組銷量按產品類型的統計數據如下：

		Completed Sales 完成銷售 (units) （套）		**Orders 訂單 (units) （套）**	
		2012	2011	**As of December 31, 2012 於2012年12月31日**	
				Confirmed orders 已確認訂單	**Successful tenders 成功競標**
1.5 MW	1.5兆瓦	**2,005**	1,596	**1,680**	**729**
2.0 MW	2.0兆瓦	**83**	—	**195**	**155**
3.0 MW	3.0兆瓦	**25**	15	**—**	**282**
Total	**合計**	**2,113**	**1,611**	**1,875**	**1,166**

Maintaining and strengthening market leader position across business lines and segments. In 2012, the Group maintained its market leading positions in the PRC in its various business operations. According to the information published by the China Electricity Council, in the desulfurization services sector, the Group was the largest desulfurization EPC service provider in terms of newly installed capacity for the year ended December 31, 2012 and cumulative installed capacity as of December 31, 2012, and the largest desulfurization concession operator in terms of the cumulative contracted capacity as of December 31, 2012. In the denitrification services sector, the Group was the largest EPC service provider in terms of newly installed and contracted capacity for the year ended December 31, 2012 and the cumulative installed capacity as of December 31, 2012, and the largest denitrification concession operator in terms of cumulative contracted capacity as of December 31, 2012. The Group's annual production capacity for SCR denitrification catalysts ranked the second and the installed capacity of the generators equipped with SCR denitrification catalysts ranked the third in the PRC. In terms of the energy conservation business, the Group maintained a leading position in the plasma ignition and tiny-oil ignition businesses. According to the Chinese Wind Energy Association, Guodian United Power Technology Co., Ltd. (國電聯合動力技術有限公司) ("**United Power**"), the Group's

維持及加強業務及分部的市場領導地位。2012年，本集團繼續維持其所有於中國市場若干業務的領先地位。根據中國電力企業聯合會公佈的信息，在脱硫服務領域，本集團是最大的脱硫EPC服務供貨商（就截至2012年12月31日的年度新裝機容量以及截止至2012年12月31日的總累計裝機容量而言），也是最大的脱硫特許經營者（就截至2012年12月31日的累計簽訂合同容量而言）。在脱硝服務領域，本集團是最大的EPC服務供貨商（就截至2012年12月31日的年度新裝機容量及合約量以及截至2012年12月31日的累計總裝機容量而言），也是最大的脱硝特許經營者（就截至2012年12月31日的累計簽訂合同量而言），並擁有全國第二大的催化劑產能和全國第三大的脱硝催化劑配套使用的機組容量。節能業務方面，本集團等離子點火、微油點火業務繼續保持領先優勢。根據中國風能協會公佈的數據顯示，就2012年新增裝機容量而言，國電聯合動力技術有限公司（「**聯合動力**」）（本集團附屬公司同時也是本集團範圍內提供風

subsidiary and the primary platform for the wind power products and services business, was the second largest WTG manufacturer in the PRC in terms of newly installed capacity in 2012; it was the third largest WTG manufacturer in the PRC in 2011. According to BTM Consult ApS, United Power was the seventh largest WTG manufacturer globally in terms of newly installed capacity in 2012. According to rankings compiled by IMS Research (IHS) and published on the March 2013 issue of the PV Magazine, Guodian Solar (Jiangsu) Co., Ltd. (國電光伏(江蘇)有限公司) ("**Guodian Solar**"), which is the Company's subsidiary and the primary platform for the Group's solar products and services business, was the seventh largest solar power EPC general contractor globally and ranked second among all PRC companies mentioned in the rankings, based on the newly installed capacity in 2012.

能產品和服務的主要平台)是中國境內第二大風力發電機組製造商,聯合動力在2011年在中國境內排名第三。根據BTM Consult ApS,就2012年新增裝機容量而言,聯合動力為全球第三大風力發電機組製造商。依據光伏雜誌(PV Magazine)2013年3月刊,本集團內太陽能產品與服務的主要平台 — 本公司的附屬公司國電光伏(江蘇)有限公司(「**國電光伏**」)在IMS研究公司發佈的依據2012年新增裝機容量而定的2012年全球太陽能EPC總承包公司排名中位居全球第七,於所有上榜中國公司中位居第二。

Further development in WTG technology and diversification of WTG product lines and services. The Group has been dedicated to the innovation of the WTG technologies and achieved significant developments in 2012. On December 10, 2012, the Group completed the installation of five WTGs for super high altitude areas on the plateau with the altitude of over 4,500 meters. The Group also developed its 6 MW WTG and successfully connected it on-grid in 2012. In September 2012, the Group's WTG pitch control system obtained the CE certificate issued by Ente Certificazione Macchine, and therefore received export permission to the European Union countries. The Group also adopted a new production and sales model of "mobile factory", through which the Group assembles parts and components of WTGs into final products at a temporary or leased plant near the site of its customer's wind farm. The "mobile factory" model is expected to enable the Group to effectively reduce transportation costs in relation to sales of the WTG products. Furthermore, the Group further developed its WTG maintenance and repair services in 2012 by having established five regional management centers and a supporting spare parts storage system for the WTG maintenance and repair services, supported by a team of experienced technicians.

風力發電機組技術進一步發展、產品和服務進一步豐富。在2012年,本集團不斷致力於風力發電機組相關技術的創新,並取得了實質性進展。2012年12月10日,本集團在海拔4,500多米的高原上完成5台超高海拔風機的組裝工作。此外,本集團研發了自己的6MW風電機組,並於2012年度內成功實現併網。2012年9月,本集團的風電變槳控制系統獲得了Ente國際認證檢測中心(ENTE CERTIFICAZIONE MACCHINE)核發的CE(即CONFORMITE EUROPEENNE)符合性證書,該產品也因此擁有了進入歐盟市場的「通行證」。同時,集團還採用了一種新型的生產和銷售模式「移動工廠」,基於這種模式,集團能夠在客戶的風電場附近的臨時工廠或租賃工廠內將風力發電機組的零部件組裝成為成品。預計「移動工廠」模式能夠有效降低集團在風力發電機組產品銷售方面的運輸費用。此外,在風機設備運行維護服務方面,本集團於2012年繼續拓展這一領域的支持業務:現已建成五大區域管理中心和一個備用配件倉儲系統並有一支技術骨幹團隊給予及時的技術服務與支持。

Diversification of financing sources and successful completion of the issuance of its corporate bonds. The Company completed the issue of its domestic corporate bonds (the "**Corporate Bonds**") with an aggregate principal amount of RMB4.0 billion on August 22, 2012. The issuance of the Corporate Bonds is part of the Company's efforts to further diversify its financing sources to reduce financing costs and to optimize the Company's debt structure. See also "— Analysis of 2012 Financial Results — Indebtedness" for more details.

豐富及拓寬融資渠道,成功發行公司債券。本公司已於2012年8月22日完成本金總額為人民幣40億元的境內公司債券(「**公司債券**」)發行。公司債券發行有助於進一步豐富本公司的融資渠道,降低本集團的利息和融資成本並優化本公司的債務結構。另參見「— 2012年財務業績分析 — 債項」。

Continuing efforts in technological innovation and research and development. The Group achieved significant technological breakthroughs in 2012. The Group's in-furnace denitrification technologies successfully applied in over 100 power plants. The Group successfully applied its cutting-edge low-NOx technology in the Scientific and Technological Showcase Project of 600 MW Unit Dual-Scale Super Low-NOx Combustion for Guohua Ninghai Power Plant (國華寧海電廠600MW機組雙尺度超低NOx科技示範項目), which are able to reduce the NOx level to below 100mg/Nm^3 and is remarkably high in the world. The Group also accomplished the "W" Shape Flame Furnace Plasma Ignition project ("W"型火焰鍋爐等離子點火項目) in Xingyang Power Plant, Inferior Coal Plasma Ignition Project (「劣質煤等離子點火項目」) in Changzhi Power Plant and Key Showcase Project of 600 MW Unit Wall Combustion Low-NOx retrofitting project (「600 MW機組牆式燃燒鍋爐低氮改造重點示範項目」) in Changzhou Power Plant during 2012, all of which expanded the application of the Group's technologies and received positive feedbacks from the market, and thus are expected to benefit the Group by bringing in a larger group of clients. The Group also achieved important technological breakthroughs in its solar power products technologies. The conversion rates of the gallium arsenide solar cell developed by the Group reached 33.0% and 40.0% under haploid light condition and under concentrated light condition, respectively. On August 3, 2012, the Group's 500kW photovoltaic inverter passed the low voltage ride through capacity ("**LVRT**") full-function test by the National Energy Solar Center of China Electric Power Research Institute. The Group also achieved significant breakthroughs in WTG technologies. Please refer to "-Key Business Developments - Further development in WTG technology and diversification of WTG product lines and services" for more information.

致力於技術革新和研發。2012年，本集團取得意義深遠的技術突破。本集團的爐內脱硝技術成功應用於100多家發電廠。同時，本集團成功將低NOx燃燒技術應用在國華寧海電廠600MW機組雙尺度超低NOx科技示範項目中，能夠將NOx濃度降低至100毫克／Nm^{3}以下，達到國際領先水平。2012年，本集團還成功完成了滎陽電廠「W」型火焰鍋爐等離子點火項目，長治電廠劣質煤等離子點火項目以及在常州電廠600MW機組墻式燃燒鍋爐低氮改造重點示範項目，以上這些均擴大了集團科技的應用，收到良好的市場反饋，有望為本集團帶來更多客戶。本集團還在太陽能產品科技上取得了重要技術突破。本集團研發的砷化鎵電池在單倍光條件下及聚光條件下，轉換效率分別達到33%及40%。2012年8月3日，本集團自主研發的500KW光伏逆變器產品順利通過中國電力科學研究院國家能源太陽能發電研發(實驗)中心低電壓穿越(「**LVRT**」)全功能測試認證。報告期內，本集團的風力發電機組亦取得了重要技術突破。欲了解更多信息，請參考「—主要業務發展 — 風力發電機組技術進一步發展、產品和服務進一步豐富」。

The Group received a spectrum of industrial recognitions and awards in 2012 for its achievements in technology innovations and research and development:

- In April 2012, the Digitized Implementation of the Field Bus Technology project (「現場總線技術的數字化執行項目」) was awarded the China Electric Power Technology Award Third Prize;
- In July 2012, the Industrial Application of Oil-free Coal-fired Power Plant Integration Technologies (「無燃油燃煤電廠成套技術的產業化應用」) project received financial support from the National Projects of Transformation of Key Scientific and Technological Achievements;
- In October 2012, the Research on Flue Gas Desulfurization Engineering Technology Specification (「煙氣脱硫工程技術規範研究」) project jointly carried out by the Group and other participants was awarded 2011 National Environmental Protection Science and Technology Second Prize;

本集團在技術和產品創新和研發方面取得的卓越成就使本集團在2012年獲得多項行業肯定及獲頒多項獎項：

- 2012年4月，「現場總線技術的數字化執行項目」獲得中國電力科學技術獎三等獎。
- 2012年7月，「無燃油燃煤電廠成套技術的產業化應用」項目獲得國家重大科技成果轉化項目資助。
- 2012年10月，本集團以及其他參與者共同參與的「煙氣脱硫工程技術規範研究」項目榮獲2011年度國家環境保護科學技術二等獎。

- Pulverized Furnace Dual-scale Low-NOx Combustion Technology (「煤粉鍋爐雙尺度低NOx燃燒技術」) was awarded National Energy Administration Technology Advancement Second Prize and "Pulverized Furnace Dual-Scale Low-NOx Combustion Equipment" (「煤粉鍋爐雙尺度低NOx燃燒設備」) was listed as one of 2012 National Key New Products; and

- The Group undertook a sub-project named as Research on Technologies for Recovering Residual Heat and Water from Smoke Emission of Power Station Furnace (「電站鍋爐排煙餘熱及水份回收技術研究」) under the Key Technology Research and Development Projects in the 12th Five-year Plan of the PRC (「十二五」國家主要科技研發項目) named as Key Technologies and Demonstration of Residual Heat and Surplus Energy Recovery and Exploitation (「餘熱餘能回收利用關鍵技術及示範」).

- 「煤粉鍋爐雙尺度低NOx燃燒技術」獲得國家能源局技術進步二等獎，「煤粉鍋爐雙尺度低NOx燃燒設備」被列為2012年國家重點新產品。

- 本集團承接「十二五」國家主要科技研發項目「餘熱餘能回收利用關鍵技術及示範」下的項目子課題「電站鍋爐排煙餘熱及水份回收技術研究」。

ANALYSIS OF 2012 FINANCIAL RESULTS

Please read this section in conjunction with the audited consolidated financial results of the Company as of, and for the year ended, December 31, 2012.

Analysis of Consolidated Results

Revenue

Revenues of the Group in 2012 were approximately RMB21,776.5 million, representing an increase of approximately RMB3,069.5 million, or 16.4% from RMB18,707.0 million in 2011, mainly due to the growth in wind power products and services and environmental protection businesses. Revenues in the wind power products and services and environmental protection businesses increased by approximately RMB1,951.3 million and RMB1,592.8 million as compared to 2011, which represent percentage increases of approximately 21.2% and 37.4%, respectively. The increase in revenue generated from wind power products and services business was primarily attributable to the Group's continuing efforts in expanding this business. The revenue increase in the environmental protection business was primarily due to policies issued by the PRC Government in late 2011 and in 2012 as well as the Group's leading position in this business segment. These increases were partially offset by a decrease of revenue from the Group's solar power products and services business. The decrease in revenue from the solar power products services business was due to a decrease in revenue in the solar cells and modules manufacturing business resulting from the Group's disposals of Guodian Jintech Solar Energy Technology (Yixing) Co., Ltd. (國電晶德太陽能科技(宜興)有限公司) ("**Jintech**") and Guodian Ningxia Solar Co., Ltd. (國電寧夏太陽能有限公司) ("**Ningxia Solar**") in June 2011 and August 2011, respectively, both of which were primarily engaged in manufacturing and sales of solar power products, and the consequential deconsolidation of results of Jintech and Ningxia Solar from the Group's results in 2012.

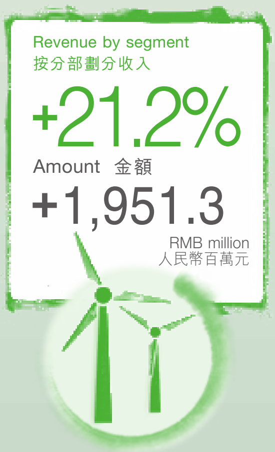
2012年財務業績分析

閱讀本節時請一併閱讀於2012年12月31日及截至該日止年度本公司經審核的合併財務業績。

合併業績分析

收入

2012年，本集團收入約為人民幣21,776.5百萬元，與2011年的約人民幣18,707.0百萬元相比，約增長人民幣3,069.5百萬元或16.4%，收入增長的主要原因是風電產品及服務、環保業務的增長。與2011年相比，該等風電產品及服務與環保業務的收入分別增長約為人民幣1,951.3百萬元、人民幣1,592.8百萬元，增長率分別約為21.2%、37.4%。風電產品及服務業務產生的收入增長主要歸功於本集團在該業務領域爭取發展壯大的不懈努力。環保業務產生的收入增長主要受益於中國政府在2011年年底及2012年頒佈的支持政策以及本集團在該領域的領導地位。太陽能產品及服務業務所產生收入的減少額抵銷了上述部分收入增長額。太陽能產品及服務業務產生的收入減少是因為本集團分別於2011年6月和2011年8月出售了國電晶德太陽能科技(宜興)有限公司(「**晶德**」)和國電寧夏太陽能有限公司(「**寧夏太陽能**」)(均主要從事太陽能產品的製造和銷售)且這兩家公司的業績未併入到本集團2012年度業績之內。



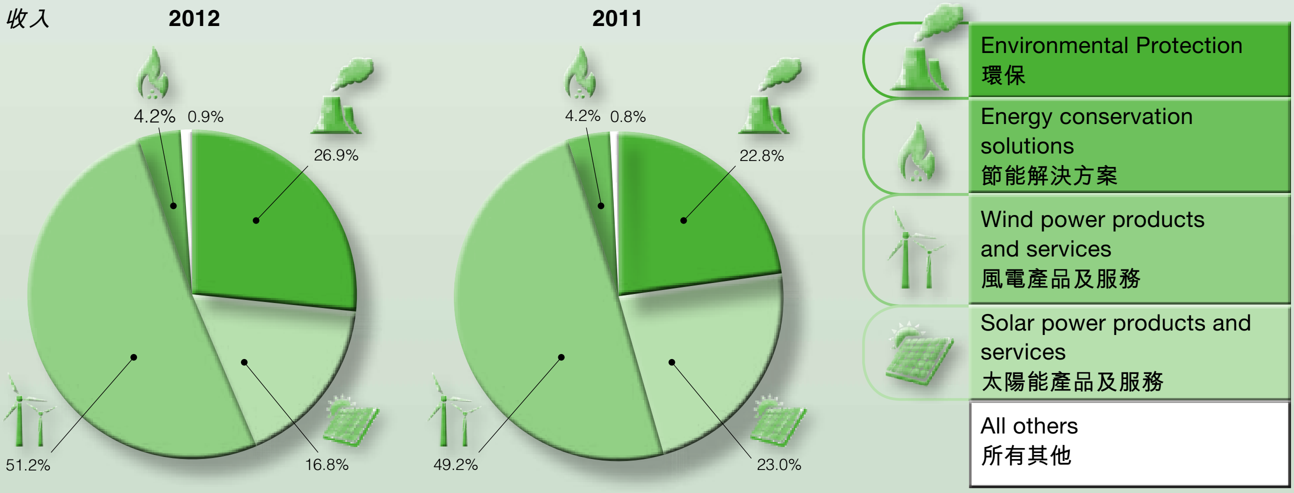
The following table sets out the Group's revenue by segment and as a percentage of total revenues of the Group for the years ended December 31, 2012 and 2011, respectively:

下表分別載列截至2012年及2011年12月31日止年度按分部劃分的本集團收入及其佔本集團總收入的百分比：

		2012 (RMB million) (人民幣百萬元)	**%**	2011 (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	環保	**5,855.4**	**26.9**	4,262.6	22.8
Energy conservation solutions	節能解決方案	**919.6**	**4.2**	788.7	4.2
Total	**合計**	**6,775.0**	**31.1**	5,051.3	27.0
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	**11,161.2**	**51.2**	9,209.9	49.2
Solar power products and services	太陽能產品及服務	**3,649.3**	**16.8**	4,295.0	23.0
Total	**合計**	**14,810.5**	**68.0**	13,504.9	72.2
All others[(1)]	所有其他[(1)]	**191.0**	**0.9**	150.8	0.8
Total	**合計**	**21,776.5**	**100.0**	18,707.0	100.0

Revenue

收入



Note:

(1) Revenues included under this category are mainly from the wind power generation by wind farms, other power related products and rental of properties.

備註：

(1) 屬於該範疇的收入主要來自風電場風力發電、其他電力相關產品以及租賃物業。

Cost of sales

Cost of sales for the Group increased by approximately RMB2,471.6 million, or 15.5%, from RMB15,924.3 million in 2011 to RMB18,395.9 million in 2012. This was primarily attributable to increases in cost of sales in wind power products and services and environmental protection businesses, partially offset by the decrease in cost of sales in solar power products and services business.

The following table sets out the Group's cost of sales by segment and as a percentage of total cost of sales of the Group for the years ended December 31, 2012 and 2011, respectively:

銷售成本

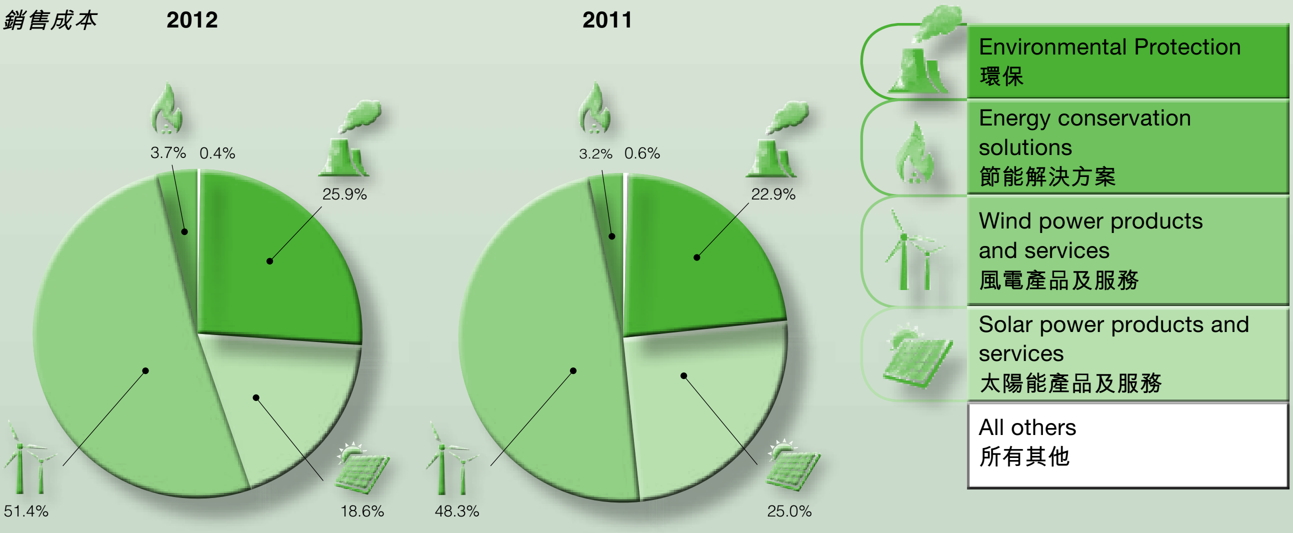
2012年本集團銷售成本為人民幣18,395.9百萬元，較2011年的人民幣15,924.3百萬元約增長人民幣2,471.6百萬元或15.5%。增長的主要原因是風電產品及服務、環保業務銷售成本增長，但太陽能產品及服務業務的銷售成本減少額抵銷了上述部分銷售成本增長額。

下表分別載列截至2012年及2011年12月31日止年度按分部劃分的本集團銷售成本及其佔本集團總銷售成本的百分比：

		2012		2011	
		(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	環保	**4,761.3**	**25.9**	3,639.0	22.9
Energy conservation solutions	節能解決方案	**677.6**	**3.7**	511.9	3.2
Total	**合計**	**5,438.9**	**29.6**	4,150.9	26.1
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	**9,455.9**	**51.4**	7,687.9	48.3
Solar power products and services	太陽能產品及服務	**3,430.8**	**18.6**	3,986.8	25.0
Total	**合計**	**12,886.7**	**70.0**	11,674.7	73.3
All others	所有其他	**70.3**	**0.4**	98.7	0.6
Total	**合計**	**18,395.9**	**100.0**	15,924.3	100.0

Cost of sales

銷售成本



Gross profit and gross profit margin

For the foregoing reasons, the gross profit of the Group increased by approximately RMB597.9 million, or 21.5%, from approximately RMB2,782.7 million in 2011 to approximately RMB3,380.6 million in 2012. The average gross profit margin across all segments of the Group increased from 14.9% in 2011 to 15.5% in 2012. This increase was primarily attributable to an increase in the gross profit margin in the environmental protection business, partially offset by decreases in gross profit margins in the energy conservation solutions, wind power products and services and solar power products and services businesses. The gross profit margins in several business lines of the Group's environmental protection business segment increased during 2012. The decrease in the average gross profit margin in the energy conservation solutions segment was primarily due to the decreases in gross profit margins in the Group's EMC and plasma-assisted coal ignition and combustion stabilization businesses. The decrease in the average gross profit margin in the wind power products and services segment was primarily attributable to intense market competition and maturing of the WTG manufacturing business, which resulted in continued declines in the average selling prices for WTG units on an industry-wide basis, partially offset by declines in prices of raw materials and components used in the WTG manufacturing process during the period. The decrease in the average gross profit margin in the solar power products and services business was primarily attributable to the sharp decrease in the gross profit margin in solar power cells and modules manufacturing business, partially offset by an increase in the gross profit margin in the solar power EPC business.

毛利及毛利率

鑒於上述原因，本集團2012年的毛利與2011年相比約增長人民幣597.9百萬元或21.5%（2011年本集團毛利約為人民幣2,782.7百萬元，2012年本集團毛利約為人民幣3,380.6百萬元）。本集團所有分部平均毛利率從2011年的14.9%增長至2012年的15.5%。毛利增長主要是因為環保業務毛利率的增長，但節能解決方案業務、風電產品及服務以及太陽能產品及服務業務的毛利率減少額抵銷了上述部分環保業務毛利率的增長額。2012年，本集團環保業務的各業務鏈的毛利率有所增長。節能解決方案業務的平均毛利率下降主要是因為本集團EMC及等離子體點火及穩燃業務的毛利率下降。風電產品及服務業務的平均毛利率下降主要是因為激烈的市場競爭和成熟的製造工藝，以致行業總體風力發電機組平均售價下跌所致，但有關下降部分被期內風力發電機組製造過程所用的原材料和零部件價格下降額部分抵銷。太陽能產品及服務業務的平均毛利率下降主要是因為太陽能電池及組件製造業務的毛利率的急劇下降，但有關下降部分被太陽能EPC業務毛利率的增長額部分抵銷。

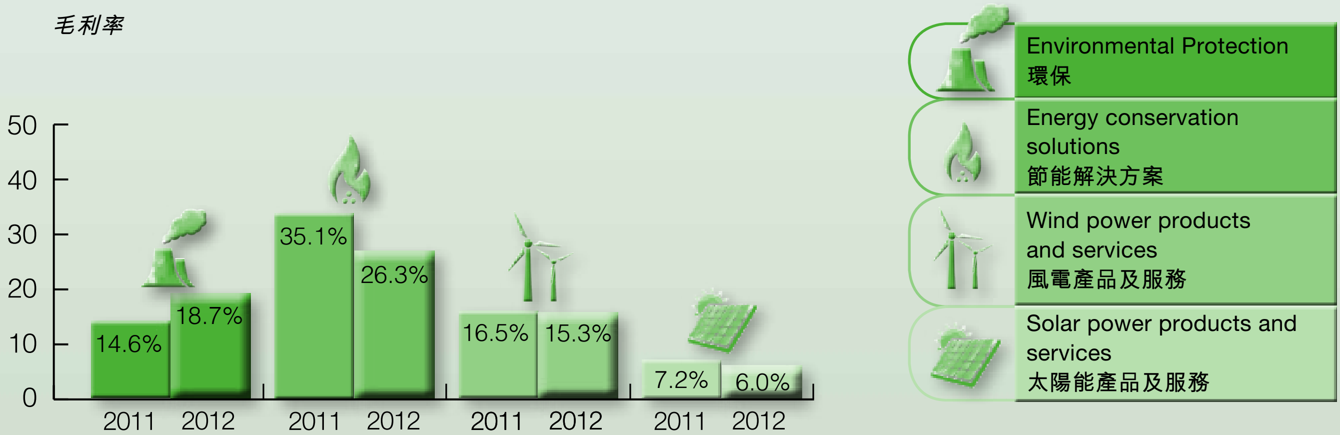
The following table sets out the Group's gross profit and gross profit margins by segment for the years ended December 31, 2012 and 2011, respectively:

下表分別載列截至2012年及2011年12月31日止年度按分部劃分的本集團毛利和毛利率：

		2012 (RMB million) （人民幣百萬元）	%	2011 (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	環保	**1,094.1**	**18.7**	623.6	14.6
Energy conservation solutions	節能解決方案	**242.0**	**26.3**	276.8	35.1
Total	**合計**	**1,336.1**	**19.7**	900.4	17.8
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	**1,705.3**	**15.3**	1,522.0	16.5
Solar power products and services	太陽能產品及服務	**218.5**	**6.0**	308.2	7.2
Total	**合計**	**1,923.8**	**13.0**	1,830.2	13.6
All others	所有其他	**120.7**	**63.2**	52.1	34.5
Total	**合計**	**3,380.6**	**15.5**	2,782.7	14.9

Gross profit margin

毛利率



Other revenues

Other revenues increased by approximately RMB116.4 million, or 33.1%, from approximately RMB352.0 million in 2011 to approximately RMB468.4 million in 2012. This increase was primarily due to additional subsidies granted by the PRC Government during the period for the Group's research and development projects and other operational activities.

其他收入

2012年，其他收入約人民幣468.4百萬元，較2011年的約人民幣352.0百萬元增長約人民幣116.4百萬元或33.1%。增長主要是因為期內中國政府授予集團研發項目以及其他經營活動的補助。

Other net (losses) /income

The Group recorded other net losses of approximately RMB5.6 million in 2012, compared with other net income of approximately RMB278.3 million in 2011. The change between the two years was primarily due to the one-off income recognized from disposals of the Group's equity interests in certain companies during the re-organization process in 2011. The net loss in 2012 was primarily due to an adjustment of consideration of approximately RMB34.5 million paid to the acquirer of Jintech's equity interests, disposed of by the Group in 2011, and a net foreign exchange loss of approximately RMB17.6 million mainly incurred by the Group's solar products and services business, partially offset by an income of approximately RMB39.4 million from sales of raw materials for the environmental protection business.

其他（虧損）╱收益淨額

本集團在2012年內錄得其他虧損淨額約人民幣5.6百萬元，而截至2011年12月31日止的2011年的其他收益淨額約為人民幣278.3百萬元。這兩年間變化的主要原因在於在2011年重組期間由於處置本集團在若干公司中的股權而取得的一次性收益。在2012年，該筆虧損淨額主要是由於向晶德的股權（本集團於2011年處置）的收購方支付約人民幣34.5百萬元的對價調整以及本集團太陽能產品及服務業務產生的約人民幣17.6百萬元的匯兑虧損淨額所致，但本集團環保業務出售原材料獲得的約人民幣39.4百萬的收益抵銷了上述部分虧損。

Selling and distribution expenses

Selling and distribution expenses increased by approximately RMB45.6 million, or 7.2%, from approximately RMB635.0 million in 2011 to RMB680.6 million in 2012. This increase was primarily attributable to the increase in WTG transportation expenses incurred in relation to WTG sales.

銷售及分銷開支

2012年，銷售及分銷開支約人民幣680.6百萬元，較2011年的約人民幣635.0百萬元增長約人民幣45.6百萬元或7.2%。增長主要是由有關風力發電機組銷售的風力發電機組運輸成本增加所致。

Administrative expenses

Administrative expenses increased by approximately RMB175.4 million, or 15.7%, from RMB1,115.5 million in 2011 to approximately RMB1,290.9 million in 2012. This increase was primarily attributable to increased wage and salary expenses from an increase in the number of the Group's employees resulted primarily from acquisitions of certain subsidiaries in 2012 in connection with the Group's business expansions, and an increase of approximately RMB30.3 million for inventory write-downs in relation to the Group's solar power products and services business.

行政開支

2012年，行政開支約1,290.9百萬元，較2011年的約人民幣1,115.5百萬元增長約人民幣175.4百萬元或15.7%。增長主要是因為就本集團業務擴張增聘員工（主要出於2012年度收購部分附屬公司的需要）產生的工資和薪金開支，以及本集團太陽能產品及服務業務約人民幣30.3百萬元的存貨撇減的增加。

Operating profit and operating profit margin

For the foregoing reasons, operating profit increased by approximately RMB209.4 million, or 12.6%, from approximately RMB1,662.5 million in 2011 to RMB1,871.9 million in 2012. Operating profit margin slightly decreased from 8.9% in 2011 to 8.6% in 2012, primarily due to decreases in operating profit margin from the Group's energy conservation solutions, wind power products and services and solar power products and services businesses, partially offset by an increase in the operating profit margin from the Group's environmental protection business.

經營利潤及經營利潤率

鑒於上述原因，經營利潤約從2011年的人民幣1,662.5百萬元增長約人民幣209.4百萬元或12.6%至2012年的人民幣1,871.9百萬元。經營利潤率由2011年的8.9%緩降至2012年的8.6%，下降主要是由於本集團節能解決方案、風電產品和服務、以及太陽能產品和服務業務經營利潤率下降所致，但本集團環保業務經營利潤率的上升部分抵銷了上述經營利潤率的下降。

The following table sets out the Group's operating profit margins by segment for the years ended December 31, 2012 and 2011, respectively:

下表分別載列截至2012年及2011年12月31日止年度按分部劃分的本集團經營利潤率：

		2012 %	2011 %
Environmental protection and energy conservation solutions:	**環保及節能解決方案：**		
Environmental protection	環保	**12.2**	7.6
Energy conservation solutions	節能解決方案	**16.5**	22.0
Segment operating margin	**分部經營利潤率**	**12.8**	9.8
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	**7.9**	9.3
Solar power products and services	太陽能產品及服務	**2.5**	4.3
Segment operating margin	**分部經營利潤率**	**6.6**	7.7

Finance costs

Finance costs increased by approximately RMB227.4 million, or 54.7%, from approximately RMB415.4 million in 2011 to approximately RMB642.8 million in 2012, primarily due to an increase in principal amounts borrowed by the Group in 2012 to fund its operational expansions. The increase was also partially due to the completion of certain construction projects during the reporting period, such as the construction of solar cells and modules production facilities. Interest expenses related to these projects ceased to be capitalised upon projects' completion. As a percentage of Group revenues, finance costs increased from 2.2% in 2011 to 3.0% in 2012. The Group endeavored to reduce the finance costs by, among others, issue of Corporate Bonds and replacing loans carried high interest rates with loans carried relatively lower interest rates. See also "- Liquidity and Capital Resources."

財務成本

2012年，財務成本約人民幣642.8百萬元，較2011年的約人民幣415.4百萬元增長約人民幣227.4百萬元或54.7%，增長主要是因為本集團的借款本金增加用於運營規模擴大。財務成本的增加也部分是因為報告年度完成某些建造工程，例如太陽能電池和組件生產設施建造工程完工，與這些工程相關的利息支出在工程完工後終止資本化。財務成本佔本集團收入的百分比從2011年的2.2%增長至2012年的3.0%。本集團已採取發行債券、以利率較低的貸款置換利率較高的貸款等途徑力圖降低財務成本。另參見「— 流動資金和資本來源」。

Profit before taxation

As a result of the foregoing factors, profit before taxation of the Group was approximately RMB1,263.9 million in 2012, which remained constant as compared with approximately RMB1,271.6 million in 2011.

稅前利潤

鑒於上述原因，2012年度本集團的稅前利潤約為人民幣1,263.9百萬元，與2011年度的約人民幣1,271.6百萬元相較保持穩定。

Income tax

Income tax charges increased by approximately RMB122.7 million, or 114.5%, from approximately RMB107.2 million in 2011 to RMB229.9 million in 2012. The Group's effective tax rate increased from 8.4% in 2011 to 18.2% in 2012. The relatively low effective tax rate in 2011 was primarily due to tax deductions granted to the renewable energy and related business of the Group. The Group's effective tax rate in 2012 was 18.2% which was comparable to its effective tax rate of 17.4% in 2010.

所得稅

所得稅由2011年的人民幣107.2百萬元增長至2012年的人民幣229.9百萬元，增長約人民幣122.7百萬元或114.5%。本集團的實際稅率從2011年的8.4%增長至2012年的18.2%。2011年實際稅率相對較低主要是因為本集團可再生能源及相關業務所獲得的扣稅減免。2012年，本集團實際稅率為18.2%，與集團2010年17.4%的實際稅率相差無幾。

Profit for the year

As a result of the foregoing, profit for the year decreased by approximately RMB130.4 million, or 11.2%, from approximately RMB1,164.4 million in 2011 to approximately RMB1,034.0 million in 2012.

本年利潤

鑒於上述原因，本年利潤由2011年的約人民幣1,164.4百萬元下降至2012年的約人民幣1,034.0百萬元，下降約人民幣130.4百萬元或11.2%。

Profit attributable to non-controlling interests

Profit attributable to non-controlling interests of the Group increased by approximately RMB17.3 million, or 5.3%, from approximately RMB323.7 million in 2011 to approximately RMB 341.0 million in 2012.

非控股權益應佔利潤

本集團非控股權益應佔利潤由2011年的約人民幣323.7百萬元增加至2012年的約人民幣341.0百萬元，增長約人民幣17.3百萬元或5.3%。

Profit attributable to equity shareholders/owners of the Company

As a result of the foregoing, profit attributable to equity shareholders/owners of the Company decreased by approximately RMB147.7 million, or 17.6%, from approximately RMB840.7 million in 2011 to approximately RMB693.0 million in 2012.

本公司權益股東／所有者應佔利潤

鑒於上述原因，本公司權益股東／所有者應佔利潤由2011年的約人民幣840.7百萬元下降至2012年的約人民幣693.0百萬元，下降約人民幣147.7百萬元或17.6%。

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, each as a percentage of total Group revenue, gross profit and operating profit for the relevant period, for the years ended December 31, 2012 and 2011, respectively:

下表分別載列截至2012年及2011年12月31日止年度本集團的分部收入、毛利和經營利潤以及各自佔相關期間本集團總收入、毛利和經營利潤的百分比：

		2012 (RMB million) (人民幣百萬元)	%	2011 (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:	環保：				
Revenue	收入	**5,855.4**	**26.9**	4,262.6	22.8
Gross profit	毛利	**1,094.1**	**32.4**	623.6	22.4
Operating profit	經營利潤	**712.4**	**38.1**	323.0	19.4
Energy conservation solutions:	節能解決方案：				
Revenue	收入	**919.6**	**4.2**	788.7	4.2
Gross profit	毛利	**242.0**	**7.1**	276.8	9.9
Operating profit	經營利潤	**151.8**	**8.1**	173.5	10.4
Segment revenues	**分部收入**	**6,775.0**	**31.1**	5,051.3	27.0
Segment gross profit	**分部毛利**	**1,336.1**	**39.5**	900.4	32.3
Segment operating profit	**分部經營利潤**	**864.2**	**46.2**	496.5	29.8
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：				
Revenue	收入	**11,161.2**	**51.2**	9,209.9	49.2
Gross profit	毛利	**1,705.3**	**50.4**	1,522.0	54.7
Operating profit	經營利潤	**881.0**	**47.1**	857.4	51.6
Solar power products and services:	太陽能產品及服務：				
Revenue	收入	**3,649.3**	**16.8**	4,295.0	23.0
Gross profit	毛利	**218.5**	**6.5**	308.2	11.1
Operating profit	經營利潤	**91.6**	**4.9**	182.9	11.0
Segment revenues	**分部收入**	**14,810.5**	**68.0**	13,504.9	72.2
Segment gross profit	**分部毛利**	**1,923.8**	**56.9**	1,830.2	65.8
Segment operating profit	**分部經營利潤**	**972.6**	**52.0**	1,040.3	62.6

Environmental protection and energy conservation solutions

Environmental protection

The following table sets out the revenue, cost of sales and gross profit attributable to the environmental protection business, each as a percentage of revenue for this business for the years ended December 31, 2012 and 2011, respectively:

	2012 (RMB million) （人民幣百萬元）	**%**	2011 (RMB million) （人民幣百萬元）	%
Revenue 收入	**5,855.4**	**100.0**	4,262.6	100.0
Cost of sales 銷售成本	**(4,761.3)**	**(81.3)**	(3,639.0)	(85.4)
Gross profit 毛利	**1,094.1**	**18.7**	623.6	14.6

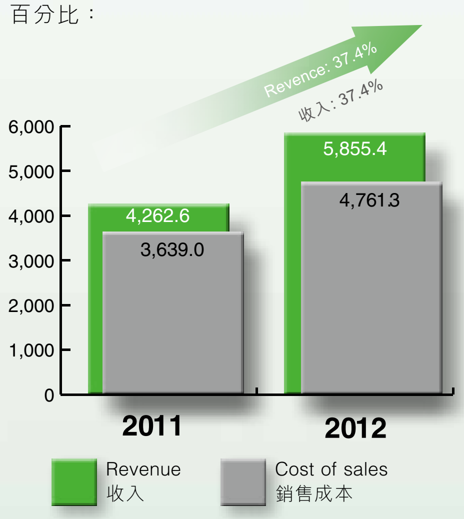
Revenue

Revenue from the environmental protection business increased by approximately RMB1,592.8 million, or 37.4%, from approximately RMB4,262.6 million in 2011 to approximately RMB5,855.4 million in 2012. The increase was mainly attributable to increases in revenues generated by the NOx emissions reduction and water treatment businesses, partially offset by a decrease in revenues generated by the SO_2 emissions reduction business. Revenue generated from NOx emissions reduction businesses increased by approximately RMB1,373.1 million or 103.3% as compared to the preceding year. The growth in this business line was primarily attributable to the increased market demand as a result of the favorable policy initiatives promulgated by the PRC Government in 2011 and 2012, aiming to reduce air pollutions by, among others, tightening NOx emission standards applicable to coal-fired power plants and incentivizing NOx emissions reduction. Growth in revenue in the water treatment business was primarily due to the Group's efforts in expanding this business and the acquisition and consolidation of results of Galaxy Water and its subsidiaries in 2012. The Group recorded revenues of approximately RMB651.1 million and approximately RMB262.6 million from its water treatment EPC business and water treatment BOT business, representing year-on-year growths of approximately 83.6% and 320.8%, respectively. The decrease in revenue generated from the Group's SO_2 emissions reduction businesses was due to declines in revenues from the desulfurization EPC business and the slow-down of increases in newly installed coal-fired power plants in the PRC, partially offset by an increase of approximately RMB154.0 million in revenue from the desulfurization concession business in 2012.

環保及節能解決方案

環保

下表分別載列截至2012年及2011年12月31日止年度本集團的環保業務收入、銷售成本和毛利，以及各自佔相應年度該業務收入的百分比：



收入

環保業務收入從2011年的約人民幣4,262.6百萬元增長至2012年的約人民幣5,855.4百萬元，增長約人民幣1,592.8百萬元或37.4%。增長的主要原因是脱硝業務、水處理業務所產生的收入增長，但脱硫業務產生的收入減少額抵銷了上述部分增長額。脱硝業務產生的收入與去年同期相比增長約人民幣1,373.1百萬元或103.3%。此業務增長主要是因為2011年和2012年中國政府為了通過加強適用於燃煤電廠的脱硝標準並鼓勵脱硝來遏制空氣污染而頒佈的有利的政策措施所造成的市場需求增加。水處理業務的收入增加主要是由本集團為拓展此業務付出的不懈努力以及期內收購並合併銀河水務及其附屬公司的經營業績。本集團水處理EPC業務錄得約人民幣651.1百萬元的收入，水處理BOT業務錄得約人民幣262.6百萬元，同比分別增長83.6%和320.8%。本集團脱硫業務產生的收入減少主要是由脱硫EPC業務產生的收入減少，以及新增的燃煤電廠的需求增速放慢，但脱硫特許經營業務大約人民幣154.0百萬元的收入增長額抵銷了上述部份減少額。

The following table sets out the revenues from the business lines comprising the Group's environmental protection business, each as a percentage of the revenue from this business, for the years ended December 31, 2012 and 2011, respectively.

下表分別載列截至2012年及2011年12月31日止年度包括在本集團環保業務的各業務線的收入，以及各自佔相關年度該業務收入的百分比：

		2012 (RMB million) (人民幣百萬元)	2012 %	2011 (RMB million) (人民幣百萬元)	2011 %
SO_2 emission reduction	脱硫	**1,873.3**	**32.0**	2,283.9	53.6
NOx emission reduction	脱硝	**2,702.3**	**46.2**	1,329.2	31.2
Water treatment	水處理	**1,008.0**	**17.2**	487.0	11.4
Ash removal(1)	除塵(1)	**271.8**	**4.6**	162.5	3.8

Note:

(1) Ash removal was classified under "Others" for the year ended December 31, 2011.

備註：

(1) 截至2011年12月31日止的年度，除塵業務歸類為「其他」。

Cost of sales

Cost of sales for the environmental protection business increased by approximately RMB1,122.3 million, or 30.8%, from approximately RMB3,639.0 million in 2011 to approximately RMB4,761.3 million in 2012, primarily due to increases in cost of sales corresponding to revenue growth in the NOx emissions reduction and water treatment businesses as described above.

銷售成本

本集團環保業務的銷售成本從2011年的約人民幣3,639.0百萬元增長至2012年的約人民幣4,761.3百萬元，增長約人民幣1,122.3百萬元或30.8%，增長主要原因是上述脱硝業務和水處理業務的銷售成本增加，這與上述業務的收入增加保持一致。

Gross profit and gross profit margin

As a result of the foregoing factors, gross profit attributable to the environmental protection business increased by approximately RMB470.5 million, or 75.4%, from approximately RMB623.6 million for 2011 to approximately RMB1,094.1 million for 2012. Gross profit margin for this business increased from 14.6% in 2011 to 18.7% in 2012, primarily due to increases in proportionate revenue contribution and gross profit margin of the NOx emissions reduction business as a result of the surged market demand for denitrification products and services and a consequential increase in their average contract prices. In addition, with the Group's relatively high production capacity for SCR denitrification catalysts, the demand of which exceeded the supply because of the rapid development of the denitrification market, not only the profits from sales of SCR denitrification catalysts but also the gross profit margin for the Group's denitrification EPC projects increased. Gross profit margin from the water treatment business increased from 9.7% in 2011 to 22.8% in 2012. An increase in proportionate revenue contribution from water treatment BOT business contributed to the increase in gross profit margin for water treatment business. Gross profit margin for water treatment EPC business and water treatment BOT business increased from 9.6% and 24.3% in 2011 to 19.0% and 36.7% in 2012, respectively. The increase in gross profit margin for water treatment EPC business was attributable to the relatively high gross profit margins for certain EPC projects carried out by the Group in 2012. The comparatively high gross profit margin for the Group's BOT business in 2012, as compared to 2011, was primarily due to some of the Group's BOT projects had entered into a stable operation stage and the relatively high gross profit margin of Galaxy Water's BOT projects, also contributed to the increase in gross profit margin for the Group's water treatment business in 2012. The decrease in gross profit margin for SO_2 emission reduction business was primarily due to the maturing market and the reduced market demand.

毛利及毛利率

鑒於上述原因，環保業務產生的毛利從2011年的約人民幣623.6百萬元增長至2012年的約人民幣1,094.1百萬元，增長約人民幣470.5百萬元或75.4%。此業務的毛利率從2011年的14.6%增長至2012年的18.7%，增長原因主要是脱硝產品及服務的市場需求劇增以致其平均售價上調所導致的收入貢獻和毛利率按比例增加。而且本集團具有較大的脱硝催化劑產能，而這種產品由於脱硝市場的快速發展而供不應求，從而不僅提升了催化劑銷售的利潤，也帶動了本集團使用自產催化劑的脱硝EPC工程的毛利率。水處理業務的毛利率從2011年的9.7%增加至2012年的22.8%。水處理BOT業務收益貢獻比例的增長是導致本集團2012年水處理業務毛利率上升的一個原因。水處理EPC業務、水處理BOT業務的毛利率分別從9.6%、24.3%增長至19.0%、36.7%。水處理EPC業務毛利率的增長主要是由於本集團於2012年進行的個別EPC項目的相對較高的毛利率所致。2012年水處理BOT業務相比2011年有較高的毛利率是因為本集團的部分BOT項目已進入穩定運營階段且收購的銀河水務的BOT項目毛利率較高。脱硫業務毛利率的減少主要是因為市場飽和且市場需求減少。

The following table sets out the changes in gross profit margins for the business lines comprising of the Group's environmental protection business for 2012 as compared with 2011:

下表載列2012年構成本集團環保業務的業務線毛利率與2011年相比的變化：

		2012 **%**	2011 %
SO_2 emission reduction	脱硫	**14.2**	15.6
NOx emission reduction	脱硝	**23.1**	19.5
Water treatment	水處理	**22.8**	9.7
Ash removal	除塵	**11.3**	7.3

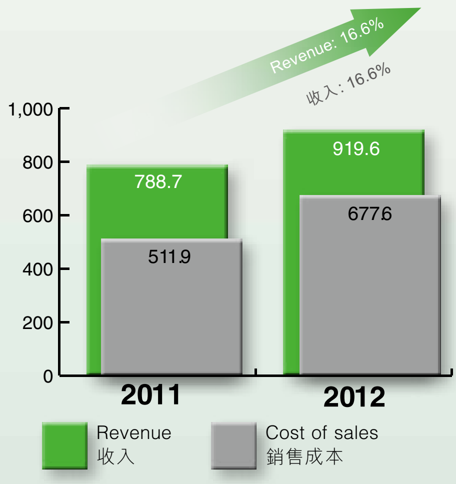
Energy conservation solutions

The following table sets out the revenue, cost of sales and gross profit attributable to the energy conservation solutions business, each as a percentage of revenue for this business, for the years ended December 31, 2012 and 2011, respectively:

節能解決方案

下表分別載列截至2012年及2011年12月31日止年度節能解決方案業務的收入、銷售成本和毛利，以及各自佔該業務收入的百分比：

	2012 (RMB million) (人民幣百萬元)	**%**	2011 (RMB million) (人民幣百萬元)	%
Revenue 收入	**919.6**	**100.0**	788.7	100.0
Cost of sales 銷售成本	**(677.6)**	**(73.7)**	(511.9)	(64.9)
Gross profit 毛利	**242.0**	**26.3**	276.8	35.1



Revenue

Revenue from the energy conservation solutions business increased by approximately RMB130.9 million, or 16.6%, from approximately RMB788.7 million in 2011 to approximately RMB919.6 million in 2012. This was primarily due to increases in revenues from the plasma-assisted coal ignition and combustion stabilization and the EMC businesses, partially offset by decreases in revenues from waste heat recovery services and steam turbine flow passage retrofitting businesses.

Increases in revenues for the Group's plasma-assisted coal ignition and combustion stabilization and EMC businesses were primarily attributable to favorable policies issued by the PRC Government, which incentivized development of the energy conservation services provided to the coal-fired power plants in the PRC.

A decrease in revenue from the Group's waste heat recovery business was because the Group's waste heat recovery business has been at the development stage. The business has been subject to fluctuation due to a limited number of projects. A decrease in revenue from the steam turbine flow passage retrofitting business was primarily attributable to certain steam turbine flow passage retrofitting services being carried out under the EMC business model and the relevant revenue classified as EMC revenue and thereby not recognized as revenue from the steam turbine flow passage retrofitting business, as well as to a general decline in demand due to market saturation.

收入

節能解決方案業務產生的收入從2011年的約人民幣788.7百萬元增長至2012年的人民幣約919.6百萬元，增長約人民幣130.9百萬元或16.6%。增長主要是因為等離子體點火及穩燃業務以及EMC業務收入的增加，但餘熱回收服務和汽輪機通流改造業務產生的收入減少額抵銷了上述部分收入增長額。

本集團等離子體點火及穩燃業務和EMC業務收入增加主要是因為中國政府出台利好政策促進了提供給中國燃煤電廠的節能服務的發展。

本集團餘熱回收業務收入的減少是由於本集團的餘熱回收業務仍處於發展階段，因此該業務因項目數量減少而容易波動。汽輪機通流改造業務收入減少主要是因為某些汽輪機通流改造服務通過EMC業務模式開展，因此相關收入被劃分為EMC收入，且因市場飽和，汽輪機通流改造業務需求普遍下降。

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 years ended December 31, 2012 and 2011, respectively.

下表分別載列截至2012年及2011年12月31日至年度包括在本集團節能解決方案業務的各業務線的收入，以及各自佔相關年度該業務收入的百分比：

		2012		2011	
		(RMB million) **（人民幣百萬元）**	**%**	(RMB million) （人民幣百萬元）	%
Plasma-assisted coal ignition and combustion stabilization	等離子體點火及穩燃	**401.7**	**43.7**	330.2	41.9
Steam turbine flow passage retrofitting	汽輪機通流改造	**76.8**	**8.3**	102.6	13.0
EMC	EMC	**249.3**	**27.1**	65.0	8.2
Waste heat recovery	餘熱回收	**191.8**	**20.9**	284.4	36.1
Others(1)	其他(1)	**—**	**—**	6.5	0.8

Note:

(1) The business under this category was mainly the external construction services, which the Group undertook irregularly. No revenue was recorded from this business in 2012.

備註：

(1) 其他業務為本集團外部建造業務，具有不規律性，2012年沒有產生此類業務。

Cost of sales

Cost of sales for the energy conservation solutions business increased by approximately RMB165.7 million, or 32.4%, from approximately RMB511.9 million in 2011 to approximately RMB677.6 million in 2012. This increase was mainly attributable to increases in cost of sales for the plasma-assisted coal ignition and combustion stabilization and the EMC businesses, in line with the increases in revenues in these businesses.

銷售成本

節能解決方案業務產生的銷售成本從2011年的約人民幣511.9百萬元增長至2012年的約人民幣677.6百萬元，增長約人民幣165.7百萬元或32.4%。增長的主要原因是因為等離子體點火及穩燃業務和EMC業務的銷售成本增加，這與該等業務的收入增長保持一致。

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 RMB34.8 million, or 12.6%, from approximately RMB276.8 million in 2011 to RMB242.0 million in 2012. Gross profit margin for this business decreased from approximately 35.1% in 2011 to 26.3% in 2012. Decrease in average gross profit margin in the energy conservation solutions business was primarily due to decreases in the gross profit margins in the Group's plasma-assisted coal ignition and combustion stabilization and EMC businesses, partially offset by increases in the gross profit margins in the Group's steam turbine flow passage retrofitting and waste heat recovery businesses. Decrease in the gross profit margin of the plasma-assisted coal ignition and combustion stabilization business was due to decreased average selling prices for the relevant products and services caused by the maturing market and decrease of investment in the coal-fired power industry, where the Group's customers for this business operate. Decrease in gross profit margin of the EMC business was primarily due to decreased average EMC contract price caused by intensified market competition. In addition, in 2012, the Group's subsidiary in the EMC business obtained relevant certifications, and became qualified for the PRC Government's subsidies granted to certain EMC service providers, thereby having the ability to offer competitive prices to its EMC customers. Increases in the gross profit margins in the Group's steam turbine flow passage retrofitting and waste heat recovery businesses were due to fluctuations in the prices of the solutions, which were tailored for specific projects, and the limited number of the projects.

The following table sets out changes in gross profit margins for the business lines comprising the Group's energy conservation solutions business for 2012 as compared with 2011:

毛利及毛利率

鑒於上述原因，節能解決方案業務產生的毛利從2011年的約人民幣276.8百萬元下降至2012年的約人民幣242.0百萬元，下降約人民幣34.8百萬元或12.6%。此業務的毛利率從2011年的約35.1%下降至2012年的26.3%。節能解決方案業務的平均毛利率的減少主要是因為本集團等離子點火及穩燃業務和EMC業務之毛利率減少，但本集團汽輪機通流改造及餘熱回收業務的毛利率增長額抵銷了上述部分減少額。等離子體點火及穩燃業務的毛利率減少是由成熟的市場造成的相關產品和服務的平均售價下降以及燃煤發電行業(本集團該業務的客戶群體所在行業)的投資壓縮所致。EMC業務的毛利率減少主要是因為EMC合同價格因市場競爭激烈而下降。另外，2012年，本集團專門從事於EMC業務的附屬公司獲得相關認證後，有資格獲得中國政府向具備資格的EMC服務提供商授予的補貼，因此可以向EMC客戶提供更具競爭性的價格。本集團汽輪機通流改造及餘熱回收業務的毛利率增長的原因在於解決方案價格的波動，因為這些解決方案專為各具體項目定制，且項目數量有限。

下表載列2012年構成本集團節能解決方案業務的業務線毛利率與2011年相比的變化：

		2012 **%**	2011 %
Plasma-assisted coal ignition and combustion stabilization	等離子體點火及穩燃	**39.2**	52.9
Steam turbine flow passage retrofitting	汽輪機通流改造	**45.9**	24.4
EMC	EMC	**7.3**	27.1
Waste heat recovery	餘熱回收	**25.2**	23.8
Others	其他	**—**	10.6

Renewable energy equipment manufacturing and services

Wind power products and services

The following table sets out the revenue, cost of sales and gross profit attributable to the wind power products and services business, each as a percentage of revenue for this business for the years ended December 31, 2012 and 2011, respectively:

	2012		2011	
	(RMB million) **(人民幣百萬元)**	**%**	(RMB million) (人民幣百萬元)	%
Revenue 收入	**11,161.2**	**100.0**	9,209.9	100.0
Cost of sales 銷售成本	**(9,455.9)**	**(84.7)**	(7,687.9)	(83.5)
Gross profit **毛利**	**1,705.3**	**15.3**	1,522.0	16.5

Revenue

Revenue attributable to the wind power products and services business increased by approximately RMB1,951.3 million, or 21.2%, from approximately RMB9,209.9 million in 2011 to approximately RMB11,161.2 million in 2012. The increase was primarily due to an increase in the Group's WTG sales volume in 2012, resulting from the Group's business expansion efforts to increase market share in the WTG manufacturing industry.

Cost of sales

Cost of sales attributable to the wind power products and services business increased by approximately RMB1,768.0 million, or 23.0%, from approximately RMB7,687.9 million for 2011 to approximately RMB9,455.9 million for 2012, primarily due to an increase in the WTG sales volume during the year, and partially offset by declines in the prices of raw materials used in WTG manufacturing process.

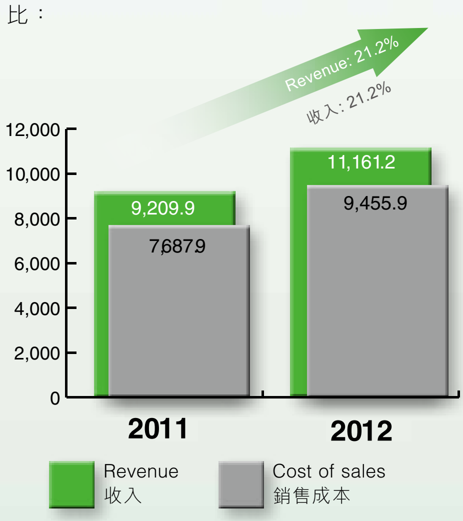
Gross profit and gross profit margin

As a result of the foregoing, gross profit attributable to the wind power products and services business increased by approximately RMB183.3 million, or 12.0%, from approximately RMB1,522.0 million in 2011 to RMB1,705.3 million for 2012. Gross profit margin for this business decreased from 16.5% in 2011 to 15.3% in 2012, primarily due to continuing declines in the average selling prices for WTG units on an industry-wide basis due to the industry's maturing process and its intensified market competition, although such declines were partially offset by decreases in the prices of raw materials and components used in the WTG manufacturing process.

可再生能源設備製造及服務

風電產品及服務

下表分別載列截至2012年及2011年12月31日止年度風電產品及服務業務的收入、銷售成本和毛利，以及各自佔該業務收入的百分比：



收入

風電產品及服務業務的收入從2011年的約人民幣9,209.9百萬元增長至2012年的約人民幣11,161.2百萬元，增長約人民幣1,951.3百萬元或21.2%。增長的主要原因是本集團在2012年風力發電機組的銷量上升，這在於本集團進行拓展業務工作使其於風力發電機組製造業的市場份額增加。

銷售成本

風電產品及服務業務的銷售成本從2011年的約人民幣7,687.9百萬元增長至2012年的約人民幣9,455.9百萬元，增長約人民幣1,768.0百萬元或23.0%，增長主要原因是因為2012年風力發電機組的銷量增加，但風力發電機組製造過程使用的原材料價格的下降額抵銷了上述部分增長。

毛利及毛利率

鑒於上述原因，風電產品及服務業務的毛利約從2011年的人民幣1,522.0百萬元增長至2012年的人民幣1,705.3百萬元，增長約人民幣183.3百萬元或12.0%。此業務的毛利率從2011年的16.5%下降至2012年的15.3%，下降原因主要來自於風力發電機組平均售價由於此行業成熟的工藝和行業競爭加劇而持續下降，但此毛利率的下降被上述原材料和部件價格下降部分抵銷。

Solar power products and services

The following table sets out the revenue, cost of sales and gross profit attributable to the solar power products and services business, each as a percentage of revenue for this business for the years ended December 31, 2012 and 2011, respectively:

	2012 (RMB million) (人民幣百萬元)	%	2011 (RMB million) (人民幣百萬元)	%
Revenue 收入	**3,649.3**	**100.0**	4,295.0	100.0
Cost of sales 銷售成本	**(3,430.8)**	**(94.0)**	(3,986.8)	(92.8)
Gross profit 毛利	**218.5**	**6.0**	308.2	7.2

Revenues

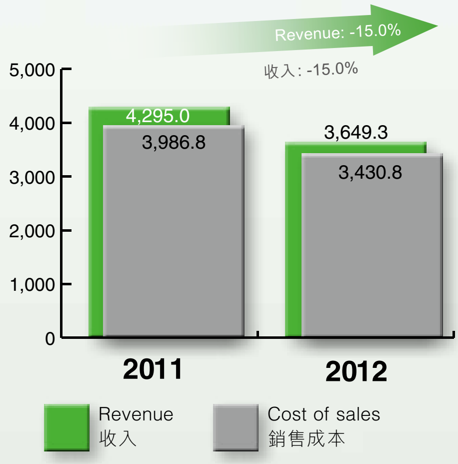
Revenue attributable to the solar power products and services business decreased by approximately RMB645.7 million, or 15.0%, from approximately RMB4,295.0 million for 2011 to approximately RMB3,649.3 million for 2012. The decrease was primarily due to the Group's disposals of Jintech and Ningxia Solar in 2011 and the consequential de-consolidation of results of Jintech and Ningxia Solar from the Group's results in 2012. This decrease was partially offset by an increase in revenue generated from the solar power EPC business, as a result of the Group's efforts in expanding this business line.

Cost of sales

Cost of sales attributable to the solar power products and services business decreased by approximately RMB556.0 million, or 13.9%, from approximately RMB3,986.8 million for 2011 to approximately RMB3,430.8 million for 2012, primarily due to corresponding decrease in revenues from solar cells and modules manufacturing sector, partially offset by an increase in costs of sales for the solar power EPC business.

太陽能產品及服務

下表分別載列截至2012年及2011年12月31日止年度太陽能產品及服務業務的收入、銷售成本和毛利，以及各自佔該業務收入的百分比：



收入

太陽能產品及服務業務的收入從2011年的約人民幣4,295.0百萬元下降至2012年的約人民幣3,649.3百萬元，下降約人民幣645.7百萬元或15.0%。下降原因主要是因為2011年本集團出售晶德和寧夏太陽能以及2012年晶德和寧夏太陽能的業績從本集團業績中相應分離出來。鑒於本集團拓展太陽能EPC業務付出的不懈努力，此減少額被此業務產生的收入增長額部分抵銷。

銷售成本

太陽能產品及服務業務的銷售成本從2011年的約人民幣3,986.8百萬元下降至2012年的約人民幣3,430.8百萬元，下降約人民幣556.0百萬元或13.9%，減少主要是由太陽能電池及組件製造業收入的相應減少所致，但部分被太陽能EPC業務銷售成本的增加抵銷。

Gross profit and gross profit margin

As a result of the foregoing, gross profit attributable to the solar power products and services business of the Group decreased by approximately RMB89.7 million, or 29.1%, from approximately RMB308.2 million for 2011 to approximately RMB218.5 million for 2012. Gross profit margin for this business decreased from approximately 7.2% in 2011 to approximately 6.0% for 2012. The decline in demand for solar power products and further intensified market competition resulted in a sharp decrease in average selling price across the solar power industry. In addition, the value of the raw material inventories also decreased significantly. The decline was partially offset by increases in the gross profit margin and proportionate revenue contribution of the Group's solar power station EPC business.

毛利及毛利率

鑒於上述原因，本集團太陽能產品及服務業務的毛利從2011年的約人民幣308.2百萬元下降至2012年的約人民幣218.5百萬元，下降約人民幣89.7百萬元或29.1%。此業務的毛利率從2011年的約7.2%下降至2012年的約6.0%。太陽能產品需求下降以及愈加激烈的市場競爭導致太陽能產品的平均售價急劇下降，且原材料存貨價值也大幅下降。集團太陽能發電站EPC業務方面同比例收入以及毛利的增加從而抵銷了太陽能產品及服務方面的利潤削減。

Liquidity and Capital Resources

The Group's principal use of cash has been to fund its business operations. Its main source of liquidity in 2012 was indebtedness in the form of long-term borrowings (including the net proceeds of approximately RMB3,971.6 million from the Group's issuance of Corporate Bonds) and short-term bank borrowings, as well as the net proceeds of approximately RMB192.0 million from the issuance of the additional over-allotment shares during the period.

In 2012, the Group experienced significant cash outflows and increased its reliance on financing in order to increase its production capacity in its wind power products and services business and to expand its operation scale in its environmental protection and energy conservation solutions businesses. In order to effectively capture the growth opportunities arising from regulatory changes and increased market demands in the PRC, the Group also expanded its desulfurization and denitrification concession businesses and its EMC business, all of which are capital intensive in nature.

The following table sets out net cashflows of the Group for the financial years as of and ended December 31, 2012 and 2011:

流動資金和資本來源

本集團的現金主要供業務經營之用。2012年，其流動資金的主要來源是長期借款（包括本集團發行國內公司債券所獲得的約人民幣3,971.6百萬元的淨款項）和短期銀行借款形式的債務，以及期內發售額外的超額配發股份所獲得的約人民幣192.0百萬元的淨款項。

2012年，本集團經歷了重大現金流出，增加了其對融資的依賴以提升其風電產品及服務業務的生產能力，並擴大環保及節能解決方案業務的經營規模。為了有效把握中國監管政策的變化和日益增長的市場需求所帶來的增長機遇，本集團還擴大了其脱硫、脱硝特許經營業務及其EMC業務，上述所有業務均具資本密集性質。

下表分別載列截至2012年及2011年12月31日止財務年度，本集團的現金流量淨額：

		2012 (RMB million) （人民幣百萬元）	2011 (RMB million) （人民幣百萬元）
Net cash (used in)/generated from operating activities	經營活動（使用）／產生之現金淨額	**(1,559.5)**	346.4
Net cash used in investing activities	投資活動使用之現金淨額	**(3,505.1)**	(3,529.6)
Net cash generated from financing activities	融資活動產生之現金淨額	**2,843.0**	7,026.9
Cash and cash equivalents at December 31	於12月31日的現金及現金等價物	**3,405.3**	5,626.6

Net cash (used in)/generated from operating activities

Net cash used in the Group's operating activities in 2012 amounted to approximately RMB1,559.5 million, as compared to 2011, when net cash generated from operating activities amounted to approximately RMB346.4 million. The increase in net cash outflows used in operating activities was primarily attributable to cash payments made to repay trade payables for the expansion of the wind power products and services business through purchasing raw materials and other production materials.

The significant growth of trade and bills receivables for the Group's wind power products and services business, which was in line with the growth of such business and its proportionate revenue contribution, were also factors contributing to the amount of net cash outflows in operating activities.

經營活動(使用)/產生的現金淨額

本集團2012年經營活動使用的現金淨額約為人民幣1,559.5百萬元，而2011年經營活動產生的現金淨額約為人民幣346.4百萬元。經營活動使用的現金外流淨額增加主要是因為支付本集團為支付擴張風電產品及服務業務而購買原材料和其他生產材料導致的運營支出所產生的應付款項的現金支出。

本集團風電產品及服務業務應收賬款及應收票據的大幅上升與該業務的收入增長及相應對合併收入的貢獻的增長相一致，也是導致經營活動使用現金淨額增長的一個因素。

Net cash used in investing activities

Net cash used in the Group's investing activities in 2012 amounted to approximately RMB3,505.1 million, as compared to 2011, when net cash used in investing activities amounted to approximately RMB3,529.6 million. Cash outflows for investing activities were primarily used to fund the Group's expansion of operations, in addition to the Group's acquiring equity interests from, or making capital contribution to, a few companies. Please see "- Material Investments" and "-Material Acquisitions of Subsidiaries" for more details.

投資活動使用的現金淨額

本集團2012年投資活動使用的現金淨額約為人民幣3,505.1百萬元，而2011年投資活動使用的現金淨額約為人民幣3,529.6百萬元。投資活動中的現金外流淨額主要是用於本集團經營活動的拓展，尤其是本集團收購其他公司的股權或對其他公司注資。詳情請參見「— 重大投資」和「— 重大收購附屬公司」。

Net cash generated from financing activities

Net cash generated from the Group's financing activities in 2012 amounted to approximately RMB2,843.0 million, as compared to 2011, when net cash generated from financing activities amounted to approximately RMB7,026.9 million. Cash generated from financing activities in 2012 was primarily from the net proceeds of approximately RMB3,971.6 million generated from the issuance of Corporate Bonds, proceeds from borrowings of approximately RMB16,935.9 million and the net proceeds of approximately RMB192.0 million from the issuance of the additional over-allotment shares during the period, and partially offset by repayment of borrowings of approximately RMB17,831.5 million and interest payments of approximately RMB910.2 million in 2012.

融資活動產生的現金淨額

本集團2012年融資活動產生的現金淨額約為人民幣2,843.0百萬元，而2011年融資活動產生的現金淨額約為人民幣7,026.9百萬元。融資活動產生的現金金額主要來源期內發售公司債券所獲得的約人民幣3,971.6百萬元的淨款項、借款所獲得的約人民幣16,935.9百萬元的收入以及發行超額配售股所得約人民幣192.0百萬元的淨款項，並被期內所支付的貸款償付額約人民幣17,831.5百萬元和利息約人民幣910.2百萬元所部分抵銷。

Working Capital

As at December 31, 2012, the Group' s cash and cash equivalents amounted to RMB3,405.3 million, a decrease of RMB2,221.3 million as compared to RMB5,626.6 million as of December 31, 2011. As at December 31, 2012, unutilised bank credit facilities amounted to approximately RMB20.0 billion.

運營資金

2012年12月31日，集團的現金以及現金等價物總計人民幣3,405.3百萬元，與2011年同期的人民幣5,626.6百萬元相比，減少人民幣2,221.3百萬元。截至2012年12月31日，本集團尚未使用的銀行信貸總計約為人民幣200億元。

The Group's gearing ratio, which is calculated by dividing net debt (includes interest-bearing other payables and interest-bearing bank loans, less cash and cash equivalents) by total equity plus net debt, increased from 37.0% as at December 31, 2011 to 51.6% as at December 31, 2012. This was primarily due to an increase in net debt of approximately RMB6,481.0 million, partially offset by the increase in equity of approximately RMB1,145.0 million. The increase in net debt of the Group principally reflects an increase of interest-bearing other payables and interest-bearing bank loans of approximately RMB4,259.9 million and a decrease in cash and cash equivalent of approximately RMB2,221.3 million. See also "- Analysis of 2012 Financial Results - Liquidity and Capital Resources."

集團的資產負債率，由淨債務（包括有息其他應付款項和有息銀行貸款減去的現金和現金等價物）除以本集團的權益總額及淨債務總和的比例核算，2012年12月31日，該比率由2011年同期的37.0%增加到51.6%。這主要是由於淨債務約人民幣6,481.0百萬元的增長，該增長被權益約人民幣1,145.0百萬元的增長部分抵銷。本集團淨債務的增長則主要反映了約人民幣4,259.9百萬元的有息銀行貸款和有息其他應付款項的增加，以及公司現金和現金等價物減少約合人民幣2,221.3百萬元。請參見「—2012年財務業績分析—流動資金和資本來源」。

Based on the existing cash resources and unutilized bank credit facilities, the directors of the Company (the "**Directors**") confirm that the Group's working capital will be sufficient for its present requirements and for the next 12 months.

基於現有現金來源以及尚未使用的銀行信貸額度，本公司的董事（「**董事**」）聲明本集團的運營資金足以支撐當前的需求以及未來12個月的日常運作。

Net Current Liabilities

流動負債淨額

As at December 31, 2012, the net current liabilities of the Group amounted to approximately RMB812.5 million, representing a decrease in net current liabilities of approximately RMB981.4 million, or 54.7%, as compared to December 31, 2011. The decrease was primarily attributable to decreases of the Group's current portion of long-term borrowings and short-term borrowings, the Group's trade and bills payables and the Group's other payables of approximately RMB1,114.9 million, RMB368.2 million and RMB943.2 million, respectively, and attributable to an increase in the Group's trade and bills receivables of approximately RMB4,335.1 million, partially offset by decreases in the Group's cash at bank and in hand and in the Group's inventories of approximately RMB2,374.9 million and RMB4,182.0 million, respectively. The Company completed the issuance of Corporate Bonds and obtained a net proceeds of approximately RMB3,971.6 million in 2012.

於2012年12月31日，本集團流動負債淨額約為人民幣812.5百萬元，較2011年12月31日的流動負債淨額減少約為人民幣981.4百萬元或54.7%。此減少主要是因為本集團長期借款的即期部分和短期借款減少約人民幣1,114.9百萬元、本集團應付賬款及票據減少約人民幣368.2百萬元及本集團其他應付款項減少約人民幣943.2百萬元，以及本集團應收賬款及票據增加約人民幣4,335.1百萬元，並被本集團約人民幣2,374.9百萬元的銀行存款及庫存現金的減少和約人民幣4,182.0百萬元的本集團存貨的減少部分抵銷。本公司完成發售公司債券並獲得約人民幣3,971.6百萬元的淨款項。

Inventory Analysis

存貨分析

The inventories of the Group decreased by approximately RMB4,182.0 million, or 55.8%, from RMB7,488.9 million as of December 31, 2011 to RMB3,306.9 million as of December 31, 2012, primarily due to increased sales volume of WTG products and the significantly decreased inventories of WTG products. The Group's inventory turnover days decreased to 107.1 days in 2012 from 170.5 days in 2011.

存貨從2011年12月31日的約人民幣7,488.9百萬元減少約人民幣4,182.0百萬元或55.8%至2012年12月31日的約人民幣3,306.9百萬元。主要是由於風力發電機組產品的銷售額增加、2012年末風機產成品庫存大幅減少所致。本集團的存貨周轉天數由2011年的170.5日下降至2012年的107.1日。

Trade and bills receivables

應收賬款及票據

Trade and bills receivables increased by RMB4,335.1 million, or 43.7%, from RMB9,925.6 million as of December 31, 2011 to RMB14,260.7 million as of December 31, 2012. Such increases were primarily resulted from increases in the trade and bills receivables in the wind power products manufacturing business.

應收賬款及票據從2011年12月31日的約人民幣9,925.6百萬元增加約人民幣4,335.1百萬元或43.7%至2012年12月31日的約人民幣14,260.7百萬元。增加主要為風機產品製造業務產生的應收賬款及票據。

The following table sets out the breakdown of the Group's trade and bills receivables as of December 31, 2012 and 2011, respectively:

下表分別載列於2012年及2011年12月31日本集團應收賬款及票據的明細：

		As of December 31, 2012 於2012年12月31日 (RMB millions) (人民幣百萬元)	As of December 31, 2011 於2011年12月31日
Trade receivables for contract work	合同工程的應收賬款	**4,082.5**	3,709.4
Bills receivable for contract work	合同工程的應收票據	**1,730.0**	310.1
Trade receivables for operating leases	經營租賃的應收賬款	**539.7**	332.3
Trade receivables for sale of goods and rendering of services	銷售商品及提供服務的應收賬款	**7,548.5**	4,174.3
Bills receivable for sale of goods and rendering of services	銷售商品及提供服務的應收票據	**495.5**	1,495.3
Less: allowance for doubtful debts	減：呆壞賬撥備	**(135.5)**	(95.8)
Total	合計	**14,260.7**	9,925.6

The Group's receivable turnover days increased to 202.7 days in 2012 from 151.6 days in 2011, roughly in line with the increased growth of, and revenue contribution from, the wind power product and services business, which reflects the time lag between sales of the WTG unit and actual payment by the customers, which is a characteristic of the industry.

本集團的應收款項周轉天數由2011年的151.6天增加至2012年的202.7天，其與風電產品及服務業務的增長提高及其收入增加大體一致，反映出銷售風力發電機組與客戶實際付款的時間差，這是該行業的特徵。

Deposits, prepayments and other receivables

The Group's deposits, prepayments and other receivables increased by 57.4% from RMB1,139.9 million as of December 31, 2011 to RMB1,794.7 million as of December 31, 2012. The increase was primarily attributable to an increase of approximately RMB330.5 million in prepayments for construction contracts and purchase of inventory for the Group's environmental protection business, and attributable to an increase of approximately RMB116.8 million in the amount of bidding and performance deposits resulting from the Group's expansion across its business segments, in particular the Group's solar power equipment manufacturing business, WTG products manufacturing business, desulfurization concession operations business, NOx emission reduction business and water treatment business.

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2011年12月31日的約人民幣1,139.9百萬元增加57.4%至2012年12月31日的約人民幣1,794.7百萬元。此增加主要由於本集團存貨採購及建造合同相關的預付款金額增加約人民幣330.5百萬元，以及本集團為擴大業務規模各業務板塊，特別是本集團太陽能設備製造業務、風力發電機組製造業務、脱硫特許經營業務、脱硝業務及水處理業務，從而增加的投標及履約保證金約人民幣116.8百萬元。

Trade and bills payables

Trade and bills payables decreased by 3.0% from RMB12,664.9 million as of December 31, 2011 to RMB12,276.7 million as of December 31, 2012, primarily due to the Group's payments of its trade and bills payables in relation to wind power equipment manufacturing business.

應付賬款及票據

應付賬款及票據從2011年12月31日的約人民幣12,644.9百萬元減少3.0%至2012年12月31日約人民幣12,276.7百萬元。主要是因為本集團就風機設備製造業務償付應付賬款及票據。

Indebtedness

債項

The following table sets forth the Group's borrowings as of December 31, 2012 and 2011:

下表載列於2012及2011年12月31日本集團的借款情況：

		As of December 31, 2012 於2012年12月31日 (RMB millions) (人民幣百萬元)	As of December 31, 2011 於2011年12月31日
Long-term interest bearing borrowings	**長期帶息借款**		
Bank loans:	銀行貸款：		
Secured	有抵押	**1,842.0**	293.1
Unsecured	無抵押	**1,439.9**	1,175.2
Other loans:	其他貸款：		
Secured	有抵押	**6.2**	—
Unsecured	無抵押	**5.0**	11.7
Corporate bonds	公司債券	**4,042.1**	—
		7,335.2	1,480.0
Less: Current portion of long-term borrowings	減：長期借款的即期部分	**(968.6)**	(341.3)
Total	**合計**	**6,366.6**	1,138.7
Short-term interest bearing borrowings	**短期帶息借款**		
Bank loans:	銀行貸款：		
Secured	有抵押	**927.1**	249.5
Unsecured	無抵押	**7,427.7**	10,347.5
Other loans (unsecured)	其他貸款（無抵押）	**500.0**	—
Current portion of long-term borrowings	長期借款的即期部分	**968.6**	341.3
Total	**合計**	**9,823.4**	10,938.3
Total indebtedness	債項總額	**16,190.0**	12,077.0

The Group's indebtedness increased by approximately 34.1% from RMB12,077.0 million as of December 31, 2011 to RMB16,190.0 million as of December 31, 2012, primarily attributable to an increase in non-current portion of long-term borrowings (including the Group's issuance of Corporate Bonds with an aggregated principal amount of RMB4.0 billion) of approximately RMB5,227.9 million, partially offset by the decrease in short-term borrowings (including current-portion of long-term borrowings) of RMB1,114.9 million. The proportion of short-term indebtedness to overall indebtedness decreased from approximately 90.6% in 2011 to 60.7% in 2012, with a corresponding proportional increase in long-term indebtedness.

於2012年12月31日，本集團債項約為人民幣16,190.0百萬元，比於2011年12月31日的債項約人民幣12,077.0百萬元增加約34.1%。其增長主要是由於約人民幣5,227.9百萬元的長期借款的非即期部分（包括本集團發行的面值人民幣40億元國內公司債券）的增長，上述增長部分被約人民幣1,114.9百萬元的短期借款（包括長期貸款的即期部分）的減少所抵銷。其中短期債項佔總債項的比例從於2011年的90.6%減少至於2012年的60.7%，而長期債項的比例相應增加。

Substantially all of the Group's borrowings are denominated in RMB.

本集團絕大部分的借款都以人民幣計算。

The following table sets out the maturity profiles of the Group's long-term borrowings as at the dates indicated:

下表載列本集團於所列示日期的長期借款到期情況：

		As of December 31, 2012 於2012年12月31日	As of December 31, 2011 於2011年12月31日
		(RMB millions) （人民幣百萬元）	
Within 1 year or on demand	1年內或按要求償還	**968.6**	341.3
After 1 year but within 2 years	1年以上但2年以內	**773.7**	777.3
After 2 years but within 5 years	2年以上但5年以內	**3,780.1**	190.0
After 5 years	5年以上	**1,812.8**	171.4
Total	**合計**	**7,335.2**	1,480.0

The Group's effective interest rate (determined by dividing total interest expenses by the sum of outstanding borrowings and other interest-bearing payables) increased from approximately 6.3% in 2011 to approximately 6.9% in 2012, primarily due to an increase in average interest rates for bank loans offered by PRC commercial banks. In order to reduce its finance costs, the Group issued Corporate Bonds and replaced its loans in 2012. As of December 31, 2012, the Group's effective weighted average interest rate was approximately 5.4%, reduced by approximately 1.3% compared to approximately 6.7% as of December 31, 2011 calculated with the same method.

本集團的實際利率（以總利息開支除以未償還借款及其他帶息應付款項總額的平均值釐定）從2011年的約6.3%上升至2012年的約6.9%，主要由於中國商業銀行貸款提供的利率提高。本集團於2012年年末通過發行公司債券以及貸款置換等途徑降低融資成本。如採用加權法計算，本集團於2012年12月31日的加權平均利率為約5.4%，比運用同樣公式計算的於2011年12月31日的約6.7%降低了約1.3%。

The weighted average interest rate is calculated as the total amount of total interest expenses, divided by the amount of each of the loan, multiplied by the actual borrowing months and divided by 12; put it another way, dividing the total amount of the interest expenses by the sum of the weighted borrowings as of December 31, 2012. The sum of weighted borrowing is the sum of the outstanding balance of each loan as of December 31, 2012 multiplied with the weighted index (dividing the number of months for which the loan was borrowed by 12).

加權平均利率計算公式為「利息支出總額／∑單筆貸款金額×實際佔用月數／12」，即利息支出總額除以2012年12月31日所有貸款加權總額（所有貸款加權總額即所有單筆貸款於2012年12月31日的金額與加權指數（即實際佔用月數除以12）的乘積之和）。

Contingent Liabilities

或有負債

The Group's contingent liabilities decreased by approximately 22.9% from RMB1,615.7 million as of December 31, 2011 to RMB1,245.3 million as of December 31, 2012. The Group's contingent liabilities at the end of the period primarily consisted of bidding guarantees and performance guarantees provided by the Group, and a guarantee provided by Galaxy Water, one of the Company's non-wholly owned subsidiaries, to a related party of its minority shareholder.

本集團的或有負債從2011年12月31日的人民幣1,615.7百萬元下降約22.9%至2012年12月31日的約人民幣1,245.3百萬元。本集團期末的或有負債主要包括本集團提供的投標和履約擔保以及銀河水務（系本公司的非全資附屬公司）向其少數股東的關聯方提供的擔保。

Material Investments

On June 28, 2012, the Group subscribed to and was alloted with 141,062,000 H shares of Huadian Fuxin Energy Corporation Limited (華電福新能源股份有限公司) ("**Huadian Fuxin**"), a company listed on the main board of the Hong Kong Stock Exchange (stock code: 0816), with a consideration of approximately RMB193.0 million.

On March 1, 2013, the Group sold 62,562,000 H shares of Huadian Fuxin, with selling price of approximately RMB90.1 million. As a result of the disposal, the Group held 78,500,000 H shares of Huadian Fuxin, representing approximately 1.0% of the total issued shares, or approximately 4.4% of the issued H shares of Huadian Fuxin on that day.

重大投資

2012年6月28日，本集團以約人民幣193.0百萬元的對價認購及獲配發華電福新能源股份有限公司(「**華電福新**」)(該公司於香港聯交所主板上市(股票代碼：0816))141,062,000股H股。

2013年3月1日，本集團出售華電福新62,562,000股H股，出售價格約為人民幣90.1百萬元。作為上述出售的結果，本集團持有華電福新78,500,000股H股，佔該公司當日已發行總股數約1.0%，或已發行H股股數約4.4%。

Material Acquisitions of Subsidiaries

Acquisition of Galaxy Water

On February 16, 2012 and April 20, 2012, the Group entered into purchase agreements to acquire 70% of equity interest in Galaxy Water with a consideration of approximately RMB466.2 million. Galaxy Water became the Group's subsidiary after completion of the acquisition in May 2012.

Acquisition of Zhaojing

On December 25, 2012, the Group entered into a subscription agreement to subscribe to 51% of the equity interest in Jiangsu Zhaojing Optoelectronics Technology Co., Ltd. (江蘇兆晶光電科技發展有限公司) ("**Zhaojing**") with a consideration of approximately RMB153.0 million. Zhaojing became the Group's subsidiary after completion of the acquisition.

重大收購附屬公司

收購銀河水務

本集團分別於2012年2月16日及2012年4月20日簽訂購買協議以大約人民幣466.2百萬元的對價收購銀河水務70.0%的股權。該項收購於2012年5月完成後，銀河水務成為本集團附屬公司。

收購兆晶

本集團於2012年12月25日簽訂一份認購協議以大約人民幣153.0百萬元的對價認購江蘇兆晶光電科技發展有限公司(「**江蘇兆晶**」)51.0%的股權。收購完成後，江蘇兆晶成為本集團附屬公司。

Market Risks

The Group is exposed to various risks associated with its business operations, including credit and counterparty risk, interest rate risk, liquidity risk exchange rate risk, among others.

Credit and counterparty risk

The Group's credit risk is primarily attributable to our cash at bank and in hand, trade and bills receivables, deposits, prepayments and other receivables and other non-current assets. The Group has an internal credit polity to monitor 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. Therefore, Directors consider such risks to be insignificant.

市場風險

本集團面臨著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。

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，以及其他非流動資產。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。

本集團絕大部分現金都存於中國國有或國有控股的銀行業金融機構中。因此，本公司董事認為該等風險並不重大。

The Group performed credit evaluations on all its customers, and monitor outstanding receivables due from such customers on an ongoing basis. The Group's credit evaluation focuses on the customer's payment history, 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 contract terms.

本集團對其所有客戶進行信用評估，並持續監控客戶的重大應收款項。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。

Interest rate risk

利率風險

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 condition. The Company issued Corporate Bonds with an aggregate principal amount of RMB4.0 billion in 2012, which are subject to fixed interest rates, and thereby are not subject to interest rate risk.

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。本公司絕大部分的借款均以人民幣計價，且都是向中國的貸款銀行和金融機構借貸的，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，利率波動會對本集團的業務、營運和財務狀況產生重大影響。本公司於2012年發行了本金總額人民幣40億元的公司債券，該公司債券適用固定利率，因此不受利率風險影響。

The Group does not currently hedge its interest rate risks through any derivative instruments or other hedging arrangements.

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。

Liquidity risk

流動資金風險

The Group's operating cash flows are subject to significant irregularity, given the nature of the businesses in which it is engaged. The Group increasingly carries out its water treatment business through the BOT business model and its desulfurization business through the concession business model. While the Group believes that such business models generate steady cash flows and revenues for the Group over expended periods, such business models require substantial up-front capital investment and a longer period to fully recoup such investments as compared to the traditional business model of EPC. Accordingly, while the Group aims to ensure that it has sufficient working capital to meet its operational requirements or has access to sufficient banking credit facilities to continue its operations without disruption, the cash flow position of the Group is integral to its continued growth and expansion.

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。集團日益加大對BOT運營模式下的水處理業務和特許經營模式下的脱硫業務的投資力度。集團認為，上述兩種運營模式對正處於上升期的集團發展幫助良多：將會帶來更為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模式需要的前期投資更多，資金回籠的時限也更久。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對於其持續發展和擴張不可或缺。

Exchange rate risk

匯率風險

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 the United States dollar, the Euro or the Hong Kong dollar. As of December 31, 2012, the Group recorded a net foreign exchange loss of RMB17.6 million. In addition, after the completion of its IPO on the Stock Exchange in December 2011, the Group holds approximately HKD273.5 million of partial net proceeds denominated in Hong Kong dollars. Directors consider the Group's exchange rate risk to be insignificant. The Group does not currently hedge its exchange risk.

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。這種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、歐元或港元計價。於2012年12月31日，本集團的淨外匯損失為人民幣17.6百萬元。又及，由於本集團於2011年12月在香港聯交所完成首次公開發售，本集團獲得以港元計價的部分所得款項淨額餘額約港幣273.5百萬元。本公司董事認為匯率風險不重大。本集團目前未對沖其匯率風險。

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.

目前人民幣並不是自由兌換的貨幣，未來中國政府可能會酌情決定限制經常賬戶交易的外匯准入。對外幣兌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，由於政策變化，本集團向其股東支付上市的H股的股息可能會被限制。

Outlook 2013

Last year witnessed the promulgation by the PRC Government of a series of laws and regulations which, among others, lay out nationwide performance parameters, standards and goals for environmental protection and energy conservation solutions sectors and renewable energy sectors. These laws and regulations constitute part of the regulatory environment in which the Group conducts its core businesses. Concerned with recent environmental pollution outbreaks and ongoing energy sustainability issues, the PRC Government is expected to intensify its efforts to improve the energy structure and to enhance environmental protection in 2013, signaled by public speeches given by senior PRC Government officials and new issued policies at the beginning of 2013. On January 1, 2013, the PRC State Council issued the 12th Five-year Energy Development Plan (《能源發展「十二五」規劃》), which provided a blueprint and an action plan for the energy development in the PRC during the 12th five-year period. The 12th Five-year Energy Development Plan anticipates that during the 12th five-year period, the average annual growth rate for the wind power and solar power in the PRC would be 26.4% and 89.5%, respectively. In a speech given on February 19, 2013, Mr. ZHOU Shengxian, the PRC Minister of Environmental Protection, highlighted the importance of air pollution reductions. According to the speech, rigorous emission limits would apply to new projects of six heavy-polluting industries, including coal-fired power, steel, petrochemical, cement, colored materials and chemical industries, and to existing projects of three industries, coal-fired power, steel, petrochemical industries, located in the identified key control areas in 19 provinces. Therefore, despite that global economy is still navigating through the path to recovery, the Group anticipates that favorable regulatory environment in the PRC is likely to present significant market opportunities for the Group's businesses in 2013. In response to the PRC Government's focus on promoting development of the renewable energies and strategic energy-related environmental protection and resources conservation measures, the Group's goal is to leverage on the significant market opportunities presented by the regulatory changes in the PRC, by focusing on enhancing technological innovations, strengthening overall management, promoting product and service competitiveness and increasing market shares. The Group plans to improve its innovation capability, advanced technologies, brand recognition and corporate culture in order to achieve the Group's sustainable development.

展望2013

中國政府在2012年出台了一系列法規和措施，為環保和節能產業及可再生能源產業提出了全國性的參數指標、標準和目標。其監管環境的變化關係著本集團核心產業的經營。鑒於近期頻發的環境污染事故以及能源可持續發展的問題，中國政府將於2013年繼續致力改善能源結構，加強環保力度。2013伊始，中國官員講話以及新頒佈的相關政策即可見端倪。2013年1月1日，國務院發佈《能源發展「十二五」規劃》，為中國「十二五」期間的能源發展提供了總體藍圖和行動綱領。規劃預期「十二五」期間中國風電年均增長將達到26.4%，太陽能發電年均增長將達到89.5%。另，在2013年2月19日的演講中，中華人民共和國環保部部長周生賢先生強調減少空氣污染的重要性。根據其發表的演講，將對六大重污染行業(包括火電、鋼鐵、石化、水泥、有色材料類和化工行業)的新建項目以及位於19個省份確定的重點控制區的火電、鋼鐵、石化等行業的現有項目實施更嚴格的排放限值。因此，在全球經濟探求復蘇之路的大環境下，本集團預期中國政府有力的環境監管會為我們2013年的發展帶來巨大的市場契機。本集團致力於支持中國政府大力發展可再生能源，以及在能源相關的環境保護和資源節約方面的戰略舉措，計劃把握住中國政府監管政策變化帶來的巨大市場契機，以科技創新為支撐，以管理提升為載體，以提高產品、服務競爭力和擴大市場佔有率為重點，著力提升公司的創新驅動力、科技引領力、品牌競爭力和文化凝聚力，實現公司健康持續發展。

To leverage on the favorable policies in the PRC and to enhance its core competitiveness, the Group intends to implement the following, in 2013:

借助於中國政府的有力政策，為增強企業的核心競爭力，本集團將於2013年重點開展以下工作：

Continuously focusing on technology innovations and further exploring future growth areas

繼續致力於技術創新，培育發展新增長點

The Group believes that the advanced technology is the core competitiveness of the Group's businesses. To enhance this core competitiveness, in 2013, the Group plans to continue its efforts in aiming to achieve breakthroughs in the identified key research and development areas and core technologies, allocate sufficient financial and other resources to technology research and development and ramp up product innovations. Furthermore, the Group intends to accelerate the progress of technology research and development of lignite comprehensive utilization, flue gas waste heat comprehensive utilization, large-capacity offshore wind power generation, microgrid, wind farm energy storage systems, decentralized energy seawater desalinization, CO_2 capture and fine particles (PM 2.5) collection, and to complete the showcase project for industrialization of the GaAs concentrator solar cell and the technological R&D for lignite conversion. In the meanwhile, the Group intends to focus on developing its general contracting business for power stations and its information management and electronic engineering business, and to cultivate markets outside of the power industry, in order to further explore new growth areas for the Group.

本集團堅信技術進步是核心競爭力之所在。為在2013年提高這一競爭力，本集團計劃繼續努力突破已被確認的重點研究與開發領域及核心科技，加快國家級重點實驗室建設，分配充足的資金和其他資源進行科技研究和開發，並加強對產品的創新。此外，本集團計劃加快推進低階煤綜合利用、煙氣餘熱深度利用、大容量海上風力發電、微網、風電場儲能、分布式能源、海水淡化、二氧化碳捕捉和PM2.5細顆粒物捕集等技術創新，完成聚光砷化鎵電池技術產業化示範和褐煤提質方面的科技研究與開發。同時，本集團計劃著重培育電站總承包業務和信息控制與電力電子業務，將市場拓展到非電領域，以培育能夠帶動本集團快速發展的新增長點。

Integrating and optimizing business assets and promoting industry upgrade

整合優化，推動產業轉型升級

In order to enhance the synergies among various segments and business lines and to increase its competitiveness, the Group intends to further integrate and optimize its core business assets. The Group plans to maintain and promote its existing market-recognized brand names and to create new products and services to diversify its portfolio. The Group also plans to actively search quality acquisition targets in the desulfurization and denitrification concession and water treatment businesses, as and when the market presents such opportunities, in order to optimize the Group's business assets. While aiming to steadily improve its traditional businesses, the Group intends to focus on desulfurization and denitrification concession operations and promote industry upgrade of its business. For environmental protection and energy conservation solutions, the Group intends to further improve its product and service quality, further develop and industrialize its new business line of EMC services and promote the application of new comprehensive boiler energy conservation technologies, such as waste heat recovery and low-NOx combustion technologies. In relation to its renewable energy related business, the Group intends to further develop the "One-stop Shop" service model for wind power products and services to differentiate its services from its competitors and to increase the scale of its solar power EPC general contracting services.

為提高各個環節和產品種類間的協同作用，進一步提高競爭力，本集團預期會整合優化企業的核心業務。本集團計劃保持並提高公司現有品牌的市場認知度，並生產新品種以擴大產品和服務的範圍，把環保節能作為優先發展業務，積極尋找市場契機通過併購脱硫脱硝特許經營、水務等優質資產推進資產重組。在穩定提高傳統業務的基礎上，本集團將著力推動產業升級。環保和節能方面，本集團計劃大力推行脱硫脱硝特許經營加快實現合同能源管理業務產業化發展，推動新型鍋爐綜合節能改造技術的運用，比如餘熱回收和低氮燃燒技術。可再生能源相關產業方面，本集團計劃更進一步提高產品與服務質量，提供風能產品及其服務的「一站式」經營模式，同時計劃擴大太陽能EPC總承包業務的規模。

Developing innovative business models and further cultivating the international market

Leveraging on the achieved leading market position in the PRC, the Company intends to further explore opportunities presented in the international market. The Group plans to further develop the "One-stop Shop" business model by extending selected business lines to the upstream and downstream markets so that the Group's services cover the entire lifespan of a project, from planning, design, EPC general contracting to maintenance. The Group intends to utilize the new business model to promote international cooperation and renewable power station investment, in order to materialize its "Going-out" strategy and create synergies between the Group's domestic and international businesses. The Group also plans to further improve its overseas sales network and to accelerate establishment of overseas sales offices at selected locations, by strengthening operations of its existing overseas branches, subsidiaries and offices in locations such as the United States of America, Canada and Thailand and by establishing new offices selectively, in order to achieve a shared overseas sales network within the Group.

開發創新模式，加快實施「走出去」戰略

借力於國內市場領先優勢，本公司計劃加快創造國際市場機遇。本集團計劃通過延伸服務鏈的上下游，加快發展「一站式」經營模式，以達到一項工程的服務範圍涵蓋從規劃、立項、EPC總承包到運維的整個過程。本集團計劃利用新經營模式來推動國際貿易合作、新能源電站投資，實現「走出去」這一戰略，協同公司各產業共同開發國內、國際兩個市場。本集團也計劃完善海外渠道，加快海外銷售網點布局，推進已有的美國、加拿大、泰國等海外分支機構的實體化運作並有選擇性地發展新設代表處，並實現全集團內共享海外銷售渠道。

Enhancing management efficiency and increasing profitability

The Group intends to improve the overall management efficiency and to transform the administration method, in order to increase its profitability. The Group plans to enhance its centralized capital management and increase financial efficiency, through implementing measures such as strengthening cost control and budget management. In addition, the Group intends to enhance cost control of the value chain, by establishing centralized management platforms for functions including the material procurement, project bidding and capital management, in order to improve the cost control of the logistics, procurement, processing and design phases of the management.

強化管理，提升企業的盈利能力

本集團計劃全面提升管理效率，改變管理方式，以期提升企業的盈利能力，同時通過實施加強成本管理和預算管理等措施，強化企業的資金集中管理，提高資金使用效率。本集團也計劃強化產業鏈成本控制，在物資採購、工程招投標、資金管理等方面搭建集中管理平台以加強對物流鏈、採購鏈、工藝鏈和設計鏈的成本控制。

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT
董事、監事及高級管理人員

BOARD OF DIRECTORS

The Board of the Company consists of 11 Directors, including three executive Directors, four non-executive Directors and four independent non-executive Directors. The Board of the Company's function and responsibility include: convening general meetings; reporting its work to the general meeting; implementing resolutions approved by general meetings; deciding on the Company's business plans and investment plans; preparing the Company's annual budget and final accounts, preparing the Company's profit distribution plans and proposals for the increase in or reduction of the registered capital; and exercising other powers, functions and responsibilities as set out in the articles of association of the Company. The Company has entered into a service contract or appointment letter with each of Directors.

The following table sets out certain information relating to Directors of the Company. On June 8, 2012, Mr. YAN Andrew Y. was appointed as an non-executive Director of the Company, and Mr. SHI Dinghuan was appointed as an independent non-executive Director of the Company. The current term for all the Company's Directors will expire on May 15, 2014.

董事會

本公司的董事會由11名董事組成：三名執行董事、四名非執行董事及四名獨立非執行董事。本公司董事會的職能及職責包括：召集股東大會；於股東大會上報告董事會的工作；執行股東大會通過的決議；確定本公司業務計劃及投資計劃；制定本公司年度預算及決算；制定本公司利潤分配方案及關於註冊資本增減的議案；以及行使本公司《公司章程》所賦予的其他權力、職能及職責。本公司與各董事訂立了服務合約或任命書。

下表載述有關本公司董事的若干資料。本公司於2012年6月8日任命閻焱先生為公司非執行董事及石定環先生為公司獨立非執行董事。本公司所有董事的本屆任期將於2014年5月15日屆滿。

Name 姓名	Age 年齡	Position 職位	Date of Appointment 委任日期
Mr. ZHU Yongpeng 朱永芃先生	62	Chairman of the Board of Directors and Non-executive Director 董事長兼非執行董事	May 16, 2011 2011年5月16日
Mr. YE Weifang 葉偉芳先生	60	Deputy Chairman of the Board of Directors and Executive Director 副董事長兼執行董事	May 16, 2011 2011年5月16日
Mr. YANG Guang 陽　光先生	48	Non-executive Director 非執行董事	May 16, 2011 2011年5月16日
Mr. FENG Shuchen 馮樹臣先生	48	Non-executive Director 非執行董事	May 16, 2011 2011年5月16日
Mr. YAN Andrew Y. 閻　焱先生	55	Non-executive Director 非執行董事	June 8, 2012 2012年6月8日
Mr. LI Hongyuan 李宏遠先生	47	Executive Director 執行董事	May 16, 2011 2011年5月16日
Ms. WANG Hongyan 王鴻艷女士	48	Executive Director 執行董事	May 16, 2011 2011年5月16日
Mr. LU Yanchang 陸延昌先生	72	Independent Non-executive Director 獨立非執行董事	September 21, 2011 2011年9月21日
Mr. ZHAI Ligong 翟立功先生	66	Independent Non-executive Director 獨立非執行董事	September 21, 2011 2011年9月21日
Mr. SHI Dinghuan 石定環先生	69	Independent Non-executive Director 獨立非執行董事	June 8, 2012 2012年6月8日
Mr. FAN Ren Da Anthony 范仁達先生	52	Independent Non-executive Director 獨立非執行董事	September 21, 2011 2011年9月21日

Mr. ZHU Yongpeng, is the chairman of the Board of Directors and a non-executive Director of the Company. Mr. ZHU serves concurrently as president of the Guodian Group, chairman of the board of directors and non-executive director of GD Power, and chairman of the board of directors and non-executive director of China Longyuan Power Group Corporation Limited (龍源電力集團股份有限公司)("**Longyuan Power**"). Mr. ZHU commenced to serve on the Board in January 2005. Mr. ZHU previously served successively as director of general office of the power department of the Ministry of Energy from June 1988 to September 1993; vice president of China Longyuan Electric Power Group Corporation of Ministry of Electric Power from September 1993 to November 1997; president of China Longyuan Electric Power Group Corporation of Ministry of Electric Power from November 1997 to June 1999; president of China Longyuan Electric Power Group Corporation from June 1999 to July 2000; and vice chairman of the board of directors, president of GD Power during the period from July 2000 to October 2002. He also served as vice president of the Guodian Group from December 2002 to March 2008, and president of the Guodian Group since March 2008. Mr. ZHU received a bachelor's degree in engineering from Northeast Dianli University in 1982. Mr. ZHU is a Professor-level Senior Engineer, receiving special allowance from the PRC State Council.

朱永芃先生，為本公司董事長兼非執行董事。目前，朱先生擔任國電集團總經理、國電電力董事長及非執行董事以及龍源電力集團股份有限公司(「**龍源電力**」)董事長及非執行董事。朱先生於2005年1月開始入職董事會，朱先生之前於1988年6月至1993年9月期間，任能源部電力司綜合處處長；1993年9月至1997年11月期間，擔任電力部龍源電力集團公司副總經理；1997年11月至1999年6月期間，任電力部龍源電力集團公司總經理；1999年6月至2000年7月，任龍源電力集團公司總經理；及2000年7月至2002年10月，任國電電力副董事長、總經理；2002年12月至2008年3月期間，擔任國電集團副總經理，自2008年3月起，擔任國電集團總經理。朱先生於1982年獲得東北電力大學工程學士學位。朱先生是教授級高級工程師，享有中國國務院特殊津貼。

Mr. YE Weifang, is the deputy chairman of the Board of Directors and an executive Director of the Company. Mr. YE joined the Group in May 1997. He previously served successively as general economist of Xionghui General Contraction Company of North China Electrical Bureau from September 1996 to May 1997; vice president and president of Beijing Guodian Longyuan Environmental Engineering Limited Liability Company from May 1997 to January 2005; president of the environmental engineering branch of the Company from January 2005 till May 2006; general manager of Beijing Guodian Longyuan Environmental Engineering Limited Liability Company from May 2006 to December 2006; vice president of the Company from December 2006 to June 2009; and president of the Company from June 2009 to May 2011. Mr. YE has been the deputy chairman of the Board of Directors of the Company since June 2011. He received a bachelor's degree in thermal power engineering from North China Electricity Power University in December 1979 and a bachelor's degree in economics from the Correspondence Institute of the Party School of the CPC Central Committee. Mr. YE is a Senior Economist.

葉偉芳先生，為本公司副董事長兼執行董事。葉先生於1997年5月加入本集團。葉先生先後於1996年9月至1997年5月任華北電管局雄輝總承包公司總經濟師；1997年5月至2005年1月擔任北京國電龍源環保工程有限公司副總經理及總經理；2005年1月至2006年5月任本公司環保工程分公司總經理；2006年5月至2006年12月任北京國電龍源環保工程有限公司總經理；於2006年12月至2009年6月期間，擔任本公司副總經理；及於2009年6月至2011年5月期間，擔任本公司總經理；自2011年6月起，擔任本公司副董事長。葉先生於1979年12月畢業於華北電力大學，獲得熱能與動力工程學士學位，並且獲得了中共中央黨校函授學院經濟專業的學士學位。葉先生是高級經濟師。

Mr. YANG Guang, is a non-executive Director of the Company. Mr. YANG serves concurrently as head of science-technology and comprehensive business department of the Guodian Group. Mr. YANG joined the Board of Director of the Company in January 2005. Mr. YANG previously served successively as designing chief engineer, deputy director and director of engineering division of South West Electric Power Design Institute from 1994 to April 1998; deputy chief engineer of South West Electric Power Design Institute and director of project division of South West Electric Power Design Institute from April 1998 to June 1999; deputy director of economic and trade division of international department of the State Power Corporation from February 2001 to November 2001; director of economic and trade division of international department of the State Power Corporation from November 2001 to January 2003; deputy head of engineering and construction department of the Guodian Group from January 2003 to December 2006; head of international cooperation department of the Guodian Group from December 2006 to October 2008, and head of international cooperation and overseas business department of the Guodian Group from October 2008 to September 2009. Mr. YANG received a bachelor's degree in engineering from Chongqing University in July 1985 and is also a Senior Engineer.

陽光先生，為本公司非執行董事。陽先生同時擔任國電集團科技與綜合產業部主任一職。陽先生於2005年1月加入董事會。陽先生之前於1994年至1998年4月，先後任西南電力設計院工程處設計總工程師及工程處副處長及處長；1998年4月至1999年6月期間，擔任西南電力設計院副總工程師兼項目部處長；2001年2月至2001年11月期間，任國家電力公司國際部經濟貿易處副處長；2001年11月至2003年1月期間，任國家電力公司國際部經濟貿易處處長；2003年1月至2006年12月期間，任國電集團工程建設部副主任；2006年12月至2008年10月任國電集團國際合作部主任；2008年10月至2009年9月任國電集團國際合作與海外業務部主任。陽先生於1985年7月獲重慶大學工程學士學位，系高級工程師。

Mr. FENG Shuchen, is a non-executive Director of the Company and serves concurrently as president of GD Power. Mr. FENG joined the Group in September 2004. He previously served successively as chief manager of Chaoyang Power Plant from October 2000 to February 2002; deputy chief manager of Guodian Datong No.2 Power Plant from February 2002 to December 2002; chief manager of Guodian Datong No. 2 Power Plant from December 2002 to September 2004; vice president of the Company from September 2004 to July 2008; President of the Company from July 2008 to April 2009; and head of the human resources department of the Guodian Group from April 2009 to October 2010. Mr. FENG graduated from Shenyang Electric Power Institute in August 1982. He also completed a post-graduate study in control theory and control engineering in North China Electric Power University and received a master's degree in engineering. Mr. FENG is a Senior Engineer.

馮樹臣先生，為本公司非執行董事，同時擔任國電電力總經理。馮先生於2004年9月加入本集團。馮先生先後於2000年10月至2002年2月期間，任朝陽發電廠廠長；2002年2月至2002年12月期間，任國電電力大同第二發電廠第一副廠長；2002年12月至2004年9月，任國電電力大同第二發電廠廠長；2004年9月至2008年7月期間，擔任本公司副總經理；2008年7月至2009年4月期間，任本公司總經理；2009年4月至2010年10月，任國電集團人力資源部主任。馮先生於1982年8月畢業於瀋陽電力學校。他亦完成了華北電力大學的控制理論與控制工程研究生學習課程並獲得工程學碩士學位。馮先生是高級工程師。

Mr. YAN Andrew Y., is a non-executive Director of the Company since June 8, 2012. He also serves concurrently as the managing partner of SAIF Partners. Mr. YAN previously served as managing director and head of Hong Kong office of AIG Asia Infrastructure Fund from 1994 to 2001; director for strategic planning and business development at Sprint International Corporation from 1993 to 1994. Mr. YAN majored in airplane design and obtained his bachelor's degree in engineering from Nanjing Aeronautic Institute (now named as Nanjing University of Aeronautics and Astronautics) in 1982. Mr. YAN also studied at a master's program in sociology at Peking University between 1984 and 1986. He has also obtained a master of arts in international political economy from the Princeton University in 1989.

閻焱先生，自2012年6月8日起擔任本公司非執行董事，同時擔任賽富亞州投資基金的首席合夥人。閻先生於1994年至2001年任職AIG亞洲基礎設施投資基金之董事總經理及香港辦公室主任。於1993年至1994年間，閻先生任Sprint International Corporation的亞太區戰略規劃及業務發展董事。閻先生於1982年在南京航空學院（現南京航空航天大學）獲得飛機設計專業工程學學士學位。1984年至1986年在北京大學攻讀社會學碩士學位。1989年在普林斯頓大學獲得國際政治經濟碩士學位。

Mr. LI Hongyuan, is an executive Director and president of the Company since 2011. Mr. LI joined the Group on May 16, 2011. He previously served successively as president of Guodian Xuanwei Power Generation Co., Ltd. from April 2002 to January 2006; vice president of Guodian Yunnan Branch from March 2004 to January 2006; deputy head of Department of Environmental Protection of the Guodian Group from January 2006 to December 2006 and deputy head of Department of Safety Supervision from December 2006 to October 2008; and president and executive director of Guodian Yunnan Power Co., Ltd. from October 2008 to April 2011. Mr. LI received a bachelor's degree in engineering from Taiyuan University of Technology in July 1986 and a master's degree in engineering from Kunming University of Science and Technology. Mr. LI is a Senior Engineer.

李宏遠先生，自2011年起為本公司執行董事及總經理。李先生於2011年5月16日加入本集團。李先生先後於2002年4月至2006年1月，擔任國電宣威發電有限責任公司總經理；2004年3月至2006年1月期間，擔任國電雲南分公司副總經理；2006年1月至2006年12月期間，任國電集團科技環保部副主任；2006年12月至2008年10月，任國電集團安全生產部副主任；自2008年10月至2011年4月任國電雲南電力有限公司總經理及執行董事。李先生於1986年7月獲得太原工業大學工程學學士學位，並取得昆明理工大學工程學碩士學位。李先生是高級工程師。

Ms. WANG Hongyan, is an executive Director and chief accountant of the Company. Ms. WANG joined the Group in January 2005. Ms. WANG previously served successively as financial executive of China Longyuan Electric Power Group Corporation from June 1993 to December 2000 and vice president of Long Wei Power Technology Co., Ltd. from January 2001 to February 2004; and deputy manager of department of finance of GD Power from February 2004 to January 2005. She also served as deputy chief accountant and manager of department of finance of the Company from April 2005 to April 2006, and served as chief accountant of the Company from April 2006 till now. Ms. WANG received a bachelor's degree in accounting from Renmin University of China (No. 1 Branch) in July 1987. Ms. WANG is a Senior Accountant.

王鴻艷女士，為本公司執行董事及總會計師。王女士於2005年1月加入本集團。王女士先後於1993年6月至2000年12月擔任龍源電力集團公司財務主管；2001年1月至2004年2月擔任龍威發電技術股份有限公司副總經理；2004年2月至2005年1月任國電電力財務部副經理。王女士亦於2005年4月至2006年4月間擔任本公司副總會計師兼財務部經理，2006年4月至今擔任本公司的總會計師。王女士於1987年7月畢業於中國人民大學一分校並獲得會計學學士學位。王女士是高級會計師。

Independent Non-executive Directors

獨立非執行董事

Mr. LU Yanchang, is an independent non-executive Director of the Company. Mr. LU serves concurrently as a vice president of China Association for Science and Technology and president of Chinese Society of Electrical Engineering. Mr. LU served successively as deputy general of department of power generation, head of dispatch bureau, chief engineer and head of department of general office in the Ministry of Water Resources and Electric Power from June 1984 to May 1988; chief engineer for electric power and head of power department of the Ministry of Energy from May 1988 to April 1993; deputy minister of Ministry of Power Industry from April 1993 to March 1998 (and vice president of State Power Corporation and deputy chairman of the board of directors of China United Telecommunications Corporation from December 1996 to March 1998); vice president of State Power Corporation and deputy chairman of the board of directors of China United Telecommunications Corporation from March 1998 to June 2001; deputy chairman of the sixth China Association of Science and Technology from June 2001 to June 2006; deputy chairman of the seventh China Association of Science and Technology since June 2006 and member of the tenth national committee of Chinese People's Political Consultative Conference. Mr. LU graduated from department of power of Tsinghua University and majored in thermal power. Mr. LU is a Professor-level Senior Engineer.

陸延昌先生，為本公司獨立非執行董事。陸先生同時擔任中國科學技術協會副主席、中國電機工程學會理事長。陸先生於1984年6月至1988年5月先後擔任水利電力部電力生產司副司長、調度局局長、總工程師兼辦公廳主任；1988年5月至1993年4月期間擔任能源部電力總工程師兼電力司司長；1993年4月至1998年3月擔任電力工業部副部長(1996年12月至1998年3月兼任國家電力公司副總經理及中國聯合通信有限公司副董事長)；1998年3月至2001年6月任國家電力公司副總經理，中國聯合通信有限公司副董事長；2001年6月至2006年6月任第六屆中國科學技術協會副主席。自2006年6月起擔任第七屆中國科學技術協會副主席。陸先生是十屆中國人民政治協商會議委員。陸先生畢業於清華大學動力系熱能動力專業。陸先生是教授級高級工程師。

Mr. ZHAI Ligong, is an independent non-executive Director of the Company. Mr. ZHAI serves concurrently as deputy managing president of China Association of Production Science, and deputy executive and secretary-general of China Birth Defect Intervention and Aid Foundation. Mr. ZHAI served as deputy head of Institute for Energy Economies of Shanxi Academy of social sciences from May 1979 to December 1982; chief officer of Shanxi Taiyuan Governmental Research Center for Technology Economy from December 1982 to December 1985; successively as director, chief general and deputy head in the National Bureau of Statistics from January 1986 to November 2000; chairman of Central Work Committee for Central Government-led Enterprise and board of supervisors of State-owned Assets Supervision and Administration Commission of the State Council from November 2000 to July 2010. Mr. ZHAI graduated from the Department of Labor Economics at the Capital University of Economics and Business, formerly known as Beijing College of Economics, in July 1970.

翟立功先生，為本公司獨立非執行董事。翟先生同時擔任中國生產力學會常務副會長，中國出生缺陷干預救助基金會副理事長兼秘書長。翟先生於1979年5月至1982年12月任山西省社會科學院能源經濟所副所長；1982年12月至1985年12月任山西省太原市政府技術經濟研究中心總幹事；1986年1月至2000年11月先後擔任國家統計局處長、司長、副局長；2000年11月至2010年7月擔任中央企業工委、國務院國有資產監督管理委員會監事會主席。翟先生於1970年7月畢業於首都經濟貿易大學（前稱為北京經濟學院）勞動經濟系。

Mr. SHI Dinghuan, is an independent non-executive Director of the Company. Mr SHI serves concurrently as counselor of State Council of the PRC, chairman of China Renewable Energy Society,China Science and Technology Consulting Association, China Productivity Promotion Center, China Society for Science and Technical Information, and deputy president of China Industry-University-Research Institute Collaboration Association. Mr. SHI was appointed as Secretary of the Ministry of Science and Technology of the PRC in August 2001. He was also involved in the preparation of the National Program for Medium and Long-term Planning for Scientific and Technological Development (2006-2020) from 2003 to 2005. Mr. SHI graduated from Engineering Physics Department of Tsinghua University in 1967.

石定環先生，為本公司獨立非執行董事。石先生同時擔任中華人民共和國國務院參事、中國可再生能源學會理事長、中國科技諮詢協會理事長、中國生產力促進中心協會理事長、中國科技情報學會理事長、中國產學研合作促進會常務副會長等職務。石先生於2001年8月獲委任為科學技術部秘書長，並於2003年至2005年參與《2006-2020國家中長期科技發展規劃》編製工作。石先生於1967年畢業於清華大學工程物理系。

Mr. FAN Ren Da Anthony, is an independent non-executive Director of the Company. Mr. FAN received his MBA degree from University of Dallas. Mr. FAN serves concurrently as chairman and managing director of AsiaLink Capital Limited. Mr. FAN also serves as independent non-executive director in the following companies listed on the Main Board of Hong Kong Stock Exchange: Uni-President China Holdings Ltd. (220.HK), Raymond Industrial Limited (229.HK), Shanghai Industrial Urban Development Group Limited (563.HK), China Development Bank International Investment Limited (1062.HK), Technovator International Limited (1206.HK), Renhe Commercial Holdings Company Limited (1387.HK), Hong Kong Resources Holdings Company Limited (2882.HK), CITIC Resources Holdings Limited (1205.HK) and Tenfu (Cayman) Holdings Company Limited (6868.HK).

范仁達先生，為本公司獨立非執行董事。范先生在美國達拉斯大學獲得工商管理碩士學位。范先生同時擔任東源資本有限公司的主席兼董事總經理。范先生亦為在聯交所主板上市的統一企業中國控股有限公司（股份代號：220）、利民實業有限公司（股份代號：229）、上海實業城市開發集團有限公司（股份代號：563）、國開國際投資有限公司（股份代號：1062）、同方泰德國際科技有限公司（股份代號：1206）、人和商業控股有限公司（股份代號：1387）、香港資源控股有限公司（股份代號：2882）， 中信資源股份有限公司（股份代號：1205）和天福（開曼）控股有限公司（股份代號：6868）的獨立非執行董事。

Board of Supervisors

The board of supervisors of the Company consists of five members. Except that employee representative supervisors are elected by employees, supervisors are elected by the shareholders of the Company. Supervisors serve a term of three years after which they may be re-elected or re-appointed. The responsibilities of the board of supervisors include: reviewing and verifying the financial report, business report and profit distribution plan prepared by the Board of Directors, and (upon doubt, if any) appointing certified public account and certified public auditor to examine again the financial information of the Company; supervising financial activities of the Company; supervising the performance of Directors, president and other senior management and safeguarding against any breach of the law, administrative regulations and provisions of the articles of association of the Company in the course of discharging their duties; requiring Directors, president and senior management to correct actions that may harm the interests of the Company and exercising other rights granted to them by the articles of association of the Company.

監事會

本公司的監事會現時由五名成員組成。除職工代表監事由僱員選出外，監事均由本公司股東選出，任期三年，如獲重選或重新委任可予連任。監事會的職責包括（但不限於）：審閱及核實董事會編製的財務報告、業務報告及利潤分配方案，並（如有疑問）委任執業會計師及執業核數師重新審查本公司的財務資料；監察本公司的財務活動；監察董事、總經理及其他高級管理人員的表現，及監察他們於執行職務時的行為有否違反法律、行政規定及公司章程細則；要求董事、總經理及高級管理人員糾正有損本公司利益的行動（如有）；以及行使本公司章程賦予他們的其他權力。

Supervisors

The following table sets out certain information relating to the supervisors of the Company.

監事

下表列示有關監事的若干信息。

Name 姓名	Age 年齡	Position 職位	Date of Joining 加入日期	Date of Appointment 委任日期
Mr. QIAO Baoping 喬保平先生	57	Chairman of the Board of Supervisors 監事會主席	May 16, 2011 2011年5月16日	May 16, 2011 2011年5月16日
Mr. CHEN Bin 陳斌先生	53	Supervisor 監事	January 6, 2005 2005年1月6日	May 16, 2011 2011年5月16日
Mr. XU Xingzhou 許興洲先生	51	Supervisor 監事	May 16, 2011 2011年5月16日	May 16, 2011 2011年5月16日
Mr. GUAN Xiaochun 關曉春先生	56	Employee Representative Supervisor 職工代表監事	November 12, 1998 1998年11月12日	May 16, 2011 2011年5月16日
Mr. LI Wei 李偉先生	39	Employee Representative Supervisor 職工代表監事	March 10, 2008 2008年3月10日	May 16, 2011 2011年5月16日

Mr. QIAO Baoping, is chairman of the board of supervisors of the Company. Mr. QIAO joined the Group on May 16, 2011. He serves concurrently as vice president and party secretary of the Guodian Group. Mr. QIAO previously served successively as managing director of standing committee and organization department of Central Committee of the Communist Youth League from August 1998 to May 2000; managing director of mass work department of Central Work Committee for Central Government-led Enterprises from May 2000 to July 2000; managing director of mass work department of Central Work Committee for Central Government-led Enterprise from July 2000 to May 2003 (also as secretary of Committee of the Communist Youth League for Central Government-led Enterprises); managing director of Mass Work Bureau and United Front Work Department of State-owned Assets Supervision and Administration Commission of the State Council from May 2003 to June 2005; and member of the party committee and disciplinary officer of China Power Investment Corporation from June 2005 to June 2008. Mr. QIAO received a bachelor's degree in economics from Nankai University in August 1983 and obtained master's degree in management engineering from Central South University of Technology and master's degree in laws from Party School of the CPC Central Committee. Mr. QIAO is a Senior Economist.

喬保平先生，為本公司監事會主席。喬先生於2011年5月16日加入本集團。喬先生同時擔任國電集團副總經理及黨組書記。喬先生先後於1998年8月至2000年5月期間，擔任團中央常委、組織部部長；於2000年5月至2000年7月期間，擔任中央企業工委群工部部長；2000年7月至2003年5月期間，擔任中央企業工委群工部部長(同時兼任中央企業團工委書記)；2003年5月至2005年6月出任國有資產監督管理委員會群眾工作局局長、統戰部部長；2005年6月至2008年6月出任中國電力投資集團公司黨組成員及黨組紀檢組組長。喬先生於1983年8月畢業於南開大學，獲得經濟學學士學位，並取得中南工業大學管理工程碩士學位和中央黨校法律碩士學位。喬先生是高級經濟師。

Mr. CHEN Bin, is a supervisor of the Company. Mr. CHEN joined the Group on January 6, 2005. He also serves concurrently as assistant president of the Guodian Group and head of finance management department. Mr. CHEN previously served successively as director of financial budget office, financial and property rights department of State Power Corporation from April 1999 to October 2001; general accountant of Sinohydro Engineering Corporation from November 2001 to January 2003; general accountant of GD Power from February 2003 to November 2006 (also vice president of GD Power from March 2004 to November 2006); head of financial and property department as well as deputy general accountant of the Guodian Group from November 2006 to October 2008;and deputy chief accountant and head of finance management department of Guodian Group from October 2008 to April 2012. Mr. CHEN received a bachelor's degree in power management from Northeast Dianli Institute, and a master's degree in management from North China Electric Power University in April 2011. Mr. CHEN is a Senior Accountant.

陳斌先生，為本公司的監事。陳先生於2005年1月6日加入本集團。他目前還擔任國電集團總經理助理兼財務管理部主任。陳先生先後於1999年4月至2001年10月期間擔任國家電力公司財務與產權管理部預算財務處處長；2001年11月至2003年1月期間，任中國水利水電工程總公司總會計師；2003年2月至2006年11月間，擔任國電電力總會計師(並於2004年3月至2006年11月期間擔任國電電力副總經理)；2006年11月至2008年10月期間，擔任國電集團副總會計師兼財務產權部主任；2008年10月至2012年4月期間，擔任國電集團副總會計師兼財務管理部主任。陳先生畢業於東北電力學院，獲得電力管理學士學位並於2011年4月取得華北電力大學管理碩士學位。陳先生是高級會計師。

Mr. XU Xingzhou, is a supervisor of the Company. Mr. XU joined the Group on May 16, 2011. He serves concurrently as head of the human resource department of the Guodian Group. Mr. XU previously served successively as deputy director and director of the Salary and Insurance Division of human resource department of State Power Corporation from May 1999 to January 2003 and deputy head of the human resource department of the Guodian Group from January 2003 to November 2010 (also chairman of the board of supervisors of Guodian Suqian Company and Guodian Kaiyuan Company since October 2003). He has been appointed as head of the Social Insurance Center of the Guodian Group since October 2003 and head of the human resources department of the Guodian Group since November 2010. Mr. XU received a bachelor's degree in management engineering from Jilin Technology University in July 1983, attended a part-time postgraduate program in Tsinghua University and received a master's degree in enterprise management. Mr. XU is a Senior Economist.

許興洲先生，為本公司的監事。許先生於2011年5月16日加入本集團。他同時擔任國電集團人力資源部主任。許先生先後於1999年5月至2003年1月擔任國家電力公司人力資源部工資保險處副處長及處長；2003年1月至2010年11月擔任國電集團人力資源部副主任(2003年10月起兼任國電宿遷公司及國電開遠公司監事會主席)；許先生於2003年10月、2010年11月分別被任命為國電集團社會保險中心主任、國電集團人力資源部主任。許先生於1983年7月自吉林工業大學獲得管理工程學學士學位，並參加了清華大學在職研究生課程，獲得企業管理碩士學位。許先生是高級經濟師。

Mr. GUAN Xiaochun, is an employee representative supervisor of the Company. Mr. GUAN joined the Company on November 12,1998. He serves concurrently as party secretary, disciplinary officer and chairman of the labor union of the Company, and as chairman of the board of directors of Yantai Longyuan Power Technology Co., Ltd., Guodian Longyuan Electrical Co., Ltd. and Beijing Huadian Tianren Power Control Technology Co., Ltd. Mr. GUAN previously served successively as president of Guodian Longyuan Electrical Co., Ltd. from August 1998 to April 2001; president and chairman of the board of directors of Guodian Longyuan Power Technology and Engineering Co., Ltd. from April 2001 to August 2004 and disciplinary officer and chairman of the trade union of the Company from April 2006 to April 2009. Mr. GUAN received a bachelor's degree in engineering from Northeast Dianli University in February 1982 and is a Senior Engineer.

關曉春先生，為本公司的職工代表監事。關先生於1998年11月12日加入本公司。關先生同時擔任本公司的黨組書記、紀檢組長及工會主席，以及煙台龍源電力技術股份有限公司、國電龍源電氣有限公司及北京華電天仁電力控制技術有限公司董事長。關先生先後自1998年8月至2001年4月擔任國電龍源電氣有限公司總經理；2001年4月至2004年8月先後擔任國電龍源電力技術工程有限責任公司總經理、董事長；2006年4月至2009年4月期間，擔任本公司紀檢組長和工會主席。關先生於1982年2月取得東北電力大學工程學士學位。關先生是高級工程師。

Mr. LI Wei, is an employee representative supervisor of the Company. Mr. LI joined the Group on March 10, 2008. He serves concurrently as manager of the inspection and audit department (Disciplinary Office) of the Company and deputy disciplinary officer. Mr. LI previously served successively as deputy director of the audit department and vice president of the financial department of China National Electronic Materials Corporation from March 2000 to March 2008; deputy chief accountant of United Power from March 2008 to October 2008; and vice president of audit department and supervision and audit department of the company from October 2008 to May 2012. Mr. LI received a bachelor's degree in economics from Hangzhou Institute of Electronics Engineering and an MBA degree from Beijing University of Aeronautics & Astronautics. Mr. LI is a Senior Accountant.

李偉先生，為本公司的職工代表監事。李先生於2008年3月10日加入本集團。他同時擔任本公司的審計部監察部（紀檢辦）經理、紀檢組副組長。李先生先後自2000年3月至2008年3月期間，擔任中國電子物資總公司審計處副處長及財務部副總經理；2008年3月至2008年10月期間，任聯合動力副總會計師職務；2008年10月至2012年5月期間，先後任本公司審計部副經理、監察審計部副經理職務。李先生自杭州電子工業學院獲得經濟學學士學位，並獲得北京航空航天大學的工商管理碩士學位。李先生是高級會計師。

SENIOR MANAGEMENT

高級管理人員

The following table sets out certain information relating to the senior management of the Company.

下表列示有關本公司高級管理人員的若干信息。

Name 姓名	Age 年齡	Position 職位	Date of Joining 加入日期
Mr. LI Hongyuan 李宏遠先生	47	Executive Director and President 執行董事及總經理	May 16, 2011 2011年5月16日
Ms. WANG Hongyan 王鴻艷女士	48	Executive Director and Chief Accountant 執行董事及總會計師	January 1, 2005 2005年1月1日
Mr. WANG Gonglin 王公林先生	53	Vice President 副總經理	December 26, 1998 1998年12月26日
Mr. ZHANG Binquan 張濱泉先生	49	Vice President 副總經理	April 30, 2001 2001年4月30日
Mr. ZHANG Xiaodong 張曉東先生	37	Vice President 副總經理	November 1, 2010 2010年11月1日
Mr. YANG Dong 楊東先生	40	Chief Engineer 總工程師	January 18, 2001 2001年1月18日
Mr. TANG Dejun 湯得軍先生	44	Secretary of the Board of Directors 董事會秘書	February 5, 2007 2007年2月5日

Mr. LI Hongyuan - Please see details under the heading "Board of Directors"above.

Ms. WANG Hongyan - Please see details under the heading "Board of Directors"above.

Mr. WANG Gonglin, is vice president of the Company. Mr. WANG servers concurrently as the chairman of the board and the president of Guodian Longyuan Power Technology and Engineering Co., Ltd. He joined the Group on December 26, 1998. Mr. WANG was vice president and then president of Longyuan Technology from December 1998 to June 2009. He was appointed as vice president of the Company in June 2009. Mr. WANG received a master's degree in thermal measurement and automation from Northeast Dianli University in January 1990 and is a Senior Engineer.

Mr. ZHANG Binquan, is vice president of the Company. Mr. ZHANG serves concurrently as the president and director of Guodian United Power Technology Co., Ltd. He joined the Group on April 30, 2001. Mr. ZHANG previously served successively as assistant president and vice president of Guodian Longyuan Power Technology and Engineering Co., Ltd. from May 2001 to October 2005; president of department of planning and development, department of operation and development, department new energy, department of project management and department of solar business of the Company from November 2005 to September 2008; and president of Guodian Ningxia Solar Co., Ltd. from October 2008 to December 2010. Mr. ZHANG majored in control engineering and automation and graduated from Harbin Institute of Technology in 1985 for undergraduate study and received in equivalent master's degree in management in Yanshan University. Mr. ZHANG is a Senior Economist. He also worked in China Great Wall Industry Corporation and CITIC International Cooperation Co., Ltd.

李宏遠先生－請參閱上文「－董事會」部分相關內容。

王鴻艷女士－請參閱上文「－董事會」部分相關內容。

王公林先生，為本公司的副總經理。王先生目前還兼任國電龍源電力技術工程有限公司董事長、總經理等。他於1998年12月26日加入本集團。王先生先後自1998年12月至2009年6月期間擔任龍源技術副總經理及總經理。於2009年6月被任命為本公司副總經理。王先生於1990年1月畢業於東北電力大學，取得熱工測量及自動化碩士學位。王先生是高級工程師。

張濱泉先生，為本公司副總經理。張先生目前還兼任國電聯合動力技術有限公司總經理、董事。他於2001年4月30日加入本集團。張先生先後於2001年5月至2005年10月期間，擔任國電龍源電力技術工程有限責任公司總經理助理、副總經理；2005年11月至2008年9月期間，出任本公司計劃發展部經理、運營發展部經理、新能源部經理、項目管理部經理、太陽能事業部總經理；2008年10月至2010年12月期間，出任國電寧夏太陽能有限公司總經理。張先生於1985年畢業於哈爾濱工業大學，取得控制工程與自動化碩士，並取得燕山大學管理碩士同等學歷。張先生是高級經濟師。他亦曾任職於中國長城工業總公司及中信國際合作公司。

Mr. ZHANG Xiaodong, is vice president of the Company. Mr. ZHANG joined the Group on November 1, 2010. Mr. ZHANG previously served as project principal of Energy Conservation Information Dissemination Center and project principal of project construction division of Information Center of the State Economic and Trade Commission from September 1999 to September 2004; deputy director of research and consulting division of the SASAC's Information Center and director of application and development division of the SASAC's Information Center during the period of September 2004 to October 2010. Mr. ZHANG majored in electric technology and received a bachelor degree from Taiyuan Heavy Machinery Institute. Mr. ZHANG also received an MBA degree from Beijing University of Aeronautics and Astronautics. He is a Senior Engineer.

張曉東先生，為本公司副總經理。張先生於2010年11月1日加入本集團。張先生先後於1999年9月至2004年9月擔任國家經貿委節能信息傳播中心項目負責人以及國家經貿委信息中心項目建設處項目負責人；2004年9月至2010年10月期間，先後擔任國資委信息中心研究諮詢處副處長、國資委信息中心應用開發處處長。張先生畢業於太原重型機械學院，取得電氣技術學士學位。張先生亦獲得北京航空航天大學工商管理碩士學位。他是高級工程師。

Mr. YANG Dong, is chief engineer of the Company. Mr. YANG joined the Group on January 18, 2001. Mr. YANG previously served as thermal mechanical engineer of North China Electric Power Design Institute from July 1993 to May 1998; project engineer of ABB Beijing Representative Office from May 1998 to December 2000; manager of engineering department of Beijing Guodian Longyuan Environmental Engineering Limited Liability Company from January 2000 to August 2004; president of Beijing Longyuan Environmental Engineering Co., Ltd from August 2004 to May 2010. Mr. YANG was assistant president and manager of the department of technology management of the Company from June 2010 to June 2011. Mr. YANG received his bachelor's degree in engineering and applied electronics technology from Shanghai Jiao Tong University and an MBA degree from Renmin University of China. Mr. YANG is a Senior Engineer.

楊東先生，為本公司的總工程師。楊先生於2001年1月18日加入本集團。楊先生先後於1993年7月至1998年5月擔任華北電力設計院的熱機工程師；1998年5月至2000年12月擔任ABB北京代表處的項目工程師；2001年1月至2004年8月擔任北京國電龍源環保工程有限公司設計部經理；2004年8月至2010年5月期間，擔任北京龍源環保工程有限公司總經理；2010年6月至2011年6月，擔任本公司總經理助理兼技術管理部經理。楊先生畢業於上海交通大學，獲工程及應用電子技術學士學位，並獲得中國人民大學工商管理碩士學位。楊先生是高級工程師。

Mr. TANG Dejun, is secretary of the Board of Directors of the Company. Mr. TANG also serves concurrently as manager of securities and financing department of the Company and director of Longyuan Technology. Mr. TANG joined the Group on February 5, 2007. He previously served as director of department of finance of China Center for Information Industry Development from October 2000 to December 2001; chief financial officer (also secretary of board of directors) of CCID Consulting Co., Ltd. from December 2001 to November 2006; manager of finance department of the Company from February 2007 to February 2008; and vice president and chief accountant of Longyuan Technology from February 2008 to April 2011. Mr. TANG received a bachelor's degree in economics from Hangzhou Institute of Electronics Engineering and a master's degree of economics in finance from Central University of Finance and Economics. Mr. TANG is a Senior Accountant.

湯得軍先生，為本公司的董事會秘書。湯先生目前還擔任證券融資部經理、龍源技術的董事。湯先生於2007年2月5日加入本集團。他先後於2000年10月至2001年12月任中國電子信息產業發展研究院財務處處長；2001年12月至2006年11月任賽迪顧問股份有限公司財務總監（及董事會秘書）。2007年2月至2008年2月，湯先生任本公司財務部經理；2008年2月至2011年4月，擔任龍源技術副總經理兼總會計師。湯先生畢業於杭州電子工業學院，獲得經濟學學士學位，並獲得中央財經大學經濟學碩士學位。湯先生是高級會計師。

JOINT COMPANY SECRETARIES

Mr. TANG Dejun - Please see the subsection above under the heading of "Senior Management".

Mr. WONG Ki Yan Davhen, is joint company secretary of the company. Mr. WONG is a fellow member of Association of Chartered Certified Accountants, a Hong Kong Institute of Certified Public Accountants Approved Supervisor to train its prospective members, a member of the Association of Chartered Certified Accountants in the United Kingdom, and a member of the Hong Kong Institute of Certified Public Accountants. Mr. WONG served as senior company secretary, senior company accountant and authorized representative of CCID Consulting Co., Ltd (stock code: HK08235) (2006-2011). Mr. WONG received a bachelor's degree in International Business with his major in China trade from City University of Hong Kong in 1993. Afterwards, he obtained postgraduate accounting diploma at University of Lethbridge, Canada. He received a bachelor's degree in accounting from Oxford Brooks University in 2006 and a joint International Master of Business Administration degree from Tsinghua University and Massachusetts Institute of Technology, USA.

聯席公司秘書

湯得軍先生，請參閱上文「— 高級管理人員」分節。

黃基恩先生，為本公司聯席公司秘書。黃先生是英國特許公認會計師公會資深會員、香港會計師公會認可學員監督、香港會計師公會會員。黃先生曾任賽迪顧問股份有限公司（股份代號：HK08235）（自2006年至2011年）資深公司秘書、資深公司會計師及授權代表。黃先生於1993年獲香港城市大學國際貿易榮譽學士，主修中國貿易；後獲得加拿大列城大學研究生會計學位；於2006年獲牛津布克斯大學榮譽會計學士學位；並獲得清華大學與美國麻省理工學院聯合國際工商管理學碩士學位。

REPORT OF THE BOARD OF DIRECTORS
董事會報告

The Board of the Company hereby presents to shareholders this Annual Report and the audited financial statements as of, and for the year ended, December 31, 2012 (the "**Financial Statements**").

本公司董事會現向股東提呈其於2012年12月31日及截至該日止年度的年報及經審核財務報表(「**財務報表**」)。

Share Capital

As of December 31, 2012, 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. Details of movement in the share capital of the Company during the year are set out in Note 36(c) to the Financial Statements.

股本

於2012年12月31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，H股1,309,770,000股。本公司股本於本年度的變動詳情載於財務報表附註36(c)。

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

On January 13, 2012, the Company issued and allotted additional 121,270,000 H shares of the Company as a result of the partial exercise of the over-allotment option in connected with the Company's initial public offering.

Save as disclosed above, neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the Company's listed securities during the year ended December 31, 2012.

購買、出售或贖回本公司上市證券

由於與本公司首次公開發售相關的超額配股權被部分行使，本公司於2012年1月13日額外配售121,270,000股H股。

除上文所披露者之外，本公司或其任何附屬公司於截至2012年12月31日止年度未購買、出售或贖回本公司任何上市證券。

Pre-emptive Rights

According to the articles of association of the Company or the PRC law, there are no provisions for pre-emptive rights requiring the Company to offer new shares to the existing shareholders of the Company in proportion to their shareholdings.

優先購股權

根據本公司的《公司章程》或中國法律並無存在要求本公司按現有股東持股比例向其發售新股的優先購股權的規定。

Principal Business

The Company is principally engaged in (1) environmental protection and energy conservation solutions, and (2) renewable energy equipment manufacturing and solutions. The Company offers diversified products and services and uses various business models in its business operation. Details of subsidiaries and associates of the Company are set out in Note 19 and Note 20 to the Financial Statements respectively.

主營業務

本公司的主營業務為(1)環保及節能解決方案以及(2)可再生能源設備製造及解決方案。本公司供應多元化的產品及服務，並於開展業務時使用多樣化的業務模式。本公司附屬公司及聯營公司的詳情分別載於財務報表附註19及20。

Results

The results of the Company and its subsidiaries for the year ended December 31, 2012 and the financial position of the Company and its subsidiaries as of December 31, 2012 are set out in the audited Financial Statements of this Annual Report.

A discussion and analysis of the Group performance during the year and material factors underlying its results and financial position are set out in the Management's Discussion and Analysis section of this Annual Report.

業績

本公司及其附屬公司截至2012年12月31日止年度的業績以及本公司及其附屬公司於2012年12月31日的財務狀況載於本年報的經審核財務報表。

有關本集團本年度的業績表現、影響業績及財務狀況的重要因素的討論及分析，載於本年報的管理層討論與分析。

Profit Distribution

The Board has recommended the distribution of a final dividend in cash of RMB2.0 cents per share (before tax) and RMB121,275,400.0 in aggregate (before tax) for the year ended December 31, 2012. All dividends will be distributed upon being approved by shareholders at the forthcoming 2012 annual general meeting of the Company.

利潤分派

董事會建議派發截至2012年12月31日止年度的末期股息現金每股人民幣0.02元（稅前），合計人民幣121,275,400.0元（稅前）。股息派發將於即將召開的本公司2012年度股東周年大會上提交給股東批准。

Property, Plant and Equipment

Details of the movements in property, plant and equipment of the Company and its subsidiaries during the year are set up in Note 14 to the Financial Statement.

物業、廠房及設備

本公司及其附屬公司物業、廠房及設備於本年度的變動詳情載於財務報表附註14。

Reserves

Details of the movements in reserves of the Company during the year are set out in Note 36(a) to the Financial Statements, among which, details of reserves available for distribution to the shareholders as of December 31, 2012 are set out in Note 36(e) to the Financial Statements.

儲備

本年度內本公司儲備的變動詳情載於財務報表附註36(a)，其中截至2012年12月31日可供分配予股東的儲備詳情載於財務報表附註36(e)。

Bank Loans and Other Borrowings

Details of bank loans and other borrowings of the Company and its subsidiaries as of December 31, 2012 are set out in Note 29 to the Financial Statements.

銀行貸款及其他借款

關於本公司及其附屬公司於2012年12月31日之銀行貸款及其他借款的詳情載於財務報表附註29。

Directors, Supervisors and Senior Management

董事、監事和高級管理人員

The following table sets forth certain information concerning the Directors, supervisors and senior management of the Company for the year ended December 31, 2012.

下表列出截至2012年12月31日止年度本公司董事、監事和高級管理人員的若干資料。

Name 姓名	Position in the Company 本公司職位	Date of Appointment 委任日期
Directors **董事**		
Mr. ZHU Yongpeng 朱永芃先生	Chairman of the Board and Non-executive Director 董事長兼非執行董事	May 16, 2011 2011年5月16日
Mr. YE Weifang 葉偉芳先生	Vice Chairman of the Board and Executive Director 副董事長兼執行董事	May 16, 2011 2011年5月16日
Mr. YANG Guang 陽　光先生	Non-executive Director 非執行董事	May 16, 2011 2011年5月16日
Mr. FENG Shuchen 馮樹臣先生	Non-executive Director 非執行董事	May 16, 2011 2011年5月16日
Mr. YAN Andrew Y. 閻　焱先生	Non-executive Director 非執行董事	June 8, 2012 2012年6月8日
Mr. LI Hongyuan 李宏遠先生	Executive Director 執行董事	May 16, 2011 2011年5月16日
Ms. WANG Hongyan 王鴻艷女士	Executive Director 執行董事	May 16, 2011 2011年5月16日
Mr. LU Yanchang 陸延昌先生	Independent Non-executive Director 獨立非執行董事	September 21, 2011 2011年9月21日
Mr. ZHAI Ligong 翟立功先生	Independent Non-executive Director 獨立非執行董事	September 21, 2011 2011年9月21日
Mr. SHI Dinghuan 石定環先生	Independent Non-executive Director 獨立非執行董事	June 8, 2012 2012年6月8日
Mr. FAN Ren Da Anthony 范仁達先生	Independent Non-executive Director 獨立非執行董事	September 21, 2011 2011年9月21日

Name 姓名	Position in the Company 本公司職位	Date of Appointment 委任日期
Supervisors **監事**		
Mr. QIAO Baoping 喬保平先生	Chairman of the Board of Supervisors 監事會主席	May 16, 2011 2011年5月16日
Mr. CHEN Bin 陳斌先生	Supervisor 監事	May 16, 2011 2011年5月16日
Mr. XU Xingzhou 許興洲先生	Supervisor 監事	May 16, 2011 2011年5月16日
Mr. GUAN Xiaochun 關曉春先生	Employee Representative Supervisor 職工代表監事	May 16, 2011 2011年5月16日
Mr. LI Wei 李偉先生	Employee Representative Supervisor 職工代表監事	May 16, 2011 2011年5月16日
Senior Management **高級管理人員**		**Date of Joining** **加入日期**
Mr. LI Hongyuan 李宏遠先生	Executive Director and President 執行董事兼總經理	May 16, 2011 2011年5月16日
Ms. WANG Hongyan 王鴻艷女士	Executive Director and Chief Accountant 執行董事兼總會計師	January 1, 2005 2005年1月1日
Mr. WANG Gonglin 王公林先生	Vice President 副總經理	December 26, 1998 1998年12月26日
Mr. ZHANG Binquan 張濱泉先生	Vice President 副總經理	April 30, 2001 2001年4月30日
Mr. ZHANG Xiaodong 張曉東先生	Vice President 副總經理	November 1, 2010 2010年11月1日
Mr. YANG Dong 楊東先生	Chief Engineer 總工程師	January 18, 2001 2001年1月18日
Mr. TANG Dejun 湯得軍先生	Board Secretary 董事會秘書	February 5, 2007 2007年2月5日

The Company has received, from each of the independent non-executive Directors, an annual confirmation of his independence pursuant to Rule 3.13 of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited and considers that all of the independent non-executive Directors are independent of the Company.

本公司已收到每名獨立非執行董事根據香港聯合交易所有限公司證券上市規則第3.13條就其各自的獨立性出具的年度確認書，並認為每名獨立非執行董事均獨立於本公司。

Biographies of Directors, Supervisors and Senior Management

Biographical details of Directors, supervisors and senior management are set out in the Directors, Supervisors and Senior Management of this Annual Report.

董事、監事和高級管理人員簡歷

董事、監事和高級管理人員的簡歷詳情載於本年報的董事、監事及高級管理人員。

Service Contracts of the Directors and Supervisors

Each of the executive Directors and supervisors of the Company has entered into a service agreement with the Company, and each of the non-executive Directors has entered into a letter of appointment with the Company, on November 28, 2011 (or June 8, 2012, in the case of Mr. YAN Andrew Y.), in compliance with relevant laws and regulations, the articles of association of the Company and the relevant regulations of arbitration. Each service agreement or letter of appointment is for a term commencing from May 16, 2011 (or June 8, 2012, in the case of Mr. YAN Andrew Y.) and expiring on May 15, 2014. Each independent non-executive Director has each entered into a letter of appointment with the Company on November 28, 2011 (or June 8, 2012, in the case of Mr. SHI Dinghuan) for a term commencing from December 30, 2011 (or June 8, 2012, in the case of Mr. SHI Dinghuan) and expiring on May 15, 2014.

Save as disclosed above, none of the Directors or supervisors has entered into a service contract with the Company which is not determinable by the Company within one year without payment of compensation, other than statutory compensation.

董事及監事的服務合約

本公司於2011年11月28日（對於閻焱先生而言，為2012年6月8日）根據相關法律、法規《公司章程》及相關仲裁法規與每位執行董事和監事訂立服務合約，並與每位非執行董事訂立委任書。各服務合約或委任書由2011年5月16日（對於閻焱先生而言，為2012年6月8日）開始，任期截止至2014年5月15日止。本公司已於2011年11月28日（對於石定環先生而言，為2012年6月8日）與每位獨立非執行董事訂立委任書，各委任書由2011年12月30日（對於石定環先生而言，為2012年6月8日）開始，任期截止至2014年5月15日止。

除上文所披露者外，概無董事或監事與本公司訂立本公司不可於一年內不付賠償（法定賠償除外）而終止的服務合約。

Directors' and Supervisors' Remuneration

Details of the remuneration of the Directors and supervisors of the Company are set out in Note 9 to the Financial Statements.

董事及監事的酬金

本公司董事及監事酬金的詳情載於財務報表附註9。

Interests of Directors and Supervisors in Contracts

At any time during the year of 2012, there was no contract of significance to the Group's business in which the Company and its subsidiaries was a party, and in which a director or supervisor had a material interest, either directly or indirectly, subsisted during the year or at the end of the year.

董事及監事於合約的權益

於2012年度內的任何時間，本公司及其附屬公司概無直接或間接參與訂立董事或監事有重大利益關係、與本集團業務有關、且於本年度內或結束時仍然有效的重要合約。

Interests of Directors in Competing Business

During the year of 2012, save as disclosed below, none of the Directors and their associates had any competing interests in any business which competed, or was likely to compete, either directly or indirectly, with the business of the Group:

董事於競爭業務的權益

於2012年度內，除下文所披露者外，概無董事及其聯繫人於任何與本集團業務直接或間接構成競爭或可能構成競爭的業務中擁有任何競爭權益：

Name of Directors 董事姓名	Position in the Company 本公司職位	Other Interests 其他權益
Mr. ZHU Yongpeng 朱永芃先生	Non-executive Director and Chairman of the Board 非執行董事兼董事長	President of Guodian Group, Chairman of the board of directors and non-executive director of GD Power and Chairman of the board of directors and non-executive director of Longyuan Power 國電集團總經理、國電電力非執行董事兼董事長以及龍源電力非執行董事兼董事長
Mr. YANG Guang 陽　光先生	Non-executive Director 非執行董事	Chief of Science and Comprehensive Industry Department of Guodian Group 國電集團科技與綜合產業部主任
Mr. FENG Shuchen 馮樹臣先生	Non-executive Director 非執行董事	President of GD Power 國電電力總經理

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

As of December 31, 2012, Mr. YAN Andrew Y., a non-executive Director of the Company, was interested in 288,200,000 shares of the Company. Please refer to "-Substantial Shareholders' Interests in 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 the meaning of Part XV of the SFO) which would have to be notified to the Company and The Stock Exchange of Hong Kong Limited 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 The Stock Exchange of Hong Kong Limited pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers.

董事、監事及高級管理人員於股份、相關股份及債券的權益及淡倉

於2012年12月31日，本公司非執行董事閻焱先生對本公司的288,200,000股股份擁有權益。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、相關股份或債券中擁有任何根據《證券及期貨條例》第XV部第7及8分部須知會本公司及香港聯合交易所有限公司的權益或淡倉（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《上市發行人董事進行證券交易的標準守則》須知會本公司及香港聯合交易所有限公司的權益或淡倉。

Substantial Shareholders' Interests in Shares

As of December 31, 2012, so far as known to the Directors, the following persons (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:

主要股東於股份之權益

於2012年12月31日，就董事所知，下列人士（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：

Name of Shareholders 股東姓名／名稱	Class of Share 股份類別	Capacity 身份	Number of Shares/ Underlying Shares Held (Share) 持有股份／相關股份數目（股）	Percentage in the Relevant Class of Share Capital[1] % 佔有關股本類別之百分比[1] %	Percentage in the Total Share Capital[1] % 佔股本總數之百分比[1] %
Guodian Group 國電集團	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 share 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 (Long position) （好倉）	22.00	4.75

Name of Shareholders 股東姓名／名稱	Class of Share 股份類別	Capacity 身份	Number of Shares/ Underlying Shares Held (Share) 持有股份／相關股份數目（股）	Percentage in the Relevant Class of Share Capital[1] % 佔有關股本類別之百分比[1] %	Percentage in the Total Share Capital[1] % 佔股本總數之百分比[1] %
China High Speed Transmission Equipment Group Co. Ltd. 中國高速傳動設備集團有限公司	H shares H股	Interests of beneficial owner 實益擁有人之權益	144,100,000 (Long position) （好倉）	11.00	2.38
China Huadian Corporation 中國華電集團公司	H shares H股	Interests of beneficial owner and controlled corporation 實益擁有人之權益及受控公司之權益	108,050,000[4] (Long position) （好倉）	8.25	1.78
China Huadian Hong Kong 中國華電香港有限公司	H shares H股	Interests of beneficial owner 實益擁有人之權益	108,050,000 (Long position) （好倉）	8.25	1.78
Beijing High Technology Venture Capital Co., Ltd. 北京高新技術創業投資股份有限公司	H shares H股	Interests of beneficial owner 實益擁有人之權益	105,637,000 (Long position) （好倉）	8.07	1.74
			105,637,000 (Lending pool) （可供借出的股份）	8.07	1.74
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	96,000,000 (Long position) （好倉）	7.33	1.58
SDIC Capital Holdings Co., Ltd. 國投資本控股有限公司	H shares H股	Interests of beneficial owner 實益擁有人之權益	72,050,000 (Long position) （好倉）	5.50	1.19

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 of December 31, 2012.

(2) The Guodian Group holds, directly or indirectly, 100% of the domestic shares of the Company via GD Power. As of December 31, 2012, Guodian Group has 52.13% of the interests in the total shares of GD Power and GD Power has 49.99% of the domestic shares of the Company. Therefore, Guodian Group is deemed to have the interests in the domestic shares of the Company possessed 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. He is the controlling shareholder of SAIF IV 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 have the interests in the H shares held by SAIF Partners IV L. P.

(4) China Huadian Corporation holds 8.25% of the H shares indirectly via China Huadian Hong Kong.

備註：

(1) 該百分比是以本公司於2012年12月31日已發行的相關股份數目／總股份數目計算。

(2) 國電集團透過國電電力直接及間接持有100%的內資股。於2012年12月31日，國電集團於國電電力股份總額中擁有52.13 %的權益，國電電力擁有本公司49.99%的內資股。因此，國電集團被視作為擁有國電電力所持有的內資股的權益。

(3) 閻焱先生透過SAIF IV GP Capital Ltd.及SAIF IV GP LP經SAIF Partners IV L.P.間接持有22.00%的H股。閻焱先生是SAIF IV GP Capital Ltd.、SAIF IV GP LP以及SAIF Partners IV L.P.的控股股東。SAIF IV GP Capital Ltd.是SAIF IV GP LP的控股股東。SAIF IV GP LP是SAIF Partners IV L.P.的控股股東。SAIF Partners IV L.P.擁有22.00%的H股。因此，閻焱、SAIF IV GP Capital Ltd.以及SAIF IV GP LP被視作為擁有SAIF Partners IV L.P.所持有H股的權益。

(4) 中國華電集團公司透過中國華電香港有限公司間接持有8.25%的H股。

Management Contracts

The Company did not enter into any contract in respect of the management or administration of the entire or any significant part of the business of the Company nor such contract subsisted at any time during 2012.

管理合約

2012年度內本公司並未於任何時間就有關全部或任何重大部分業務的管理或行政工作訂立或存在任何合約。

Subsequent Events

Details of non-adjustment events after the balance sheet date of the Company are set out in Note 44 to the Financial Statements.

結算日後事項

本公司資產負債表日期之後未調整事件詳情載於財務報表附註44。

Connected Transactions

The Company has entered into certain contracts with its connected persons (as defined under Chapter 14A of the Listing Rules). These transactions were monitored and managed by the Company in accordance with the Listing Rules.

關連交易

本公司已與其關連人士(定義見上市規則第14A章)訂立若干合約。此等交易乃由本公司根據上市規則監督和管理。

Non-exempt connected transactions of the Group during 2012 are as follows:

(1) Non-exempt One-off Connected Transaction

During the year of 2012, the Group had conducted the following non-exempt one-off connected transactions.

1. *Increase in capital contribution to Guodian Finance*

On April 17, 2012, Guodian Finance Corporation Ltd. ("**Guodian Finance**") entered into the capital increase agreement with twelve shareholder companies (including the Company), pursuant to which, these twelve shareholder companies agreed to increase their capital contributions to Guodian Finance. Upon the increase in capital contribution, the twelve shareholder companies will inject a total capital contribution of RMB2.739 billion into Guodian Finance, among which the registered capital of Guodian Finance will be increased by RMB2.05 billion and the capital reserve of Guodian Finance will be increased by RMB689.00 million.

Pursuant to the capital increase agreement, the Company agreed to inject a total capital contribution of RMB66.83 million to Guodian Finance, among which RMB18.30 million will be transferred from its existing capital reserve to the registered capital of Guodian Finance, RMB31.72 million will be injected into the registered capital of Guodian Finance, and RMB16.81 million will be injected into the capital reserve of Guodian Finance. Upon completion of the capital increase, the Company's shareholding interests in Guodian Finance will remain unchanged.

As the Guodian Group directly and indirectly holds approximately 78.4% of the issued share capital of the Company, it is a controlling shareholder as defined under the Listing Rules and thus a connected person of the Company. Guodian Finance is a subsidiary of the Guodian Group, and is therefore a connected person of the Company. The capital contribution to Guodian Finance by the Company constitutes a connected transaction of the Company under Chapter 14A of the Listing Rules, and is therefore subject to the reporting and announcement requirements but exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

下列為本集團於2012年度內的未獲豁免關連交易：

(一) 不獲豁免一次性關連交易

2012年，本集團已開展以下不獲豁免一次性關連交易。

1. *向國電財務增資*

2012年4月17日，國電財務有限公司（「**國電財務**」）與十二家股東公司（包括本公司）訂立了增資協議約定向國電財務增資，根據此協議，該等十二家股東公司同意向國電財務增資。增資後，十二家股東公司向國電財務投入人民幣27.39億元的總出資額，其中國電財務的註冊資本增加20.5億元，國電財務的資本公積增加人民幣689.00百萬元。

根據增資協議，本公司同意向國電財務投入人民幣66.83百萬元的總出資額，其中人民幣18.30百萬元將從現有的資本公積轉為國電財務的註冊資本，人民幣31.72百萬元將投入國電財務的註冊資本，人民幣16.81百萬元將投入國電財務的資本公積。完成增資後，本公司在國電財務中的持股權益仍保持不變。

鑒於國電集團直接或間接持有本公司約78.4%的已發行股本，依據上市規則，其應為控股股東，因此，其為本公司的關連人士。國電財務系國電集團的附屬公司，因此，其亦為本公司的關連人士。依據上市規則第14A章，本公司向國電財務增資構成本公司的關連交易，因此依據上市規則第14A章，該增資應進行申報、公告，但無需獲得獨立股東的批准。

The capital increase was expected to enhance the function of Guodian Finance as a platform for central management of funds from its member companies and improve funding utilization efficiency, which will effectively reduce the cost of funds and related transaction costs. Through the further capital contribution to Guodian Finance, the Company was expected to benefit from expanding its financing channel to obtain more efficient financial management services with lower risk and strengthen its financial positions. In addition, the capital increase was expected to drive the business expansion of Guodian Finance and increase its overall profitability, which will, in turn, bring economic benefits to the Company by virtue of its equity interest in Guodian Finance.

本公司希望通過增資來增強國電財務作為其成員公司資金的中央管理平台的職能，提高資金利用效率，並有效地降低資金成本和相關交易費用。通過進一步向國電財務增資，本公司希望通過擴大融資渠道，獲得更高效且低風險的財務管理服務並鞏固其財務狀況。此外，增資亦可推動國電財務業務拓展並提高其整體盈利能力。鑒於本公司在國電財務享有的股權，增資亦可給本公司帶來經濟利益。

Details of the transaction are set out in the Company's announcement dated April 17, 2012.

該交易詳情見本公司2012年4月17日的公告。

2. *Acquisition of 30% of the equity interest in Jiangsu Longyuan*

2. *收購在江蘇龍源30%的股權*

On July 4, 2012, Beijing Guodian Longyuan Environmental Engineering Co., Ltd. ("**Longyuan Environmental**"), a wholly-owned subsidiary of the Company, entered into an equity transfer agreement with Guodian Environmental Protection Research Institute, pursuant to which, Longyuan Environmental conditionally agreed to purchase, and Guodian Environmental Protection Research Institute conditionally agreed to sell, Guodian Environmental Protection Research Institute's entire 30% equity interest in Jiangsu Longyuan Catalyst Co. Ltd. ("**Jiangsu Longyuan**") at a consideration of RMB45,057,263. Before completion of the transaction, Longyuan Environmental holds 70.0% equity interest in Jiangsu Longyuan and Guodian Environmental Protection Research Institute holds the remaining 30.0% equity interest in Jiangsu Longyuan. After completion of the transaction, Longyuan Environmental holds 100% equity interest in Jiangsu Longyuan.

2012年7月4日，北京國電龍源環保工程有限公司（「**龍源環保**」），系本公司的一家全資附屬公司，與國電環境保護研究所訂立了股權轉讓協議，根據此協議，龍源環保以人民幣45,057,263元的價格同意購買，且國電環境保護研究所同意出售國電環境保護研究所在江蘇龍源催化劑有限公司（「**江蘇龍源**」）所持有的30%股權。在完成轉讓之前，龍源環保持有江蘇龍源70.0%股份，國電環境保護研究所持有江蘇龍源剩餘的30.0%股權。完成轉讓之後，龍源環保持有江蘇龍源100%的股權。

As the Guodian Group directly and indirectly holds approximately 78.4% of the Company's issued share capital, it is a controlling shareholder as defined under the Listing Rules and thus a connected person of the Company. Guodian Environmental Protection Research Institute, a subsidiary of the Guodian Group, is therefore a connected person of the Company. The equity transfer constitutes a connected transaction under Chapter 14A of the Listing Rules, and is therefore subject to the reporting and announcement requirements but exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

鑒於國電集團直接或間接持有本公司約78.4%的已發行股本，依據上市規則，其應為控股股東，因此，其為本公司的關連人士。國電環境保護研究所系國電集團的附屬公司，因此，其亦為本公司的關連人士。依據上市規則第14A章，此次股權轉讓構成本公司的關連交易，因此依據上市規則第14A章，本次股權轉讓應進行申報、公告，但無需獲得獨立股東的批准。

The acquisition is in line with Company's strategy of streamlining and further developing its denitrification business. It integrates the assets of the Group and further enhances the Company's resource allocation and management. In addition, it reduces connected transactions and optimizes the corporate governance structure.

此次收購符合本公司制定並進一步發展其脱硝業務的戰略。本公司通過收購整合本公司資產並進一步改善本公司的資源分配和管理。此外，此次收購減少關連交易並優化公司治理結構。

Details of the transaction are set out in the Company's announcement dated July 4, 2012.

該交易詳情見本公司2012年7月4日的公告。

3. *Formation of a joint venture*

3. *組成合營公司*

On July 31, 2012, Guodian United Power Technology Co., Ltd ("**United Power**"), a non-wholly owned subsidiary of the Company, and Guodian Weifang Wind Power Generation Company Limited ("**Weifang Power**") entered into an agreement ("**JV Agreement**") in relation to the formation of a joint venture company ("**JV Company**") with a registered capital of RMB75.0 million. The terms of the JV Agreement were negotiated on an arm's length basis between United Power and Weifang Power. Pursuant to the JV Agreement, United Power and Weifang Power will contribute RMB45.0 million and RMB30.0 million respectively to the JV Company, accounting for 60% and 40% of its equity interest. The payment will be paid by cash installments and will be fully contributed by United Power and Weifang Power within two years from the date of incorporation of the JV Company.

2012年7月31日，國電聯合動力技術有限公司(「**聯合動力**」)，系本公司的一家非全資附屬公司，與國電濰坊風力發電有限公司(「**濰坊風電**」)就組成合營公司(「**合營公司**」)訂立了一份協議(「**合營協議**」)，合營公司註冊資本為人民幣75.0百萬元。聯合動力和濰坊風電經公平協商後訂立此合營協議條款。根據合營協議，聯合動力和濰坊風電分別向合營公司出資人民幣45.0百萬元和人民幣30.0百萬元，分別佔其股權的60%和40%。聯合動力和濰坊風電將在合營公司註冊成立後的兩年內以現金方式分期進行全額出資。

As the Guodian Group directly and indirectly holds approximately 78.40% of the Company's issued share capital, it is a controlling shareholder as defined under the Listing Rules and thus a connected person of the Company. Weifang Power is a subsidiary of the Guodian Group and is therefore a connected person of the Company. The formation of the JV Company constitutes a connected transaction of the Company under the Listing Rules, and is therefore subject to the reporting and announcement requirements but exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

鑒於國電集團直接或間接持有本公司約78.40%的已發行股本，依據上市規則，其應為控股股東，因此，其為本公司的關連人士。濰坊風電系國電集團的附屬公司，因此，其亦為本公司的關連人士。依據上市規則，組成合營公司構成本公司的關連交易，因此依據上市規則第14A章，組成合營公司應進行申報、公告但無需獲得獨立股東的批准。

With the formation of the JV Company, United Power may expand its business scope and scale in the areas of manufacturing of wind turbine generator and its accessories, providing EPC and other wind power services. Weifang Power is a potential customer of United Power; setting up a joint venture with its potential customer could increase business opportunities for United Power. Moreover, the JV Company will become an indirect non-wholly owned subsidiary of the Company and its financial results will be consolidated into the Group's financial statements.

通過組成合營公司，聯合動力可拓展其在製造風力發電機組及其配件以及提供EPC及其他風電服務領域的業務範圍和規模。濰坊風電系聯合動力的潛在客戶；與其潛在客戶建立合營公司能夠增加聯合動力的商業機會。而且，合營公司將成為本公司間接非全資附屬公司，且財務業績將並入本集團的財務報表。

Details of the transaction are set out in the Company's announcement dated July 31, 2012.

該交易詳情見本公司2012年7月31日的公告。

4. *Increase in capital contribution to United Power*

On August 28, 2012, United Power entered into the Increase of Share Capital Agreement with China Longyuan Power Group Corporation Limited ("**Longyuan Power**") and the Company ("**Shareholder Companies**"), pursuant to which, each of the two Shareholder Companies agreed to increase its respective capital contribution to United Power, in proportion to each of their existing shareholdings in United Power. The two Shareholder Companies are expected to make a total capital contribution of approximately RMB734.48 million to United Power. Upon completion of above-mentioned increase of share capital, the registered capital of United Power is expected to increase from approximately RMB1,403.05 million to approximately RMB2,137.53 million.

Pursuant to the Increase of Share Capital Agreement, the Company is expected to contribute a total capital of approximately RMB514.14 million to United Power. Upon completion of the increase of share capital, the Company's equity interests in United Power will remain unchanged.

The Company owns 70%, while Longyuan Power owns 30%, of equity interests in United Power. The Guodian Group, the Company's controlling shareholder, owns approximately 63.68% of equity interests in Longyuan Power. United Power is therefore an associate of the Guodian Group. Therefore, United Power is the Company's connected person under Rule 14A.11(4) and Rule 14A.11(5) of the Listing Rules. Entering into the Increase of Share Capital Agreement constitutes a connected transaction of the Company as defined under Rule 14A.13 of the Listing Rules and is therefore subject to the reporting, announcement and the independent shareholders' approval requirements under Chapter 14A of the Listing Rules.

The increase of share capital can enhance the registered capital and working capital of United Power, which will effectively improve its operation and business. The increase of share capital is expected to allow United Power to expand its business and to increase its overall profitability, which in turn is expected to bring economic benefits to the Company.

Details of the transaction are set out in the Company's announcement dated August 28, 2012.

4. *向聯合動力增資*

2012年8月28日，聯合動力與中國龍源電力集團股份有限公司(「**龍源電力**」)以及本公司(兩者統稱為「**股東公司**」)訂立了增資協議，根據此協議，兩家股東公司同意根據其各自在聯合動力現有的持股比例向聯合動力增加其各自的出資額。兩家股東公司向聯合動力作出的出資總額約為人民幣734.48百萬元。完成上述增資後，聯合動力的註冊資本將從約人民幣1,403.05百萬元增至約人民幣2,137.53百萬元。

根據增資協議，本公司將向聯合動力作出的出資總額約人民幣514.14百萬元。完成增資後，本公司在聯合動力的股權仍保持不變。

本公司在聯合動力持有70%的股權，龍源電力在聯合動力持有30%的股權。國電集團，系本公司控股股東，持有龍源電力約63.68%的股權。因此，聯合電力為國電集團的聯繫人。因此，依據上市規則之規則14A.11(4)和規則14A.11(5)，聯合動力為本公司的關連人士。因此，依據上市規則之規則14A.13，簽訂增資協議構成本公司的關連交易，因此依據上市規則第14A章，簽訂增資協議應進行申報、公告，並需獲得獨立股東的批准。

增資能加強聯合動力的註冊資本和流動資金，從而有效提高其營運及業務。增資可拓展聯合動力的業務並提高其整體盈利能力；增資亦可給公司帶來經濟利益。

該交易詳情見本公司2012年8月28日的公告。

5. *Provision of financial assistance*

In May 2012, the Company, through its wholly-owned subsidiary, Beijing Lucency Environment and Technology Corporation Limited ("**Lucency**"), completed the acquisition of a total of 70% of equity interests in Galaxy Water Treatment Limited Company ("**Galaxy Water**") from two independent third parties, Qingdao Galaxy Investment Corporation Limited ("**Galaxy Investment**", 60.82%) and Qingdao Huayin Property Development Corporation Limited ("**Qingdao Huayin**", 9.18%). Upon completion of the acquisition, Galaxy Water became the Company's indirect, non-wholly owned subsidiary. Galaxy Investment, which is a subsidiary of Qingdao Galaxy Group Corporation Limited ("**Qingdao Galaxy**"), owns the remaining 30% of equity interests in Galaxy Water.

Before the acquisition, Galaxy Water provided a guarantee in favor of the Changde Renmin Road Sub-branch of ICBC to secure loan facilities provided to Changde Santong Construction and Investment Corporation Limited ("**Changde Santong**"), a then fellow subsidiary of Galaxy Water and also a subsidiary of Galaxy Investment. The maximum amount of the guarantee was RMB260.0 million. Furthermore, before the acquisition, Qingdao Galaxy, together with its subsidiaries and shareholders, provided a number of guarantees for the benefit of Galaxy Water and its subsidiaries in a total amount of approximately RMB259.5 million. At completion of the acquisition, the guarantee and those guarantees provided by Qingdao Galaxy and its shareholders and subsidiaries to Galaxy Water have not been released.

Galaxy Investment, which owns 30% of equity interests in Galaxy Water, is Galaxy Water's substantial shareholder. Changde Santong is a subsidiary of Galaxy Investment, and therefore an associate of Galaxy Investment and therefore a connected person of the Company under Rule 14A.11(4) of the Listing Rules. Thus the guarantee constitutes a connected transaction of the Company under the Listing Rules, and is therefore subject to the reporting and announcement requirements but exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

The guarantee was assumed by the Group in the acquisition, and the acquisition is expected to enable the Group to expand its water treatment business and to allow the Group to benefit from Galaxy Water's expertise in constructing and operating water treatment projects.

Details of the transaction are set out in the Company's announcement dated September 5, 2012.

5. *提供財務資助*

2012年5月，本公司通過其全資附屬公司，即北京朗新明環保科技有限公司(「**朗新明**」)，收購兩家獨立的第三方青島銀河投資有限公司(「**銀河投資**」，60.82%)和青島華銀房地產開發有限公司(「**青島華銀**」，9.18%)在銀河水務股份有限公司(「**銀河水務**」)持有的共70%股權。完成收購後，銀河水務成為本公司間接非全資附屬公司。銀河投資，系青島銀河集團股份有限公司(「**青島銀河**」)的一家附屬公司，擁有銀河水務剩餘的30%股權。

在收購之前，銀河水務對中國工商銀行常德人民路支行向常德三同建設投資有限公司(「**常德三同**」)授予的貸款提供擔保，常德三同當時系銀河水務的同系附屬公司，同時亦為銀河投資的附屬公司。擔保最高金額為人民幣260.0百萬元。此外，在收購之前，青島銀河及其附屬公司和股東為銀河水務及其附屬公司提供總額約為人民幣259.5百萬元的擔保。完成收購時，青島銀河及其股東和附屬公司向銀河水務提供的擔保尚未解除。

擁有銀河水務30%股權的銀河投資系銀河水務的主要股東。常德三同系銀河投資的一家附屬公司，因此亦為銀河投資的聯繫人士，依據上市規則之規則14A.11(4)，其亦為本公司的關連人士。因此，依據上市規則，此次擔保構成本公司的關連交易，因此依據上市規則第14A章，此次擔保應進行申報、公告，但無需獲得獨立股東的批准。

在收購期間，本公司負責提供擔保，通過收購能夠使得本集團拓展其水務業務並了解銀河水務建設和運營水務項目的專業知識。

該交易詳情見本公司2012年9月5日的公告。

(2) Non-exempt Continuing Connected Transaction

The Group has entered into certain non-exempt continuing connected transactions during 2012.

After the listing of the Company's shares, the Hong Kong Stock Exchange and the independent shareholders approved the annual caps of the following non-exempt continuing connected transactions and granted a waiver to the Company from strict compliance with the announcement and independent shareholders' approval requirements. The table below has set out the annual caps and the actual transaction amount of such continuing connected transactions:

（二）不獲豁免持續關連交易

本集團於2012年度訂立了若干不獲豁免持續關連交易。

本公司已於股份上市後獲得香港證券交易所及獨立股東對下述不獲豁免持續關連交易年度上限的批准，並獲授予豁免嚴格遵守有關公告及獨立股東批准的規定。下表列示此類持續關連交易的年度上限和實際交易金額：

	Connected Party 關連方	Transaction Type 交易類型	Cap for 2012 2012年 年度上限 (RMB million) （人民幣百萬元）	Actual Transaction Amount for 2012 2012年年度 實際交易金額 (RMB million) （人民幣百萬元）
1	Guodian Group 國電集團	Provision of Products and services by the Group to Guodian Group and its subsidiaries 由本集團向國電集團及其附屬公司提供產品及服務	18,475.0	12,523.0
2	Guodian Group 國電集團	Provision of products and services by Guodian Group and its subsidiaries to the Group 由國電集團及其附屬公司向本集團提供產品及服務	2,746.0	928.3
3	11th Institute 第十一研究所	Provision of products and services by the IT Electronics Eleventh Design & Research Institute Scientific and Technological Engineering Corporation Limited to the Group 由信息產業電力第十一設計研究所科技工程股份有限公司向本集團提供產品及服務	180.0	161.8
4	11th Institute 第十一研究所	Provision of products and services by the Group to the IT Electronics Eleventh Design & Research Institute Scientific and Technological Engineering Corporation Limited 由本集團向信息產業電力第十一設計研究所科技工程股份有限公司提供產品及服務	100.0	0.6
5	United Power 聯合動力	Provision of products and services to United Power and its subsidiaries by the Group 由本集團向聯合動力及其附屬公司提供產品及服務	1,136.0	478.0
6	United Power 聯合動力	Lease of properties by the Group to United Power 由本集團向聯合動力出租物業	30.0	20.9

	Connected Party 關連方	Transaction Type 交易類型	Cap for 2012 2012年 年度上限 (RMB million) （人民幣百萬元）	Actual Transaction Amount for 2012 2012年年度 實際交易金額 (RMB million) （人民幣百萬元）
7	Full Dimension 北京全四維	Provision of products and services by Beijing Full Dimension Power Tech Co., Ltd. to the Group 由北京全四維動力科技有限公司向本集團提供產品及服務	70.0	54.0
8	Longyuan Technology 龍源技術	Provision of products and services by Longyuan Technology to the Group 由龍源技術向本集團提供產品及服務	30.0	22.1
9	Jiangsu Longyuan. 江蘇龍源	Provision of products and services by Jiangsu Longyuan Catalyst Co., Ltd. to the Group 由江蘇龍源催化劑有限公司向本集團提供產品及服務	320.0	156.4
10	Guodian Finance 國電財務	Provision of financial services by Guodian Finance Corporation Ltd. to the Group 由國電財務有限公司向本集團提供財務服務	350.0(1)	302.3(1)

Note:

(1) These numbers represent the maximum daily balance of the deposit placed with Guodian Finance by the Group.

備註：

(1) 這些數字表示本集團存於國電財務的每日最高存款餘額。

1. Provision of products and services by the Group to the Guodian Group and its subsidiaries (other than the Group)

The Company entered into a master agreement in good faith and at arm's length on the mutual supply of products and services with the Guodian Group on November 23, 2011, amended by a supplemental agreement and a second supplemental agreement on May 7, 2012 and August 28, 2012, respectively.

1. 本集團向國電集團及其附屬公司（除本集團外）提供產品及服務

本公司與國電集團於2012年5月7日及2012年8月28日日經公平協商後分別訂立互相供應產品及服務的框架協議的補充協議及第二次補充協議，修訂了2011年11月23日訂立的框架協議。

Material terms and conditions of the master agreement are set out as follows:

Pursuant to the master agreement, the goods and services to be provided by the Group to the Guodian Group and its subsidiaries (other than the Group) include:

- Environmental protection and energy conservation solutions services segment: (i) environmental protection products (including, among others, ash removal, water treatment and denitrification catalyst); (ii) energy conservation products (including, among others, plasma-assisted coal combustion equipment); (iii) environmental protection services (including, among others, desulfurization concession service, denitrification concession service, desulfurization EPC service, denitrification EPC service, water treatment BOT service); and (iv) energy conservation services (including, among others, steam turbine flow passage improvement service and EMC); and

- Renewable energy equipment manufacturing and integrated solutions services segment: (i) WTGs and their parts and components; (ii) solar power products; (iii) wind power services including wind farm EPC services; and (iv) solar power services including station EPC services.

If the terms and conditions of similar products and services offered by an independent third party are no better than those offered by one party, the other party shall give priority in sourcing the requisite products and services from the first party.

The Group and the Guodian Group and its subsidiaries (other than the Group) will enter into separate agreements which shall set out the specific scope of products and services, terms and conditions of providing such products and services according to the principles laid down by the master agreement.

The master agreement is for a term of three years ending on December 31, 2013. Either party may terminate the master agreement upon giving the other party at least three months' written notice.

The products to be provided under the master agreement will be based on the following pricing policy:

(1) government-prescribed price (including any price prescribed by any relevant local government, if applicable);

(2) where there is no government-prescribed price but there is a government-guidance price, then the government-guidance price;

框架協議主要條款載列如下：

根據框架協議，本集團向國電集團及其附屬公司(除本集團外)提供的產品及服務包括下列各項：

- 環保及節能解決方案服務分部：(i)環保產品(包括除塵、水處理及脱硝催化劑等)；(ii)節能產品(包括等離子體點火穩燃設備等)；(iii)環保服務(包括脱硫特許經營服務、脱硝特許經營服務、脱硫EPC服務、脱硝EPC服務、水處理BOT服務等)；及(iv)節能服務(包括汽輪機通流改造服務及EMC等)；及

- 可再生能源設備製造及集成解決方案服務分部：(i)風力發電機組及其零部件；(ii)太陽能產品；(iii)風電服務(包括風電廠EPC服務)；及(iv)太陽能服務(包括光伏發電站EPC服務)。

倘獨立第三方提供類似產品及服務的條款及條件並不比其中一方所提供者優惠，則另一方須優先向對方採購所需產品及服務。

本集團與國電集團及其附屬公司(除本集團外)將訂立獨立協議，根據本框架協議所定的原則或正常商業條款載列服務的指定範圍、產品、提供該等服務及產品的條款及條件。

框架協議為期三年，至2013年12月31日屆滿，任何一方可在不少於三個月之前向另一方發出書面通知終止框架協議。

框架協議項下的產品價格將按下列定價政策確定：

(1) 凡有政府定價(包括任何有關地方政府定價(如適用))的，執行政府定價；

(2) 凡沒有政府定價，但有政府指導價的，執行政府指導價；

(3) where there is neither a government-prescribed price nor a government-guidance price, the market price, which is defined as the price at which the same type of products and/or services are provided by the Independent Third Parties in the ordinary course of business; or

(4) where none of the above is applicable or where it is not practical to apply the above pricing policies, then the price agreed between the relevant parties shall be based on arm's length negotiation and shall be the reasonable costs incurred in providing the products plus reasonable profits.

The above pricing mechanism is hereinafter referred to as the "**Applicable Standard Products Pricing Policy**."

The services to be provided under this agreement will be based on the following pricing policy:

(1) the bidding price where the bidding process is required; or

(2) where no bidding process is involved, the market price.

The above pricing mechanism is hereinafter referred to as the "**Applicable Standard Services Pricing Policy**."

The Group would be accorded priority by the Guodian Group and its subsidiaries (other than the Group) in the provision of the relevant products and services, provided that the terms and conditions offered by Independent Third Parties to the Guodian Group and its subsidiaries (other than the Group) are no more favorable than those offered by the Group for the same products or services, and in return, under the same terms and conditions, the Group has undertaken to the Guodian Group and its subsidiaries (other than the Group) that it shall not provide products and services which are less favorable than those offered by the Group to independent third parties.

Guodian Group is the controlling shareholder of the Company and is, together with its subsidiaries, a connected person of the Company under the Listing Rules.

The annual cap of this continuing connected transaction for 2012 was RMB18,475.0 million and the actual transaction amount during the reporting year was RMB12,523.0 million.

(3) 沒有政府定價和政府指導價的，執行市場價，市場價定為獨立第三方於一般業務過程中提供的同類產品及／或服務的價格；或

(4) 倘上述原則均不適用或倘運用上述定價政策不可行，則價格由相關訂約方經公平協商議定且為提供產品所產生的合理成本加上合理利潤。

上述定價機制於下文中稱作「**適用標準產品定價政策**」。

該協議項下的服務價格將按照下列定價政策確定：

(1) 如需招標程序，則執行競標價；或

(2) 如不需招標程序，則執行市場價。

上述定價機制於下文中稱作「**適用標準服務定價政策**」。

本集團獲國電集團及其附屬公司（除本集團外）授予提供相關產品及服務的優先權，惟獨立第三方向國電集團及其附屬公司（除本集團外）提供的條款及條件並不優於本集團為相同產品或服務所提供者，反之，根據相同條款及條件，本集團已向國電集團及其附屬公司（除本集團外）承諾，本集團提供的產品及服務不會遜色於本集團向獨立第三方所提供者。

國電集團為本公司控股股東，根據上市規則，國電集團及其附屬公司屬於本公司的關連人士。

本報告年度內，此項持續關連交易的2012年年度上限為人民幣18,475.0百萬元，而實際交易金額為人民幣12,523.0百萬元。

2. Provision of products and services by the Guodian Group and its subsidiaries (other than the Group) to the Group

The Company entered into a master agreement in good faith and at arm's length on the mutual supply of products and services with the Guodian Group on November 23, 2011, amended by the second supplemental agreement dated August 28, 2012.

Please refer to relevant disclosure under "—1. Provision of products and services by the Group to the Guodian Group and its subsidiaries (other than the Group)" for material terms and conditions of the master agreement.

Goods and services to be provided by the Guodian Group and its subsidiaries (other than the Group) to the Group include: SO_2 emissions reduction equipment, NOx emissions reduction equipment and water supply, electricity supply, gas supply and consulting services.

The annual cap of this continuing connected transaction for 2012 was RMB2,746.0 million and the actual transaction amount during the reporting year was RMB928.3 million.

3. Provision of products and services to the Group by the 11th Institute

The Company entered into a master agreement in good faith and at arm's length on the mutual supply of products and services with The IT Electronics Eleventh Design & Research Institute Scientific and Technological Engineering Corporation Limited ("**11th Institute**") on November 23, 2011.

Material terms and conditions of the agreement are set out as follows:

Pursuant to this master agreement, the products to be supplied to the Group include solar power equipment and spare parts, and the services to be supplied to the Group include engineer design, agency services to purchase certain accessory equipment and construction of facility system in relation to the Group's solar power services.

If the conditions of similar products and services and the fees payable thereof offered by an independent third party are not better than those offered by one party, the other party shall give priority in sourcing the requisite products and services from the first party.

2. 國電集團及其附屬公司（除本集團外）向本集團提供產品及服務

本公司與國電集團經公平協商後於2011年11月23日訂立了互相供應產品及服務的框架協議。本關連交易項下的上限被本公司與國電集團2012年8月28日訂立的第二次補充協議所修訂。

有關該框架協議的主要條款及條件，請參閱上文「—1.本集團向國電集團及其附屬公司（除本集團外）提供產品及服務」項下的有關披露。

國電集團及其附屬公司（除本集團外）向本集團提供的產品及服務包括：脱硫設備、脱硝設備及供水、供電、供煤氣及諮詢服務等。

本報告年度內，此項持續關連交易的2012年年度上限為人民幣2,746.0百萬元，而實際交易金額為人民幣928.3百萬元。

3. 第十一研究所向本集團提供產品及服務

本公司與信息產業電子第十一設計研究所科技工程股份有限公司（「**第十一研究所**」）於2011年11月23日經公平協商後真誠訂立互相供應產品和服務的框架協議。

協議主要條款載列如下：

根據該框架協議，第十一研究所將向本集團供應的產品包括太陽能設備及其配件，向本集團提供的服務包括與本公司的太陽能服務有關的工程設計、採購若干配套設備及建設設施系統的代理服務。

倘獨立第三方提供類似產品及服務的條款及條件並不比其中一方所提供者優惠，則另一方須優先向對方採購所需材料、產品及服務。

Relevant subsidiaries of both parties will enter into separate agreements which shall set out the specific scope of products and services, terms and conditions of providing such products and services according to the principles laid down by the agreement.

雙方的相關附屬公司將訂立獨立協議，當中將載有服務的具體範圍，產品以及根據框架協議所定的原則或按正常商業條款提供該等服務及產品的條款及條件。

The products to be provided under the agreement will be based on the Applicable Standard Products Pricing Policy.

該協議項下產品價格將根據適用標準產品定價政策確定。

The agreement is for a term of three years ending on December 31, 2013. Either party may terminate the agreement upon giving the other party at least three months' written notice.

該協議為期三年，至2013年12月31日屆滿。任何一方可在不少於三個月之前向另一方發出書面通知終止框架協議。

The 11th Institute owns 40% of equity interest in Guodian Solar System Technology (Shanghai) Co., Ltd ("**GD Solar (Shanghai)**"), which is a 50% owned subsidiary of Guodian Solar (Jiangsu) Co., Ltd. ("**GD Solar**"). GD Solar is a wholly owned subsidiary of the Company. Therefore, the 11th Institute is a substantial shareholder of GD Solar (Shanghai) and the connected person of the Company under Rule 14A.11(1) of the Listing Rules. The 11th Institute is not otherwise connected to the Guodian Group.

第十一研究所擁有國電太陽能系統科技（上海）有限公司（「**國電太陽能（上海）**」），為國電光伏（江蘇）有限公司（「**國電光伏**」）持股50%的附屬公司）的40%股份。國電光伏是本公司的全資附屬公司。因此，根據上市規則第14A.11(1)條，第十一研究所為國電太陽能（上海）的主要股東及本公司的關連人士，但並非國電集團的關連人士。

The annual cap of this continuing connected transaction for 2012 was RMB180.0 million and the actual transaction amount during the reporting year was RMB161.8 million.

本報告年度內，此項持續關連交易的2012年年度上限為人民幣180.0百萬元，而實際交易金額為人民幣161.8百萬元。

4. Provision of products and services by the Group to the 11th Institute

4. 本集團向第十一研究所提供產品

The Company entered into a master agreement in good faith and at arm's length on the mutual supply of products and services with the 11th Institute on November 23, 2011. The products provided by the Group to the 11th Institute are equipment and spare parts. Please refer to the disclosures under "-4. Provision of products and services to the Group by the 11th Institute" for the material terms of this master agreement.

本公司與第十一研究所於2011年11月23日就互相供應產品和服務訂立框架協議。本集團主要向第十一研究所提供設備及零件。有關該框架協議的主要條款及條件，請參閱上文「— 4.第十一研究所向本集團提供產品及服務」項下的有關披露。

The annual cap of this continuing connected transaction for 2012 was RMB100.0 million and the actual transaction amount during the reporting year was RMB0.6 million.

本報告年度內，此項持續關連交易的2012年年度上限為人民幣100.0百萬元，而實際交易金額為人民幣0.6百萬元。

5. Provision of products to United Power and its subsidiaries by the Group

The Company has entered into a master agreement in good faith and at arm's length with United Power for provision of products to United Power and its subsidiaries by our Group on November 23, 2011. Pursuant to this agreement, the products to be provided to United Power and its subsidiaries by our Group are parts and components of WTGs.

Material terms and conditions of the agreement are set out as follows:

Subsidiaries of both parties will enter into separate agreements which shall set out the specific scope of products and services, terms and conditions of providing such products and services according to the principles laid down by the agreement.

The products to be provided under the agreement will be based on the Applicable Standard Products Pricing Policy.

The agreement is for a term of three years ending on December 31, 2013. Either party may terminate the agreement upon giving the other party at least three months' written notice.

The products to be provided under this agreement will be based on the Applicable Standard Products Pricing Policy.

The Company owns 70%, while Longyuan Power owns 30%, of equity interest in United Power. As Longyuan Power is a 63.68% owned subsidiary of the Guodian Group, the Company's controlling shareholder, United Power is therefore an associate of the Guodian Group. Therefore, United Power is the connected person of the Company under Rule 14A.11(4) and Rule 14A.11(5) of the Listing Rules. The subsidiaries of United Power are the Company's connected persons under Rule 14A.11(4) and Rule 14A.11(6) of the Listing Rules. The result of the transactions between United Power and its subsidiaries and the Group will be eliminated in consolidation because United Power is the Company's connected person as well as its subsidiary.

The annual cap of this continuing connected transaction for 2012 was RMB1,136.0 million and the actual transaction amount during the reporting year was RMB478.0 million.

5. 本集團向聯合動力及其附屬公司提供產品

本公司與聯合動力於2011年11月23日經公平協商後真誠訂立由本集團向聯合動力及其附屬公司供應產品的框架協議。根據該框架協議，本集團向聯合動力及其附屬公司供應的產品為風力發電機組的零件及組件。

該協議主要條款載列如下：

雙方的附屬公司將訂立獨立協議，當中將載有根據該框架協議所定的原則或按正常商業條款提供產品的條款及條件。

該協議項下將供應的產品價格將根據適用標準產品定價政策確定。

該協議為期三年，至2013年12月31日屆滿。任何一方可在不少於三個月之前向另一方發出書面通知終止框架協議。

該協議項下產品價格將根據適用標準產品定價政策確定。

本公司擁有聯合動力70%的股權，而龍源電力擁有聯合動力30%的股權。由於龍源電力是本公司的控股股東國電集團附屬公司，國電集團持有其63.68%的股權，因此聯合動力為國電集團的聯繫人士。根據上市規則第14A.11(4)和14A.11(5)條，聯合動力為本公司的關連人士。根據上市規則第14A.11(4)和14A.11(6)條，聯合動力的附屬公司為本公司的關連人士。由於聯合動力為本公司的關連人士及附屬公司，故本公司與聯合動力及其附屬公司的交易結果將在合併財務報表層面抵銷。

本報告年度內，此項持續關連交易的2012年年度上限為人民幣1,136.0百萬元，而實際交易金額為人民幣478.0百萬元。

6. Properties Leasing Agreement

The Company entered into a master leasing agreement with United Power in good faith and at arm's length on November 23, 2011.

Material terms and conditions of the agreement are set out as follows:

The Company agreed to lease land and buildings to United Power and its subsidiaries as offices, production facilities, workshops and staff quarters.

United Power and its subsidiaries are not entitled to sub-lease or transfer any of the leases to another party without prior written consent from the Company;

This agreement is for a term of three years ending on December 31, 2013, and is subject to compliance with the requirements of the Listing Rules by us, renewable upon mutual agreement of the parties;

During the term of the leases for the properties, the parties to each lease will bear their own taxes in accordance with the applicable laws and regulations;

United Power has warranted that it and its subsidiaries will pay the rents specified for each of the properties in a timely manner and that United Power and its subsidiaries shall use the properties in accordance with the leases and not do or allow any damage to the value of the properties;

The rights and obligations of the parties under the master leasing agreement are not transferable; and

The rent for each of the leases has been determined for the three year period with reference to comparable properties in similar locations as specified in each of the leases and (where applicable) will be adjusted in accordance with the terms of the lease by mutual agreement or by the appointment of an independent valuer acceptable to both parties. However, any such increment in rent has to be reasonable and no higher than the rent that would otherwise be payable by an independent third party paying market rent for similar properties.

The annual cap of this continuing connected transaction for 2012 was RMB30.0 million and the actual transaction amount during the reporting year was RMB20.9 million.

6. 物業租賃協議

本公司與聯合動力於2011年11月23日經公平磋商後真誠訂立物業租賃協議。

協議主要條款載列如下：

根據該物業租賃協議，本公司同意租給聯合動力及其附屬公司用作辦公室、生產設施、車間及員工宿舍的土地及樓宇。

聯合動力及其附屬公司在未取得本公司的事先書面批准的情況下，不得分租或轉讓該物業予其他人士。

該協議為期三年，至2013年12月31日屆滿，在本公司遵守上市規則規定的前提下，協議可通過雙方協商續期。

於物業租賃期內，協議雙方將根據適用法律及法規承擔各自的税項。

聯合動力保證，聯合動力及其附屬公司將支付各項物業的指定租金，並根據協議使用物業，且不會亦不容許他人損害物業價值。

物業租賃協議雙方的權利及責任不得轉讓；及

每份協議的租金乃經參考各協議指定地點的同類物業而釐定，各協議持續三年，並(如適用)將通過雙方磋商或委任雙方認可的獨立估值師根據租賃條款作出調整。然而，租金的任何增幅必須合理，不得高於獨立第三方就同類物業支付的市場租金。

此項持續關連交易的2012年年度上限為人民幣30.0百萬元，而實際交易金額為人民幣20.9百萬元。

7. Provision of products and services to the Group by Beijing Full Dimension Power Tech. Co., Ltd.

The Company entered into a master agreement in good faith and at arm's length on the mutual supply of products and services with Beijing Full Dimension Power Tech. Co., Ltd. ("**Full Dimension**") on November 23, 2011, amended by a supplemental agreement on July 31, 2012.

Material terms and conditions of the master agreement are set out as follows:

Pursuant to this master agreement, the products to be provided to the Group include equipment for improvement of the circulation function of the steam turbine, all necessary spare parts and technical materials as required for performing the improvement. The services to be provided by Full Dimension to the Group include design, testing, installation, adjusting, examination and acceptance, technical guidance, technical assistances and training in relation to the improvement of the circulation function of the steam turbine.

The agreement is for a term of three years ending December 31, 2013. Either party may terminate the agreement upon giving the other party 3 months' written notice.

Pricing Policy: The products to be provided under the agreement will be based on the Applicable Standard Products Pricing Policy.

The services to be provided under this agreement will be based on the Applicable Standard Services Pricing Policy.

Full Dimension owns 20% of equity interest in Beijing Long Wei Power Generation Technology Co., Ltd. ("**BJLW**"), which is a 60% subsidiary of United Power. The Company owns 70% of equity interest in United Power. Therefore, Full Dimension is a substantial shareholder of BJLW and the Company's connected person under Rule 14A.11(1) of the Listing Rules. Full Dimension is not otherwise connected to the Guodian Group.

The annual cap of this continuing connected transaction for 2012 was RMB70.0 million and the actual transaction amount during the reporting year was RMB54.0 million.

7. 北京全四維動力科技有限公司向本集團提供產品及服務

2012年7月31日本公司與北京全四維動力科技有限公司(「**北京全四維**」)經公平協商後真誠訂立一份補充協議，修訂了2011年11月23日雙方就互相提供產品及服務事宜訂立的框架協議。

框架協議主要條款載列如下：

根據該框架協議，北京全四維將向本集團提供的產品包括改善汽輪機通流功能的設備，以及進行改善所需的所有必需零件及工藝材料。北京全四維將向本集團提供的服務包括有關改善汽輪機通流功能的設計、測試、安裝、調整、檢驗及驗收、技術指導、技術支持及培訓服務。

該協議為期三年，至2013年12月31日屆滿。任何一方可在不少於三個月之前向另一方發出書面通知終止框架協議。

定價政策：該協議項下產品價格將根據適用標準產品定價政策確定。

該協議項下服務價格將根據適用標準服務定價政策確定。

北京全四維擁有北京龍威發電技術有限公司(「**北京龍威**」)(聯合動力持股60%的附屬公司)的20%股權。公司擁有聯合動力的70%股權，因此，根據上市規則第14A.11(1)條，北京全四維為北京龍威的主要股東及本公司的關連人士，但並非國電集團的關連人士。

報告年度內，此項持續關連交易的2012年年度上限為人民幣70.0百萬元，而實際交易金額為人民幣54.0百萬元。

8. Provision of products and services by Longyuan Technology and its subsidiaries to the Group

The Company entered into a master agreement in good faith and at arm's length on the mutual supply of products and services with Longyuan Technology on November 23, 2011, amended by a supplemental agreement on July 31, 2012.

Material terms and conditions of the master agreement are set out as follows:

Pursuant to this master agreement, the products and services to be provided to the Group by Longyuan Technology and its subsidiaries include plasma-assisted coal combustion equipment, and other products and services.

If the conditions of similar products and services and the fees payable thereof offered by an independent third party are not better than those offered by Longyuan Technology and its subsidiaries, the Group shall give priority in sourcing the requisite products and services from the first party.

The Group and Longyuan Technology and its subsidiaries will enter into separate agreements which shall set out the specific scope of products and services, terms and conditions of providing such products and services according to the principles laid down by the agreement.

This agreement is for a term of three years ending on December 31, 2013. Either party may terminate the master agreement upon giving the other party three months' written notice.

The products to be provided under this agreement will be based on the Applicable Standard Products Pricing Policy.

8. 龍源技術及其附屬公司向本集團提供產品及服務

2012年7月31日本公司與龍源技術經公平協商後真誠訂立了一份的框架協議的補充協議，修訂了2011年11月23日雙方就互相提供產品及服務事宜訂立的框架協議。

框架協議主要條款載列如下：

根據該框架協議，龍源技術及其附屬公司提供的產品及服務包括等離子體點火穩燃設備及其他產品和服務。

倘獨立第三方提供類似產品及服務的條款及條件並不比龍源技術及其附屬公司所提供者優惠，則本集團須優先向對方採購所需產品及服務。

本集團與龍源技術及其附屬公司將訂立獨立協議，當中將載有服務的具體範圍，產品以及根據該框架協議所定的原則或按正常商業條款提供該等產品的條款及條件。

該協議為期三年，至2013年12月31日屆滿。任何一方可在不少於三個月之前向另一方發出書面通知終止該框架協議。

該協議項下產品價格將根據適用標準產品定價政策確定。

Longyuan Technology is the Company's 23.25% owned subsidiary. As of the latest practicable date, Hero Asia (BVI) Company Limited, a wholly owned subsidiary of Longyuan Power, owns approximately 18.8% of equity interest in Longyuan Technology. Given that Longyuan Power is a subsidiary of the Guodian Group, Longyuan Technology is a connected person of the Company under Rule 14A.11(5) of the Listing Rules. The subsidiaries of Longyuan Technology are the connected persons of the Company under Rule 14A.11(6) of the Listing Rules. The result of the transactions between Longyuan Technology and its subsidiaries and the Group will be eliminated in consolidation because Longyuan Technology is the Company's connected person as well as its subsidiary.

龍源技術為本公司持有23.25%股權的附屬公司。於最後實際可行日期，雄亞（維爾京）有限公司是龍源電力的一間全資附屬公司，擁有龍源技術約18.8%股權。鑒於龍源電力是國電集團的附屬公司，根據上市規則第14A.11(5)條，龍源技術為本公司的關連人士。根據上市規則14A.11(6)條，龍源技術的附屬公司為本公司的關連人士。由於龍源技術為本公司的關連人士以及附屬公司，故本集團與龍源技術及其附屬公司的交易結果將在合併財務報表層面抵銷。

The annual cap of this continuing connected transaction for 2012 was RMB30.0 million and the actual transaction amount during the reporting year was RMB22.1 million.

報告年度內，此項持續關連交易的2012年年度上限為人民幣30.0百萬元，而實際交易金額為人民幣22.1百萬元。

9. Provision of products by Jiangsu Longyuan to the Group

9. 江蘇龍源向本集團提供產品

The Company entered into a master agreement in good faith and at arm's length on the mutual supply of products and services with Jiangsu Longyuan on November 23, 2011, amended by a supplemental agreement on July 31, 2012.

2012年7月31日本公司與江蘇龍源經公平協商後真誠訂立了一份補充協議，修訂了2011年11月23日雙方就互相提供產品及服務事宜訂立的框架協議。

Material terms and conditions of the master agreement are set out as follows:

框架協議主要條款載列如下：

Pursuant to this master agreement, the goods to be provided by Jiangsu Longyuan to the Group include SCR denitrification catalyst.

根據該框架協議，江蘇龍源向本集團提供的產品包括SCR脱硝催化劑。

This agreement is for a term of three years ending on December 31, 2013. Either party may terminate the master agreement upon giving the other party three months' written notice.

該協議為期三年，至2013年12月31日屆滿。任何一方可在不少於三個月之前向另一方發出書面通知終止該框架協議。

The products to be provided under this agreement will be based on the Applicable Standard Products Pricing Policy.

該協議項下產品價格將根據適用標準產品定價政策確定。

Jiangsu Longyuan is a 70% owned subsidiary of Longyuan Environmental, the Company's wholly owned subsidiary. Guodian Environment Research Institute, a subsidiary of the Guodian Group, holds the remaining 30% of equity interest in Jiangsu Longyuan. The Guodian Group is the Company's controlling shareholder. Therefore, Jiangsu Longyuan is an associate of the Guodian Group and the Company's connected person under Rule 14A.11(4) and Rule 14A.11(5) of the Listing Rules. The result of the transactions between Jiangsu Longyuan and its subsidiaries and the Group will be eliminated in consolidation because Jiangsu Longyuan is the Company's connected person as well as its subsidiary.

江蘇龍源為公司的全資附屬公司龍源環保佔股70%的附屬公司。國電集團的附屬公司國電環境保護研究院持有江蘇龍源30%的股權。國電集團為公司的控股股東。因此，依據上市規則第14A.11(4)和14A.11(5)條規定，江蘇龍源為國電集團的聯繫人士並為公司的關連人士。由於江蘇龍源為公司關連人士且為其附屬公司，故本集團與江蘇龍源及其附屬公司的交易結果將在合併財務報表層面抵銷。

On July 4, 2012, Longyuan Environmental entered into an equity transfer agreement with Guodian Environment Research Institute to acquire from Guodian Environment Research Institute the remaining 30% equity interest of Jiangsu Longyuan. Upon completion of this acquisition in July 2012, Jiangsu Longyuan became a wholly-owned subsidiary of the Company and transactions between the Company and Jiangsu Longyuan are no longer connected transactions under the Listing Rules.

2012年7月4日，龍源環保（本公司的全資附屬公司）與國電環境保護研究院（國電集團的附屬公司）訂立股權轉讓協議，國電環境保護研究所同意將其於江蘇龍源30%的股權全部轉讓給龍源環保。因此，2012年7月收購完成以後，江蘇龍源將成為本公司的全資附屬公司。其後，本公司與江蘇龍源之間進行的交易不再是關連交易。

The annual cap of this continuing connected transaction for 2012 was RMB320.0 million and the actual transaction amount during the reporting year was RMB156.4 million.

報告年度內，此項持續關連交易的2012年年度上限為人民幣320.0百萬元，而實際交易金額為人民幣156.4百萬元。

10. Provision of financial services by Guodian Finance to the Group

10. 國電財務向集團提供財務服務

The Company entered into a finance services framework agreement with Guodian Finance in good faith and at arm's length on the provision of financial services by Guodian Finance to the Group on July 31, 2012.

2012年7月31日，本公司本著誠信、公平的原則就國電財務向本集團提供財務服務事宜與國電財務簽訂一份財務服務框架協議。

Material terms and conditions of the finance services framework agreement are set out as follows:

該財務服務框架協議的主要條款如下：

Pursuant to the finance services framework agreement, the services to be provided by the Guodian Finance to the Group include (i) deposit services; (ii) loan services; and (iii) other financial services.

根據該財務服務框架協議，國電財務向集團提供的服務包括(i)存款服務；(ii)貸款服務；以及(iii)其他財務服務。

Under the agreement, Guodian Finance has promised that the financial services provided to the Company will not be less favorable than those offered to other members of Guodian Group network, or those provided by commercial banks or comparable services.

本協議下，國電財務承諾，國電財務向本公司提供財務服務的標準不低於國電財務向國電集團網絡內部其他成員提供財務服務的標準、或商業銀行向本公司提供財務服務的標準、或其他同類服務的標準。

The Company and its subsidiaries will utilize the financial services of Guodian Finance on a voluntary and non-compulsory basis and is not obliged to engage Guodian Finance for any particular service.

Guodian Finance may, from time to time, enter into separate individual financial service agreement with the Company and its subsidiaries for the provision of specific financial services, subject to the terms and conditions of the agreement.

The duration of the agreement is for a term of three years, with retroactive effect commencing on January 1, 2012 and with an expiration date on December 31, 2014.

The services to be provided under the agreement will be based on the following pricing policy:

(1) Deposit services: interest rates for deposit services shall not be lower than any of the following: (i) the interest rates cap published by the People's Bank of China ("**PBOC**") from time to time for the same category of deposits; (ii) the interest rates offered to other members of Guodian Group network by Guodian Finance for the same category of deposits; and (iii) the interest rates offered to the Company and its subsidiaries by any commercial bank for the same category of deposits.

(2) Loan services: interest rates shall be no higher than any of the following: (i) interest rates 10% lower than the interest rates published by the PBOC from time to time for the same category of loans; (ii) the interest rates offered to other members of Guodian Group by Guodian Finance for the same category of loans; and (iii) the interest rates offered to the Company and its subsidiaries by commercial banks for the same category of loans.

(3) Other financial services: the interests or service fees charged for other financial services (i) shall comply with the standard rates as promulgated by the PBOC or China Banking Regulatory Commission ("**CBRC**") from time to time (if applicable); (ii) shall be no higher than or equal to the interests or service fees charged by commercial banks or other financial institution for comparable services; and (iii) shall not be higher than the interests or service fees charged by Guodian Finance for comparable services to other members of Guodian Group network.

本公司及其子公司應在自願和非強制的基礎上使用國電財務提供的服務，無義務就任何特殊服務而僱傭國電財務為其提供服務。

根據該協議載明的條款，國電財務可不時就其向本公司及其子公司提供具體財務服務的事宜與本公司及其子公司簽訂單獨的財務服務協議。

該協議有效期為三年，追溯至2012年1月1日起生效，至2014年12月31日終止。

國電財務根據該協議提供的服務應建立在下述定價政策基礎之上：

(1) 存款服務：存款服務的利率不得低於下述利率：(i)中國人民銀行（「**人民銀行**」）就同類存款不時公佈的利率上限；(ii)國電財務就同類存款向其網絡內的其他成員提供的利率；以及(iii)任何商業銀行就同類存款向本公司及其子公司提供的利率。

(2) 貸款服務：貸款服務的利率不得高於下述利率：(i)較中國人民銀行就同類貸款不時公佈利率低10%的利率；(ii)國電財務就同類貸款向其網絡內的其他成員提供的利率；以及(iii)任何商業銀行就同類貸款向本公司及其子公司提供的利率。

(3) 其他財務服務：其他財務服務的利率或就其他財務服務收取的服務費(i)應服從中國人民銀行或中國銀行業監督管理委員會（「**銀監會**」）（若適用的話）不時公佈的標準收費率；(ii)不得高於或等同於商業銀行或其他金融機構就同類服務提供的利率或收取的服務費用；以及(iii)不得高於國電財務就同類服務向其網絡內的其他成員提供的利率或收取的服務費用。

The Guodian Group is controlling shareholder of the Company as defined under the Listing Rules and thus a connected person of the Company. Guodian Finance is a subsidiary of the Guodian Group, and is therefore a connected person of the Company.

根據上市規則給出的定義，國電集團系本公司控股股東，因此也是本公司的關連人士。國電財務系國電集團附屬公司，因此國電財務也是本公司的關連人士。

The allowed maximum daily balance of this continuing connected transaction for 2012 was RMB350.0 million and the actual maximum daily balance during the reporting year was RMB302.3 million.

2012年度本次持續性關連交易的每日存款餘額上限為人民幣350.0百萬元，當前報告年度內實際最大每日存款餘額為人民幣302.3百萬元。

The independent non-executive Directors of the Company have reviewed each of the abovementioned continuing connected transactions and confirmed that the transactions have been conducted:

(1) in the usual course of business of the Group;

(2) on normal commercial terms or, if there are no sufficient comparable transactions to determine whether they are on normal commercial terms, from the perspective of the Group, on terms no less favorable than the terms available to or from independent third parties; and

(3) in accordance with relevant agreement governing the relevant transactions on terms that are fair and reasonable and in the interests of the shareholders of the Company as a whole.

本公司獨立非執行董事已審閱上述各項持續關連交易，並確認該等交易：

(1) 在本集團日常業務過程中進行；

(2) 按照一般商業條款進行，或如可供比較的交易不足以判斷該等交易的條款是否按一般商業條款進行，則對本集團而言，該等交易的條款不遜於獨立第三方可取得或提供的條款；及

(3) 根據規管有關交易的相關協議進行，而條款公平合理，並符合本公司股東整體利益。

Pursuant to Chapter 14A.38 of the Listing Rules, the Company's auditor was engaged by the Board of the Company to report on the Group's continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. Based on the work performed, the auditor of the Company confirmed to the Board of Directors of the Company that the aforesaid continuing connected transactions:

(1) have been approved by the Board of Directors of the Company;

(2) involving the provision of goods and services by the Group were priced in accordance with the pricing policies of the Group stipulated under the relevant agreements governing such transactions;

根據上市規則第14A.38條，本公司核數師已獲本公司董事會聘用，根據香港會計師公會頒佈之香港鑒證業務準則第3000號「非審核或審閱歷史財務資料之鑒證工作」及參照實務說明第740號「關於香港上市規則所述持續關連交易的核數師函件」就本集團的持續關連交易作出匯報。根據所執行的工作，本公司核數師向本公司董事會確認上述持續關連交易：

(1) 已獲本公司董事會批准；

(2) 涉及由本集團提供產品及服務的，乃按照規管有關交易的協議規定的本集團的定價政策而進行；

(3) have been entered into in accordance with the relevant agreements governing such transactions; and

(4) have not exceeded the relevant annual cap as disclosed in the Prospectus of the Company or the relevant announcements.

The auditor has issued his letter containing his findings and conclusions in respect of the continuing connected transactions disclosed by the Group on pages 92 to 105 of this Annual Report in accordance with rule 14A.38 of the Listing Rules. A copy of the auditor's letter has been provided by the Company to The Stock Exchange of Hong Kong Limited.

Save as disclosed above, no related party transaction or continuing related party transaction set out in Note 40 to the Financial Statements falls into the category of connected transactions or continuing connected transactions under the Listing Rules.

In respect of the abovementioned connected transactions, the Directors also confirmed that except for the following matters, the Company was in compliance with the disclosure requirements under Chapter 14A of the Listing Rules.

The Company technically breached the Listing Rules regarding the continuing connected transactions with Guodian Finance and the unstopped financial assistance at the time the Group acquired Galaxy Water.

Guodian Finance. Before a written agreement was entered into and before the announcement dated July 31, 2012 was published, the Company's accounts with Guodian Finance had a positive balance. In light of the fact that the maximum daily amount of the Company's accounts with Guodian Finance was approximately RMB302.3 million for the six month period ended June 30, 2012, the Company should have published an announcement of the relevant transactions when any of the applicable percentage ratios reached 0.1% or the value reached HK$1,000,000 (whichever is higher). The positive balance in the Company's accounts with Guodian Finance was a result of the Group's customers making deposits to the Group's accounts located at Guodian Finance in order to pay their accounts payables. In addition, the Company and Guodian Finance had been evaluating services that could replace the financial services provided by Guodian Finance, which delayed the execution of the finance services framework agreement. The failures to enter into a written agreement and to make an announcement sooner were not intentional; such failures, however, constituted a non-compliance in full of the relevant disclosure requirement under Rules 14A.35(1) of the Listing Rules. Details of the transaction are set out in the Company's announcement dated July 31, 2012.

(3) 已根據規管有關交易的協議條款進行；及

(4) 並無超逾本公司的招股章程或相關公告中披露的有關年度上限。

根據上市規則第14A.38條，核數師已就本年報第92頁至第105頁本集團所披露的持續關連交易出具的函件。本公司已向香港聯合交易所有限公司提供核數師函件之副本。

除上述披露外，沒有載列於財務報表附註40的任何關聯方交易或持續性關聯方交易屬於上市規則項下的關連交易或持續性關連交易。

就上述關連交易，董事亦確認除下述事宜外本公司已符合上市規則第14A章的披露規定。

就與國電財務進行的持續性關連交易以及本集團在收購銀河水務時未終止的財務資助而言，技術上本公司違反了上市規則：

國電財務。在書面協議訂立前並在2012年7月31日的公告發佈之前，公司在國電財務的賬戶存有餘額：鑒於本公司於國電財務的賬戶截至2012年6月30日止六個月的每日存款餘額上限約為人民幣302.3百萬元，本公司應當在任何適用百分比率達到0.1%或價值達到1,000,000港幣（以較高者為準）時，就有關交易作出公告。本公司於國電財務的賬戶的存款由本集團客戶作為支付本集團賬戶內有關該等客戶債務的應收款項的付款而作出。此外，本公司及國電財務一直評估可能替代國電財務所提供的金融服務的服務，因此，訂立金融服務框架協議被不慎推遲。未能訂立書面協議及儘快作出公告並非蓄意所為；然而，上述行為構成不完全遵守上市規則第14A.35(1)條項下的相關披露規定。交易的細節可參見2012年7月31日的公司公告。

Galaxy Water. The employees at the Company's subsidiary, Lucency, who executed the acquisition, did not immediately realize that the guarantee was not terminated prior to the acquisition, and such guarantee would trigger a disclosure obligation of the Company at the closing of the acquisition. The Company did not delay the announcement of the transaction intentionally or on purpose. However, the delay constituted a non-compliance in full of the Listing Rules. Details of the transaction are set out in the Company's announcement dated September 5, 2012.

銀河水務。公司附屬公司朗新明內部執行收購的員工並沒有立即意識到擔保在收購之前並未終止，有關擔保將會觸發本公司在完成收購事項時的披露責任。本公司無心及並非有意延遲作出有關公告。然而，本公司延遲作出有關公告構成違反上市規則。交易的細節可參見2012年9月5日的公司公告。

To prevent any potential breach in the future, the Company intends to provide further trainings on topics relating to the Listing Rules to a wider group of employees, including employees at the indirect subsidiary levels, so that the Group as a whole could detect disclosable matters in a timely manner.

為了防止今後發生違規行為，公司意欲就相關上市規則的話題向廣大員工(包括間接附屬公司內部的員工)提供進一步的培訓，從而集團可以及時發覺任何需要進行披露的事宜。

Compliance with Non-Competition Agreement

《避免同業競爭協議》的遵守

The Company entered into the non-competition agreement with the Guodian Group and GD Power respectively on November 23, 2011 ("**Non-Competition Agreement**").

於2011年11月23日，本公司已分別與國電集團及國電電力定立《避免同業競爭協議》(「**避免同業競爭協議**」)。

Pursuant to the agreement, Guodian Group and GD Power provided certain non-competition undertakings to the Company and granted the options and pre-emptive rights to acquire the retained business and any new business opportunities of Guodian Group or GD Power (as the case may be) to the Company. Pursuant to the agreement, the independent non-executive Directors of the Company are responsible for reviewing and considering whether or not to exercise such options and pre-emptive rights and are entitled, on behalf of the Company, to review the implementation of the undertakings under the arrangement on an annual basis.

根據該協議，國電集團及國電電力對本公司作出了若干不競爭承諾，並授予本公司收購國電集團及國電電力保留業務及任何新業務機會的選擇權及優先受讓權。根據該協議，本公司的獨立非執行董事負責審閱並考慮是否行使該等選擇權及優先受讓權，並有權代表本公司對該協議下承諾的執行情況進行年度審查。

During the year, the independent non-executive Directors of the Company have reviewed the implementation of the Non-Competition Agreement and confirm Guodian Group and GD Power has been in full compliance with the agreement and there was no breach by Guodian Group and GD Power.

本年度內，本公司獨立非執行董事已就《避免同業競爭協議》的執行情況進行了審閱，並確認國電集團及國電電力已充分遵守該協議，並無任何違約情形。

Major Customers and Suppliers

For the year ended December 31, 2012, the purchase from the Group's five largest suppliers in aggregate contributed 14.9% of the Group's total purchase for the year, among which, the total purchase from the largest supplier contributed 5.8% of the Group's total purchase for the year.

For the year ended December 31, 2012, the sales to the Group's five largest customers in aggregate contributed 71.0% of the Group's total sales for the year, among which, the sales to the largest customer contributed 57.5% of the Group's total sales for the year.

Guodian Group's subsidiaries as the Group's customers mainly include GD Power and Longyuan Power which are all the Group's connected person. Save as disclosed above, during the year, so far as the Directors are aware, none of the Directors, associates of Directors or any shareholders of the Company (who to the knowledge of the Directors owns more than 5% of the Company's issued share capital) had any interest in the Company's five largest suppliers or five largest customers during the year.

主要客戶及供貨商

截至2012年12月31日止年度，本集團五大供貨商的購買額共佔本集團本年度購買總額的14.9%，其中最大供貨商的購買總額佔本集團本年度購買總額的5.8%。

截至2012年12月31日止年度，本集團向五大客戶作出的銷售共佔本集團本年度銷售總額的71.0%，其中向最大客戶作出的銷售佔本集團本年度銷售總額的57.5%。

作為本集團客戶的國電集團附屬公司主要包括國電電力和龍源電力，均為本集團的關連人士。除上文披露外，於本年度內，就董事所知，概無董事、董事的聯繫人或本公司任何股東(據董事所知擁有本公司已發行股本5%以上的權益)於本年度內在本公司五大供貨商或客戶中擁有任何權益。

Retirement and Employees Benefit Scheme

Details of the Group's retirement and employees benefit scheme are set out in Note 7(a) to the Financial Statements.

退休及僱員福利計劃

本集團退休及僱員福利計劃詳情載於財務報表附註7(a)。

Compliance with the Code on Corporate Governance Practices

As a company listed on the Stock Exchange of Hong Kong Limited, the Company strives to maintain a high standard of corporate governance practices and complies with the code provisions as set out in the Code on Corporate Governance Practices in Appendix 14 to the Listing Rules. Please refer to the Corporate Governance Report of this Annual Report for details.

遵守企業管治常規守則

本公司作為香港聯合交易所有限公司的上市公司，始終致力於保持高水平的企業管治常規，並遵守上市規則附錄14所載的《企業管治常規守則》所載的守則條文。詳情請參閱本年報的企業管治報告。

Public Float

Based on information publicly available to the Company and so far as the Directors are aware, not less than 21.6% of the issued share capital of the Company was held by the public as at the latest practicable date prior to the issue of this Annual Report, which was in compliance with the requirements under the Listing Rules.

公眾持股量

根據本公司可公開獲得的資料，就董事所知，於本年報刊發前的最後實際可行日期，公眾人士持有本公司已發行股本不少於21.6%，符合上市規則的規定。

Material Litigation

A subsidiary of the Group is a defendant in a lawsuit. On September 29, 2012, a bank sued Guodian Solar and its associate for repayment of a loan owed by the associate and the legal fee in the total amount of RMB39,979,000. On January 6, 2013, the Municipal Intermediate People's Court in Wuxi (the "**Court**") heard the case. Currently the judgment from the Court is still pending. As of the date of this Annual Report, based on the opinion of the Company's PRC counsel, the Directors believe that it is highly likely that the Group would win the case. Accordingly, the Group has not made any provision in relation to the matter.

Audit Committee

The 2012 annual results of the Group and the Financial Statements as of, and for the year ended, December 31, 2012 prepared in accordance with the International Financial Reporting Standards have been reviewed by the audit committee of the Company.

Auditors

KPMG and RSM China Public Accountants Co., Ltd. were appointed as auditors for the financial statements prepared in accordance with International Financial Reporting Standards and Accounting Standards for Business Enterprises of PRC for the year ended December 31, 2012, respectively. The enclosed Financial Statements prepared in accordance with the International Financial Reporting Standards have been audited by KPMG. KPMG and RSM China Certified Public Accountants Co., Ltd. have been appointed by the Company since the date of preparation of its listing.

By order of the Board
Guodian Technology & Environment Group Corporation Limited
Chairman of the Board
Mr. ZHU Yongpeng

Beijing, March 28, 2013

重大訴訟

本集團附屬公司為一宗訴訟的被告人。2012年9月29日，一家銀行起訴國電光伏和它的聯營公司，要求國電光伏和它的聯營公司償還總額為人民幣39,979,000元的貸款和法律費用。2013年1月6日，無錫市中級人民法院(「**法院**」)審理了此案。目前法院未對此作出判決。截至本年報刊發日期，根據本公司中國法律顧問的意見，董事相信本集團有極大的可能在案件中勝訴。因此，本集團概無確認任何與此有關的撥備。

審計委員會

本公司的審計委員會已審閱本集團2012年之年度業績，及按國際財務報告準則編製的於2012年12月31日及截至該日止年度的財務報表。

核數師

畢馬威會計師事務所和中瑞岳華會計師事務所分別獲委任為審核截至2012年12月31日止年度按照國際財務報告準則和中國企業會計準則編製的財務報表的核數師。畢馬威會計師事務所已審核隨附的財務報表，該等報表按國際財務報告準則編製。本公司自從籌備上市之日起就一直聘用畢馬威會計師事務所和中瑞岳華會計師事務所。

承董事會命
國電科技環保集團股份有限公司
董事長
朱永芃先生

北京，2013年3月28日

REPORT OF THE BOARD OF SUPERVISORS
監事會報告

In 2012, to protect the interests of shareholders and the Company, and in compliance with relevant laws and regulations and the articles of association of the Company, the board of supervisors of the Company (the "**Board of Supervisors**") had effectively exercised its supervision authority over the meeting-convening and decision-making procedures of the Board of Directors for compliance with relevant laws, regulations and the articles of association of the Company. During this reporting year, the main work of the Board of Supervisors is as follows:

2012年，本公司監事會為維護股東權益和公司利益，依照有關法律法規和本公司《公司章程》的規定，公司監事會（「**監事會**」）對董事會的召開和決策過程有效行使其監管權，以使其符合相關法律法規和本公司《公司章程》的規定。現將報告年度內本公司監事會的主要工作情況報告如下：

1. Meetings the Board of Supervisors Convened in 2012

The Board of Supervisors convened two meetings in 2012:

1. The first meeting in 2012 of the first session of the Board of Supervisors was held on March 27, 2012, at which the Company's 2011 annual report, the announcement of annual results for 2011, the annual profit distribution proposal for 2011 and the report of the Board of Supervisors were considered and approved.

2. The second meeting in 2012 of the first session of the Board of Supervisors was held on August 24, 2012, at which the Resolutions regarding the 2012 interim report and interim results of the Company, the Resolutions regarding the 2012 interim financial statements of the Company and the 2012 interim profit distribution proposal were considered and approved.

1. 2012年監事會會議召開情況

2012年監事會共召開兩次會議：

1. 2012年3月27日，召開第1屆監事會2012年度第1次會議，會議審議通過了《2011年年度報告》、《2011年度業績報告》、《2011年度利潤分配方案》及《監事會報告》。

2. 2012年8月24日，召開第1屆監事會2012年度第2次會議，會議審議通過了《關於審議公司2012年度中期報告及中期業績公告的議案》、《關於審議公司2012年度中期財務報表的議案》及《關於審議公司2012年中期利潤分配方案的議案》。

2. Work Undertaken by the Board of Supervisors

In 2012, the Board of Supervisors mainly undertook the following work:

During the reporting year, the Board of Supervisors duly reviewed the Company's operation plan and development plan and proposed reasonable suggestions and advice to the Board of Directors. The Board of Supervisors actively and effectively performed its supervision duties over significant decisions and implementations by the Company's senior management to ensure compliance with the laws, regulations, and the articles of association of the Company, in order to protect the interests of shareholders.

2. 監事會工作開展情況

2012年度，本監事會主要開展以下工作：

在本報告年度內，本監事會對本公司的經營及發展計劃進行充分審查，並向董事會提出合理的建議和意見。監事會積極且有效地履行其監管職責，對本公司高級管理人員的重大決策及決策的具體實施情況實施監督，確保其符合國家法律法規以及本公司《公司章程》的規定，維護股東利益。

REPORT OF THE BOARD OF SUPERVISORS
監事會報告

The Board of Supervisors carefully reviewed and approved the Directors' Report by the Board of Directors and reviewed the Financial Report and the dividend distribution plan which are to be presented at 2012 annual general meeting of shareholders. The Board of Supervisors is of the opinion that the members of the Board of Directors, President and other senior management of the Company strictly complied with the principles of integrity, performed their duties diligently, exercised their powers in the best interests of the Company, and discharged their responsibilities in accordance with the articles of association of the Company. Meanwhile, the Company's operations have been further standardized and its internal control system has been improved. The Company's connected transactions were in the overall interest of the Company's shareholders and were on fair and reasonable terms. The Board of Supervisors has not discovered that any of the Directors or senior management had abused their power or any of their actions were prejudicial to the interests of the Company or shareholders of the Company, or violated the laws, regulations and the Articles of the Association of the Company.

The Board of Supervisors is satisfied with the financial status and operational results in 2012. The Board of Supervisors is confident in the prospect of the Group.

By Order of the Board of Supervisors
Chairman of the Board of Supervisors
Mr. QIAO Baoping

Beijing, China, March 28, 2013

本監事會認真審閱並批准董事會報告，並審閱擬提呈予2012年度股東大會的經審核的財務報告以及股利派發方案，認為本公司董事會成員、總經理及其他高級管理人員，嚴格遵守誠信原則，工作克勤盡職，以本公司最佳利益為出發點行使職權，能夠按照本公司《公司章程》履行其各項職責。同時，公司的運作更為規範化，內部控制系統也相應改善。本公司關連交易本著公平、合理的原則，從本公司股東整體利益出發。本監事會尚未發現公司任何董事或者高級管理人員有濫用職權、損害本公司及公司股東合利益以及違反有關法律、法規及本公司《公司章程》規定的行為。

本監事會對2012年度公司的財務狀況以及業績狀況表示滿意，對本集團未來的發展前景充滿信心。

承監事會命
監事會主席
喬保平先生

中國北京，2013年3月28日


企業管治報告
CORPORATE
GOVERNANCE
REPORT

Edges of the Earth by CHEN Bo
天涯海角 陳波作品

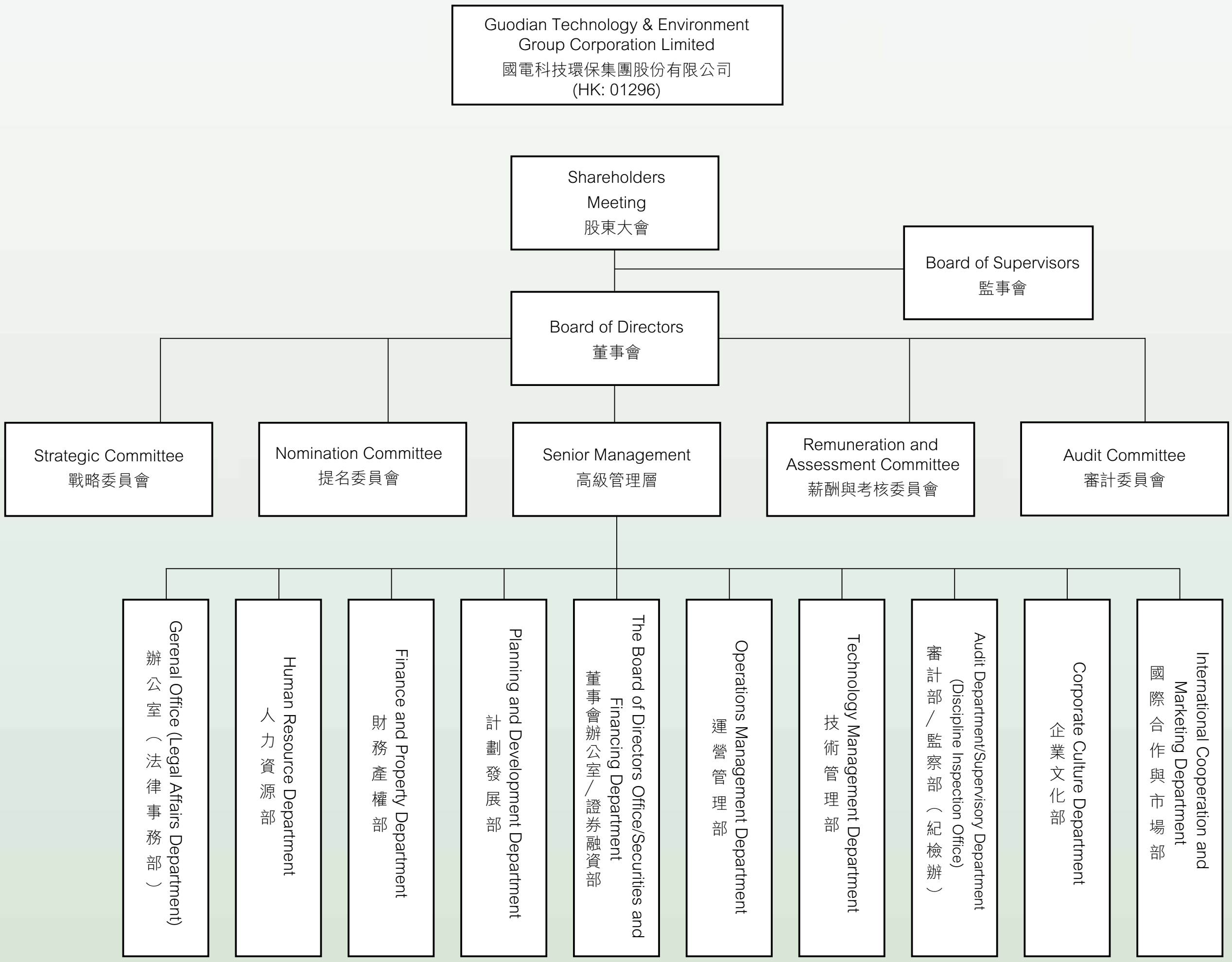
CORPORATE GOVERNANCE REPORT
企業管治報告

The Board of the Company hereby presents to the shareholders the corporate governance report for the year ended December 31, 2012.

本公司董事會現向股東提呈其截至2012年12月31日止的年度企業管治報告。

Corporate governance framework of the Company is set out as follows:

本公司企業管治架構圖如下：



Corporate Governance Practices

Since its establishment, the Company has been committed to improving its corporate governance, which is considered an ingredient essential 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 on Corporate Governance Practices (the "Code") in Appendix 14 to the Listing Rules. The Company has adopted the Code as its own corporate governance practices. During 2012, the Company had complied with the principles and provisions of the Code, and in some circumstances adopted the best practices recommended by the Code.

Corporate governance practices adopted by the Company are summarized below.

1. The Board

The Board exercises its powers and functions in accordance with the provisions as set out in the articles of association of the Company. In the best interests of the Company and its shareholders, the Board reports to the general meetings of shareholders, implements the resolutions passed thereon and is accountable to the general meetings of shareholders.

1.1 Composition of the Board

As of December 31, 2012, the Board consisted of 11 Directors, including three executive Directors, four non-executive Directors and four independent non-executive Directors.

The biographical details of the Directors as of this Annual Report are set out in the Director, Supervisor and Senior Management of this Annual Report. There are no relationships (including financial, business, family or other material or relevant relationship) among members of the Board. The structure of the Board is well balanced with each Director having sound knowledge, experience and expertise on the business operation and development of the Group. All Directors are well aware of their joint and several responsibilities to the shareholders.

企業管治常規

自成立以來，本公司始終致力於提升企業管治水平，視企業管治為實現為股東創造價值不可或缺的一部分。本公司參照上市規則附錄14所載《企業管治常規守則》(「《守則》」)的守則條文，建立了由股東大會、董事會、監事會及高級管理人員有效制衡、獨立運作的現代公司治理架構。本公司亦採納《守則》作為本公司的企業管治常規。2012年度，本公司嚴格遵守《守則》所載的原則及守則條文，並在特定情形下採取《守則》建議的最佳常規。

本公司所採用的企業管治常規概述如下。

1. 董事會

董事會按照《公司章程》的規定行使其權力及職責，以本公司及其股東的最大利益為原則，向股東大會報告工作，執行股東大會的決議，對股東大會負責。

1.1 董事會的組成

於2012年12月31日，董事會由11名董事組成，其中三名執行董事，四名非執行董事及四名獨立非執行董事。

董事於本年度報告日期的簡歷詳情載於本年報的董事、監事及高級管理人員。董事會各成員之間不存在任何關係(包括財政、業務、家族或其他重大或相關關係)。董事會結構平衡，每名董事均具備與本集團業務運營及發展有關的豐富知識、經驗及才能。所有董事深知其共同及個別對股東所負之責任。

Since the listing of the Company, the Board has been in compliance with the requirements of the Listing Rules regarding the appointment of at least three independent non-executive Directors. Furthermore, the qualifications of all four independent non-executive Directors of the Company are in full compliance with the requirements under Rules 3.10(1) and (2) of the Listing Rules. In addition, the Company has received annual confirmations from all independent non-executive Directors as to their respective independence in accordance with Rule 3.13 of the Listing Rules. The Company therefore considers all independent non-executive Directors to be in compliance with the independence requirements as set out in the Listing Rules.

自本公司上市以來，董事會一直符合上市規則有關委任至少三名獨立非執行董事的要求。本公司四名獨立非執行董事的資格完全符合上市規則第3.10(1)及(2)條的規定。此外，本公司已收到每名獨立非執行董事根據上市規則第3.13條就其各自的獨立性出具的年度確認書。因此，本公司認為所有獨立非執行董事均具備上市規則要求的獨立性。

The composition of the current Board of the Company is set forth below:

本公司董事會現任成員列表如下：

The Board

董事會

The Board of the Company consists of 11 Directors, including three executive Directors, four non-executive Directors and four independent non-executive Directors. The Board of the Company's function and responsibility include: convening general meetings; reporting its work to the general meeting; implementing resolutions approved by general meetings; deciding on the Company's business plans and investment plans; preparing the Company's annual budget and final accounts, preparing the Company's profit distribution plans and proposals for the increase in or reduction of the registered capital; and exercising other powers, functions and responsibilities as set out in the articles of association of the Company. The Company has entered into a service agreement or letter of appointment with each of the Directors.

本公司的董事會由11名董事組成，包括三名執行董事、四名非執行董事及四名獨立非執行董事。本公司董事會的職能及職責包括：召集股東大會；於股東大會上報告董事會的工作；執行股東大會通過的決議；確定本公司業務計劃及投資計劃；制定本公司年度預算及決算;制定本公司利潤分配方案及關於註冊資本增減的議案；以及行使本公司《公司章程》所賦予的其他權力、職能及職責。本公司與每一位董事訂立了服務合約或任命書。

Certain information concerning the Directors of the Company is set out in the table below. All our current non-executive Directors and executive Directors except for Mr. YAN Andrew Y. were elected as the current Directors on May 16, 2011 and all our independent non-executive Directors except for Mr. SHI Dinghuan were appointed on September 21, 2011. Their appointment came into effect on the listing date. Mr. YAN Andrew Y. and Mr. SHI Dinghuan were appointed on June 8, 2012. The term of all the Directors of the Company will end on May 15, 2014.

下表載述有關本公司董事的若干資料。除閻焱先生以外，我們的所有現任非執行董事及執行董事均於2011年5月16日獲選舉擔任本屆董事；除石定環先生外，我們的所有獨立非執行董事均於2011年9月21日獲委任，且其委任於上市日期生效。閻焱先生與石定環先生於2012年6月8日獲得任命。本公司所有董事的本屆任期將於2014年5月15日屆滿。

Name 姓名	Age 年齡	Rank 職位	Date of Appointment 委任日期
Mr. ZHU Yongpeng 朱永芃先生	62	Chairman of the Board and Non-executive Director 董事長兼非執行董事	May 16, 2011 2011年5月16日
Mr. YE Weifang 葉偉芳先生	60	Vice Chairman of the Board and Executive Director 副董事長兼執行董事	May 16, 2011 2011年5月16日
Mr. YANG Guang 陽　光先生	48	Non-executive Director 非執行董事	May 16, 2011 2011年5月16日
Mr. FENG Shuchen 馮樹臣先生	48	Non-executive Director 非執行董事	May 16, 2011 2011年5月16日
Mr. YAN Andrew Y. 閻　焱先生	55	Non-executive Director 非執行董事	June 8, 2012 2012年6月8日
Mr. LI Hongyuan 李宏遠先生	47	Executive Director 執行董事	May 16, 2011 2011年5月16日
Ms. WANG Hongyan 王鴻艷女士	48	Executive Director 執行董事	May 16, 2011 2011年5月16日
Mr. LU Yanchang 陸延昌先生	72	Independent Non-executive Director 獨立非執行董事	September 21, 2011 2011年9月21日
Mr. ZHAI Ligong 翟立功先生	66	Independent Non-executive Director 獨立非執行董事	September 21, 2011 2011年9月21日
Mr. SHI Dinghuan 石定環先生	69	Independent Non-executive Director 獨立非執行董事	June 8, 2012 2012年6月8日
Mr. FAN Ren Da Anthony 范仁達先生	52	Independent Non-executive Director 獨立非執行董事	September 21, 2011 2011年9月21日

1.2 *Director's Continuous Training and Development*

In compliance with Rule A6.5 of the Code and to ensure that the Directors' contribution to the Board remains informed and relevant, during the reporting year, the Company arranged and funded suitable training for all Directors such as holding special training sessions covering topics including notifiable transactions under Chapter 14 of the Listing Rules, connected transactions under Chapter 14A of the Listing Rules and the issuer's continuing obligations under Chapter 13 of the Listing Rules.

1.2 *董事的持續培訓及發展*

遵照《守則》第A6.5條的規定，並為確保董事在具備全面資訊及切合所需的情況下對董事會作出貢獻，在報告年度裏，本公司為所有董事安排了合適的培訓並提供有關經費，例如舉辦特別的培訓會議，就上市規則第14章規定的須予公佈的交易、上市規則第14A章規定的關連交易以及發行人在上市規則第13章下持續責任進行探討。

Besides the trainings provided by the Company, Directors have also developed their professional skills through various ways, including attending forums, seminars and public lectures such as those sponsored by the Hong Kong Stock Exchange in Beijing during 2012.

除接受公司提供的培訓外，董事還通過各種途徑積極提高其專業技能，包括參加各類論壇、研討會以及公開講座，例如香港證券交易所於2012年在北京開辦的講座。

As of December 31, 2012, all Directors of the Company, namely, Mr. ZHU Yongpeng, Mr. YE Weifang, Mr. YANG Guang, Mr. FENG Shuchen, Mr. YAN Andrew Y., Mr. LI Hongyuan, Ms. WANG Hongyan, Mr. LU Yanchang, Mr. ZHAI Ligong, Mr. FAN Ren Da Anthony and Mr. SHI Dinghuan, have participated in continuous professional development to develop and refresh their knowledge and skills as required by Rule A6.5 of the Code.

截至2012年12月31日，本公司的所有董事，即朱永芃先生、葉偉芳先生、陽光先生、馮樹臣先生、閻焱先生、李宏遠先生、王鴻艷女士、陸延昌先生、翟立功先生、范仁達先生、以及石定環先生，均已按照《守則》第A6.5條的要求參與持續專業發展，發展並更新其知識及技能。

1.3 Board Meetings

Pursuant to the articles of association of the Company, the Board is required to hold at least four Board meetings each year, which shall be convened by the Chairman of the Board. A notice of at least 14 days shall be given for a regular board meeting. The notice shall state the time, venue and means by which the board meeting will be convened.

Except for the Board's consideration of matters in relation to connected transactions as set forth in the articles of association of the Company, the quorum for a board meeting is the majority of all the Directors. A Director may attend the board meeting in person, or appoint another Director in writing as his proxy to attend the board meeting. The secretary to the Board of the Company is responsible for preparing and keeping the minutes of board meetings and ensuring that such minutes are available for inspection by any Director.

1.3 董事會會議

根據《公司章程》的規定，董事會每年至少召開四次會議，董事會會議由董事長召集。定期董事會會議應於召開前至少14天發出通知，通知須列明會議召開的時間、地點以及會議將採用的方式。

除《公司章程》規定的董事會審議關連交易事項的情況外，董事會會議應由大多數董事出席方可舉行。董事可以親自參加董事會會議，亦可以書面委託其他董事代為出席董事會會議。本公司董事會秘書負責制作和保管董事會會議記錄，並確保董事能夠查閱該等記錄。

During 2012, the Board held four meetings in total. Presence of Directors at board meetings is as follows:

於2012年度，董事會共舉行了四次會議。董事出席董事會會議情況如下。

Name 姓名	Position in the Company 本公司職位	Number of Meetings Attended/Held 出席／舉行會議次數	Attendance Rate % 出席率
Mr. ZHU Yongpeng 朱永芃先生	Chairman of the Board and Non-executive Director 董事長兼非執行董事	4/4	100
Mr. YE Weifang 葉偉芳先生	Vice Chairman of the Board and Executive Director 副董事長兼執行董事	4/4	100
Mr. YANG Guang 陽　光先生	Non-executive Director 非執行董事	4/4	100
Mr. FENG Shuchen 馮樹臣先生	Non-executive Director 非執行董事	4/4	100
Mr. YAN Andrew Y. 閻　焱先生	Non-executive Director 非執行董事	3/3(1)	100
Mr. LI Hongyuan 李宏遠先生	Executive Director 執行董事	4/4	100
Ms. WANG Hongyan 王鴻艷女士	Executive Director 執行董事	4/4	100
Mr. LU Yanchang 陸延昌先生	Independent Non-executive Director 獨立非執行董事	4/4	100
Mr. ZHAI Ligong 翟立功先生	Independent Non-executive Director 獨立非執行董事	4/4	100
Mr. FAN Ren Da Anthony 范仁達先生	Independent Non-executive Director 獨立非執行董事	4/4	100
Mr. SHI Dinghuan 石定環先生	Independent Non-executive Director 獨立非執行董事	3/3(1)	100

Note:

(1) Because Mr. YAN Andrew Y. and Mr. SHI Dinghuan were appointed on June 8, 2012, they only attended meetings that were held after their appointment.

附註：

(1) 由於閻焱先生和石定環先生於2012年6月8日任命，他們僅參加委任後舉行的會議。

1.4 *Powers Exercised by the Board and the Management*

The powers and duties of the Board and the management have been clearly defined in the articles of association of the Company so as to ensure that adequate check-and-balance is in place for the purpose of maintaining effective corporate governance and internal control.

The Board is responsible for deciding on the Company's business and investment plans, determining the establishment of the Company's internal management structure, issuing the Company's essential administration regulations, resolving and approving other material business and administrative matters of the Company and supervising the performance of the management.

Led by the President, who is also an executive Director, the management of the Company is responsible for implementing the resolutions passed by the Board and managing the Company's day-to-day operations.

1.5 *Chairman and President*

The posts of the Chairman of the Board and the President of the Company (i.e. chief executive officer pursuant to the relevant Listing Rules) are separated and held by different persons in order to ensure the independence of their respective responsibilities, and the balance of power and authority between them. Mr. ZHU Yongpeng acts as the Chairman of the Board and Mr. LI Hongyuan acts as the President. The Rules and Procedures of the Board Meeting and the Terms of Reference of the Senior Management of the Company, as considered and approved by the Board, clearly define the division of duties between the Chairman and the President.

Mr. ZHU Yongpeng, the Chairman of the Board, is responsible for leading the Board in determining the overall development strategies of the Company and ensuring that the Board effectively performs its duties and discusses significant and appropriate matters in a timely manner that the Company establishes effective corporate governance practices and procedures and that the Board acts in the best interest of the Company and its shareholders. Mr. LI Hongyuan, the President of the Company, is mainly responsible for the Company's day-to-day operations, including implementing Board resolutions and making day-to-day decisions.

1.4 *由董事會和管理層行使的權力*

董事會和管理層的權力和職責已在《公司章程》中進行了明確規定，以確保為保持有效的公司管治和內部控制提供充分的平衡和制約機制。

董事會負責決定本公司的經營計劃和投資方案，決定本公司內部管理機構的設置，頒佈本公司必要的管理制度，對本公司的其他重大業務和行政事項做出決議並對管理層進行監督。

本公司管理層，在總經理(同時亦為執行董事)的領導下，負責執行董事會批准的各項決議，並管理本公司的日常經營。

1.5 *董事長及總經理*

本公司董事長和總經理(即相關上市規則條文下之行政總裁)職務分別由不同人士擔任，以確保各自職責的獨立性以及權力和授權的分布平衡。董事長由朱永芃先生擔任，總經理由李宏遠先生擔任，董事會審議通過的《董事會議事規則》和《公司高管職責説明書》，分別對董事長和總經理的職責分工進行了明確清楚的界定。

董事長朱永芃先生領導董事會確定本公司的整體發展戰略，確保董事會有效履行應有職責，並及時就所有重要的適當事項進行討論，從而本公司得以制定有效的企業管治常規及程序，並且董事會行事符合本公司及全體股東的最佳利益。總經理李宏遠先生主要負責本公司的日常運營，包括實施董事會決議、進行日常決策等。

1.6 *Appointment and Re-election of Directors*

Pursuant to the articles of association of the Company, Directors including the non-executive Directors shall be elected at general meetings with a term of office for no more than three years and may be re-appointed. The Company has established a set of procedures for appointing new Directors. Nomination of new Directors shall be first considered by the nomination committee, whose recommendations will then be presented to the Board for consideration. All newly nominated Directors are subject to election and approval at general meetings of shareholders.

Each of the executive Directors and supervisors of the Company has entered into a service agreement with the Company, and each of the non-executive Directors has entered into a letter of appointment with the Company, on November 28, 2011 (or June 8, 2012, in the case of Mr. YAN Andrew Y.), in compliance with relevant laws and regulations, and the articles of association of the Company. Each service agreement or letter of appointment commenced from May 16, 2011 (or June 8, 2012, in the case of Mr. YAN Andrew Y.), and will expire on May 15, 2014. Each of the independent non-executive Directors has entered into a letter of appointment with the Company on November 28, 2011 (or June 8, 2012, in the case of Mr. SHI Dinghuan) which commenced from December 30, 2011 (or June 8, 2012, in the case of Mr. SHI Dinghuan), and will expire on May 15, 2014.

1.7 *Directors' Remuneration*

The remuneration and assessment committee makes recommendations about Directors' remuneration by taking into consideration factors such as educational background and work experience. The Board determines the Directors' remuneration by considering Directors' experiences, work performances, positions and market conditions and subject to approval of the general meeting of shareholders.

2. Board Committees

There are four Board committees, namely the audit committee, remuneration and assessment committee, nomination committee and strategic committee.

1.6 *委任及重選董事*

根據《公司章程》的規定，董事由股東大會選舉產生，每屆任期不得超過三年，可連選連任。本公司已就新董事的委任建立了一套有效的程序。新董事的提名事宜先由提名委員會商議，然後再向董事會提交以供審議，並由股東大會選舉通過。

根據相關法律法規及《公司章程》的規定，本公司已於2011年11月28日與每位執行董事及監事訂立了服務協議，且與每位非執行董事訂立了委任書（或於2012年6月8日與閻焱先生訂立委任書）。各服務協議或委任書由2011年5月16日開始（閻焱先生的委任書自2012年6月8日開始），將於2014年5月15日屆滿。本公司與每位獨立非執行董事於2011年11月28日訂立委任書（與石定環先生於2012年6月8日訂立委任書），各委任書自2011年12月30日開始（石定環先生的委任書自2012年6月8日開始），將於2014年5月15日屆滿。

1.7 *董事薪酬*

董事薪酬根據學歷、工作經驗等因素，由薪酬與考核委員會提出建議，經股東大會批准由董事會根據董事經驗、工作表現、職務及市場確定。

2. 董事會下轄委員會

董事會下設四個委員會，包括審計委員會、薪酬與考核委員會、提名委員會和戰略委員會。

2.1 Audit Committee

The audit committee consists of three Directors: Mr. FAN Ren Da Anthony (independent non-executive Director), Mr. ZHAI Ligong (independent non-executive Director) and Mr. YANG Guang (non-executive Director). Mr. FAN Ren Da Anthony serves as the chairman of the audit committee. The primary responsibilities of the audit committee are to review and supervise the Company's financial reporting procedures, including:

- Making proposals in respect of the appointment, re-appointment or change of the external auditors to the Board, approving remuneration and terms of engagement of external auditors, and handling any issues related to the resignation or dismissal of external auditors;
- Evaluating and examining the independence and objectivity of the external auditors and the effectiveness of the auditing procedures in accordance with applicable standards;
- Monitoring completeness, accuracy and impartiality of the financial statements of the Company and the Company's accounts, annual reports and and interim reports and reviewing significant financial reporting opinions contained in them;
- Reviewing the Company's financial control, internal control and risk management systems; and
- Taking necessary measures to ensure that employees have a channel to raise concerns in an anonymous manner any possible improprieties in financial reporting, internal control or other matters.

During the reporting year, the audit committee held two meetings, details of which are as follows:

On March 22, 2012, the first meeting of the audit committee of the first session of the Board for 2012 was held, at which (1) the Company's 2011 annual report, results announcement and annual financial statements were considered and approved; (2) rules and procedures of meetings of the audit committee were considered and approved; and (3) the proposed revised annual cap for continuing connected transactions for 2011 was considered and approved.

2.1 審計委員會

本公司的審計委員會由三名董事組成：范仁達先生（獨立非執行董事）、翟立功先生（獨立非執行董事）及陽光先生（非執行董事）。范仁達先生為審計委員會主席。審計委員會的主要職責為審計及監督公司的財務申報程序，包括：

- 就董事會外聘核數師的任命、重新任命或變更提出議案，審批外聘核數師的薪酬與僱傭條款，並處理與外聘核數師辭職或解僱相關的任何問題；
- 根據相關標準評估外聘核數師的獨立性及客觀性和審計程序的有效性；
- 監督公司財務報表、年報、賬目和中期年報的完整性、準確性和公正性，並審查其中重要的財務報表意見；
- 審查公司的財務控制、內部控制和風險管理系統；及
- 採取必要措施，確保員工能夠以匿名的方式對財務報表、內部控制或其他事項中的不當行為提出質疑。

在本報告年度內，審計委員會共召開了兩次會議，每次會議的詳細情況如下：

2012年3月22日召開了第一屆董事會審計委員會2012年第一次會議，會議主要內容為：(1)審議並通過公司2011年年度報告、業績公告及年度財務報表；(2)審議並通過董事會審計委員會工作細則；以及(3)審議並通過調整持續性關連交易2011年年度上限金額的議案等。

On August 17, 2012, the second meeting of the audit committee of the first session of the Board for 2012 was held, at which (1) the Company's 2012 interim report and interim results announcement were considered and approved; (2) the Company's 2012 interim financial statements were considered and approved; and (3) the proposed revised annual caps for continuing connected transactions for 2012 and 2013 were considered and approved.

2012年8月17日召開了第一屆董事會審計委員會2012年第二次會議，會議主要內容為：(1)審議並通過公司2012年度中期報告及中期業績公告；(2)審議並通過公司2012年度中期財務報表；以及(3)審議並通過調整持續性關連交易2012年度及2013年度上限金額的議案等。

All the members of the audit committee attended the above meetings.

審計委員會全體委員均出席了上述會議。

2.2 *Remuneration and Assessment Committee*

2.2 *薪酬與考核委員會*

The remuneration and assessment committee of the Company consists of three Directors: Mr. ZHAI Ligong (independent non-executive Director), Mr. ZHU Yongpeng (non-executive Director) and Mr. LU Yanchang (independent non-executive Director). Mr. ZHAI Ligong serves as the chairman of the remuneration and assessment committee. The primary responsibilities of the remuneration and assessment committee are to formulate the standards concerning the assessment of Directors and senior management, assess the performance of Directors and senior management, and decide on and review remuneration policies and plans concerning Directors and senior management, including:

- Approving and overseeing the total remuneration of Directors and senior management; assessing the performance of senior management and deciding on and approving the remuneration to be paid to senior management;
- Reviewing the remuneration of Directors and making corresponding recommendations to the Board of Directors; and
- Reviewing the remuneration policies, strategies and principles of Directors and senior management and making recommendations about it to the Board of Directors.

本公司的薪酬與考核委員會由三名董事組成：翟立功先生（獨立非執行董事）、朱永芃先生（非執行董事）和陸延昌先生（獨立非執行董事）。翟立功先生目前為本公司薪酬與考核委員會主席。薪酬與考核委員會的主要職責為制定評估董事及高級管理人員的標準及對彼等的表現進行評估；釐定、審閱董事及高級管理層相關的薪酬政策及計劃，其中包括：

- 批准及監督董事及高級管理人員的整體薪酬、評估高級管理人員的表現並釐定及核准將支付予高級管理人員的薪酬；
- 審閱董事薪酬並就此向董事會提出推薦建議；及
- 審閱董事及高級管理人員的薪酬政策、策略及原則並就此向董事會提出推薦建議。

During the reporting year, the remuneration and assessment committee held one meeting on March 27, 2012, at which the remuneration of Directors, supervisors and senior management for 2012 and the rules and procedures of meetings of the remuneration and assessment committee were considered and approved.

在本報告年度內，薪酬與考核委員會共召開了一次會議，於2012年3月27日召開，審議並通過了公司董事、監事及高級管理人員2012年度薪酬方案及薪酬與考核委員會工作細則。

All the members of the remuneration and assessment committee attended this meeting.

薪酬與考核委員會全體委員均出席了上述會議。

2.3 Nomination Committee

The Company's nomination committee consists of three Directors: Mr. LU Yanchang (independent non-executive Director), Mr. ZHAI Ligong (independent non-executive Director) and Ms. WANG Hongyan (executive Director). Mr. LU Yanchang serves as the chairman of the nomination committee. The primary responsibilities of the Company's nomination committee are to formulate the procedures and standards for nominating candidates for Directors and senior management, and conduct preliminary review of the qualifications and other credentials of the candidates for Directors and senior management.

During the reporting year, the nomination committee held one meeting on March 27, 2012, at which (1) the proposal to appoint Mr. SHI Dinghuan as independent non-executive Director was considered and approved; (2) the proposal to appoint Mr. YAN Andrew Y. as non-executive Director was considered and approved; and (3) the rules and procedures of meetings of the nomination committee were considered and approved.

All the members of the nomination committee attended this meeting.

2.4 Strategic Committee

The Company's strategic committee consists of five Directors: Mr. ZHU Yongpeng (non-executive Director), Mr. FENG Shuchen (non-executive Director), Mr. YE Weifang (executive Director), Mr. LI Hongyuan (executive Director) and Mr. ZHAI Ligong (independent non-executive Director). Mr. ZHU Yongpeng serves as the chairman of the strategic committee. The primary responsibilities of the strategic committee are to formulate the Company's overall development plans and investment decision-making procedures, including:

- Reviewing the Company's long-term development strategies;
- Reviewing the Company's strategic plans and implementation reports;
- Reviewing significant capital expenditures, investment and financing projects that require approval of the Board; and
- Authorizing the President's office to formulate specific plans, negotiate and implement relevant review and approval procedures, execute contracts and relevant documents, and handle relevant procedures for the above matters.

2.3 提名委員會

本公司的提名委員會由三名董事組成：陸延昌先生（獨立非執行董事）、翟立功先生（獨立非執行董事）及王鴻艷女士（執行董事）。陸延昌先生為提名委員會主席。本公司提名委員會的主要職責為制定董事及高級管理人員人選的提名程序及標準、對董事及高級管理人員人選的資格及其他資歷進行初步審閱。

在本報告年度內，提名委員會共召開了一次會議，於2012年3月27日召開，會議主要內容為：(1)審議並通過增選石定環先生為獨立非執行董事的議案；(2)審議並通過增選閻焱先生為非執行董事的議案；以及(3)審議並通過提名委員會工作細則。

提名委員會全體委員均出席了上述會議。

2.4 戰略委員會

本公司的戰略委員會由五名董事組成：朱永芃先生（非執行董事）、馮樹臣先生（非執行董事）、葉偉芳先生（執行董事）、李宏遠（執行董事）和翟立功先生（獨立非執行董事）。朱永芃先生為戰略委員會主席。戰略委員會的主要職責為制定本公司的整體發展計劃及投資決策程序，包括：

- 審閱本公司的長遠發展戰略；
- 審閱本公司的戰略規劃及實施報告；
- 審閱須董事會批准的重大資本支出、投資及融資項目；及
- 授權本公司總經理辦公會對上述各項制定具體方案、協商並實施相關審批程序、適時簽署協議及相關文件、辦理相關手續等。

During the reporting year, the strategic committee held two meetings, details of which are as follows:

在本報告年度內，戰略委員會共召開了兩次會議，每次會議的詳細情況如下：

On March 27, 2012, the first meeting of the strategic committee for 2012 was held, at which (1) the proposed acquisition of 30% equity interest of Jiangsu Longyuan was considered and approved; (2) the proposed capital contribution by the Company to Guodian Finance was considered and approved; and (3) the proposed acquisition of 70% equity interest of Galaxy Water by Lucency was considered and approved.

2012年3月27日召開戰略委員會2012年第一次會議，主要內容為：(1)審議並通過龍源環保收購江蘇龍源30%股權的議案；(2)審議並通過公司向國電財務增資的議案；以及(3)審議並通過朗新明收購銀河水務70%股權的議案等。

On August 24, 2012, the second meeting of the strategic committee for 2012 was held, at which (1) the proposal to adjust the Company's organization structure was considered and approved; and (2) the proposed capital contribution to United Power was considered and approved.

2012年8月24日，戰略委員會召開2012年第二次會議，主要內容為：(1)審議並通過公司調整組織機構設置的議案；以及(2)審議並通過向聯合動力增資的議案。

All the members of the strategic committee attended these two meetings.

戰略委員會全體委員均出席了上述會議。

3. Director's Responsibility for the Financial Statements

3. 董事對財務報表承擔的責任

The Board acknowledges its responsibility for preparing the Financial Statements of the Group for the year ended December 31, 2012.

董事會已確認其承擔編製本集團截至2012年12月31日止年度財務報表的責任。

The Board is responsible for presenting a clear and understandable assessment of 2012 financial statements and other issues required to be disclosed pursuant to the Listing Rules and other supervisory provisions. The management has provided such explanations and information to the Board as necessary to enable the Board to make an informed assessment of the financial information and position of the Group which is to be reviewed and approved by the Board.

董事會負責就2012年度的財務報表以及根據上市規則和其他監管條例的規定需要進行披露的其他事宜制定一份清晰易懂的評估報告。管理層已經向董事會提交了必要的解釋和資料，確保董事會能夠就財務信息和集團(有待董事會進行審核)的地位作出有根據的評估。

There are no material uncertainties relating to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern.

本公司並無面臨可能對本公司持續經營業務之能力產生重大疑慮的重大不確定事件或情況。

In addition, appropriate insurance coverage for Directors' liabilities has been arranged against possible legal proceedings to be taken against the Directors.

另外，董事可能面對的法律行動方面，本公司已為其可能招致的責任作出適當的投保安排。

4. Compliance with the Code for Securities Transactions

The Company has adopted the Model Code for Securities Transactions by Directors of Listed Issuers set out in Appendix 10 to the Listing Rules as the code of conduct and rules governing dealings by its Directors and supervisors in the securities of the Company. After specific enquiries were made by the Company to them, all Directors and supervisors of the Company have confirmed that they have strictly complied with the required standard set out in the Model Code for Securities Transactions by Directors of Listed Issuers during the reporting year.

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.

5. Internal Control

The Company has attached prime importance to internal control. An internal control system has been established to protect shareholders' and the Company's interests.

The Company has set up a set of internal control rules, including "Rules and Procedures of the Board Meeting", "Rules and Procedures of Meetings of the Audit Committee", "Rules and Procedures of Meetings of Remuneration and Assessment Committee", "Provisions on Information Disclosure", "Rules on the Conduct of Connected Transactions", "Tentative Risk Management Framework", "Template for Regular Declaration Requirement by the Directors and Senior Management", "Terms of Reference of the Senior Management of the Company", "Interim Measures on Anti-Corruption, Complaints and Reports" and "Management System of Internal Audit".

In order to monitor and regulate potential insider trading activities, ensure confidentiality insider information, the Company has established a set of "Management Rules on the Conduct of Insider Trading of Guodian Technology & Environment Group Corporation Limited" in accordance with the Company Law of the PRC, Securities and Futures Ordinance, Listing Rules and other relevant laws and regulations and the articles of association of the Company.

The Company has also established the Finance and Property Department, the Audit Department and the Supervision Department and put on sufficient personnel in each department in charge of financial operations, risk management, internal auditing and anti-corruption. Besides, the Company has provided regular trainings 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.

4. **遵守證券交易守則**

本公司已採納上市規則附錄十所載《上市公司董事進行證券交易的標準守則》，作為規管其董事及監事進行本公司證券交易的行為守則及規則。根據對本公司董事及監事的專門查詢後，本公司所有董事及監事均確認：於本報告年度內，各董事及監事均已嚴格遵守《上市公司董事進行證券交易的標準守則》所訂之標準。

董事會將不時檢查本公司的公司治理常規及本公司運作，以符合上市規則有關規定並保障股東的利益。

5. **內部控制**

本公司高度重視內部控制工作，已建立了一套內部控制體系，以保障股東利益和公司利益。

本公司建立了一套內部控制規程，包括《董事會議事規則》、《審計委員會議事規則》、《薪酬與考核委員會議事規則》、《信息披露事務管理規定》、《關連交易管理辦法》、《風險管理框架(試行)》、《董事與高管定期聲明規定範本》、《公司高管職責説明書》、《反舞弊及接收投訴、舉報的暫行辦法》及《內部審計管理制度》。

本公司為監管和規範潛在內幕交易行為，確保集團內幕資訊保密工作，根據《中華人民共和國公司法》、《香港證券及期貨條例》、上市規則等有關法律法規及《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資訊管理辦法》。

本公司業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、反舞弊等具體工作。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，確保其擁有足夠的素質和經驗。

Each department of the Company has the channel to submit to the Board information requested. 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.

本公司每個部門都能把有需要呈交董事會的數據順暢呈交。本公司總經理作為與各部門的最高對接口，有責任對各部門運作有效地呈報董事會，並配合及調動各部門的要求促進合理的本公司決策。

During the reporting year, the Board assessed the internal control systems of the Company and its subsidiaries and was not aware of any material weaknesses nor any material defaults with respect of financial, operational and compliance controls and risk management. The Board believes that the current monitoring system of the Company is effective 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.

董事會已於報告年度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檢討，期內未發現本公司內部控制存在任何重大弱項，或出現任何重大失誤。董事會認為本公司目前的監控體系是有效的，並認為本公司在會計及財務匯報職能方面的資源、員工的資歷和經驗以及員工培訓計劃及有關預算方面是足夠的。

6. Auditors and Remuneration

6. 核數師及其酬金

KPMG and RSM China Public Accountants Co., Ltd. were appointed as auditors for the financial statements prepared in accordance with the International Financial Reporting Standards and the Accounting Standards for Business Enterprises of PRC for the year ended December 31, 2012, respectively.

畢馬威會計師事務所和中瑞岳華會計師事務所分別獲委任為審計截至2012年12月31日止年度按照國際財務報告準則和中國企業會計準則編製的財務報表的核數師。

For the year ended December 31, 2012, the fees payable to KPMG and RSM China Certified Public Accountants Co., Ltd. for audit services were RMB9,600,000 and RMB3,300,000 respectively.

截至2012年12月31日止年度，就畢馬威會計師事務所和中瑞岳華會計師事務所提供的審計服務，本公司分別向其支付費用人民幣9,600,000元和人民幣3,300,000元。

For the year ended December 31, 2012, the fee payable to KPMG for non-audit service related to the review of the Company's interim financial report was RMB4,320,000. RSM China Certified Public Accountants Co., did not provide any non-auditing service for the year ended December 31, 2012.

截至2012年12月31日止年度，應向畢馬威會計師事務所支付的與審閱公司中期財務報表相關的非審計服務費為人民幣4,320,000元。截至2012年12月31日止年度，中瑞岳華會計師事務所並未提供非審計服務。

KMPG, the Company's external auditor's responsibilities to the financial statements are set out on pages 142 to 143 of this Annual Report.

畢馬威會計師事務所作為本公司外聘核數師對財務報表的責任，載於本年報第142頁至第143頁。

The Company plans to present the proposal of re-appointing KMPG and RSM China Certified Public Accountant Co., Ltd. as the auditors of the Company to the annual general meeting of shareholders which is to be convened.

本公司擬於即將召開之股東周年大會上提呈議案，續聘畢馬威會計師事務所和中瑞岳華會計師事務所為本公司之核數師。

7. Communications with Shareholders

The Company highly appreciates shareholders' opinions and advice, actively organizes various investor relations-related activities to maintain connections with shareholders and makes timely responses to reasonable requests of shareholders.

7.1 *Convening Extraordinary General Meetings by Shareholders*

According to the articles of association of the Company, two or more shareholders holding in aggregate more than 10% of the shares carrying the right to vote at the meeting sought to be held shall sign one or more counterpart requisitions requiring the Board of Directors to convene an extraordinary general meeting and stating the objectives of the meeting. The Board of Directors shall, in accordance with the requirements of laws and regulations and the articles of association of the Company, furnish a written reply stating its agreement or disagreement to convene the extraordinary general meeting within ten days upon receipt of such requisition. If the Board of Directors agrees to convene the extraordinary general meeting, a notice for convening the extraordinary general meeting shall be issued within five days upon adoption of the resolution by the Board of Directors.

If the Board of Directors does not agree to convene the extraordinary general meeting, or if it fails to give its feedback in writing within ten days upon receipt of such requisition, shareholders individually or jointly holding an aggregate of more than 10% of the shares carrying the right to vote at the meeting sought to be held shall be entitled to propose to the board of supervisors to convene an extraordinary general meeting, and shall submit its proposal in writing to the board of supervisors. If the board of supervisors agrees to convene the extraordinary general meeting, a notice for convening such meeting shall be issued within five days upon receipt of such requisition.

If the board of supervisors fails to issue a notice for such meeting within the prescribed period, the board of supervisors shall be deemed not to convene and preside at the meeting, and shareholders individually or jointly holding an aggregate of more than 10% of the shares of the Company for more than 90 consecutive days themselves may convene and preside at the meeting at their own discretion.

If the Board of Directors does not issue a notice of meeting within 30 days upon receipt of the aforesaid written requisition, the requisitioning shareholders themselves may convene such a meeting according to procedures as similar as possible to that in which general meeting are to be convened by the Board of Directors within four months from the date of receipt of the requisition by the Board of Directors.

7. 與股東的溝通

本公司高度重視股東的意見和建議，積極開展各類與投資者相關的活動與股東保持溝通，及時滿足各股東的合理需求。

7.1 *股東召開臨時股東大會*

根據本公司章程，合計持有在該擬舉行的會議上有表決權的股份10%以上的兩個或兩個以上的股東，可以簽署一份或數份同樣格式內容的書面要求，提請董事會召集臨時股東大會，並闡明會議的議題。董事會應當根據法律法規和本章程的規定，在收到請求後十日內提出同意或不同意召開臨時股東大會的書面反饋意見。董事會同意召開臨時股東大會的，應當在作出董事會決議後的五日內發出召開會議的通知。

董事會不同意召開臨時股東大會，或者在收到請求後十日內未作出反饋的，單獨或者合計持有在該擬舉行的會議上有表決權的股份10%以上的股東有權向監事會提議召開臨時股東大會，並應當以書面形式向監事會提出請求。監事會同意召開臨時股東大會的，應在收到請求五日內發出召開會議的通知。

監事會未在規定期限內發出會議通知的，視為監事會不召集和主持股東大會，連續九十日以上單獨或者合計持有公司10%以上股份的股東可以自行召集和主持。

如果董事會在收到前述書面要求後三十日內沒有發出召集會議的通告，提出該要求的股東可以在董事會收到該要求後四個月內自行召集會議，召集的程序應當盡可能與董事會召集股東會議的程序相同。

7.2 Putting Forward Proposals at Shareholders' Meetings

According to the articles of association of the Company, when the Company convenes an annual general meeting, shareholders individually or jointly holding more than 3% of the shares of the Company shall have the right to propose motions. Shareholders holding more than 3% of the shares of the Company shall have the right to propose ad hoc motions in writing, and the Company shall include matters in the proposed ad hoc motions within the scope of duties and responsibilities of the general meetings on the agenda, if the criteria as specified in the articles of association of the Company are met.

7.3 Putting Forward Enquiries to the Board

According to the articles of association of the Company, all Directors shall attend general meetings. Shareholders may present enquiries to the Board of Directors at such general meetings. If shareholders need to contact the Board for enquiries, they are also welcomed to send enquiries directly to the Company at its principal place of business in the PRC, contact details of which are as follows:

Attention:	Board Office
Address:	Suite 1101, 11th Floor, Building No.1, Block No. 16, Xi Si Huan Zhong Road, Haidian District, Beijing, PRC
Postal code:	100039
Telephone:	010-5765 7777
Fax:	010-5765 9705
Email:	khdq@kh.cgdc.com.cn

For the avoidance of doubt, shareholder(s) must deposit and send the original duly signed written enquiry or correspondence of any type to the above address, and provide full name, contact details and identification in order to give effect thereto.

7.4 Disseminating Information through the Internet

In order to promote good corporate governance and transparency, the Group uses its website (www.01296.hk) as a medium to disseminate information. The Group implements procedures to vet information which is to be put on its website and also monitors its website to ensure that all published information is up-to-date and accurate.

7.2 在股東大會提出建議

根據本公司章程，公司召開股東大會，單獨或合計持有公司3%以上股份的股東有權向公司提出提案。單獨或合計持有公司3%以上股份的股東，有權以書面形式向公司提出臨時提案，公司應當將臨時提案中屬於股東大會職責範圍內的事項，列入該次會議的議程，如果公司章程中對臨時提案所列的要求均已滿足。

7.3 向董事會提出查詢

根據本公司章程，股東大會召開時，公司全體董事都應當出席會議。股東可以在股東大會上向董事會提出查詢。如果股東因查詢而需聯繫董事會，他們也可以直接將查詢函發送至本公司在中國的主要營業地點，具體聯繫方式如下：

收件人：	董事會辦公室
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
郵編：	100039
電話：	010-5765 7777
傳真：	010-5765 9705
電子郵箱：	khdq@kh.cgdc.com.cn

未免生疑，股東須將正式簽署的書面查詢原件或其他形式的信函存放或寄送至上述地址，並提供全名、聯繫方式詳情以及身份證明，方告生效。

7.4 互聯網資訊發佈的管理工作

為提升企業管治水平和增加企業透明度，本集團設立網站(www.01296.hk)並使用互聯網作為發放資料的渠道，制定程式審閱即將登載在互聯網上的資料，同時監察本集團網站，以確保所有公佈的資料都是最新的並且是正確的。

7.5 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 requirements regarding overseas regulatory announcements in accordance with Rule 13.09(2) of Listing Rules.

Furthermore, the Group has also complied with the requirements regarding overseas regulatory announcements in relation to its bonds offering on the Shanghai Stock Exchange in accordance with Rule 13.09(2) of Listing Rules in this regard.

7.5 於其他海外監管市場發佈的公告

由於本集團擁有一間於深圳證券交易所上市的附屬公司，煙台龍源電力技術股份有限公司，故此，本集團需要根據上市規則第13.09(2)條的規定遵守海外監管公告的相關規定。

此外，本集團已根據上市規則第13.09(2)條規定在境內發行(於上海證券交易所)適宜遵守海外監管公告的相關規定。

8. Company Secretary

Mr. TANG Dejun and Mr. WONG Ki Yan Davhen are the internal joint company secretaries of the Company. Please refer to the Section headed "Directors, Supervisors and Senior Management — Joint Company Secretaries" for further information.

The Company's joint company secretaries had complied with Rule 3.29 of the Listing Rules during 2012.

8. 公司秘書

湯得軍先生和黃基恩先生為本公司的內聘聯席公司秘書。請參閱名為「董事、監事和高級管理人員—聯席公司秘書」的章節以獲得其進一步信息。

於2012年度內，聯席公司秘書已遵守了上市規則第3.29條之規定。

9. Amendments to the articles of association

As adopted as special resolutions at the 2011 annual general meeting held on June 8, 2012, the articles of association of the Company was amended. The amendments to the articles of association of the Company included, among other matters, certain changes in the corporate information of the Company, including changes in business scope of the Company, changes in the registered capital of the Company, and changes in the number of H Shares of the Company as a result of the partial exercise of the over-allotment option and the increase in the size of the Board. For details of the amendments to the article of association of the Company, please refer to the announcement of the Company dated April 30, 2012.

9. 對章程的修改

作為在2012年6月8日召開的2011年度股東周年大會上通過的特別議案，本公司的章程被修改。對本公司章程的修改包括修改本公司經營範圍、本公司註冊資本、以及因超額配股權部分行使而需修改的本公司H股數目等公司信息，以及董事會人數的增加。關於本公司章程的修改詳情，請參見本公司2012年4月30日的公告。

10. The Management of Price Sensitive Information

In order to promote fairness, transparency, accountability and responsibility, which are the core principles of good corporate governance, the Group assisted by compliance advisors and legal advisors has notified the Exchange and has disclosed to shareholders and other holders of its listed securities as soon as practicable of any price sensitive information of the Group pursuant to the Listing Rules.

10. 股價敏感資料的管理工作

為促進公平、透明度、問責和責任這幾方面(上述全是良好企業管治的要素)，根據上市規則，本集團由合規顧問和法律顧問協助，在切實可行的情況下，儘快向聯交所、股東及其上市證券的其他持有人通知任何與該集團有關的股價敏感資料。

SUMMARY OF HUMAN RESOURCES
人力資源概況

As of December 31, 2012, the Group had a total of 10,928 staff, of which 8,334 or 76.3% were male while 2,594 or 23.7% were female. The staff structure is as follows:

於2012年12月31日，本集團共有員工10,928名，其中男員工8,334人，佔76.3%，女員工2,594人，佔23.7%。人員構成情況如下：

Table 1: Analysis of the Group's staff by business function

表一：本集團按業務分部劃分的員工分析

No. 序號	Business Function 分部	Number of Staff 人數	Percentage 比例
1	Centralized Management 整體管理	97	0.9%
2	Wind power business 風電業務	4,027	36.8%
3	Coal power business 火電業務	2,635	24.1%
4	Technical and related services business 技術及相關服務業務	1,986	18.2%
5	Other renewable energy 其他可再生能源	2,183	20.0%
	Total 合計	10,928	100.0%

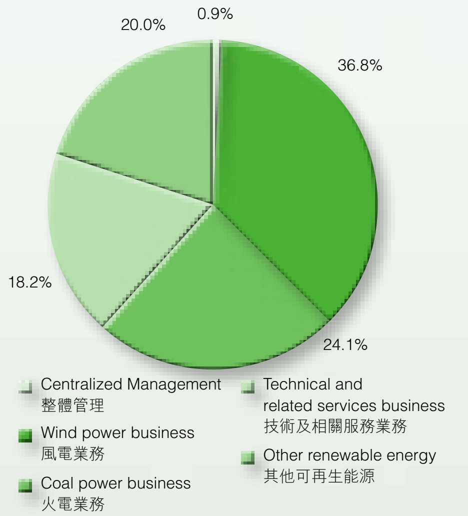
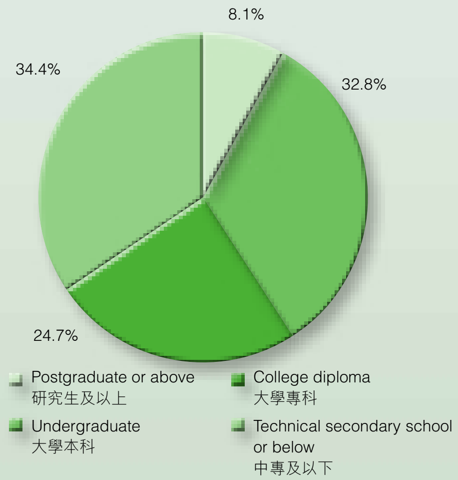


Table 2: Analysis of the Group's staff by academic qualification

表二：本集團按學歷劃分的員工分析

No. 序號	Academic Qualification 學歷	Number of Staff 人數	Percentage 比例
1	Postgraduate or above 研究生及以上	880	8.1%
2	Undergraduate 大學本科	3,586	32.8%
3	College diploma 大學專科	2,703	24.7%
4	Technical secondary school or below 中專及以下	3,759	34.4%
	Total 合計	10,928	100.0%

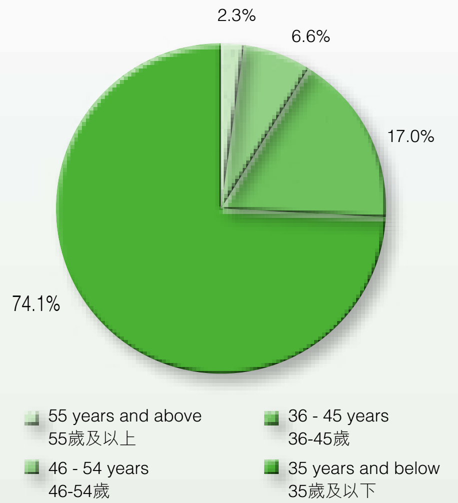


SUMMARY OF HUMAN RESOURCES
人力資源概況

Table 3: Analysis of the Group's staff by age

表三：本集團按年齡劃分的員工分析

No. 序號	Age 年齡	Number of Staff 人數	Percentage 比例
1	55 years and above 55歲及以上	252	2.3%
2	46 - 54 years 46-54歲	721	6.6%
3	36 - 45 years 36-45歲	1,859	17.0%
4	35 years and below 35歲及以下	8,096	74.1%
	Total 合計	10,928	100.0%



As of December 31, 2012, the Company had a total of 97 staff. The staff structure is as follows:

於2012年12月31日，本公司共有員工97名。人員構成情況如下：

Table 4: Analysis of the Company's staff by academic qualification

表四：本公司按學歷劃分的員工分析

No. 序號	Academic Qualification 學歷	Number of Staff 人數	Percentage 比例
1	Postgraduate or above 研究生及以上	34	35.1%
2	Undergraduate 大學本科	48	49.5%
3	College diploma 大學專科	11	11.3%
4	Technical secondary school or below 中專及以下	4	4.1%
	Total 合計	97	100.0%

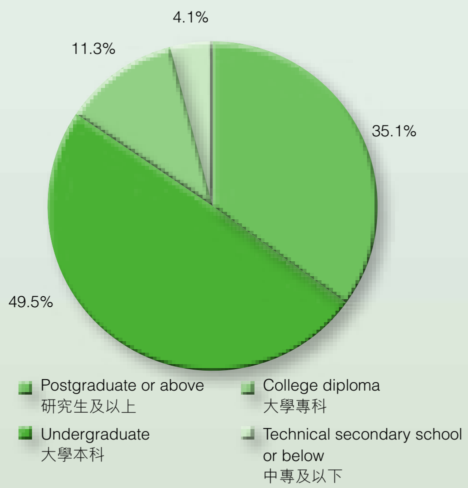


Table 5: Analysis of the Company's staff by age

表五：本公司按年齡劃分的員工分析

No. 序號	Age 年齡	Number of Staff 人數	Percentage 比例
1	55 years and above 55歲及以上	6	6.2%
2	46 - 54 years 46-54歲	15	15.5%
3	36 - 45 years 36-45歲	27	27.8%
4	35 years and below 35歲及以下	49	50.5%
	Total 合計	97	100.0%

Staff Performance Appraisal

In order to meet its development needs, and aiming to become a top-tier clean energy high-tech enterprise, the Group has been actively exploring a practical, customized and sustainable innovation mechanism for a high-tech enterprise in the power industry. The Group has focused on quality and efficiency, constantly reinforced its staff's competitiveness awareness, market awareness and cost-efficiency awareness, and improved the Company's value adding capability. In addition to its existing position-based accountability system, the Group has established and perfected an effective mechanism for staff performance appraisal and management, and also implemented an all-staff performance appraisal. The Group has implemented the approach of both incentivization and discipline, by maintaining a clear division of duties, identification of the performance targets for different positions, formulation of performance standards, appraisal of staff performance in an objective and accurate manner, stimulation of the potential and enthusiasm of the employees.

員工績效考核

本集團不斷適應發展需要，按照建設一流的清潔能源高科技企業目標，積極探索一條符合實際、獨具特色、可持續發展的電力高科技企業體制機制創新之路，以質量和效益為中心，持續强化員工的競爭意識、市場意識和成本意識，不斷提升公司的價值創造能力。在現有崗位目標責任制的基礎上，進一步建立完善了有效的員工績效考核管理機制，在公司實施全員績效考核。堅持激勵與約束並行的原則，通過分解工作任務，明確不同崗位績效目標，制定績效標準，客觀準確地評價員工績效，激發員工潛能和工作熱情。

Staff Training

Envisioning the Group's future development and talents needs, the Group has established a sound staff training system in a bid to duly implement the strategy of strengthening the enterprise by attracting and retaining talents, and standardize and strengthen the education and training systems of the Group's employees. The Group has formulated and implemented training plans and programs tailored for management, technical and skilled personnel.

In 2012, the Group continued its effort in training all kinds of talents by providing its staff with various forms of training, primarily including regular trainings for management, orientation training for new staff, licensed induction training for operating and maintaining staff in power stations, professional qualification training, international cooperation training programme and others. 6,908 employees attended these trainings during the year, representing more than 63.2% of the total staff.

The Company has laid a solid foundation for building the platform of talent training and appraisal of occupational skills through the establishment of "the Lecture Hall of Guodian Tech". Through continuous development of various training courses, the Group has increasingly improved staff quality, reinforced the modern management concept among its management and enhanced the overall management efficiency.

員工培訓

本集團為全面實施人才強企戰略，規範和加強本集團系統教育培訓工作，建設了適應本集團未來發展及人才需要的完善的員工培訓體系；針對管理、技術、技能人員工作需要，組織制定並實施培訓項目計劃。

2012年，本集團繼續加大各類人才隊伍培訓力度，為員工提供了多種形式的培訓，主要包括：管理人員定期培訓、新員工入職培訓、電場運行檢修人員持證上崗培訓、職業資格培訓及國際合作項目培訓等，全年參加培訓員工總計達6,908人次，培訓率超過63.2%。

本公司成立了「科環大講堂」，為本公司人才培養和職業技能鑒定搭建平台，奠定了良好的基礎。通過各種培訓項目的不斷開展，本集團員工素質不斷提高，管理人員的現代管理理念和整體管理效率進一步提升。

Employee Remuneration Policy

The employee remuneration of the Group comprises of basic salary, performance payment and bonus payment. Performance payment is made 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.

員工薪酬政策

本集團員工薪酬由基本工資、績效工資和獎勵工資三部份組成，績效工資依據公司業績及績效考核情況確定，獎勵工資依據公司年度專項重點工作完成情況確定。

SOCIAL RESPONSIBILITY STRATEGY AND MANAGEMENT
社會責任戰略與管理

Since its inception, the Company has made substantial efforts to fulfill its corporate social responsibilities, by promoting sustainable growth within the Group and in the society. The Company emphasizes the importance of energy conservation and environmental protection as part of its corporate culture, and incorporates such concept into its daily business operation.

自成立以來，公司一直致力於通過促進企業經營和社會的可持續發展來實踐其社會責任，將節能環保的重要性植根於公司文化中，並將這種觀念融入日常經營活動。

Today, the global economy still remains in a state of adjustment after the financial crisis, which is expected to have a long-term impact. Meanwhile, developed countries are implementing the strategy of re-establishing its manufacturing industry. The third industry revolution is gaining momentum with the development of internet and new energy. Faced with these challenges and to adapt to fast-changing market environments, the Company focuses its corporate social responsibilities on the following aspects: (1) innovation and development of new technology; (2) development of alternative energy, energy conservation, and low-carbon technologies; (3) participation in social welfare activities; and (4) promotion of anti-corruption efforts as well as conducting business with honesty and integrity.

目前，全球經濟仍處於危機後的調整期，金融危機的影響呈現長期化趨勢，同時，發達國家實施再製造業化戰略，以互聯網、新能源為代表的第三次工業革命正在興起。面對這些挑戰，為適應快速變化的市場環境，本集團將企業社會責任圍繞在(1)推動科技創新和發展；(2)促進新能源、節能環保、低碳技術的發展；(3)積極參與社會福利活動；及(4)加大反腐力度，倡導廉潔從業理念。

Proactive Participation in the National Technological Innovation and R&D Projects for Environmental Protection and Energy Conservation and Renewable Energy Technologies

積極參與國家科技創新與研發項目，發展節能環保及可再生能源技術

As one of the state-owned enterprises, the Company, since its inception, has been proactively participating in multiple national technological innovation and R&D projects and made significant contribution to the development of the PRC's environmental protection and energy conservation and renewable energy related technologies. The Company always considers enhancing independent innovation capability as its core development strategy, and has promoted the development of industries related to national energy security and sustainable growth of the Chinese society.

作為央企「國家隊」的一員，公司自成立以來積極參與了多項國家科技創新與研發項目，對與節能環保和新能源相關技術及產業的發展做出了重大貢獻。公司始終把提升自主創新能力作為我們的核心發展策略，推動了與國家能源安全及可持續發展息息相關的產業的發展。

In addition, the Company regards the industrial application of new technologies as a significant part of the R&D activities. The Group proactively participated in national scientific research projects with significant practical value such as the 863 Program and the 973 Project. Major technology breakthroughs achieved by the Group's R&D projects have successfully eliminated the monopoly in such areas which were once enjoyed by multinational corporations from developed countries, and contributed significantly to the upgrade of the power industry in the PRC.

此外，公司把新技術的工業應用作為研發活動的重要組成部分。本集團積極參與了「863」計劃和「973」項目等一批具有實用價值的國家重點研發項目，並取得了重大技術突破，成功地打破了發達國家跨國公司的技術壟斷，為我國電力工業的產業化升級做出了重要貢獻。

Promotion of A Greener Society

Aiming to become a global leading provider of integrated green power solutions, the Company endeavors to improve environmental quality and energy efficiency, energy conservation and use of renewable energy, such as wind power and solar power. The Group has implemented a set of standard procedures in its operations. At the preliminary stage of the projects, The Company undertakes cautious environmental protection assessment so as to avoid negative impact on environment. During the construction and operation stage of each project, the Company also implements necessary and appropriate measures for environmental protection. The Company has greatly contributed to the cleaner production of the power industry in the PRC, which in turn boosts the harmonic development of economy, society and ecologic environment of China, and helps promote energy efficiency and emission reduction initiatives in the PRC and around the world.

The Company considers raising public awareness about energy conservation and environmental protection as part of its corporate social responsibilities. In order to build a greener society, the Company established the Guodian Science and Technology Exhibition Hall (the "Exhibition Hall") in its headquarters in Beijing. More than 4,000 people from various walks of life such as governmental agencies, social organizations, companies and schools have visited the Exhibition Hall in 2012. The Exhibition Hall was designed to educate the public about the importance of energy conservation and low-carbon footprint lifestyle. Such exhibitions have received high regards among the participants and built up the Group's brand image as a green and socially responsible high-tech corporation.

助推社會綠色發展

為成為世界一流的綠色能源整體解決方案提供商，公司大大提高了環境質量、節能環保及新能源的利用。本集團在生產過程中實施了一系列標準化工作流程。在項目前期，公司進行了細緻的環保評估以避免項目對環境的影響。在每一項目的建設和運營階段，公司還實施了必要的環境保護措施。公司努力提高中國電力行業的清潔生產能力，促進了我國經濟、社會與生態環境協調發展，推動了中國乃至世界範圍內的能源效率的提高及節能減排事業的發展。

公司把向社會傳播節能環保理念作為履行企業社會責任的重要組成部分。為實現社會綠色發展這一倡議，公司在其總部中國北京開設了國電科技展廳。2012年全年累計接待各級政府部門、公益組織、其他公司、學校等逾4,000人次。國電科技展廳旨在向公眾傳播節能環保的重要性和低碳生活理念，在參觀者中受到了廣泛好評，展示了公司作為富有社會責任的高科技企業的良好形象。

Environmental Protection

Longyuan Environmental, a subsidiary of the Company, is committed to the denitrification and desulfurication of thermal power plants. Its total SO_2 emission control capacity for the 24 concession projects which were operational for the whole year was approximately 70,000 tons, and the annual emission reduction reached 928,100 tons, which was a great contribution to the state and thermal power industry's air pollutant emission reduction. The adverse effect on environment protection can be avoided if the emission is in line with the protocol during production. For example, if the exhaust is released into the air after being purified by the desulfurication system, the amount of SO_2, which is as a major pollutant in exhaust emission, will be decreased from 2,000mg/m^3 before desulfurication to 100mg/m^3 (based on the 1% sulfur content).

The water from the Company's sewage treatment plants was released after meeting the emission standard, or utilized by industrial enterprise such as power plants after receiving further renewable treatment. Industrial sewage and household sewage produced by sewage treatment plants were collected into the sewage treatment system and contained, causing no pollution to the environment. The Company's sewage treatment plants treated organic pollutants from exhaust pollutant with oxidative decomposition, and released them after meeting the required standard. With respect to solid wastes, residual sludge is normally buried or utilized as fertilization in farmland after treatment, and other solid wastes such as sediment and grit are shipped to refuse landfills to be buried.

環境保護

本公司下屬龍源環保致力於火電廠脱硫脱硝工作，全年在運的24個脱硫特許經營項目SO_2排放控制總容量約7萬噸，年減排SO_2量達到了92.81萬噸，為國家和火電行業的大氣污染物減排工作做出了積極的貢獻。在生產過程中按照規定進行排污，不會對環境保護產生不良影響。例如廢氣排放主要污染物為二氧化硫，經脱硫系統淨化後達標排放，以煤含硫量1%計算，脱硫處理前SO_2產生量2,000mg／m^{3}左右，處理後可達到100mg／m^{3}排放標準。

本公司所屬污水處理廠產品水去向分為：達到排放標準後排放，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。本公司所屬污水處理廠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。

Energy Conservation and Emission Reduction

Longyuan Technology, one of the Company's subsidiaries, was responsible for plasma ignition of over 600 thermal power generators, saving over 10 million tons of oil, and its low-NOx combustion technology significantly reduced the emission of NOx. Solid wastes produced during the equipment manufacturing were contained for comprehensive treatment, or handled by delegated third-party renewable resource companies. There was no sewage emission from production; household sewage was released into the local municipal sewage network and handled collectively. Minor flue gas was purified by portable ash purifying machines (effective rate over 95%), and the total annual emission was no more than 8 kilograms.

In 2012, Guodian Longyuan Power Technology and Engineering Co., Ltd., one of the Company's subsidiaries, executed 27 EMC contracts. By the end of 2012, the cumulative amount of standard coal saved was 500,000 tons and the amount of CO_2 emission reduced was approximately 1.2 million tons.

節能減排

本公司下屬龍源技術的等離子點火業務已超過600台火電機組，節約燃油上千萬噸；低氮燃燒技術大幅度降低了氮氧化物排放量。設備加工生產過程產生的固體廢物全部綜合處理不外排，或委託第三方再生資源公司進行合理處理。生產過程中無廢水排放，生活污水進入市政管網進行統一處理。少量煙氣經移動式煙塵淨化機(效率達95%以上)進行淨化處理，全年排放量不超過8千克。

2012年，本公司下屬國電龍源電力技術工程有限責任公司簽訂EMC合同27項。截至2012年年底，累計節約標準煤50萬噸，減少二氧化碳排放量約120萬噸。

Wind Turbine Manufacturing and Emission Reduction

The sewage from the wind turbine production of the Group's production bases in Jiangsu, Neimenggu, Jilin, and Hebei provinces was released into the local municipal sewage treatment plant and handled collectively; solid waste pollutant was handled and reused by third party; ventilation systems with activated carbon treatment were installed at the air pollutant sources to eliminate the pollution to the environment. Other wastes were sold to metal recycle companies for recycling purposes.

風機製造減排

本集團位於江蘇、內蒙古、吉林、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；固廢污染經第三方回收處理再利用；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。而其他廢棄物全部銷售給金屬回收公司回收利用。

Work Place Safety and Employee Health

The Company has continuingly implemented the PRC laws and regulations and standards on safe production and occupational hazard, and continuingly promoted and improved the work environment management and the occupational health and safety management system. The Company has created for its employees a working environment that meets the PRC safety and sanitary standard and requirements. By providing qualified labor protection products, preventing, controlling and eliminating occupational hazards, the Company has safeguarded its employee's health and relevant rights.

In order to strengthen the occupational health supervision and management in each of the Group's work sites, the Company has established safety, occupational health assurance system. Each front-line operational unit has taken the following measures:

1. Compiling the hazard causations list and the major hazard causations list, and implementing tailored measures and management plans for each hazard causation, especially major hazard causations;

注重安全生產，關注員工職業健康

公司一貫堅持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。

為加強科環集團各單位作業場所的職業健康監督與管理工作，公司系統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. 編製危險源清單和重大危險源清單，對於各危險源，特別是重大危險源，採取有針對性的措施和管理方案；

2. Regularly organizing employees to take trainings on occupational health maintenance and occupational hazard prevention, and promoting employees' self-protection awareness;

3. Developing and improving the work environment of the work site;

4. Organizing employees to take physical examinations on a regular basis according to supervision and management measures; and

5. Proactively cooperating with relevant government authorities to work on the prevention of contagious diseases.

Contribution to Social Welfare and Participation in the Development of Local Economy

While aiming to maximize shareholders' return, the Company is also always devoted to promoting the society well-being and development, pushing forward sustainable development of the Group, the Chinese society and the environment. The Company's subsidiaries and associates are located all around the PRC, which have implemented the Company's community service spirit and proactively participated in the development of local economy by working with local enterprises operated in the related industries. Through its local subsidiaries, the Company has played a proactive role in further diversifying the local industrial structure, stimulating the local employment and promoting the progress of urbanization. In 2012 alone, the Group undertook numerous social welfare activities, such as sponsoring infrastructure construction of remote communities, blood donation, investment in and donation to education and elderly care services, tree planting volunteering, as its efforts in constructing a harmonic environment and driving the development of local economy.

In addition, the Company organized a series of regularly held internal lectures named Guodian Tech Forum to prompt the concept of good corporate governance and corporate culture and to assist the staffs to understand new governmental policies. It became a cultural brand of the Company. "Guodian Tech Forum" promoted in-depth communications and interactions among the employees, whose active participation in developing and promoting the Company's company culture has become a strong factor in the steady development of the Company.

The PRC Government has set a target that during the "12th Five-Year Plan", 95% of the populations in Tibet will have access to electricity. To support such initiative, the Company, via its subsidiary Beijing Huadian Tianren, conducted research and survey in Tibet in 2012 with the support of the local government. After a thorough consideration and evaluation of the area's fragile ecological systems and traffic inconvenience, the Group decided to use the micro-grid technologies to minimize the environment impact and to optimize the power supply. In 2012, the Group constructed five micro-grid projects in Tibet with a total capacity of 230 kW. More than 1,400 people in Tibet benefited from these projects and have been able to use electricity ever since.

2. 定期組織員工就有關職業健康和預防職業病的知識進行培訓，提高員工的自我保護意識；

3. 不斷改善作業場所的工作環境；

4. 按照監督管理辦法，定期組織員工進行職業健康查體；

5. 積極配合相關部門做好傳染性疾病的預防工作。

貢獻社會福利事業，帶動地方經濟社會發展

為回報股東，公司還致力於社會福祉與發展，推動集團經營、社會與環境的可持續發展。公司在各地的骨幹企業發展壯大，帶動了一批產業相關聯的地方企業發展，貫徹了公司服務社會的精神，推動了當地經濟發展。通過在各地的骨幹企業，公司在進一步推動當地的產業結構多樣化上起到了積極的作用，促進了當地人員就業，推進了城鎮化的進程。僅在2012年，本集團參與了各種社會福利活動，如加大對偏遠地區基礎設施建設投入力度、獻血活動、對教育事業及老年人關愛服務的投入和捐款捐物、志願植樹活動，努力構建和諧社會，推動當地經濟發展。

另外，公司定期組織名為「科環大講堂」的內部系列講座，以推廣公司治理、企業文化管理理念，並幫助員工學習和了解新的國家政策，使其成為了公司的特色文化品牌。同時，「科環大講堂」推動了員工之間的深入交流互動，員工積極參與和推動公司文化已成為公司穩定發展的重要因素。

西藏地區「十二五」發展規劃中提出了2015年實現用電人口覆蓋95%的目標。為支持這一事業，在當地政府的支持和協助下，2012年國電科環所屬華電天仁公司在西藏地區開展了實地考察和調研。在充分考慮和評估了當地脆弱的生態系統和交通不便狀況後，本集團確定通過微型電網技術來減少對環境的影響，同時優化電力供應。2012年，本集團共建設了5個西藏微電網項目，共計230千瓦，西藏1,400多人從此用上了電。

Promoting Anti-corruption System and Advocating Integrity and Honesty

Since its inception, the Company has attached importance to the promotion of anti-corruption and integrity promotion system, formulated and improved ten sets of anti-corruption and integrity promotion rules such as the Implementation Rules for the Conducts of the Company Management, the Administrative Measures for Supervision on Company's Efficiency, the Administrative Measures for Supervision on Company's Bidding.

In August 2012, Company's discipline inspection and supervision personnel participated in the workshop for discipline inspection and supervision personnel of state-own enterprises, which was arranged by the disciplinary supervision department of the Central Discipline Inspection Commission of the Communist Party of China. The systematic training improved the competency and skills of discipline inspection and supervision personnel in performing their duties in accordance with relevant laws and regulations. Furthermore, the Company held two lectures on integrity and honesty promotion, at which the general counsel of the Group and the deputy chief procurator of Beijing People's Procuratorate were invited to lecture on performance of duties and prevention of duty-related crimes for management in state-owned enterprises. Meanwhile, the Company follows the routine supervision and inspection and aims to eliminate corruptions and misconducts at the early stage. The Company's inspection and audit department supervises important functions such as project bidding and sourcing procurement. A comprehensive efficiency supervision and inspection has been conducted within the Company to timely discover and fix the loopholes and weaknesses in management and suggestions on supervision and inspection have been raised to effectively avoid any potential risks.

In order to strengthen the discipline inspection and supervision function, in June 2012, the Company divided the former supervision and audit department into supervision department (disciplinary office) and audit department, and appointed two specialized disciplinary inspection officer. The Company believes that it has laid a solid foundation for the disciplinary and prevention system.

推動反腐制度建設及倡導廉潔從業觀念

公司自成立以來，一直重視反腐倡廉制度建設，制定和完善了《公司企業領導人員廉潔從業規定實施細則》、《公司效能監察管理辦法》、《公司招標監督管理辦法》等十項反腐倡廉制度。

2012年8月份公司紀檢監察幹部參加了中央紀委監察部舉辦的國有企業紀檢監察幹部培訓班，通過系統培訓提高了紀檢監察工作人員依法依紀履行工作職責的能力和水平。並且，公司安排了兩次黨風廉政建設教育講座，分別邀請了集團公司的總法律顧問和北京市人民檢察院副檢察長就國有企業領導人員依法履職和預防國有企業職務犯罪等黨風廉政建設方面進行了授課。同時，公司十分重視常規監督檢查，積極促進源頭預防工作。公司監察紀檢部門對公司的工程招標、物資採購點等重點工作進行了跟踪監督。並在公司系統內全面開展效能監察工作，及時發現並糾正管理中的漏洞和薄弱環節，並提出監察建議，有效防範管理過程中的潛在風險。

為加強紀檢監察職能，2012年6月公司將原來的監察審計部，分設為監察部（紀檢辦）和審計部兩個部門，配備了兩名專職的紀檢監察人員。本公司相信其為確保懲防體系建設落到實處奠定了堅實的基礎。

獨立核數師報告

REPORT OF THE INDEPENDENT AUDITORS

Touch by SUN Lele
觸碰　孫樂樂作品

REPORT OF THE INDEPENDENT AUDITORS
獨立核數師報告

Independent auditor's report to the shareholders of
Guodian Technology & Environment Group Corporation Limited
(a joint stock company incorporated in the People's Republic of China with limited liability)

We have audited the consolidated financial statements of Guodian Technology & Environment Group Corporation Limited (the "Company") and its subsidiaries (together the "Group") set out on pages 144 to 296, which comprise the consolidated and company balance sheets as at 31 December 2012, and the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated cash flow statement for the year then ended, and a summary of significant accounting policies and other explanatory information.

Directors' responsibility for the consolidated financial statements

The directors of the Company are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board and the disclosure requirements of the Hong Kong Companies Ordinance and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. This report is made solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

We conducted our audit in accordance with Hong Kong Standards on Auditing issued by the Hong Kong Institute of Certified Public Accountants. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

獨立核數師報告
致國電科技環保集團股份有限公司股東
(於中華人民共和國註冊成立的股份有限公司)

本核數師(以下簡稱「我們」)已審核刊於第144至第296頁國電科技環保集團股份有限公司(「貴公司」)及其附屬公司(「貴集團」)的合併財務報表,此合併財務報表包括於2012年12月31日的合併和公司資產負債表與截至該日止年度的合併收益表、合併綜合收益表、合併權益變動表和合併現金流量表,以及主要會計政策概要及其他附註解釋。

董事就合併財務報表須承擔的責任

貴公司董事須負責根據國際會計準則委員會頒布的《國際財務報告準則》及香港《公司條例》的披露規定而編製及提供真實而公允的合併財務報表,以及負責董事認為編製合併財務報表所必需的內部控制,以確保合併財務報表不存在由於欺詐或錯誤而導致的重大錯誤陳述。

核數師的責任

我們的責任是根據我們的審核對該等合併財務報表作出意見。我們的報告書僅向整體股東報告。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。

我們已根據香港會計師公會頒佈的《香港審計準則》進行審核。這些準則要求我們遵守道德規範,並規劃及執行審核,以合理確定此等合併財務報表是否不存有任何重大錯誤陳述。

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of the consolidated financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the consolidated financial statements.

審核涉及執行程序以獲取有關合併財務報表所載金額及披露資料的審核憑證。所選定的程序取決於核數師的判斷，包括評估由於欺詐或錯誤而導致合併財務報表存有重大錯誤陳述的風險。在評估該等風險時，核數師考慮與該公司編製及真實而公允地列報合併財務報表相關的內部控制，以設計適當的審核程序，但並非為對公司的內部控制的效能發表意見。審核亦包括評價董事所採用的會計政策的合適性及所作出的會計估計的合理性，以及評價合併財務報表的整體列報方式。

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

我們相信，我們所獲得的審核憑證是充足和適當地為我們的審核意見提供基礎。

Opinion

意見

In our opinion, the consolidated financial statements give a true and fair view of the state of affairs of the Company and of the Group as at 31 December 2012 and of the Group's profit and cash flows for the year then ended in accordance with International Financial Reporting Standards and have been properly prepared in accordance with the disclosure requirements of the Hong Kong Companies Ordinance.

我們認為，該等合併財務報表已根據《國際財務報告準則》真實而公允地反映　貴公司和　貴集團於2012年12月31日的事務狀況及　貴集團截至該日止年度的利潤和現金流量，並已按照香港《公司條例》的披露要求妥為編製。

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

28 March 2013

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

2013年3月28日

CONSOLIDATED INCOME STATEMENT
合併收益表

For the year ended 31 December 2012 截至2012年12月31日止年度
(Expressed in Renminbi)(以人民幣列示)

		Note 附註	2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Revenue	**收入**	4	**21,776,510**	18,706,980
Cost of sales	銷售成本		**(18,395,929)**	(15,924,329)
Gross profit	**毛利**		**3,380,581**	2,782,651
Other revenue	其他收入	5	**468,372**	352,022
Other net (losses)/income	其他(虧損)/收益淨額	5	**(5,633)**	278,276
Selling and distribution expenses	銷售及分銷開支		**(680,604)**	(634,980)
Administrative expenses	行政開支		**(1,290,839)**	(1,115,463)
Profit from operations	**經營利潤**		**1,871,877**	1,662,506
Finance costs	財務成本	6	**(642,815)**	(415,442)
Share of profits less losses of associates	應佔聯營公司利潤減虧損		**34,843**	24,510
Profit before taxation	**稅前利潤**	7	**1,263,905**	1,271,574
Income tax	所得稅	8	**(229,934)**	(107,161)
Profit for the year	**本年利潤**		**1,033,971**	1,164,413
Profit attributable to:	**利潤歸屬於:**			
Equity shareholders/owners of the Company	本公司權益股東/所有者		**692,947**	840,681
Non-controlling interests	非控股權益		**341,024**	323,732
Profit for the year	**本年利潤**		**1,033,971**	1,164,413
Basic and diluted earnings per share (RMB cents)	**每股基本及攤薄盈利(人民幣分)**	13	**11.4**	17.3

The notes on page 155 to 296 form part of these financial statements. 155至296頁的附註為此等財務報表的一部分。

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
合併綜合收益表

For the year ended 31 December 2012 截至2012年12月31日止年度
(Expressed in Renminbi) (以人民幣列示)

		Note 附註	2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Profit for the year	**本年利潤**		**1,033,971**	1,164,413
Other comprehensive income for the year (after tax)	**本年其他綜合收益(稅後)**	12		
Exchange differences on translation of financial statements of operations outside the People's Republic of China (the "PRC")	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		**(135)**	(153)
Available-for-sale securities: net movement in the fair value reserve	可供出售證券:公允價值儲備的淨變動		**(23,958)**	—
			(24,093)	(153)
Total comprehensive income for the year	**本年綜合收益總額**		**1,009,878**	1,164,260
Attributable to:	**歸屬於:**			
Equity shareholders/owners of the Company	本公司權益股東/所有者		**668,854**	840,528
Non-controlling interests	非控股權益		**341,024**	323,732
Total comprehensive income for the year	**本年綜合收益總額**		**1,009,878**	1,164,260

The notes on page 155 to 296 form part of these financial statements.

155至296頁的附註為此等財務報表的一部分。

CONSOLIDATED BALANCE SHEET
合併資產負債表

As at 31 December 2012 於2012年12月31日
(Expressed in Renminbi)（以人民幣列示）

		Note 附註	2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Non-current assets	**非流動資產**			
Property, plant and equipment	物業、廠房及設備	14	**12,896,669**	10,055,273
Investment properties	投資性物業	15	**364,497**	258,392
Lease prepayments	預付土地租賃款	16	**933,527**	885,349
Intangible assets	無形資產	17	**1,170,999**	648,719
Goodwill	商譽	18	**57,591**	7,082
Interests in associates	對聯營公司的投資	20	**478,011**	291,998
Other equity investments	其他權益投資	21	**329,821**	112,255
Other non-current assets	其他非流動資產	22	**3,864,187**	2,297,352
Deferred tax assets	遞延稅項資產	32(b)	**249,765**	174,538
Total non-current assets	**非流動資產總額**		**20,345,067**	14,730,958
Current assets	**流動資產**			
Inventories	存貨	23	**3,306,934**	7,488,905
Gross amounts due from customers for contract work	應收建造合同客戶款項總額	24	**1,946,700**	1,638,456
Trade and bills receivables	應收賬款及票據	25	**14,260,723**	9,925,578
Deposits, prepayments and other receivables	按金、預付款項及其他應收款項	26	**1,794,711**	1,139,902
Tax recoverable	可收回稅項	32(a)	**49,646**	127,962
Restricted deposits	受限制存款	27	**399,119**	436,222
Cash at bank and in hand	銀行存款及庫存現金	28	**4,192,787**	6,567,715
Total current assets	**流動資產總額**		**25,950,620**	27,324,740
Current liabilities	**流動負債**			
Borrowings	借款	29(b)	**9,823,411**	10,938,282
Trade and bills payables	應付賬款及票據	30	**12,276,725**	12,644,926
Other payables	其他應付款項	31	**3,864,609**	4,807,775
Gross amounts due to customers for contract work	應付建造合同客戶款項總額	24	**644,845**	518,044
Income tax payable	應付所得稅	32(a)	**72,574**	126,058
Provision for warranty	質保金撥備	33	**80,920**	83,578
Total current liabilities	**流動負債總額**		**26,763,084**	29,118,663
Net current liabilities	**流動負債淨額**		**(812,464)**	(1,793,923)
Total assets less current liabilities	**總資產減流動負債**		**19,532,603**	12,937,035

The notes on page 155 to 296 form part of these financial statements. 155至296頁的附註為此等財務報表的一部分。

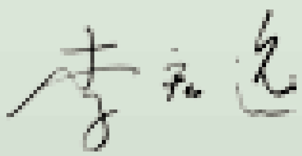
CONSOLIDATED BALANCE SHEET (CONTINUED)
合併資產負債表(續)

As at 31 December 2012 於2012年12月31日
(Expressed in Renminbi)(以人民幣列示)

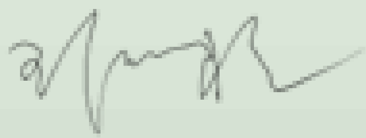
		Note 附註	**2012** **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Non-current liabilities	**非流動負債**			
Borrowings	借款	29(a)	**6,366,579**	1,138,728
Deferred income	遞延收益	34	**331,239**	306,072
Deferred tax liabilities	遞延稅項負債	32(b)	**95,670**	—
Provision for warranty	質保金撥備	33	**508,821**	391,868
Other non-current liabilities	其他非流動負債	35	**89,168**	104,288
Total non-current liabilities	**非流動負債總額**		**7,391,477**	1,940,956
NET ASSETS	**資產淨額**		**12,141,126**	10,996,079
CAPITAL AND RESERVES	**資本及儲備**			
Share capital	股本	36(c)	**6,063,770**	5,942,500
Reserves	儲備		**3,218,114**	2,829,046
Total equity attributable to the equity shareholders of the Company	**歸屬本公司權益股東的權益總額**		**9,281,884**	8,771,546
Non-controlling interests	**非控股權益**		**2,859,242**	2,224,533
TOTAL EQUITY	**權益總額**		**12,141,126**	10,996,079

Approved and authorised for issue by the board of directors on 28 March 2013.

董事會於2013年3月28日批准及授權刊發。



Mr. LI Hongyuan
李宏遠先生
Director
董事



Ms. WANG Hongyan
王鴻艷女士
Director
董事

The notes on page 155 to 296 form part of these financial statements.

155至296頁的附註為此等財務報表的一部分。

BALANCE SHEET
資產負債表

As at 31 December 2012 於2012年12月31日
(Expressed in Renminbi)（以人民幣列示）

		Note 附註	2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Non-current assets	**非流動資產**			
Property, plant and equipment	物業、廠房及設備	14	**1,277,888**	1,470,461
Investment properties	投資性物業	15	**1,004,623**	877,507
Intangible assets	無形資產		**10,244**	597
Investments in subsidiaries	對附屬公司的投資	19	**4,996,824**	3,769,824
Interests in associates	對聯營公司的投資	20	**63,116**	63,116
Other equity investments	其他權益投資	21	**325,104**	107,538
Other non-current assets	其他非流動資產	22	**158,143**	157,380
Total non-current assets	**非流動資產總額**		**7,835,942**	6,446,423
Current assets	**流動資產**			
Inventories	存貨		**880**	—
Gross amounts due from customers for contract work	應收建造合同客戶款項總額	24	**—**	10,554
Trade and bills receivables	應收賬款及票據	25	**292,709**	158,772
Deposits, prepayments and other receivables	按金、預付款項及其他應收款項	26	**8,173,584**	3,729,608
Restricted deposits	受限制存款		**303**	55
Cash at bank and in hand	銀行存款及庫存現金	28	**1,404,688**	2,648,118
Total current assets	**流動資產總額**		**9,872,164**	6,547,107
Current liabilities	**流動負債**			
Borrowings	借款	29(b)	**3,895,978**	4,170,000
Trade and bills payables	應付賬款及票據	30	**19,503**	104,973
Other payables	其他應付款項	31	**2,170,075**	1,081,892
Total current liabilities	**流動負債總額**		**6,085,556**	5,356,865
Net current assets	**流動資產淨額**		**3,786,608**	1,190,242
Total assets less current liabilities	**總資產減流動負債**		**11,622,550**	7,636,665

The notes on page 155 to 296 form part of these financial statements. 155至296頁的附註為此等財務報表的一部分。

BALANCE SHEET (CONTINUED)
資產負債表（續）

As at 31 December 2012 於2012年12月31日
(Expressed in Renminbi)（以人民幣列示）

		Note 附註	**2012** **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Non-current liabilities	**非流動負債**			
Borrowings	借款	29(a)	**4,356,106**	640,000
Total non-current liabilities	**非流動負債總額**		**4,356,106**	640,000
NET ASSETS	**資產淨額**		**7,266,444**	6,996,665
CAPITAL AND RESERVES	**資本及儲備**	36(a)		
Share capital	股本		**6,063,770**	5,942,500
Reserves	儲備		**1,202,674**	1,054,165
TOTAL EQUITY	**權益總額**		**7,266,444**	6,996,665

Approved and authorised for issue by the board of directors on 28 March 2013.

董事會於2013年3月28日批准及授權刊發。

Mr. LI Hongyuan
李宏遠先生
Director
董事

Ms. WANG Hongyan
王鴻艷女士
Director
董事

The notes on page 155 to 296 form part of these financial statements.

155至296頁的附註為此等財務報表的一部分。

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
合併權益變動表

For the year ended 31 December 2012 截至2012年12月31日止年度
(Expressed in Renminbi)（以人民幣列示）

		Attributable to equity shareholders/owners of the Company 歸屬本公司權益股東╱所有者								
		Paid-in capital/ share capital 實收資本╱股本 RMB'000 人民幣千元 Note 36(c) 附註 36(c)	Capital reserve 資本儲備 RMB'000 人民幣千元 Note 36(d)(i) 附註 36(d)(i)	PRC statutory reserve 中國法定公積金 RMB'000 人民幣千元 Note 36(d)(ii) 附註 36(d)(ii)	Exchange reserve 匯兑儲備 RMB'000 人民幣千元 Note 36(d)(iii) 附註 36(d)(iii)	Fair value reserve 公允價值儲備 RMB'000 人民幣千元 Note 36(d)(iv) 附註 36(d)(iv)	Retained profits 留存利潤 RMB'000 人民幣千元	Sub-total 小結 RMB'000 人民幣千元	Non-controlling interests 非控股權益 RMB'000 人民幣千元	Total equity 權益總額 RMB'000 人民幣千元
Balance at 1 January 2011	**2011年1月1日結餘**	4,822,590	309,583	22,781	(363)	—	1,002,585	6,157,176	1,942,855	8,100,031
Changes in equity for 2011:	**2011年權益變化：**									
Profit for the year	本年利潤	—	—	—	—	—	840,681	840,681	323,732	1,164,413
Other comprehensive income	其他綜合收益	—	—	—	(153)	—	—	(153)	—	(153)
Total comprehensive income for the year	本年綜合收益總額	—	—	—	(153)	—	840,681	840,528	323,732	1,164,260
Capital contributions	繳納資本	—	—	—	—	—	—	—	213,995	213,995
Conversion into a joint stock company with limited liability	轉制為股份有限公司	27,410	14,347	(13,638)	—	—	(28,119)	—	—	—
Appropriation	劃撥	—	—	31,367	—	—	(31,367)	—	—	—
Issuance of shares by initial public offering	通過首次公開招股發行股份	1,092,500	676,912	—	—	—	—	1,769,412	—	1,769,412
Dilution of equity interest in a subsidiary	附屬公司股權的稀釋	—	4,430	—	—	—	—	4,430	(4,430)	—
Disposal of subsidiaries	出售附屬公司	—	—	—	—	—	—	—	(116,226)	(116,226)
Dividends paid by subsidiaries to non-controlling equity owners	附屬公司向非控股權益所有者支付股息	—	—	—	—	—	—	—	(135,393)	(135,393)
Balance at 31 December 2011	**2011年12月31日結餘**	5,942,500	1,005,272	40,510	(516)	—	1,783,780	8,771,546	2,224,533	10,996,079

The notes on page 155 to 296 form part of these financial statements.

155至296頁的附註為此等財務報表的一部分。

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

For the year ended 31 December 2012 截至2012年12月31日止年度
(Expressed in Renminbi)(以人民幣列示)

		Attributable to equity shareholders of the Company 歸屬本公司權益股東								
		Share capital 股本 RMB'000 人民幣千元 Note 36(c) 附註 36(c)	Capital reserve 資本儲備 RMB'000 人民幣千元 Note 36(d)(i) 附註 36(d)(i)	PRC statutory reserve 中國法定公積金 RMB'000 人民幣千元 Note 36(d)(ii) 附註 36(d)(ii)	Exchange reserve 匯兑儲備 RMB'000 人民幣千元 Note 36(d)(iii) 附註 36(d)(iii)	Fair value reserve 公允價值儲備 RMB'000 人民幣千元 Note 36(d)(iv) 附註 36(d)(iv)	Retained profits 留存利潤 RMB'000 人民幣千元	Sub-total 小結 RMB'000 人民幣千元	Non-controlling interests 非控股權益 RMB'000 人民幣千元	Total equity 權益總額 RMB'000 人民幣千元
Balance at 1 January 2012	**2012年1月1日結餘**	**5,942,500**	**1,005,272**	**40,510**	**(516)**	**—**	**1,783,780**	**8,771,546**	**2,224,533**	**10,996,079**
Changes in equity for 2012:	**2012年權益變化:**									
Profit for the year	本年利潤	—	—	—	—	—	692,947	692,947	341,024	1,033,971
Other comprehensive income	其他綜合收益	—	—	—	(135)	(23,958)	—	(24,093)	—	(24,093)
Total comprehensive income for the year	本年綜合收益總額	—	—	—	(135)	(23,958)	692,947	668,854	341,024	1,009,878
Capital contributions	繳納資本	—	—	—	—	—	—	—	202,205	202,205
Appropriation	劃撥	—	—	41,762	—	—	(41,762)	—	—	—
Issuance of shares (note 36(c)(iii))	發行股票(附註36(c)(iii))	121,270	70,705	—	—	—	—	191,975	—	191,975
Dilution of equity interest in a subsidiary	附屬公司股權的稀釋	—	2,677	—	—	—	—	2,677	(2,677)	—
Acquisition of subsidiaries (note 41(a) & (b))	收購附屬公司(附註41(a)&(b))	—	—	—	—	—	—	—	325,153	325,153
Acquisition of non-controlling interests (note 41(c))	收購非控股權益(附註41(c))	—	(14,885)	—	—	—	—	(14,885)	(30,172)	(45,057)
Special dividend (note 36(b))	特別股息(附註36(b))	—	—	—	—	—	(338,283)	(338,283)	—	(338,283)
Dividends paid by subsidiaries to non-controlling equity owners	附屬公司向非控股權益所有者支付股息	—	—	—	—	—	—	—	(200,824)	(200,824)
Balance at 31 December 2012	**2012年12月31日結餘**	**6,063,770**	**1,063,769**	**82,272**	**(651)**	**(23,958)**	**2,096,682**	**9,281,884**	**2,859,242**	**12,141,126**

The notes on page 155 to 296 form part of these financial statements.　　155至296頁的附註為此等財務報表的一部分。

CONSOLIDATED CASH FLOW STATEMENT
合併現金流量表

For the year ended 31 December 2012 截至2012年12月31日止年度
(Expressed in Renminbi)（以人民幣列示）

		Note 附註	2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Cash flows from operating activities	**來自經營活動的現金流**			
Profit before taxation	稅前利潤		**1,263,905**	1,271,574
Adjustments for:	調整為：			
Depreciation	折舊	7(b)	**602,494**	438,575
Amortisation	攤銷	7(b)	**66,673**	40,210
Net (gain)/loss on disposal of property, plant and equipment	出售物業、廠房及設備（收益）／虧損淨額	5	**(208)**	163
Net loss from changes in fair value	公允價值變動虧損淨額	5	**—**	1,449
Impairment loss on trade and other receivables	應收賬款及其他應收款項減值虧損	7(b)	**43,185**	45,351
Write down of inventories	存貨撇減	23(b)	**66,467**	—
Finance costs	財務成本	6	**642,815**	415,442
Foreign exchange loss/(gain), net	匯兑虧損／（收益）淨額	5	**17,561**	(21,835)
Interest income	利息收入	5	**(90,645)**	(84,975)
Government grants	政府補助		**(67,484)**	(11,232)
Dividend income from unquoted equity securities	非上市權益證券的股息收入	5	**(15,816)**	(6,041)
Net gain on disposal of associates	出售聯營公司的收益淨額	5	**—**	(145,325)
Net gain on disposal of unquoted equity investments	出售非上市權益投資收益淨額	5	**—**	(109)
Net loss/(gain) on disposal of subsidiaries	出售附屬公司虧損／（收益）淨額	5	**31,451**	(97,312)
Share of profits less losses of associates	應佔聯營公司利潤減虧損		**(34,843)**	(24,510)
Changes in working capital:	營運資金的變化：			
Decrease/(increase) in inventories	存貨減少／（增加）		**4,138,002**	(455,146)
Increase in gross amounts due from customers for contract work	應收建造合同客戶款項總額的增加		**(216,563)**	(561,393)
Increase in trade and bills receivables	應收賬款及票據的增加		**(4,220,795)**	(4,605,560)
(Increase)/decrease in deposits, prepayments and other receivables	按金、預付款項和其他應收款項的（增加）／減少		**(165,632)**	1,418,327
Increase in other non-current assets	其他非流動資產的增加		**(1,680,173)**	(146,015)
(Decrease)/increase in trade and bills payables	應付賬款及票據的（減少）／增加		**(823,198)**	3,686,126
Decrease in other payables	其他應付款項的減少		**(1,095,319)**	(791,964)
Increase/(decrease) in gross amounts due to customers for contract work	應付建造合同客戶款項總額的增加／（減少）		**126,801**	(70,423)
Increase in provision for warranty	質保金撥備的增加		**114,295**	246,532
Cash (used in)/generated from operations	**經營中（使用）／產生的現金**		**(1,297,027)**	541,909
Income tax paid	已付所得稅	32(a)	**(262,460)**	(195,520)
Net cash (used in)/generated from operating activities	**經營活動（使用）／產生的淨現金**		**(1,559,487)**	346,389

The notes on page 155 to 296 form part of these financial statements. 155至296頁的附註為此等財務報表的一部分。

CONSOLIDATED CASH FLOW STATEMENT (CONTINUED)
合併現金流量表(續)

For the year ended 31 December 2012 截至2012年12月31日止年度
(Expressed in Renminbi)(以人民幣列示)

		Note 附註	2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Cash flows from investing activities	**來自投資活動產生的現金流**			
Payments for purchase of property, plant and equipment, lease prepayments and intangible assets	採購物業、廠房及設備、預付土地租賃款及無形資產支出		**(2,813,783)**	(4,972,589)
Payment for acquisition of subsidiaries	收購附屬公司支出	42	**(555,552)**	—
Payments for acquisitions of associates and other equity investments	收購聯營公司及其他權益投資支出		**(351,524)**	(92,259)
Disposal of subsidiaries, net of cash disposed of	出售附屬公司所得的淨現金		**(31,451)**	464,176
Payments for advances to related parties	給關聯方的墊款		**(135,052)**	(117,887)
Payments for advances to third parties	給第三方的墊款		**(3,089)**	(2,699)
Increase in deposits with banks	銀行存款的增加		**(844,500)**	(909,988)
Withdrawal of deposits with banks	銀行存款的提取		**998,068**	944,920
Government grants received	收到的政府補貼		**92,651**	131,655
Proceeds from disposal of property, plant and equipment	出售物業、廠房及設備所得款項		**11,059**	1,408
Proceeds from repayment of advances by related parties	關聯方償還墊款		**4,615**	807,636
Proceeds from repayment of advances by third parties	第三方償還墊款		**6,558**	7,721
Proceeds from disposal of associates and other equity investments	出售聯營公司與其他權益投資所得款項		**—**	119,057
Dividends received	已收股息		**44,176**	15,200
Interest received	已收利息		**72,719**	74,052
Net cash used in investing activities	**投資活動使用的淨現金**		**(3,505,105)**	(3,529,597)

The notes on page 155 to 296 form part of these financial statements.　155至296頁的附註為此等財務報表的一部分。

CONSOLIDATED CASH FLOW STATEMENT (CONTINUED)
合併現金流量表（續）

For the year ended 31 December 2012 截至2012年12月31日止年度
(Expressed in Renminbi)（以人民幣列示）

		Note 附註	2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Cash flows from financing activities	**來自融資活動產生的現金流**			
Capital contributions from non-controlling equity owners of subsidiaries	附屬公司非控股權益所有者的資本認繳		**202,205**	213,995
Proceeds from issuing shares, net of listing expenses	發行股份所得款項減上市支出淨額		**191,975**	1,827,040
Proceeds from borrowings	借款所得款項		**16,935,864**	11,577,475
Proceeds from issuing corporate bonds	發行公司債券所得款項		**3,971,623**	—
Proceeds from advances from related parties	關聯方墊款		**300,000**	911,472
Proceeds from advances from third parties	第三方墊款		**94,857**	190,000
Decrease in restricted deposits	受限制存款的減少		**815,727**	253,219
Repayment of advances to related parties	償還關聯方墊款		**(259)**	(2,775,296)
Repayment of advances to third parties	償還第三方墊款		**(143,698)**	(46,302)
Repayment of borrowings	償還借款		**(17,831,469)**	(3,761,752)
Dividends paid by subsidiaries to non-controlling equity owners	附屬公司向非控股權益所有者支付股息		**(72,359)**	(133,914)
Interest paid	已付利息		**(910,195)**	(626,535)
Increase in restricted deposits	受限制存款的增加		**(696,224)**	(602,528)
Payments for acquisitions of non-controlling interests	收購非控股權益支出		**(15,057)**	—
Net cash generated from financing activities	**融資活動產生的淨現金**		**2,842,990**	7,026,874
Net (decrease)/increase in cash and cash equivalents	**現金及現金等價物的淨（減少）╱增加額**		**(2,221,602)**	3,843,666
Cash and cash equivalents at 1 January	**1月1日的現金及現金等價物**		**5,626,647**	1,790,924
Effect of foreign exchange rate changes	外匯匯率變化的影響		**242**	(7,943)
Cash and cash equivalents at 31 December	**12月31日的現金及現金等價物**	28	**3,405,287**	5,626,647

The notes on page 155 to 296 form part of these financial statements. 155至296頁的附註為此等財務報表的一部分。

NOTES TO THE FINANCIAL STATEMENTS
財務報表附註

(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 to 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").

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 Significant accounting policies

(a) Statement of compliance

These financial statements have been prepared in accordance with all applicable International Financial Reporting Standards ("IFRSs"), which collective term includes all applicable individual International Financial Reporting Standards, International Accounting Standards ("IASs") and Interpretations issued by the International Accounting Standards Board ("IASB") and the disclosure requirements of the Hong Kong Companies Ordinance. These financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on HKSE. A summary of the significant accounting policies adopted by the Group is set out below.

The IASB has issued certain new and revised IFRSs that are first effective or available for early adoption for the current accounting period of the Group and the Company. Note 2(c) provides information on any changes in accounting policies resulting from initial application of these developments to the extent that they are relevant to the Group for the current and prior accounting periods reflected in these financial statements.

2 主要會計政策

(a) 合規聲明

此等財務報表依據國際會計準則委員會頒佈的所有適用的《國際財務報告準則》（該統稱包括所有適用的單項《國際財務報告準則》、《國際會計準則》和詮釋）及香港《公司條例》的披露要求而編製。此等財務報表也符合《香港聯合交易所有限公司證券上市規則》中適用的披露規定。本集團所採納的重大會計政策概要如下。

國際會計準則委員會已頒佈若干新訂及經修訂的《國際財務報告準則》，並於本集團及本公司的當前會計期間首次生效或可提早採納。因首次採納此等已反映在財務報表中與本集團當期或過往會計期間相關的新準則而導致的會計政策變動的信息載於附註2(c)。

2 Significant accounting policies (continued)

(b) Basis of preparation of the financial statements

The consolidated financial statements for the year ended 31 December 2012 comprise the Company and its subsidiaries (together referred to as the "Group") and the Group's interest in associates.

The measurement basis used in the preparation of the financial statements is the historical cost basis except that financial instruments classified as available-for-sale (see note 2(i)) are stated at their fair value.

The preparation of financial statements in conformity with IFRSs requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Judgements made by management in the application of IFRSs that have significant effect on these financial statements and major sources of estimation uncertainty are discussed in note 3.

2 主要會計政策(續)

(b) 財務報表編製基礎

截至2012年12月31日止年度的合併財務報表包括本公司及其附屬公司(統稱為「本集團」)及本集團對聯營公司的權益。

除歸類為可供出售的金融工具是以其公允價值列賬外(見附註2(i)),財務報表編製中使用的計量基礎是歷史成本基礎。

編製符合《國際財務報告準則》規定的財務報表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和資產、負債、收入以及支出的報告金額。估計和相關假設系基於過往經驗和在該情況下被認為是合理的各種其他因素,並因此形成判斷目前無法從其他來源而得出的資產和負債賬面價值的依據。實際結果可能有別於這些估計。

各項估計和相關假設會被持續審閱。如果會計估計的修訂僅影響作出有關修訂的期間,則有關修訂在當期確認;但如果會計估計的修訂對當期和以後的期間均有影響,則會在作出有關修訂的期間和以後的期間內確認。

管理層在應用《國際財務報告準則》時所作出且對財務報表有重大影響之判斷,以及估算產生不確定性之主要來源,詳述於附註3。

2 Significant accounting policies (continued)

(c) Changes in accounting policies

The IASB has issued several amendments to IFRSs that are first effective for the current accounting period of the Group and the Company. Of these, the amendments to IFRS 7, Financial instruments: Disclosures - Transfers of financial assets, is relevant to the Group's financial statements.

The amendments to IFRS 7 require certain disclosures to be included in the financial statements in respect of transferred financial assets that are not derecognised in their entirety and for any continuing involvement in transferred financial assets that are derecognised in their entirety, irrespective of when the related transfer transaction occurred. However, an entity need not provide the disclosures for the comparative period in the first year of adoption. As a result of these amendments, the relevant information is disclosed in these financial statements.

The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period (see note 46).

2 主要會計政策（續）

(c) 會計政策變動

國際會計準則委員會已頒佈若干《國際財務報告準則》修訂，並於本集團及本公司的本會計期間首次生效。其中《國際財務報告準則》第7號之修訂——「金融工具：披露－金融資產的轉讓」與本集團財務報表相關。

《國際財務報告準則》第7號之修訂要求財務報表載有若干披露，其有關已轉讓而並無完全終止確認的金融資產，以及已完全終止確認的已轉讓金融資產的任何持續參與，並無論有關轉讓交易在何時發生。然而，企業於首個採納的年度無需提供比較期間的披露信息。由於該等修訂，相關的信息已在此等財務報表中披露。

本集團並無採用本會計期間尚未生效的任何新訂準則或詮釋（見附註46）。

2 Significant accounting policies (continued)

(d) Functional and presentation currency

These financial statements are presented in Renminbi ("RMB"), rounded to the nearest thousand, which is the functional currency of the Company and its subsidiaries established in the PRC ("PRC Subsidiaries") carrying on the principal activities of the Group. The functional currencies of the Company's subsidiaries in Hong Kong and United States are Hong Kong dollars ("HKD") and United States dollars ("USD") respectively.

(e) Going concern

These financial statements have been prepared assuming the Group will continue as a going concern notwithstanding the net current liabilities of the Group at 31 December 2012. The Group has unutilised banking facilities of RMB17,062,452,000 as at 31 December 2012 to fulfil its future capital commitments and other financial requirements. The directors are of the opinion that the Group will have necessary liquid funds to finance its working capital and capital expenditure requirements.

(f) Subsidiaries and non-controlling interests

Subsidiaries are entities controlled by the Group. Control exists when the Group has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, potential voting rights that presently are exercisable are taken into account.

An investment in a subsidiary is consolidated into the consolidated financial statements from the date that control commences until the date that control ceases. Intra-group balances and transactions and any unrealised profits arising from intra-group transactions are eliminated in full in preparing the consolidated financial statements. Unrealised losses resulting from intra-group transactions are eliminated in the same way as unrealised gains but only to the extent that there is no evidence of impairment.

2 主要會計政策(續)

(d) 功能貨幣

此等財務報表均以本公司及在中國設立的附屬公司(「中國附屬公司」)開展本集團經營活動所採用的功能貨幣人民幣列示,約至最接近的千位。本公司在香港和美國的各附屬公司的功能貨幣分別為港元和美元。

(e) 持續經營

儘管本集團於2012年12月31日存在淨流動負債,此等財務報表是以假設本集團持續經營的基準編製。本集團未動用銀行授信為人民幣17,062,452,000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,本集團將擁有足量的流動資金滿足其營運資金及資本開支需求。

(f) 附屬公司及非控股權益

附屬公司是由本集團控制的實體。當本集團有權力支配某實體的財務和經營政策,並進而從其活動中獲取利益時,則表明存在控制情形。在進行控制評估時,應考慮目前可行使的潛在表決權。

自控制開始之日起至控制終止之日,將對附屬公司的投資併入合併財務報表中。在編製合併財務報表時,全數抵銷集團內部交易產生的集團內部結餘、交易以及任何未實現利潤。集團內部交易產生的未實現損失以未實現利潤相同的方式作抵銷,但僅限於沒有減值證據的部分。

2 Significant accounting policies (continued)

(f) Subsidiaries and non-controlling interests (continued)

Non-controlling interests represent the equity in a subsidiary not attributable directly or indirectly to the Company, and in respect of which the Group has not agreed any additional terms with the holders of those interests which would result in the Group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability. For each business combination, the Group can elect to measure any non-controlling interests either at fair value or at their proportionate share of the subsidiary's net identifiable assets.

Non-controlling interests are presented in the consolidated balance sheet within equity, separately from equity attributable to the equity shareholders of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated income statement and the consolidated statement of comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the equity shareholders of the Company. Loans from holders of non-controlling interests and other contractual obligations towards these holders are presented as financial liabilities in the consolidated balance sheet in accordance with notes 2(r) or (s) depending on the nature of the liability.

Changes in the Group's interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling and non-controlling interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognised.

2 主要會計政策(續)

(f) 附屬公司及非控股權益(續)

非控股權益是指非本公司直接或間接應佔的附屬公司權益，且本集團並無與相關權益持有人另行訂立條款而導致本集團整體須根據其所佔權益承擔符合金融負債定義的合同責任。對於各業務合併而言，本集團可以選擇按公允價值或按本集團佔附屬公司的可識別淨資產的比例而計量任何非控股權益。

非控股權益在合併資產負債表的權益中列示，惟與本公司權益股東應佔權益分開。非控股權益持有人所佔本集團的業績，會按照該年度的損益總額及綜合收益總額在非控股權益持有人與本公司權益股東之間進行分配，並在合併收益表和合併綜合收益表呈列。來自非控股權益持有人的借貸及對該等持有人的其他合同責任，會視乎負債的性質，並按照附註2(r)或(s)於合併資產負債表中呈列為金融負債。

本集團於附屬公司的權益如發生變動但不會造成喪失控制權，則該變動乃按權益交易的方式入賬，即僅調整在合併權益內的控股及非控股權益金額，以反映其相關權益的變動，但不會調整商譽及不會確認盈虧。

2 Significant accounting policies (continued)

(f) Subsidiaries and non-controlling interests (continued)

When the Group loses control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset or, when appropriate, the cost on initial recognition of an investment in an associate or jointly controlled entity.

In the Company's balance sheet, an investment in a subsidiary is stated at cost less impairment losses (see note 2(n)).

(g) Associates

An associate is an entity in which the Group or Company has significant influence, but not control or joint control, over its management, including participation in the financial and operating policy decisions.

An investment in an associate is accounted for in the consolidated financial statements under the equity method. Under the equity method, the investment is initially recorded at cost, adjusted for any excess of the Group's share of the acquisition-date fair values of the investee's identifiable net assets over the cost of the investment (if any). Thereafter, the investment is adjusted for the post-acquisition change in the Group's share of the investee's net assets and any impairment loss relating to the investment (see notes 2(h) and (n)). Any acquisition-date excess over cost, the Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognised in the consolidated income statement, whereas the Group's share of the post-acquisition post-tax items of the investees' other comprehensive income is recognised in the consolidated statement of comprehensive income.

2 主要會計政策（續）

(f) 附屬公司及非控股權益（續）

當本集團喪失一家附屬公司的控股權，則按出售該附屬公司的所有權益入賬，而所產生的盈虧將確認為損益。於喪失控股權當日仍保留於前附屬公司的任何權益乃按公允價值確認，而該金額將被視為一項金融資產初始確認的公允價值或（如適用）一項對聯營公司或共同控制實體之投資的初始確認的成本。

在本公司的資產負債表中，對附屬公司的投資是按成本減去減值虧損（見附註2(n)）後入賬。

(g) 聯營公司

聯營公司是指本集團或本公司可以對其管理層發揮重大影響的實體，包括參與其財務及經營決策，但不是控制或聯合控制管理層。

對聯營公司的投資是按權益法計入合併財務報表。根據權益法，投資初始按成本計值，並調整本集團於收購日期佔被投資公司可識別淨資產公允價值超出投資成本的任何差額（如有）。其後，投資就本集團佔被投資公司淨資產及任何有關投資的減值虧損的收購後變動作出調整（見附註2(h)和(n)）。任何收購日超出成本的金額、本集團應佔本年度收購後被投資公司稅後業績及減值虧損均於合併收益表中確認，而本集團佔被投資公司於收購日後的其他稅後綜合收益的項目則確認於合併綜合收益表。

2 Significant accounting policies (continued)

(g) Associates (continued)

When the Group's share of losses exceeds its interest in the associate, the Group's interest is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the investee. For this purpose, the Group's interest is the carrying amount of the investment under the equity method together with the Group's long-term interests that in substance form part of the Group's net investment in the associate.

Unrealised profits and losses resulting from transactions between the Group and its associates are eliminated to the extent of the Group's interest in the investee, except where unrealised losses provide evidence of an impairment of the asset transferred, in which case they are recognised immediately in profit or loss.

When the Group ceases to have significant influence over an associate, it is accounted for as a disposal of the entire interest in that investee, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former investee at the date when significant influence is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (see note 2(i)).

In the Company's balance sheet, investments in associates are stated at cost less impairment losses (see note 2(n)).

(h) Goodwill

Goodwill represents the excess of

(i) the aggregate of the fair value of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of the Group's previously held equity interest in the acquiree; over

(ii) the net fair value of the acquiree's identifiable assets and liabilities measured as at the acquisition date.

2 主要會計政策(續)

(g) 聯營公司(續)

當本集團的虧損份額超過其在該聯營公司的權益,本集團的權益會減少至零,並且不再確認額外虧損,本集團已產生法定或推定責任或代表被投資公司付款除外。就此而言,本集團權益是以按照權益法計算投資的賬面值,以及事實上構成本集團在聯營公司投資淨額一部分的長期權益為準。

本集團與其聯營公司間交易產生的未實現損益,均按本集團於被投資公司所佔的權益比率抵銷,但假如未實現虧損提供所轉讓資產出現減值的證據,則該等未實現虧損會立即在損益內確認。

當本集團不再對聯營公司的產生重大影響時,即出售被投資公司的全部權益,由此產生的收益或虧損在損益中確認。在喪失重大影響力當日所保留的有關前被投資公司的權益按公允價值確認,該金額為金融資產初始確認的公允價值(見附註2(i))。

本公司資產負債表所示對聯營公司投資,是按成本法減去減值虧損中(見附註2(n))後入賬。

(h) 商譽

商譽指:

(i) 已轉讓代價的公允價值、於被收購公司的任何非控制股東權益的數額,以及本集團之前於被收購公司持有的股權的總額;超過

(ii) 於收購日期計量的被收購公司的可識別資產及負債的公允價值。

2 Significant accounting policies (continued)

(h) Goodwill (continued)

When (ii) is greater than (i), then this excess is recognised immediately in profit or loss as a gain on a bargain purchase.

Goodwill is stated at cost less accumulated impairment losses. Goodwill arising on a business combination is allocated to each cash-generating unit, or groups of cash generating units, that is expected to benefit from the synergies of the combination and is tested annually for impairment (see note 2(n)).

On disposal of a cash generating unit during the year, any attributable amount of purchased goodwill is included in the calculation of the profit or loss on disposal.

(i) Other investments in equity securities

The Group's and the Company's policies for investments in equity securities, other than investments in subsidiaries and associates, are as follows:

Investments in equity securities are initially stated at fair value, which is their transaction price unless fair value can be more reliably estimated using valuation techniques whose variables include only data from observable markets. Cost includes attributable transaction costs, except where indicated otherwise below. These investments are subsequently accounted for as follows, depending on their classification:

Investments in equity securities held for trading are classified as current assets. Any attributable transaction costs are recognised in profit or loss as incurred. At each balance sheet date the fair value is remeasured, with any resultant gain or loss being recognised in profit or loss. The net gain or loss recognised in profit or loss does not include any dividends earned on these investments as these are recognised in accordance with the policies set out in note 2(x)(vi).

Investments in equity securities that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are recognised in the balance sheet at cost less impairment losses (see note 2(n)).

2 主要會計政策(續)

(h) 商譽(續)

當(ii)較(i)為大時,該超越值即時在損益內確認為議價收購收益。

商譽按成本減累計減值虧損列賬。業務合併產生之商譽分配至預計將會受惠於合併之協同作用之各現金產生單元或現金產生單元或現金產生單元組別,並於每年進行減值測試(見附註2(n))。

在當年內出售現金產生單元,任何可歸屬的購入商譽的金額均應包含在計算出售的損益內。

(i) 其他權益證券投資

本集團及本公司對附屬公司和聯營公司以外的其他權益證券投資的會計政策如下:

權益證券投資初始按公允價值列賬,通常為交易價格,除非使用評估技術測出的公允價值更為可靠(該評估技術所涉及的變量僅包括從可觀察的市場上獲取的數據)。除非下文另有說明,成本包括相關的交易費用。這些投資將在資產負債表中按分類列示:

交易性權益證券投資列入流動資產。任何相關交易費用發生時均列入損益內確認。公允價值於每個資產負債表日重新計量,由此產生的任何收益或虧損列入損益內。於損益表內確認的收益或虧損不包括此等投資所賺取的任何股息,此等收益需根據載於附註2(x)(vi)的規定確認。

無活躍市場報價且其公允價值不能可靠計量的權益證券投資以成本減去減值虧損(見附註2(n))於資產負債表中確認。

2 Significant accounting policies (continued)

(i) Other investments in equity securities (continued)

Investments in equity securities which do not fall into any of the above categories are classified as available-for-sale equity securities. At each balance sheet date the fair value is remeasured, with any resultant gain or loss being recognised in other comprehensive income and accumulated separately in equity in the fair value reserve. Dividend income from these investments is recognised in profit or loss in accordance with the policy set out in note 2(x)(vi). When these investments are derecognised or impaired (see note 2(n)), the cumulative gain or loss is reclassified from equity to profit or loss.

Investments are recognised/derecognised on the date the Group commits to purchase/sell the investments.

(j) Investment property

Investment properties are land and buildings which are owned or held under a leasehold interest (see note 2(m)) to earn rental income and/or for capital appreciation.

Investment properties are stated at cost less accumulated depreciation and impairment losses (see note 2(n)). The depreciation policy is the same as that of property, plant and equipment (see note 2(k)). Rental income from investment properties is accounted for as described in note 2(x)(v).

(k) Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and impairment losses (see note 2(n)).

The cost of self-constructed items of property, plant and equipment includes the cost of materials, direct labour, the initial estimate, where relevant, of the costs of dismantling and removing the items and restoring the site on which they are located, and an appropriate proportion of production overheads and borrowing costs (see note 2(z)).

Gains or losses arising from the retirement or disposal of an item of property, plant and equipment are determined as the difference between the net disposal proceeds and the carrying amount of the item and are recognised in profit or loss on the date of retirement or disposal.

2 主要會計政策(續)

(i) 其他權益證券投資(續)

未列入上述任何類別之權益證券投資應歸類為可供出售權益證券。公允價值於每個資產負債表日重新計量,由此產生的任何收益或虧損於其他綜合收益中確認,並單獨累計於權益中的公允價值儲備。此等投資的股息收入根據載於附註2(x)(vi)的規定在損益中確認。當此等投資被終止確認或減值(見附註2(n))時,累計收益或虧損從權益重分類至損益。

在本集團承諾購入/出售投資當日,有關投資會被確認/終止確認。

(j) 投資性物業

投資性物業是以賺取租金收入及/或為資本增值而持有或租用(見附註2(m))的土地及樓宇。

投資性物業按成本減累計折舊及減值虧損(見附註2(n))列賬。折舊政策與物業、廠房及設備(見附註2(k))的折舊政策相同。投資性物業租賃收入按照附註2(x)(v)中所述方法列賬。

(k) 物業、廠房及設備

物業、廠房及設備按成本減累計折舊及減值虧損(見附註2(n))列賬。

自建物業、廠房及設備項目成本包括材料成本、直接勞工成本、拆卸及搬遷有關項目的成本與修復項目所在場地的還原修復費用初步估計成本(如有關)以及適當比例的間接生產開支與借貸成本(見附註2(z))。

報廢或出售物業、廠房及設備項目產生的收益或虧損為出售所得款項淨額與項目賬面值的差額,於報廢或出售日期在損益中確認。

(Expressed in Renminbi unless otherwise indicated)

2 Significant accounting policies (continued)

(k) Property, plant and equipment (continued)

Depreciation is calculated to write off the cost of items of property, plant and equipment, less their estimated residual value, if any, using the straight line method over their estimated useful lives as follows:

— Land, buildings and structures	20-70 years
— Machinery and equipment	3-20 years
— Motor vehicles	4-10 years
— Furniture, fixtures and others	3-10 years

Where parts of an item of property, plant and equipment have different useful lives, the cost of the item is allocated on a reasonable basis between the parts and each part is depreciated separately. Both the useful life of an asset and its residual value, if any, are reviewed annually.

(l) Intangible assets (other than goodwill)

The Group recognises an intangible asset arising from a service concession arrangement when it has a right to charge for usage of the concession infrastructure. An intangible asset received as consideration for providing construction services in a service concession arrangement are measured at fair value upon initial recognition by reference to the fair value of the services provided. Subsequent to initial recognition the intangible asset is measured at cost less accumulated amortisation and impairment losses (see note 2(n)). If the Group is paid for the construction services partly by an intangible asset and partly by a financial asset (see note 2(q)), then each component of the consideration is accounted for separately and is recognised initially at fair value of the consideration.

Expenditure on research activities is recognised as an expense in the period in which it is incurred. Expenditure on development activities is capitalised if the product or process is technically and commercially feasible and the Group has sufficient resources and the intention to complete development. The expenditure capitalised includes the costs of materials, direct labour, and an appropriate proportion of overheads and borrowing costs, where applicable (see note 2(z)). Capitalised development costs are stated at cost less accumulated amortisation and impairment losses (see note 2(n)). Other development expenditure is recognised as an expense in the period in which it is incurred.

2 主要會計政策(續)

(k) 物業、廠房及設備(續)

折舊是在下列估計可使用期限內按直線法沖銷物業、廠房及設備項目的成本,扣除估計殘值(如有)計算:

— 土地、樓宇及建築物	20-70年
— 機器及設備	3-20年
— 汽車	4-10年
— 傢具、裝置及其他	3-10年

如果物業、廠房及設備項目各部分的可使用期限不同,則該項目的成本會合理分配至各部分,而每部分須分開折舊。本集團會每年審閱資產的可使用期限及其殘值(如有)。

(l) 無形資產(商譽除外)

如果本集團有權就使用特許權基建設施收費,本集團會確認服務特許權安排產生的無形資產。作為提供服務特許權安排的代建設服務的代價所收取的無形資產,於初始確認時按公允價值計量。在初始確認後,無形資產按成本減去累計攤銷和減值虧損(見附註2(n))計量。如果就建造服務支付予本集團的對價部分為無形資產而部分為金融資產(見附註2(q)),對價的各部份則應分別入帳並初始按對價的公允價值計量。

研究活動開支於其產生期間確認為開支。如果產品或程序於技術上可行及可投入商業運作,且本集團具備充裕資源及有意完成開發,則開發活動開支進行資本化。資本化的開支包括材料成本、直接勞工成本,以及在適當比例的間接成本及借貸成本(如適用)(見附註2(z))。資本化之開發成本按照成本減累計攤銷及減值虧損(見附註2(n))列賬。其他開發支出於其產生期間確認為費用。

(Expressed in Renminbi unless otherwise indicated)

2 Significant accounting policies (continued)

(l) Intangible assets (other than goodwill) (continued)

Other intangible assets that are acquired by the Group are stated at cost less accumulated amortisation (where the estimated useful life is finite) and impairment losses (see note 2(n)). Expenditure on internally generated goodwill and brands is recognised as an expense in the period in which it is incurred.

Amortisation of intangible assets with finite useful lives is charged to profit or loss on a straight-line basis over the assets' estimated useful lives. The following intangible assets with finite useful lives are amortised from the date they are available for use and their estimated useful lives are as follows:

— Concession assets	20-34 years
— Technical know-how	5-18 years
— Capitalised development costs	5-10 years
— Software and others	3-10 years

The estimated useful life of a concession asset in a service concession arrangement is the period from when the Group is able to charge for the use of the infrastructure to the end of the concession period.

Both the period and method of amortisation are reviewed annually.

(m) Leased assets

An arrangement, comprising a transaction or a series of transactions, is or contains a lease if the Group determines that the arrangement conveys a right to use a specific asset or assets for an agreed period of time in return for a payment or a series of payments. Such a determination is made based on an evaluation of the substance of the arrangement and is regardless of whether the arrangement takes the legal form of a lease.

2 主要會計政策(續)

(l) 無形資產(商譽除外)(續)

本集團收購的其他無形資產以成本減累計攤銷(如果既定的估計可使用期限)和減值虧損(見附註2(n))列賬。內部產生的商譽和品牌開支在其產生當期以費用形式確認。

有既定可使用期限的無形資產的攤銷是以直線法於資產的估計可使用期限內計入損益。以下有既定可使用期限的無形資產由可供使用當日起,在估計可使用期限內攤銷:

— 特許權資產	20-34年
— 專業技術	5-18年
— 資本化開發成本	5-10年
— 軟件及其他	3-10年

服務特許經營安排中的特許權資產的預計可使用年限於本集團可收取基礎設施使用費開始至特許經營期結束時終止之期間。

攤銷期限及方法均每年進行審閱。

(m) 租賃資產

如果本集團確定一項安排(由一宗交易或一系列交易組成)會於協議期間內賦予一項特定資產或多項資產的使用權,以換取一項或多項付款,則該安排為或包括一項租賃。該確定乃根據對該安排的實質情況所作評估,而無論該安排是否採取租賃的法律形式。

2 Significant accounting policies (continued)

(m) Leased assets (continued)

(i) Classification of assets leased to the Group

Assets that are held by Group under leases which transfer to the Group substantially all the risks and rewards of ownership are classified as being held under finance leases. Leases which do not transfer substantially all the risks and rewards of ownership to the Group are classified as operating leases except for land held for own use under an operating lease, the fair value of which cannot be measured separately from the fair value of a building situated thereon at the inception of the lease, is accounted for as being held under a finance lease, unless the building is also clearly held under an operating lease. For these purposes, the inception of the lease is the time that the lease was first entered into by the Group, or taken over from the previous lessee.

(ii) Assets acquired under finance leases

Where the Group acquires the use of assets under finance leases, the amounts representing the fair value of the leased asset, or, if lower, the present value of the minimum lease payments, of such assets are included in property, plant and equipment and the corresponding liabilities, net of finance charges, are recorded as obligations under finance leases. Depreciation is provided at rates which write off the cost of the assets over the term of the relevant lease or, where it is likely the Group will obtain ownership of the asset, the life of the asset, as set out in note 2(k). Impairment losses are accounted for in accordance with the accounting policy as set out in note 2(n). Finance charges implicit in the lease payments are charged to profit or loss over the period of the leases so as to produce an approximately constant periodic rate of charge on the remaining balance of the obligations for each accounting period. Contingent rentals are charged to profit or loss in the accounting period in which they are incurred.

2 主要會計政策(續)

(m) 租賃資產(續)

(i) 本集團租用的資產分類

對於本集團以租賃持有的資產,如果租賃使所有權的絕大部分風險及回報轉讓予本集團,該項資產被分類為以融資租賃持有。如租賃不會將所有權的絕大部分風險及回報轉讓予本集團,則該項資產被分類為經營租賃,惟以經營租賃持做自用,但無法在租賃開始時將其公允價值與建於其上的的樓宇的公允價值分開計量的土地是按以融資租賃持有方式入賬,但清楚的以經營租賃持有的樓宇除外。就此而言,租賃的開始時間是指本集團首次訂立租賃時,或自前承租人接收時。

(ii) 根據融資租賃獲得的資產

如果本集團根據融資租賃獲得資產的使用權,便會將相當於租賃資產公允價值及最低租賃預付款的現值(兩者中的較低者)計入固定資產,而扣除融資費用後的相應負債則列為融資租賃承擔。折舊是在相關的租賃期或資產的可用期限(如本集團很可能取得資產的所有權)內,以沖銷其成本的比率計提;有關的資產可用期限列載於附註2(k)。減值損虧損按照附註2(n)所載的會計政策入賬。租賃付款內含的融資費用會計入租賃期內的損益中,使各會計期間的融資費用佔承擔餘額的比率大致相同。或有租金於其產生的會計期間在損益中列支。

2 Significant accounting policies (continued)

(m) Leased assets (continued)

(iii) Operating lease charges

Where the Group has the use of assets held under operating leases, payments made under the leases are charged to profit or loss in equal instalments over the accounting periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the leased asset. Lease incentives received are recognised in profit or loss as an integral part of the aggregate net lease payments made. Contingent rentals are charged to profit or loss in the accounting period in which they are incurred.

The cost of acquiring land held under an operating lease is amortised on a straight-line basis over the period of the lease term.

(n) Impairment of assets

(i) Impairment of investments in equity securities and other receivables

Investments in equity securities and other current and non-current receivables that are stated at cost or amortised cost or are classified as available-for-sale securities are reviewed at each balance sheet date to determine whether there is objective evidence of impairment. Objective evidence of impairment includes observable data that comes to the attention of the Group about one or more of the following loss events:

— significant financial difficulty of the debtor;

— a breach of contract, such as a default or delinquency in interest or principal payments;

— it becoming probable that the debtor will enter bankruptcy or other financial reorganisation;

— significant changes in the technological, market, economic or legal environment that have an adverse effect on the debtor; and

— a significant or prolonged decline in the fair value of an investment in an equity instrument below its cost.

2 主要會計政策(續)

(m) 租賃資產(續)

(iii) 經營租賃之費用

如果本集團通過經營租賃持有資產的使用權,會以租賃作出的付款於租期的會計期間內,按等額的攤付金額計入損益,但是,其他基準可以更清楚地反映租賃資產所產生的收益模式的基準則除外。所獲租賃獎勵應於損益中確認為租賃淨付款總額的一部分。或有租金將於其產生的會計期間自損益中列支。

根據經營租賃所持土地的收購成本於租賃期內按直線法攤銷。

(n) 資產減值

(i) 權益證券投資及其他應收款項之減值

按成本或攤餘成本入賬之權益證券投資及其他流動及非流動應收款項於每個資產負債表日審閱,以確定是否有減值的客觀證據。減值之客觀證據包括本集團注意到以下一項或多項虧損事項之顯著數據:

— 債務人有重大財務困難;

— 違反合約,例如拖欠或逾期償還利息或本金款項;

— 債務人可能面臨破產或進行其他財務重組;

— 科技、市場、經濟或法律環境發生重大變動而對債務人產生不利影響;及

— 一項權益工具投資之公允價值大幅度或長期貶值至低於其成本。

2 Significant accounting policies (continued)

(n) Impairment of assets (continued)

(i) Impairment of investments in equity securities and other receivables (continued)

If any such evidence exists, any impairment loss is determined and recognised as follows:

— For investments in subsidiaries and associates, the impairment loss is measured by comparing the recoverable amount of the investment with its carrying amount in accordance with note 2(n)(ii). The impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount in accordance with note 2(n)(ii).

— For unquoted equity securities carried at cost, the impairment loss is measured as the difference between the carrying amount of the financial asset and the estimated future cash flows, discounted at the current market rate of return for a similar financial asset where the effect of discounting is material. Impairment losses for equity securities carried at cost are not reversed.

— For trade and other current receivables and other financial assets carried at amortised cost, the impairment loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate (i.e. the effective interest rate computed at initial recognition of these assets), where the effect of discounting is material. This assessment is made collectively where these financial assets share similar risk characteristics, such as similar past due status, and have not been individually assessed as impaired. Future cash flows for financial assets which are assessed for impairment collectively are based on historical loss experience for assets with credit risk characteristics similar to the collective group.

2 主要會計政策(續)

(n) 資產減值(續)

(i) 權益證券投資及其他應收款項之減值(續)

如有任何該等證據存在,便會確定減值虧損並按以下方式確認:

— 對於對附屬公司及聯營公司的投資,減值虧損是根據附註2(n)(ii)以投資可收回金額與其賬面金額之間之差額計量。倘若用以決定可收回金額之估計有利好之變動,則該減值虧損可按附註2(n)(ii)所述撥回。

— 就按成本列賬之非上市權益證券而言,減值虧損乃按金融資產之賬面值與類似金融資產當時市場回報率折現計算(倘若折現產生重大影響)的預計未來現金流量之間的差額計量。按成本列賬之權益證券減值虧損將不會撥回。

— 對於按攤餘成本列賬之應收賬款及其他流動應收款項及其他金融資產,減值虧損按該項資產賬面值與有關金融資產之原定的實際利率(即按最初確認該等資產計算出之實際利率)進行折現(倘折現影響屬重大)的預計未來現金流量的現值之間的差額計量。若金融資產擁有類似風險性質(如相近的過期未付情況)且沒有被個別評估為已減值,則按整體評估。金融資產的未來現金流量乃根據與被評估資產具有類似風險特徵資產的過往虧損經驗進行整體減值評估。

2 Significant accounting policies (continued)

(n) Impairment of assets (continued)

(i) Impairment of investments in equity securities and other receivables (continued)

If in a subsequent period the amount of an impairment loss decreases and the decrease can be linked objectively to an event occurring after the impairment loss was recognised, the impairment loss is reversed through profit or loss. A reversal of an impairment loss shall not result in the asset's carrying amount exceeding that which would have been determined had no impairment loss been recognised in prior years.

— For available-for-sale equity securities, the cumulative loss that has been recognised in the fair value reserve is reclassified to profit or loss. The amount of the cumulative loss that is recognised in profit or loss is the difference between the acquisition cost and current fair value, less any impairment loss on that asset previously recognised in profit or loss.

Impairment losses recognised in profit or loss in respect of available-for-sale equity securities are not reversed through profit or loss. Any subsequent increase in the fair value of such assets is recognised in other comprehensive income.

Impairment losses are written off against the corresponding assets directly, except for impairment losses recognised in respect of trade and bills receivables and other receivables, whose recovery is considered doubtful but not remote. In this case, the impairment losses for doubtful debts are recorded using an allowance account. When the Group is satisfied that recovery is remote, the amount considered irrecoverable is written off against the respective receivables directly and any amounts held in the allowance account relating to that debt are reversed. Subsequent recoveries of amounts previously charged to the allowance account are reversed against the allowance account. Other changes in the allowance account and subsequent recoveries of amounts previously written off directly are recognised in profit or loss.

2 主要會計政策（續）

(n) 資產減值（續）

(i) 權益證券投資及其他應收款項之減值（續）

倘若減值虧損數額在其後的期間減少，而且客觀上與減值虧損確認後發生之事件有關，則應通過損益撥回減值虧損。減值虧損之撥回不應使資產之賬面金額超過其在以往年度沒有確認任何減值虧損而已應確定之數額。

— 對於可供出售權益證券，已直接計入權益中的因公允價值下降形成的累計損失，應予以轉出，計入當期損益。已於損益內確認的累計虧損金額為收購成本與當前公允價值之差額，減去該資產於損益中確認之前的減值虧損。

於損益中確認的可供出售權益證券的減值虧損不得通過損益撥回。其後任何此等資產的公允價值增加於其他綜合收益中確認。

減值虧損直接沖銷相關資產，惟就應收賬款及票據及其他應收款項中確認的減值虧損除外，原因是該等應收款項可收回機會是被懷疑而非可能性極低。在此情況下，呆壞賬的減值虧損則於撥備賬計提。如本集團認為收回機會渺茫，被視為不會收回的金額直接沖銷各自應收款項，而在撥備賬的有關數額則須撥回。如已計提在撥備賬中的金額已被收回，其將從撥備賬中撥回。其他在撥備賬內的變動及以往已直接撇銷而其後收回的數額則在損益中確認。

2 Significant accounting policies (continued)

(n) Impairment of assets (continued)

(ii) Impairment of other assets

Internal and external sources of information are reviewed at each balance sheet date to identify indications that the following assets may be impaired or, except in the case of goodwill, an impairment loss previously recognised no longer exists or may have decreased:

— property, plant and equipment;

— investment properties;

— lease prepayments;

— intangible assets; and

— goodwill.

If any such indication exists, the asset's recoverable amount is estimated. In addition, for goodwill, the recoverable amount is estimated annually whether or not there is any indication of impairment.

— Calculation of recoverable amount

The recoverable amount of an asset is the greater of its fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Where an asset does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the smallest group of assets that generates cash inflows independently (i.e. a cash-generating unit).

2 主要會計政策(續)

(n) 資產減值(續)

(ii) 其他資產減值

在每個資產負債表日審閱內部和外來的資料,以確定下列資產有否出現減值跡象,或是以往確認的減值虧損不復存在或已經減少(商譽除外):

— 物業、廠房及設備;

— 投資性物業;

— 預付土地租賃款;

— 無形資產;及

— 商譽。

倘出現任何有關跡象,則會估計該資產的可收回金額。此外,就商譽而言,無論是否出現減值的跡象,須每年估計可收回金額。

— 計算可收回金額

資產的可收回金額是其公允價值減去出售成本後的數值與使用價值兩者中較高者。在評估使用價值時,預計未來現金流量會按照能反映當時市場對貨幣時間價值和資產特定風險的評估的稅前折現率,折現至其現值。如果資產所產生的現金流入基本上並非獨立於其他資產所產生的現金流入,則以能產生獨立現金流入的最小資產類別(即現金產生單元)來確定可收回金額。

2 Significant accounting policies (continued)

(n) Impairment of assets (continued)

(ii) Impairment of other assets (continued)

— Recognition of impairment losses

An impairment loss is recognised in profit or loss if the carrying amount of an asset, or the cash-generating unit to which it belongs, exceeds its recoverable amount. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit (or group of units) and then, to reduce the carrying amount of the other assets in the unit (or group of units) on a pro rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs to sell, or value in use, if determinable.

— Reversals of impairment losses

In respect of assets other than goodwill, an impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount. An impairment loss in respect of goodwill is not reversed.

A reversal of an impairment loss is limited to the asset's carrying amount that would have been determined had no impairment loss been recognised in prior years. Reversals of impairment losses are credited to profit or loss in the year in which the reversals are recognised.

2 主要會計政策(續)

(n) 資產減值(續)

(ii) 其他資產減值(續)

— 確認減值虧損

倘資產或其所屬現金產生單元的賬面值超過其可收回金額,則減值虧損於損益確認。在分配現金產生單元確認的減值虧損時,首先減少已分配至該現金生產單元(或該組單元)的商譽之賬面金額,然後按比例減少該單元(或該組單元)內資產的賬面金額;但資產的賬面值不得減少至低於其個別公允價值減去出售成本後所得的金額或其使用價值(如能確定)。

— 減值虧損撥回

就商譽以外之資產而言,倘用以確定可收回金額的估計出現有利轉變,則減值虧損會被撥回。商譽減值虧損概不撥回。

減值虧損的撥回僅限於資產在以往年度內並無確認任何減值虧損的情況下的原應確定的賬面值。減值虧損的撥回在確認撥回的年度內計入損益。

2 Significant accounting policies (continued)

(n) Impairment of assets (continued)

(iii) Interim financial reporting and impairment

Under the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited, the Group is required to prepare an interim financial report in compliance with IAS 34, Interim financial reporting, in respect of the first six months of the financial year. At the end of the interim period, the Group applies the same impairment testing, recognition, and reversal criteria as it would at the end of the financial year (see notes 2(n)(i) and (ii)).

Impairment losses recognised in an interim period in respect of goodwill, available-for-sale equity securities and unquoted equity securities carried at cost are not reversed in a subsequent period. This is the case even if no loss, or a smaller loss, would have been recognised had the impairment been assessed only at the end of the financial year to which the interim period relates. Consequently, if the fair value of an available-for-sale equity security increases in the remainder of the annual period, or in any other period subsequently, the increase is recognised in other comprehensive income and not profit or loss.

(o) Inventories

Inventories are carried at the lower of cost and net realisable value.

Cost is calculated using the weighted average cost formula and comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

2 主要會計政策(續)

(n) 資產減值(續)

(iii) 中期財務報告及減值

根據《香港聯合交易所有限公司證券上市規則》，本集團須根據《國際會計準則》第34號——「中期財務報告」就財政年度首六個月編製中期財務報告。於中期期末，本集團應用的減值測試、確認及撥回標準與其於財政年度末所應用者相同(見註釋2(n)(i)及(ii))。

於中期期間就商譽、可供出售權益證券及按成本入賬的非上市權益證券確認的減值虧損並不會於往後期間撥回。即使在倘若減值評估僅於與中期期間相關財政年度結束時進行則將無需確認虧損或確認較少虧損的情況下亦然。因此，倘可供出售權益證券之公允價值於年度期間之剩餘期間或於其後之任何其他期間有所增加，有關增加則將於其他綜合收益而非損益中確認。

(o) 存貨

存貨乃以成本與可變現淨值之的較低者列賬。

成本採用加權平均成本公式計算，並包括所有採購成本、加工成本及將存貨運至目前地點及達成現狀產生之其他成本。

可變現淨值乃以日常業務過程中的估計售價減估計完工成本及估計進行銷售所需的成本後所得數額。

2 Significant accounting policies (continued)

(o) Inventories (continued)

When inventories are sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories is recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

(p) Construction contracts

Construction contracts are contracts specifically negotiated with a customer for the construction of an asset or a group of assets, where the customer is able to specify the major structural elements of the design. The accounting policy for contract revenue is set out in note 2(x)(ii). When the outcome of a construction contract can be estimated reliably, contract costs are recognised as an expense by reference to the stage of completion of the contract at the balance sheet date. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognised as an expense immediately. When the outcome of a construction contract cannot be estimated reliably, contract costs are recognised as an expense in the period in which they are incurred.

Construction contracts in progress at the balance sheet date are recorded at the net amount of costs incurred plus recognised profit less recognised losses and progress billings, and are presented in the balance sheet as the "Gross amounts due from customers for contract work" (as an asset) or the "Gross amounts due to customers for contract work" (as a liability), as applicable. Progress billings not yet paid by the customer are included under "Trade and bills receivables". Amounts received before the related work is performed are presented as "Receipts in advance" under "Other payables".

2 主要會計政策(續)

(o) 存貨(續)

存貨售出時,該等存貨之賬面金額於相關收入獲確認期間內確認為開支。任何由存貨撇減至可變現淨值之金額及所有存貨虧損,於撇減或虧損出現期間確認為開支。存貨撇減的任何撥回金額,於撥回期間作為存貨所確認的開支的扣減。

(p) 建造合同

建造合同乃就建造一項或一組資產而與客戶具體商議的合約,客戶可指定設計的主要構造元素。建造合同收入之會計政策載於附註2(x)(ii)。倘能可靠估計建造合同的結果,則合同成本於資產負債表日按合同完工進度確認為開支。如總合同成本很可能超出總合同收入,則預期虧損立即確認為開支。倘無法可靠估計建造合同的結果,則合同成本於產生期間確認為開支。

於資產負債表日的建造合同按所產生成本淨額加已確認利潤再減已確認虧損及進度款項於資產負債表入賬,並於資產負債表呈列為「應收建造合同客戶款項總額」(作為資產)或「應付建造合同客戶款項總額」(作為負債)(視情況而定)。客戶尚未支付的進度款項計入「應收賬款及票據」。於進行有關工程前收取的款項於「其他應付款項」下呈列為「預收款項」。

2 Significant accounting policies (continued)

(q) Trade and other receivables

Trade and other receivables are initially recognised at fair value and thereafter stated at amortised cost using the effective interest method, less allowance for impairment of doubtful debts (see note 2(n)), except where the receivables are interest-free loans made to related parties without any fixed repayment terms or the effect of discounting would be immaterial. In such cases, the receivables are stated at cost less allowance for impairment of doubtful debts.

The Group recognises a financial asset arising from a service concession arrangement when it has an unconditional contractual right to receive cash or another financial asset from or at the direction of the grantor for the construction services provided. Such financial assets are accounted for as trade and other receivables as described above.

(r) Interest-bearing borrowings

Interest-bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost with any difference between the amount initially recognised and redemption value being recognised in profit or loss over the period of the borrowings, together with any interest and fees payable, using the effective interest method.

(s) Trade and other payables

Trade and other payables are initially recognised at fair value. Except for financial guarantee liabilities measured in accordance with note 2(w)(i), trade and other payables are subsequently stated at amortised cost unless the effect of discounting would be immaterial, in which case they are stated at cost.

(t) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand, demand deposits with banks and other financial institutions, and short-term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value, having been within three months of maturity at acquisition.

2 主要會計政策(續)

(q) 應收賬款及其他應收款項

應收賬款及其他應收款項初始按公允價值確認,其後使用實際利率法按攤餘成本減呆壞賬減值準備(見附註2(n))列賬,惟倘應收款項乃向關聯方所提供並無固定還款期的免息貸款或貼現影響並不重大則除外。於該等情況,應收款項乃按成本減呆壞賬減值準備列賬。

本集團根據服務特許權協議因其所提供的建造服務可無條件按授權方的指示收取現金或其他金融資產的,本集團則確認一項服務特許權協議所產生的金融資產。這些金融資產按上述的應收賬款及其他應收款項入賬。

(r) 帶息借貸

帶息借貸乃初始按公允價值減相關交易成本確認。於初始確認後,帶息借貸乃按攤餘成本列賬,而初始確認之金額與贖回價值兩者間之任何差額(連同任何應付利息及費用)使用實際利息法按借貸之期間於損益內確認。

(s) 應付賬款及其他應付款

應付賬款及其他應付款項乃初始按公允價值確認。除根據附註2(w)(i)計量之財務擔保負債外,應付賬款及其他應付款項其後按攤餘成本列賬,惟貼現之影響輕微時則除外,於此情況乃按成本列賬。

(t) 現金及現金等價物

現金及現金等價物包括現金及銀行存款、存放在銀行及其他金融機構活期存款,以及隨時兑換為已知金額之現金,價值變動風險較小及在購入後三個月內到期的短期和高流動性的投資。

2 Significant accounting policies (continued)

(u) Employee benefits

(i) Short-term employee benefits and contributions to defined contribution retirement plans

Salaries, annual bonuses, contributions to defined contribution retirement plans and the cost of non-monetary benefits are accrued in the year in which the associated services are rendered by employees. Where payment or settlement is deferred and the effect would be material, these amounts are stated at their present values.

(ii) Termination benefits

Termination benefits are recognised when, and only when, the Group demonstrably commits itself to terminate employment or to provide benefits as a result of voluntary redundancy by having a detailed formal plan which is without realistic possibility of withdrawal.

(v) Income tax

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities. Current tax and movements in deferred tax assets and liabilities are recognised in profit or loss except to the extent that they relate to business combinations, or items recognised in other comprehensive income or directly in equity, in which case the relevant amounts of tax are recognised in other comprehensive income or directly in equity, respectively.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the balance sheet date, and any adjustment to tax payable in respect of previous years.

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purposes and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits.

2 主要會計政策(續)

(u) 僱員福利

(i) 短期僱員福利及界定供款退休計劃供款

薪金、年度花紅、界定供款退休計劃作出供款及非貨幣性福利之成本乃於僱員提供有關服務年度內計提。倘延遲付款或結算而且其影響重大,則該等金額按現值列賬。

(ii) 辭退福利

辭退福利只會在本集團根據正式、具體,且不大可能撤回的計劃終止僱員合約或因僱員自願遣散而終止合約而做出補償時確認。

(v) 所得稅

本年度之所得稅包括即期稅項,以及遞延稅項資產及負債之變動。即期稅項及遞延稅項資產及負債之變動於損益中確認,惟倘涉及業務合併,或於其他綜合收益或直接於權益確認之項目除外,在此情況下,相關稅項金額分別於其他綜合收益或直接於權益確認。

當期稅項是根據年內應稅所得額,按資產負債表日期已執行或實際已執行之稅率計算之預期應付稅項,以及過往年度的應付稅項的任何調整。

遞延所得稅資產與負債分別由可抵扣和應納稅暫時性差異產生。暫時性差異是指資產和負債在財務報表上的賬面金額與該等資產和負債的計稅基礎之間的差異。遞延稅項資產也可以由未使用稅項虧損和未使用稅項抵免產生。

2 Significant accounting policies (continued)

(v) Income tax (continued)

Apart from certain limited exceptions, all deferred tax liabilities, and all deferred tax assets to the extent that it is probable that future taxable profits will be available against which the asset can be utilised, are recognised. Future taxable profits that may support the recognition of deferred tax assets arising from deductible temporary differences include those that will arise from the reversal of existing taxable temporary differences, provided those differences relate to the same taxation authority and the same taxable entity, and are expected to reverse either in the same period as the expected reversal of the deductible temporary difference or in periods into which a tax loss arising from the deferred tax asset can be carried back or forward. The same criteria are adopted when determining whether existing taxable temporary differences support the recognition of deferred tax assets arising from unused tax losses and credits, that is, those differences are taken into account if they relate to the same taxation authority and the same taxable entity, and are expected to reverse in a period, or periods, in which the tax loss or credit can be utilised.

The limited exceptions to recognition of deferred tax assets and liabilities are those temporary differences arising from goodwill not deductible for tax purposes, the initial recognition of assets or liabilities that affect neither accounting nor taxable profit (provided they are not part of a business combination), and temporary differences relating to investments in subsidiaries to the extent that, in the case of taxable differences, the Group controls the timing of the reversal and it is probable that the differences will not reverse in the foreseeable future, or in the case of deductible differences, unless it is probable that they will reverse in the future.

The amount of deferred tax recognised is measured based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the balance sheet date. Deferred tax assets and liabilities are not discounted.

The carrying amount of a deferred tax asset is reviewed at the balance sheet date and is reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow the related tax benefit to be utilised. Any such reduction is reversed to the extent that it becomes probable that sufficient taxable profits will be available.

2 主要會計政策(續)

(v) 所得稅(續)

除若干有限之例外情況外,所有遞延稅項負債及所有遞延稅項資產(惟以有可能用以抵扣未來很可能取得之應課稅利潤的部分為限)均予以確認。可支持確認可抵扣暫時性差異所產生遞延稅項資產的未來應課稅利潤包括轉回現有應納稅暫時性差異所產生的金額。為該等差異必須與同一稅務機關及同一課稅實體有關,並預期在預計轉回可抵扣暫時性差異之同一期間或遞延稅項資產所產生稅務虧損可予撥回或結轉之期間內轉回。在決定現有應納稅暫時性差異是否足以支持確認由未使用稅項虧損及稅項抵免所產生遞延稅項資產時,亦會採用同一準則,即須計及與同一稅務機關及同一應課稅實體有關,並預期在能夠運用稅項虧損或稅項抵免之間內轉回之該等差異。

確認遞延稅項資產及負債之有限例外情況包括來自不可在稅務方面獲得扣減的商譽、不影響會計或應課稅利潤(如屬業務合併的一部分則除外)的資產或負債之初始確認,以及與對附屬公司投資有關之暫時性差異,如為應納稅差異,只限於本集團可以控制轉回時間而不大可能在可預見將來轉回之差額;或如屬可抵扣差異,則只限於可在將來轉回的差異。

已確認遞延稅額是按照資產與負債賬面金額的預期實現或結算方式,根據已執行或在資產負債表日實質上已執行的稅率計量。遞延稅項資產與負債均不折現計算。

遞延稅項資產之賬面值會於資產負債表日予以審閱,並減少不再可能有足夠之應課稅利潤以抵扣相關可使用的稅項利益之部分。如日後有可能有足夠之應課稅利潤,該減少金額將被撥回。

2 Significant accounting policies (continued)

(v) Income tax (continued)

Current tax balances and deferred tax balances, and movements therein, are presented separately from each other and are not offset. Current tax assets are offset against current tax liabilities, and deferred tax assets against deferred tax liabilities, if the Company or the Group has the legally enforceable right to set off current tax assets against current tax liabilities and the following additional conditions are met:

— in the case of current tax assets and liabilities, the Company or the Group intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously; or

— in the case of deferred tax assets and liabilities, if they relate to income taxes levied by the same taxation authority on either:

  — the same taxable entity; or

  — different taxable entities, which, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered, intend to realise the current tax assets and settle the current tax liabilities on a net basis or realise and settle simultaneously.

(w) Financial guarantees issued, provisions and contingent liabilities

(i) Financial guarantees issued

Financial guarantees are contracts that require the issuer (i.e. the guarantor) to make specified payments to reimburse the beneficiary of the guarantee (the "holder") for a loss the holder incurs because a specified debtor fails to make payment when due in accordance with the terms of a debt instrument.

2 主要會計政策（續）

(v) 所得稅（續）

即期稅項結餘及遞延稅項結餘以及當中之變動乃各自分開呈列及不予抵銷。倘本公司或本集團擁有以即期稅項資產抵銷即期稅項負債之法律上可執行之權利，以及符合以下之額外條件時，即期稅項資產才會與即期稅項負債抵銷，而遞延稅項資產則與遞延稅項負債抵銷：

— 就即期稅項資產及負債而言，本公司或本集團計劃以淨額方式結算，或同時變現資產及償還負債；或

— 就遞延稅項資產及負債而言，如該資產及負債涉及之所得稅乃由同一個稅務機關向以下各方徵收：

  — 同一應課稅實體；或

  — 不同應課稅實體。該等實體計劃在日後每個預期有大額遞延稅項負債需要清算或大額遞延稅項資產可以收回的期間內，按淨額為基礎實現當期稅項資產和清算當期稅項負債，或同時變現該資產和清算該負債。

(w) 已作出的財務擔保、撥備及或有負債

(i) 已作出的財務擔保

財務擔保合同規定發行人（即擔保人）支付指定款項，以補償該擔保的受益人（「持有人」）因某一特定債務人未能根據債務工具的條款償付到期債務而產生的損失。

2 Significant accounting policies (continued)

(w) Financial guarantees issued, provisions and contingent liabilities (continued)

(i) Financial guarantees issued (continued)

Where the Group issues a financial guarantee, the fair value of the guarantee (being the transaction price, unless the fair value can otherwise be reliably estimated) is initially recognised as deferred income within trade and other payables. Where consideration is received or receivable for the issuance of the guarantee, the consideration is recognised in accordance with the Group's policies applicable to that category of asset. Where no such consideration is received or receivable, an immediate expense is recognised in profit or loss on initial recognition of any deferred income.

The amount of the guarantee initially recognised as deferred income is amortised in profit or loss over the term of the guarantee as income from financial guarantees issued. In addition, provisions are recognised in accordance with note 2(w)(ii) if and when (i) it becomes probable that the holder of the guarantee will call upon the Group under the guarantee, and (ii) the amount of that claim on the Group is expected to exceed the amount currently carried in trade and other payables in respect of that guarantee i.e. the amount initially recognised, less accumulated amortisation.

(ii) Other provisions and contingent liabilities

Provisions are recognised for other liabilities of uncertain timing or amount when the Group or the Company has a legal or constructive obligation arising as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made. Where the time value of money is material, provisions are stated at the present value of the expenditure expected to settle the obligation.

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

2 主要會計政策(續)

(w) 已作出的財務擔保、撥備及或有負債(續)

(i) 已作出的財務擔保(續)

如當本集團作出財務擔保,該擔保的公允價值(即交易價格,除非該公允價值能以其他方式可靠的估計)初始確認為應付賬款和其他應付款項下的遞延收益。如果在作出擔保時已收取或可收取對價,該對價會根據本集團適用於該類資產的政策而予以確認。如果並無收取或不會收取有關對價,則於初始確認任何遞延收益時,立即於損益內確認為開支。

初始確認為遞延收益的擔保款額於擔保期內在損益內攤銷為已作出財務擔保收入。此外,如果(i)擔保持有人有可能根據擔保向本集團提出申請;及(ii)向本集團索償的金額預期超過現時於有關擔保的應付賬款和其他應付款金額(即初始確認金額減累計攤銷),則根據附註2(w)(ii)確認撥備。

(ii) 其他撥備與或有負債

如果本集團或本公司須就已發生事件承擔法律或推定責任,而履行該責任會導致經濟利益外流,並可作出可靠估計,便會就時間或數額仍不明朗之其他負債確認撥備。如果貨幣時間價值重大,則按預計履行責任所需開支之現值計提撥備。

倘若致使經濟利益外流之機會不大,或無法對有關款項作出可靠估計,便會將該責任披露為或有負債,惟經濟利益外流之機會極低則除外。如果本集團的義務僅視乎一宗或多宗未來事件是否發生才能確定存在,該義務亦會披露為或有負債,惟經濟利益外流之機會極低則除外。

2 Significant accounting policies (continued)

(x) Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable. Provided it is probable that the economic benefits will flow to the Group and the revenue and costs, if applicable, can be measured reliably, revenue is recognised in profit or loss as follows:

(i) Sale of goods

Revenue is recognised when goods are delivered at the customers' premises which is taken to be the point in time when the customer has accepted the goods and the related risks and rewards of ownership. Revenue excludes value added tax ("VAT") or other sales taxes and is after deduction of any trade discounts.

(ii) Contract revenue

When the outcome of a construction contract can be estimated reliably, revenue from a fixed price contract is recognised using the percentage of completion method, measured by reference to the percentage of contract costs incurred to date to estimated total contract costs for the contract.

When the outcome of a construction contract cannot be estimated reliably, revenue is recognised only to the extent of contract costs incurred that it is probable will be recoverable.

(iii) Service concession revenue

Revenue related to construction services under a service concession arrangement is recognised based on the stage of completion of the work performed consistent with the Group's accounting policy on recognising revenue on construction contracts (see note 2(x)(ii)). Operation or service revenue is recognised in the period in which the services are provided by the Group. Interest income on financial assets is recognised in accordance with note 2(x)(vii). When the Group provides more than one service in a service concession arrangement, the consideration received is allocated by reference to the relative fair value of the services delivered when the amounts are separately identifiable.

2 主要會計政策(續)

(x) 收入確認

收入按已收或應收代價之公允價值計量。倘經濟利益可能會流入本集團,以及能夠可靠地計算收入及成本(如適用)時,則收入根據下列方法在損益內確認。

(i) 銷售商品

商品銷售收入是在商品已付運至客戶經營場所即客戶已接收商品及所有權有關的風險和回報時確認。收入已扣減商業折扣,且不含增值稅及其他銷售稅金。

(ii) 建造合同收入

如果建造合同之結果可以可靠地估計,固定造價合同之收入會使用完工百分比方法確認,參考截至計算日為止已發生之合同成本佔估計合同成本總額百分比而計算。

如果建造合同之結果不能可靠的估計,則僅以已產生合同成本可收回的部分確認收入。

(iii) 服務特許權收入

服務特許權協議項下的與施工相關的收入,按照本集團確認建造合同收入所一致的會計政策(見附註2(x)(ii))按工程完工進度確認。營運或服務收入在本集團提供服務的期間內確認。金融資產的利息收入按照附註2(x)(vii)的規定確認。當本集團在服務特許權協議提供的服務多於一項,且服務確認收入的公允價值能分別確定時,則參照所提供服務的相對公允價值對收取的對價進行分配。

2 Significant accounting policies (continued)

(x) Revenue recognition (continued)

(iv) Rendering of services

Revenue from design and consultant services rendered is recognised in the consolidated income statement in proportion to the stage of completion of the transaction at the balance sheet date.

Revenue from other services rendered is recognised upon the delivery or performance of the services.

(v) Rental income from operating leases

Rental income receivable under operating leases is recognised in profit or loss in equal instalments over the periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the use of the leased asset. Lease incentives granted are recognised in profit or loss as an integral part of the aggregate net lease payments receivable. Contingent rentals are recognised as income in the accounting period in which they are earned.

(vi) Dividends

— Dividend income from unlisted investments is recognised when the shareholder's right to receive payment is established.

— Dividend income from listed investments is recognised when the share price of the investment goes ex-dividend.

(vii) Interest income

Interest income is recognised as it accrues using the effective interest method.

2 主要會計政策（續）

(x) 收入確認（續）

(iv) 提供服務

所提供的設計和諮詢服務收入按交易於資產負債表日的完成進度於合併收益表內確認。

所提供的其他服務的收入於服務提供後確認。

(v) 經營租賃的租金收入

除非有更能代表使用租賃資產所產生的收益模式的其他基准之外，經營租賃之租金收入按該租期所涵蓋的年期以等額分期在損益中確認。所給予的租賃獎勵作為租賃淨付款應收額的組成部分在損益中確認。或有租金在該收入產生的會計期間確認收入。

(vi) 股息

— 非上市權益投資的股息收入在股東收取款項的權利確立時確認。

— 上市股權投資的股息收入在投資項目的股價除息時確認。

(vii) 利息收入

利息收入按實際利率法於其產生時確認。

2 Significant accounting policies (continued)

(x) Revenue recognition (continued)

(viii) Government grants

Government grants are recognised in the balance sheet initially when there is reasonable assurance that they will be received and that the Group will comply with the conditions attaching to them. Grants that compensate the Group for expenses incurred are recognised as revenue in profit or loss on a systematic basis in the same periods in which the expenses are incurred. Grants that compensate the Group for the cost of an asset are initially recognised as deferred income and are subsequently recognised in profit or loss over the useful life of the asset.

(y) Translation of foreign currencies

Foreign currency transactions during the year are translated at the foreign exchange rates ruling at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rates ruling at the balance sheet date. Exchange gains and losses are recognised in profit or loss.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates.

The results of operations which have a functional currency other than RMB are translated into RMB at the exchange rates approximating the foreign exchange rates ruling at the dates of the transactions. Balance sheet items are translated into RMB at the closing foreign exchange rates ruling at the balance sheet date. The resulting exchange differences are recognised in other comprehensive income and accumulated separately in equity in the exchange reserve.

2 主要會計政策（續）

(x) 收入確認（續）

(viii) 政府補助

當本集團可以合理確認將會收到政府輔助並符合相關附帶條件時，政府輔助初始會在資產負債表內確認。用作補償本集團開支的輔助於開支產生的同一期間以有系統的基準在損益內確認為收入。用作補償本集團資產成本的輔助，初始確認為遞延收益，其後按資產的可使用期限在損益內確認。

(y) 外幣換算

年內的外幣交易按交易日的外幣匯率換算。以外幣計價的貨幣資產與負債則按資產負債表日的外幣匯率換算。匯兑損益在損益內確認。

以外幣計值並按歷史成本計量的非貨幣資產及負債以交易日期的匯率換算。

以人民幣以外貨幣為功能貨幣的業務業績乃按與於交易日適用的外幣匯率相近的匯率換算成人民幣。資產負債表項目乃按於資產負債表日的收市外幣匯率換算為人民幣。所產生的匯兑差額乃於其他綜合收益內確認，並單獨累計在權益的匯兑儲備內。

2 Significant accounting policies (continued)

(z) Borrowing costs

Borrowing costs that are directly attributable to the acquisition, construction or production of an asset which necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of that asset. Other borrowing costs are expensed in the period in which they are incurred.

The capitalisation of borrowing costs as part of the cost of a qualifying asset commences when expenditure for the asset is being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use or sale are in progress. Capitalisation of borrowing costs is suspended or ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are interrupted or complete.

(aa) Related parties

(a) A person, or a close member of that person's family, is related to the Group if that person:

(i) has control or joint control over the Group;

(ii) has significant influence over the Group; or

(iii) is a member of the key management personnel of the Group or the Group's parent.

(b) An entity is related to the Group if any of the following conditions applies:

(i) The entity and the Group are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).

2 主要會計政策（續）

(z) 借貸成本

與購置、建造或生產需要長時間才可以達到擬定可使用或可出售狀態的資產直接相關的借款費用資本化，作為資產的部分成本。其他借款費用於產生期間列為開支。

借款費用應在資產開支和借款費用產生時，並且在資產達到擬定可使用或可出售狀態所必須的準備工作進行期間開始予以資本化，以作為合格資產的成本的一部分，在使合格資產達到擬定可使用或可出售狀態所必須的幾乎全部準備工作中斷或完成時，即暫時中止或停止將借款費用資本化。

(aa) 關聯方

(a) 某一個人或與該個人關係密切的家庭成員應被視為與本集團有關聯，如果該個人：

(i) 控制或共同控制本集團；

(ii) 對本集團具有重大影響；或

(iii) 作為本集團或本集團母公司關鍵管理人員。

(b) 在滿足任何以下條件的情況下，某一實體應被視為與本集團有關聯的實體：

(i) 該實體和本集團均屬於同一集團的成員（即各母公司、附屬公司和同系附屬公司彼此相互關聯）；

2 Significant accounting policies (continued)

(aa) Related parties (continued)

(b) An entity is related to the Group if any of the following conditions applies: (continued)

(ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).

(iii) Both entities are joint ventures of the same third party.

(iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.

(v) The entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group.

(vi) The entity is controlled or jointly controlled by a person identified in (a).

(vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).

Close family members of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

2 主要會計政策(續)

(aa) 關聯方(續)

(b) 在滿足任何以下條件的情況下,某一實體應被視為與本集團有關聯的實體:(續)

(ii) 一間實體是另間實體的聯營公司或合營企業(或另一實體為成員公司之集團旗下成員公司之聯營公司或合營企業);

(iii) 兩間實體均為同一第三方的合營企業;

(iv) 一間實體為第三方實體的合營企業,另一實體為該第三方實體的聯營公司;

(v) 該實體為本集團或與本集團有關連的實體就僱員福利而設的離職後福利計劃;

(vi) 由(a)所述的個人控制或共同控制的實體;

(vii) 受上述(a)(i)中定義的個人重大影響的實體或該個人為實體(或該實體的母公司)的關聯管理人員。

與個人關係密切的家庭成員是指預期該等在與實體的交易中,可能會影響該名個人或受其影響的家屬。

2 Significant accounting policies (continued)

(bb) Segment reporting

Operating segments, and the amounts of each segment item reported in the financial statements, are identified from the financial statements provided regularly to the Group's most senior executive management for the purposes of allocating resources to, and assessing the performance of, the Group's various lines of business.

Individually material operating segments are not aggregated for financial reporting purposes unless the segments have similar economic characteristics and are similar in respect of the nature of products and services, the nature of production processes, the type or class of customers, the methods used to distribute the products or provide the services, and the nature of the regulatory environment. Operating segments which are not individually material may be aggregated if they share a majority of these criteria.

2 主要會計政策(續)

(bb) 分部報告

本集團為了分配資源予本集團各項業務以及評估各項業務的業績,而定期向本集團最高級行政管理層提供的財務資料。從該等資料中,可找出在財務報表中報告的經營分部和每一分部項目的金額。

個別而言屬於重大的經營分部不會在財務報告中予以匯總,除非該等分部擁有相若的經濟特性,而且其產品及服務的性質、生產流程性質、客戶的類型或類別、用以分銷產品或提供服務的方法以及監管環境的性質均相若。如果個別而言並非屬於重大的經營分部擁有以上大部分特徵可予以匯總成同一分部列示。

3 Accounting judgement and estimates

The Group's financial condition and results of operations are sensitive to accounting methods, assumptions and estimates that underlie the preparation of these financial statements. The Group bases the assumptions and estimates on historical experience and on various other assumptions that the Group believes to be reasonable and which form the basis for making judgements about matters that are not readily apparent from other sources. Actual results may differ from those estimates as facts, circumstances and conditions change.

The selection of critical accounting policies, the judgements and other uncertainties affecting application of those polices and the sensitivity of reported results to changes in conditions and assumptions are factors to be considered when reviewing these financial statements. The principal accounting policies are set forth in note 2. The Group believes the following critical accounting policies involve the most significant judgements and estimates used in the preparation of these financial statements.

3 會計判斷和估計

本集團的財務狀況和經營業績對編製財務信息時所採用的會計方法、假設及估計而言屬敏感。本集團的有關假設及估計乃基於以往經驗及本集團相信屬合理的各種其他假設而做出。本集團亦按該等假設及估計為基準,對不能明顯地從其他來源確定的事項做出判斷。實際結果可能因事實,情況及條件的改變而與估計有異。

對重大會計政策的選擇、影響該等政策的應用的判斷及其他不確定因素以及報告的結果對條件及假設發生變化的敏感度均為審閱財務信息時應予以考慮的因素。主要會計政策已載列於附註2。本集團認為,在編製財務信息時,下列重大會計政策涉及至為重要的判斷及估計。

3 Accounting judgement and estimates (continued)

(a) Impairment losses for bad and doubtful debts

The Group estimates impairment losses for bad and doubtful debts resulting from the inability of the customers and other debtors to make the required payments. The Group bases the estimates on the ageing of the receivable balance, debtors' credit-worthiness, and historical write-off experience. If the financial condition of the customers and debtors were to deteriorate, actual write-offs would be higher than estimated.

(b) Construction contracts

As explained in accounting policies set out in notes 2(p) and (x)(ii), revenue and profit recognition on an uncompleted project is dependent on estimating the total outcome of the construction contract, as well as the work done to date. Based on the Group's recent experience and the nature of the construction activity undertaken by the Group, the Group makes estimates of the point at which it considers the work is sufficiently advanced such that the costs to complete and revenue can be reliably estimated. As a result, until this point is reached the amounts due from customers for contract work as disclosed in note 24 will not include profit which the Group may eventually realise from the work done to date. In addition, actual outcomes in terms of total cost or revenue may be higher or lower than estimated at the balance sheet date, which would affect the revenue and profit recognised in future years as an adjustment to the amounts recorded to date.

(c) Provision for warranty

The Group provides warranties for its products for 2 to 5 years for defects and/or 10 to 25 years for guaranteed performance after sales have taken place. The Group estimates warranty costs based on the Group's historical cost data, industry data and an assessment of the Group's competitors' accrual. The warranty obligation of the Group will be affected not only by the product failure rates, but also by costs incurred to repair or replace failed products. If the actual product failure rates and cost of replacement or repairing of failed products differ from the estimates, the Group will need to prospectively revise the provision for warranty costs which would affect profit or loss in future years.

3 會計判斷和估計(續)

(a) 呆壞賬減值虧損

本集團對因客戶及其他債務人無法按規定付款而造成的呆壞賬減值虧損進行估計。本集團的估計乃基於應收結餘的賬齡、債務人的信用及以往的呆壞賬沖銷經驗而作出。倘客戶及債務人的財政狀況惡化，實際的沖銷金額可能高於估計數字。

(b) 建造合同

誠如附註2(p)和(x)(ii)所載之會計政策所釋述，確認未完成項目之收入及利潤取決於估計建造合同之總結果及迄今已完成之工程。根據本集團近期經驗及本集團所進行工程活動之性質，本集團於其認為工程已進展至足以可靠地估計完成成本及收入時做出估計。因此，直至此時點之前，附註24所披露的應收建造合同客戶款項不會計入本集團迄今已完成工程最終可能實現的利潤。此外，按總成本或收入計算的實際結果可能高於或低於資產負債表日之估計金額，並透過對迄今記錄金額作出調整而影響於未來年度確認之收入及利潤。

(c) 質保金撥備

產品銷售後，本集團產品提供2-5年的缺陷質保，和／或10-25年的性能質保。本集團根據其歷史成本數據、行業數據及其競爭對手的應計項目評估算其保修成本。質保金撥備不僅受產品故障率的影響，同樣也受修復或替換故障產品成本之影響。倘若實際的產品故障率及修復或替換故障產品的成本與估算有異，本集團則須修訂未來的質保成本撥備，從而影響未來年度的損益。

3 Accounting judgement and estimates (continued)

(d) Impairment losses for non-current assets

In considering the impairment losses that may be required for certain of the Group's assets which include property, plant and equipment, investment properties, lease prepayments, intangible assets, investments in associates and unquoted equity investments, recoverable amount of the asset needs to be determined. The recoverable amount is the greater of the fair value less costs to sell and the value in use. It is difficult to precisely estimate selling price because quoted market prices for these assets may not be readily available. In determining the value in use, expected cash flows generated by the asset are discounted to their present value, which requires significant judgement relating to items such as level of sales volume, selling price and amount of operating costs. The Group uses all readily available information in determining an amount that is a reasonable approximation of recoverable amount, including estimates based on reasonable and supportable assumptions and projections of items such as sales volume, selling price and amount of operating costs.

(e) Recognition of deferred tax assets

Deferred tax assets in respect of unused tax losses and tax credit carried forward and deductible temporary differences are recognised and measured based on the expected manner of realisation or settlement of the carrying amount of the assets, using tax rates enacted or substantively enacted at the balance sheet date. In determining the carrying amounts of deferred assets, expected taxable profits are estimated which involves a number of assumptions relating to the operating environment of the Group and requires a significant level of judgement exercised by the directors. Any change in such assumptions and judgement would affect the carrying amounts of deferred tax assets to be recognised and hence the net profit in future years.

(f) Depreciation

Property, plant and equipment and investment properties are depreciated on a straight-line basis over the estimated useful lives of the assets, after taking into account the estimated residual value. The Group reviews the estimated useful lives of the assets regularly. The useful lives are based on the Group's historical experience with similar assets and taking into account anticipated technological changes. The depreciation expense for future periods is adjusted if there are significant changes from previous estimates.

3 會計判斷和估計（續）

(d) 非流動資產減值虧損

當考慮對本集團若干資產（包括物業、廠房及設備、投資性物業、預付土地租賃款、無形資產、對聯營公司的投資及非上市權益投資）計提減值虧損時，則須確定該等資產之可收回金額。可收回金額為公允價值減銷售成本或使用價值之較高者。由於並未取得該等資產之市場報價，因此難以準確估計售價。於確定使用價值時，該資產產生之預期現金流量將折現至其現值，而此需對銷量水平、售價以及營運成本金額等項目作出重大判斷。本集團以所有現有數據確定可收回金額之合理近似金額，包括根據合理及有證據支持的假設及預測對銷量、售價及營運成本金額進行估計。

(e) 確認遞延税項資產

有關已結轉未被使用的税項虧損和税項減免以及可抵扣暫時性差異的遞延税項資產，會運用於資產負債表日已實行或實質上已實行的税率，按照資產賬面金額的預期實現或結算方式確認及計量。在確定遞延税項資產的賬面值時，會對預期應課税利潤作出估計，當中涉及多項有關本集團經營環境的假設，並要求董事作出大量判斷。當有關假設及判斷出現任何變動，將會影響將予確認的遞延税項資產的賬面值，從而影響未來年度的淨利潤。

(f) 折舊

物業、廠房及設備和投資性物業在扣除估計殘值之後，在資產的預計可使用期限內按直線法計提折舊。本集團定期審閱資產的預計可使用期限。可使用期限乃按本集團類似資產的以往經驗，並考慮預期的技術發展因素而確定。如果之前的預估發生了重大改變，則對未來期間的折舊開支進行調整。

3 Accounting judgement and estimates (continued)

(g) Income tax

The Group files income taxes with numerous tax authorities. Judgement is required in determining the provision for taxation as there are many transactions and calculations for which the ultimate tax determinations are uncertain during the ordinary course of business. For preferential tax treatments available for approved High and New Technology Enterprises, in determining the applicable tax rates for calculations of current income tax and deferred income tax, after passed the substantive approvals, the Group uses the expected tax rates that are probably be approved by tax authorities according to the tax rules and regulations enacted at the balance sheet date. Where the final tax outcomes of these matters are different from the amounts originally recorded, the differences may impact on the current income tax and deferred income tax provisions in the periods in which the final tax outcomes became available.

(h) Contingent liabilities

Management judgement is required in the area of contingent liabilities particularly in assessing the outcome of possible obligations arising from the transactions as detailed in note 39. Management reassesses the likelihood of the outcome of these possible obligations at each balance sheet date. Where a change in the probability that an outflow of economic resources will be required to settle the obligation, a provision will be recognised in the period in which such determination is made.

(i) Write-down of inventories

The Group reviews the carrying amounts of inventories at each balance sheet date to determine whether the inventories are carried at lower of cost and net realisable value in accordance with the accounting policy set out in note 2(o). Management estimates the net realisable value based on all available information, including the current market price of the finished goods and raw materials, and historical costs. Any change in the assumptions would increase or decrease the amount of inventories write-down or the related reversals of write-down and affect the Group's profit.

3 會計判斷和估計（續）

(g) 所得稅

本集團須向多個稅務機關繳付所得稅，由於在日常業務過程中很多交易和計算的最終稅項並不確定，在確定稅項撥備時須作出判斷。就已獲取的已批准高新技術企業的稅務優惠而言，在獲得實質性的批准後，本集團於資產負債表日使用根據相關稅務規則及法規很可能獲稅務機關批准的稅率來確定即期稅項和遞延稅項的適用稅率。當有關事項的最終稅務結果有別於初始記錄金額時，有關差異可能影響取得最終稅務結果期間的即期所得稅和遞延所得稅撥備。

(h) 或有負債

管理層須對或有負債作出判斷，尤其是評估附註39所詳述交易所產生的可能責任之結果。管理層會於每個資產負債表日重新評估該等可能責任結果之可能性。倘經濟資源流出之可能性發生變動而將需結付債務，則於作出該項決定之期間確認撥備。

(i) 存貨撇減

本集團於每一資產負債表日對於存貨的賬面價值進行審閱，以確定存貨是否如附註2(o)中所述的會計政策以其成本及可變現淨值孰低者列賬。管理層根據全部能獲取信息，包括產成品及原材料的市場價格，以及歷史成本評估其可變現淨值。相關假設的任何變動會增加或減少存貨撇減或相關撇減轉回的金額，因而影響本集團的損益。

4 Revenue and segment reporting

4 收入及分部報告

(a) Revenue

(a) 收入

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

本集團主要從事點火裝置、風力發電機、太陽能電池和組件及發電廠其他相關電氣設備的製造和銷售、以及脱硫、水處理、太陽能和其他環保和節能工程的建造施工、脱硫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。

Revenue represents the sales value of goods supplied to customers, net of VAT, revenues from construction contracts, rendering of services and service concession arrangement and rental income. The amount of each significant category of revenue recognised during the year is as follows:

收入指向客戶出售的商品銷售價值(扣除增值税)、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。本年內確認的各重大類別收入的金額列舉如下:

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Sales of goods (note)	銷售商品(附註)	**13,767,823**	11,985,179
Revenue from construction contracts	建造合同收入	**6,497,729**	5,558,146
Rendering of services	提供服務	**85,621**	92,527
Service concession arrangement revenue (note 43)	服務特許權協議收入(附註43)	**262,636**	62,379
Rental income from operating leases (note 40(a)(i))	經營租賃的租賃收入(附註40(a)(i))	**1,162,701**	1,008,749
		21,776,510	18,706,980

Note:

Revenue from sale of goods amounting to RMB2,713,524,000 (2011: RMB1,833,074,000) is sale of wind turbines to contractors who are engaged to construct wind farms for China Guodian Corporation ("Guodian") and related parties under Guodian.

附註:

銷售商品收入中人民幣2,713,524,000元(2011年:人民幣1,833,074,000元)為向中國國電集團(「國電」)及國電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。

4 Revenue and segment reporting (continued)

(b) Segment reporting

The Group manages its businesses by 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 presented the following four reportable segments.

— Environmental protection segment: this segment provides environmental protection products and services which mainly consists of sulphur oxide control technologies, nitrogen oxide control technologies, rental of desulphurisation facilities, ash removal with filer bag, water treatment related technologies and products.

— Energy conservation solutions segment: this segment provides energy saving products and services which mainly consists of plasma ignition and micro-oil ignition equipment and gas turbine improvement services.

— Wind power products and services segment: this segment produces and sells wind turbine and its components, provides related system solutions and services to wind power operators.

— Solar power products and services segment: this segment produces and sells solar cells, solar modules and other solar products, constructs solar power stations and provides related system solutions and services to solar power operators.

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

4 收入及分部報告(續)

(b) 分部報告

本集團通過附屬公司管理業務,該等業務由經營項目(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以下四個可呈報分部:

— 環保分部:本分部提供環保產品和服務,主要包括脱硫技術、脱硝技術、脱硫設備租賃服務、濾袋式除塵、水處理相關技術和產品。

— 節能解決方案分部:本分部提供節能產品及服務,主要包括等離子點火、微油點火設備及氣輪機改造服務。

— 風電產品及服務分部:本分部生產和銷售風機及其組件,向風電運營商提供相關系統解決方案和服務。

— 太陽能產品及服務分部:本分部生產及銷售太陽能電池、太陽能組件及其他太陽能產品、建造太陽能電站及向太陽能運營商提供相關系統解決方案及服務。

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發電場的風力發電、銷售其他電力相關產品及物業租賃。

4 Revenue and segment reporting (continued)

(b) Segment reporting (continued)

(i) Segment results, assets and liabilities

For the purposes of assessing segment performance and allocating resources between segments, the Group's senior executive management monitors the results, assets and liabilities attributable to each reportable segment on the following bases:

Segment assets include all assets with the exception of interests in associates, other equity investments, tax recoverable, deferred tax assets and other corporate assets. Segment liabilities include all liabilities with the exception of tax payable, deferred tax liabilities and other corporate liabilities.

Revenue and expenses are allocated to the reportable segments with reference to revenue generated by those segments and the expenses incurred by those segments.

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, inventory write-down and additions to segment non-current assets.

4 收入及分部報告(續)

(b) 分部報告(續)

(i) 分部業績、資產及負債

為評估分部業績、在分部間分配資源,本集團高級行政管理人員按以下基準對各可呈報分部的應佔業績、資產和負債進行監控:

分部資產包括所有資產,對聯營公司的投資、其他權益投資、可收回税項、遞延税項資產和其他行政資產除外。分部負債包括所有負債,應付所得税、遞延税項負債和其他行政負債除外。

收入和費用乃參考各可呈報分部產生的收入和發生的開支分配給各可呈報分部。

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信息外,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、存貨撇減和添置分部非流動資產的分部信息。

4 Revenue and segment reporting (continued)

4 收入及分部報告（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 years ended 31 December 2012 and 2011 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2012年和2011年12月31日止年度的分部業績作出評估的關於本集團可呈報分部的信息如下：

		2012					
		Environmental protection 環保 RMB'000 人民幣千元	Energy conservation solutions 節能解決方案 RMB'000 人民幣千元	Wind power products and services 風電產品及服務 RMB'000 人民幣千元	Solar power products and services 太陽能產品及服務 RMB'000 人民幣千元	All others 所有其他 RMB'000 人民幣千元	Total 總計 RMB'000 人民幣千元
Revenue from external customers	外部客戶收入	5,855,403	919,574	11,161,233	3,649,329	190,971	21,776,510
Inter-segment revenue	分部間收入	66,574	14,490	189,022	—	29,128	299,214
Reportable segment revenue	**可呈報分部收入**	5,921,977	934,064	11,350,255	3,649,329	220,099	22,075,724
Reportable segment profit (gross profit)	**可呈報分部利潤（毛利）**	1,093,766	241,925	1,734,872	218,551	149,900	3,439,014
Depreciation and amortisation	折舊及攤銷	341,309	18,890	153,263	105,620	46,743	665,825
Impairment/(reversal of impairment) of trade and other receivables	應收賬款及其他應收款項減值／（減值轉回）	18,579	9,166	934	14,786	(280)	43,185
Inventory write-down	存貨撇減	—	—	—	66,467	—	66,467
Interest income	利息收入	31,656	30,203	10,526	6,832	62	79,279
Finance costs	財務成本	115,148	178	335,327	134,265	8,026	592,944
Reportable segment assets	**可呈報分部資產**	15,461,572	2,596,381	13,875,024	9,445,457	1,978,957	43,357,391
Additions to reportable segment non-current assets during the year	年內添置可呈報分部非流動資產	1,788,766	75,138	391,663	828,077	23,718	3,107,362
Reportable segment liabilities	**可呈報分部負債**	12,404,982	674,839	11,340,893	8,024,686	687,418	33,132,818

4 Revenue and segment reporting (continued)

4 收入及分部報告(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)

		2011					
		Environmental protection 環保 RMB'000 人民幣千元	Energy conservation solutions 節能解決方案 RMB'000 人民幣千元	Wind power products and services 風電產品及服務 RMB'000 人民幣千元	Solar power products and services 太陽能產品及服務 RMB'000 人民幣千元	All others 所有其他 RMB'000 人民幣千元	Total 總計 RMB'000 人民幣千元
Revenue from external customers	外部客戶收入	4,262,567	788,746	9,209,921	4,294,963	150,783	18,706,980
Inter-segment revenue	分部間收入	45,035	—	190,408	—	12,619	248,062
Reportable segment revenue	**可呈報分部收入**	4,307,602	788,746	9,400,329	4,294,963	163,402	18,955,042
Reportable segment profit (gross profit)	**可呈報分部利潤(毛利)**	628,698	276,832	1,558,838	308,117	64,778	2,837,263
Depreciation and amortisation	折舊及攤銷	253,684	17,252	114,835	53,239	36,202	475,212
Impairment/(reversal of impairment) of trade and other receivables	應收賬款及其他應收款項減值/(減值轉回)	24,927	9,004	(6)	12,440	(1,014)	45,351
Interest income	利息收入	28,195	21,175	16,162	2,377	1,065	68,974
Finance costs	財務成本	51,274	—	248,905	60,145	9,098	369,422
Reportable segment assets	**可呈報分部資產**	9,578,509	2,315,115	16,560,658	8,089,052	1,643,465	38,186,799
Additions to reportable segment non-current assets during the year	年內添置可呈報分部非流動資產	1,683,743	11,075	582,445	1,679,880	509,810	4,466,953
Reportable segment liabilities	**可呈報分部負債**	7,036,597	550,609	14,894,483	6,880,855	618,692	29,981,236

4 Revenue and segment reporting (continued)

4 收入及分部報告（續）

(b) Segment reporting (continued)

(b) 分部報告（續）

(ii) Reconciliations of reportable segment revenues, gross profit, assets and liabilities

(ii) 可呈報分部收入、毛利、資產與負債的調節

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Revenue	**收入**		
Reportable segment revenue	可呈報分部收入	**22,075,724**	18,955,042
Elimination of inter-segment revenue	分部間收入抵銷	**(299,214)**	(248,062)
Consolidated revenue	合併收入	**21,776,510**	18,706,980

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Gross Profit	**毛利**		
Reportable segment profit	可呈報分部利潤	**3,439,014**	2,837,263
Elimination of inter-segment profit	分部間利潤抵銷	**(58,433)**	(54,612)
Consolidated gross profit	合併毛利	**3,380,581**	2,782,651

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Assets	**資產**		
Reportable segment assets	可呈報分部資產	**43,357,391**	38,186,799
Inter-segment elimination	分部間抵銷	**(504,564)**	(538,811)
		42,852,827	37,647,988
Interests in associates	對聯營公司的投資	**478,011**	291,998
Other equity investments	其他權益投資	**329,821**	112,255
Tax recoverable	可收回税項	**49,646**	127,962
Deferred tax assets	遞延税項資產	**249,765**	174,538
Unallocated head office and corporate assets	未分配總部及行政資產	**2,335,617**	3,700,957
Consolidated total assets	合併資產總額	**46,295,687**	42,055,698

4 Revenue and segment reporting (continued)

4 收入及分部報告(續)

(b) Segment reporting (continued)

(b) 分部報告(續)

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

(ii) 可呈報分部收入、毛利、資產與負債的調節(續)

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Liabilities	**負債**		
Reportable segment liabilities	可呈報分部負債	**33,132,818**	29,981,236
Inter-segment elimination	分部間抵銷	**(455,040)**	(485,723)
		32,677,778	29,495,513
Income tax payable	應付所得税	**72,574**	126,058
Deferred tax liabilities	遞延税項負債	**95,670**	—
Unallocated head office and corporate liabilities	未分配總部及行政負債	**1,308,539**	1,438,048
Consolidated total liabilities	合併負債總額	**34,154,561**	31,059,619

(iii) Geographical information

The Group did not have significant business operations outside the PRC, therefore no geographic segment information is presented.

(iii) 地區信息

本集團並無於中國境外經營的重大業務,因此並無呈報地區分部信息。

(iv) Major customers

Revenues from Guodian and related parties under Guodian amounted to RMB12,523,048,000 (2011: RMB12,242,660,000).

(iv) 主要客戶

從國電及國電下屬的關聯方取得的收入金額為人民幣12,523,048,000元(2011年:人民幣12,242,660,000元)。

5 Other revenue and other net (losses)/income

5 其他收入及其他（虧損）／收益淨額

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Other revenue	**其他收入**		
Government grants	政府補助	**328,162**	223,808
Interest income	利息收入	**90,645**	84,975
Dividend income from unquoted equity investments	非上市權益投資股息收入	**15,816**	6,041
Others	其他	**33,749**	37,198
		468,372	352,022

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Other net (losses)/income	**其他（虧損）／收益淨額**		
Net gain on sales of raw materials	原材料銷售收益淨額	**43,171**	15,307
Net (loss)/gain on disposal of subsidiaries (notes (i) and (ii))	出售附屬公司（虧損）／收益淨額（附註(i)和(ii)）	**(31,451)**	97,312
Net gain on disposal of associates (note (i))	出售聯營公司收益淨額（附註(i)）	**—**	145,325
Net loss from changes in fair value	公允價值變動虧損淨額	**—**	(1,449)
Net gain on disposal of unquoted equity investments	出售非上市股權投資收益淨額	**—**	109
Net gain/(loss) on disposal of property, plant and equipment	出售物業、廠房及設備收益／（虧損）淨額	**208**	(163)
Net foreign exchange (loss)/gain	匯兑（虧損）／收益淨額	**(17,561)**	21,835
		(5,633)	278,276

5 Other revenue and other net (losses)/income (continued)

Notes:

(i) In 2011, the Group disposed of certain subsidiaries and associates to related parties under Guodian at a consideration in total RMB974,064,000, which was determined with reference to valuation reports issued by independent appraisers in the PRC, and resulted in a total net gain of RMB225,020,000 which is included in the amounts above.

(ii) The amount for the year ended 31 December 2012 represents the adjustment of consideration in respect of the partial disposal of equity interest in Guodian Jintech Solar Energy Technology (Yixing) Co., Ltd., a former subsidiary of the Group, in 2011. As the adverse change in market environment after the disposal, the acquirer re-negotiated the consideration with the Group in 2012 and the Group agreed to repay the acquirer an amount of RMB31,451,000.

5 其他收入及其他(虧損)/收益淨額(續)

附註:

(i) 於2011年,本集團以總對價人民幣974,064,000元向國電下屬的關聯方出售若干附屬公司及聯營公司。對價參考了中國獨立評估師出具的估價報告所釐定。該等交易產生淨收益總計人民幣225,020,000元並包括在上述金額中。

(ii) 截至2012年12月31日止年度的金額為與2011年出售國電晶德太陽能科技(宜興)有限公司(曾為本集團的附屬公司)部分股權相關的對價調整。由於在出售後市場環境的不利變化,於2012年收購方與本集團重新商討對價,本集團同意向收購方償還人民幣31,451,000元的款項。

6 Finance costs
6 財務成本

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Interest on bank and other borrowings wholly repayable within five years	須於五年內悉數償還的銀行及其他借款利息	**932,360**	618,028
Interest on bank and other borrowings repayable after five years	須於五年後償還的銀行及其他借款利息	**42,842**	29,785
		975,202	647,813
Less: interest expenses capitalised into property, plant and equipment, intangible assets and construction contracts	減:資本化在物業、廠房及設備、無形資產及建造合同中的利息開支	**(332,387)**	(232,371)
		642,815	415,442

The borrowing costs have been capitalised at a rate of 6.31% per annum (2011: 5.99%).

借款成本已按年利率6.31%(2011:5.99%)作資本化。

7 Profit before taxation

7 稅前利潤

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

稅前利潤已扣除/(計入):

(a) Staff costs#

(a) 員工成本#

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Salaries, wages and other benefits	薪金、工資及其他福利	**874,618**	786,359
Contributions to defined contribution retirement plan (note)	界定供款退休計劃的供款(附註)	**87,190**	63,877
		961,808	850,236

Note:

Pursuant to the relevant labour rules and regulations in the PRC, the Company and its PRC Subsidiaries participated in defined contribution retirement schemes (the "PRC Schemes") organised by the relevant local government authorities for its employees. The Group is required to make contributions to the PRC Schemes at 17% to 20% of basic salaries of the employees. The local government authorities are responsible for the entire pension obligations payable to retired employees. In addition, certain subsidiaries and its staff participate in a retirement plan managed by Guodian on a voluntary basis to supplement the above-mentioned schemes and the Group is required to make contributions at 5% to 10% of total salaries of the employees. The Group has no other material obligation to make payments in respect of pension benefits associated with these schemes and supplementary retirement plan other than the annual contributions described above.

附註:

根據中國相關勞動法律法規,本公司及其中國附屬公司為其員工參加了有關地方政府機關組織的界定供款退休計劃(「中國計劃」)。本集團須對中國計劃繳納員工基本薪金的17%到20%的供款。當地政府機關負責全部應付離退休職工的養老金。此外,若干附屬公司及其職工可自願參加國電管理的退休計劃作為對上述計劃的補充,本集團須繳納員工總薪金的5%到10%的供款。除上述年度供款以外,本集團沒有其他就退休福利須向這些計劃與補充退休計劃支付款項的重大責任。

7 Profit before taxation (continued) 7 稅前利潤（續）

(b) Other items (b) 其他項目

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Amortisation#	攤銷#		
— lease prepayments	— 預付土地租賃款	**18,552**	14,079
— intangible assets	— 無形資產	**48,121**	26,131
Depreciation#	折舊#		
— investment properties	— 投資性物業	**7,798**	6,497
— property, plant and equipment	— 物業、廠房及設備	**594,696**	432,078
Impairment losses	減值虧損		
— trade and other receivables	— 應收賬款及其他應收款項	**43,185**	45,351
Auditor's remuneration	審計師酬金		
— annual audit services	— 年度審計服務	**12,900**	9,396
— interim review service	— 中期審閱服務	**4,320**	—
Operating lease charges#	經營租賃費用#		
— hire of plant and equipment	— 廠房及設備租賃	**12,262**	5,976
— hire of properties	— 物業租賃	**18,024**	13,704
Research and development costs	研發成本	**137,536**	122,980
Provision for warranty (note 33)	質保金撥備（附註33）	**223,430**	255,907
Rental receivable from investment properties	投資性物業的應收租金	**(34,336)**	(32,536)
Direct outgoings of investment properties	投資性物業的直接開支	**7,409**	5,886
Cost of inventories# (note 23(b))	存貨成本#（附註23(b)）	**11,604,976**	9,912,232

Cost of inventories includes staff costs, depreciation and amortisation expenses and operating lease charges, which amount is also included in the respective total amounts disclosed separately above or in note 7(a) for each of these types of expenses.

存貨成本包括員工成本、折舊及攤銷費用以及經營租賃費用，這些費用的金額亦已計入在上文單獨披露或附註7(a)的各項總金額中。

8 Income tax in the consolidated income statement

8 合併收益表內的所得稅

(a) Taxation in the consolidated income statement represents:

(a) 合併收益表的稅項指:

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Current tax	**本期稅額**		
Provision for the year	本年度撥備	**288,667**	200,246
Over-provision in respect of prior years	以往年度撥備過剩	**(1,375)**	(14,765)
		287,292	185,481
Deferred tax (note 32(b))	**遞延稅項(附註32(b))**		
Origination and reversal of temporary differences	暫時性差異的產生及轉回	**(57,358)**	(78,320)
		229,934	107,161

The charge for PRC enterprise income tax for the Company and the Group's subsidiaries established in the PRC is calculated at the statutory rate of 25% (2011: 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 a preferential rate of 12.5% or 15% (2011: 12.5% or 15%) and a subsidiary of the Group which is a small-scale enterprise and is subject to enterprise income tax at 20%.

本公司及本集團於中國成立的附屬公司之企業所得稅支出是以根據相關企業所得稅法規釐定的期間估計應繳稅利潤按25%(2011年:25%)的法定稅率計算,本集團若干免稅或按12.5%或15%(2011年:12.5%或15%)優惠稅率徵稅的附屬公司,以及一家屬於小型企業並按20%徵收企業所得稅的附屬公司除外。

A subsidiary of the Group is subject to Hong Kong Profits Tax at 16.5% (2011: 16.5%). Taxation for other overseas subsidiaries is charged at the appropriate rate of taxation ruling in the relevant jurisdiction.

本集團有一家附屬公司按16.5%(2011年:16.5%)徵香港利得稅。其他海外附屬公司根據相關地域的適用稅率繳納稅款。

8 Income tax in the consolidated income statement (continued)

8 合併收益表內的所得税(續)

(b) Reconciliations between tax expense and accounting profit at applicable tax rates:

(b) 税項開支與會計利潤按照適用税率計算的調節:

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Profit before taxation	税前利潤	**1,263,905**	1,271,574
Notional tax on profit before taxation at PRC statutory tax rate	税前利潤按照中國法定税率計算的名義税項	**315,976**	317,894
Effect on non-deductible expenses	不可扣減開支的影響	**19,046**	10,263
Effect of non-taxable income	非應税收入的影響	**(1,216)**	(1,769)
Effect of research and development bonus deductions	研發開支加計扣除的影響	**(7,912)**	(43,668)
Effect of share of profits less losses of associates	應佔聯營公司利潤減虧損的影響	**(8,707)**	(7,938)
Effect of PRC tax concessions	中國税務優惠的影響	**(128,572)**	(140,375)
Tax effect of unused tax losses and temporary differences not recognised	未確認的未使用税務虧損及暫時性差異的税項影響	**39,772**	22,830
Tax effect of unused tax losses and temporary differences not recognised in previous year but utilised or recognised in current year	本年使用或確認以往年度未確認的未使用税務虧損及暫時性差異的税項影響	**(1,222)**	(37,098)
Over-provision in respect of prior years	以往年度撥備過剩	**(1,375)**	(14,765)
Others	其他	**4,144**	1,787
Actual tax expense	實際税項開支	**229,934**	107,161

9 Directors' and supervisors' emoluments

9 董事及監事的薪酬

Details of directors' and supervisors' emoluments are as follows:

董事及監事的薪酬如下:

		Directors' and supervisors' fees 董事費及監事費 RMB'000 人民幣千元	Salaries, allowances and benefits in kind 工資、補貼及實物福利 RMB'000 人民幣千元	Discretionary bonuses 酌情花紅 RMB'000 人民幣千元	Retirement scheme contributions 退休金供款 RMB'000 人民幣千元	2012 Total 2012年合計 RMB'000 人民幣千元
Directors	董事					
Mr. ZHU, Yongpeng (Chairman)	朱永芃先生(董事長)	—	—	—	—	—
Mr. FENG, Shuchen	馮樹臣先生	—	—	—	—	—
Mr. YANG, Guang	陽 光先生	—	—	—	—	—
Mr. YE, Weifang	葉偉芳先生	—	260	221	47	528
Mr. LI, Hongyuan	李宏遠先生	—	444	300	87	831
Ms. WANG, Hongyan	王鴻艷女士	—	392	210	81	683
Mr. YAN, Andrew (Appointed in June)	閻 焱先生(2012年6月任命)	—	—	—	—	—
Independent non-executive directors	獨立非執行董事					
Mr. LU, Yanchang	陸延昌先生	150	—	—	—	150
Mr. ZHAI, Ligong	翟立功先生	150	—	—	—	150
Mr. FAN, Renda Anthony	范仁達先生	150	—	—	—	150
Mr. SHI, Dinghuan (Appointed in June)	石定環先生(2012年6月任命)	88	—	—	—	88
Supervisors	監事					
Mr. QIAO, Baoping	喬保平先生	—	—	—	—	—
Mr. CHEN, Bin	陳 斌先生	—	—	—	—	—
Mr. XU, Xingzhou	許興洲先生	—	—	—	—	—
Mr. GUAN, Xiaochun	關曉春先生	—	444	300	87	831
Mr. LI, Wei	李 偉先生	—	223	216	66	505
		538	1,763	1,247	368	3,916

9 Directors' and supervisors' emoluments (continued) 9 董事及監事的薪酬（續）

		Directors' and supervisors' fees 董事費及監事費 RMB'000 人民幣千元	Salaries, allowances and benefits in kind 工資、補貼及實物福利 RMB'000 人民幣千元	Discretionary bonuses 酌情花紅 RMB'000 人民幣千元	Retirement scheme contributions 退休金供款 RMB'000 人民幣千元	2011 Total 2011年合計 RMB'000 人民幣千元
Directors	董事					
Mr. ZHU, Yongpeng (Chairman) (Appointed in May 2011)	朱永芃先生（董事長）（2011年5月任命）	—	—	—	—	—
Mr. FENG, Shuchen (Appointed in May 2011)	馮樹臣先生（2011年5月任命）	—	—	—	—	—
Mr. YANG, Guang	陽　光先生	—	—	—	—	—
Mr. YE, Weifang (Appointed in May 2011)	葉偉芳先生（2011年5月任命）	—	416	323	84	823
Mr. LI, Hongyuan (Appointed in May 2011)	李宏遠先生（2011年5月任命）	—	270	180	49	499
Ms. WANG, Hongyan (Appointed in May 2011)	王鴻艷女士（2011年5月任命）	—	367	228	78	673
Mr. XU, Fenggang (Resigned in May 2011)	徐鳳剛先生（2011年5月辭職）	—	212	97	42	351
Mr. WANG, Zhongqu (Resigned in May 2011)	王忠渠先生（2011年5月辭職）	—	—	—	—	—
Mr. QI, Zhiming (Resigned in May 2011)	祁智明先生（2011年5月辭職）	—	—	—	—	—
Ms. REN, Mudi (Resigned in May 2011)	任慕棣女士（2011年5月辭職）	—	—	—	—	—
Mr. LI, Zhongjun (Resigned in May 2011)	李忠軍先生（2011年5月辭職）	—	—	—	—	—
Mr. WANG, Baozhong (Resigned in May 2011)	王保忠先生（2011年5月辭職）	—	—	—	—	—
Independent non-executive directors	獨立非執行董事					
Mr. LU, Yanchang (Appointed in September 2011)	陸延昌先生（2011年9月任命）	25	—	—	—	25
Mr. ZHAI, Ligong (Appointed in September 2011)	翟立功先生（2011年9月任命）	25	—	—	—	25
Mr. FAN, Renda Anthony (Appointed in September 2011)	范仁達先生（2011年9月任命）	25	—	—	—	25

9 Directors' and supervisors' emoluments (continued) 9 董事及監事的薪酬（續）

		Directors' and supervisors' fees 董事費及監事費 RMB'000 人民幣千元	Salaries, allowances and benefits in kind 工資、補貼及實物福利 RMB'000 人民幣千元	Discretionary bonuses 酌情花紅 RMB'000 人民幣千元	Retirement scheme contributions 退休金供款 RMB'000 人民幣千元	2011 Total 2011年合計 RMB'000 人民幣千元
Supervisors	監事					
Mr. QIAO, Baoping (Appointed in May 2011)	喬保平先生（2011年5月任命）	—	—	—	—	—
Mr. CHEN, Bin	陳　斌先生	—	—	—	—	—
Mr. XU, Xingzhou (Appointed in May 2011)	許興洲先生（2011年5月任命）	—	—	—	—	—
Mr. GUAN, Xiaochun (Appointed in May 2011)	關曉春先生（2011年5月任命）	—	413	326	84	823
Mr. LI, Wei (Appointed in May 2011)	李　偉先生（2011年5月任命）	—	202	190	60	452
Mr. WANG, Longling (Resigned in May 2011)	王龍陵先生（2011年5月辭職）	—	—	—	—	—
Mr. JIANG, Hongyuan (Resigned in May 2011)	姜洪源先生（2011年5月辭職）	—	—	—	—	—
Mr. FENG, Shuchen (Resigned in May 2011)	馮樹臣先生（2011年5月辭職）	—	—	—	—	—
		75	1,880	1,344	397	3,696

10 Individuals with highest emoluments

10 薪酬最高的個人

Of the five individuals with the highest emoluments, three (2011: three) are directors whose emoluments are disclosed in note 9. The aggregate of the emoluments in respect of the other two (2011: two) individuals are as follows

薪酬最高的五位個人中，其中三位(2011年：三位)為董事，其薪酬在附註9中進行了披露。其他兩位(2011年：兩位)個人的總薪酬如下：

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Salaries and other emoluments	工資及其他薪酬	**731**	678
Discretionary bonuses	酌情花紅	**459**	496
Retirement scheme contributions	退休金供款	**162**	156
		1,352	1,330

The emoluments of the two (2011: two) individuals with the highest emoluments are within the following band:

這兩位(2011年：兩位)具有最高薪酬的個人的薪酬範圍如下：

		2012 Number of individuals 人數	2011 Number of individuals 人數
Nil to HKD1,000,000	零至港幣1,000,000元	**2**	2

11 Profit attributable to equity shareholders/owners of the Company

11 歸屬於本公司權益股東╱所有者的利潤

The consolidated profit attributable to equity shareholders/owners of the Company includes a profit of RMB6,133,000 (2011: RMB34,161,000) which have been dealt with in the financial statements of the Company.

歸屬於本公司權益股東╱所有者的合併利潤額為人民幣6,133,000元（2011年：人民幣34,161,000元）已在本公司財務報表中列出。

Reconciliations of the above amount to the Company's profit for the year:

上述金額與本公司本年利潤的調整：

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Amount of consolidated profit attributable to equity shareholders/owners dealt with in the Company's financial statements	本公司財務報表中已列入的歸屬於本公司的權益股東╱所有者的合併利潤	**6,133**	34,161
Final dividends from subsidiaries and associates attributable to the profits of the previous financial year and approved during the year	歸屬於以前財政年度利潤並於本年批准的來自附屬公司及聯營公司的期末股息	**433,912**	251,807
Company's profit for the year (note 36(a))	本公司本年利潤（附註36(a)）	**440,045**	285,968

12 Other comprehensive income

12 其他綜合收益

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Exchange differences on translation of financial statements of operations outside PRC	換算中國境外業務財務報表產生的匯兑差額	**(135)**	(153)
Available-for-sale securities:	可供出售證券：		
Changes in fair value recognised during the year	當年確認的公允價值變動	**(23,958)**	—
Net movement in the fair value reserve during the year recognised in other comprehensive income	於其他綜合收益中確認的當年公允價值儲備的淨變動	**(23,958)**	—
Other comprehensive income	其他綜合收益	**(24,093)**	(153)

13 Earnings per share

The calculation of basic earnings per share is based on the profit attributable to ordinary equity shareholders/owners of the Company of RMB692,947,000 (2011: RMB840,681,000) and the weighted average of 6,059,794,000 ordinary shares (2011: 4,855,986,000 ordinary shares) in issue during the year, calculated as follows:

13 每股盈利

每股基本盈利的計算依據為歸屬於本公司普通股股東／所有人的利潤人民幣692,947,000元(2011年:人民幣840,681,000元)以及本年度發行在外普通股的加權平均數6,059,794,000股(2011年:4,855,986,000股普通股),計算如下:

Weighted average number of ordinary shares

普通股加權平均股數

		2012 '000 千股	2011 '000 千股
Issued ordinary shares at 1 January	於1月1日已發行的普通股	**5,942,500**	—
Effect of the Conversion (note)	轉制的影響(附註)	**—**	4,850,000
Effect of issuance of shares	發行股份的影響	**117,294**	5,986
Weighted average number of ordinary shares at 31 December	於12月31日普通股的加權平均數	**6,059,794**	4,855,986

There were no dilutive potential ordinary shares in existence during the years ended 31 December 2012 and 2011.

於截至2012年及2011年12月31日止年度內,本公司不存在稀釋性潛在普通股。

Note:

The Company was converted into a joint stock company with limited liability on 16 May 2011 by converting its equity into 4,850,000,000 ordinary shares. These ordinary shares were issued to its then existing equity owners for no additional consideration. Therefore, the weighted average number of ordinary shares outstanding during 2011 is adjusted as if the Conversion had occurred at the beginning of the earliest period presented. Details of the Conversion are set out in note 1.

附註:

本公司於2011年5月16日轉制為股份有限公司,將其權益轉換成4,850,000,000股普通股,該等普通股發行予本公司當時的權益所有者而毋須支付對價。因此,對2011年期間發行在外的普通股加權平均數進行了調整,如同上述轉制事宜發生於所列示的最早的報告期期初。關於資轉制的詳細說明,參見附註1。

14 Property, plant and equipment

14 物業、廠房及設備

The Group

本集團

		Land, buildings and structures 土地、樓宇及建築物 RMB'000 人民幣千元	Machinery and equipment 機器及設備 RMB'000 人民幣千元	Motor vehicles 汽車 RMB'000 人民幣千元	Furniture, fixtures and others 傢具、裝置及其他 RMB'000 人民幣千元	Construction in progress 在建工程 RMB'000 人民幣千元	Total 合計 RMB'000 人民幣千元
Cost:	**成本：**						
At 1 January 2011	2011年1月1日	2,835,499	2,207,553	131,627	169,612	4,556,879	9,901,170
Additions	增加	93,563	631,975	46,830	58,458	3,159,664	3,990,490
Transfer from construction in progress	在建工程轉入	1,025,687	2,304,745	2,395	19,708	(3,352,535)	—
Transfer to investment properties (note 15)	轉作投資性物業(附註15)	(106,051)	—	—	—	—	(106,051)
Disposal of subsidiaries	出售附屬公司	(638,816)	(1,829,402)	(25,834)	(13,047)	(470,306)	(2,977,405)
Disposal	出售	—	(3,321)	(2,393)	(1,113)	—	(6,827)
At 31 December 2011 and 1 January 2012	2011年12月31日及2012年1月1日	3,209,882	3,311,550	152,625	233,618	3,893,702	10,801,377
Additions	增加	**60,996**	**304,381**	**27,653**	**26,703**	**2,419,468**	**2,839,201**
Transfer from construction in progress	在建工程轉入	**1,107,241**	**2,622,326**	**—**	**19,928**	**(3,749,495)**	**—**
Transfer to investment properties (note 15)	轉作投資性物業(附註15)	**(114,357)**	**—**	**—**	**—**	**—**	**(114,357)**
Acquisition of subsidiaries (note 41(a) & (b))	收購附屬公司(附註41(a)和(b))	**177,503**	**261,632**	**2,175**	**29,670**	**250,665**	**721,645**
Disposal	出售	**(12,714)**	**(28)**	**(1,069)**	**(1,697)**	**—**	**(15,508)**
At 31 December 2012	2012年12月31日	**4,428,551**	**6,499,861**	**181,384**	**308,222**	**2,814,340**	**14,232,358**
Accumulated depreciation:	**累計折舊:**						
At 1 January 2011	2011年1月1日	81,304	249,297	42,320	35,638	—	408,559
Depreciation charge for the year	本年度折舊費	124,736	257,699	20,555	29,088	—	432,078
Transfer to investment properties (note 15)	轉作投資性物業(附註15)	(7,887)	—	—	—	—	(7,887)
Disposal of subsidiaries	出售附屬公司	(16,469)	(51,747)	(7,582)	(5,592)	—	(81,390)
Written back on disposal	因出售而撥回	—	(2,319)	(1,876)	(1,061)	—	(5,256)
At 31 December 2011 and 1 January 2012	2011年12月31日及2012年1月1日	181,684	452,930	53,417	58,073	—	746,104
Depreciation charge for the year	本年度折舊費	**144,054**	**399,601**	**23,535**	**27,506**	**—**	**594,696**
Transfer to investment properties (note 15)	轉作投資性物業(附註15)	**(454)**	**—**	**—**	**—**	**—**	**(454)**
Written back on disposal	因出售而撥回	**(2,261)**	**(1)**	**(952)**	**(1,443)**	**—**	**(4,657)**
At 31 December 2012	2012年12月31日	**323,023**	**852,530**	**76,000**	**84,136**	**—**	**1,335,689**
Net book value:	**賬面淨值：**						
At 31 December 2012	2012年12月31日	**4,105,528**	**5,647,331**	**105,384**	**224,086**	**2,814,340**	**12,896,669**
At 31 December 2011	2011年12月31日	3,028,198	2,858,620	99,208	175,545	3,893,702	10,055,273

14 Property, plant and equipment (continued)

14 物業、廠房及設備（續）

The Company

本公司

		Land, buildings and structures 土地、樓宇及建築物 RMB'000 人民幣千元	Machinery and equipment 機器及設備 RMB'000 人民幣千元	Motor vehicles 汽車 RMB'000 人民幣千元	Furniture, fixtures and others 傢具、裝置及其他 RMB'000 人民幣千元	Construction in progress 在建工程 RMB'000 人民幣千元	Total 合計 RMB'000 人民幣千元
Cost:	**成本：**						
At 1 January 2011	2011年1月1日	792,450	—	7,502	87,689	95,925	983,566
Additions	增加	16,510	—	2,549	1,020	499,970	520,049
Transfer from construction in progress	在建工程轉入	36,855	116,107	—	—	(152,962)	—
At 31 December 2011 and 1 January 2012	2011年12月31日及2012年1月1日	845,815	116,107	10,051	88,709	442,933	1,503,615
Additions	增加	**2,397**	**—**	**295**	**4,232**	**12,987**	**19,911**
Transfer from construction in progress	在建工程轉入	**22,087**	**428,259**	**—**	**59**	**(450,405)**	**—**
Transfer to investment properties (note 15)	轉作投資性物業（附註15）	**(161,434)**	**—**	**—**	**—**	**—**	**(161,434)**
Disposal	出售	**(12,714)**	**—**	**—**	**—**	**—**	**(12,714)**
At 31 December 2012	2012年12月31日	**696,151**	**544,366**	**10,346**	**93,000**	**5,515**	**1,349,378**
Accumulated depreciation:	**累計折舊：**						
At 1 January 2011	2011年1月1日	—	—	2,163	1,434	—	3,597
Depreciation charge for the year	本年度折舊費	26,588	938	1,416	615	—	29,557
At 31 December 2011 and 1 January 2012	2011年12月31日及2012年1月1日	26,588	938	3,579	2,049	—	33,154
Depreciation charge for the year	本年度折舊費	**23,894**	**18,921**	**1,408**	**1,213**	**—**	**45,436**
Transfer to investment properties (note 15)	轉作投資性物業（附註15）	**(4,839)**	**—**	**—**	**—**	**—**	**(4,839)**
Written back on disposal	因出售而撥回	**(2,261)**	**—**	**—**	**—**	**—**	**(2,261)**
At 31 December 2012	2012年12月31日	**43,382**	**19,859**	**4,987**	**3,262**	**—**	**71,490**
Net book value:	**賬面淨值：**						
At 31 December 2012	2012年12月31日	**652,769**	**524,507**	**5,359**	**89,738**	**5,515**	**1,277,888**
At 31 December 2011	2011年12月31日	819,227	115,169	6,472	86,660	442,933	1,470,461

14 Property, plant and equipment (continued)

Notes:

(i) The Group's and the Company's plants and buildings are located in the PRC.

(ii) As at 31 December 2012, certain of the Group's interest-bearing bank and other borrowings were secured by certain of the Group's buildings and machinery (see note 29), which had an aggregate net book value of RMB434,976,000. There were no borrowings secured by the Group's buildings and machinery as at 31 December 2011.

(iii) As at 31 December 2012, the Group is in the process of applying for the ownership certificates for certain of its properties. The aggregate carrying value of such properties of the Group as at 31 December 2012 is approximately RMB444,600,000 (2011: RMB229,193,000). The directors are of the opinion that the Group is entitled to lawfully occupy or use these properties.

(iv) The Group leases out a number of items of machinery and equipment to power plants under operating leases, details of the lease arrangements are set out in note 40(a)(i). As at 31 December 2012, the aggregate net book value of these assets amounted to RMB2,547,281,000 (2011: RMB1,915,356,000).

14 物業、廠房及設備（續）

附註：

(i) 本集團與本公司的廠房及樓宇均位於中國。

(ii) 於2012年12月31日，本集團的若干帶息的銀行及其他借款以本集團的若干樓宇及機器設備作抵押（見附註29），其賬面淨值總額為人民幣434,976,000元。於2011年12月31日，本集團樓宇及機器設備未對任何借款提供抵押。

(iii) 於2012年12月31日，本集團正在為若干物業辦理產權證。於2012年12月31日，本集團的此類物業總值為人民幣444,600,000元（2011年：229,193,000元）。董事們認為，本集團有權合法佔有或使用此等物業。

(iv) 本集團以經營租賃向電廠出租了若干機器及設備，關於租賃安排，參見附註40(a)(i)。於2012年12月31日，此等資產的賬面淨值總額為人民幣2,547,281,000元（2011年：人民幣1,915,356,000元）。

15 Investment properties

15 投資性物業

The Group

本集團

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Cost:	**成本：**		
At 1 January	1月1日	**276,202**	162,574
Additions	增加	**—**	7,577
Transfer from property, plant and equipment (note 14)	物業、廠房及設備轉入（附註14）	**114,357**	106,051
At 31 December	12月31日	**390,559**	276,202
Accumulated depreciation:	**累計折舊：**		
At 1 January	1月1日	**17,810**	3,426
Depreciation charge for the year	本年度折舊費	**7,798**	6,497
Transfer from property, plant and equipment (note 14)	物業、廠房及設備轉入（附註14）	**454**	7,887
At 31 December	12月31日	**26,062**	17,810
Net book value	**賬面淨值**	**364,497**	258,392

15 Investment properties (continued)

15 投資性物業（續）

The Company

本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Cost:	**成本：**		
At 1 January	1月1日	**903,531**	859,533
Additions	增加	**—**	43,998
Transfer from property, plant and equipment (note 14)	物業、廠房及設備轉入（附註14）	**161,434**	—
At 31 December	12月31日	**1,064,965**	903,531
Accumulated depreciation:	**累計折舊：**		
At 1 January	1月1日	**26,024**	—
Depreciation charge for the year	本年度折舊費	**29,479**	26,024
Transfer from property, plant and equipment (note 14)	物業、廠房及設備轉入（附註14）	**4,839**	—
At 31 December	12月31日	**60,342**	26,024
Net book value	**賬面淨值**	**1,004,623**	877,507

All the investment properties owned by the Group and the Company are located in the PRC.

本集團及本公司所有的投資性物業均位於中國。

The fair value of the Group's investment properties as at 31 December 2012 was RMB562,539,000 (2011: RMB415,109,000).

於2012年12月31日，本集團的投資性物業公允價值為人民幣562,539,000元(2011：人民幣415,109,000元）。

15 Investment properties (continued)

15 投資性物業（續）

(a) Investment properties leased out under operating lease

(a) 根據經營租賃出租的投資性物業

The Group and the Company lease out investment properties under operating leases. The leases typically run for an initial period of 1 to 15 years, with an option to renew the lease after that date at which time all terms are re-negotiated. Lease payments are usually adjusted upon the expiry of lease terms to reflect market rentals. None of the leases includes contingent rentals.

本集團及本公司以經營租賃租出投資性物業。一般初始租賃期均為1－15年，到期之後可以續租，屆時雙方將就所有租賃條款重新談判。租期到期之後一般根據市場租金進行調整。所有租賃合同均不存在或有租金。

The Group's and the Company's total future minimum lease payments under non-cancellable operating leases are receivable as follows:

在不可解除的經營租賃項下，本集團與本公司未來應收的最低租賃付款總額如下：

The Group **本集團**

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Within 1 year	1年內	**13,503**	28,238
After 1 year but within 5 years	1年後但5年內	**2,901**	15,980
		16,404	44,218

The Company **本公司**

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Within 1 year	1年內	**41,787**	14,894

16 Lease prepayments

16 預付土地租賃款

The Group

本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Cost:	**成本：**		
At 1 January	1月1日	**907,977**	564,060
Additions	增加	**37,716**	396,138
Acquisition of subsidiaries (note 41(a) & (b))	收購附屬公司（附註41(a)&(b)）	**29,014**	—
Disposal of subsidiaries	出售附屬公司	**—**	(52,221)
At 31 December	12月31日	**974,707**	907,977
Accumulated amortisation:	**累計攤銷：**		
At 1 January	1月1日	**22,628**	10,373
Amortisation for the year	本年度攤銷費	**18,552**	14,079
Disposal of subsidiaries	出售附屬公司	**—**	(1,824)
At 31 December	12月31日	**41,180**	22,628
Net book value	**賬面淨值**	**933,527**	885,349

Lease prepayments mainly represent prepayments for rights to use land, which is all located in the PRC, for own use properties with lease periods of 25 to 50 years. There were no unpaid lease prepayments as at 31 December 2012 and 2011.

預付土地租賃款主要是土地使用權預付款，所有使用土地均位於中國，作為自用物業，租賃期為25－50年。於2012年及2011年12月31日，均不存在未支付的預付土地租賃款。

As at 31 December 2012, the Group was in the process of applying for registration of the ownership certificates for certain of its land use rights. The aggregate carrying value of such land use rights of the Group as at 31 December 2012 is approximately RMB7,160,000 (2011: RMB9,632,000). The directors are of the opinion that the Group is entitled to lawfully occupy or use these land.

於2012年12月31日，本集團正在為若干土地使用權辦理產權證。於2012年12月31日，本集團的此等土地所有權總價值約為人民幣7,160,000元(2011：人民幣9,632,000元)。董事們認為，本集團有權合法地佔有或使用此等土地。

As at 31 December 2012, certain of the Group's interest-bearing bank and other borrowings were secured by certain of the Group's lease prepayments (see note 29), which had an aggregate net book value of RMB29,104,000. There was no borrowing secured by the Group's lease prepayments as at 31 December 2011.

於2012年12月31日，本集團的若干帶息的銀行及其他借款以本集團的若干預付土地租賃款作抵押（見附註29），其賬面淨值總額為人民幣29,104,000元。於2011年12月31日，本集團的預付土地租賃款未對任何借款提供抵押。

17 Intangible assets

17 無形資產

The Group

本集團

		Concession assets 特許權資產 RMB'000 人民幣千元	Technical know-how 專業技術 RMB'000 人民幣千元	Development costs 開發成本 RMB'000 人民幣千元	Software and others 軟件及其他 RMB'000 人民幣千元	Total 合計 RMB'000 人民幣千元
Cost:	**成本：**					
At 1 January 2011	2011年1月1日	463,025	157,559	32,024	17,547	670,155
Additions	增加	21,084	8,768	73,211	4,929	107,992
Disposal of subsidiaries	出售附屬公司	—	(65,236)	—	(3,316)	(68,552)
At 31 December 2011 and 1 January 2012	2011年12月31日及2012年1月1日	484,109	101,091	105,235	19,160	709,595
Additions	增加	**33,581**	**4,316**	**101,705**	**12,458**	**152,060**
Acquisition of subsidiaries (note 41(a) & (b))	收購附屬公司（附註41(a)&(b)）	**418,152**	**—**	**—**	**189**	**418,341**
At 31 December 2012	2012年12月31日	**935,842**	**105,407**	**206,940**	**31,807**	**1,279,996**
Accumulated amortisation:	**累計攤銷：**					
At 1 January 2011	2011年1月1日	10,532	28,644	548	3,660	43,384
Amortisation charge for the year	本年度攤銷費	9,246	12,715	1,184	2,986	26,131
Disposal of subsidiaries	出售附屬公司	—	(8,547)	—	(92)	(8,639)
At 31 December 2011 and 1 January 2012	2011年12月31日及2012年1月1日	19,778	32,812	1,732	6,554	60,876
Amortisation charge for the year	本年度攤銷費	**27,206**	**6,390**	**11,389**	**3,136**	**48,121**
At 31 December 2012	2012年12月31日	**46,984**	**39,202**	**13,121**	**9,690**	**108,997**
Net book value:	**賬面淨值：**					
At 31 December 2012	2012年12月31日	**888,858**	**66,205**	**193,819**	**22,117**	**1,170,999**
At 31 December 2011	2011年12月31日	464,331	68,279	103,503	12,606	648,719

Concession assets represent the rights the Group received for the usage of the concession water treatment plants for the treatment of water. The concession assets are amortised over the operating period of the service concession projects.

特許權資產指本集團享有使用特許的水處理廠進行水處理的權利。特許權資產在特許經營項目經營期間進行攤銷。

17 Intangible assets (continued)

The amortisation charges of RMB29,896,000 (2011: RMB15,678,000) and RMB18,225,000 (2011: RMB10,453,000) are included in "cost of sales" and "administrative expenses" in the consolidated income statement respectively.

Certain of the Group's interest-bearing bank and other borrowings were secured by concession assets (see note 29), which had an aggregate net book value of RMB540,171,000 (2011: RMB84,707,000).

17 無形資產(續)

合併收益表中的「銷售成本」及「行政開支」項目下分別包括無形資產攤銷費用人民幣29,896,000元(2011年:人民幣15,678,000元),以及人民幣18,225,000元(2011年:人民幣10,453,000元)。

本集團的若干帶息銀行及其他借款以特許權資產作抵押(見附註29),其賬面淨值總額為人民幣540,171,000元(2011年:人民幣84,707,000元)。

18 Goodwill

18 商譽

The Group

本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
At 1 January	1月1日	**7,082**	14,409
Acquisition of subsidiaries (note 41(a) & (b))	收購附屬公司(附註41(a)&(b))	**50,509**	—
Disposal of a subsidiary	出售附屬公司	**—**	(7,327)
		57,591	7,082

Goodwill is allocated to the Group's cash-generating units identified according to operation and operating segment as follows:

商譽分配到根據下列業務及經營分部劃分的本集團現金產生單元:

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Environmental protection	環保	**57,591**	7,082

The recoverable amounts of CGUs are determined based on value-in-use calculations. These calculations use cash flow projections based on financial budgets approved by management covering a five-year period. Cash flows beyond the five-year period are extrapolated using zero growth rate. The cash flows are discounted using discount rate of 14.5%. The discount rate used is pre-tax and reflect specific risks relating to the relevant segments.

現金產生單元的可收回數額乃按使用價值計算而確定。有關價值的計算根據本公司管理層批覆之五年期間的財務預算的現金流預測。超過五年期的現金流量採用零增長率推算。現金流量預測計算採用14.5%的折現率。所採用的折現率為稅前折現率,並反映相關分部的特定風險。

19 Investments in subsidiaries

19 對附屬公司的投資

The Company

本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Unlisted shares, at cost	非上市股份,按成本計算	**4,982,710**	3,755,710
PRC listed shares, at cost	中國上市股份,按成本計算	**14,114**	14,114
		4,996,824	3,769,824
Market value of PRC listed shares	中國上市股份的市值	**1,455,787**	1,888,908

The following list contains the particulars of subsidiaries as at 31 December 2012 which principally affected the results, assets or liabilities of the Group. All of the PRC Subsidiaries are limited liability companies.

於2012年12月31日,對本集團業績、資產或負債具有主要影響的附屬公司的詳情列舉如下。所有中國附屬公司均為有限責任公司。

			Proportion of ownership interest 所有者權益比例			
Name of the company 公司名稱	Place of establishment/ incorporation 成立/註冊地	Issued and fully paid-up capital 已發行且全部繳足的資本	Group's effective interest 本集團的有效權益	Held by the Company 由本公司持有	Held by subsidiaries 由附屬公司持有	Principal activities 主營業務
Beijing Guodian Longyuan Environmental Engineering Co., Ltd. (北京國電龍源環保工程有限公司)	The PRC 中國	RMB1,510,000,000 人民幣1,510,000,000	100%	100%	—	Provision of desulphurisation and other environmental protection engineering services 提供脱硫及其他環保工程服務
Jiangsu Deke Environmental Equipment Co., Ltd. (江蘇德克環保設備有限公司)	The PRC 中國	RMB80,000,000 人民幣80,000,000	67.46%	—	67.46%	Production and sale of environmental protection equipment 環保設備的生產與銷售
Beijing Longyuan Environmental Engineering Co., Ltd. (北京龍源環保工程有限公司)	The PRC 中國	RMB33,750,000 人民幣33,750,000	51%	—	51%	Provision of desulphurisation and other environmental protection engineering services 提供脱硫及其他環保工程服務
Zhoushan Longxi Environment Engineering Co., Ltd. (舟山龍熹環保工程有限公司)	The PRC 中國	RMB33,340,000 人民幣33,340,000	36.21%	—	71%	Design and construction of environmental protection projects 環保項目的設計及施工
Bengbu Guodian Longyuan Environmental Development Co., Ltd. (蚌埠國電龍源環保發展有限公司)	The PRC 中國	RMB30,000,000 人民幣30,000,000	100%	—	100%	Operation of environmental protection facilities 環保設施的經營

(Expressed in Renminbi unless otherwise indicated)

19 Investments in subsidiaries (continued)

19 對附屬公司的投資(續)

Name of the company 公司名稱	Place of establishment/ incorporation 成立/註冊地	Issued and fully paid-up capital 已發行且全部繳足的資本	Proportion of ownership interest 所有者權益比例 Group's effective interest 本集團的有效權益	Held by the Company 由本公司持有	Held by subsidiaries 由附屬公司持有	Principal activities 主營業務
Jiangsu Longyuan Catalyst Co., Ltd. (江蘇龍源催化劑有限公司)	The PRC 中國	RMB50,000,000 人民幣50,000,000	100%	—	100%	Production and sale of selective catalytic reduction catalyst 選擇性催化還原催化劑的生產與銷售
Tonghua Guodian Longyuan Environment Engineering Co., Ltd. (通化國電龍源環境技術有限公司)	The PRC 中國	RMB26,000,000 人民幣26,000,000	100%	—	100%	Generation and sale of electricity 發電及銷售
Guodian Longyuan Nanjing Membrane Technology Co., Ltd. (國電龍源南京膜技術有限公司)	The PRC 中國	RMB25,000,000 人民幣25,000,000	84%	—	100%	Production and sale of membrane, water treatment equipment and electric equipment 膜組件、水處理設備及電氣設備的生產與銷售
Nanjing Longyuan Environmental Co., Ltd. (南京龍源環保有限公司)	The PRC 中國	RMB101,000,000 人民幣101,000,000	60%	—	60%	Provision of environmental protection engineering services 提供環保工程服務
Puyang Guodian Longyuan Water Treatment Co., Ltd. (濮陽國電龍源水務有限公司)	The PRC 中國	RMB10,000,000 人民幣10,000,000	70%	—	70%	Operation of water treatment projects 水處理項目的經營
Guodian Technology & Environment Group Hong Kong Corporation Limited (國電科環集團(香港)有限公司)	Hong Kong 香港	2,000,000 ordinary shares of HK$1 each 2,000,000股普通股,每股1元港幣	100%	100%	—	Sale of desulphurisation equipment 脱硫設備的銷售
Beijing Lucency Environment and Technology Co., Ltd. (北京朗新明環保科技有限公司)	The PRC 中國	RMB500,000,000 人民幣500,000,000	100%	100%	—	Construction and operation of water treatment projects 水處理項目的施工與經營
Dalian Delang Water Treatment Co., Ltd. (大連德朗水務有限公司)	The PRC 中國	RMB20,000,000 人民幣20,000,000	51%	—	51%	Operation of water treatment projects 水處理項目的經營
Shanxi Xinyuan Environment Protection Resources Development Co., Ltd. (山西新源環保資源開發有限責任公司)	The PRC 中國	RMB13,000,000 人民幣13,000,000	51%	—	51%	Construction and operation of water treatment projects 水處理項目的施工與經營
Taiyuan Lucency Sewage Treatment Co., Ltd. (太原朗新明污水處理有限公司)	The PRC 中國	RMB102,000,000 人民幣102,000,000	80%	—	80%	Design and installation of sewage treatment equipment 污水處理設備的設計與安裝

(Expressed in Renminbi unless otherwise indicated)

19 Investments in subsidiaries (continued)

19 對附屬公司的投資(續)

Name of the company 公司名稱	Place of establishment/ incorporation 成立/註冊地	Issued and fully paid-up capital 已發行且全部繳足的資本	Proportion of ownership interest 所有者權益比例: Group's effective interest 本集團的有效權益	Held by the Company 由本公司持有	Held by subsidiaries 由附屬公司持有	Principal activities 主營業務
Qingdao Galaxy Water Corporation Limited ("Galaxy Water") (note (v)) (青島銀河水務股份有限公司)(「銀河水務」)(附註(v))	The PRC 中國	300,000,000 shares of RMB1 each 300,000,000股,每股人民幣1元	70%	—	100%	Construction and operation of water treatment projects 水處理項目的施工與經營
Shanxian Jiashan River Water Treatment Co., Ltd. (note (v)) (單縣嘉單河污水處理有限公司)(附註(v))	The PRC 中國	RMB15,000,000 人民幣15,000,000	70%	—	100%	Construction and operation of water treatment projects 水處理項目的施工與經營
Galaxy Water (Shouguang) Co., Ltd. (note (v)) (銀河水務(壽光)有限公司)(附註(v))	The PRC 中國	RMB60,000,000 人民幣60,000,000	70%	—	100%	Construction and operation of water treatment projects 水處理項目的施工與經營
Galaxy Water (Dezhou) Co., Ltd. (note (v)) (銀河水務(德州)有限公司)(附註(v))	The PRC 中國	RMB21,409,200 人民幣21,409,200	70%	—	100%	Construction and operation of water treatment projects 水處理項目的施工與經營
Galaxy Water (Cahngle) Co., Ltd. (note (v)) (銀河水務(昌樂)有限公司)(附註(v))	The PRC 中國	RMB26,000,000 人民幣26,000,000	70%	—	100%	Construction and operation of water treatment projects 水處理項目的施工與經營
Caoxian Season River Water Treatment Co., Ltd. (note (v)) (曹縣四季河污水處理有限公司)(附註(v))	The PRC 中國	RMB12,000,000 人民幣12,000,000	70%	—	100%	Construction and operation of water treatment projects 水處理項目的施工與經營
Galaxy Water (Tengzhou Mushi) Co., Ltd. (note (v)) (銀河水務(滕州木石)有限公司)(附註(v))	The PRC 中國	RMB13,250,000 人民幣13,250,000	70%	—	100%	Construction and operation of water treatment projects 水處理項目的施工與經營
Qingdao Galaxy Water Technology Management Co., Ltd. (note (v)) (青島銀河水務技術管理有限公司)(附註(v))	The PRC 中國	RMB48,000,000 人民幣48,000,000	70%	—	100%	Construction and operation of water treatment projects 水處理項目的施工與經營
Jining Galaxy Water Treatment Co., Ltd. (note (v)) (濟寧銀河水務處理有限公司)(附註(v))	The PRC 中國	RMB51,710,400 人民幣51,710,400	44.50%	—	63.57%	Construction and operation of water treatment projects 水處理項目的施工與經營
Galaxy Water (Tengzhou) Co., Ltd. (note (v)) (銀河水務(滕州)有限公司)(附註(v))	The PRC 中國	RMB47,000,000 人民幣47,000,000	70%	—	100%	Construction and operation of water treatment projects 水處理項目的施工與經營

(Expressed in Renminbi unless otherwise indicated)

19 Investments in subsidiaries (continued)

19 對附屬公司的投資(續)

Name of the company 公司名稱	Place of establishment/ incorporation 成立/註冊地	Issued and fully paid-up capital 已發行且全部繳足的資本	Proportion of ownership interest 所有者權益比例: Group's effective interest 本集團的有效權益	Held by the Company 由本公司持有	Held by subsidiaries 由附屬公司持有	Principal activities 主營業務
Zhucheng Galaxy Water Treatment Co., Ltd. (note (v)) (諸城銀河污水處理有限公司) (附註(v))	The PRC 中國	RMB50,000,000 人民幣50,000,000	48.61%	—	69.44%	Construction and operation of water treatment projects 水處理項目的施工與經營
Guodian United Power Technology Co., Ltd. (國電聯合動力技術有限公司)	The PRC 中國	RMB1,695,903,400 人民幣1,695,903,400	70%	70%	—	Research and development of wind turbine technology 風力機技術的研發
Guodian United Power Technology (Baoding) Co., Ltd. (國電聯合動力技術(保定)有限公司)	The PRC 中國	RMB220,000,000 人民幣220,000,000	70%	—	100%	Production and sale of wind turbine 風力機的生產與銷售
Guodian United Power Technology (Baotou) Co., Ltd. (國電聯合動力技術(包頭)有限公司)	The PRC 中國	RMB260,000,000 人民幣260,000,000	38.77%	—	55.38%	Production and sale of wind turbine 風力機的生產與銷售
Guodian United Power Technology (Lianyungang) Co., Ltd. (國電聯合動力技術(連雲港)有限公司)	The PRC 中國	RMB150,000,000 人民幣150,000,000	70%	—	100%	Production and sale of wind turbine 風力機的生產與銷售
Guodian United Power Technology (Chifeng) Co., Ltd. (國電聯合動力技術(赤峰)有限公司)	The PRC 中國	RMB105,000,000 人民幣105,000,000	70%	—	100%	Production and sale of wind turbine 風力機的生產與銷售
Guodian United Power Technology (Yixing) Co., Ltd. (國電聯合動力技術(宜興)有限公司)	The PRC 中國	RMB50,000,000 人民幣50,000,000	59.50%	—	85%	Production and sale of wind turbine 風力機的生產與銷售
Beijing Long Wei Power Generation Technology Co., Ltd. (北京龍威發電技術有限公司)	The PRC 中國	RMB40,000,000 人民幣40,000,000	42%	—	60%	Production and sale of steam turbine 汽輪機的生產與銷售
Guodian United Power Technology (Jiangsu) Co., Ltd. (國電聯合動力技術(江蘇)有限公司)	The PRC 中國	RMB40,000,000 人民幣40,000,000	61.25%	—	87.50%	Production and sale of wind turbine 風力機的生產與銷售
Guodian United Power Technology (Changchun) Co., Ltd. (國電聯合動力技術(長春)有限公司)	The PRC 中國	RMB5,000,000 人民幣5,000,000	70%	—	100%	Production and sale of wind turbine 風力機的生產與銷售

(Expressed in Renminbi unless otherwise indicated)

19 Investments in subsidiaries (continued) 19 對附屬公司的投資(續)

Name of the company 公司名稱	Place of establishment/ incorporation 成立/註冊地	Issued and fully paid-up capital 已發行且全部繳足的資本	Proportion of ownership interest 所有者權益比例: Group's effective interest 本集團的有效權益	Held by the Company 由本公司持有	Held by subsidiaries 由附屬公司持有	Principal activities 主營業務
Guodian United Power Technology (Weifang) Co., Ltd. (note (ii)) (國電聯合動力技術(濰坊)有限公司) (附註(ii))	The PRC 中國	RMB24,000,000 人民幣24,000,000	42%	—	60%	Production and sale of wind turbine 風力機的生產與銷售
Guodian United Power American LLC. (note (ii))(附註(ii))	United States 美國	USD2,000,000 美元2,000,000	70%	—	100%	Sale of Solar cells 太陽能電池的銷售
Guodian Solar (Jiangsu) Co., Ltd. (國電光伏(江蘇)有限公司)	The PRC 中國	RMB1,483,000,000 人民幣1,483,000,000	100%	100%	—	Production and sale of solar cells 太陽能電池的生產與銷售
Jiangsu Zhaojing Optoelectronics Technology Co., Ltd. ("Zhaojing") (note (v)) (江蘇兆晶光電科技發展有限公司) (「兆晶公司」)(附註(v))	The PRC 中國	RMB300,000,000 人民幣300,000,000	51%	—	51%	Production and sale of solar cells 太陽能電池的生產與銷售
Guodian Solar System Technology (Shanghai) Co., Ltd. (note (iii)) (國電太陽能系統科技(上海)有限公司) (附註(iii))	The PRC 中國	RMB20,000,000 人民幣20,000,000	50%	—	50%	Construction of solar power generation system 太陽能發電系統的施工建設
Guodian Longyuan Power Technology and Engineering Co., Ltd. (國電龍源電力技術工程有限責任公司)	The PRC 中國	RMB244,727,000 人民幣244,727,000	100%	100%	—	Provision of energy conservation engineering services 提供節能工程服務
Guodian Longyuan Energy Saving Technology Co., Ltd. (國電龍源節能技術有限公司)	The PRC 中國	RMB100,000,000 人民幣100,000,000	99.58%	—	100%	Provision of energy conservation engineering services 提供節能工程服務
Yantai Longyuan Power Technology Co., Ltd. (note (iv)) (煙台龍源電力技術股份有限公司) (附註(iv))	The PRC 中國	285,120,000 shares of RMB1 each 285,120,000股,每股人民幣1元	23.25%	23.25%	—	Production and sale of thermal energy equipment 熱能設備的生產與銷售
Guodian Longyuan Technologies USA Corporation	United States 美國	USD2,000,000 美元2,000,000	23.25%	—	100%	Production and sale of igniters and other electric equipment 點火器及其他電氣設備的生產與銷售

(Expressed in Renminbi unless otherwise indicated)

19 Investments in subsidiaries (continued)

19 對附屬公司的投資(續)

Name of the company 公司名稱	Place of establishment/ incorporation 成立/註冊地	Issued and fully paid-up capital 已發行且全部繳足的資本	Proportion of ownership interest 所有者權益比例 — Group's effective interest 本集團的有效權益	Held by the Company 由本公司持有	Held by subsidiaries 由附屬公司持有	Principal activities 主營業務
Beijing Huadian Tianren Power Controlling Technology Co., Ltd. (北京華電天仁電力控制技術有限公司)	The PRC 中國	RMB24,232,100 人民幣24,232,100	90%	90%	—	Production and sale of variable-pitch control system for wind turbine 風力發電機組變槳控制系統的生產與銷售
Guodian Longyuan Electrical Co., Ltd. (國電龍源電氣有限公司)	The PRC 中國	RMB14,932,900 人民幣14,932,900	51%	51%	—	Production and sale of wind turbine components 風力機部件的生產與銷售

Notes:

(i) Except for Guodian Technology & Environment Group Hong Kong Corporation Limited, Guodian Longyuan Technologies USA Corporation and Guodian United Power American LLC, the English translation of the names of other entities is for identification only. The official names of these entities are in Chinese.

(ii) These companies were newly established in 2012.

(iii) The Group appointed and has the power to appoint the directors of this company to govern the financial and operating policies of this company so as to obtain benefits from its activities since the establishment of this company.

(iv) The Company is the biggest equity owner of this company and no other equity owners individually or in the aggregate had the power to control this company according to the articles of association. Historically, the Company controlled the operation of this company by appointing senior management, approving annual budget and determining the remuneration of employees, etc. The Company has agreements with certain shareholders of this company, whereby such equity owners have agreed to vote in concert with the Company since the establishment of this company. The PRC lawyer of the Company confirmed that these agreements are valid under relevant PRC laws. Considering the above mentioned factors, the directors are of the opinion that the Company controlled this company during the years presented.

(v) These companies were acquired through business combinations in 2012 (note 41(a) & (b)).

附註：

(i) 除Guodian Technology & Environment Group Hong Kong Corporation Limited，Guodian Longyuan Technologies USA Corporation 以及Guodian United Power American LLC的英文名稱之外，其餘英文名稱僅用於識別之用，該等公司的正式名稱為中文名稱。

(ii) 該等公司是於2012年新成立的公司。

(iii) 該公司成立以來，本集團即已任命了、並有權任命該公司的董事以支配該公司的財務與經營政策並從而自該公司的經營活動中取得收益。

(iv) 本公司是該公司最大的權益所有者，根據該公司的公司章程，不存在個別地或集體地有能力控制該公司的其他權益所有者。在該公司歷史上，本公司通過任命高級管理人員、年度預算審批及確定僱員薪酬等，一直對該公司的經營享有控制權。自該公司成立以來，本公司與該公司的若干股東簽訂了協議，根據協議規定，此等股東同意與本公司投出一致的投票。本公司的中國律師確認，此等協議在中國法律項下具有效力。鑒於上述因素，董事們認為，在報告年限內，本公司對該公司具有控制權。

(v) 於2012年通過業務合併收購了該等公司(見附註41(a)&(b))。

20 Interests in associates 20 對聯營公司的投資

The Group 本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Share of net assets	應佔資產淨值	**476,811**	290,798
Amounts due from associates	聯營公司之欠款	**1,200**	1,200
		478,011	291,998

The Company 本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Unlisted shares, at cost	非上市股份,按成本計算	**63,116**	63,116

(Expressed in Renminbi unless otherwise indicated)

20 Interests in associates (continued)

20 對聯營公司的投資（續）

The following list contains the particulars of associates, all of which are unlisted corporate entities and established in the PRC, which principally affected the results or assets of the Group as at 31 December 2012:

下表列出了對本集團2012年12月31日的業績或資產具有重大影響的聯營公司的詳情，所有這些公司均未掛牌上市，並成立於中國。

Name of the company 公司名稱	Place of establishment 成立地	Issued and fully paid-up capital 已發行且已全部繳足的資本	Proportion of ownership interest 所有者權益比例			Principal activities 主營業務
			Group's effective interest 本集團的有效權益	Held by the Company 由本公司持有	Held by a subsidiary 由附屬公司持有	
Beijing Longyuan Cooling Technology Ltd. *(note (ii))* (北京龍源冷卻技術有限公司)(附註(ii))	The PRC 中國	RMB50,000,000 人民幣50,000,000	60%	60%	—	Production and installation of cooling equipment 冷卻設備的生產與安裝
Beijing Guodian Zhishen Control Technology Co., Ltd. (北京國電智深控制技術有限公司)	The PRC 中國	RMB53,900,000 人民幣53,900,000	46.86%	46.86%	—	Research and development of automatic control system of thermal power generation units 火電機組自控系統的研發
Datong Sunshine Desulphurisation Preparation Co., Ltd. (大同陽光脱硫製劑有限公司)	The PRC 中國	RMB8,000,000 人民幣8,000,000	20%	—	20%	Production and sale of lime and limestone powder 石灰與石灰粉的生產與銷售
Guodian Jintech Solar Energy Technology (Yixing) Co., Ltd. (國電晶德太陽能科技（宜興）有限公司)	The PRC 中國	RMB234,179,000 人民幣234,179,000	26.67%	—	26.67%	Design, production and sale of solar power generation equipment 太陽能發電設備的設計、生產與銷售
Dalian Economic and Technical Development Zone Drain Management Co., Ltd. (大連經濟技術開發區排水管理有限公司)	The PRC 中國	RMB48,422,000 人民幣48,422,000	50%	—	50%	Management and operation of water treatment projects 水處理項目的管理與經營
Taian Daiyue Galaxy Water Co, Ltd (note (iii)) (泰安岱岳銀河污水有限公司)(附註(iii))	The PRC 中國	RMB48,000,000 人民幣48,000,000	28%	40%	—	Management and operation water treatment projects 水處理項目的管理與經營

Notes:

(i) The English translation of the names is for identification only. The official names of these entities are in Chinese.

(ii) According to the articles of association of this company, the resolutions in relation to material financial and operating decisions have to be passed by three-fourth of directors. As the Company only has rights to appoint four out of seven directors of this company, the Company does not have power to control the financial and operating policies of this company although the Company owns more than half of equity interests and voting power in this company.

(iii) This company was acquired through business combinations in 2012 (note 41(a) & (b)).

附註：

(i) 公司的英文名稱僅為識別之用，這些公司的正式名稱均為中文名稱。

(ii) 根據該公司的公司章程，關於重大財務及經營決策的決議需要四分之三董事通過。在該公司的七名董事之中，由於公司僅有權任命其中的四名董事，因此儘管本公司持有該公司過半數的權益及表決權，本公司對該公司的財務及經營政策不具有控制權。

(iii) 於2012年通過業務合併收購該公司（見附註41(a)&(b)）。

20 Interests in associates (continued) 20 對聯營公司的投資(續)

Summary financial statements on associates: 聯營公司財務報表概要：

		Assets 資產 RMB'000 人民幣千元	Liabilities 負債 RMB'000 人民幣千元	Equity 權益 RMB'000 人民幣千元	Revenues 收入 RMB'000 人民幣千元	Profit 利潤 RMB'000 人民幣千元
2012	**2012年**					
100 percent	100%	**2,981,510**	**(1,973,171)**	**1,008,339**	**1,171,497**	**46,599**
Group's effective interest	本集團的有效權益	**1,384,781**	**(907,970)**	**476,811**	**596,212**	**34,843**
2011	2011年					
100 percent	100%	2,922,014	(2,096,736)	825,278	1,349,581	129,865
Group's effective interest	本集團的有效權益	1,306,853	(1,016,055)	290,798	689,797	22,547

21 Other equity investments 21 其他權益投資

The Group 本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Unlisted equity securities, at cost	非上市權益證券，按成本計算	**160,787**	112,255
Listed available-for-sale equity securities in Hong Kong	於香港上市可供出售權益證券	**169,034**	—
		329,821	112,255

The Company 本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Unlisted equity securities, at cost	非上市權益證券，按成本計算	**156,070**	107,538
Listed available-for-sale equity securities in Hong Kong	於香港上市可供出售權益證券	**169,034**	—
		325,104	107,538

22 Other non-current assets

22 其他非流動資產

The Group

本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Long-term trade receivables due from: (note (i))	長期應收賬款:(附註(i))		
— related parties under Guodian	— 國電下屬的關聯方	**242,105**	140,445
— third parties	— 第三方	**204,983**	130,805
Less: current portion of long-term trade receivables	減:長期應收款的即期部分	**(143,683)**	(64,486)
		303,405	206,764
Long-term service concession receivables due from third parties (note (ii))	應收第三方服務特許權長期應收款項(附註(ii))	**832,706**	—
Less: current portion of long-term service concession receivables	減:服務特許權長期應收款項的即期部分	**(16,194)**	—
		816,512	—
Long-term retention receivables due from: (note (iii))	長期應收質保金款項:(附註(iii))		
— related parties under Guodian	— 國電下屬的關聯方	**272,911**	309,095
— third parties	— 第三方	**1,677,150**	180,115
		1,950,061	489,210
Long-term loans to third parties (note (iv))	提供給第三方的長期貸款(附註(iv))	**13,910**	37,587
Less: current portion of long-term loans	減:長期貸款的即期部分	**—**	(10,160)
		13,910	27,427
Non-current financial assets	非流動金融資產	**3,083,888**	723,401
Long-term prepayments	長期預付款	**17,610**	21,550
Deductible VAT (note (v))	可抵扣增值稅(附註(v))	**762,689**	1,552,401
		3,864,187	2,297,352

22 Other non-current assets (continued)

22 其他非流動資產(續)

The Company

本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Long-term trade receivables due from: (note (i))	長期應收賬款:(附註(i))		
— related parties under Guodian	— 國電下屬的關聯方	**152,142**	132,265
— third parties	— 第三方	**7,360**	71,630
Less: current portion of long-term trade receivables	減:長期應收賬款的即期部分	**(57,126)**	(56,305)
Non-current financial assets	非流動金融資產	**102,376**	147,590
Deductible VAT (note (v))	可抵扣增值稅(附註(v))	**55,767**	9,790
		158,143	157,380

Notes:

(i) Long-term trade receivables represent trade receivables of certain construction contracts which are repayable by instalments over a 3 to 8-year period.

(ii) Long-term service concession receivables due from third parties represent the amounts contractually and unconditionally receivable in connection with construction services under concession arrangements (note 43).

(iii) Long-term retention receivables represent retentions of sales of wind turbines which will be received when the retention period elapses.

(iv) A loan to third party represents an unsecured interest-free loan amounting to RMB13,910,000 which is repayable by instalment from 2015 to 2034.

(v) Deductible VAT represents the input VAT in excess of output VAT. Input VAT is recognised for the purchase of manufacturing raw materials and components and acquisitions of machinery and equipment used for operation. Input VAT will be deductible from output VAT payable for goods to be sold in subsequent years.

(vi) All non-current financial assets of the Group and the Company are neither past due nor impaired.

附註:

(i) 長期應收賬款指在3-8年期內分期償付的若干建造合同項下的應收賬款。

(ii) 應收第三方服務特許權長期應收款項指與特許經營安排下的建造服務相關之約定及無條件應收款項(附註43)。

(iii) 長期應收質保金款項指質保期滿之後將收回的風力機銷售質保金款項。

(iv) 提供給第三方的貸款包括無擔保的無息貸款人民幣13,910,000元,該筆貸款將於2015年至2034年分期償還。

(v) 可抵扣增值稅指進項增值稅超過銷項增值稅的部分。進項增值稅於購買生產用原材料和部件以及購買經營用機器及設備時確認。進項增值稅可從後續年度出售貨物應支付的銷項增值稅中抵扣。

(vi) 本集團及本公司的所有非流動金融資產既未逾期,亦未發生減值。

23 Inventories

23 存貨

(a) Inventories in the consolidated balance sheet comprises:

(a) 合併資產負債表中的存貨包括:

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Raw materials	原材料	**1,203,633**	873,019
Work in progress	在產品	**290,172**	481,775
Finished goods	產成品	**1,797,170**	6,080,419
Spare parts	備件	**15,959**	53,692
		3,306,934	7,488,905

(b) The analysis of the amount of inventories recognised as an expense and included in the consolidated income statement is as follows:

(b) 在合併收益表中確認為費用的存貨金額如下:

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Carrying amount of inventories sold	售出存貨的賬面金額	**11,538,509**	9,876,078
Write down of inventories	存貨撇減	**66,467**	36,154
		11,604,976	9,912,232

24 Gross amounts due from/to customers for contract work

24 應收/應付建造合同客戶款項總額

The Group 本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Contract costs incurred plus recognised profits less recognised losses in connection with construction contracts in progress	在建中建造合同已發生合同成本加已確認利潤減已確認的損失	**16,103,514**	11,423,133
Less: progress billings	減:工程進度款	**(14,801,659)**	(10,302,721)
		1,301,855	1,120,412
Gross amounts due from customers for contract work (notes (ii) and (iii))	應收建造合同客戶款項總額(附註(ii)與(iii))	**1,946,700**	1,638,456
Gross amounts due to customers for contract work (note (iv))	應付建造合同客戶款項總額(附註(iv))	**(644,845)**	(518,044)
		1,301,855	1,120,412

The Company 本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Contract costs incurred plus recognised profits less recognised losses in connection with construction contracts in progress	在建中建造合同已發生合同成本加已確認利潤減已確認的損失	**—**	10,554
Gross amounts due from customers for contract work (notes (ii) and (iii))	應收建造合同客戶款項總額(附註(ii)與(iii))	**—**	10,554

24 Gross amounts due from/to customers for contract work (continued)

Notes:

(i) Gross amounts due from customers for contract work represent unbilled revenue for contract work and are presented as assets in the consolidated balance sheet. Gross amounts due to customers for contract work represent the amounts billed in advance of the contract work delivered and are presented as liabilities in the consolidated balance sheet.

(ii) The gross amounts due from customers for contract work of the Group include amounts of RMB1,571,893,000 (2011: RMB1,069,492,000) due from related parties under Guodian. All gross amounts due from customers for contract work of the Company as at 31 December 2011 are due from related parties under Guodian.

(iii) As at 31 December 2012, except for amounts of RMB95,815,000 (2011: RMB66,509,000) which are payable to the Group after the retention period of construction contracts, all of the remaining gross amounts due from customers for contract work of the Group are expected to be recovered within one year. As at 31 December 2011, all of the gross amounts due from customers for contract work of the Company are expected to be recovered within one year.

(iv) Included in the gross amounts due to customers for contract work are amounts of RMB421,137,000 (2011: RMB244,073,000) due to related parties under Guodian.

24 應收／應付建造合同客戶款項總額（續）

附註：

(i) 應收建造合同客戶款項總額指合同工程項下未發賬單的收入，在合併資產負債表中列為資產。應付建造合同客戶款項總額指已發賬單金額多於已完成工程的金額，在資產負債表內列為負債。

(ii) 本集團應收建造合同客戶款項總額包括應從國電下屬的關聯方收取的款額人民幣1,571,893,000元（2011年：人民幣1,069,492,000元）。於2011年12月31日，本公司應收建造合同客戶款項總額均為應從國電下屬關聯方收取的賬款。

(iii) 於2012年12月31日，除建造合同項下的保修期滿之後應付給本集團的人民幣95,815,000元（2011年：人民幣66,509,000元）之外，本集團應收建造合同客戶款項總額的所有剩餘賬款，預計將在一年之內收回。於2011年12月31日，本公司應收建造合同客戶款項總額的所有賬款，預計將在一年之內收回。

(iv) 包括在應付建造合同客戶款項總額之內的應支付給國電下屬的關聯方的款項為人民幣421,137,000元（2011年：人民幣244,073,000元）。

25 Trade and bills receivables

25 應收賬款及票據

The Group

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		2012 **RMB'000** **人民幣千元**	2011 RMB'000 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	**2,930,806**	2,958,402
— associates	— 聯營公司	**—**	10,436
— third parties	— 第三方	**1,151,661**	740,572
		4,082,467	3,709,410
Bills receivable for contract work due from:	合同工程的應收票據：		
— related parties under Guodian	— 國電下屬的關聯方	**1,449,447**	82,932
— third parties	— 第三方	**280,599**	227,157
		1,730,046	310,089
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	**531,402**	327,352
— third parties	— 第三方	**8,282**	4,938
		539,684	332,290
Trade receivables for sale of goods and rendering of services due from: (note (ii))	銷售商品及提供服務的應收賬款：（附註(ii)）		
— Guodian	— 國電	**—**	145
— related parties under Guodian	— 國電下屬的關聯方	**1,372,583**	863,546
— associates	— 聯營公司	**33,255**	11,530
— third parties	— 第三方	**6,142,653**	3,299,075
		7,548,491	4,174,296
Bills receivable for sale of goods and rendering of services due from third parties (note (ii))	應收第三方的銷售商品及提供服務的應收票據（附註(ii)）	**495,509**	1,495,265
		14,396,197	10,021,350
Less: allowance for doubtful debts	減：呆壞賬撥備	**(135,474)**	(95,772)
		14,260,723	9,925,578

25 Trade and bills receivables (continued)

25 應收賬款及票據(續)

The Company

本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 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	**71,698**	—
— third parties	— 第三方	**96,404**	82,427
		168,102	82,427
Trade receivables for sale of goods and rendering of services due from:	銷售商品及提供服務的應收賬款:		
— related parties under Guodian	— 國電下屬的關聯方	**245**	56,903
— third parties	— 第三方	**84,990**	25,106
		85,235	82,009
Bills receivable for sale of goods and rendering of services due from a subsidiary	應收附屬公司的銷售商品及提供服務的應收票據	**51,500**	6,464
		304,837	170,900
Less: allowance for doubtful debts	減:呆壞賬撥備	**(12,128)**	(12,128)
		292,709	158,772

Notes:

(i) Trade and bills receivables of the Group include bills discounted to banks or endorsed to suppliers and factored trade receivables with recourse totalling RMB1,559,634,000 (2011: RMB707,123,000). These receivables were not derecognised as the Group remains exposed to the credit risk of these receivables. The carrying amount of the associated bank loans and trade payables amounted to RMB1,491,103,000 (2011: RMB690,769,000). As at 31 December 2012, the fair value of the transferred assets and the associated liabilities is the same as their carrying amount, with the net position of RMB68,531,000.

(ii) As at 31 December 2012, trade receivables of the Group amounting to RMB335,259,000 (2011: RMB335,620,000) was pledged as collateral for long-term bank loans (see note 29).

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

附註:

(i) 本集團的應收賬款及票據包括貼現給銀行的票據、或背書轉讓給供應商的票據,以及帶追索權的應收賬款保理,總額為人民幣1,559,634,000元(2011年:人民幣707,123,000元)。這些應收賬款和票據未被中止確認,因為本集團仍對這些應收賬款和票據具有信用風險。相關銀行貸款及應付賬款的賬面金額為人民幣1,491,103,000元(2011年:人民幣690,769,000元)。於2012年12月31日,轉讓資產的公允價值及關聯負債與其賬面金額相同,淨差額為人民幣68,531,000元。

(ii) 於2012年12月31日,本集團作為長期銀行貸款押物而質押的應收賬款為人民幣335,259,000元(2011年:人民幣335,620,000元)(見附註29)。

本集團與本公司的所有應收賬款與票據(扣除呆壞賬的減值虧損)預計將於一年之內收回。

25 Trade and bills receivables (continued)

25 應收賬款及票據(續)

(a) Ageing analysis

(a) 賬齡分析

As at 31 December 2012, the ageing analysis of trade and bills receivables, based on invoice date and net of allowance for doubtful debts of the Group and the Company is as follows:

於2012年12月31日，本集團與本公司基於開立發票日期的應收賬款及票據(扣除呆壞賬撥備)的賬齡分析如下：

The Group 本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Within 1 year	1年內	**13,001,712**	9,385,711
Between 1 to 2 years	1－2年內	**1,097,910**	466,396
Between 2 to 3 years	2－3年內	**139,395**	50,315
Over 3 years	3年以上	**21,706**	23,156
		14,260,723	9,925,578

The Company 本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Within 1 year	1年內	**253,939**	109,651
Between 1 to 2 years	1－2年內	**25,602**	25,690
Between 2 to 3 years	2－3年內	**12,923**	23,431
Over 3 years	3年以上	**245**	—
		292,709	158,772

Trade receivables are required to be settled in accordance with contracted terms and are generally due immediately without credit upon the issuance of invoice. Further details on the Group's credit policy are set out in note 37(a).

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。關於本集團信用政策的詳細說明，參見附註37(a)。

25 Trade and bills receivables (continued)

25 應收賬款及票據（續）

(b) Impairment of trade and bills receivables

(b) 應收賬款及票據的減值

Impairment losses in respect of trade and bills receivables are recorded using an allowance account unless the Group is satisfied that recovery of the amount is remote, in which case the impairment loss is written off against trade and bills receivables directly (see note 2(n)(i)).

應收賬款及票據的減值虧損將被記入撥備賬，除非本集團認為幾乎不可能收回該款項，在此情形之下，則直接將此等應收賬款及票據與減值虧損沖銷（見附註2(n)(i)）。

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

本年度個別和整體的呆壞賬撥備的變動如下：

The Group **本集團**

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
At 1 January	1月1日	**95,772**	49,992
Impairment losses recognised	確認的減值虧損	**42,837**	49,045
Reversal of impairment losses	減值虧損轉回	**(3,135)**	(2,859)
Uncollectible amounts written off	不可收回款項的沖銷	**—**	(406)
At 31 December	12月31日	**135,474**	95,772

The Company **本公司**

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
At 1 January and 31 December	1月1日及12月31日	**12,128**	12,128

The Group's and the Company's trade and bills receivables of RMB167,224,000 (2011: RMB61,064,000) and RMB12,128,000 (2011: RMB12,128,000) were individually determined to be impaired. The individually impaired receivables related to customers that were in financial difficulties and management assessed that the receivables are expected to be unrecoverable. Consequently, specific allowances for doubtful debts of RMB118,834,000 (2011: RMB60,564,000) and RMB12,128,000 (2011: RMB12,128,000) were recognised by the Group and the Company respectively.

本集團與本公司已個別評定為已減值的應收賬款及票據分別為人民幣167,224,000元（2011年：人民幣61,064,000元）與人民幣12,128,000元（2011年：人民幣12,128,000元）。被個別評定為已減值的應收款項乃關於存在財務困難的客戶且管理層評定認為其應收款項不可能收回。因此，本集團與本公司分別針對呆壞賬撥備了人民幣118,834,000元（2011年：人民幣60,564,000元）與人民幣12,128,000元（2011年：人民幣12,128,000元）。

25 Trade and bills receivables (continued)

25 應收賬款及票據(續)

(c) Trade and bills receivables that are not impaired

(c) 並無減值的應收賬款及票據

The ageing analysis of trade and bills receivables that are neither individually nor collectively considered to be impaired are as follows:

本集團及本公司均認為並無減值的應收賬款和票據賬齡分析如下:

The Group **本集團**

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Neither past due nor impaired	既未逾期亦無減值	**3,108,033**	2,425,806
Within 1 year	1年內	**9,893,679**	6,803,895
Between 1 to 2 years	1至2年	**952,315**	418,280
Between 2 to 3 years	2至3年	**105,971**	50,315
Over 3 years	3年以上	**10,164**	11,614
		10,962,129	7,284,104
		14,070,162	9,709,910

The Company **本公司**

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Neither past due nor impaired	既未逾期亦無減值	**108,626**	62,769
Within 1 year	1年內	**145,313**	46,882
Between 1 to 2 years	1至2年	**25,602**	25,690
Between 2 to 3 years	2至3年	**12,923**	23,431
Over 3 years	3年以上	**245**	—
		184,083	96,003
		292,709	158,772

Aged receivables that were not impaired relate to a wide range of customers for whom there were no recent history of default and have a good track record with the Group. Based on past experience, management believes that no impairment allowance is necessary in respect of these balances as there has not been a significant change in credit quality and the balances are still considered fully recoverable. The Group does not hold any collateral over these balances.

未產生減值的長賬齡應收賬款與眾多客戶相關,該等客戶最近沒有違約歷史,與本集團一直保持良好的交易記錄。根據過往經驗,管理層相信,該等餘額無須減值撥備,因信用質量未發生重大變動,並且這些結餘仍被視為可以全數收回。本集團並未對上述餘額持有押物。

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

26 Deposits, prepayments and other receivables

26 按金、預付款項及其他應收款項

The Group **本集團**

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Prepayments to sub-contractors (note (i))	支付給分包商的預付款(附註(i))		
— related parties under Guodian	— 國電下屬的關聯方	**21,965**	44,200
— associates	— 聯營公司	**20,688**	4,808
— third parties	— 第三方	**861,775**	390,837
Prepayments for purchase of inventories	採購存貨的預付款		
— related parties under Guodian	— 國電下屬的關聯方	**227**	17,180
— associates	— 聯營公司	**3,270**	613
— third parties	— 第三方	**238,637**	363,823
Deposits for construction contracts' bidding or performance (note (ii))	建造合同的投標或履約保證金(附註(ii))		
— Guodian	— 國電	**—**	300
— related parties under Guodian	— 國電下屬的關聯方	**98,909**	33,294
— third parties	— 第三方	**136,857**	85,402
Other deposits	其他按金	**10,355**	5,158
Advances to staff	給員工的墊款	**15,521**	29,130
Advances to	墊款		
— related parties under Guodian	— 國電下屬的關聯方	**447**	3,691
— associates (note (iii))	— 聯營公司(附註(iii))	**137,862**	4,181
— third parties	— 第三方	**81,998**	6,558
Interest receivables from third parties	從第三方應收的利息	**9,035**	9,369
Dividends receivable from associates	從聯營公司應收的股息	**14,592**	12,350
Consideration receivable from a related party under Guodian for the disposal of an associate	應收國電下屬的關聯方的出售聯營公司的對價	**100,001**	101,222
Others	其他	**47,302**	29,966
		1,799,441	1,142,082
Less: allowance for doubtful debts	減：呆壞賬撥備	**(4,730)**	(2,180)
		1,794,711	1,139,902

26 Deposits, prepayments and other receivables (continued)

26 按金、預付款項及其他應收款項（續）

The Company 本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Prepayments to third party sub-contractors	支付給第三方分包商的預付款	**84,990**	—
Advances to	墊款		
— subsidiaries	— 附屬公司	**7,615,524**	3,550,970
— associates	— 聯營公司	**120**	3,691
Dividends receivable from	應收的股息		
— subsidiaries	— 附屬公司	**348,249**	38,328
— associate	— 聯營公司	**13,886**	12,350
Consideration receivable from a related party under Guodian for the disposal of an associate	應收國電下屬的關聯方的出售聯營公司的對價	**100,001**	101,222
Others	其他	**10,814**	23,327
		8,173,584	3,729,888
Less: allowance for doubtful debts	減值：呆壞賬撥備	**—**	(280)
		8,173,584	3,729,608

Notes:

(i) The balances represent prepayments to the sub-contractors in connection with the Group's construction contracts. The prepayments will be settled upon the delivery of goods and services by the sub-contractors.

(ii) The balances represent deposits placed with customers for contracts bidding or performance of contracts in progress. The deposits will be released to the Group upon the completion of the related bidding or contract work, where applicable.

(iii) All advances to associates are unsecured, interest-free and repayable on demand except for amounts of RMB112,000,000 and RMB21,525,000 as at 31 December 2012 bear interest at 6.00% per annum and 6.60% per annum, and are repayable on 23 December 2013 and 27 December 2013, respectively. There were no interest-bearing advances to associates as at 31 December 2011.

附註：

(i) 該款項指關於本集團的建造合同而向分包商支付的預付款。分包商交付貨物及服務之後，則將對預付款結算。

(ii) 該款項是關於合同投標或合同履約而支付給客戶的保證金。相關投標或合同工程完工之後，該保證金則將返還給本集團。

(iii) 於2012年12月31日，除人民幣112,000,000元及人民幣21,525,000元年息率分別為6.00%、6.60%之外，且分別應於2013年12月23日及2013年12月27日償還的款項之外，所有其他給聯營公司的墊款均無抵押、不帶息且提出要求之後即應立即還款。於2011年12月31日，未有任何給聯營公司提供的帶息墊款。

26 Deposits, prepayments and other receivables (continued)

26 按金、預付款項及其他應收款項(續)

(a) Impairment of deposits, prepayments and other receivables

(a) 按金、預付款項及其他應收款項的減值

Impairment of deposits, prepayments and other receivables are recorded using an allowance account unless the Group is satisfied that recovery of the amount is remote, in which case the impairment loss is written off against deposits, prepayments and other receivables directly (note 2(n)(i)).

按金、預付款項以及其他應收款項的減值記入撥備賬，除非本集團認為幾乎不可能收回該款項，在此情形之下，則直接將此等按金、預付款項及其他應收款項與減值虧損沖銷(見附註2(n)(i))。

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

本年度個別和整體呆壞賬撥備的變動如下：

The Group **本集團**

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
At 1 January	1月1日	**2,180**	8,389
Impairment losses recognised	確認的減值虧損	**3,779**	2,385
Reversal of impairment losses	減值虧損轉回	**(296)**	(3,220)
Uncollectible amounts written off	沖銷不可收回金額	**(933)**	—
Disposal of subsidiary	出售附屬公司	**—**	(5,374)
At 31 December	12月31日	**4,730**	2,180

The Company **本公司**

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
At 1 January	1月1日	**280**	280
Reversal of impairment losses	減值虧損轉回	**(280)**	—
At 31 December	12月31日	**—**	280

26 Deposits, prepayments and other receivables (continued)

(a) Impairment of deposits, prepayments and other receivables (continued)

The Group's deposits, prepayments and other receivables of RMB2,846,000 (2011: RMB2,180,000) were individually determined to be impaired. The individually impaired receivables related to the counterparties that were in financial difficulties and management assessed that the receivables are expected to be unrecoverable. Consequently, specific allowances for doubtful debts of RMB2,846,000 (2011: RMB2,180,000) were recognised by the Group.

For other balances of deposits, prepayments and other receivables, management is of the opinion that the counterparties are with good credit quality and the balances are considered fully recoverable.

27 Restricted deposits

Restricted deposits mainly represent guarantee deposits, cash pledged as collateral for bills payable and loans. Majority of these restricted deposits are expected to be released within one year. As at 31 December 2012, a deposit of RMB99,900,000 was pledged as the collateral for a short-term bank loan (see note 29).

26 按金、預付款項及其他應收款項(續)

(a) 按金、預付款項及其他應收款項的減值(續)

本集團與已個別評定為已減值的按金、預付款項及應收款項為人民幣2,846,000元(2011年:2,180,000元)。被評定為已減值的應收款項乃關於存在賬務困難問題的對方且管理層評定認為其應收款項預計不可能收回。因此,本集團針對呆壞賬撥備了人民幣2,846,000元(2011年:2,180,000元)。

關於其他按金、預付款項及其他應收款項,管理層認為,對方具有良好的信用質量,此類按金、預付款項及其他應收款項可以完全收回。

27 受限制存款

受限制存款主要指為保證金存款、應付票據相關的抵押現金。大多數受限制存款預計將於一年之內解除限制。於2012年12月31日,本集團為取得短期銀行貸款抵押現金人民幣99,900,000元(見附註29)。

28 Cash at bank and in hand

28 銀行存款及庫存現金

The Group 本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Cash in hand	庫存現金	**1,071**	1,032
Cash at bank	銀行存款	**3,962,887**	6,566,683
Cash at Guodian Finance Corporation Limited ("Guodian Finance")	國電財務有限公司(「國電財務」)中的存款	**228,829**	—
		4,192,787	6,567,715
Representing:	包括:		
— cash and cash equivalents	— 現金及現金等價物	**3,405,287**	5,626,647
— deposits with banks over three months of original maturity	— 到期日三個月以上的銀行存款	**787,500**	941,068
		4,192,787	6,567,715

The Company 本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Cash in hand	庫存現金	**89**	152
Cash at bank	銀行存款	**1,395,783**	2,647,966
Cash at Guodian Finance	國電財務中的存款	**8,816**	—
Cash and cash equivalents	現金及現金等價物	**1,404,688**	2,648,118

29 Borrowings

29 借款

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

(a) 長期帶息借款包括:

The Group 本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Bank loans	銀行貸款:		
— secured (note (i))	— 抵押(附註(i))	**1,842,000**	293,140
— unsecured	— 無抵押	**1,439,900**	1,175,200
Other loans	其他貸款		
— secured (note (i))	— 抵押(附註(i))	**6,190**	—
— unsecured	— 無抵押	**5,000**	11,727
Corporate bonds (note (ii))	公司債券(附註(ii))	**4,042,084**	—
		7,335,174	1,480,067
Less: current portion of long-term borrowings	減:長期借款的即期部分	**(968,595)**	(341,339)
		6,366,579	1,138,728

The Company 本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Bank loans (unsecured)	銀行貸款(無抵押)	**1,090,000**	840,000
Corporate bonds (note (ii))	公司債券(附註(ii))	**4,042,084**	—
		5,132,084	840,000
Less: current portion of long-term borrowings	減:長期借款的即期部分	**(775,978)**	(200,000)
		4,356,106	640,000

29 Borrowings (continued)

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

Notes:

(i) Secured long-term interest-bearing borrowings as at 31 December 2012 were guaranteed and/or secured by concession assets (note 17), property, plant and equipment (note 14), lease prepayments (note 16), trade and bills receivables (note 25), equity interests in and income stream of certain subsidiaries. Secured long-term interest-bearing borrowings as at 31 December 2011 were secured by concession assets (note 17) and income stream of certain subsidiaries.

(ii) In August 2012, the Company issued corporate bonds of RMB4,000,000,000, which comprise 3-year corporate bonds of RMB1,200,000,000 issued at par and with a coupon rate of 4.30% per annum, 5-year corporate bonds of RMB800,000,000 issued at par and with a coupon rate of 4.65% per annum and 10-year corporate bonds of RMB2,000,000,000 issued at par and with a coupon rate of 5.15% per annum. All corporate bonds are guaranteed by Guodian. The effective interest rates of the bonds are 4.52%, 4.85% and 5.24% per annum respectively.

29 借款(續)

(a) 長期帶息借款包括:(續)

附註:

(i) 於2012年12月31日,抵押的長期帶息借款為受擔保及/或以特許經營權資產(附註17)、物業、廠房及設備(附註14)、預付土地租賃款(附註16)、應收賬款及票據(附註25)、若干附屬公司之股權及收費權抵押。於2011年12月31日抵押的長期帶息借款以特許權資產(附註17)與若干附屬公司的收費權作抵押。

(ii) 於2012年8月20日,本公司發行公司債券人民幣4,000,000,000元,包括按面值發行的三年期公司債券人民幣1,200,000,000元,票面年利率為4.30%;按面值發行的五年期公司債券人民幣800,000,000元,票面年利率為4.65%;按面值發行的十年期公司債券人民幣2,000,000,000元,票面年利率為5.15%。所有公司債券由國電擔保。此等債券的實際年利率分別為4.52%、4.85%及5.24%。

(b) The short-term interest-bearing borrowings comprise:

(b) 短期帶息借款包括:

The Group

本集團

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Bank loans	銀行貸款		
— secured (note)	— 抵押(附註)	**927,100**	249,499
— unsecured	— 無抵押	**7,427,716**	10,347,444
Other loans (unsecured)	其他貸款(無抵押)	**500,000**	—
Current portion of long-term borrowings	長期借款的即期部分	**968,595**	341,339
		9,823,411	10,938,282

29 Borrowings (continued)

29 借款(續)

(b) The short-term interest-bearing borrowings comprise: (continued)

(b) 短期帶息借款包括:(續)

The Company

本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Bank loans (unsecured)	銀行貸款(無抵押)	**3,120,000**	*3,970,000*
Current portion of long-term borrowings	長期借款的即期部分	**775,978**	*200,000*
		3,895,978	*4,170,000*

Note:

Secured short-term interest-bearing borrowings as at 31 December 2012 were guaranteed and/or secured by income stream of certain subsidiaries, trade and bills receivables (note 25) and bank deposits (note 27). Secured short-term interest-bearing borrowings as at 31 December 2011 were secured by trade and bills receivables (note 25).

附註:

於2012年12月31日,抵押的短期帶息借款為受擔保及/或以若干附屬公司的收費權,應收賬款及票據(附註25)及銀行存款(附註27)作抵押。於2011年12月31日抵押短期帶息借款以應收賬款及票據(附註25)作抵押。

(c) The interest rates per annum on borrowings are as follows:

(c) 借款年利率如下:

The Group

本集團

		2012	2011
Long-term	**長期**		
Bank loans	銀行貸款	**5.23%~7.68%**	4.48%~7.74%
Other loans	其他貸款	**0.30%~9.10%**	0.30%~2.88%
Corporate bonds	公司債券	**4.30%~5.15%**	—
Short-term	**短期**		
Bank loans	銀行貸款	**5.10%~7.22%**	5.81%~7.87%
Other loans	其他貸款	**5.40%**	—

29 Borrowings (continued) 29 借款（續）

(c) The interest rates per annum on borrowings are as follows: (continued)

(c) 借款年利率如下：（續）

The Company 本公司

		2012	2011
Long-term	**長期**		
Bank loans	銀行貸款	**5.23%~5.54%**	4.48%~6.65%
Corporate bonds	公司債券	**4.30%~5.15%**	—
Short-term	**短期**		
Bank loans	銀行貸款	**5.10%~6.60%**	5.81%~6.88%

(d) The long-term borrowings are repayable as follows:

(d) 長期借款還款情況如下：

The Group 本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Within 1 year or on demand	1年內或要求時立即還款	**968,595**	341,339
After 1 year but within 2 years	1年以上但2年以內	**773,709**	777,339
After 2 years but within 5 years	2年以上但5年以內	**3,780,036**	190,007
After 5 years	5年以上	**1,812,834**	171,382
		7,335,174	1,480,067

The Company 本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Within 1 year or on demand	1年內或要求時立即還款	**775,978**	200,000
After 1 year but within 2 years	1年以上但2年以內	**177,176**	590,000
After 2 years but within 5 years	2年以上但5年以內	**2,607,106**	50,000
After 5 years	5年以上	**1,571,824**	—
		5,132,084	840,000

30 Trade and bills payables

30 應付賬款及票據(續)

The Group **本集團**

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Bills payable to:	應付票據：		
— sub-contractors and equipment suppliers	—分包商及設備供應商	**502,444**	205,997
— raw material suppliers	—原材料供應商	**2,044,644**	2,822,025
		2,547,088	3,028,022
Trade payables to:	應付賬款：		
— sub-contractors and equipment suppliers:	—分包商及設備供應商：		
— related parties under Guodian	—國電下屬的關聯方	**11,720**	3,538
— associates	—聯營公司	**1,733**	640
— third parties	—第三方	**2,770,149**	1,809,047
		2,783,602	1,813,225
— raw material suppliers:	—原材料供應商：		
— related parties under Guodian	—國電下屬的關聯方	**226,193**	71,394
— associates	—聯營公司	**5,017**	27,784
— third parties	—第三方	**6,714,825**	7,704,501
		6,946,035	7,803,679
		12,276,725	12,644,926

The Company **本公司**

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Trade payables to sub-contractors and equipment suppliers:	對分包商及設備供應商的應付賬款：		
— related parties under Guodian	—國電下屬的關聯方	**2,645**	389
— subsidiaries	—附屬公司	**12,777**	74,161
— associates	—聯營公司	**368**	503
— third parties	—第三方	**3,713**	29,920
		19,503	104,973

As at 31 December 2012 and 2011, all trade and bills payables of the Group and the Company are repayable on demand except for bills payable which are repayable within 6 months. All trade and bills payables are expected to be settled within one year.

於2012年及2011年12月31日，除於6個月內應償還的應付票據之外，本集團的所有應付賬款及票據應在對方要求時立即償還。預計所有應付賬款及票據將在一年之內結清。

31 Other payables

31 其他應付款項

The Group 本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Interest payables	應付利息		
— related parties under Guodian	— 國電下屬的關聯方	—	7,400
— third parties	— 第三方	17,636	16,410
Payables for staff related costs	應付員工的相關成本	54,011	62,091
Payables for other taxes	應付其他稅項	159,373	153,149
Payable for acquisition of property, plant and equipment and land use rights	購買物業、廠房及設備以及土地使用權的應付款項		
— related parties under Guodian	— 國電下屬的關聯方	384,303	197,569
— associates	— 聯營公司	—	119,737
— third parties	— 第三方	1,071,902	748,657
Deposits from sub-contractors (note (i))	分包商支付的按金（附註(i)）	142,179	158,312
Retention payables (note (ii))	應付質保金款項（附註(ii)）	59,595	49,417
Advances from (note (iii))	墊款（附註(iii)）		
— Guodian	— 國電	300,000	—
— associates	— 聯營公司	—	259
— third parties	— 第三方	246,928	143,698
Dividends payables	應付股息		
— Guodian	— 國電	172,524	—
— related parties under Guodian	— 國電下屬的關聯方	298,246	—
— third parties	— 第三方	14,467	2,559
Listing expenses payable	應付上市費用	180	58,289
Other accruals and payables	其他預提金額與應付款項		
— Guodian	— 國電	7,310	—
— related parties under Guodian	— 國電下屬的關聯方	58,516	28,150
— associates	— 聯營公司	3,256	4,179
— third parties	— 第三方	123,531	78,640
Financial liabilities	金融負債	3,113,957	1,828,516
Receipts in advance (note (iv))	預收款項（附註(iv)）		
— related parties under Guodian	— 國電下屬的關聯方	180,104	546,645
— third parties	— 第三方	570,548	2,432,614
		750,652	2,979,259
		3,864,609	4,807,775

31 Other payables (continued)

31 其他應付款項(續)

The Company 本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Interest payables	應付利息		
— related parties under Guodian	— 國電下屬的關聯方	—	7,400
— third parties	— 第三方	7,846	—
Payables for staff related costs	應付員工的相關成本	2,055	12,473
Payables for other taxes	應付其他税項	20,568	4,576
Payable for acquisition of property, plant and equipment and land use rights	購買物業、廠房及設備以及土地使用權的應付款項		
— subsidiaries	— 附屬公司	291,964	204,572
— third parties	— 第三方	55,280	136,062
Advances from subsidiaries (note (v))	從附屬公司取得的墊款(附註(v))	1,261,584	587,501
Dividends payables	應付股息		
— Guodian	— 國電	172,524	—
— related parties under Guodian	— 國電下屬的關聯方	165,759	—
Listing expenses payable	應付上市費用	180	58,289
Other accruals and payables	其他預提金額與應付款項		
— Guodian	— 國電	7,060	—
— related parties under Guodian	— 國電下屬的關聯方	59	33,326
— third parties	— 第三方	32,845	20,363
Financial liabilities	金融負債	2,017,724	1,064,562
Receipts in advance	預收款項		
— subsidiaries	— 附屬公司	17,191	15,641
— third parties	— 第三方	135,160	1,689
		152,351	17,330
		2,170,075	1,081,892

31 Other payables (continued)

Notes:

(i) The balances represent deposits from sub-contractors for contract bidding. The deposits will be released to sub-contractors upon the completion of the related bidding.

(ii) Retention payables represent the amounts due to equipment and construction contractors which will be settled upon the expiry of the warranty period.

(iii) All amounts are interest-free, unsecured and have no fixed terms of repayment except for amounts totalling RMB146,964,000 as at 31 December 2012 which bear interest rate of 6.00% per annum.

(iv) Included in the balance are amounts of RMB28,751,000 (2011: RMB111,183,000) advances received from customers for which the related construction works have not commenced as at the balance sheet date.

(v) All amounts are interest-free, unsecured and have no fixed terms of repayment except for amounts of RMB150,512,000 (2011: RMB529,451,000) of the Company which bear interest rate of 5.80% (2011: 6.10% to 7.05%) per annum.

All of the other payables of the Group and the Company are expected to be settled or recognised as income within one year or are repayable on demand.

31 其他應付款項（續）

附註：

(i) 該款項指關於合同投標從分包商收到的按金。相關招標結束之後，按金即將還給分包商。

(ii) 應付質保金款項指保修期滿之後，則應付給設備及施工承包商的款項。

(iii) 除2012年12月31日年利率6.00%的人民幣146,964,000元之外，所有款項均不帶息、無抵押且未規定還款期。

(iv) 該款項包括從客戶收到的人民幣28,751,000元（2011年：111,183,000元人民幣）預收款項，於資產負債表日期之日，相關建造工程尚未開工。

(v) 除本公司人民幣150,512,000元（2011年：人民幣529,451,000元）年利率為5.80%（2011年：6.10%-7.05%）之外，所有其他款項均為不帶息款項、無抵押，及並未規定還款期限。

預計本集團與本公司的所有其他應付款項將於一年之內結清或確認為收入，或提出要求之後立即支付。

32 Income tax in the consolidated balance sheet

32 合併資產負債表中的所得税

(a) Tax payable/(recoverable) in the consolidated balance sheet represents:

(a) 合併資產負債表中應付/(可收回)税項:

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Net tax (receivable)/payable at 1 January	1月1日(可收回)/應付税項淨額	**(1,904)**	8,135
Provision for the year (note 8(a))	本年度撥備(附註8(a))	**288,667**	200,246
Over-provision in respect of prior year (note 8(a))	以往年度撥備過剩(附註8(a))	**(1,375)**	(14,765)
Income tax paid	繳納的所得税	**(262,460)**	(195,520)
Net tax payable/(receivable) at 31 December	12月31日應付/(可收回)税項淨額	**22,928**	(1,904)
Representing:	包括:		
Tax payable	應付所得税	**72,574**	126,058
Tax recoverable	可收回税項	**(49,646)**	(127,962)
		22,928	(1,904)

32 Income tax in the consolidated balance sheet (continued)

32 合併資產負債表中的所得稅（續）

(b) Deferred tax assets and liabilities recognised:

(b) 已確認的遞延稅項資產及負債：

The components of deferred tax assets/(liabilities) recognised in the consolidated balance sheet and the movements during the year are as follows:

合併資產負債表中確認的遞延稅項資產／(負債)以及在本年度的變化情況如下所述：

Deferred tax arising from 遞延稅項來源		Provision for impairment of assets 資產減值撥備 RMB'000 人民幣千元	Tax losses 稅項虧損 RMB'000 (note (i)) 人民幣千元 (附註(i))	Unrealised profits on intra-group transactions 集團內部交易未實現的利潤 RMB'000 人民幣千元	Deferred income 遞延收益 RMB'000 人民幣千元	Provision for warranty 質保金撥備 RMB'000 人民幣千元	Intangible assets 無形資產 RMB'000 (note (ii)) 人民幣千元 (附註(ii))	Others 其他 RMB'000 人民幣千元	Total 合計 RMB'000 人民幣千元
At 1 January 2011	2011年1月1日	7,241	10,463	4,218	40,258	45,090	(14,110)	4,489	97,649
Disposal of a subsidiary	出售附屬公司	—	(1,431)	—	—	—	—	—	(1,431)
Credited/(charged) to profit or loss (note 8(a))	計入／(扣減)損益(附註8(a))	12,858	23,081	(1,025)	(6,560)	46,984	2,928	54	78,320
At 31 December 2011 and 1 January 2012	2011年12月31日及2012年1月1日	20,099	32,113	3,193	33,698	92,074	(11,182)	4,543	174,538
Acquisition of subsidiaries (note 41(a) & (b))	收購附屬公司(附註41(a)&(b))	**—**	**—**	**—**	**—**	**—**	**(77,801)**	**—**	**(77,801)**
Credited/(charged) to profit or loss (note 8(a))	計入／(扣減)損益(附註8(a))	**16,707**	**(756)**	**10,261**	**1,087**	**17,033**	**(2,638)**	**15,664**	**57,358**
At 31 December 2012	2012年12月31日	**36,806**	**31,357**	**13,454**	**34,785**	**109,107**	**(91,621)**	**20,207**	**154,095**

32 Income tax in the consolidated balance sheet (continued)

32 合併資產負債表中的所得稅（續）

(b) Deferred tax assets and liabilities recognised: (continued)

(b) 已確認的遞延稅項資產及負債：（續）

Notes:

(i) Deferred tax assets in respect of unused tax losses are related to subsidiaries that were established in recent years. They are now progressing to their normal production stage and are deriving profits. Accordingly, it is considered probable that sufficient taxable profits will be available in the future to utilise their unused tax losses before they expire.

(ii) Deferred tax liabilities in respect of intangible assets arose from the temporary differences in development costs and concession assets.

附註：

(i) 關於未利用的可抵扣稅項虧損所產生的遞延稅項資產，與近年來成立的附屬公司有關，這些附屬公司目前正在步入經營正軌並開始產生利潤。相應地，認為將來可能會存在足夠的應納稅利潤，從而可以使用以前未利用的可抵扣稅項虧損。

(ii) 關於無形資產所產生的遞延所得稅負債是由於開發成本與特許權資產的暫時性差異而產生的。

Reconciliation to the balance sheet

調節至資產負債表

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Net deferred tax asset recognised in the balance sheet	於資產負債表中確認的遞延稅項資產淨額	**249,765**	174,538
Net deferred tax liability recognised in the balance sheet	於資產負債表中確認的遞延稅項負債淨額	**(95,670)**	—
		154,095	174,538

32 Income tax in the consolidated balance sheet (continued)

32 合併資產負債表中的所得税(續)

(c) Deferred tax assets not recognised

(c) 未確認的遞延税項資產

In accordance with the accounting policy set out in note 2(v), the Group and the Company have not recognised deferred tax assets in respect of unused tax losses and certain deductible temporary differences of RMB348,657,000 (2011: RMB194,454,000) and RMB213,226,000 (2011: RMB178,016,000), respectively, as it is not probable that future taxable profits against which the losses or the temporary differences can be utilised will be available in the relevant tax jurisdictions and entities. As at 31 December 2012, the expiration of tax losses of the Group and the Company, if unused, is as follows:

根據附註2(v)中規定的會計政策,本集團及本公司並無確認未利用的可抵扣税項虧損與某些可抵扣的暫時性差異分別為人民幣348,657,000元(2011年:人民幣194,454,000元)及人民幣213,226,000元(2011年:人民幣178,016,000元)確認遞延税項資產,因為在相關税務管轄區域及實體內,將來不很可能產生可以使用此等未利用税項虧損或暫時性差異的應納税利潤。於2012年12月31日,本集團與本公司未利用的税項虧損的期限分別如下:

The Group 本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
2012	2012	—	15,188
2013	2013	33,380	33,380
2014	2014	39,784	39,784
2015	2015	45,164	45,164
2016	2016	9,812	9,812
2017	2017	129,234	—
		257,374	143,328

The Company 本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
2012	2012	—	15,188
2013	2013	33,380	33,380
2014	2014	39,784	39,784
2015	2015	40,448	40,448
2017	2017	9,376	—
		122,988	128,800

32 Income tax in the consolidated balance sheet (continued)

(d) Deferred tax liability not recognised

At 31 December 2012, taxable temporary differences relating to undistributed profits and PRC statutory reserves of subsidiaries and associates amounted to RMB2,091,375,000 (2011: RMB1,933,061,000). No deferred tax liability was recognised in respect of these taxable temporary differences as dividends from subsidiaries and associates are not subject to PRC income tax and the Group has no plan to dispose of these subsidiaries and associates in the foreseeable future.

32 合併資產負債表中的所得税(續)

(d) 未確認的遞延税項負債

於2012年12月31日，關於附屬公司與聯營公司的未分配利潤及中國法定公積金的應納税暫時性差異為人民幣2,091,375,000元(2011年：人民幣1,933,061,000元)。關於此等應納税暫時性差異，未確認任何遞延所税項負債，因為從附屬公司及聯營公司取得的股息不需繳納中國所得税，且在可預見的未來，本集團並無任何計劃出售此等附屬公司及聯營公司。

33 Provision for warranty

The movement of provisions for product warranty during the year is as follows:

33 質保金撥備

本年度產品質保金撥備的變化如下：

The Group

本集團

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
At 1 January	1月1日	**475,446**	228,914
Additional provisions made	額外撥備	**223,430**	255,907
Provision utilised	已使用撥備	**(36,442)**	(9,375)
Provision reversed	撥備轉回	**(72,693)**	—
At 31 December	12月31日	**589,741**	475,446
Less: current portion of provision for warranty	減：質保金撥備的即期部分	**(80,920)**	(83,578)
		508,821	391,868

33 Provision for warranty (continued)

Under the terms of the Group's sales agreements, the Group will rectify product defects of wind turbines and steam turbines arising within two to five years of the date of sale. Provision is therefore made for the best estimate of the expected settlement under these agreements in respect of sales made within two to five years prior to the balance sheet date.

In addition, the Group's photovoltaic modules typically sold with a two or five-year warranty for defects in materials and workmanship and a ten and twenty-five year minimum power output warranty, against declines of more than 10% and 20%, respectively, of initial power generation capacity from the date of delivery. The Group has the responsibility to repair or replace solar modules, at customers' option, under the terms of the warranty policy. The Group maintains warranty provision to cover potential liabilities that could arise under these warranties.

The amount of the provision takes into account the Group's recent claim experience and the experiences of other companies for similar products and is only made where a warranty claim is probable.

During 2012, the warranty period of a number of wind turbine sold has lapsed which has provided more reliable internal historical product failure data to management for estimating the Group's warranty costs. In addition, the market price of wind turbine materials has continuously decreased during 2012 which has resulted in a decrease in warranty costs to the Group. Therefore, management reassessed the provision for outstanding warranty obligation at the balance sheet date and has reversed a provision of RMB72,693,000 in respect of the wind turbines sold in prior years.

33 質保金撥備（續）

根據本集團銷售協議條款規定，產品售出日期之後2－5年內風機與汽輪機產生的產品缺陷，本集團將進行保修。因此，就在資產負債表日期之前的2－5年內的銷售，根據協議項下的預期償付金額的最佳估計作出了撥備。

此外，本集團的光伏組件通常提供2年或5年的原材料及製作工藝缺陷質保期，且針對交付日期時的初始發電能力降低超過10%與20%，分別提供10年及25年的最小發電量質保。在質保條款項下，根據客戶的要求，本集團有責任維修或更換太陽能組件。本集團對此等質保項下潛在的責任計提質保撥備。

根據本集團近年來的理賠經驗以及其他公司關於類似產品的處理經驗，確定此等質保撥備，並僅對很可能產生質保要求的情形提取撥備。

於2012年12月31日，部分已售出風機的質保期限已過期，其為管理層估計本集團的質保成本提供了更為可靠的內部歷史產品故障數據。此外，風機原材料市場價格自2012年開始不斷下降，促使本集團的質保成本降低。因此，管理層於資產負債表日重新估計未償付質保義務撥備，並轉回於以前年度銷售的風機質保金撥備人民幣72,693,000元。

34 Deferred income

34 遞延收益

The Group

本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
At 1 January	1月1日	**306,072**	185,649
Additions	增加	**92,651**	136,391
Credited to profit or loss	計入損益	**(67,484)**	(11,232)
Disposal of subsidiaries	出售附屬公司	**—**	(4,736)
At 31 December	12月31日	**331,239**	306,072

Deferred income mainly represents government grants relating to the construction of property, plant and equipment, as well as technology research funding related to environmental protection related assets, which would be recognised as income on a straight-line basis over the expected useful life of the relevant assets. The deferred income recognised is included in "other revenue" in the consolidated income statement.

遞延收益主要包括政府給予關於物業、廠房及設備的建造補貼,以及關於相關環保資產的技術研發基金,根據直線法在相關資產的預計使用壽命期內確認收入。確認為遞延收益的款項包括在合併收益表的「其他收入」中。

35 Other non-current liabilities

35 其他非流動負債

The Group

本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Long-term retention payables to third parties	應付第三方長期質保金	**82,798**	97,918
Other non-current financial liability	其他非流動金融負債	**6,370**	6,370
		89,168	104,288

36 Capital, reserves and dividends

36 資本、儲備及股息

(a) Movements in components of equity

(a) 權益組成部分的變動

The reconciliation between the opening and closing balances of each component of the Group's consolidated equity is set out in the consolidated statements of changes in equity. Details of the changes in the Company's individual components of equity between the beginning and the end of the year are set out below:

合併權益變動表中列出了本集團合併權益中各組成部分的期初及期末餘額的調節情況。本公司權益各組成部分的年初及年末變化情況如下所述:

		Paid-in capital/ share capital 實收資本/股本 RMB'000 人民幣千元	Capital reserve 資本儲備 RMB'000 人民幣千元	PRC statutory reserve 中國法定公積金 RMB'000 人民幣千元	Fair value reserve 公允價值儲備 RMB'000 人民幣千元	Retained profits 留存利潤 RMB'000 人民幣千元	Total equity 權益總額 RMB'000 人民幣千元
Balance at 1 January 2011	2011年1月1日餘額	4,822,590	43,718	22,781	—	52,196	4,941,285
Changes in equity for 2011:	2011年權益變化:						
Profit and total comprehensive income for the year	本年度利潤及綜合收益總額	—	—	—	—	285,968	285,968
Conversion into a joint stock company with limited liability	轉制為股份有限公司	27,410	14,347	(13,638)	—	(28,119)	—
Appropriation	劃撥	—	—	31,367	—	(31,367)	—
Issuance of shares by initial public offering	通過首次公開招股發行股份	1,092,500	676,912	—	—	—	1,769,412
Balance at 31 December 2011 and 1 January 2012	2011年12月31日及2012年1月1日餘額	5,942,500	734,977	40,510	—	278,678	6,996,665
Changes in equity for 2012:	2012年權益變化:						
Profit and total comprehensive income for the year	本年度利潤及綜合收益總額	—	—	—	(23,958)	440,045	416,087
Issuance of shares (note 36(c)(iii))	發行股票(附註36(c)(iii))	121,270	70,705	—	—	—	191,975
Appropriation	劃撥	—	—	41,762	—	(41,762)	—
Special dividend (note 36(b))	特別股息(附註36(b))	—	—	—	—	(338,283)	(338,283)
Balance at 31 December 2012	2012年12月31日餘額	6,063,770	805,682	82,272	(23,958)	338,678	7,266,444

36 Capital, reserves and dividends (continued)

36 資本、儲備及股息(續)

(b) Dividends

(b) 股息

(i) Dividends payable to equity shareholders of the Company attributable to the year

(i) 本年應付本公司權益股東股息

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Final dividend proposed after the balance sheet date of RMB0.02 per ordinary share (2011: nil)	於資產負債表日擬派末期股息,每股普通股人民幣0.02元(2011年:無)	**121,275**	—

The final dividend proposed after the balance sheet date has not been recognised as a liability at the balance sheet date.

於資產負債表日後擬派末期股息並未在資產負債表中被確認為負債。

(ii) Dividends payable to equity shareholders of the Company attributable to previous financial years, approved during the year

(ii) 於本年批准的應付本公司權益股東之以前財政年度的股息

As disclosed in the prospectus of the Company dated 9 December 2011, in accordance with the Interim Provisions on the Management and Financial Treatment of State Owned Capital in Enterprise Corporate Restructuring (企業公司制改建有關國有資本管理與財務處理的暫行規定) issued by the Ministry of Finance and effective on 27 August 2002, and pursuant to an ordinary resolution passed by the shareholders on 3 June 2011, the Company would have to pay a dividend to Guodian and GD Power Development Co., Ltd. ("GD Power"), which represents an amount equal to the net profit attributable to the shareholders of the Company generated by the Group from 1 November 2010, the date following the day on which the Group's state-owned assets were valued, to 30 June 2011.

如2011年12月9日的本公司招股書所披露,根據財政部頒發並於2002年8月27日生效的《企業公司制改建有關國有資本管理與財務處理的暫行規定》以及按照於2011年6月3日股東大會通過的普通決議案,本公司將向國電和國電電力發展股份有限公司(「國電電力」)支付股息,該股息金額等於自2010年11月1日(本集團國有資產評估日之翌日)至2011年6月30日期間本集團產生的歸屬於本公司股東的淨利潤。

Pursuant to a resolution passed at directors' meeting on 27 March 2012, the directors resolved to distribute the special dividend to Guodian and GD Power amounting to RMB338,283,000 in aggregate.

根據2012年3月27日董事會通過的決議,董事決定向國電和國電電力分派金額總計為人民幣338,283,000元的特別股息。

As at 31 December 2012, the special dividend has not been paid to Guodian and GD Power.

截至2012年12月31日,該等特別股息尚未支付給國電和國電電力。

36 Capital, reserves and dividends (continued)

36 資本、儲備及股息(續)

(c) Share capital/paid-in capital

(c) 股本/實收資本

(i) Registered and issued share capital

(i) 已註冊及發行的股本

		No. of shares 股數 '000 千股	RMB'000 人民幣千元
Ordinary shares, registered issued and fully paid:	**已註冊、發行且全部繳足的普通股:**		
Domestic shares of RMB1.00 each	**國內股份,每股人民幣1元**		
At 1 January 2011	2011年1月1日	—	—
Conversion into a joint stock company with limited liability (note)	轉制為股份有限公司(附註)	4,850,000	4,850,000
Converted to H shares (note 36(c)(iii))	轉至H股(附註36(c)(iii))	(96,000)	(96,000)
At 31 December 2011, 1 January 2012 and 31 December 2012	2011年12月31日、2012年1月1日及2012年12月31日	4,754,000	4,754,000
H shares of RMB1.00 each	**H股,每股人民幣1元**		
At 1 January 2011	2011年1月1日	—	—
Issuance of shares by IPO (note 36(c)(iii))	通過首次公開招股發行股份(附註36(c)(iii))	1,092,500	1,092,500
Converted from domestic shares (note 36 (c)(iii))	轉自國內股份(附註36(c)(iii))	96,000	96,000
At 31 December 2011 and 1 January 2012	2011年12月31日及2012年1月1日	1,188,500	1,188,500
Issuance of shares (note 36(c)(iii))	發行股票(附註36(c)(iii))	121,270	121,270
At 31 December 2012	2012年12月31日	1,309,770	1,309,770
Total	**合計**		
At 31 December 2012	2012年12月31日	6,063,770	6,063,770
At 31 December 2011	2011年12月31日	5,942,500	5,942,500

36 Capital, reserves and dividends (continued)

(c) Share capital/paid-in capital (continued)

(i) Registered and issued share capital (continued)

The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at meetings of the Company. All ordinary shares rank equally with regard to the Company's residual assets.

Note:

The Company was a limited liability company and converted into a joint stock company with limited liability on 16 May 2011. Pursuant to the approval of State-owned Assets Supervision and Administration Commission of the State Council, the Company's equity of RMB4,874,724,000 was converted into 4,850,000,000 ordinary shares with par value of RMB1 each issued proportionately to its existing equity owners. RSM China Certified Public Accountants Co., Ltd. (中瑞岳華會計師事務所) have verified the issued and fully paid share capital, and issued related capital verification report ZhongRuiYueHuaYanZi[2011]No.068 (中瑞岳華驗字[2011]第068號).

(ii) Registered and paid-in capital

The paid-in capital of the Company represents the paid-in capital of the Company before the Conversion.

The registered and paid-in capital of the Company was RMB4,822,590,000 before the Conversion. RSM China Certified Public Accountants Co., Ltd. (中瑞岳華會計師事務所) have verified the registered and paid-in capital, and issued related capital verification reports ZhongRuiYueHuaYanZi[2010]No.034, 202, 223 and 269 (中瑞岳華驗字[2010]第034、202、223及269號).

36 資本、儲備及股息（續）

(c) 股本╱實收資本（續）

(i) 已註冊及發行的股本（續）

普通股持有人有權收取不時公佈的股息，且每股在本公司會議上享有一票投票權。所有普通股對公司的剩餘資產享有同樣權利。

附註：

本公司原為一家有限責任公司，於2011年5月16日轉制成為一家股份有限公司。經國務院國有資產監督管理委員會批准，本公司的權益人民幣4,874,724,000元轉換為4,850,000,000普通股，每股面值人民幣1元，並按比例發行給予本公司當時的權益所有者。中瑞岳華會計師事務所已對發行的全部繳足的股本進行了驗資，並出具了相關驗資報告：中瑞岳華驗字[2011]第068號。

(ii) 已註冊及繳足的實收資本

本公司的實收資本指本公司轉制之前本公司實收資本。

轉制前，本公司已註冊的實收資本為人民幣4,822,590,000元。中瑞岳華會計師事務所已對註冊的實收資本進行了驗資，並出具了相關驗資報告：中瑞岳華驗字[2010]第034、202、223及269號。

36 Capital, reserves and dividends (continued)

(c) Share capital/paid-in capital (continued)

(iii) Shares issued

In December 2011, the Company issued an aggregate of 1,092,500,000 H shares with a nominal value of RMB1.00 each, at a price of HKD2.16 per share by way of initial public offering to Hong Kong and overseas investors (the "IPO"). In connection with the IPO, 96,000,000 domestic state-owned shares of RMB1.00 each owned by Guodian were converted into H shares on a one-for-one basis and transferred to the National Social Security Fund Council of the PRC.

On 13 January 2012, the over-allotment option granted by the Company was partially exercised. The Company issued and allotted an aggregate of 121,270,000 H shares at HKD2.16 each. After the issuance and allotment of these shares, the registered and issued ordinary shares of the Company increased to 6,063,770,000 shares with 1,309,770,000 H shares being listed on HKSE. The net proceeds of RMB191,975,000 were credited to share capital and capital reserves at the amount of RMB121,270,000 and RMB70,705,000 respectively.

36 資本、儲備及股息（續）

(c) 股本／實收資本（續）

(iii) 發行股票

於2011年12月，本公司共發行1,092,500,000股H股，每股票面價值人民幣1元，通過首次公開招股的方式以每股2.16港幣向香港和海外投資人發行。因首次公開招股，國電持有的96,000,000股國有股（每股人民幣1元）以一比一比例轉換為H股，並轉讓給中國全國社會保障基金理事會。

於2012年1月13日，本公司授出的超配額股權被部分行使。本公司以每股面值為2.16港元發行並配發H股總數為121,270,000股。在發行並分配該等股份後，本公司已註冊及發行的普通股增至6,063,770,000股，其中1,309,770,000股於香港聯交所上市。所得款項淨額人民幣191,975,000元分別以人民幣121,270,000元和人民幣70,705,000元計入股本和資本儲備。

36 Capital, reserves and dividends (continued)

(d) Nature and purpose of reserves

(i) Capital reserve

Capital reserve mainly represents share premium, contributions from Guodian, and the difference between the considerations of acquisition or disposal of equity interests from/to non-controlling equity owners and the carrying amount of the proportionate net assets.

(ii) PRC statutory reserve

According to the Company's Article of Association, the Company is required to transfer 10% of its net profit as determined in accordance with accounting rules and regulations of the PRC to its statutory reserve until the reserve balance reaches 50% of the registered capital. The transfer to this reserve must be made before distribution of a dividend to equity shareholders/owners. This reserve fund can be utilised in setting off accumulated losses or increasing capital of the Company and is non-distributable other than in liquidation.

(iii) Exchange reserve

Exchange reserve comprises all foreign exchange differences arising from the translation of the financial statements of operations that have functional currency other than the RMB which are dealt with in accordance with the accounting policies as set out in note 2(y).

(iv) Fair value reserve

The fair value reserve comprises the cumulative net charge in the fair value of available-for-sale securities held at the balance sheet date and is dealt with in accordance with the accounting policies notes 2(i) and 2(n)(i).

36 資本、儲備及股息（續）

(d) 儲備性質及用途

(i) 資本儲備

資本儲備主要包括股份溢價、國電繳款、以及向非控股權益所有者購買或出售權益的對價與相應淨資產賬面金額之間的差額。

(ii) 中國法定公積金

根據本公司的《公司章程》規定，要求本公司將根據中國會計準則及法規確定的淨利潤的10%轉為本公司的法定公積金，直至公積金剩餘總額達到註冊資本的50%。必須在向股東／所有者分配股息之前，提取該公積金。該公積金可以用於彌補本公司的累計虧損或增資，並且除清算之外不得進行分配。

(iii) 匯兑儲備

匯兑儲備包括根據附註2(y)規定的會計政策換算非人民幣為功能貨幣的業務的財務報表時所產生的所有匯兑差額。

(iv) 公允價值儲備

公允價值儲備包括根據會計政策附註2(i)及2(n)(i)處理的於資產負債表日的可供出售證券的公允價值累計變動。

36 Capital, reserves and dividends (continued)

(e) Distributability of reserves

In accordance with the Articles of Association of the Company, the net profit after tax of the Company for the purpose of dividends payment will be the lesser of (i) the net profit determined in accordance with the accounting rules and regulations of the PRC; and (ii) the net profit determined in accordance with IFRSs. As of 31 December 2012, the retained profits available for distribution are RMB338,678,000 (2011: RMB278,678,000).

(f) Capital management

The Group's primary objectives when managing capital are to safeguard the Group's ability to continue as a going concern, so that it can continue to provide returns for equity owners/shareholders and benefits for other stakeholders, by pricing products and services commensurately with the level of risk and by securing access to financing at a reasonable costs.

The Group actively and regularly reviews and manages its capital structure to maintain a balance between the higher equity shareholder/owner returns that might be possible with higher levels of borrowings and the advantages and security afforded by a sound capital position, and makes adjustments to the capital structure in light of changes in economic conditions.

The Group monitors its capital structure on the basis of liability-to-asset ratio, which is calculated as total liabilities by total assets. The liability-to-asset ratio of the Group and the Company were 74% (2011: 74%) and 59% (2011: 46%) respectively.

There were no changes in the Group's approach to capital management during the year. Neither the Company nor any of its subsidiaries are subject to externally imposed capital requirements.

36 資本、儲備及股息(續)

(e) 儲備的可分配性

本公司股份在香港聯交所上市之後,根據本公司的《公司章程》,作為股息分配的本公司稅後淨利潤應為以下兩者之中的孰低者:(i)按照中國會計準則及法規確定的淨利潤;(ii)按照《國際會計報告準則》確定的淨利潤。於2012年12月31日,可供分配的留存利潤額為人民幣338,678,000元(2011年:278,678,000元)。

(f) 資本管理

本集團資本管理的主要目標是,根據風險水平對產品及服務定價及按照合理的成本取得融資,以便保障本集團持續經營的能力,從而可以持續向股東／所有者提供回報並向其他利益關聯方提供益處。

本集團積極地並且定期審查並管理本集團的資本結構,在較高的借款水平情況下向股東／所有者提供較高回報的同時,保持本集團具有較好的資本優勢及安全性,並按照經濟形勢不斷調整本集團的資本結構。

本集團根據負債對資產比率(按負債總額除以資產總額計算)監控本集團的資本結構。本集團與本公司的負債對資產比率分別為74%(2011年:74%)與59%(2011年:46%)。

本年度本集團的資本管理方法沒有發生變更。本公司或其任何附屬公司均未有任何受外界施加的資本要求。

37 Financial risk management and fair values

Exposure to credit, liquidity, interest rate and currency risks arises in the normal course of the Group's business.

The Group's exposure to these risks and the financial risk management policies and practices used by the Group to manage these risks are described below:

(a) Credit risk

The Group's credit risk is primarily attributable to cash at bank and in hand, trade and bills receivables, deposits, prepayments and other receivables and other non-current assets. Management has a credit policy in place and the exposure to these credit risks are monitored on an ongoing basis.

Substantially all of the Group's cash at bank and in hand are deposited in the stated owned/controlled PRC banks which the directors assessed the credit risk to be insignificant.

In respect of trade and bills receivables, deposits, prepayments and other receivables and other non-current assets, individual credit evaluations are performed on all customers. These evaluations focus on the customer's past history of making payments when due and current ability to pay, and take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates. The Group generally requires customers to settle trade receivables in accordance with contracted terms and other debts in accordance with agreements. Credit terms may be granted to customers, depending on the nature of business. Normally, the Group does not obtain collateral from customers.

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer rather than the industry in which the customers operate and therefore significant concentrations of credit risk primarily arise when the Group has significant exposure to individual customers. At the balance sheet date, 42% and 20% (2011: 42% and 10%) of trade and other receivables was due from Guodian and related parties under Guodian, the Group's largest customer, and the five largest remaining customers respectively.

37 財務風險管理及公允價值

本集團的正常業務過程中存在信用、流動資金、利率以及貨幣風險。

本集團面臨的此等風險以及本集團的財務風險管理政策及措施如下所述：

(a) 信用風險

本集團的信用風險主要與如下因素有關：銀行存款及庫存現金、應收賬款及票據、按金、預付款項及其他應收款項，以及其他非流動資產。管理層已建立了信用管理政策，不斷監控信用風險因素。

本集團近乎所有的銀行存款及庫存現金均存放於中國國有╱控制的銀行，董事們評估認為其信用風險不大。

關於應收賬款及票據、按金、預付款項及其他應收款項與其他非流動資產，已對所有客戶進行了單獨信用評估。評估針對客戶過去的到期款項支付歷史及目前的支付能力，並考慮了客戶的具體情況，以及客戶營業所在地的整體經濟環境。總體上，本集團要求客戶按照合同條款結算應收賬款，並按照協議規定結清其他欠款。根據業務性質，可能會給予客戶一定的付款信用期限。通常，本集團不向客戶收取抵押物。

本集團的信用風險主要受到每個客戶的具體情況影響，而不會受到客戶所從事行業的影響，因此，當本集團頻繁地接觸個別客戶時，信用風險的集中度就會增加。於資產負債表日，分別有42%與20%（2011年：42%與10%）的應收賬款及其他應收款項來自於國電及國電下屬的關聯方（本集團最大的客戶）和其餘的前五大客戶。

37 Financial risk management and fair values (continued)

(a) Credit risk (continued)

Except for the financial guarantees given by the Group as set out in note 39, the Group does not provide any other guarantees which would expose the Group to credit risk. The maximum exposure to credit risk in respect of these financial guarantees at the balance sheet date is disclosed in note 39.

Further quantitative disclosures in respect of the Group's exposure to credit risk arising from trade and bills receivables, deposits, prepayments and other receivables and other non-current assets are set out in notes 25, 26 and 22 respectively.

(b) Liquidity risk

The Group's objective is to ensure continuity of sufficient funding and flexibility by utilising a variety of bank and other borrowings with debt maturities spreading over a range of periods, thereby ensuring that the Group's outstanding borrowing obligation is not exposed to excessive repayment risk in any one year.

The Company is responsible for the Group's overall cash management and the raising of borrowings to cover expected cash demands. The Group's policy is to regularly monitor current and expected liquidity requirements to ensure that it maintains sufficient reserves of cash and adequate committed lines of funding from major financial institutions to meet its liquidity requirements in the short and longer term.

At the balance sheet date, the Group had net current liabilities of RMB812,464,000 (2011: RMB1,793,923,000). With regards to its future capital commitments and other financing requirements, the Group has unutilised banking facilities of RMB17,062,452,000 (2011: RMB11,059,342,000) as at 31 December 2012. The directors are of the opinion that the assumptions which are included in the cash flow forecast are reasonable. However, as with all assumptions in regard to future events, these are subject to inherent limitations and uncertainties and some or all of these assumptions may not be realised.

37 財務風險管理及公允價值(續)

(a) 信用風險(續)

除附註39中本集團提供的金融擔保之外,本集團未提供任何其他會使本集團承受信用風險的其他擔保。於資產負債表日,這些金融擔保產生的最大信用風險度,已在附註39中進行了披露。

與應收賬款及票據、按金、預付款項以及其他應收款項,及其他非流動資產相關的本集團信用風險,分別在附註25、26以及22中進行了披露。

(b) 流動資金風險

為保證本集團具有足夠的連續資金以及資金靈活性,本集團採用多元化的銀行及其他借款,債務到期日期較為分散,從而使本集團的還款義務不會過度地集中於任何一個年度。

本公司負責本集團的整體現金管理以及滿足所有現金需求的借款事宜。根據本集團的財務政策,本集團定期監控流動資金及預計流動資金的需求性,確保本集團具有足夠的現金儲備,並在主要金融機構中具有適當的資金承諾額度,從而滿足本集團長期以及短期的流動資金需求。

於資產負債表日,本集團的淨流動負債為人民幣812,464,000元(2011年:人民幣1,793,923,000元)。關於本集團未來的資金承擔及其他融資要求,於2012年12月31日,本集團未動用銀行授信為人民幣17,062,452,000元(2011年:人民幣11,059,342,000元)。董事們認為,現金流預計的假設條件是合理的。然而,關於未來事件的所有假設條件本身均具有限制性及不確定性,某些或者所有此類假設條件均可能不會實現。

37 Financial risk management and fair values (continued)

37 財務風險管理及公允價值（續）

(b) Liquidity risk (continued)

(b) 流動資金風險（續）

The following table details the remaining contractual maturities at the balance sheet date of the Group's and the Company's non-derivative financial liabilities, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on rates current at the balance sheet dates) and the earliest date the Group and the Company can be required to pay:

下表列出了於資產負債表日期之日，本集團與本公司非衍生金融負債的剩餘合同期限，依據是合同未貼現現金流（包括根據合同利率計算的利息款額，如果採用浮動利率，即為根據資產負債表日期的利率計算的利息款額），以及可能要求本集團及本公司支付的最早日期：

The Group

本集團

		2012					
		Contractual undiscounted cash outflow 合同未貼現現金流出					
		Within 1 year or on demand 1年內或要求即付 RMB'000 人民幣千元	More than 1 year but less than 2 years 1年以上2年以下 RMB'000 人民幣千元	More than 2 years but less than 5 years 2年以上5年以下 RMB'000 人民幣千元	More than 5 years 5年以上 RMB'000 人民幣千元	Total 合計 RMB'000 人民幣千元	Carrying amount 賬面金額 RMB'000 人民幣千元
Long-term borrowings (note 29(a))	長期借款（附註29(a)）	160,512	934,530	4,334,246	2,810,397	8,239,685	6,366,579
Short-term borrowings (note 29(b))	短期借款（附註29(b)）	10,108,784	—	—	—	10,108,784	9,823,411
Trade and bills payables (note 30)	應付賬款及票據（附註30）	12,276,725	—	—	—	12,276,725	12,276,725
Other payables (note 31)	其他應付款項（附註31）	3,113,957	—	—	—	3,113,957	3,113,957
Other non-current liabilities (note 35)	其他非流動負債（附註35）	—	87,290	1,878	—	89,168	89,168
		25,659,978	1,021,820	4,336,124	2,810,397	33,828,319	31,669,840
Financial guarantees issued:	提供的金融擔保：						
Maximum amount guaranteed (note 39)	最大擔保額（附註39）	260,000	—	—	—	260,000	—

37 Financial risk management and fair values (continued)

37 財務風險管理及公允價值(續)

(b) Liquidity risk (continued)

(b) 流動資金風險(續)

The Group (continued)

本集團(續)

		2011					
		Contractual undiscounted cash outflow 合同未貼現現金流出					
		Within 1 year or on demand 1年內或要求即付 RMB'000 人民幣千元	More than 1 year but less than 2 years 1年以上2年以下 RMB'000 人民幣千元	More than 2 years but less than 5 years 2年以上5年以下 RMB'000 人民幣千元	More than 5 years 5年以上 RMB'000 人民幣千元	Total 合計 RMB'000 人民幣千元	Carrying amount 賬面金額 RMB'000 人民幣千元
Long-term borrowings (note 29(a))	長期借款(附註29(a))	70,026	831,589	239,210	201,167	1,341,992	1,138,728
Short-term borrowings (note 29(b))	短期借款(附註29(b))	11,312,984	—	—	—	11,312,984	10,938,282
Trade and bills payables (note 30)	應付賬款及票據(附註30)	12,644,926	—	—	—	12,644,926	12,644,926
Other payables (note 31)	其他應付款項(附註31)	1,828,516	—	—	—	1,828,516	1,828,516
Other non-current liabilities (note 35)	其他非流動負債(附註35)	—	11,871	92,417	—	104,288	104,288
		25,856,452	843,460	331,627	201,167	27,232,706	26,654,740
Financial guarantees issued:	提供的金融擔保:						
Maximum amount guaranteed (note 39)	最大擔保額(附註39)	260,000	—	—	—	260,000	—

37 Financial risk management and fair values (continued)

37 財務風險管理及公允價值(續)

(b) Liquidity risk (continued)

(b) 流動資金風險(續)

The Company

本公司

		2012					
		Contractual undiscounted cash outflow 合同未貼現現金流出					
		Within 1 year or on demand 1年內或要求即付 RMB'000 人民幣千元	More than 1 year but less than 2 years 1年以上2年以下 RMB'000 人民幣千元	More than 2 years but less than 5 years 2年以上5年以下 RMB'000 人民幣千元	More than 5 years 5年以上 RMB'000 人民幣千元	Total 合計 RMB'000 人民幣千元	Carrying amount 賬面金額 RMB'000 人民幣千元
Long-term borrowings (note 29(a))	長期借款(附註29(a))	27,675	219,474	2,978,872	2,515,000	5,741,021	4,356,106
Short-term borrowings (note 29(b))	短期借款(附註29(b))	4,004,810	—	—	—	4,004,810	3,895,978
Trade and bills payables (note 30)	應付賬款及票據(附註30)	19,503	—	—	—	19,503	19,503
Other payables (note 31)	其他應付款項(附註31)	2,017,724	—	—	—	2,017,724	2,017,724
		6,069,712	219,474	2,978,872	2,515,000	11,783,058	10,289,311
Financial guarantees issued:	提供的金融擔保:						
Maximum amount guaranteed (note 39)	最大擔保額(附註39)	1,654,688	—	—	—	1,654,688	—

37 Financial risk management and fair values (continued)

37 財務風險管理及公允價值（續）

(b) Liquidity risk (continued)

(b) 流動資金風險（續）

The Company (continued)

本公司（續）

		2011					
		Contractual undiscounted cash outflow 合同未貼現現金流出					
		Within 1 year or on demand 1年內或要求即付 RMB'000 人民幣千元	More than 1 year but less than 2 years 1年以上2年以下 RMB'000 人民幣千元	More than 2 years but less than 5 years 2年以上5年以下 RMB'000 人民幣千元	More than 5 years 5年以上 RMB'000 人民幣千元	Total 合計 RMB'000 人民幣千元	Carrying amount 賬面金額 RMB'000 人民幣千元
Long-term borrowings (note 29(a))	長期借款（附註29(a)）	37,972	616,600	50,292	—	704,864	640,000
Short-term borrowings (note 29(b))	短期借款（附註29(b)）	4,326,463	—	—	—	4,326,463	4,170,000
Trade and bills payables (note 30)	應付賬款及票據（附註30）	104,973	—	—	—	104,973	104,973
Other payables (note 31)	其他應付款項（附註31）	1,064,562	—	—	—	1,064,562	1,064,562
		5,533,970	616,600	50,292	—	6,200,862	5,979,535
Financial guarantees issued:	提供的金融擔保：						
Maximum amount guaranteed (note 39)	最大擔保額（附註39）	1,132,400	—	—	—	1,132,400	—

37 Financial risk management and fair values (continued)

37 財務風險管理及公允價值(續)

(c) Interest rate risk

The Group's interest rate risk arises primarily from long-term borrowings. Borrowings issued at variable rates expose the Group to cash flow interest rate risk.

The Group regularly reviews and monitors the mix of fixed and variable rate borrowings in order to manage its interest rate risks. During the year, however, management of the Group did not consider it is necessary to use interest rate swaps to hedge their exposure to interest.

(i) Interest rate profile

The following table details the profile of the Group's net borrowings (interest-bearing financial liabilities less interest-bearing financial assets) at the balance sheet dates. The detailed interest rates and maturity information of the Group's borrowings are disclosed in note 29.

(c) 利率風險

本集團的利率風險主要來自於長期借款。浮動利率借款使本集團暴露於現金流利率風險之下。

為了管理本集團的利率風險,本集團定期審查並監控固定利率及浮動利率借款的組合。然而,本集團管理層認為在本年度無需通過利率掉期,對沖本集團的利率風險。

(i) 利率情況

下表詳細列出了資產負債表日本集團的淨借款情況(帶息金融負債減帶息金融資產)。附註29披露了本集團借款的詳細利率以及借款期限。

The Group **本集團**

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Net fixed rate borrowings:	**固定利率淨借款:**		
Borrowings	借款	**6,929,373**	1,38 6,943
Less: bank deposits (including restricted deposits)	減:銀行存款(包括受限制存款)	**(787,500)**	(995,797)
loans and advances	貸款及墊款	**(21,525)**	(14,000)
		6,120,348	377,146
Net floating rate borrowings:	**浮動利率淨借款:**		
Borrowings	借款	**9,260,617**	10,690,067
Other payables	其他應付款項	**146,964**	—
Less: bank deposits (including restricted deposits)	減:銀行存款(包括受限制存款)	**(3,793,473)**	(5,932,109)
loans and advances	貸款及墊款	**(112,000)**	—
		5,502,108	4,757,958
Total net borrowings	淨借款總額	**11,622,456**	5,135,104

37 Financial risk management and fair values (continued)

37 財務風險管理及公允價值（續）

(c) Interest rate risk (continued)

(c) 利率風險（續）

(i) Interest rate profile (continued)

(i) 利率情況（續）

The Company

本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Net fixed rate borrowings:	**固定利率淨借款：**		
Borrowings	借款	**4,702,084**	400,000
Less: loans and advances	減：貸款及墊款	**(2,748,220)**	—
		1,953,864	400,000
Net floating rate borrowings:	**浮動利率淨借款：**		
Borrowings	借款	**3,550,000**	4,410,000
Other payables	其他應付款項	**150,512**	529,451
Less: bank deposits (including restricted deposits)	減：銀行存款（包括受限制存款）	**(1,404,902)**	(2,647,966)
loans and advances	貸款及墊款	**(4,770,948)**	(3,439,391)
		(2,475,338)	(1,147,906)
Total net deposits	淨存款總額	**(521,474)**	(747,906)

37 Financial risk management and fair values (continued)

(c) Interest rate risk (continued)

(ii) *Sensitivity analysis*

At 31 December 2012, it is estimated that a general increase/decrease of 100 basis points in interest rates of net floating borrowings, with all other variables held constant, the Group's profit after tax and retained profits would have decreased/increased by approximately RMB36,992,000 (2011: RMB38,258,000). Other components of consolidated equity would not be affected by the general increase/decrease in interest rates.

The sensitivity analysis above has been determined assuming that the change in interest rates had occurred at the balance sheet dates and had been applied to the exposure to interest rate risk for non-derivative financial instruments in existence at the balance sheet date. The impact on the Group's profit after tax (and retained profits) and other components of consolidated equity is estimated as an annualised impact on interest expense or income of such a change in interest rates.

The estimated 100 basis points increase or decrease represents management's assessment of a reasonable change in interest rates over the period until the next annual balance sheet date. The analysis is performed on the same basis for 2011.

37 財務風險管理及公允價值(續)

(c) 利率風險(續)

(ii) *敏感度分析*

於2012年12月31日,預計淨浮動利率借款的利率普遍上漲/下調100個基點,其他所有變量保持不變,本集團的稅後利潤及留存利潤則將大約下降/增長人民幣36,992,000元人民幣(2011年:38,258,000元人民幣)。合併權益的其他組成部分不會受到利率上漲/下調的影響。

做出上述敏感度分析的假設條件是利率變化發生在資產負債表日且套用於當日存在的非衍生金融工具的利率風險的敞口。對本集團稅後利潤(及留存利潤)及合併權益其他組成部分的影響是根據此利率變化對利息費用或收入的年度性影響而估計的。

估計的100個基點上漲/下調,是管理層對利率至下一年度資產負債表日期間的變化做出的合理評估。與2011年分析方法相同。

37 Financial risk management and fair values (continued)

(d) Currency risk

The Group is exposed to currency risk primarily through sales and purchases which give rise to receivables and payables, as well as other equity investments, borrowings and cash at bank and in hand that are denominated in a foreign currency, i.e. a currency other than the functional currency of the operations to which the transactions relate. The currencies giving rise to this risk are primarily Euros ("EUR"), USD, HKD and Australian Dollars ("AUD").

(i) Recognised assets and liabilities

The Group is exposed to currency risk primarily arising from cash at bank, other equity investments, receivables, payables and borrowings which are denominated in EUR, USD, HKD or AUD. Depreciation or appreciation of these foreign currencies against Renminbi would affect the financial position and operating results of the Group. The Group did not hedge its foreign currency exposure.

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 the foreign exchange control system may prevent the Group from satisfying sufficient foreign currency demands and the Group may not be able to pay dividends in foreign currencies to its equity shareholders.

(ii) Exposure to currency risk

The following table details the Group's and the Company's exposure at the balance sheet date to currency risk arising from recognised assets or liabilities denominated in a currency other than the functional currency of the entity to which they relate. For presentation purposes, the amounts of the exposure are shown in RMB, translated using the spot rate at the balance sheet dates. Differences resulting from the translation of the financial statements of foreign operations into the Group's presentation currency are excluded.

37 財務風險管理及公允價值(續)

(d) 貨幣風險

本集團的貨幣風險主要為採用外幣(即與交易相關的業務自功能性幣種不同的其他貨幣)計價的來源於銷售及購買活動產生的應收款項及應付款項,以及借款及銀行存款及庫存現金。與該風險相關的幣種主要包括歐元、美元、港幣及澳大利亞元(「澳元」)。

(i) 確認的資產與負債

本集團的貨幣風險主要來源於採用歐元、美元、港元或澳元計價的銀行存款、其他權益投資、應收款項、應付款項及借款。此等外幣相對於人民幣的升值或貶值均會影響到本集團的財務狀況及經營業績。本集團未對沖外幣風險。

人民幣並非自由兑換貨幣,中國政府可自行決定將來限制來往賬戶交易採用的外幣。關於外匯控制制度的變化,可能妨礙本集團滿足對外幣的需求,本集團可能無法採用外幣向股東支付股息。

(ii) 貨幣風險敞口

採用實體相關功能貨幣以外的其他幣種計價的確認資產或負債,使本集團及本公司於資產負債日期承受的貨幣風險在下表中詳細列出。為陳述之目的,採用資產負債表日的現匯匯率兑折算為人民幣來列示貨幣風險。未包括將境外業務的財務報表轉換成本集團報告貨幣所產生的差額。

37 Financial risk management and fair values (continued)

37 財務風險管理及公允價值(續)

(d) Currency risk (continued)

(d) 貨幣風險(續)

(ii) Exposure to currency risk (continued)

(ii) 貨幣風險敞口(續)

The Group

本集團

		2012			
		USD 美元 RMB'000 人民幣千元	**EUR 歐元 RMB'000 人民幣千元**	**HKD 港幣 RMB'000 人民幣千元**	**AUD 澳元 RMB'000 人民幣千元**
Cash at bank and in hand	銀行存款及庫存現金	**12,002**	**11,547**	**275,522**	**—**
Trade receivables	應收賬款	**52,416**	**—**	**24,276**	**—**
Other equity investments	其他權益投資	**—**	**—**	**169,034**	**—**
Trade payables	應付賬款	**(97,790)**	**—**	**(259)**	**—**
Other receivables	其他應收款項	**—**	**—**	**1,015**	**—**
Other payables	其他應付款項	**(1,934)**	**—**	**(1,135)**	**—**
Net exposure	淨敞口	**(35,306)**	**11,547**	**468,453**	**—**

		2011			
		USD 美元 RMB'000 人民幣千元	EUR 歐元 RMB'000 人民幣千元	HKD 港幣 RMB'000 人民幣千元	AUD 澳元 RMB'000 人民幣千元
Cash at bank and in hand	銀行存款及庫存現金	1,431	2,228	1,839,828	—
Trade receivables	應收賬款	15,464	14,362	—	—
Trade payables	應付賬款	(393,539)	—	—	—
Other receivables	其他應收款項	—	—	1,079	—
Other payables	其他應付款項	—	(113,409)	—	(5,450)
Short-term borrowings	短期借款	—	(82,443)	—	—
Net exposure	淨敞口	(376,644)	(179,262)	1,840,907	(5,450)

37 Financial risk management and fair values (continued)

37 財務風險管理及公允價值（續）

(d) Currency risk (continued)

(d) 貨幣風險（續）

(ii) Exposure to currency risk (continued)

(ii) 貨幣風險敞口（續）

The Company

本公司

		2012		2011	
		EUR 歐元 RMB'000 人民幣千元	**HKD 港幣 RMB'000 人民幣千元**	EUR 歐元 RMB'000 人民幣千元	HKD 港幣 RMB'000 人民幣千元
Cash at bank and in hand	銀行存款及庫存現金	**1,204**	**273,548**	2,206	1,836,745
Trade receivables	應收賬款	**—**	**24,276**	—	—
Other equity investments	其他權益投資	**—**	**169,034**	—	—
Net exposure	淨敞口	**1,204**	**466,858**	2,206	1,836,745

(iii) Sensitivity analysis

(iii) 敏感度分析

The followings are the related foreign currency exchange rates to RMB during the year:

下表列出了相關外幣與人民幣之間的匯率：

		2012		2011	
		Average rate 平均匯率	**Reporting date spot rate 報告日現匯匯率**	Average rate 平均匯率	Reporting date spot rate 報告日現匯匯率
USD	美元	**6.2932**	**6.2855**	6.4588	6.3009
EUR	歐元	**8.2401**	**8.3176**	9.0213	8.1625
HKD	港幣	**0.8108**	**0.8108**	0.8279	0.8107
AUD	澳元	**6.4728**	**6.5363**	6.7180	6.4093

A 5% strengthening of RMB against the following currencies would have increased/(decreased) the net profit after tax and retained profits by the amounts shown below. Other components of equity would not be affected by the strengthen of RMB against foreign currencies.

人民幣對如下貨幣5%的升值，稅後利潤及留存利潤的上漲／（下滑）金額如下表所列。權益的其他組成部分不會受到人民幣相對於外幣升值的影響。

37 Financial risk management and fair values (continued)

37 財務風險管理及公允價值(續)

(d) Currency risk (continued)

(d) 貨幣風險(續)

(iii) Sensitivity analysis (continued)

(iii) 敏感度分析(續)

The Group 本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
USD	美元	**(1,501)**	16,008
EUR	歐元	**500**	7,630
HKD	港幣	**23,410**	(69,055)
AUD	澳元	**—**	232
		22,409	(45,185)

The Company 本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
USD	美元	**60**	(83)
HKD	港幣	**23,343**	(68,878)
		23,403	(68,961)

A 5% weakening of RMB against the above currencies would have had the equal but opposite effect on the above currencies to the amounts shown above, on the basis that all other variables remain constant.

人民幣相對於上述貨幣5%的貶值,如果所有其他變量保持不變,則對上述貨幣產生相同但相反的影響,影響金額如上表所列。

The sensitivity analysis has been determined assuming that the change in foreign exchange rates had occurred at the balance sheet dates and had been applied to the Group's exposure to currency risk for financial instruments in existence at that date, and that all other variables, in particular interest rates, remain constant.

作出上述敏感度分析的假設條件是,匯率變化發生在資產負債表日且套用於當日存在的金融工具的貨幣風險敞口,且所有其他變量保持不變,尤其是利率未發生變化。

The stated changes represent management's assessment of reasonably possible changes in foreign exchange rates over the period until the next annual balance sheet date. The analysis is performed on the same basis for 2011.

所陳述的匯率波動情況是管理層對至下一資產負債表日期間可能發生的匯率變化的合理評估。分析方法同2011年的分析方法相同。

37 Financial risk management and fair values (continued)

(e) Equity price risk

The Group is exposed to equity price changes arising from listed equity investments classified as available-for-sale equity securities (see note 21). The Group's listed investments are listed on the HKSE, which have been chosen based on their longer term growth potential and are monitored regularly for performance against expectations.

The directors considered that the Group's and the Company's exposure to equity price risk is insignificant.

(f) Fair values

(i) Financial instruments carried at fair value

The following table presents the carrying value of financial instruments measured at fair value at the balance sheet date across the three levels of the fair value hierarchy defined in IFRS 7, Financial Instruments: Disclosures, with the fair value of each financial instrument categorised in its entirety based on the lowest level of input that is significant to that fair value measurement. The levels are defined as follows:

— Level 1 (highest level): fair values measured using quoted prices (unadjusted) in active markets for identical financial instruments

— Level 2: fair values measured using quoted prices in active markets for similar financial instruments, or using valuation techniques in which all significant inputs are directly or indirectly based on observable market data

37 財務風險管理及公允價值（續）

(e) 股票價格風險

本集團因被歸類為可供出售權益證券的已上市權益投資（參見註釋21）而受股票價格風險。本集團的已上市投資於香港聯交所上市，本集團是根據其長遠的發展潛力選擇有關投資，並定期根據與預期的比較對其業績進行監控。

董事們認為本集團以及本公司的股票價格風險敞口不重大。

(f) 公允價值

(i) 按公允價值列賬的金融工具

下表列出了根據《國際財務報告準則》第7號——「金融工具：披露」中定義的三個公允價值層級中以公允價值計量的金融工具於資產負債表日的賬面價值，對各金融工具的整體的公允價值根據其對公允價值的計量而言重要的最低級輸入變量作分類。各層級的定義如下：

— 第一層級（最高層級）：以相同金融工具在活躍市場的報價（未經調整）計量的公允價值

— 第二層級：以類似金融工具在活躍市場的報價計量的公允價值，或使用評估技術而所有重要的輸入變量均直接或間接基於可觀察市場數據所計量的公允價值

37 Financial risk management and fair values (continued)

37 財務風險管理及公允價值（續）

(f) Fair values(continued)

(f) 公允價值（續）

(i) Financial instruments carried at fair value (continued)

(i) 按公允價值列賬的金融工具（續）

— Level 3 (lowest level): fair values measured using valuation techniques in which any significant input is not based on observable market data

— 第三層級（最低層級）：使用評估技術而所有重要的輸入變量皆並非基於可觀察市場數據所計量的公允價值

2012 2012年		The Group 本集團 Level 1 第一層級 RMB'000 人民幣千元	Level 2 第二層級 RMB'000 人民幣千元	Level 3 第三層級 RMB'000 人民幣千元	Total 總計 RMB'000 人民幣千元	The Company 本公司 Level 1 第一層級 RMB'000 人民幣千元	Level 2 第二層級 RMB'000 人民幣千元	Level 3 第三層級 RMB'000 人民幣千元	Total 總計 RMB'000 人民幣千元
Assets	資產								
Available-for-sale equity securities:	可供出售權益證券：								
— Listed	一已上市	169,034	—	—	169,034	169,034	—	—	169,034

During the years ended 31 December 2012 and 2011, there were no significant transfers between instruments in Level 1 and Level 2.

於2012年及2011年的12月31日，於第一層級和第二層級之間的金融工具未發生重大轉移。

37 Financial risk management and fair values (continued)

37 財務風險管理及公允價值(續)

(f) Fair values (continued)

(f) 公允價值(續)

(ii) Fair value of financial instruments carried at other than fair value

(ii) 以非公允價值列賬的金融工具的公允價值

The carrying amounts of the Group's and the Company's financial instruments carried at cost or amortised cost are not materially different from their fair values as at 31 December 2012 and 2011 except the Group's financial instruments as follows:

除本集團的如下金融工具之外,於2012年及2011年12月31日,本集團及本公司採用成本及攤餘成本記賬的金融工具的賬面金額,與公允價值不存在重大差異。

The Group

本集團

		2012		2011	
		Carrying amount 賬面金額 RMB'000 人民幣千元	**Fair value 公允價值 RMB'000 人民幣千元**	Carrying amount 賬面金額 RMB'000 人民幣千元	Fair value 公允價值 RMB'000 人民幣千元
Long-term receivables	長期應收款項	**1,963,970**	**1,780,283**	13,427	11,413
Fixed rate long-term bank loans	固定利率長期銀行貸款	**—**	**—**	(5,000)	(4,422)
Corporate bonds	公司債券	**(4,042,084)**	**(4,002,195)**	—	—
Other non-current liabilities	其他非流動負債	**(89,168)**	**(84,491)**	—	—

(g) Estimation of fair values

(g) 公允價值的估計

The fair values of interest-bearing borrowings and receivables are estimated as the present value of future cash flows, discounted at current market interest rates for similar financial instruments.

帶息借款及應收款項的公允價值估計為未來現金流按照類似金融工具當前市場利率折現的現值。

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

38 Commitments

38 承擔

(a) Commitments for the construction and acquisition of property, plant and equipment outstanding at 31 December 2012 not provided for in the financial statements were as follows:

(a) 財務報表中未列出的於2012年12月31日關於建造及購買物業、廠房及設備的資本承擔如下所述：

The Group 本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Contracted for	已訂約	**2,901,444**	1,872,569
Authorised but not contracted for	已授權但未訂約	**133,633**	1,926,309
		3,035,077	3,798,878

The Company 本公司

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Contracted for	已訂約	**—**	98,479
		—	98,479

(b) At 31 December 2012, the total future minimum lease payments under non-cancellable operating leases are payable as follows:

(b) 於2012年12月31日，根據不可解除的經營租賃，未來應付的最低租賃付款總額如下所述：

The Group 本集團

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Within 1 year	1年內	**49,965**	*2,051*
After 1 year but within 5 years	1年後但5年內	**9,130**	*1,434*
		59,095	*3,485*

The Group leases certain buildings through non-cancellable operating leases. These operating leases do not contain provisions for contingent lease rentals. None of the rental agreements contain escalation provisions that may require higher future rental payments.

本集團通過不可解除的經營租賃方式承租了若干樓宇。此等租賃中未包括關於或有租金的條款規定。租賃協議中均未規定關於未來支付更高租金的增價條款。

39 Contingent liabilities

39 或有負債

At 31 December 2012, the Group and the Company issued financial guarantees to banks in respect of the bank loans granted to related parties and provided bid and performance guarantees to customers and the Company's subsidiaries for construction contracts and sale of wind turbines as follows:

於2012年12月31日，由於銀行向關聯方提供的貸款而使本集團及本公司向銀行作出的金融擔保、本集團及本公司關於建造合同及風機銷售而向客戶及本公司的附屬公司作出的投標及履約擔保如下所述：

The Group 本集團

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Financial guarantees to banks for a third party (note)	為第三方而向銀行作出的金融擔保(附註)	**260,000**	—
Bid guarantees provided to:	向如下公司提供的投標擔保：		
— related parties under Guodian	— 國電下屬的關聯方	**1,436**	800
— third parties	— 第三方	**30,830**	20,030
Performance guarantees provided to:	向如下公司提供的履約擔保：		
— related parties under Guodian	— 國電下屬的關聯方	**160,831**	303,659
— third parties	— 第三方	**792,166**	1,291,238
		1,245,263	1,615,727

The Company 本公司

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Financial guarantees to banks for subsidiaries	為附屬公司而向銀行作出的金融擔保	**319,400**	1,132,400
Performance guarantees provided to subsidiaries	為附屬公司提供的履約擔保	**515,959**	676,936
		835,359	1,809,336

39 Contingent liabilities (continued)

As at the balance sheet date, the directors do not consider it probable that a claim will be made against the Group under any of the guarantees.

In addition, a subsidiary is the defendant in a lawsuit arising from its associate's default in the repayment of a bank loan. On 29 September 2012, the bank sued the subsidiary and its associate for the repayment of the loan and the legal fee with an amount of RMB39,979,000. On 6 January 2013, Wuxi Intermediate People's Court heard the case and up to the date of authorisation of these financial statements the litigation is pending court decision. The subsidiary should not be liable to the loan as it is not a party in the loan agreement, and taking into account of the relevant legal opinion, management believes that it is more probable than not that the Group would win the case. Accordingly, no provision has been recognised by the Group for this claim.

Note:

The financial guarantee for a third party is assumed by the Group in the acquisition of Galaxy Water (see note 41(a)) in 2012. On 31 December 2012, the seller of Galaxy Water provided a counter-guarantee to the Group against the Group's obligation under the financial guarantee.

39 或有負債（續）

於資產負債表日，董事們認為根據所提供的擔保向本集團或本公司提出任何索賠的機會不大。

此外，本集團一家附屬公司因其聯營公司違約償還銀行貸款的一宗訴訟案而為案中的被告。於2012年9月29日，銀行起訴該附屬公司及其聯營公司，要求償還貸款並支付相關訴訟費人民幣39,979,000元。於2013年1月6日，無錫市中級人民法院就此案進行審理，截至此等財務報表批准之日，該案仍有待法院判決。由於該附屬公司並非作為貸款合同的一方，該附屬公司對該貸款並無責任，並考慮了相關法律意見後，管理層認為本集團很有可能將在該案中勝訴。因此，本集團並未就該項索賠確認撥備。

附註：

於2012年，本集團收購銀河水務承擔了對第三方提供的財務擔保（見附註41(a)）。於2012年12月31日，銀河水務的出讓方就本集團的財務擔保責任向本集團提供反擔保。

40 Material related party transactions

(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.

40 重大關聯方交易

(a) 與關聯方的交易

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。

40 Material related party transactions (continued)

40 重大關聯方交易（續）

(a) Transactions with related parties (continued)

(a) 與關聯方的交易（續）

Except as disclosed in note 41(c), other principal transactions which were carried out in the ordinary course of business are as follows:

除附註41(c)所披露，在正常業務過程中與關聯方的其他主要交易如下所述：

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Sale of goods to	*出售商品予*		
Guodian	國電	**125,580**	—
Related parties under Guodian	國電下屬的關聯方	**6,319,476**	6,718,228
Associates	聯營公司	**983**	34,773
Construction service provided to	*提供建造服務予*		
Guodian	國電	**477,218**	283,393
Related parties under Guodian	國電下屬的關聯方	**4,395,926**	4,250,592
Service provided to	*提供服務予*		
Related parties under Guodian	國電下屬的關聯方	**62,834**	26,381
Associates	聯營公司	**—**	3,691
Lease to	*出租予*		
Related parties under Guodian (note (i))	國電下屬的關聯方（附註(i)）	**1,142,014**	964,066
Lease of investment properties to	*租賃投資性物業予*		
Associates	聯營公司	**—**	2,612
Purchase of goods from	*購買商品自*		
Related parties under Guodian	國電下屬的關聯方	**80,364**	15,561
Associates	聯營公司	**393**	55,305
Purchase of equipment from	*購買設備自*		
Related parties under Guodian	國電下屬的關聯方	**819,405**	675,530
Service provided by	*服務提供自*		
Related parties under Guodian	國電下屬的關聯方	**28,511**	1,500
Associates	聯營公司	**21,284**	22,000
Working capital obtained from	*周轉資金取得自*		
Guodian	國電	**300,000**	—
Related parties under Guodian	國電下屬的關聯方	**—**	911,213
Associates	聯營公司	**—**	259

40 Material related party transactions (continued) 40 重大關聯方交易(續)

(a) Transactions with related parties (continued) (a) 與關聯方的交易(續)

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Working capital repaid to	*償還周轉資金予*		
Guodian	國電	**—**	1,123,898
Related parties under Guodian	國電下屬的關聯方	**—**	1,651,398
Associates	聯營公司	**259**	—
Working capital provided to	*提供周轉資金予*		
Related parties under Guodian	國電下屬的關聯方	**—**	3,266
Associates	聯營公司	**184,094**	114,621
Working capital repaid from	*償還周轉資金自*		
Related parties under Guodian	國電下屬的關聯方	**3,244**	542,636
Associates	聯營公司	**60,613**	265,000
Loans received from	*貸款借取自*		
Related parties under Guodian	國電下屬的關聯方	**—**	920,000
Loans repaid to	*償還貸款予*		
Related parties under Guodian	國電下屬的關聯方	**—**	2,750,000
Interest expenses	*利息費用*		
Guodian	國電	**—**	33,322
Related parties under Guodian	國電下屬的關聯方	**—**	35,211
Interest income	*利息收入*		
Related parties under Guodian	國電下屬的關聯方	**451**	43
Net deposits placed with/(withdrawn from)	*存入/(提取)的存款淨額*		
Related parties under Guodian	國電下屬的關聯方	**228,829**	(56,597)
Capital investment in	*資本投資予*		
Related parties under Guodian	國電下屬的關聯方	**48,532**	38,038
Associates	聯營公司	**110,000**	27,500
Capital investment from	*資本投入自*		
Related parties under Guodian	國電下屬的關聯方	**97,457**	150,000
Dividend paid to	*支付股息予*		
Related parties under Guodian	國電下屬的關聯方	**151,984**	90,000
Dividend received from	*收取股息自*		
Related parties under Guodian	國電下屬的關聯方	**15,511**	5,743
Associates	聯營公司	**28,741**	21,509

40 Material related party transactions (continued)

(a) Transactions with related parties (continued)

Notes:

(i) Pursuant to the Notice of Pilot Plan of Concession of Fossil-Fired Power Plant Flue Gas Desulphurisation (《關於開展火電廠煙氣脱硫特許經營試點工作的通知》) promulgated by the National Development and Reform Commission of the PRC (the "NDRC") and Ministry of Environmental Protection in 2007, the state encourages power plants to engage professional desulphurisation service providers to construct, operate and maintain the desulphurisation facilities and the Group is one of the approved service providers. Accordingly, the Group entered into various service arrangements with power plants, including power plants of Guodian and related parties under Guodian, to operate the desulphurisation facilities for the treatment of sulphur dioxide generated by power plants during their electricity generation. The Group acquires or constructs the desulphurisation facilities and then maintains and operates the desulphurisation 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 NDRC. These arrangements are not in the legal form of leases, but are deemed as operating leases based on their terms and conditions.

(b) Outstanding balances, including commitment, with related parties

Details of the outstanding balances with related parties are set out in notes 22, 24, 25, 26, 28, 30 and 31.

As at 31 December 2012, a bank loan of the Group amounting to RMB900,000,000 is guaranteed by Guodian.

40 重大關聯方交易(續)

(a) 與關聯方的交易(續)

附註:

(i) 根據中國發展與改革委員會(「發改委」)與國家環境保護部於2007年頒佈的《關於開展火電廠烟氣脱硫特許經營試點工作的通知》規定,國家鼓勵電廠聘請專業的脱硫服務提供商建設、運營並維護脱硫設施,本集團已批准為此類服務提供商。因此,本集團已與電廠簽訂了大量的服務安排,包括國電及國電下屬的關聯方的電廠,負責脱硫設施的運行工作,以在發電過程中處理電廠生成的二氧化硫。本集團購買或製造脱硫設備,之後在電廠運行期間負責運行脱硫設施以向電廠提供污染物處理服務。根據電廠售出的發電量以及發改委制定的收費標準,收取脱硫服務費用。此等安排雖並不是法律形式上的租賃,但根據其條款與條件被視同為經營租賃。

(b) 與關聯方的餘額、包括約定

附註22、24、25、26、28、30與31對關聯方的餘額進行了詳細説明。

於2012年12月31日,國電為本集團銀行借款人民幣900,000,000元提供擔保。

40 Material related party transactions (continued)

40 重大關聯方交易(續)

(b) Outstanding balances, including commitment, with related parties (continued)

(b) 與關聯方的餘額、包括約定(續)

At 31 December 2012, the Group's commitments with related parties that have been contracted for but not yet been recognised in these financial statements were as follows:

於2012年12月31日,本集團已訂約但尚未在財務報表中確認的對關聯方的約定情況如下:

		2012 RMB'000 人民幣千元	2011 RMB'000 人民幣千元
Sale of goods to	*出售商品予:*		
Related parties under Guodian	國電下屬的關聯方	**3,203,459**	4,654,284
Construction service to be provided to	*提供建造服務予:*		
Related parties under Guodian	國電下屬的關聯方	**1,934,382**	1,583,525

(c) Contributions to defined contribution retirement plans

(c) 界定供款退休計劃的供款

The Group participates in various defined contribution retirement plans organised by relevant local government authorities and Guodian for its staff. As at 31 December 2012, there was no material outstanding contribution to post-employment benefit plans. Details of the defined contribution retirement plans are set out in note 7(a).

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2012年12月31日,在退休福利計劃項下,沒有重大未支付供款。附註7(a)對界定供款退休計劃進行了詳細説明。

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

(d) 與中國其他政府相關實體之間的交易

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.

在本集團目前從業的經濟體制之下,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、聯合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。

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.

除上述與國電及國電下屬關聯方之間的交易之外,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。

40 Material related party transactions (continued)

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

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 these financial statements, 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.

— 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.

40 重大關聯方交易（續）

(d) 與中國其他政府相關實體之間的交易（續）

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。此類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財務報表的潛在影響而需要的信息，董事們認為，對於具有整體重大意義的如下交易，需要披露進一步的詳細信息：

— 貨物銷售及施工服務的提供；

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。

— 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類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訂。

— 材料購買及獲得施工服務；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。

40 Material related party transactions (continued)

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

— 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.

(e) 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 as disclosed in note 9, and certain of the highest paid employees as disclosed in note 10, is as follows:

40 重大關聯方交易(續)

(d) 與中國其他政府相關實體之間的交易(續)

— 服務特許權安排;

本集團已與當地政府簽訂了多項特許權服務協議,在特許期限之內,負責建設以及經營污水處理廠。服務特許權協議項下的所有交易均是與地方政府作出的,且在各自的特許權安排中規定了交易執行條款。

(e) 主要管理人員薪酬

主要管理人員指對其所處職位具有權力與責任、可直接或間接地規劃、領導以及控制本集團的活動的個人,包括本公司的董事們。

關於主要管理人員的薪酬如下(包括附註9中披露的支付給本公司董事們的金額,以及附註10中披露的若干薪酬最高的僱員):

		2012 **RMB'000** **人民幣千元**	2011 RMB'000 人民幣千元
Salaries and other emoluments	工資及其他薪金	**4,127**	3,640
Discretionary bonus	酌情花紅	**2,394**	2,555
Retirement scheme contributions	退休計劃供款	**772**	748
		7,293	6,943

41 Acquisition of subsidiaries and non-controlling interests

(a) Acquisition of Galaxy Water

In May 2012, the Group acquired 70% equity interests in Galaxy Water and obtained the control of Galaxy Water and its subsidiaries. Galaxy Water is principally engaged in the construction and operation of water treatment plants under service concession agreements with local municipal governments. The acquisition of Galaxy Water allows the Group to benefit from its expertise in the construction and operation of water treatment projects and increases the Group's market share of water treatment business in the environmental protection segment.

In the period from the date of acquisition to 31 December 2012, Galaxy Water contributed revenue of RMB153,357,000 and profit of RMB39,237,000 to the Group's results. Management estimates that if the acquisition had occurred on 1 January 2012, the consolidated revenue of the Group would have been RMB21,828,242,000, and consolidated profit of the Group for the year ended 31 December 2012 would have been RMB1,040,635,000. In determining these amounts, management has assumed that the provisional fair value adjustments that arose on the date of acquisition would have been the same if the acquisition had occurred on 1 January 2012.

Consideration transferred

The fair value of the total consideration transferred on acquisition date was RMB466,200,000, which is satisfied fully by cash.

41 收購附屬公司和非控股權益

(a) 收購銀河水務

於2012年5月，本集團收購銀河水70%的股權並獲得銀河水務及其附屬公司的控制權。銀河水務主要負責根據與當地市政府簽訂的服務特許權協議建設和營運水處理廠。收購銀河水務使得本集團能夠將其專業知識用於水處理項目的建設和運營中並增加本集團水處理業務在環保領域的市場份額。

在收購日至2012年12月31日期間，銀河水務為本集團經營業績帶來人民幣153,357,000元的收入和人民幣39,237,000元的利潤。管理層估算，如果收購於2012年1月1日發生，則截至2012年12月31日止年度本集團的合併收入將為人民幣21,828,242,000元，本集團的合併利潤將為人民幣1,040,635,000元。在確定該等金額時，管理層已假設如果發生於2012年1月1日發生，在收購日產生的假定的公允價值調整額將為相同金額。

轉讓對價

收購日轉讓的總對價的公允價值為人民幣466,200,000元，全部以現金償付。

41 Acquisition of subsidiaries and non-controlling interests (continued)

41 收購附屬公司級非控股權益(續)

(a) Acquisition of Galaxy Water (continued)

(a) 收購銀河水務(續)

Identified assets acquired and liabilities assumed

確認的取得的資產和承擔的負債

The following summarises the recognised amounts of assets acquired and liabilities assumed at the acquisition date.

以下為於收購日取得的資產和承擔的負債的已確認金額。

		RMB'000 人民幣千元
Property, plant and equipment	物業、廠房及設備	1,117
Intangible assets	無形資產	418,152
Interests in associates	對聯營公司的投資	71,774
Deferred tax assets	遞延税項資產	3,361
Long-term receivables	長期應收款項	791,754
Inventories	存貨	181
Trade and other receivables	應收賬款及其他應收款項	255,205
Cash at bank and in hand	銀行存款及庫存現金	63,052
Borrowings	借款	(713,501)
Trade and other payables	應付賬款及其他應付款項	(216,089)
Deferred tax liabilities	遞延税項負債	(81,162)
		593,844

41 Acquisition of subsidiaries and non-controlling interests (continued)

41 收購附屬公司級非控股權益(續)

(a) Acquisition of Galaxy Water (continued)

(a) 收購銀河水務(續)

Goodwill

商譽

Goodwill arising from the acquisition has been recognised as follows:

收購產生的商譽確認如下:

		RMB'000 人民幣千元
Total consideration	總對價	466,200
Non-controlling interests, based on their proportionate interest in the recognised amounts of the asset and liabilities of the acquiree	根據對被收購方的資產和負債之確認金額持有的權益比例的非控股權益	178,153
Fair value of identifiable net assets	可辨認淨資產的公允價值	(593,844)
Goodwill	商譽	50,509

Goodwill is attributable mainly to the skills and expertise of Galaxy Water's work force and management. None of the goodwill recognised is expected to be deductible for income tax purpose.

商譽主要歸屬於銀河水務的工作團隊和管理層的技能和專業知識。已確認的商譽預期不用於扣減所得税。

Acquisition-related costs

收購相關成本

The Group incurred acquisition-related costs of RMB4,440,000 relating to external legal fees and due diligence costs. These amounts have been included in "administrative expenses" in the consolidated income statement.

本集團所產生之收購相關成本為人民幣4,440,000元,包括外部律師費與盡職調查成本。該等款項已計入合併收益表中的「行政開支」。

41 Acquisition of subsidiaries and non-controlling interests (continued)

(b) Acquisition of Zhaojing

In December 2012, the Group acquired 51% equity interests in Zhaojing and obtained the control of Zhaojing and its subsidiaries. Zhaojing is principally engaged in the production and sale of solar products. The acquisition of Zhaojing enables the Group to facilitate the production and sale of solar power products and services.

Management estimates that if the acquisition had occurred on 1 January 2012, the consolidated revenue of the Group would have been RMB22,248,513,000, and consolidated profit of the Group for the year ended 31 December 2012 would have been RMB948,341,000. In determining these amounts, management has assumed that the provisional fair value adjustments that arose on the date of acquisition would have been the same if the acquisition had occurred on 1 January 2012.

Consideration transferred

The fair value of the total consideration transferred on acquisition date was RMB153,000,000, which is satisfied fully by cash.

In addition, according to the investment agreement, the selling shareholder agreed to make good the net losses of Zhaojing in the first three financial years from the date of acquisition by waiving the principal and interests of loans due to the selling shareholder and its related entities, and by cash for any shortfall. Based on the profit forecast of Zhaojing, the Group estimates the fair value of the contingent consideration to be zero as at the date of acquisition and balance sheet date. Therefore no contingent consideration asset has been recognised as at the date of acquisition and 31 December 2012.

41 收購附屬公司級非控股權益(續)

(b) 收購兆晶公司

於2012年12月,本集團取得兆晶公司51%權益並獲得兆晶公司及其附屬公司的控制權。兆晶公司主要從事太陽能產品的生產和銷售。收購兆晶公司有助本集團的太陽能產品及服務。

管理層估計,如果該收購於2012年1月1日發生,則截至2012年12月31日止年度本集團的合併收入將為人民幣22,248,513,000元,本集團的合併利潤將為人民幣948,341,000元。在確定該等金額時,管理層已假設如果發生於2012年1月1日發生,在收購日產生的假定的公允價值調整額將為相同金額。

轉讓對價

收購日轉讓的總對價的公允價值為人民幣153,000,000元,全部以現金償付。

此外,根據相關投資協議,出讓方股東同意以免除出讓方股東及其關聯公司的債權之本金及利息及以現金補足差額的方式彌補兆晶公司自收購日後的三個年度的淨虧損。根據對於兆晶公司的盈利預測,本集團估計該項或有對價於收購日及資產負債表日的公允價值為零。因此於收購日及2012年12月31日沒有確認或有對價資產。

41 Acquisition of subsidiaries and non-controlling interests (continued)

41 收購附屬公司及非控股權益（續）

(b) Acquisition of Zhaojing (continued)

(b) 收購兆晶公司（續）

Identified assets acquired and liabilities assumed

確認的取得的資產和承擔的負債

The following summarises the recognised amounts of assets acquired and liabilities assumed at the acquisition date.

以下為於收購日取得的資產和承擔的負債的已確認金額。

		RMB'000 人民幣千元
Property, plant and equipment	物業、廠房及設備	720,528
Lease prepayments	預付土地租賃款	29,014
Intangible assets	無形資產	189
Inventories	存貨	22,317
Trade and other receivables	應收賬款及其他應收款項	134,595
Cash at bank and in hand	銀行存款及庫存現金	596
Restrict deposits	受限制存款	82,400
Borrowings	借款	(253,000)
Trade and other payables	應付賬款及其他應付款項	(436,639)
		300,000

Goodwill

商譽

		RMB'000 人民幣千元
Total consideration	總對價	153,000
Non-controlling interests, based on their proportionate interest in the recognised amounts of the asset and liabilities of the acquiree	根據對被收購方的資產和負債之確認金額持有的權益比例的非控股權益	147,000
Fair value of identifiable net assets	可辨認淨資產的公允價值	(300,000)
Goodwill	商譽	—

Acquisition-related costs

收購相關成本

The Group incurred acquisition-related costs of RMB3,700,000 relating to external legal fees and due diligence costs. These amounts have been included in "administrative expenses" in the consolidated income statement.

本集團所產生之收購相關成本為人民幣3,700,000元，包括外部律師費與盡職調查成本。該等款項已計入合併收益表中的「行政開支」。

41 Acquisition of subsidiaries and non-controlling interests (continued)

(c) Acquisition of non-controlling interests

In July 2012, the Group acquired from a related party under Guodian an additional 30% interest in a subsidiary for RMB45,057,000 in cash. The subsidiary becomes a wholly owned subsidiary of the Group after the acquisition. The carrying amount of the subsidiary's net assets in the Group's consolidated financial statements on the date of acquisition was RMB100,574,000. The Group recognised a decrease in non-controlling interests of RMB30,172,200 and an increase in capital reserves of RMB14,884,800.

41 收購附屬公司及非控股權益(續)

(c) 收購非控股權益

於2012年7月,本集團以現金人民幣45,057,000元從國電下屬的關聯方收購一家附屬公司額外30%的權益。收購完成後,該附屬公司成為本集團全資附屬公司。收購日該附屬公司於本集團合併財務報表中的淨資產賬面金額為人民幣100,574,000元。本集團確認非控股權益減少人民幣30,172,200元,資本儲備增加人民幣14,884,800元。

42 Notes to the consolidated cash flow statements

42 合併現金流量表的附註

Acquisition of subsidiaries during the year ended 31 December 2012

截至2012年12月31日止年度附屬公司的收購

		RMB'000 人民幣千元
Total consideration	總對價	619,200
Cash and cash equivalents acquired	取得的現金及現金等價物	(63,648)
Net outflow of cash and cash equivalents in respect of the acquisition	因收購的現金及現金等價物淨流出	555,552

43 Service concession arrangement

The Group entered into a number of service concession agreements with local governments (the "Grantors") to construct and operate water treatment plants during the concession period, which is normally for 20-30 years of operation. The Group is responsible for construction and maintenance of water treatment plants during the concession period. At the end of the concession period, the Group needs to transfer water treatment plants to the Grantors at nil consideration. With respect to these service concession arrangements, the Group has evaluated and assessed that these arrangements fall under the scope of IFRIC 12, Service Concession Arrangements.

43 服務特許權安排

本集團與地方政府(「授權方」)簽訂了多項服務特許權協議,在特許權期限之內,負責建設及營運水處理廠,該期限一般為20-30年。在特許權期限之內,本集團負責水處理廠的施工建設以及維護。特許權期滿之後,本集團需要以零對價將水處理廠轉讓給授權方。關於此等服務特許權安排,經本集團評估,此等安排符合《國際財務報告準則詮釋》第12號——「服務特許權安排」(「《國際財務報告準則詮釋》第12號」)。

43 Service concession arrangement

In accordance with IFRIC 12, the Group accounts for the revenue and costs relating to construction services in accordance with the accounting policy set out in note 2(p). The consideration received or receivables in exchange for the construction services is recognised as a financial asset for an unconditional contractual right to receive cash or another financial asset from or at the direction of the Grantor for the construction services and/or an intangible asset for a right or a license to charge users of the water treatment service.

The Group has recognised intangible assets (note 17) and service concession receivables (note 22) related to the service concession arrangement representing the right the Group received to charge a fee for water treatment or sale of reclaimed water and the guaranteed minimum payment during the operating period of the water treatment plants respectively.

Services concession construction revenue recorded during the year amounted to RMB74,021,000 (2011: RMB21,084,000), which represents the revenue recognised during the construction stage of the service concession period. The Group has recognised profit of RMB7,931,000 (2011: RMB1,585,000) for the construction of water treatment plants.

43 服務特許權安排(續)

根據《國際財務報告準則詮釋》第12號規定，本集團根據附註2(p)中陳述的會計政策處理建造服務相關的收入及成本。建造服務的已收或應收對價，就自授權方或按授權方的指示收取現金或其他金融資產的不附帶條件契約權確認為一項金融資產，和／或就向水處理服務之用戶收取費用的權利或許可確認為一項無形資產。

關於服務特許權安排，本集團已確認無形資產(附註17)及服務特許權應收款項(附註22)，分別表示本集團收取水處理費用或銷售中水的權利，以及水處理廠運營期間的保證最低付款額。

本年度服務特許權建造收入為人民幣74,021,000元(2011年：人民幣21,084,000元)，即為服在務特許權期間的建造階段所確認的收入。本集團已確認有關建造水處理廠的利潤人民幣7,931,000元(2011年：人民幣1,585,000元)。

44 Non-adjusting events after the balance date

After the balance sheet date the directors proposed a final dividend. Further details are disclosed in note 36(b).

44 資產負債表日後的未調整事項

資產負債表日後，本公司董事建議派發末期股息。詳情載於附註36(b)。

45 Parent and ultimate holding company

At 31 December 2012, the directors of the Company consider its parent and ultimate holding company of the Group to be Guodian, which is a state-owned enterprise established in the PRC. Guodian does not produce financial statements available for public use.

45 母公司及最終控股公司

於2012年12月31日，本公司的董事們認為，本集團的母公司及最終控股公司為國電，國電是在中國成立的一家國有企業。國電不編製公開使用的財務報務。

(Expressed in Renminbi unless otherwise indicated)

46 Possible impact of amendments, new standards and interpretations issued but not yet effective for the year ended 31 December 2012

46 已發佈但尚未在截至2012年12月31日止年度生效的修訂、新訂的準則及詮釋可能產生的影響

Up to the date of issue of these financial statements, the IASB has issued a number of amendments, new standards and interpretations which are not yet effective for the year ended 31 December 2012 and which have not been adopted in these financial statements.

截止財務報表發佈日期,國際會計準則委員會已發佈了多項修訂、新訂的準則及詮釋,但尚未在截至2012年12月31日止年度內生效,且未在這些財務報表中採納。

		Effective for accounting periods beginning on or after **自以下日期或之後開始之會計期限生效**
Amendments to IAS 1, *Presentation of financial statements — Presentation of items of other comprehensive income*	《國際會計準則》第1號之修訂——*「財務報表的列報 — 其他綜合收益項目的列報」*	1 July 2012 2012年7月1日
IFRS 10, *Consolidated financial statements*	《國際財務報告準則》第10號——*「合併財務報表」*	1 January 2013 2013年1月1日
IFRS 11, *Joint arrangements*	《國際財務報告準則》第11號 ——*「合營協議」*	1 January 2013 2013年1月1日
IFRS 12, *Disclosure of interests in other entities*	《國際財務報告準則》第12號——*「其他實體中權益的披露」*	1 January 2013 2013年1月1日
IFRS 13, *Fair value measurement*	《國際財務報告準則》第13號——*「公允價值計量」*	1 January 2013 2013年1月1日
IAS 27, *Separate financial statements (2011)*	《國際會計準則》第27號——*「獨立財務報表(2011)」*	1 January 2013 2013年1月1日
IAS 28, *Investments in associates and joint ventures (2011)*	《國際會計準則》第28號——*「對聯營公司及合資企業的投資(2011)」*	1 January 2013 2013年1月1日
Revised IAS 19, *Employee benefits*	《國際會計準則》第19號之修訂——*「僱員福利」*	1 January 2013 2013年1月1日
Annual Improvements to IFRS 2009-2011 Cycle	《國際財務報告準則》年度改善(2009年-2011年)	1 January 2013 2013年1月1日
Amendments to IFRS 7, *Financial instruments: Disclosures — Disclosures — Offsetting financial assets and financial liabilities*	《國際財務報告準則》第7號——*「金融工具:披露—披露—金融資產和金融負債的抵銷」*	1 January 2013 2013年1月1日

(Expressed in Renminbi unless otherwise indicated)

46 Possible impact of amendments, new standards and interpretations issued but not yet effective for the year ended 31 December 2012 (continued)

46 已發佈但尚未在截至2012年12月31日止年度生效的修訂、新訂的準則及詮釋可能產生的影響(續)

		Effective for accounting periods beginning on or after **自以下日期或之後開始之會計期限生效**
Amendments to IFRS 10, *Consolidated financial statements,* IFRS 11, *Joint arrangements* and IFRS 12, *Disclosure of interests in other entities - Transition guidance*	《國際財務報告準則》第10號之修訂——*「合併財務報表」*、《國際財務報告準則》第11號——*「合營協議」*及《國際財務報告準則》第12號——*「其他實體中權益的披露—過渡指導」*	1 January 2013 2013年1月1日
Amendments to IFRS 10, IFRS 12 and IAS 27, *Investment entities*	《國際財務報告準則》第10號、《國際財務報告準則》第12號及《國際會計準則》第27號之修訂——*「投資實體」*	1 January 2014 2014年1月1日
Amendments to IAS 32, Financial instruments: *Presentation — Offsetting financial assets and financial liabilities*	《國際會計準則》第32號之修訂——*「金融工具:列報—金融資產和金融負債的抵銷」*	1 January 2014 2014年1月1日
IFRS 9, *Financial instruments (2010)*	《國際財務報告準則》第9號——*「金融工具(2010)」*	1 January 2015 2015年1月1日
Amendments to IFRS 9, *Financial instruments* and IFRS 7, *Financial instruments: Disclosures — Mandatory effective date and transition disclosures*	《國際財務報告準則》第9號之修訂——*「金融工具」*及《國際財務報告準則》第7號——*「金融工具:披露—強制生效日期與過渡披露」*	1 January 2015 2015年1月1日

The Group is in the process of making an assessment of what the impact of these amendments, new standards and new interpretations is expected to be in the period of initial application. So far the Group believes that the adoption of these new IFRSs is unlikely to have a significant impact on the consolidated financial statements, except for the following:

本集團目前正在評估在上述修訂、新訂的準則及新詮釋與首次採用期間預期所產生影響。目前本集團認為採用此等新訂《國際財務報告準則》不會對本集團的合併財務報表產生重大影響,除以下所述:

46 Possible impact of amendments, new standards and interpretations issued but not yet effective for the year ended 31 December 2012 (continued)

46 已發佈但尚未在截至2012年12月31日止年度生效的修訂、新訂的準則及詮釋可能產生的影響(續)

IFRS 10, Consolidated financial statements

IFRS 10 replaces the requirements in IAS 27, Consolidated and separate financial statements relating to the preparation of consolidated financial statements and SIC 12 Consolidation - Special purpose entities. It introduces a single control model to determine whether an investee should be consolidated, by focusing on whether the entity has power over the investee, exposure to variable returns from its involvement with the investee and the ability to use its power to affect the amount of those returns.

The application of IFRS 10 is not expected to change any of the control conclusions reached by the Group in respect of its involvement with other entities as at 1 January 2013. However, it may in the future result in investees being consolidated which would not have been consolidated under the Group's existing policies or vice versa.

IFRS 12, Disclosure of interests in other entities

IFRS 12 brings together into a single standard all the disclosure requirements relevant to an entity's interests in subsidiaries, joint arrangements, associates and unconsolidated structured entities. The disclosures required in IFRS 12 are generally more extensive than those required in the current standards. The Group may have to make additional disclosures about its interests in other entities when the standard is adopted for the first time in 2013.

《國際財務報告準則》第10號 ——「合併財務報表」

《國際財務報告準則》第10號替代了《國際會計準則》第27號——「合併財務報表及獨立財務報表」中關於編製合併財務報表與《詮釋》第12號——「合併—特殊目的實體」。該規定引入了一個單一的控制模型,用於確定被投資方是否應被合併,著重於實體是否有權控制被投資方,從其在被投資方的投資中獲取可變回報,並能夠利用其權力影響該等回報的金額。

《國際財務報告準則》第10號的應用預計不會改變任何本集團於2013年1月1日參與其他實體權益的控制結論。不過,可能會出現未來被合併的被投資方根據本集團現有政策將不會合併,反之亦然。

《國際財務報告準則》第12號 ——「其他實體中權益的披露」

《國際財務報告準則》第12號將有關企業對附屬公司、合營安排、聯營公司及不合併的結構實體中的權益的披露要求組合成一個單一準則。《國際財務報告準則》第12號的披露規定一般比現行準則所要求的更廣泛。本集團可能在2013年首次採用該準則時須對其他實體權益作出額外披露。

46 Possible impact of amendments, new standards and interpretations issued but not yet effective for the year ended 31 December 2012 (continued)

IFRS 13, Fair value measurement

IFRS 13 replaces existing guidance in individual IFRSs with a single source of fair value measurement guidance. IFRS 13 also contains extensive disclosure requirements about fair value measurements for both financial instruments and non-financial instruments. IFRS 13 is effective as from 1 January 2013, but retrospective adoption is not required. The Group estimates that the adoption of IFRS 13 will not have any significant impact on the fair value measurements of its assets and liabilities, but additional disclosures may need to be made in the 2013 financial statements.

46 已發佈但尚未在截至2012年12月31日止年度生效的修訂、新訂的準則及詮釋可能產生的影響（續）

《國際財務報告準則》第13號 ——「公允價值計量」

《國際財務報告準則》第13號以單一公允價值計量指引替代各單項《國際財務報告準則》中的現有指導。《國際財務報告準則》第13號還包含金融工具及非金融工具公允價值計量廣泛的披露要求。《國際財務報告準則》第13號於2013年1月1日起生效，但不要求進行追溯採納。本集團估計，採用《國際財務報告準則》第13號不會對其資產及負債的公允價值計量產生任何重大影響，但可能需要在2013年財務報表中進行額外披露。

OUTLOOK
展望

Continue to enhance market share, explore future growth areas and boost competitiveness

Technology

- Technology of lignite comprehensive utilization
- Technology of flue gas waste heat comprehensive utilization
- Technology of large-capacity offshore wind power generation
- Technology of seawater desalinization
- Technology of CO2 capture and fine particles (PM 2.5) collection

Mode

- Maintenance services of wind farms and photovoltaic stations
- Concession rights
- BOT
- EMC
- Warranty service of key environmental protection and energy conservation equipment

Business

- Contracting business for power stations: contracting for coal-fired power plants and decentralized energy
- Lignite conversion: aspiring for industrialization
- Information management and electronic engineering business: turning itself into an integrated solutions provider of control and management technologies for power stations
- Micro-grid and energy storage of wind farms

Market

- Explore markets outside of the power industry, such as cement, chemical engineering, metallurgy as well as iron and steel
- Cultivate overseas markets

不斷提高市場份額、開發新的增長點、提高競爭力

技術

- 低階煤綜合利用技術
- 煙氣余熱深度利用技術
- 大容量海上風力發電技術
- 海水淡化技術
- 二氧化碳捕集、PM2.5 捕集技術

模式

- 風電場、光伏電站運維服務
- 特許權經營
- BOT
- EMC
- 環保節能關鍵設備保障服務

業務

- 電站總承包：燃煤電廠總承包、分布式能源
- 褐煤提質：力爭實現產業規模化
- 信息控制和電力電子：發展成為電廠控制和管理技術的整體解決方案提供商
- 微電網、風電場儲能

市場

- 拓展水泥、化工、冶金、鋼鐵等非電市場
- 拓展海外市場

Hiking to the Great Wall 登長城活動

國電科技環保集團股份有限公司

GUODIAN TECHNOLOGY & ENVIRONMENT GROUP CORPORATION LIMITED*

(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

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有關 國電科環更多內容，您可以使用手機掃一掃二維碼觀看，或登錄網站 www.01296.hk 查看詳情。