



新能源
New Energy

中國廣核新能源控股有限公司
CGN New Energy Holdings Co., Ltd.

(Incorporated in Bermuda with limited liability)
Stock Code : 1811.HK



Environmental,
Social and
Governance
Report

2017

Content

1.	About this Report	2
2.	Chairman's Statement	3
3.	President's Statement	4
4.	Highlights of 2017	5
5.	About CGN New Energy	7
6.	Stakeholder Engagement	12
7.	Environmental Protection	18
8.	Caring for Employees	25
9.	Community Contribution	33
10.	Honours and Awards	35
11.	Prospects	38
Appendix	Content Index of the Environmental, Social and Governance Reporting Guide of Hong Kong Stock Exchange	39



1. About this Report

This report is the second environmental, social and governance (“**ESG**”) report of CGN New Energy Holdings Co., Ltd. (“**CGN New Energy**” or the “**Company**” and together with its subsidiaries, collectively the “**Group**”). It contains information and data on the Group’s environmental, social and governance performance during the period from 1 January 2017 to 31 December 2017 (the “**Reporting Period**”). This report has been prepared in accordance with Appendix 27 “Environmental, Social and Governance Reporting Guide” (“**ESG Guide**”) of the Rules Governing the Listing of Securities (the “**Listing Rules**”) on The Stock Exchange of Hong Kong Limited (the “**Stock Exchange**”). The report satisfies the “comply or explain” requirements and the “recommended” disclosures of the ESG Guide. The report mainly covers the Group’s wind power, solar energy, gas-fired, coal-fired, oil-fired, hydropower, cogen and fuel cell projects and a steam project, and the content presented primarily comes from materiality assessment and stakeholder engagement. The details of the process are presented in the section headed “Stakeholder Engagement”.

We value your feedback on our sustainable development. If you have any comments and suggestions for this report and our environmental and social performance, please feel free to send us your feedback to cgnne@wsfg.hk.

2. Chairman's Statement

Developing clean
energy to benefit
mankind

Chen Sui



CGN New Energy is dedicated to the clean and renewable energy business. Based on the concept of sustainability, we develop the power industry for stable electricity supply and value creation. To demonstrate our commitment to sustainable development, we are pleased to present our second ESG report, which discloses our performance in sustainable development, allows the Group to gain insights into the expectation and needs of stakeholders and outlines our vision and commitment in sustainability. We will continue to publish the ESG report and enrich the content based on stakeholders' concerns, which sharing our performance and achievements in environmental protection, employee relations and community contribution with stakeholder.

In 2017, despite the fact that China's economy encountered uncertainties such as interest rates hikes and fluctuations, it achieved stable growth against the challenging environment. The energy structure continued to be optimised and the momentum of energy development is shifting from traditional energy growth to new energy growth. As at 31 December 2017, the installed capacity of renewable energy generation reached 650 GW, representing an increase of 14% when compared to last year. Among which, installed capacity of wind power generation amounted to 164 GW and installed capacity of solar power generation reached 130 GW, representing an increase of 10.5% and 68.7% respectively. The scale of new energy continued to expand, enabling higher utilization rate and lower curtailment rate of wind and solar power.

In the second half of 2017, the National Energy Administration issued the "Guiding Opinion on Implementation of the 13th Five-year Plan on Renewable Energy Development" (《關於可再生能源發展「十三五」規劃實施的指導意見》), which emphasised the in-depth implementation of energy generation and consumption revolution strategy to tackle problems such as hydropower, wind power and solar power curtailments and insufficient subsidy funding for renewable energy development. This facilitated a sustainable, healthy and orderly development of the renewable energy industry. In 2017, wind power and solar power curtailments were mitigated, while nationwide curtailment rate of wind and solar power decreased by 5.2 percentage points and 4.3 percentage points respectively as compared to last year. It is hoped that the red warnings for wind power could be lifted in places such as Inner Mongolia, Heilongjiang and Ningxia. According to the "Plan for Additional Construction Scale of Wind Farms for 2017-2020" (《2017-2020年風電新增建設規模方案》) and the "Plan for Additional Construction Scale of Photovoltaic Power Plants for 2017-2020" (《2017-2020年光伏電站新增建設規模方案》), accumulated new construction in China will reach 110.41 GW and 86.5 GW respectively in 2017 to 2020 for wind power and photovoltaic power, which represents a significant business opportunity for both industries.

The Group will continue to pursue the mission of "developing clean energy to benefit mankind". It will seize opportunities and work towards quality, effective and innovative development with a diversified assets portfolio and matured operating and management model. On the one hand, CGN New Energy's competitiveness in the market will be strengthened by riding on the strengths in wind power and solar power project. On the other hand, we adhere to the principles of "Safety first, quality first, pursuit of excellence". We will continue to optimize talents promotion and training mechanism, enhance team building and internal governance, so as to create larger social value for shareholders and other stakeholders and enhance corporate brand value.

Chen Sui
Chairman

3. President's Statement

Our success is reliant
on **our staff**, which
is our most valuable
assets

Li Yilun



In 2017, the PRC continued to support clean energy. In the report of the 19th National Congress of the Communist Party of China ("19th National Congress"), it is proposed that the PRC accelerate the reform of ecological civilization system for a better China. In particular, top priorities should be given to promotion of green development, establishment of a comprehensive green and low carbon circular economy, as well as development of the energy saving and green industry and clean energy industry. The Company expanded the new energy business to regions with scattered resources and improved the energy mix that emphasized on both centralized and decentralized development of new energy under the guidance of the report of the 19th National Congress. As of now, renewable energy accounted for 26.4% of the PRC's national energy production. As at 31 December 2017, the attributable installed capacity of the Group reached 4,962.4 MW, with a net power generation of approximately 10,858.3 GWh, and clean and renewable energy projects, namely wind power, solar power, gas-fired, hydropower and fuel cell projects, accounted for 64.3% of our attributable installed capacity.

In 2017, CGN New Energy achieved multiple major breakthroughs in clean energy development. For example, the Group entered into the Cooperation Agreement for Offshore Wind Power Project (《海上風電項目合作協議》) of 3,000 MW offshore wind power project with the Jieyang municipal government in December 2017, which was China's first large-scale deep-water offshore wind power project. The wind power project in Qinghai, entrusted to be managed by the Group, commenced operation successfully in November 2017, proving the Group's technical capability in overcoming high altitude, extreme geology and climate. Apart from the active development of new energy projects, the Group strived to put the environment first in project operation. It carried out preservation work against ecological environment, atmospheric environment and water environment in the process of site selection, construction to operation for its constant pursuit of sustainable development.

While the CGN New Energy develops into a green enterprise, it stays committed to fulfilling social responsibility in terms of employee welfare as well as social responsibility investment. The clean energy industry is at the early stage, hence it has keen demand for labour to cope with the rapid expansion in recent years. We recognize employees' contribution. Besides the regular review of employee benefits, it rolled out a variety of staff activities in the year. We also attach great importance to production safety, therefore, we offered various safety training programs and invited experts to educate the staff on safety knowledge during the year. In addition to caring for employees, we pay attention to community development in the local area. Last year, we organized community care events under the themes of poverty alleviation, education and environmental protection, which were widely recognized by local government and the public.

Looking forward, clean energy will remain the key driving force for energy evolution and will be continued to be supported by policy. CGN New Energy will adhere to the basic principles of safety first, quality first, pursuit of excellence; continue to optimize talents promotion and training mechanism, enhance team building and internal governance.

Li Yilun
President

4. Highlights of 2017

BUSINESS DEVELOPMENT AND OPERATION



- The Group entered into the Offshore Wind Power Project Cooperation Agreement (《海上風電項目合作協議》) with the Jieyang municipal government and consensus has been reached in developing the 3,000 MW offshore wind power project in East Guangdong waters. This marked that China's first sizeable deep-water offshore wind power project's development will be led by CGN New Energy; the Company bringing the strategic framework of offshore wind power into a new phrase in Guangdong.



- The operation support vessel "CGN 1" completed sea trial and became the only operation support vessel registered with China Classification Society (CCS).



- Overcoming the high altitude, extreme geology and climate at the plateau, the Qinghai Lenghu Dingzikou 50 MW Wind Power Project entrusted to be managed by the Company has started on-grid connection of all units and commenced operation successfully.



- Zhejiang Yuhang entrusted to be managed by the Company of 4.2 MW Distributed Photovoltaic Project started on-grid generation, marking the full operation of the first photovoltaic project in Southeast China.

4. Highlights of 2017

ENVIRONMENTAL PERFORMANCE

- The cogen projects completed the installation of wet electric precipitators for five boilers and the SCR denitrification transformation for three boilers. The projects have been operating in ultra-low emission standard since September 2017, cutting emission of SO₂, NO_x and smoke by 40 tonnes, 216.47 tonnes and 28.78 tonnes per year.
- The steam project completed the technological transformation for denitrification and high-frequency dedusting for boilers, satisfied the "Emission Standard of Air Pollutants for Boilers".
- The Nantong Cogen Project replaced 11 power distribution transformers in the factory with new models and changed some of the lights into LED lighting at the production area, thereby reducing energy use by 250 MWh per year.

EMPLOYEE BENEFITS AND OCCUPATIONAL HEALTH

- In organizing all kinds of festive celebrations for the staff in the whole year, we have invited their families and lovers to join our activity on 14 February so that our staff could share this joyful season with their loved ones besides busy work.
- The Company respects, understands and cares about female staff. Through the invitation of total 165 female staff from respective departments at headquarter to celebrate the "International Women's day on 8 March", interaction between female staff and team's cohesion have thus been improved.
- With the organization of "Safe Production Month" and various safety trainings by project companies, the Company has successfully maintained zero work-related injury in the Reporting Period.

COMMUNITY CONTRIBUTION

- Donated a total of RMB200,000 to Longjiang County, Heilongjiang Province for local poverty alleviation projects.
- Organized caring programs for Hope Primary Schools at where the Group operated, including a visit to Chengmentong Hope Primary in Yuxi city, Yunnan Province.

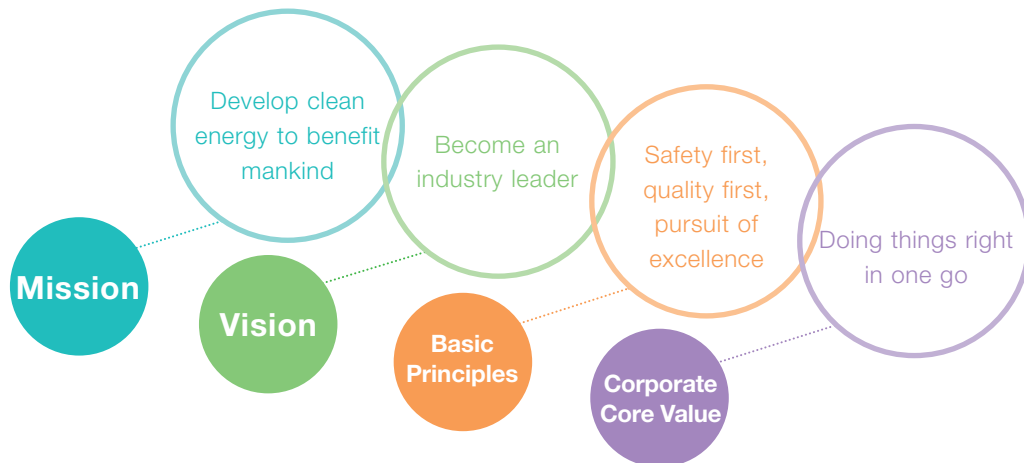
5. About CGN New Energy

CGN New Energy is an independent power producer in Asia with diverse fuel types and geographical coverage. Our assets portfolio comprises wind power, solar, gas-fired, coal-fired, oil-fired, hydro, cogen and fuel cell projects as well as a steam project located in the PRC and Korea. Our business covers 10 provinces, one autonomous region and one municipality. As at 31 December 2017, the gross attributable installed capacity of the Group reached 4,962.4 MW. In terms of the overseas market, we had two gas-fired projects and one fuel cell project in Yulchon, Korea, as well as one oil-fired project in Daesan.

CULTURAL VALUE

In addition to caring for business development and striving for better performance, the Company also hopes to establish a unique corporate culture and encourage employees to move forward in areas such as safety and quality of production and promote the sustainable development of the Company. The Company has different expectations for employees and management personnel and has requirements on integrity, transparency, professional standards, effective implementation and teamwork. On the other hand, the management is also required to be taking the lead, good at management, care for employees, and be fair and honest. In addition, we also established the mission, vision, basic principles, core value and brand slogans as well as business philosophy of the Company.

Corporate Culture



Basic Principles

"Safety first, quality first and pursuit of excellence" are our basic principles in conducting production and business operations.

- **Safety First:** Safety includes safety of employees, production, environment and business development. In any case, safety must be prioritized. Safety is about knowing and controlling risks, and is the basis for our survival and development. To ensure safety, the following have to be achieved:
 - **Safety is our responsibility:** Everyone is a barrier for safety
 - **Safety is implementation:** Prevention-oriented, defense with breadth and depth, conservative decision-making, integrity and transparency
 - **Safety is the way:** Questioning work ethics, strict working style, working habit of mutual exchange
 - **Safety is the standard:** Based on the safety standards of the industry, striving to become the benchmark for safety management in the industry.
- **Quality First:** Quality includes quality of products, operation, management, organization operation, human resources and services. Quality ensuring safety, benefits and progress. CGN New Energy adheres to high standards and strict requirements, guarantees the independence of quality supervision, ensures that each job meets quality requirements, makes no compromises on quality issues, promptly identifies and handles quality problems, makes timely feedback and adopts zero tolerance towards acts of concealing quality issues.
- **Pursuit of Excellence:** The pursuit of excellence is an inherent driving force for advancing of all work. CGN New Energy strives to continuously achieve a higher level of safety and quality, achieves operating performance for continuous return for its shareholders, continuously enhances its professional capabilities, keeps abreast of advanced technologies in the industry, continuously surpasses itself, and achieves synergy effects.

5. About CGN New Energy

Core Value

We adhere to the core value of “doing things right” and adopt the orientation based on the basic value. As the decomposition, extension and supplementation of the core value, all employees of the Group should follow the value orientation in their work execution, including:

1. **Take the responsibility:** “want to do, can do and do make it”
2. **Strict and pragmatic:** Focus on being practical and doing for results
3. **Innovative and Enterprising:** Entrepreneurship, innovation and excellence
4. **Customers-oriented:** Customers’ needs are our needs
5. **Value creation:** Everyone is a value creator

Brand Slogan

With the brand slogan of “utilizing the power of nature” and safe energy as brand positioning, CGN New Energy actively focus on putting into action: when designing, constructing and utilizing energy for nuclear power plants, the impacts on the environment is minimized; with the future in mind, we actively develop a variety of clean energy sources. Based on this brand positioning, we put forward our brand slogan consisting of two levels:

- **We are good at** – Focusing on clean energy development, innovating energy sources developing natural energy sources for production and living. Through mature and reliable safe energy technologies and professional management, we are committed to providing safe, clean and stable energy guarantee which in turn creates a safe and worries-free life for the society and public.
- **We are kind to** – While providing clean energy, we attach great importance to and ensure the safety of our employees, the public and the environment, creating value for our customers, shareholders and partners, and creating a cleaner and better environment for the community. At the same time, we aim to arouse the resonance of the public and the society through setting an example.

5. About CGN New Energy

Case sharing: Successful launch of the first operation support vessel

In November 2017, the first operation support vessel of CGN New Energy, namely “CGN 1”, passed all pre-launch tests at the Yangtze River Wharf of Yangzhou, Jiangsu. It was successfully launched in the Yangtze River.

The operation support vessel is mainly used for the operation and maintenance of offshore wind power units. “CGN 1” is 29.61 meters in length and 8.4 meters in width. Being a more advanced operation support vessel for wind farms in the PRC, it can sail at wind force 7 and is suitable for cruising nearshore. It is also the only operation support vessel registered with the China Classification Society (CCS) with a high safety level. CGN New Energy pioneered in the adoption of full rotary propellers in small catamarans, which significantly improves vessel handling and enables precise parking at wind farm infrastructure at low speed. The ducted propellers of the operation support vessel are able to produce great force for transporting on-board personnel and equipment to the wind turbines in a safe and convenient manner, thereby overcoming difficulties in parking operation support vessels near the wind turbines for maintenance in storms. Furthermore, the vessel is equipped with lubricant replacement system for offshore wind turbines, which effectively solves the problem of replacing lubricant for turbines at height.

The launch of “CGN 1” makes it easier for maintenance staff to perform their duties. Meanwhile, the upgrade of offshore maintenance capability enhances the utilization rate of wind farms, helping CGN New Energy meet the demand for offshore maintenance and accelerate the development of offshore wind power.

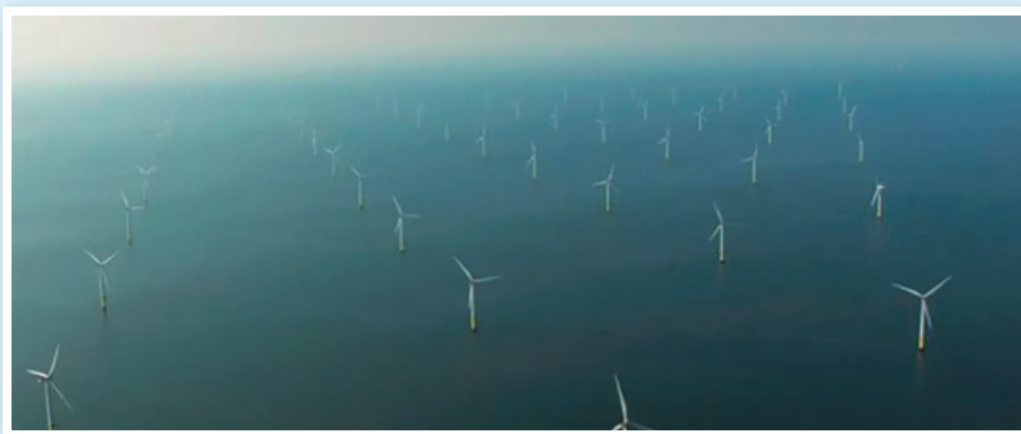


5. About CGN New Energy

Case sharing: 3,000 MW Offshore Wind Power Project Cooperation Agreement (《海上風電項目合作協議》) with the Jieyang municipal government

CGN New Energy signed the Offshore Wind Power Project Cooperation Agreement (《海上風電項目合作協議》) (the **"Agreement"**) with the Jieyang municipal government in December 2017. Pursuant to the Agreement, the relevant parties has reached consensus in developing the 3,000 MW offshore wind power project in East Guangdong waters. CGN New Energy will lead the construction of two sites located at East Guangdong in Jieyang waters for developing the 3,000 MW deep-water offshore wind power project. The project also includes the application of deep-water offshore wind power technology to co-develop deep-water site, project base and R&D centre. This marked that China's first sizeable deep-water offshore wind power project will be set up in Jieyang, China.

The signing of the Agreement represented that CGN New Energy has entered a new stage in the Guangdong offshore wind power regional strategy layout. As one of the major sources of clean energy, CGN New Energy will work further in developing offshore wind power to make contribution for the economic and social development of Guangdong society.



5. About CGN New Energy

CORPORATE GOVERNANCE

The Company maintains strict compliance with the code provisions set out in Appendix 14 Corporate Governance Code and Corporate Governance Report of the Listing Rules. Besides, it has an effective corporate governance structure and a set of well-established corporate governance policy in place. We are of the view that sound corporate governance is crucial to internal governance and shareholder value. Our governance structure mainly comprises the Board, Board committees, internal auditor, shareholders, management and employees. As the supervision body of the Company, the Board is responsible for policy formulation and approval, strategy direction maintenance, risk management and internal control system, as well as monitoring the performance and ongoing professional development of the senior management. The Board committees include the audit committee, remuneration committee, nomination committee, investment and risk management committee, and strategy development committee (cancelled on 26 June 2018). The corporate governance team acts in the interest of the Company and makes decision in an objective and fair manner, so as to facilitate sustainable development and create better returns for the Company.

We incorporate the culture of high integrity in the corporate governance structure and pursue better corporate governance through compliance with the law. We also integrate the corporate culture into the individual development of our employees. To ensure clear consensus between the management and the employees, our “Staff Manual” and “Code of Conduct for Staff” specify the codes of conduct and requirements by which all employees must abide. We require business units to closely follow the anticorruption principle, hence we have worked out the “Requirements of Business Integrity for Officers”, “Provisional Administrative Measures for Gifts Accepting and Offering” and “Provisional Measures of Conversation and Letter Enquiry on Business Integrity” to set up standards of employee behavior and raise awareness of honest business practices. In the meantime, the Company developed the “Reporting Policy” based on the Listing Rules, which encouraged employees to raise concern in confidence for any misconduct, malpractice and corruption relating to our business. This has established correct values, fostered a culture of honest business practices, and improved corporate governance effectiveness. During the Reporting Period, there were no proceedings against the Company over corruption, and there were no non-compliances with laws and regulations as well.

According to the “Staff Manual” and the “Code of Conduct for Staff”, all employees shall be responsible for protecting the Company’s intellectual property rights, complying with all applicable laws and regulations and shall respect other institutions’ and individuals’ intellectual property rights.

Supply Chain Management

Our suppliers and contractors have always supported our business development and we endeavour to maintain good relationship with them. In the common pursuit of win-win results, we are committed to the principles of “mutual benefit, joint development, environmental protection and benefiting society”, and we have formulated stringent standards for the obligations of both parties. During the Reporting Period, we joined hands with over 1,500 suppliers and contractors from Mainland China, Hong Kong and Korea, which were mainly engaged in fuel, construction project and general equipment service. To promote standardized procurement process, we prepared relevant work guidelines, agreements and contracts. We also conducted regular comprehensive assessment on the products and services of suppliers and contractors to ensure they are in line with our high standards. Priorities are given to outstanding suppliers and we may cease the cooperation with suppliers with poor performance. We entered into the “Supplier (Outsourcing Project) Environmental and Safety Control Agreement” with suppliers to monitor their ESG performance, in order to promote environmental protection along the supply chain and reduce pollution and safety accident in the production process. These agreements expressly set out the requirements of CGN on environmental protection, occupational health and safety. In the event that the contractor causes serious pollution, we will handle and terminate the contract in accordance with relevant national regulations. In the construction process, we monitored the practices of all construction units based on the “Measures for Production Safety Management and Appraisal of External Parties”, which set out assessment criteria and the rectification of non-compliance with production safety rules and regulations. Other than that, we provide safety training to suppliers to educate them on safety rules.



6. Stakeholder Engagement

COMMUNICATION WITH STAKEHOLDERS

CGN New Energy is committed to establishing a wide range of communication channels with all stakeholders for the effective collection of their feedback and formulation of our long-term development strategy. Our key stakeholders mainly comprise the following 7 groups:



While we develop power projects of various scales, stakeholders may express their opinions through different means in the project design, construction and operation stages. For example, at the initial design stage, we seek public opinion, gather the views of nearby residents on project development and understand their concerns to reduce the potential impact of the project on the local environment and community. We will also maintain close communication with government authorities to ensure smooth progress of the project. CGN New Energy reviews the communication arrangement with the stakeholders on a regular basis, with the aim of enhancing communication effectiveness.

Major communication channels and main issues of concern for different stakeholder groups are set out below:

Stakeholder group	Major communication channel	Frequency/times	Objective/issue of concern
Staff	<ul style="list-style-type: none"> Staff meeting/forum Staff performance appraisal interview Staff satisfaction survey On-site investigation and research 	Annually	<ul style="list-style-type: none"> Staff training Remuneration and benefits Career planning Future development of the Company
Shareholders/investors	<ul style="list-style-type: none"> Shareholders' meetings Investor conferences Press releases/announcements Annual/interim results presentations Analyst seminars Roadshows Banquet with stock commentators Visits Corporate Day 	<p>During the Reporting Period, CGN New Energy attended over 5 large-scale "Corporate Day" held by investment banks and securities firms to meet with over 100 investors of different types in Hong Kong, Singapore and Beijing. In addition, CGN New Energy organized roadshows in Hong Kong.</p> <p>Shareholders' meetings are held annually in general, while other events such as investor conferences, analyst seminars and roadshows are held from time to time based on actual needs.</p>	<ul style="list-style-type: none"> Business development Financial performance Compliance

6. Stakeholder Engagement

Stakeholder group	Major communication channel	Frequency/times	Objective/issue of concern
Government departments/ customers	<ul style="list-style-type: none"> Telephone/email Interview 	From time to time	<ul style="list-style-type: none"> Performance on waste and greenhouse gas emission Community relationship
Suppliers/contractors	<ul style="list-style-type: none"> Telephone/email Interview 	From time to time	<ul style="list-style-type: none"> Business development ESG management system Stakeholder communication
Partners (e.g., universities/ research institutions/ professional groups)	<ul style="list-style-type: none"> Telephone/email Interview 	From time to time	<ul style="list-style-type: none"> R&D progress of the Company Business development
Members of communities/ organisations	<ul style="list-style-type: none"> Telephone/email Interview 	From time to time	<ul style="list-style-type: none"> Environmental performance Safety and health
Media	<ul style="list-style-type: none"> Press releases/announcements Group media interview Individual media interview 	<ul style="list-style-type: none"> Constantly update the media and the public on the latest development of CGN New Energy through press releases and announcements Group media interviews are usually held after results announcements. Other media interviews are conducted from time to time based on actual needs. 	<ul style="list-style-type: none"> Business development



6. Stakeholder Engagement



Meeting with representatives of Ming Yang Smart Energy Group., Ltd., a wind turbine manufacturer, to discuss cooperation arrangements



Site visit to Altay Wind Power for Clean Heat Supply Project entrusted to be managed by CGN New Energy with the Commissioner of the Altay Prefecture Politics Office

6. Stakeholder Engagement



Visit the Jiangsu Rudong Offshore Wind Power Farm entrusted to be managed by CGN New Energy with 80 representatives of the 3rd International Summit on Offshore Wind Power Industry Development in China



2017 Annual General Meeting held successfully on 24 May 2017



6. Stakeholder Engagement



Visit the Solar Thermal Power Demonstrative Project entrusted to be managed by CGN New Energy with Shi Yubo, the captain of the sixth inspection unit of the Work Safety Committee of the State Council and the former Deputy Director of the National Energy Administration



Visit the Jiangsu Rudong Offshore Wind Farm entrusted to be managed by CGN New Energy with Wang Zhixuan, the vice-chairman of the China Electricity Council

6. Stakeholder Engagement



CGN New Energy attended the 3rd East Asia Summit Clean Energy Forum as a trustworthy and long term partner of ASEAN on clean energy development for the first time. The representative of CGN New Energy, introduced our commitment to green and diversified development to member states through key speech, roundtable and multi-lateral dialogue.

ANALYSIS ON MATERIAL ISSUES

In line with the arrangements for last year, we engaged an independent consultant to perform analysis on material issues, so as to collect stakeholders' opinions and expectations on the ESG and social responsibility fulfilment more effectively. The analysis identified issues that were important to CGN New Energy and prioritized such issues based on the materiality, thereby determining the most significant ESG issues.

This round of analysis on material issues was conducted between December 2017 and January 2018. The independent consultant collected over 853 valid questionnaires and interviewed approximately ten stakeholders. After preliminary identification of potential material issues, the consultant analysed the questionnaires from stakeholders and confirmed on 11 ESG issues that were significant to CGN New Energy. In this report, we will disclose our performance on these material issues:

Environment	Society	Governance
<ul style="list-style-type: none"> Greenhouse gas emission Environmental impact assessment of projects and relevant mitigation measures Waste management Wastewater treatment Energy consumption 	<ul style="list-style-type: none"> Supplier and contractors management Staff remuneration Assurance of service quality Occupational health and safety Compliance with labour laws 	<ul style="list-style-type: none"> Anti-corruption



7. Environmental Protection

As a major new energy enterprise in China, CGN New Energy gives priority to building a green society. In pursuit of our mission and commitment to environmental conservation, we adopt a comprehensive environmental management system and a set of internal green operating rules to keep our emission of exhaust gas, wastewater and solid waste within the local limits. By applying ultralow emission renovation and other advanced technology, we enhance operating efficiency and reduce environmental impact. We strive to become the benchmark in the new energy industry and ensure compliance of the Company and our projects. During the Reporting Year, there were no non-compliances with rules or regulations nor any complaints of the projects operated by us.

ENVIRONMENTAL MANAGEMENT SYSTEM

We have a comprehensive environmental management system in place to support and regulate the environmental management work of CGN New Energy. We have established an environmental protection leadership group to supervise green initiatives at the company-wide level. The group holds working meetings on a regular basis and is responsible for approval of major environmental projects, providing solutions to significant environmental issues and making decisions on short-term goals and long-term planning in the area of environmental protection. We have set up a safety supervision department in all project companies to supervise and manage the environmental protection initiatives of each project. We also assigned EHS management personnel to project companies for the management and maintenance of green facilities. Other departments of the project companies will play their own roles under the guidance of departments in charge of environmental initiatives, so as to ensure smooth implementation of green policy. Close cooperation between all departments guarantees the completion of CGN New Energy's mission on environmental protection.

All the CGN New Energy power stations which are in operation have obtained ISO 14001 and OHSAS 18001 certification and we require those newly-acquired power generation facilities to obtain these certifications within two years upon acquisition or completion.

EMISSION CONTROL

The exhaust produced by CGN New Energy mainly comprises smoke and dust, sulphur dioxide and nitrogen oxides. We exercise effective control on exhaust emission through the well-established exhaust emission inspection system and daily management measures, so that all project companies are in compliance with atmospheric pollutant laws and regulations of the places where they operate. By establishing stringent management system stipulated in documents such as the "Regulations of Desulfurization, Denitrification and Dust Removal Operations", "Management System relating to the Start and Stop of Desulfurization Facilities" and "Dust and Ash Removal Evaluation and Statistics Provisions", with specific provision for operation and maintenance of exhaust gas treatment facilities and operation practices of relevant personnel, in order to ensure compliance with emission standards through internal governance measures.

We carry out regular inspection and maintenance on the exhaust gas emission system to ensure all emission systems are in normal operation. We will suspend the exhaust gas emission system and carry out inspection and maintenance in case of any system failures, and submit suspension application to environmental protection department in order to minimise environmental impacts.

Our operation in Mainland China has been strictly complied with the "Emission Standard of Air Pollutants for Coal-fired Power Plants" and we ensure that the emissions of dust, sulfur dioxide and nitrogen oxides are below 20 mg/m³, 50 mg/m³, 100mg/m³ respectively. We reduce emission from electricity production continuously by measures such as improving technology and upgrading equipment.

7. Environmental Protection

Types of pollutants and relevant emission data

Emissions of exhaust gas during the Reporting Period (in tonnes)	
Nitrogen oxides (NO _x)	1,819
Sulphur oxides (SO _x)	618
Smoke and dust in exhaust gas	143
Emission of greenhouse gases during the Reporting Period (in tonnes)	
Carbon dioxide (CO ₂ eq)	4,646,245
Methane (CH ₄)	850
Nitrous oxide (N ₂ O)	1,265
Sulfur hexafluoride (SF ₆)	461
Carbon dioxide equivalent (CO ₂ eq)	11,021,179
Greenhouse gas emission per MWh power generated (CO ₂ eq)	1.48
Wastewater discharge during the Reporting Period (in tonnes)	
Wastewater	455,752
Chemical Oxygen Demand (COD)	14

Daily Management

- Install boilers that are in compliance with environmental requirements and implement the “Three Simultaneous” green measures to meet the emission standards for boilers
- The production departments of project companies carry out regular inspection and maintenance on the exhaust gas emission system, exhaust gas treatment facilities and CEMS online monitoring system to ensure all systems are in normal operation and record the inspection results.

Treatment System

- Flue gas from boilers is discharged at height after treatment in the flue gas precipitator system
- Magnesium oxide desulphurisation device is used for desulphurisation treatment of exhaust gas
- Meeting the NO₂ emission standard through low nitrogen burning and selective catalytic reduction (SCR) desulphurization.



7. Environmental Protection

Case sharing: Follow the latest environmental compliance requirements and completed the ultra-low emission technological transformation

In 2017, Nanyang General Light Electric Co., Ltd (南陽普光電力有限公司) ("Nanyang General Light") completed ultra-low emission technological transformation for coal-fired generating units. As a result of the transformation, the sulfur dioxide, nitrogen oxides and dust emissions decreased from 200 mg/m³, 200 mg/m³ and 50mg/m³ to 35 mg/m³, 50 mg/m³ and 10mg/m³. Nanyang General Light not only shared its real-time emission statistics with the database of environmental protection department for government regulation, it also disclosed such data to the public by posting it on the electric bulletin board outside the power stations. After the ultra-low emission technological transformation, Nanyang General Light meets relevant requirement of the "Emission Standard of Air Pollutants for Coal-Fired Power Plants" (DB/4124-2017), which became effective from October 2017 in Henan, and enjoys the preferential treatment of higher tariff for ultra-low emission standards.



Real time display of emission data by Nanyang General Light

Case sharing: Emission reduction improvement of the cogen projects

In 2017, the Nantong Cogen Project completed the installation of wet electric precipitators for five boilers and the SCR denitrification transformation for three boilers. The projects have been operating in ultra-low emission standard since September, cutting emission of SO₂, NO_x and smoke by 40 tonnes, 16.47 tonnes and 28.78 tonnes per year.

Case sharing: Emission reduction improvement of steam project

In 2017, the Jinqiao Steam Project in Shanghai completed the technological transformation for denitrification and high-frequency dedusting for boilers, according to the online monitoring system of Shanghai Environmental Protection Bureau, the project met the local environmental standard for emission.

7. Environmental Protection

WASTE MANAGEMENT

Through the environmental management system, CGN New Energy tackles waste management in full, with the aim of reducing the impact on the environment and public health. Waste generated by us in the power production process mainly include fly ash, boiler slag, waste oil, waste paint and desulfurization gypsum. The Company strictly complies with the “Waste Management Procedure” in terms of waste treatment. Based on which, the responsible department will collect and store the waste at designated warehouses. We place and store unwanted materials at designated spots within the factory area and the keeper, who are trained for professional waste disposal, will register and deliver the waste to qualified third parties for further treatment before filing the five copies of the transit manifest.

Hazardous waste generated from project operation during the Reporting Period (in tonnes)	
Waste battery	16
Waste oil	577
Waste paint	0.3
Waste insulation materials	13
Non-hazardous waste generated from project operation during the Reporting Period (in tonnes)	
Boiler slag	70,463
Fly ash (pulverised fuel ash)	253,752
Desulfurization gypsum	20,203
Domestic waste	69
Waste paper	0.5
Iron scrap	13.29

For pulverised fuel ash, desulfurization gypsum and other by-products of the production process that have economic value, we appointed dedicated recycling companies for compensated recycling. This not only mitigated the environmental impact of unwanted materials, but also brought economic benefits for the Company. By turning waste into treasure, we reduced resources consumption as well.

Waste recycled in project operation during the Reporting Period (in tonnes)	
Fly ash (pulverised fuel ash)	252,241
Desulfurization gypsum	20,203

All business units of CGN New Energy are committed to “repair and reuse, proper storage, full utilisation, revenue generating and expenses cutting” to reduce waste production. The procurement department of project companies is responsible for collecting waste and obsolete materials while the production management department is responsible for material recycling. Based on the principles of “economic reasonableness, quality assurance, centralised management and prioritized utilisation”, we carry out necessary repair work on components and parts dissembled at the production sites, so as to restore their original functionality. This substantially reduces waste production and lowers operating costs.

CGN New Energy grants “Repair and Reuse” awards to individuals and business units which have outstanding performance to raise green awareness. The value of repaired and reused materials is jointly determined by the procurement department and production management department and the award is based on the original value of the materials before repair. The production management department will give a regular report and make recommendation on awards in relation to completed repair and reuse projects.



7. Environmental Protection

WASTEWATER TREATMENT AND MANAGEMENT MECHANISM

CGN New Energy controls sewage discharge through the environmental management system to ensure compliance with relevant national and regional laws and regulations. The sewage generated by the Company is mainly wastewater from chemical treatment, sewage from slag removal system and sewage and coal transport system, periodic discharge of boilers as well as domestic wastewater. We strive to meet the regulations of the places where we operate, including the "Integrated Wastewater Discharge Standards" of the PRC, through active efforts in daily management, such as sewage management and treatment undertaken by the production management department and safety supervision department, along with various measures and supervision initiatives.

Our control procedure for wastewater discharge is as follows:

Daily Management

- The production department and safety supervision department of project companies are responsible for the wastewater management and treatment as well as record maintenance.
- For project construction which involves wastewater discharge, the department-in-charge is responsible for signing the environmental protection agreement with the contractors and the safety supervision department should ensure that wastewater is discharged in compliance with the standards.

Treatment

- In the wastewater treatment system, wastewater undergoes sedimentation and neutralisation until it meets the standards and is discharged to wastewater treatment facilities.

Monitoring

- The safety supervision department engages third party inspection bodies to monitor wastewater discharged by project companies and maintains inspection record.

7. Environmental Protection

ENERGY CONSUMPTION

Our projects mainly consume coal, fuel oil and natural gas. The total consumption is as follows:

Natural gas	1,121,390,000 cubic meter
Fuel oil	573,790 liters
Coal	1,465,157 tonnes

We endeavour to achieve effective energy use, which not only helps cut the operating costs, but also demonstrates our determination to protect the environment. During the Reporting Period, we successfully implemented the following key technological transformation projects for energy conservation, which fulfilled our commitments to energy conservation.

Case sharing: Elimination of pump motor with high energy consumption

According to the "Catalogue on High Energy Consuming and Outdated Mechanical and Electrical Equipment to be phased out" published by the Ministry of Industry and Information Technology, high energy consuming devices were gradually eliminated in the Hanneng gas-fired project during the Reporting Period, including one condensation pump motor, one backwashing pump motor and two intermediate pump motors. The replacement program of high-energy consuming units effectively reduced energy consumption. It passed the external review and received the Energy Management System accreditation of DNV.

Case sharing: Switching to high efficiency transformers

The Nantong Cogen Project completed the renovation of 11 power distribution transformers in the factory and replaced the original S9 series transformers with new and efficient transformers, which cut energy consumption by 176,000 kWh per year. It also substituted some of the daylight lamps and sodium-vapor lamps with LED lightings at the production area, thereby reducing energy use by 79,000 kWh per year.



7. Environmental Protection

WATER RESOURCES MANAGEMENT

We attach great importance to the effective use of water resources and promote water saving measures actively to prevent wastage. Our project companies strictly monitor water meters and instrument within the production area to stop water leakage. Meanwhile, we advocate reasonable use of recycled water and rainwater along with other water saving initiatives. Our water consumption (excluding hydropower projects) totalled 643,063 m³ for 2017 and the intensity of our power generation is 1.05 m³ per MWh.

We primarily use rainwater to clean solar power generating module, use smart robots for dry cleaning photovoltaic panels in certain photovoltaic power stations, which avoids consuming additional water resources.

Case sharing: Smart Robots

In April 2017, Dezhou Laoling Tieying Photovoltaic Power Station of Shandong branch of CGN New Energy Investment (Shenzhen) Co., Ltd (中廣核新能源投資(深圳)有限公司) successfully completed the installation of 11 Smart Robots, traced and tested the impact of Smart Robots on the electricity generation efficiency of solar power generating module. Smart Robots carry out cleaning work every other day to sweep off the foreign objects (such as dust, birds' droppings and fallen leaves) on the photovoltaic panels to ensure the electricity generation efficiency.

The installation of Smart Robots and cleaning of photovoltaic panels is estimated to increase electricity generation by approximately 3%. Cleaning with Smart Robots not only has higher efficiency than cleaning photovoltaic panels with rainwater alone, it also saves time for the operation and maintenance staff to carry out manual cleaning. Moreover, electricity generation efficiency is ensured with lower manpower cost.



Photovoltaic Smart Cleaning Robot

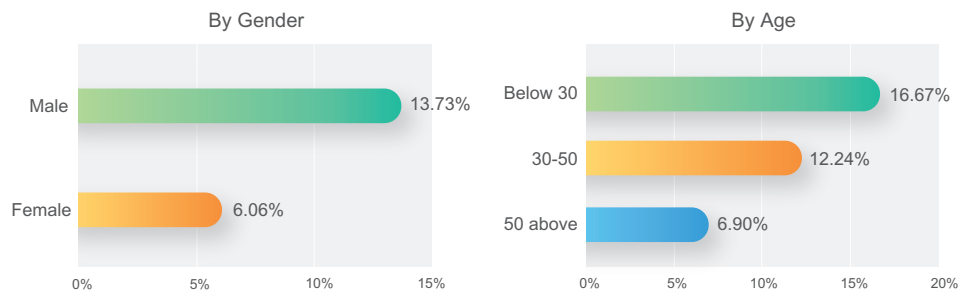
8. Caring for Employees

We cherish our staff as valuable assets and recognise their contribution to the Company. Apart from the regular review of existing remuneration and benefit packages, we aimed to improve and provide a safe and healthy working environment to retain high-caliber talents. We also attach great importance to safety risks identification and assessment of various production facilities and propose preventive measures to safeguard employees' interests. As our business expands and new energy develops, we organise regular training to keep staff's professional standards up to date.

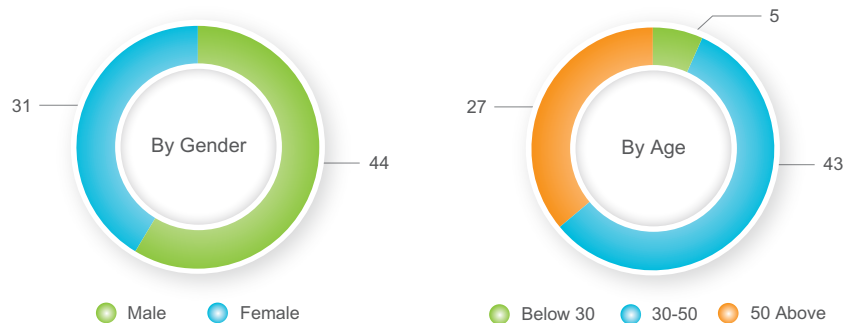
RECRUITMENT STRATEGY

CGN New Energy adheres to the general direction of "cultivating talents on its own and recruiting from the market". There are three main ways for us to recruit top-notch employees: internal transfer, internal promotion and external recruitment. We make recruitment decision primarily based on open recruitment, voluntary application, comprehensive assessment and merit-based selection. Meanwhile, we also uphold the principles of equal opportunity and meritocracy. Save for certain positions that have specific requirements on job applicants' physical fitness, we do not treat candidates and employees differently on the grounds of their race, colour, religion, nationality, age, family status or gender in the course of recruitment, employment, training, reward, promotion and development. As at 31 December 2017, CGN New Energy had a total of 1,925 staff members, with 75 and 1,713 in Hong Kong and the PRC respectively and 137 in Korea. CGN New Energy maintained strict compliance with the labour laws and regulations of Hong Kong, China, Korea and other places where it operates. It has a zero tolerance policy to unethical employment terms involving child or forced labour as well. During the Reporting Period, we are not aware of any child labour or forced labour at where we operate.

Turnover rate of Hong Kong Employees (As at 31 December 2017)



Statistics on Employees in Hong Kong (As at 31 December 2017)



EMPLOYEE BENEFITS AND REMUNERATION

We recognise that every employee is crucial to our success. Thus, we attach significance to staff benefits and remuneration for talent retention. The Company provided social insurance, holidays and other benefits to qualified employees in accordance with national and local laws and regulations. We also have a wide range of effective communication channels in place to maintain a harmonious relationship with employees and cultivate an inclusive workplace. The management will regularly review and adjust staff's performance target to help them enhance job performance and improve the workplace, thereby safeguarding employees' benefits and welfare.

8. Caring for Employees

Case sharing: “Goddess Day” on 8 March at CGN New Energy Shenzhen and Beijing Offices

CGN New Energy has always been a strong supporter of gender equality and it appreciates all female employees who make contribution to the Company and their families. On 8 March 2017, we held the “8 March Goddess Day” in Shenzhen and Beijing to celebrate the International Women’s Day 2017. Under the theme of “Beautiful Life, Healthy Life”, we invited 165 female employees of various departments at the headquarters to share festive happiness and joy, which embodied the Company’s care, respect and understanding for them.

To encourage female employees to relax under pressure, the trade union organised the preserved flower gift box course which manifested feminine tenderness. During the event, female employees learnt from the tutors how to make and select materials for preserved flowers. The trade union also held reading events for female employees to dive into the world of books and share their favourite reads.

The “Goddess Day” promoted interaction between female employees, allowing them to connect with and help each other. After the celebration, our staff was able to fight stress with a more positive attitude and bring their best game to work.



Our female employees joined the preserved flower gift box course on the 8 March “Goddess Day”

Case sharing: CGN New Energy Valentine’s Day Event for Sweet Lovers

CGN New Energy cares for its employees and empathises their love for families. Our frontline staff devoted and gave up substantial time for the Company. Many of them worked far away from the hometown and had little time to spend with their loved ones, so as to pursue career development and live up to the expectations of their families and lovers.

In recognition to employees’ contribution to the Company, CGN New Energy elaborately planned the “2.14 Sweet Love-I Come to You” campaign for the Valentine’s Day, where it held specially designed activities and invited employees’ families to visit the workplace and have fun together. We organised interactive games for couples to show their love. During the games, an employee ran towards the finishing line carrying his lover on his back, while another frontline staff proposed to his girlfriend in front of his colleagues. The Company respects and appreciates its peoples’ contribution, and encourages them to spend more quality time with family.



Our employee proposed to his lover in front of the colleagues.

8. Caring for Employees

EMPLOYEE DEVELOPMENT AND TRAINING

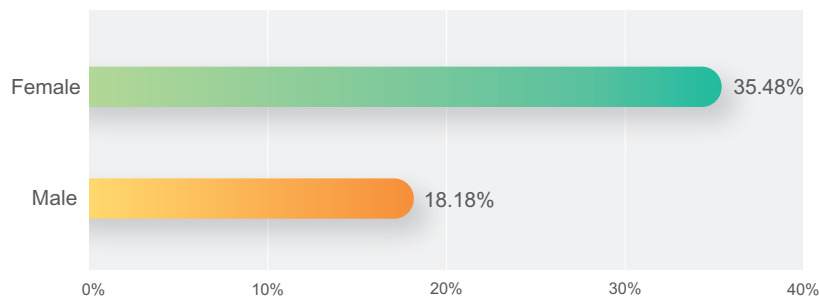
CGN New Energy offers a wide range of regular training on professional skills for employees of energy projects, which is designed to support different positions and responsibilities, enhance staff's skills, and facilitate daily operation and business growth. With such comprehensive training opportunities and diverse training programs, our employees are able to give full play to their potential and sharpen their skills.

Training time of employees in Hong Kong during the Reporting Period (number of hours)	
By Gender	
Male	8.63
Female	10.86
By Types of Employees	
Senior Management	20
Middle Management	8.82
General Staff	11.25

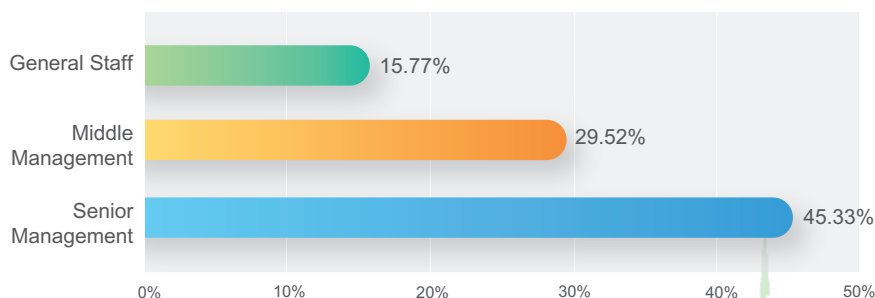
We provide training for more than 99% of PRC employees. In terms of vocational training for Korean employees, a total of 358 employees participated in the training provided by CGN New Energy, reaching a total of 4,755 training hours during the Reporting Period.

Statistics on the percentage of employees trained in Hong Kong during the Reporting Period

By Gender



By Types of Employees



8. Caring for Employees

Case sharing: Commencement of the 1st Photovoltaic Skills Level 1 Training Program

On 11 December 2017, the CGN New Energy Academy commenced the 1st Photovoltaic Skills Level 1 Training Program at Tianjin Training Base. The program was launched for the first time after nearly four months of repeated testing based on the experience of successful development of the Wind Power Skills Level 1 Program. It covered the achievements in three major sectors and 47 basic skills in operation and maintenance of photovoltaic power stations.

We invited 14 employees of eight regional subsidiaries to be the first batch of students of the program series. The 15-day program ended on 25 December. Adopting small-class teaching, the program allowed our employees to focus and acquire in-depth understanding of photovoltaic application while providing them more practise opportunities. To offer more targeted training and tutoring for better learning outcome, students were divided into three groups, with each group comprising around four to five students and one tutor. As the program received strong support from regional subsidiaries, we will ride on its success and roll out the 2nd Photovoltaic Skills Level 1 Training Program, so that more employees are able to achieve personal growth and live up to their potential.

Case sharing: New employees from campus recruitment finished practical training

CGN New Energy invested substantial amount of funds and time to help new recruits integrate into the workplace and enhance their sense of belonging. On 5 April 2017, phase two of training for campus-recruited employees kicked start following ice-breaking session with seven tutors from six regional subsidiaries. The first batch of 52 new employees then participated in 24 days of practical training. To allow students to observe our people in their daily work and practise what they learnt, the Company organised the training at the factory area, so as to help them learn in a more systematic manner and acquire basic skills in a more realistic settings.

The Wind Power Skill Level 1 Training Program covers 52 basic operating skills and comprises two phases of practical training and assessment. The person-in-charge of the CGN New Energy Academy introduced the training objectives, curriculum and arrangements to new staff recruited from campus. With the aim of promoting training outcome and management, students were grouped into six teams, and team leaders and safety officers were selected to enhance their sense of responsibility, leadership skills and morale.



New employees listened attentively to the tutor

8. Caring for Employees

OCCUPATIONAL HEALTH AND SAFETY

CGN New Energy generates electricity through different means, including solar energy, wind power and gas-fired power generation, which involve a wide range of processes and equipment operating skills. In view of the skills required for business operation and the risks of accidents, we adhere to the basic rule of “safety first” and strives to create a safe workplace by adopting various occupational health and safety policy. Meanwhile, we work towards the safety goal of “zero accident and zero damage”. During the Reporting Period, we did not record any work-related injury or death, and successfully achieved our target of safe production.

To ensure our efforts in promoting occupation safety were effective, we established the safety and quality control department to coordinate and supervise all matters relating to occupation safety and health. We have the “EHS Management System” in place, which incorporates a set of occupational safety and health management systems, including the “Dangerous Tasks Management System”, “Potential Safety Risks Investigation and Treatment System”, “Dangerous Items Management System” and “Occupational Hygiene Management System”. The “EHS Management System” aims to identify hidden safety risks at workplace and provides clear work guidelines to ensure all tasks were performed in a safe workplace. Our project companies in China and Korea have established the occupational health and safety management system and obtained the international OHSAS 18001 certification, while our project companies in Korea have obtained the local KOSHA 18001 certifications by implementing the occupational health policy that were in compliance with the local requirements.

As we believe that “Prevention is Better than Cure”, we are endeavoured to minimise the safety risk at the production sites. Our project companies established the leadership group for safety risk management based on the “Safety Risk Management Measures”, which coordinated all employees from the general manager to general staff level for safe production. All departments must identify the sources of production and management risks, formulate and implement relevant safety and risk control measures before project commencement, and conduct regular major inspection and continuous monitoring to review their effectiveness. For example, equipment must be in good conditions and the platform for work-at-height activities must meets the requirement of relevant regulations. In addition, the Company issued personal protective equipment according to national requirements relating to the power sector. Based on employees’ duties, we provide different safety equipments to prevent them from injury as a result of falling from height, falling objects, electric shock or other hazardous substances. The departmental safety officers are in charge of supervising employees in the correct use of relevant protective gears, so that they were well-equipped to minimise safety risks at workplace.



8. Caring for Employees

TRAININGS ON OCCUPATIONAL HEALTH AND SAFETY

In addition to a sound risk control system, CGN New Energy also devoted resources to offer health and safety training, which allowed employees to better understand the correct procedures and cope with workplace accidents more properly. Our new production staff must complete the three-tier safety education programme at the subsidiary, project company and on-the-job training section, which ends with an examination for them to demonstrate their learning outcomes. New recruits must pass the test before being accepted to the production sites and work sites. As a part of the on-site training and safety campaign, our production staff are required to attend a wide array of training activities, including specific on-site assessment, accident prevention courses, skill quiz and accident anticipation events. They also have to pass the production safety test to ensure that their safety awareness is up to the standards of CGN New Energy.

Other than performing daily duties, our people are also able to cope with accidents and protect personnel safety in emergency. CGN New Energy organises annual fire safety trainings to equip our staff with “four types of knowledge and skills”, namely, knowledge on danger of fire and skills of fire reporting, knowledge on fire prevention measure and skills of using fire extinguishers, knowledge on fire extinguishing methods and skills of accident handling, and knowledge on escaping from fire and skills of evacuation. In order to help employees fully grasp the knowledge of production safety, our safety and quality control department offers regular training programmes which cover production safety laws and regulations, safety management system and training courses on such systems. We designated one month in each year as the “Safe Production Month” and our project companies held safe production activities such as seminars and safety drills to raise employees’ safety awareness.

During the Reporting Period, our project companies organised the following trainings:

- Three-tier safety education programme for new recruits
- On-site first aid training
- Occupational hazard and occupational health training
- Training on road safety
- Safety training for external contractors
- Safety training for external construction contractors
- Safety management training for management officers
- Fire safety training
- Turbine technology and accident handling
- Continuing training for safety engineers
- Training on emergency response for production staff

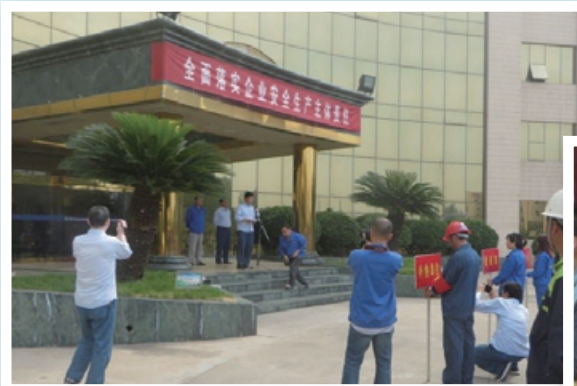
8. Caring for Employees

Case sharing: Fire safety training and fire drill

CGN New Energy recognises the importance of employees' safety and health. On 15 December 2017, our safety and quality control department and the production and maintenance department of the Southeast region invited the fire brigade of Jianshan New District, Haining to give a special lecture on fire safety and organise fire drill for employees of all power plants and the fire safety officers of the project department of the Jianshan Wind Farm in Haining, Zhejiang Province.

Through lively fire safety training and exercise, the fire brigade of Jianshan New District, Haining educated our staff on the use and points to note regarding various fire extinguishing equipment, including dry powder extinguishers, portable fire-extinguishing blowers, fire-extinguishing grenades and fire whips. They also gave a lecture on the appropriate response in case any turbine is on fire, and reminded them to be prepared for emergency and help others to escape.

Frontline employees of the power plants and project management department play a crucial role in power plant safety. In order to effectively enhance their abilities in emergency evacuation, self-protection and emergency handling, the fire brigade organised a fire drill, where staff of the power plants and project management department practised the use of fire extinguishers and fire grenades. The lecture and practise allowed our employees to understand the importance of fire prevention and emergency measures, which raised their fire safety awareness and enhanced their response in case of fire. This laid a solid foundation for promoting the overall firefighting ability of our power plants and project management department in the Southeast region.



The fire brigade of Jianshan New District, Haining giving lecture on fire safety to our employees



8. Caring for Employees

Case sharing: Annual spring inspection at Wulan Photovoltaic Power Station

Spring inspection represents a comprehensive review on the production safety management standards and a general maintenance and repair exercise before summer. Thus, it is crucial to employees' health and safety in the coming year. In 2017, our Wulan Photovoltaic Power Station in Qinghai carried out spring inspection with the goal of "preventing physical injury and equipment damage, ensuring task completion in a safe, high standard and efficient manner". It eliminated hidden risks, inspected equipment, cleaned electrical equipment, performed pretesting and protective calibration during the spring inspection.

Our employees focused on various inspection tasks during the spring inspection. We made extensive planning and preparation in advance to ensure all operations were carried out in a safe and reliable way. We strictly implemented the "Double Tickets and Triple Systems" and defined the responsibilities of operators and supervisors. We also conducted equipment repair and maintenance in accordance with the inspection standards, guidelines and rules. As a part of the spring inspection, we commenced the inspection and deficiency elimination of equipment, where we not only cleaned electrical appliance, but also investigated and eliminated hidden risks and deficiencies. In order to complete the spring inspection on schedule, our repair and maintenance staff worked overtime while the group leaders took the lead to supervise the progress on-site and coordinated in problem solving to achieve our safe production goal of the year.

9. Community Contribution

CGN New Energy brings cleaner air and upgrades people's living standards through clean energy development. We also devote resources to share our success with the local people, thereby pushing forward community development. To this end, CGN New Energy actively participates in a wide range of community care activities to understand local needs, so that we can pursue business growth and community development, while establishing harmonious relationships in the neighbourhood.

CGN New Energy focuses its social investment on poverty alleviation, education and environmental conservation. It aimed to help people in distress and bring hope to the next generation, thereby providing impetus to future community development. We also lend our hands to the community in times of emergency. For example, we joined fire and disaster relief to show our care. In addition, we take initiatives to support environmental protection in order to build a more pleasant environment with the community. The efforts of our volunteer team have been recognised by local citizens. At the 2017 Advanced Work Teams, Advanced Workers and Outstanding Units Award Ceremony for "Visiting, Promoting Livelihood and Gaining Support" in Xinjiang Autonomous Region, three of our employees received the title of 2016 Onsite Advanced Workers for "Visiting, Promoting Livelihood and Gaining Support" in villages, in appreciation of our employees' volunteering works in the countryside.

SUPPORT EDUCATION DEVELOPMENT

The growth of CGN New Energy relies on technological advancement. Thus, we believe that knowledge is a crucial key to success and aims to promote education in the neighbouring communities. The Group has increased resources investment to local schools and organised voluntary visits and teaching missions to share knowledge. We targeted to give back to society by offering children sufficient educational resources equally, so that they could change their lives with what they have learnt. CGN New Energy has held community care activities in Hope Primary Schools in Lancang County, Pu'er, Mouding County, Chuxiong, Huaning County, Yuxi and Menghai County, Xishuangbanna, which were highly popular among local governments and the public.

Case sharing: Visit to Yuxi Chengmentong Hope Primary School

On the widely-celebrated Children's Day on 1 June, young volunteers of CGN New Energy visited Yuxi Chengmentong Hope Primary School to share the joy with students.

The volunteer team gave safety leaflets, science books on wind power and other daily school supplies as presents. They wished to introduce clean energy technology so that children would know more about the invention that pushed forward social development and reduced environmental impact. Besides, students could also take advantages of the schooling items to help with their studies.

In addition to bringing school supplies as presents, our volunteers organised classes to share with children the secrets of wind power and clean energy in a lively and exciting way. Using whiteboard and drawing pens, they also completed the art piece named "Cheer for Green Wind Power" with the kids. The student representative Shi Wei said, "We wish to express our gratitude and blessing to the big brothers and sisters of CGN." Amidst children's laughter, our efforts in education have sowed the seeds which will spring up and bear fruit in the future.



Our volunteers and children worked together on the picture featuring blue sky, white clouds and white windmills.

9. Community Contribution

EMERGENCY RELIEF AND POVERTY ALLEVIATION

CGN New Energy wishes everyone to share the success of China's economic growth. The PRC government has been pushing forward poverty alleviation, and we have supported such national policy. Realising that certain backward counties required more resources to support people's living, we aimed to improve the livelihood of the underprivileged. In case of unexpected disasters, we promptly offers assistance and sends relief to help people in distress.

Case sharing: Visiting the poor with the Dawu County Government

CGN New Energy cares about people's wellbeing in where it operates. Two responsible persons of wind farms of Hubei branch office entrusted to be managed by CGN New Energy visited local disadvantaged groups with the government of Dawu County in Hubei Province.

The charitable activity took place in Gaofan Village of Fuqian District, Dawu on 13 February. The two responsible persons visited five families in Gaofan Village and understood that there was a shortage of materials through little chats with local people. We therefore sent rice, edible oil, fruits and other daily necessities to keep villagers well-fed in winter.

During the visit, representatives of CGN New Energy introduced clean energy and wind power technology in brief, which allowed the folk to interact with the concept of green energy. The event was well received by the local people.



Representatives of CGN New Energy sending daily necessities to villagers.

Case sharing: Donation to and poverty alleviation in Halahai Town, Longjiang County, Heilongjiang Province

In March 2017, CGN New Energy donated a total of RMB200,000 to Longjiang County, Heilongjiang Province in support of poverty alleviation at the county level. The simple and dignified Ceremony of Donation to Halahai Town, Longjiang County was held in the Hongqi Village Conference Room at Longjiang County.

At the donation ceremony, Wang Youliang, the deputy head of Longjiang County, expressed gratitude and appreciation to CGN New Energy's generosity. He also set the target of lifting the whole county out of hardship in 2017, which demonstrated his determination to win the war against poverty.

Shi Youwen, the representative of CGN New Energy, appreciated the support of the county governments and villagers' committees. He undertook to fulfil social corporate responsibility, further strengthen the cooperation with Halahai Town and Hongqi Village, Longjiang County, and pursue win-win results in local business and community development.

10. Honours and Awards

- The Chao Lake Hongqiao Photovoltaic Station in Anhui, the Huanghaocheng Photovoltaic Station in Hunan, Shenzhen Airport Photovoltaic Station in Southern China and the Yun County Photovoltaic Station in Hubei received the First Class Award in the operation indices benchmarking and competition at the 2017 Photovoltaic Generation Operation Indices Press Conference cum Photovoltaic Station Operation and Maintenance Seminar organised by the China Electricity Council
- Received the 2017 China Power Innovation Award (Second Class) for the “Comprehensive Technical Transformation and Technology Reform of First Batch of 2 MW Domestic Wind Turbines Adopting Foreign Technology Project” in Inner Mongolia
- The Rudong Offshore Wind Farm won the “Top 50 Wind Power Enterprises of 2017-Best 10 Wind Farm” at the 10th China (Jiangsu) International Wind Power Industry Development Forum cum 2017 Top 50 Wind Power Industry Award Ceremony
- The Altay Wind Farm, Mayitasi Wind Farm, Phase I of Dabancheng Wind Farm and Phase II of Santanghu Wind Farm in Xinjiang won the First Class Awards in four districts in the 2016 Wind Farm Operation Indices Competition
- The Jialaibo Wind Farm was given the “2016 Outstanding Contribution Award for Stable Economic Growth in Lancang County” by the party committee and government of Lancang County, Yunnan
- The construction of the Hongyan 200 MW Wind Farm won the “2017 China Electric Power Quality Engineering Award” and “China Installation Construction Quality Award” (national level)



- The Menghai Wind Farm won the title of “Environmentally-friendly Enterprise” in Xishuangbanna



10. Honours and Awards

- Received the “Most Progress in IR Award” at the “3rd Investor Relations Award” organised by the Hong Kong Investor Relations Association
- Sichuan operation won the third place in safety supervision benchmarking among Sichuan power enterprises
- Power dispatch control centre of Xishuangbanna Grid Company granted the honour title of the Advanced Team for the dispatch and operation work of the Menghai Wind Farm in relation to the Xishuangbanna Power Grid



- The first-tier wind farms under the management of CGN New Energy won the title of “Friendly Wind Farm” from Liaoning Grid Company



- Beijing Capital International Airport Photovoltaic Project was included in the “List of the Third Batch of Beijing Distributed Photovoltaic Power Generation Project Award”



10. Honours and Awards

- Daliang Wind Farm was granted the honour title of “2016 Advanced Enterprise Supporting Local Economic Development” by the party committee and government of the Guazhou County, Gansu Province



- Won the “Most Promising Listed Company” in the “2016 China Financial Market Listed Companies Awards” organised by “China Financial Market”
- Garnered the “2016 Outstanding Listed Company Award” in the 14th China Finance and Economy Overseas Industry Billboard organised by Hexun



11. Prospects

The report of the 19th National Congress proposes to strengthen the clean energy industry and advance the reform of energy production and consumption, thereby establishing a clean, low-carbon, safe and efficient energy system for a beautiful China. Amidst strong government support to clean energy development, CGN New Energy sees golden opportunities for rapid growth. We continue to explore the clean energy market intensively. Putting safe, green and economical clean energy for society as our top priority in development, we strive to act in concert with the government strategy and become an industry leader.

Facing the future macro-economic environment, development trend in the power industry as well as the remaining challenges in the PRC and Korean markets which include the declines in tariff and utilization hours, power curtailment, exchange rate and interest rate, CGN will continue to seek acquisition opportunities in relation to high quality clean and renewable power generation projects. It will also constantly promote its own greenfield and brownfield projects to upgrade its core capacity in the operation and maintenance of the wind power and solar power businesses, thereby enhancing its market competitiveness and profitability.

“Natural Energy, Powering Nature” is our development philosophy and our operations include wind power, solar energy, hydro, gas-fired and cogen projects. Through which, it has acquired solid capabilities in project construction, production, operation and maintenance. Upholding the operating principles of “effective use of resources and substantial development”, we not only provide green energy to the economy and society, but also attach great importance to ecological conservation in the communities where we operate. We are set to achieve harmonious development between the energy sector and the nature.

Currently, our wind power business is pursuing both onshore and offshore development, while we strive to promote wind power and professional services. In terms of operation standardisation, product mix and economies of scale, we have achieved the leading position in the construction, operation and maintenance of wind power facilities. Meanwhile, our investment, construction, operation and maintenance of solar power stations and other new energy, as well as the research and development of technology relating to solar energy, including large photovoltaic ground station and the integration of clean energy such as distributed photovoltaic power, solar thermal power and microgrid, have demonstrated outstanding project operation and maintenance capabilities and leading technology research and development abilities.

In respect of ecological civilization construction, CGN New Energy has introduced and implemented the ecological concept of “lucid waters and lush mountains are invaluable assets”. It incorporates green and environmental considerations in the entire process from site selection, deliberation, construction to operation and maintenance of projects. As to environmental protection and water conservation, we adopt the approach of “environmental protection first in preliminary design, striking a balance between construction progress and environment construction, and incorporating environmental considerations in production” and roll out a variety of initiatives on ecological and landscape protection, atmospheric environment protection and water environment protection.

Staff is the foundation of our success. Taking into account the business nature of CGN New Energy, we design and customise high-quality training programs to meet the actual needs of the Company and employees. We will also invite senior staff to give content-rich and practical lectures. For new recruits, we will arrange on-site exercise for them to acquire basic skills systematically in a more realistic setting. This will raise their safety awareness, foster a harmonious relationship among colleagues and enhance sense of belonging.

As part of our social responsibility, CGN New Energy implements the operational philosophy of “good neighbour, good friend and good partner”. It will launch a wide range of poverty alleviation projects on infrastructure construction, industry development, employment guarantee, cultural education and voluntary services. We strive to connect and serve local people through each project and integrate our operation with the community so as to achieve win-win results.

Appendix Content Index of the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange

Subject Areas, Aspects, General Disclosures and KPIs		2017 Environmental, Social and Governance Report or other reference
A. Environmental		
Aspect A1	Emissions	
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Environmental Protection – Environmental Management System
KPI A1.1	The types of emissions and respective emissions data.	Environmental Protection – Emission Control
KPI A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental Protection – Emission Control
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental Protection – Waste Management
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental Protection – Waste Management
KPI A1.5	Description of measures to mitigate emissions and results achieved.	Environmental Protection – Emission Control
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	Environmental Protection – Waste Management, Wastewater Treatment and Management Mechanism
Aspect A2	Use of Resources	
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials. <i>Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.</i>	Environmental Protection – Energy Consumption, Water Resources Management

Appendix Content Index of the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange

Subject Areas, Aspects, General Disclosures and KPIs		2017 Environmental, Social and Governance Report or other reference
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Environmental Protection – Energy Consumption
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Environmental Protection – Water Resources Management
KPI A2.3	Description of energy use efficiency initiatives and results achieved.	Environmental Protection – Energy Consumption
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	Environmental Protection – Water Resources Management
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Operation of the Company does not involve the use of packaging materials
Aspect A3	The Environment and Natural Resources	
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	Environmental Protection
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Environmental Protection

Appendix Content Index of the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange

Subject Areas, Aspects, General Disclosures and KPIs		2017 Environmental, Social and Governance Report or other reference
B. Social		
Employment and Labour Practices		
Aspect B1	Employment	
General Disclosure	Information on: <ul style="list-style-type: none"> (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	Caring for Employees – Recruitment Strategy, Employee Benefits and Remuneration
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	Caring for Employees – Recruitment Strategy
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	Caring for Employees – Recruitment Strategy
Aspect B2	Health and Safety	
General Disclosure	Information on: <ul style="list-style-type: none"> (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	Caring for Employees – Occupational Health and Safety, Trainings on Occupational Health and Safety
KPI B2.1	Number and rate of work-related fatalities.	Caring for Employees – Occupational Health and Safety
KPI B2.2	Lost days due to work injury.	Caring for Employees – Occupational Health and Safety
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	Caring for Employees – Occupational Health and Safety, Trainings on Occupational Health and Safety

Appendix Content Index of the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange

Subject Areas, Aspects, General Disclosures and KPIs		2017 Environmental, Social and Governance Report or other reference
Aspect B3	Development and Training	
General Disclosure	<p>Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.</p> <p><i>Training refers to vocational training. It may include internal and external courses paid by the employer.</i></p>	Caring for Employees – Employee Development and Training, Trainings on Occupational Health and Safety
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Caring for Employees – Employee Development and Training
KPI B3.2	The average training hours completed per employee by gender and employee category.	Caring for Employees – Employee Development and Training
Aspect B4	Labour Standards	
General Disclosure	<p>Information on:</p> <p>(a) the policies; and</p> <p>(b) compliance with relevant laws and regulations that have a significant impact on the issuer</p> <p>relating to preventing child and forced labour.</p>	Caring for Employees – Recruitment Strategy
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	Caring for Employees – Recruitment Strategy
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	Caring for Employees – Recruitment Strategy
Operating Practices		
Aspect B5	Supply Chain Management	
General Disclosure	Policies on managing environmental and social risks of the supply chain.	About CGN New Energy – Supply Chain Management
KPI B5.1	Number of suppliers by geographical region.	About CGN New Energy – Supply Chain Management
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	About CGN New Energy – Supply Chain Management

Appendix Content Index of the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange

Subject Areas, Aspects, General Disclosures and KPIs		2017 Environmental, Social and Governance Report or other reference
Aspect B6	Product Responsibility	
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Environmental Protection, Caring for Employees
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	The Group does not deliver any tangible goods. We considered these issues immaterial
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	Environmental Protection
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	About CGN New Energy
KPI B6.4	Description of quality assurance process and recall procedures.	Environmental Protection
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Issues Identified as Non-Material



Appendix Content Index of the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange

Subject Areas, Aspects, General Disclosures and KPIs		2017 Environmental, Social and Governance Report or other reference
Aspect B7	Anti-corruption	
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	About CGN New Energy – Corporate Governance
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	About CGN New Energy – Corporate Governance
KPI B3.2	Description of preventive measures and whistleblowing procedures, how they are implemented and monitored.	About CGN New Energy – Corporate Governance
Community		
Aspect B8	Community Investment	
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Community Contribution
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Community Contribution
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Community Contribution