

# GCL New Energy Holdings Limited 協鑫新能源控股有限公司

(Incorporated in Bermuda with limited liability) (Stock code: 451)

# Bringing Green Power to Life

# **2016** Corporate Social Responsibility Report





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This report is the annual Corporate Social Sustainability "CSR" Report (the "report") of GCL New Energy Holdings Limited ("GCL New Energy" or the "Company"). The purpose of this report is to report on the performance of GCL New Energy in environmental, social and governance issues during the period from 1 January 2016 to 31 December 2016. GCL New Energy has issued an annual standalone CSR report since last year. This report was prepared in accordance with the Core Option of the G4 Sustainability Reporting Guidelines issued by the Global Reporting Initiative (GRI), the Environmental, Social, and Governance Reporting Guide issued by the SEHK, and the Guide to the Preparation of Corporate Social Responsibility Reports of China issued by the CASS.

This report mainly covers the solar energy business of GCL New Energy. The report content was defined by materiality assessment and stakeholder engagement, and the details of the process can be found in Section "CSR Management" of this report. This report has successfully completed the Materiality Disclosures Service, which verifies that at the time of publication of the Report, disclosures G4-17 to G4-27 were correctly located in both the Content Index and in the text of the final report.

We value and welcome any comments and suggestions you may have on our sustainability performance. If you have any feedback or comments on this report and our sustainability performance, please email to newenergydm@gclnewenergy.com.

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Management Statement

Sustainability of natural environment is inextricably linked with development of human society. All employees in GCL New Energy upholds the responsibility to develop sustainable society, leads innovation and strive to promote green energy development. Every single unit of electricity generated by our power plants is contributed by our employees' daily efforts.

In 2016, GCL New Energy successfully seized new opportunities in energy transformation with our solar poverty alleviation projects, solar forerunner programmes and distributed solar power projects, helping us to maintain our industry-leading position. As at 31 December 2016, GCL New Energy owned 87 solar power plants in China, with the total installed capacity reaching 3,511 MW – an increase by approximately 114% compared to the same period last year – and we now rank second globally. In addition, we successfully developed and built multiple solar power plants in locations including North America and Japan, and achieved satisfactory result.

The function of solar power generation as green and clean energy is becoming more obvious during the energy revolution, leading to bigger responsibility and influence of solar power companies on the society and environment. In 2016, the newly installed capacity for solar power exceeds 70 GW globally, with a year-on-year growth rate of approximately 34%. In that, China contributed capacity of approximately 34.5 GW, with an approximately 132% year-on-year growth, keeping its leading position in the global solar energy market. In 2016, solar power generation continued to grow rapidly, increasing by approximately 72.0% to approximately 66.2 billion kWh as compared to the corresponding period of last year and reaching 1% for the first time in its share of total annual power generation in the country.

To realise our ambition of expanding our business covering the entire country, we have actively maximised the proportion of solelyowned operations and strengthened regional company management standards over the past year. At the same time, we have reinforced the application of new technology and techniques in construction and operation, and proactively promoted innovative technologies in increasing voltage class and bifacial solar module, keeping GCL New Energy in its industry-leading position in terms of technology. We also upheld a diversified development strategy to actively exploit overseas investment opportunities that can offer stable returns with reasonable risk. We will complete two projects in the US states of North Carolina (83MW) and Oregon (50MW) with a total installed capacity of 133MW in 2017. GCL New Energy also holds distributed solar power projects in Japan. The transaction helps GCL New Energy to expand its business overseas by utilising the company's advantages.

During the reporting period, GCL New Energy closely followed the national 13th 5-year plan to proactively respond to adjustments of the national energy structure. We are dedicated to integrating solar energy with agricultural development. Through stereotypical design solutions including high efficiency agriculture, fishery, and poultry photovoltaic systems, we adopted advanced technologies to realise agricultural production networking and all-industry chain operation. We use green energy to support green agriculture to facilitate the transformation of the industry. Besides, GCL New Energy has actively responded to solar poverty alleviation policies. We focus on driving solar poverty alleviation projects which aim to address the lack of electricity in poverty-stricken regions and the lack of income for poor families. In 2016, we obtained approximately 250MW of poverty alleviation projects approved by the National Energy Administration, ranking first in the country. We assisted a total of 18,163 poor families to improve their lives and increase their annual average household income by RMB3,000, in line with our philosophy of Bring Green Power to Life.

Looking ahead to 2017, we will continue to fulfil our responsibilities as a corporate citizen to create maximum value for our every stakeholders, including employees, investors, clients and society. We will proactively organise and participate in social, educational and community services, and continue to carry out solar poverty alleviation for the community. We are also committed to enhancing our employee welfare and work environment to retain and attract talents, and building a team with a strong sense of team spirt and togetherness to face the intensifying challenges in the future solar energy industry. GCL New Energy will continue to use national energy policies as its compass. While steadily developing our business within China, we will actively seek opportunities to enter overseas markets. With the new strategy of "equal importance of local and overseas businesses", we will seize the new development opportunities brought about by the Belt and Road Initiative. As usual, we will strengthen project development, promote intelligent operation and maintenance, improve safe production standards and reduce the cost of electricity. We hope to realise grid parity as early as possible, promote green energy to thousands of households, and continue to contribute to social advancement and environmental protection.

> SUN Xingping President



# **Business Development**

- Total installed capacity reached 3,516 MW (China: 3,511 MW), with total electricity generation volume of 2,790 million kWh a substantial increase of approximately 220% over 2015
- Increased the proportion of solely-owned operations to 48%
- Acquired the development rights of 83MW solar power plants in North Carolina, USA in February 2016, and is expected to commence operation in 2017
- Shizuishan 20MW fishery-photovoltaic solar power project successfully connected to the grid

# Environmental Performance and Achievements

- Generated a total of approximately 2,790 million kWh of green electricity, equivalent to savings of about 873,000 tonnes of coal consumption.
- Reduced approximately 2.38 million tonnes of CO<sub>2</sub> emissions, equivalent to planting approximately 2.25 million acres of forest in a year
- Reduced approximately 4,100 tonnes of SO<sub>2</sub> emissions
- Reduced approximately 4,100 tonnes of NO<sub>x</sub> emissions

# Employee Development, Occupational Safety and Health

- No work-related injuries or fatal incidents recorded
- A total of 1,224 training participants attended occupational health and safety-related training
- Approximately 70% of our employees took part in training, with the average training hours per employee reaching 15 and average training input per employee of over RMB3,000



# **Community Contribution**

- Met with the Central Committee of the Communist Youth League of China to discuss how to strengthen solar poverty alleviation projects
- The solar poverty alleviation projects improved the lives of 18,163 poor families, and their annual average household income increased by RMB3,000
- Donated a sum of RMB134,000 to the community









#### **CSR Management Strategy**

In line with our philosophy of Bringing Green Power to Life, we regard fulfilling CSR as our mission. We have established a CSR management system that integrates sustainability with the management of our day-to-day operations. With low carbon, emissions reduction, energy conservation and safety forming the underlying basis of all of our activities, we practise clean production, circular economy, eco-friendly environment and effective resource utilisation. Giving back to the community is part of GCL New Energy's agenda beyond growing our business. We are committed to promoting regional economic development and increasing our involvement in various community service programmes in the areas of education, health and medical services, and social welfare. Regular reviews of our CSR management system are carried out and suggestions are offered so as to increase our effectiveness in realising social responsibilities.

Adopting low carbon, emissions reduction and energy saving as standards to promote sustainable development. Adhering to fairness, integrity, sharing, and mutual benefit in our business operation, serving our clients, caring for our employees, and creating value for our shareholders, investors and society.

Our Green Promise





Delving deep into solar power generation, strengthening technology innovation, reducing solar power generation on-grid electricity price, and promoting the widespread use of green energy for protecting the natural world.



Participating actively in community events and activities, especially in education and philanthropy, to promote harmonious social development.



# Stakeholder Engagement

As we believe that two-way, transparent and regular communication are the keys to harmonious relationships, mutual trust and respect, we value the opinions of every stakeholder as they have a highly positive influence on the long-term development of GCL New Energy. We are committed to building multiple communication channels with our stakeholders in different aspects, allowing each of them to express their opinions. We have identified the following 7 key stakeholder groups based on their impacts on GCL New Energy's decision-making, and their proximity to our operation (contractually or geographically) [G4-25]:

Community

members/

organisations







Shareholders/ Investors



Government departments



Clients



Business partners (e.g., suppliers/ contractors)



Media

Stakeholder Groups [G4-24]	Major Communication/ Feedback Channels	Frequency [G4-26]	Issues of Concern [G4-27]
Employees	<ul><li>Employees' meeting</li><li>Employees' Performance review</li><li>Corporate newspaper and magazine</li></ul>	<ul> <li>Annual (performance review interview)</li> <li>Monthly (corporate newspaper)</li> <li>Quarterly (corporate magazine)</li> </ul>	<ul> <li>Employee training</li> <li>Remuneration and benefits</li> <li>Career planning</li> <li>Future company development</li> </ul>
Shareholders/Investors	<ul> <li>Annual, Special general meeting</li> <li>Investors' meeting</li> <li>Result announcement</li> <li>Press release/announcements</li> <li>On-site visits</li> </ul>	<ul> <li>Annual (annual general meeting)</li> <li>According to Listing Rules requirements (special general meeting)</li> <li>Others are held irregularly when necessary</li> </ul>	<ul> <li>Business development</li> <li>Financial performance</li> <li>Timely release of information</li> <li>Corporate governance</li> </ul>
Government Departments/ Clients	<ul><li>On-site visits</li><li>Meetings</li></ul>	Irregular	<ul><li>Effectiveness of solar poverty alleviation</li><li>Business cooperation</li><li>Production technology</li></ul>
Business Partners (Suppliers/Contractors)	Telephone/Email     Meetings	Irregular	<ul> <li>Environmental performance</li> <li>Operation efficiency</li> <li>Compliance requirements</li> </ul>
Community members/ organisations	<ul><li>Telephone/Email</li><li>Interviews</li><li>On-site visits</li></ul>	Irregular	<ul> <li>Business development and strategy</li> <li>Community engagement</li> <li>CSR management system</li> </ul>
Media	<ul><li>Press release/announcements</li><li>Official website</li><li>WeChat/Weibo</li></ul>	Irregular	Business prospects     Compliance issues



We regularly review our communication channels with our stakeholders to identify any shortcomings, and to better collect stakeholder opinions and feedback.









- Chairman Mr. ZHU Yufeng and President Mr. SUN Xingping met Turkish Energy Minister in Shanghai.
- Chairman Mr. ZHU Yufeng and executive director Ms. HU Xiaoyan visited Shaanxi branch to monitor the project progress.
- **3.** Chairman Mr. ZHU Yufeng visited Inner Monglia Branch.
- **4.** Chairman Mr. ZHU Yufeng's conference with the person in charge of Hebei branch.
- 5. President Mr. SUN Xingping in a meeting with Indonesia Investment Coordination Committee.



#### Materiality Assessment

Same as last year, in the course of preparing this report, we conducted a materiality assessment to understand the material economic, environmental and social issues concerning GCL New Energy's employees and other stakeholders. This assessment helps us to formulate policies, allocate resources and set the framework of this report. [G4-27] This Report mainly explores the environmental and social impacts and performance of the 87 solar power plants owned and operated by GCL New Energy in China. [G4-17]



We commissioned an independent consultant to conduct the materiality assessment. The assessment consisted of four phases as below:

#### Materiality Assessment Process [G4-18]

Identification of potentially material issues	Through reviewing internal publications, other relevant documents and, at the same time, conducting media analysis and peer analysis, our consultant identified a list of potentially material economic, environmental and social issues that are related to GCL New Energy.
Prioritisation of material issues	The independent consultant formulated a stakeholder communication plan, including designing a questionnaire and conducting surveys and interviews. Over 300 people from a total of 7 stakeholder groups participated in the survey and interviews. The consultant then analysed the results to understand the prioritised issues concerning our stakeholders. Eventually, a materiality matrix was derived and a list of material aspects of GCL New Energy were identified by materiality analysis.
Validation by Management	The result of the materiality matrix was submitted to management by our independent consultant for review to validate the materiality of the identified issues. GCL New Energy's performance on the relevant issues was also reflected truthfully in the report to ensure effective response to the demands and expectations of every stakeholder.
Review	The Report content was reviewed to see if the sustainability performance of GCL New Energy provided was reasonably described, and whether the report content preparation reflects the intention of the report. The independent consultant invited management, employees and other stakeholders to provide their comments in this regard.

Through the above assessment process, 16 social responsibility issues that are material to GCL New Energy were identified. They form an important part of this report, and we will disclose the relevant information in detail in this report.



#### Material Matrix [G4-20] [G4-21]



#### List of Material Issues [G4-19]



1. Business performance

2. Investment in research and development



3. Energy consumption and energy saving measures

#### 4. Water consumption

- 5. Raw material and resource use
- 6. Waste management
- 7. Environmental compliance



- 8. Diversity and equal opportunities
- 9. Occupational safety and health
- 10. Employee welfare, development and training
- 11. Community contribution
- 12. Community impact assessment of projects
- 13. Anti-corruption
- 14. Quality of service
- 15. Grievance redress mechanism
- **16.** Supply chain management





#### About the Company

GCL New Energy is a world leading new energy company with its primary business in solar power generation, covering development, construction and operation. We adhere to "advancing technologies, collaborative finance, and high productivity" as our operation principles, focusing on the development of centralised and distributed solar power plants, to continuously provide clean, safe, and efficient green energy to society. GCL New Energy is committed to developing a business model that integrates technology, industry, service and finance into one solution. We have a nationwide presence with our provincial subsidiaries which shows significant strength in design and research, financing, sourcing, agriculture and international businesses, as well as distributed business. As at 31 December 2016, GCL New Energy owned 87 power stations in 22 provinces and had a total installed capacity of approximately 3,511MW, ranking second in the world. In addition, GCL New Energy has set foot on the global market, with solar power plant projects in North America and Japan.









GCL New Energy's provincial/regional branches cover the entire country and own a development team of close to 400 people whom have rich experience in aspects including research and development of the initial phase of power plant development, project approval/filing and project financing. The company insists on the idea of having equal importance in self-initiated development and strategic collaborative development. In 2016, the proportion of self-initiated development increased significantly. At the same time, GCL New Energy introduced large-scaled strategic collaboration partners. The scope of development covers all the indicator types of lender project, PV poverty alleviation projects, distributed projects, generic power plant projects and other solar power plants. The company emphasises both in-house development and project expansion. In the last two years, the percentage of solely-owned projects has gradually increased from 18% in 2015 to 48% as at 31 December. At the meantime, we investigate and utilise the potential resource available in existing projects to help achieve project expansion, which enable economies of scale and reduce cost in the early stage of development.

We have four types of solar power projects: Solar Frontrunner Programmes, Solar Poverty Alleviation Projects, Distributive Solar Power Projects and Generic Power Plant Projects.







#### Solar Frontrunner Programmes

"Solar Frontrunner Programme" is a solar support project initiated by the National Energy Administration in 2015 with the aims to promote the application of advanced solar technology, facilitate industry development, and encourage the research and promotion of high efficiency solar related products. We actively participated in the programme and were successfully awarded five "Solar Frontrunner" projects in Shanxi Yangquan, Shanxi Ruicheng, Shandong Jiningin, Anhui Lianghuai and Inner Mongolia Wuhai with a total capacity of approximately 360 MW, making us ranked third in the nation.



# Shandong A Xintai To Jining Hebei Shanxi Anhui Anhui Anhui Anhui Anhui Mei Lianghuai Baotou Baotou Muhai

★ GCL New Energy's winning projects: Shanxi Yangquan, Shanxi Ruicheng, Shandong Jining, Anhui Lianghuai, Inner Mongolia Wuhai



#### **Solar Poverty Alleviation Projects**

Poverty Alleviation Projects are one of the ten main poverty alleviation projects recognised by the national government. GCL New Energy actively responded to the policy and engaged regional and province-level branches to participate in the projects to bring positive social and economic impacts. In the first batch of projects issued by the National Energy Academy and the State Council Leading Group Office of Poverty Alleviation and Development, GCL New Energy obtained approximately 250MW of Poverty Alleviation projects ranking first in the country. These projects can benefit 18,100 poor households in provinces such as Shanxi, Shandong, Anhui, Jilin and Jiangxi. GCL New Energy has also successfully developed the first solar poverty alleviation project in Funan county of Anhui province under a public-private-partnership (PPP) arrangement. This PPP project use integrated operation model as "household, village and ground mounted power station" with an aggregate capacity of 117MW, bringing economic benefits to 5,000 households, each of which enjoyed an RMB3,000 increase in income per year.

#### China "Solar Frontrunner Programme" projects in 2016



#### **Distributed Solar Power Projects**

GCL New Energy has closely followed the solar power industry's trend to actively develop distributed solar power generation projects. We encourage using the rooftops of utilities, industrial and commercial buildings, agricultural facilities as well as the ancillary structures of these buildings to develop distributed solar energy projects. In the meantime, we have also developed concentrated residential rooftop power generation projects in new village, urbanisation and solar poverty alleviation programmes. We have developed a distributed energy internet platform covering "project financing, investment and development, construction, operation and management, and financial services". The platform helps integrate resources to promote the popularity of distributed solar energy. We are expecting the percentage combination from distributed solar power business to increase substantially by 2020.





#### Ground Mounted Solar Power Plant Projects

GCL New Energy operates ground mounted solar power plant projects around the world that cover many different types of power plants. We adopt "suiting local conditions" as principle to develop our ground mounted solar power plant projects by considering the local sunlight conditions, ecological conditions and economic attributes, making sure that solar energy is an important means of improving the environment and developing the local economy. In western China, we mainly make use of the degraded land in deserts to develop large-scale ground-mounted solar plants. In eastern China, we focus on the development of "solar energy+" plants such as agricultural photovoltaic, fishery photovoltaic and floating solar power plants.



GCL New Energy has remarkable advantages in integrated system design, effective supply chain management system and engineering management system. High quality assurance of our power plants is an essential prerequisite for effective cost control and high efficiency system. With nearly 120 talents, our design and research institute has designed several forms of solar power plant development programmes, including agricultural photovoltaic, fishery photovoltaic, husbandry photovoltaic, poultry photovoltaic, mountain, Gobi, rooftop, desert and floating power plants. We have adopted systematic and informative management on material supply, while we embrace a precise approach towards project progress management. We have allocated more than 400 electricity experts to different project locations based on their expertise and business development needs. In addition, we also take the lead in adopting project management systems in construction phase to achieve smarter monitoring and management throughout the whole project.

We continue to improve our operation monitoring model. By means of a 4-in-1 approach incorporating "headquarters, provincial companies, regional centres and independent power plants", we have established a real time operation platform. With far-end control, automatic data collection and analysis, and equipment malfunction diagnosis and maintenance, we can achieve centralised monitoring, regional maintenance, unattended operation, intellectual and professional operation and maintenance. We adopt a "whole lifecycle" principle for our solar power plant operation, we are committed to setting up a strong foundation during project development and construction stages for effective and low cost operation in later project stages. To further strengthen the electricity generation efficiency, we proactively incorporate advanced technology from other industries into the operation and maintenance of our solar power plants. In the meanwhile, we optimise the return on assets of our power plants through sales and marketing, inter-regional delivery and direct electricity supply for large consumers.

#### GCL New Energy's real time operation platform







### **Corporate Structure**

As at 31 December 2016, we had constructed 87 solar power plant projects across 22 provinces, including Jiangsu, Inner Mongolia, Shanxi, Qinghai, Hebei, Ningxia and Hubei, with a total capacity of approximately 3,511MW and total electricity sales of approximately 2,784 million kWh. In the reporting period, total cost in the solar power industry was approximately RMB13.9 billion. Our operation in different regions of China (including the remote regions) creates employment opportunities for local residents, which are conducive to local economic development. The table below presents the financial profile of GCL New Energy in 2016. It also explains our methods for creating value for different stakeholders, including direct and indirect economic value. The gearing ratio of the Company is 84.5%.

# **Corporate Governance**

We are dedicated to continuously improving our corporate governance standards and procedures. The Board believes that comprehensive and reasonable corporate governance is the key to sustain business growth, safeguard the Company's interest and assets, and create value for shareholders and other stakeholders. GCL New Energy complies with the code provisions set out in the Corporate Governance Code and Corporate Governance Report contained in Appendix 14 of the Listing Rules. We are in strict accordance with the relevant provisions of SEHK to conduct investor relations management and disclose information. We publish annual report, interim report and hold annual and special general meetings regularly to keep communication with shareholders. In this way, we can ensure shareholders and investors

Item	RMB (in 10 thousands)
Direct economic value generated	
Revenue	224,643
Profit	30,940
Distributed economic value	
Expenses on staff remuneration and benefits	24,269
Tax paid to the government	4,219
Donations	13.4

can publicly, equally and immediately obtain the company information and participate in corporate governance, which can help protect the interests of small and medium investors. We have developed Shareholder Communications Policy to guarantee that shareholders can get comprehensive, identical and easy-understanding information about GCL New Energy.

For more information on our corporate governance and the Board, please refer to our 2016 Annual Report, which can be accessed via our company website, www.gclnewenergy.com/site/reports.

At GCL New Energy, we also place great importance on the work



ethics and integrity of our employees. Each employee is expected to live up to the company's standards both in professional and personal conduct, and uphold the guidelines stated in the Employee Handbook. The objective of the Employee Handbook is to standardise and unify operations, and to provide a clear guidance for our employees and their work efficiency, senses of responsibility and belonging. The Employee Handbook comes with the employment contract which is equally

10%-20%

important. Any violation of the regulations stated in the Employee Handbook will be dealt with in an objective, fair, and equitable manner. We have also issued the Anti-Corruption and Reporting Standards, detailing management responsibilities and measures for fighting against and reporting corruption. During the reporting period, there were no reports of incidences of corruption, anti-competitive behaviour, antitrust and monopoly.

3%-5%

# Active Contribution in Research and Development

GCL New Energy is committed to driving technological innovation with creative organisation and systems. We have established the GCL New Energy subdivision of the Golden Concord Holding Limited's Design Institute. We have created a research and development management system and introduced an innovative reward system to encourage our staff to invent proactively. In virtue of our efforts in research and development, we currently possess numerous inventions and patents for practical new models. We have successfully invented several core technologies and equipment, including smart solar tracker systems (horizontal single axis, inclined single axis, etc.), smart cleansing systems (smart robot, feeder car, rail system), smart far-end monitoring, unattended operation and anti-reflective nanocoating. The innovations are widely applied in our power plants, and effectively improve our electricity generation efficiency.







In order to achieve value optimisation of our solar power plant assets, we design comprehensive and suitable solar power plant projects to lower construction cost by considering factors such as the geographic environment, climate and availability of public facilities. At the same time, we adopt innovative technology and products such as horizontal single axis, inclined single double axes solar tracking technology, double-glazing components, elevated voltage levels, etc. in accordance with the geographic environment. We also actively conduct research and spot testing for the application of nano-coating technology, for the further improvement of electricity generation efficiency. In the operation aspect, GCL New Energy endeavours to promote the application of smart cleansing systems. At the same time, we have established the macro operation data base platform to connect information from different regions to the central system to further improve the operation effectiveness by putting centralised monitoring and unattended operation into practice step-by-step. Through application of new technology, we can enhance our understanding of whole lifecycle management for our solar power plants. Shared information and resources also help construct a strong foundation for project decision making and development.



# Supply Chain Management

All materials and items used in solar power plants are procured by specific department. These supplies include solar components, cables, frames, transformers, switch cabinets, box-type substations, junction boxes, security systems, fibre optic and remote video monitoring systems. We strictly follow the requirements of Supplier Management Implementation Rules established by Golden Concord Holdings Limited's Tender Management Centre to legally procure the abovementioned supplies and sell them to different project companies.

During the supplier selection process, we only consider using suppliers that abide by all related laws and regulations, are reliable and are of good standing within the industry. We review our suppliers' environmental, and health and safety performance regularly, provide relevant training and conduct audits to ensure our suppliers are in compliance with the environmental and occupational health and safety management requirements. During the reporting period, we worked with over 100 suppliers who are mainly from China. All equipment used in solar power plants are made in China, achieving 100% localisation of solar equipment. We require that all suppliers have quality management system, environmental management system, and occupational health and safety system certified. During the reporting period, around 98% of our suppliers have been awarded all three management system certifications. Some of our suppliers are currently undertaking recertification for their expired certificates. GCL New Energy takes zero tolerance for inappropriate suppliers behaviour that is detrimental to the environment or labour. If such conduct is uncovered, we will cease cooperation with the relevant supplier immediately to avoid any impact on our company's reputation and image. All suppliers have to uphold GCL New Energy's standards and guidelines in working together to fulfil our corporate social responsibility.



#### Active Participation in Industry Activities

We actively participate in industry forums, activities and exhibitions to facilitate industrial development and showcase the corporate image of GCL New Energy. On 7 January 2016, the "PRC Annual PV Power Plant Conference" and the "3rd Annual PRC PV Power Plant Award" ceremony was held in Changzhou. Our senior management was invited to attend the ceremony and the panel discussion section in "Industry

Leaders Dialogue on West Taihu". During the section, our company leaders discussed new development trends with our peers, including guests from CECEP Solar Energy, the IT Electronics Eleventh Design & Research Institute Scientific and Technological Engineering Corporation Limited, Shunfeng, CNE and Trina Solar.

Our President Mr. SUN Xingping attended "Global Top 500 New Energy Enterprises Summit" and shared GCL New Energy's experience on its distributed solar power system development.





Vice President Mr. Hui Tiancheung was invited to participate in the Global Energy Storage Conference in Shenzhen. He delivered a speech about how solar power corporations can take advantage of opportunities and overcome challenges to facilitate corporate development during power generation structural reform.

Vice President Mr. Xu Yang was invited to give a speech at China PV Summit 2016. He shared our achievements in the past year and also pointed out constraints in industry development.





Vice President Mr. Ren Feng delivered a keynote speech in the 2016 (7th) China Solar Energy Photovoltaic Summit.





Vice President and President of the Distributed PV business Departmental Ms. Liu Qian was invited to attend the 2016 6th Enhanced Promotion of Yangtze River Economic Belt "Belt and Road" Distributed Energy Innovative Development Summit, and gave a speech on the future development of distributed solar power.



Vice President Mr. Hu Tiancheung participated in the Forum on Northeast Energy Economy Transform and Prospect of Photovoltaid Industry, and was a speaker in the "New Energy Development Opportunity in Northeastern Region" session.



# **SNEC**

# SNEC 10th (2016) International Photovoltaic Power Generation Exhibition and Forum

The 10th (2016) International Photovoltaic Power Generation Exhibition and Forum was held between 24 and 26 May, 2016. The event was co-organised by 16 international organisations and led by China Renewable Energy Society, China Renewable Energy Industries Association, Shanghai Federation of Industrial Economics, Shanghai Science & Technology Development and Exchange Centre and Shanghai New Energy Industry Association, and also included the Asian Photovoltaic Industry Association. GCL New Energy spared no effort to support and participate in this signature international industry event. GCL New Energy set up a booth for the event which drew much attention from industry partners and helped raise the profile of our company. Our top management exchanged ideas with government representatives and other participating organisations during this 3-day event, making a greater contribution to the sustainable development of the solar power industry.



Operation Management Department Vice General Manager Mr. Gao Hong provided details on our achievements in professional, smart and precise operation models by means of post-assessment in the SNEC Industry Workshop on Advanced PV Technologies (Balanced System and PV Plants).

Vice President Mr. Xu Yang introduced the updated business situation of GCL New Energy to the public.





GCL New Energy Design Institute howcased our new technology applications n Funing County Xinyuan 30MW Agricultural Photovoltaic Solar Power Plant to the public.

# Our Environment





As a renewable energy company focusing on solar power generation, protecting the environment is our duty and mission. To further improve our environmental management standards, our Operations Management Department has developed the Power Plant Environment Protection Management Standards to ensure that all our projects operate in accordance with applicable national and local environmental laws, standards and regulations. All of GCL New Energy's environmental protection efforts strictly follow the principles of "comprehensive planning, rational arrangement, prevention prioritisation and preventionmitigation integration". All solar power plants are required to conduct clean production audits regularly in accordance with the requirements of the Cleaner Production Promotion Law of the PRC. We have spared no effort in complying with environmental laws and regulations. During the reporting period, no cases of non-compliance with applicable environmental laws and regulation were recorded.

# Our Environmental Management Principles:

- Make environmental protection and energy conservation part of our corporate culture
- Provide regular environmental training for employees
- Evaluate potential environmental impacts before entering into new ventures;
- Develop a preparedness and contingency plan for dealing with potential environmental problems;
- Meet operation standards set by the local environmental bureau and explore new means of environmental protection
- Use cleaner energy and more eco-friendly equipment and processes wherever possible
- Become responsible and proactive in dealing with environmenta impacts

# **CCER** Filing

On 16 June 2016, the National Development and Reform Commission announced on the China Certified Emission Reduction Exchange Info-Platform a filing notice of the Chinese certified emission reduction credit scheme (CCER) for GCL New Energy's Jinhu Zhenghui project and Funing Xinneng project. This is our first batch of projects to receive CCER filing. At the same time, it symbolises the company has achieved an important breakthrough in carbon asset. Jinhu Zhenghui 100MW project which was filed can reduce the annual emission amount by about 101 thousand tonnes. It is estimated to generate around RMB 700 thousand of revenue from carbon trading per year. Funing Xinneng 30MW Photovoltaic Fishery project can reduce the annual emission by 35 thousand tonnes, expecting to generate RMB 250 thousand of revenue per year.



# Reducing Emissions and Improving the Ecosystem

Our solar power plants make use of solar radiation to generate electricity, throughout the generation process no fossil fuel is used and no external electricity is purchased, so no Scope 1 and Scope 2 greenhouse gas is generated. The electricity generated by solar power plants is green energy that can replace electricity generated from coal fired power plants and effectively reduce emissions such as SO<sub>2</sub>, NO<sub>x</sub> and greenhouse gases. It helps improve the local environment and mitigate the impacts of climate change.

As of 31 December 2016, we operated 90 solar power plants of which 87 are in China, with a total capacity of 3,516 MW (3,511 MW in China). In 2016, we generated a total of 2,790 million kWh of green electricity, which increased by approximately 220% from 2015.

Our solar power plants are not only generating green energy and reducing emissions, but also taking an important role on improving the surrounding ecosystem. Here are some examples of environmental restoration initiated by our solar power plant projects:



GCL New Energy Shaanxi branch's Yuyang Longyuan 200MW solar power plant achieved ongrid connection on 29 July 2016.



#### The 2,790 million kWh of green electricity generated is equivalent to:



# 100 MW Solar Power Plant in Jinhu, Jiangsu Province

This project is GCL New Energy's largest fisheryphotovoltaic solar power plant. It is situated in Huai'an city of Jiangsu province covering an area of approximately 2,800 acres and was connected to the State Grid in December 2014. This project uses a 29 degree solar mounting system with a total of 333,396 300-watt photovoltaic modules installed. All panels and modules were installed above the water surface, so that the area can be used for power generation and aquaculture at the same time, significantly improving the economic value of this area. This project generates approximately 111.485 GWh of green electricity annually on average, which is equivalent to savings of about 34,003 tonnes of coal consumption. It can also help reduce the emission of several air pollutants, including a reduction of 90,855 tonnes of carbon dioxide emissions, 692 tonnes of sulphur dioxide emissions and 234 tonnes of nitrogen oxide emissions. Ashes and soot can also be greatly reduced. This project not only provides green energy for Jiangsu Province, but also improves the local environment to a great extent.





On 25 May 2016, Jurong 15MW fishery photovoltaic solar power plants in Jiangsu successfully connected to the grid. The project can generate approximately 1,6220,000 kWh of electricity, contributing to the reduction of 16,000 tonnes of carbon dioxide equivalent emission per year.



### **Green Operations**

We have been proactively promoting green production in order to increase operational efficiency and reduce resource consumption. During the reporting period, our solar power plants consumed are the electricity all self-generated. In addition, we have implemented various green measures to promote the use of renewable energy, such as installing LED solar-wind complementary lamps. Regarding our water consumption, we mainly use rainwater and our automatic de-hydro cleaning robot system to clean solar panels and modules. These water saving measures can keep the water consumption in each solar power plant at a negligible level.

All of our solar power plants have adopted the full life cycle assessment principle. Any potential impacts on the environment and communities associated with each project stage including site selection, design, development, procurement and construction, are carefully considered with corresponding mitigation measures developed accordingly, which help set a solid foundation for effective and sustainable operation of the solar power plants. All provincial companies and solar power plants continuously monitor the emission of pollutants and document the monitoring results in accordance with the requirements of the relevant technical standards.

GCL New Energy's self-developed automatic de-hydro cleaning robot

During the operation of solar power plants, no pollutants such as nitrogen oxides or sulphur dioxides are generated. Regarding wastewater generation, since automatic de-hydro cleaning robot systems are widely used in most of our solar power plants and other solar power plants use rainwater for cleaning solar panels and modules, little wastewater is generated from daily operation. Meanwhile, we continuously improve the management practices of our solar power plants. Under the four-in-one operation model of "head office-provincial company-regional centre-power station", centralised regional operation and maintenance centres and real-time operation platforms have been introduced to simultaneously achieve monitoring, regional maintenance, and automatic and professional operation for all solar power plants within a radius of 150-200km. Therefore, only a few staff are required to work at the plants and the household wastewater generated is negligible. The wastewater generated from solar panel cleaning is mainly used for greenery, and the household wastewater is treated by an onsite wastewater treatment facility and then recycled.





The waste generated by our solar power plants mainly include waste solar panels, waste electrical appliances, maintenance-free lead-acid batteries and household waste. Since our stations are all newly constructed, no replacement of solar panels, batteries and other equipment is needed, and the waste generated during the reporting period was minimal. All the abovementioned waste is collected and stored properly onsite, and then recycled by qualified organisations. Since only a limited number of staff is stationed at the solar power plants, the amount of household waste is also minimal. The household waste is collected and sent to a nearby refuse collection point for further treatment.

Besides promoting and implementing various emissions reduction, energy saving and water saving measures in solar power plants, we also enforce green management in our office and promote our Green Office Plan. By following the environmental protection policies of our parent company, Golden Concord Holdings Limited ("Golden Concord"), we promote the concept of environmental protection to our employees to raise their awareness. We urge all employees to practice energy conservation in our "Corporate Culture Brief", and promote the application of advanced technology to advance our sustainable development agenda. For example, we encourage the use of tele- and video-conferencing, internet conferencing, instant messaging, automated systems and platforms within the company for communication, so as to reduce unnecessary business travel and minimise our carbon footprint. We also support the progress of digitisation and flexibly make use of all kinds of IT management systems to reduce our resource consumption level.



# **Green Office**



# Safe Production

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Ensuring employee safety is a prerequisite for sustainable development. In order to provide a zero injury and accident work environment and to prevent occupational health and safety problems, we have established the Safe Production Management Committee and subordinate committees to monitor the production safety at all levels, set annual safety goals and clarified specific safe production tasks. Meanwhile, we have organised emergency drills in a regularly basis in order to improve our staff's capabilities for handling emergency scenarios. During the reporting period, we successfully achieved the goal of safe operation without a single accident.

# Our Goals for Safe Production

No fatal accidents
No general or above level equipment malfunctions
No fire accidents
No general or above level traffic accidents
No environmental pollution incidents
No grid accidentscaused by GCL New Energy
No incidents that cause great loss to company assets
No occupational disease



Number of

workplace injuries

and fatalities



Number of consecutive days without safety incidents time Number of significant

or general equipment malfunction cases



Safety training provided by GCL University



#### Safe Production Management System

We have established a Safe Production Management Committee, which consists of the President, Vice President, and heads of all relevant departments. The committee is chaired by the President. The main responsibilities of the Committee includes managing the safety management system and the emergency preparedness and contingency management system, implementing supervision for safety conditions and production, and handling and investigating significant safety accidents. Each provincial company has also established its committee, which constitutes the safe production management system with the holding company's committee and all relevant production departments. Both the Safe Production Management Committee and Operation and Management Department have established their own professional safety offices. The Operation and Management Department is responsible for conducting target assessment, which is based on the target assessment clause stipulated in the annual target responsibility agreement signed by the provincial companies, operation and maintenance centres, solar power plants, and departments.





Under the safe production management system, we have implemented a "two-measure" management approach, where provincial companies, operation and maintenance centres, and solar power plants are required to develop an annual accident prevention plan as well as a safety technology and labour protection plan. Meanwhile, we also strictly implement the "two-vote and three-system" safety operation mechanism and arrange relevant training and examinations each year.

We have taken a number of measures to ensure the safe operation of our solar power plants, including the implementation of "operational safety management standards", which define the responsibilities, management content and methods, reporting and documentation in relation to safe production management. The safe production management committee is responsible for all safety operation matters.

In addition to the stringent standards and clear targets, effective implementation is particularly important to achieve safe production. We regularly organise meetings for the safe production management committee, monthly safe production meeting, and safety supervision network meetings. We also prepare monthly safety reports and organise safety inspections in spring and autumn to ensure the safety management can be implemented effectively. During the reporting period, a total of 7 unplanned outages occurred due to natural disasters. The average annual utilisation hours per unit are 1,260 hours.





# Occupational Health and Safety Training

In order to ensure that all employees are fully aware of the importance of safe production, we regularly organise training activities including on-site examination, emergency response exercises, technical Q&A and accident forecast exercises for our employees. Meanwhile, all newcomers are required to attend training given by the provincial company, operation and maintenance centre, and solar power plant. When the new joiners pass the test, we provide each of them with an integrated safety training file. New operation staff are also required to attend on-site exercises and pass the assessments before officially becoming a formal employee. Departments and units from all levels organise fire safety training to ensure that all employees understand the risk of fire and how to report fires, and learn fire prevention measures, basic fire-fighting skills and escape techniques. Our safety and quality department regularly provides employees with training on safety laws and regulations and safety management systems. Such training enables employees to fully understand safe production. Every year, we designate one month as our safe operation month, and the project companies organise various activities such as safety talks, seminars and emergency drills to raise the safety awareness of our employees. During the reporting period, 1,224 employees participated in occupational health and safety related training.

Some of the occupational health and safety education and training provided during the reporting period is as follows:

Safety case sharing and learning
Emergency preparedness and contingency plans
Safety management practices training for contractors
Lectures on traffic safety knowledge
Sunstroke prevention and first aid training
Safety and production management standards
Fire knowledge learning and fire protection devices training
Introduction to occupation health
• Winter fire sefety training



#### **Emergency Drills**

We have adopted various measures to improve our employees' capabilities in dealing with various emergency scenarios. We have established an emergency management committee led by the President, other committee members include the Vice President and the heads of the relevant departments. The committee is mainly responsible for ensuring effective implementation of applicable national regulations on emergency management such as "the Measures for the Environmental Emergency Response Management", preparing for emergency deployment, and assisting the provincial companies and solar power plants to establish early warning mechanisms and emergency preparedness and contingency plans. Our daily operations strictly follow the "Solar Power Plant Safe Production Emergencies Management Standard". All solar power plant managers are required

to prepare comprehensive and case-specific emergency contingency plans and on-site handling arrangements. Specific contingency plans are developed to handle three key emergency scenarios: 1) natural disasters (such as typhoons, floods and earthquakes), 2) accidents (such as human incidents, traffic accidents and environmental pollution) and 3) public emergencies (such as infectious disease outbreaks and sudden media events). We have provided regular training for all staff to ensure that all relevant personnel are able to master contingency management and handling methods. All power stations organise emergency drills on a regular basis to improve resilience during emergencies and coordination with various departments. The effectiveness of the emergency drills is reviewed to identify any room for further improvement.

#### **Case Study**

#### Macheng Jinfu Solar Power Plant's Flood Defending for 31 Hours

From 5pm, 30 June 2016, to midnight on 1 July, Macheng, Hubei, suffered from torrential rain. The city's average amount of precipitation was 322.2mm, with the maximum amount reaching 428mm during that period. The downpour results in flash floods and steep river water level rise in various areas of the city. It was the strongest downpour experienced by the city since entering the flooding period in 2016. Various data were at record high since weather records have been available.

GCL New Energy Macheng Jinfu 110MW solar power plant had 389mm of maximum amount of precipitation within 24 hours. Dike overflow and dam failure in some 10 surrounding reservoirs and water intrusion of external rivers further led to the large waterlogged area within the power plant. Part of the low-lying area had severe waterlogging, creating a serious effect to the solar power plant.

GCL New Energy Hubei provincial company attached high importance to this unexpected disaster. Our top management arrived the stricken area immediately and at the same time our operation staff launched emergency response plan, formed a rescue team to coordinate the rescue work. Operation and maintenance staff formed in groups of three to examine the status of river level as well as the discharge situation of the drain outlet at every 30 minutes to ensure safety of our employees and the equipment. We also called the insurance company to carry out field investigation.

On 2 July, after confirming that the flood peak had passed at around 5am and a prominent drop in water level, all power plant workers were back to the plant at 7:30am. No severe abnormalities were found after checking, and the transmission lines were found able to transport electrical power. The power plant resumed power supply and operation at 11am.

The provincial company established a Macheng Solar Power Plant Post-flood Working Group on 3 July. Under the working group, there were engineering, operation, legal, finance and integrated sub-groups to handle postdisaster issues and resume operation. In the afternoon, we arranged the field investigation for the insurance company representatives.

After the disaster in Macheng, we discovered the inaccurate information released by media did cause adverse impact to our company. To deal with this, we communicated with the chief executive department and questioned the corresponding websites shortly to avoid potential negative impact on our company due to the inaccurate market information.



#### Simulated flood drill in Xuzhou Xinri GCL Solar Power Co., Ltd,

On 25 June 2016, Xuzhou Xinri solar power plant organised emergency drills on flooding, high winds and storms. Based on the simulated emergencies, the staff efficiently implemented the contingency plans including emergency pump installation, reinforcement of solar panelmounting frames, and inspection and restarting of power inverters. The flood drill strengthened the front-line staff's capabilities for dealing with these incidents.



#### Fire drill in Xuzhou Xinri

On 25 May 2016, Xuzhou Xinri organised a fire drill. A fire due to improper operation at the working site was simulated and one staff was "trapped" in the facility. In response to the incident, participating staff initiated emergency response procedures by immediately reporting the incident. The firefighting action group was informed and arrived at the scene to start initial firefighting. The staff were organised to protect important assets. Finally, the firefighting action group put out the fire by implementing the contingency responses plan and properly using the equipment. This drill further improved the fire awareness of staff at all levels.



#### Fire drill performed by solar power station in zhenglan banner, Inner Mongolia

On 24 September 2016, the solar power station in zhenglan banner held a grassland fire drill simulating a fire due to short circuit of the solar power area. After noticing the fire on patrol duty, the staff initiated the contingency response procedures. The fire was put out and recommendations for improvements were made during the evaluation session.




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We consider our employees as important asset that serve as the cornerstone of business development. Therefore, we place great importance on our employees' personal development and mental wellbeing. As the solar power generation market turns competitive due to promotion by the government, professionals in solar sector are in high demand so we have experienced challenges in attracting and retaining talents.

Therefore, we are committed to ensuring a diversified and fair working environment, providing a wide range of training, and promoting occupational health and safety with the aim to develop a strong team for GCL New Energy.

### **Recruitment Policy**

Employees are hired based on their ability to perform professional duties and our business needs. Age, gender, place of birth, race, religion or other factors unrelated to job duties are not considered. We also hold fair competition practices to ensure internal and external candidates have equal opportunities.



Investment risk management training at Suzhou Energy Centre





As at 31 December 2016, GCL New Energy had a total of 6,509 employees in Hong Kong, the PRC, and overseas, for which 4,130 employees are from discontinued operation. There were 2,300 employees in the PRC across 15 regions such as Jiangsu, Inner Mongolia, and Shanxi. Majority of the employees in China are Han Chinese, 5.2% are ethnic minorities, and 60 employees are foreigner or come from Hong Kong, Macau, Taiwan. During the reporting period, 346 employees left the company and the turnover rate is 5.3%. We



uphold the national 'Labour Law', 'Provisions on Prohibition of Using Child Labour' and other relevant laws and regulations. We have signed an employment contract with all our employees in accordance with the legal requirements. We have a zero tolerance policy regarding immoral labour practices such as use of child labour and forced labour. During the reporting period, we found no cases of child labour or forced labour from our operating locations.



New Hires



**Employee Turnover** 





### **Employee Remuneration**

We are committed to providing competitive remuneration packages for employees and conducting regular reviews to ensure that we attract and retain the best talents. Wage trends in different locations and markets, and other factors such as the consumer price index, are considered during adjustment of remuneration packages. The wages of our employees exceeds the minimum salary level by at least 180%. We have established an annual appraisal system for all employees. Salary increments are made based on the appraisal results.

Apart from setting up an objective performance-based salary system, we ensure male and female employees share the same pay scale and employees are paid according to the nature of their work instead of gender. As at 31 December 2016, women made up 32% of senior management positions.

In terms of employee welfare, apart from providing basic pension insurance, medical insurance, unemployment insurance, work injury insurance, maternity insurance and housing provident fund for 100% of our employees as required by national or regional governmental regulations, we also offer paid leave and a variety of cash subsidies (including lunch, transportation, communication, housing, extreme temperature and festivals, and special occasion gifts (such as for birthdays, weddings, etc.). Non-monetary benefits include regular body check, supplementary commercial insurance, provision of work clothes, and staff training.

When significant operational changes that could substantially affect our employees will be implemented, we will notice our employees 3 to 6 months in advance to ensure that employees could have sufficient time to adapt the new changes. Pregnant female employees are entitled to maternity leave while male employees are also entitled to paternity leave as set out by national regulations.



Examination Coverage: 100%



Rate of Occupational Health Record Coverage: 100%



### Parental leave in 2016



## **Building Our Talent Team**

We understand that employees serve as both the cornerstone and leading force of business development. As a result, we provide training to nurture them and improve their capabilities, hence boosting GCL's competitiveness.

In order to familiarise new employees with our company's culture and working conditions, we provide three training modules, namely "Walking into GCL", "Fitting in GCL" and "Hand in Hand with GCL". The training content is as follows:



culture

Corporate development

planning

Apart from providing training courses for new employees, we also offer technical training courses for all employees on various topics including project management, investment development, operational management and other technical subjects, with the aim to enhance the professional competence of staff in technical departments and provincial subsidiaries.

During the reporting period, 70% of our employees took part in training, with the average training hours per employee reaching 15 and average training input per employee of over RMB3,000.



### Average annual training hours per employee by gender and by employee category



### **Employee Career Development Path**





### **Employee Engagement Activities**

Our employees are dedicated to the success of the company so we have organised a wide range of sports and leisure activities such as sports day, interest classes and seminars to them relieve stress at work. We regularly communicate with employees to collect their views on employee engagement activities have maintained regular communication with employees to collect their views and expectation regarding employee engagement activities, which can help us plan and organise more suitable activities for our employees.

### Case Study

### The 2nd "GCL CUP" Football Competition

The 2nd "GCL CUP" football competition was organised by GCL New energy. There was a total of 28 teams from Suzhou and Xuzhou regions joining this competition. After 53 matches, New Energy Management Centre and Xuzhou GCL PV Power Company Limited won the championships in Suzhou Division and Xuzhou Division respectively. The competition provides an opportunity for our employees to show their skills and enhance GCL New Energy's sports culture.



In Hong Kong, we have cooperated with the Hong Kong Family Welfare Society to develop an Employee Assistance Programme (EAP) to help our employees handle their personal and work place issues. We are dedicated to supporting our employees to overcome workplace challenge, interpersonal barriers, obstacles to personal growth, family problems and other issues, in order to promote a better work-life balance.

### Case Study

### **Feeling Good Health Workshop**

On 11 November 2016, the staff in the Hong Kong office participated in the Feeling Good Health Workshop hosted by the Hong Kong government and co-organised by the Occupational Safety and Health Council. The Council invited registered dietitians and physical fitness coaches to share their knowledge on healthy diets and lead our staff through stretching exercises. Our staff enjoyed the workshop and earned about how to live a healthy lifestyle.



Cake Baking Class on International Women's Day







We are committed to providing reliable and clean energy for the community. We understand that we may impact the community during the construction and operation of our plants. Therefore, we conduct environmental and social impact assessment prior to project construction, with the goal of identifying and adopting every possible measure in reducing our impact on the local community.

We also understand the positive effects created by developing a mutual trust relationship with local communities where our business operates. Therefore, we maintain active communication with citizens during different project stages, i.e., from construction to operation. Apart from developing solar power plants in remote and poor areas, we have established various community development and empowerment plans as a responsible corporate citizen. For instance, we have implemented solar poverty alleviation projects in Shanxi, Inner Mongolia, Anhui and Gansu through utilising idle land in solar power plants for farming, with the goal of improving farmers' livelihood.

On 11 March, 2016, representatives from GCL New Energy met with Mr Xu Xiao, Secretary of the Secretariat from Communist Youth League to discuss how the implementation of solar poverty alleviation projects can attract youth and university students from rural districts to return home and start their own business, promote the development of rural e-commerce and hence create a better economy in rural areas. Moreover, we also discussed distributed rooftop solar power generation systems and helping the poor by adjusting the cost of electricity. We considered this discussion as vital to establishing the foundation for our next steps on community development. We have also organised in-kind donations and caring activities for the elderly and children to establish a mutual-trust relationship with the community.

During the reporting period, GCL New Energy donated a sum of RMB134,000 to the community.



### Case Study



### In-kind Donation for Children in Qing Hai

Initiated by GCL New Energy's football team and coorganised by the CEO working team, the Qinghai branch's charity donation event was successfully held on 12 December. Our employees visited two primary schools in Qing Hai Minhe County. This event was funded by the football team and an RMB10,000 donation by the Qinghai branch, which was used to purchase products such as coal, coat, hats, gloves and backpacks. Our employees also donated clothing and frostbite cream for children. We understand the importance of spreading love to children in poor and remote areas. Apart from providing material support to children, we considered this event as a passing on of our service spirit, allowing children from poor and remote areas to feel our love.







### 'GCL Donation Day'

Under the promotion of GCL Sun Charity Foundation, various functional centres, holding companies, immediate holding companies, representative offices and external organisations of Golden Concord co-organised 'GCL donation day'.

The ground-breaking ceremony was held on 7 March at 2/F of GCL Energy Centre. This event has prompted other provincial companies to organise similar donation events.







### Caring for Children in SOS Children's Village

We understand the importance of providing love and caring to children in SOS Children's Villages, and therefore we organised a visit on 16 April to SOS Children's Village in Ürümchi to express our care and concerns on their study and life, share our life stories and interact with them. Management from SOS Children's Village expressed their gratitude for our visit and their hopes of building public awareness, and providing love and care for children. We will continue to follow our 'Home' principle and be a responsible corporate citizen, encourage our employees to serve the community and help them feel love from the GCL family.







Our Solar Poverty Alleviation Programme talks in Shanxi



Our Solar Poverty Alleviation Programme talks in Inner Mongol



Household solar electricity system in Funan



Our Solar Poverty Alleviation Programme talks in FunnanGansu

### Talks Regarding Solar Poverty Alleviation Programmes and Solar Power Generation

Invited by the government, GCL New Energy and GCL University co-organised a speaking group that gave talks on solar poverty alleviation programmes and solar power generation, promoting the idea of green living in local communities. During the reporting period, we organised various visits and talks in Erlangpo Village, Ling Quan Town of Shanxi, Charhar Right Banner in Ulanqab of Inner Mongolia, and Chenjiahe village in Heshui County of Gansu. During the talks, we introduced policies regarding solar poverty alleviation and provided successful examples of our initiative. Apart from talks, we have also seized the opportunity to directly communicate with families in poor and remote areas, understand their livelihood and explain solar power generation to them in a clear and easy way. For instance, we visited villagers in Funnan County of Anhui province, answered their questions on solar panels maintenance and explained the principles of solar power generation.

We are committed to empowering the poor through installing household solar electricity systems. Our small acts could create more than RMB3,000 of income for each poor family per year, reducing their economic burden. Our goal for this programme is to help residents in local communities to escape poverty.





### **Solar Rice Paddy Programme**

GCL New energy would like to improve the livelihood of local farmers through its solar poverty alleviation programme. We understand that land covered by solar panels could be better utilised to grow rice.

Normally farmers can only grow sciophilous plants with low economic value underneath the traditional solar panels because of limited space available. Therefore, we hired an external professional to design a 2.8m high solar mounting frame, which cost RMB6,000,000 more than normal construction investment. Meanwhile, during the design phase of the project, we invited external professionals from institutions such as Nanjing Agricultural University and Jiangsu Province Academy of Agricultural Science to visit the site and develop an efficient rice paddycultivation programme, This programme can fully utilise our project site's land resources and increase farmers'income.







### A successful Example of Combining Solar Power Generation and Agricultural Development— Dong Kou, Funning County 15MW Project

This GCL New Energy self-developed project has adopted 4m high solar mounting frame, which can provide sufficient space for growing plants and allow farmers to use relatively large scale farm equipment to improve agricultural productivity. Horizontal single axis solar tracking system is used to increase the amount of light absorbed by the panels which helped generate 15% more energy than using traditional fixed system. A high solar mounting frame can allow sunlight to reach the plants, providing an ideal environment for the plants to grow while generating electricity.

Currently, 55 and 15 acres of land are used for growing edamame and sword beans respectively. The plant has also signed sales contract with the local agricultural company to purchase farmers' products. We expect this programme to generate about 1,000 employment opportunities after completion of the whole project.



# Awards and Recognitions





### GCL's Awards in 2016









- 6\7. President Mr Sun Xingping was named "Industrial Leader of the Solar Power Industry"
- **8\9.** Dong Kou, Funning County 30MW project was recognised in the SNEC Top 10 highlights and awarded the "Terawatt Diamond Award"
- Top Chinese Solar EPC Company in 2016
- Received 2016 Chinese Renewable Energy Conference (CREC) Shine Cup's "Corporate Responsibility Award" and "Elite Power Plant Developers and Investors" Award"
- Listed as a Top 100 Weixin Public Account for Energy Enterprises
- Listed as the Weixin Public Account with the Strongest Growth Potential in the Energy Sector









- Recognised by OFweek with the "Top PV Solar Energy Solutions Provider Award 2016" and "Top Solar Poverty Alleviation Project Award"
- 11. 2015 China Energy Communication Conference & Awards Ceremony Excellent Brand Award

2016 China Energy Environmental Protection Innovative Enterprise Award President Mr Sun Xingping was recognised with the "Influential People Award of the China Energy Industry 2016" and "Business Leader Award of the Global New Energy Industry 2016"

2016 Best Contributor to Solar Poverty Alleviation and Top PV Investor by IN-EN.com



# **Future Prospects**

In 2017, as usual we will continue to drive corporate culture reform to facilitate company growth, take care of our people, and contribute to the society. We are committed to creating the maximum value for all stakeholders, maintaining pragmatic and sincere attitude to communicate with our stakeholder so as to develop harmonious relationship with them. In the future, we will endeavour to extend our stakeholder involvement to propel our long term development. We will keep raising our employees' awareness on social responsibility, integrating the green and low carbon concept into every details of our life and work.

Employees are the cornerstone of company success. Following the vigorous development and technological innovation in solar power industry, we realise the strong tie between employee development and company growth. We will complete our talent development plan to help nurture and develop a team that shares our focuses on value creation and innovation in order to maintain the core competiveness of our company. We will regard zero accidents, injuries and fatalities as our safe production target at all times. We will enhance employees' welfare and review our safety management system on a regular basis to continuously improve our level of safe production, so as to provide our employees with a comfortable, safe and secure working environment. We will also continue the "Solar Poverty Alleviation" projects to help raise the income of the poor population and families. By integrating agriculture, fishery, husbandry, forestry and poultry farming into solar power plants, we can develop green energy and enhance the surrounding ecological environment at the same time.

In the future, GCL New Energy will continue to consider the national energy policy as its guide. While stabilising our local business, we will keep seeking opportunities to enter to overseas markets for having a voice on the international stage of sustainability. Following the Belt and Road initiative, we will establish good relationship with developing countries. We are dedicated to keep promoting green energy to thousands of households, and contribute to improvements in society and environmental protection.

## Appendix A GRI G4 Content Index



Indicator	Description	Relevant chapter(s) in 2016 CSR Report or other references/ Explanations
GENERAL STA	NDARD DISCLOSURES	
STRATEGY AN	D ANALYSIS	
G4-1	Statement from the most senior decision-maker of the organization	Management Statement
ORGANIZATIO	NAL PROFILE	
G4-3	Name of the organization	About this Report
G4-4	Primary brands, products and/or services	Our Business
G4-5	Location of the organization's headquarters	Our Business
G4-6	Number of countries where the organization operates, and names of countries where the organization has significant operations	Our Business
G4-7	Nature of ownership and legal form	Our Business
G4-8	Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	Our Business
G4-9	Scale of the organization	Our Business
G4-10	Workforce information	Our People – Recruitment Policy
G4-11	Percentage of total employees covered by collective bargaining agreements	Data not available. We will consider gathering such information in next report.
G4-12	Organization's supply chain	Our Business
G4-13	Significant changes during the reporting period regarding the organization's size structure, ownership, or its supply chain	Our Business
G4-14	Report whether and how the precautionary approach or principle is addressed by the organization	Our Business
G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses	We have not subscribed or endorsed any externally developed economic, environmental and social charters, principles, or other initiatives.
G4-16	List memberships of association and national or international advocacy organizations	Our Business – Active Participation in Industry Activities
IDENTIFIED M	ATERIAL ASPECTS AND BOUNDARIES	
G4-17	Entities included in the organization's consolidated financial statements or equivalent documents. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	CSR Management – Materiality Assessment (P.9)
G4-18	Process for defining the report content and the Aspect Boundaries, and how the organization has implemented the Reporting Principles for Defining Report Content	CSR Management – Materiality Assessment (P.9)
G4-19	Material Aspects identified in the process for defining report content	CSR Management – Materiality Assessment (P.10)



Indicator	Description	Relevant chapter(s) in 2016 CSR Report or other references/ Explanations
G4-20	For each material Aspect, report the Aspect Boundary within the organization	CSR Management – Materiality Assessment (P.10)
G4-21	For each material Aspect, report the Aspect Boundary outside the organization	CSR Management – Materiality Assessment (P.10)
G4-22	Report the effect of any restatements of information provided in previous reports and the reasons for such restatements	No restatement of Information provided in previous report.
G4-23	Report significant changes from previous reporting periods in Scope and Aspect Boundaries	No significant change from previous reporting periods in Scope and Aspect Boundaries.
STAKEHOLDE	RENGAGEMENT	
G4-24	List of stakeholder groups engaged by the organization	CSR Management – Stakeholder Engagement (P.7)
G4-25	Basis for identification and selection of stakeholders with whom to engage	CSR Management – Stakeholder Engagement (P.7)
G4-26	Organization's approach to stakeholder engagement	CSR Management – Stakeholder Engagement (P.7)
G4-27	Key topics and concerns that have been raised through stakeholder engagement	CSR Management – Stakeholder Engagement (P.7&9)
REPORT PRO	FILE	
G4-28	Reporting period for information provided	About this report
G4-29	Date of most recent previous report	About this report
G4-30	Reporting cycle	About this report
G4-31	Contact point for questions regarding the report or its content	About this report
G4-32	A. Report the 'in accordance' option the organization has chosen B. Report the GRI Content Index for the chosen option C. Report the reference to the External Assurance Report	About this report
G4-33	Organization's policy and current practice with regard to seeking external assurance for the report	About this report
GOVERNANCI	Ε	
G4-34	Governance structure of the organization, including committees of the highest governance body	Our Business – Corporate Framework
ETHICS AND I	NTEGRITY	
G4-56	Describe the organization's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics	Our Business



Specific Slandard Disclosures           Category: Ecolosures           Aspect: Economic Performance           64-00A         Disclosures on Management Approach         Our Business           64-EC1         Direct acconomic value generated and distributed         Our Business           64-EC2         Financial implications and other take and opportunities for the organization's activities due to climate change         Maragement Statement           64-EC3         Coverage of the organization's defined benefit pian oblgatons         Our Business           64-EC4         Disclosures on Management Approach         Our Business           64-EC7         Development and impact of infrastructure investments and services supported         Our Business           64-EC7         Development and impact of infrastructure investments and services supported         Our Business           64-EC63         Significant indirect acconomic impacts, including the extent of impacts         Our Business           64-EC64         Bisclosures on Management Approach         Our Environment           64-EC7         Development Approach         Our Environment           64-EC67         Development Approach         Our Environment           64-EC68         Total with dowal by source         Our Environment           64-EC67         Disclosures on Management Approach         <	Indicator	Description	Relevant chapter(s) in 2016 CSR Report or other references/ Explanations
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G4-EN21     NOx, SOx and other significant air emissions     Our Environment       Aspect: Effluents and Waste     G4-DMA     Disclosures on management approach     Our Environment       G4-EN24     Total number and volume of significant spills     Our Environment       Aspect: Products and Services     G4-DMA     Our Environment	G4-EN16	Energy indirect greenhouse gas emissions (scope 2)	Our Environment
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G4-DMA     Disclosures on Management Approach     Our Environment	G4-EN24	Total number and volume of significant spills	Our Environment
	Aspect: Produc	ts and Services	
G4-EN27 Extent of impact mitigation of environmental impacts of products and services Our Environment	G4-DMA	Disclosures on Management Approach	Our Environment
	G4-EN27	Extent of impact mitigation of environmental impacts of products and services	Our Environment



Indicator	Description	Relevant chapter(s) in 2016 CSR Report or other references/ Explanations
Aspect: Compl	iance	
G4-DMA	Disclosures on Management Approach	Our Environment
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Our Environment
Category: SO	CIAL	
Sub-Category:	LABOR PRACTICES AND DECENT WORK	
Aspect: Employ	yment	
G4-DMA	Disclosures on Management Approach	Our People
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	Our People
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	Our People
G4-LA3	Return to work and retention rates after parental leave, by gender	Our People
Aspect: Occup	ational Health and Safety	
G4-DMA	Disclosures on Management Approach	Safe Production
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days and absenteeism, and total number of work related fatalities, by region and by gender	Safe Production
G4-LA7	Workers with high incidence of high risk of diseases related to their occupation	Safe Production
Aspect: Training	g and education	
G4-DMA	Disclosures on Management Approach	Our People
G4-LA9	Average hours of training per year per employee by gender, and by employee category	Our People
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Our People
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender, and by employee category	Our People
Aspect: Diversi	ty and equal opportunity	
G4-DMA	Disclosures on Management Approach	Our People
G4-LA12	Composition of governance bodies and breakdown of employees per employee category, according to gender, age group, minority group membership, and other indications of diversity	Our People
Aspect: Equal I	remuneration for women and men	
G4-DMA	Disclosures on Management Approach	Our People
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	Our People



Indicator	Description	Relevant chapter(s) in 2016 CSR Report or other references/ Explanations
Sub-Category	y: HUMAN RIGHTS	
Aspect: Non-a	iscrimination	
G4-DMA	Disclosures on Management Approach	Our People
G4-HR3	Total number of incidents of discrimination and corrective actions taken	Our People
Aspect: Child L	abour	
G4-DMA	Disclosures on Management Approach	Our People
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the effective abolition of child labour	Our People
Aspect: Forced	d or Compulsory Labour	
G4-DMA	Disclosures on Management Approach	Our People
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour	Our People
Sub-Category	y: SOCIETY	
Aspect: Local	Communities	
G4-DMA	Disclosures on Management Approach	Our Community
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	Our Community
Aspect: Anti-co	pruption	
G4-DMA	Disclosures on Management Approach	Our Business
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	Our Business
G4-SO4	Communication and training on anticorruption policies and procedures	Our Business
G4-SO5	Confirmed incidents of corruption and actions taken	Our Business
Aspect: Anti-co	ompetitive Behaviour	
G4-DMA	Disclosures on Management Approach	Our People
G4-S07	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes	Our People
Aspect: Comp	liance	
G4-DMA	Disclosures on Management Approach	Our People
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	Our People

## Appendix B SEHK ESG Reporting Guide Content Index

Subject Areas, Aspec	ets, General Disclosures and KPIs	Relevant chapter(s) in CSR Report 2016 or other references/ Explanation
A. Environmental		
Aspect A1	Emission	
General Disclosure	<ul> <li>Information on:</li> <li>(a) the policies; and</li> <li>(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.</li> </ul>	Our Environment
KPI A1.1	The types of emissions and respective emissions data.	Our Environment
KPI A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Our Environment
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Not applicable
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Not applicable
KPI A1.5	Description of measures to mitigate emissions and results achieved.	Our Environment
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	Our Environment
Aspect A2	Use of Resources	
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Our Environment
KPI A2.1	Directed 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).	Our Environment
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Our Environment
KPI A2.3	Description of energy use efficiency initiatives and results achieved.	Our Environment
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	Our Environment
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Not applicable
Aspect A3	Environment and Natural Resources	
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	Our Environment



Subject Areas, Aspe	ects, General Disclosures and KPIs	Relevant chapter(s) in CSR Report 2016 or other references/ Explanation
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Our Environment
B. Social		
Employment and La	bour Practices	
Aspect B1	Employment	
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 compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	Our People
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	Our People
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	Our People
Aspect B2	Health and Safety	
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 providing a safe working environment and protecting employees from occupational hazards.	Safe Production
KPI B2.1	Number and rate of work-related fatalities.	Safe Production
KPI B2.2	Lost days due to work injury.	Safe Production
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	Safe Production
Aspect B3	Development and Training	
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Our People Safe Production
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Our People
KPI B3.2	The average training hours completed per employee by gender and employee category.	Our People
Aspect B4	Labour Standards	
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 preventing child and forced labour.	Our People
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	Our People
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	Our People



Subject Areas, Aspe	ects, General Disclosures and KPIs	Relevant chapter(s) in CSR Report 2016 or other references/ Explanation
<b>Operating Practices</b>		
Aspect B5	Supply Chain Management	
General Disclosure	Policies on managing environmental and social risks of the supply chain.	Our Business
KPI C5.1	Number of suppliers by geographical region.	Our Business
KPI C5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	Our Business
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.	Our Business Safe Production
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Not applicable
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	Not applicable
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Our Business
KPI B6.4	Description of quality assurance process and recall procedures.	Safe Production
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Not applicable
Aspect B7	Anticorruption	
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.	Our Business
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.	Our Business
KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	Our Business
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.	Our Community
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Our Community
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Our Community

## Appendix C CASS-CSR3.0 Indicator Index

Indicator System		Relevant chapter(s) in CSR Report 2010 or other references/Explanation
Level 1 Indicator	Level 2 Indicator	
Aspect A: Report Prefa	ace (Series P)	
	P1.1 Report information description	About this report
(P1) Reporting	P1.2 Report boundary	About this report
Specification	P1.3 Report system	About this report
	P1.4 Contact information	About this report
(P2) Reporting Process	P2.1 Materiality selection process	CSR Management
(D2) Managamant	P3.1 Opportunities and challenges for Corporate Social Responsibility	Management Statement
(P3) Management Statement	P3.2 A summary of achievements and deficiencies of the Annual Social Responsibility work of Company	Management Statement
	P4.1 Company name, the nature of ownership, and headquarter location	Our Business – About the Company
	P4.2 Major brands, products and services	Our Business – About the Company
(P4) About the	P4.3 Operation regions, including operating companies, subsidiaries and joint ventures	Our Business – About the Company
Company	P4.4 Service market divided by industry, customer type and geography	Our Business – About the Company
	P4.5 The total number of the employees according to the employment contracts (both formal and informal) and gender	Our People
	P5.1 Annual major works related to social responsibility	Highlights in 2016
(P5) Annual Progress	P5.2 Annual responsibility performance	Highlights in 2016
	P5.3 Annual responsibility honor	Awards and Recognitions
Aspect B: Responsibili	ty Management (Series G)	
(G1) Responsibility	G1.1 Social responsibility concept, vision and values	Our Business
Strategy	G1.2 Identify the core social responsibility issues of the company	CSR Management
(G4) Responsibility Performance	G4.4 Major accidents, effects and penalties of the company in the economic, social or environmental fields and the response of the company	Safe Production – Emergency Response
	G5.1 List of the stakeholders	CSR Management – Stakeholder Engagement
	G5.3 Stakeholders' concerns and response measures	CSR Management – Stakeholder Engagement
(G5) Responsibility Communication	G5.4 Internal Social Responsibility Communication Mechanism	CSR Management – Stakeholder Engagement
	G5.5 External Social Responsibility Communication Mechanism	CSR Management – Stakeholder Engagement
	G5.6 Corporate Social Responsibility communication and exchange activities	CSR Management – Stakeholder Engagement



Indicator System		Relevant chapter(s) in CSR Report 201 or other references/Explanation
Level 1 Indicator	Level 2 Indicator	
Aspect C:Market Perfo	rmance(Series M)	
	M1.1 Policies and mechanisms of shareholders' participation in corporate governance	Our Business – Corporate Framework
	M1.2 Protect the interests of small and medium investors	Our Business – Corporate Framework
M1) Responsibility of	M1.3 Standardize information disclosure	Our Business – Corporate Framework
the stakeholder	M1.4 Growth	Our Business
	M1.5 Profitability	Our Business
	M1.6 Safety	Our Business
	M2.2 Installed capacity according to different power supply structure	Our Business
	M2.3 Ratio of clean energy installed capacity of the total installed capacity	Our Business
	M2.5 Power generation according to different power supply structure	Our Business
M2) Electricity production	M2.6 Measures and systems that support scientific and technological innovation	Our Business – Active Contribution in Research and Development
	M2.7 Support system of product and service innovation	Our Business – Active Contribution in Research and Development
	M2.10 Major Innovation awards	Awards and Recognitions
	M3.2 The security idea and system of Integrity Management	CSR Management – CSR Management Strategy
M3) Partner Responsibility	M3.9 The ratio of suppliers passes the Quality, Environmental and Occupational Health and Safety Management System	Our Business
	M3.14 Equipment localization rate	Our Business
spect D: Society Perfe	ormance (Series S)	
	S1.1 Company compliance system	Our Environment; Safe Production
S1) Government	S1.5 Total tax payment	Our Business
Responsibility	S1.6 Policies or measures to ensure employment and (or) to promote employment	Our People – Recruitment Policy
	S1.8 Absorption of employment during the reporting period	Our people
	S2.1 Labor contract signing rate	Our People
	S2.8 Percentage of minimum wage and local minimum wage divided by operating area	Our people – Employee Remuneration
S2) Employee	S2.9 Social insurance coverage	Our people – Employee Remuneration
Responsibility	S2.12 Welfare System divided by nature of employment (formal or informal)	Our people – Employee Remuneration
	S2.13 Proportion of female management	Our people – Employee Remuneration
	S2.17 Occupational disease prevention and control system	Our people – Employee Remuneration
	S2.18 Occupational safety and health training	Safe Production – Occupational Health an Safety Training
S2) Employment	S2.19 Annual increase in occupational diseases and accumulated occupational diseases in company	Our people – Employee Remuneration
Responsibility	S2.24 Physical examination and health file coverage	Our people – Employee Remuneration
	S2.25 Staff training system	Our People – Building Our Talent Team
	S2.26 Staff training performance	Our People – Building Our Talent Team



Indicator System		Relevant chapter(s) in CSR Report 2016 or other references/Explanation
Level 1 Indicator	Level 2 Indicator	
	S3.1 Safety Production Management System	Safe Production
	S3.2 Safety Emergency Management Mechanism	Safe Production – Emergency Response
	S3.3 Safety emergency drill performance	Safe Production – Emergency Response
	S3.4 Safety education and training	Safe Production – Occupational Health and Safety Training
	S3.7 Number of casualties	Safe Production
	S3.8 Power generation equipment management system and measures	Safe Production – Safe Production Management System
(S3) Safe Production	S3.9 Continuous safe operation days	Safe Production – Safe Production Management System
	S3.10 Number of accidents in Major equipment	Safe Production – Safe Production Management System
	S3.11 Number of accidents in general equipment	Safe Production – Safe Production Management System
	S3.12 Equivalent available coefficient of units	Safe Production – Safe Production Management System
	S3.13 Number of unplanned outage	Safe Production – Safe Production Management System
	S4.1 Assess the impact on the community environment and society when a company enters or exits the community	Our Environment
(S4) Community	S4.2 Ratio of access environment and social impact of new project implementation	Our Environment
Responsibility	S4.5 Employee localization policy	Our People – Recruitment Policy
	S4.2 Enterprise public interest policy or the main public welfare areas	Our Community
Aspect E: Environment	Performance (Series E)	
	E1.1 The establishment of environmental management organization system and institution	Our Environment
	E1.2 Annual total energy consumption	Our Environment – Green Operations
(E1) Green Operations	E1.7 Environmental training and publicity	Our Environment – Our Environmental Management Principles
	E1.11 Green office measures	Our Environment – Green Office
Aspect F: Report Posts	cript (Series A)	
(A1) Future Plan: Corpor	ate plan for social responsibility	Future Prospects
(A2) Value of the report: organizations to eval	Social responsibility experts or industry experts, stakeholders or professional uate the report	Appendix D
(A3) Indicator reference	The use of this indicator is required for disclosure of indicators	Appendix C

## Appendix D Rating Report on the GCL New Energy 2016 Corporate Social **Responsibility Report**

### Rating Report on the GCL New Energy 2016 Corporate Social Responsibility Report

Upon the request of GCL New Energy Holdings Limited, the "Chinese Expert Committee on CSR Report Rating" invited experts to form rating team to rate the "GCL New Energy 2016 Corporate Social Responsibility Report " (hereinafter referred to as "the Report").

#### I. Rating Criteria

Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR 3.0) and Rating Standard on Corporate Social Responsibility Reporting for Chinese Enterprises (2014).

### **II.** Rating process

(1) The panel for process appraisal makes interview to key members of the Report preparation team and examines materials related to the preparation process;

(2) The rating group draws up the rating report based on its appraisal made toward the preparation process and information disclosure of the Report.

igneu Academy or Social (3) The rating report is submitted to and signed by both the vice-chairman of the Expert al Respons Committee and head of the rating group.

### III. Rating results

#### 会科学院经济学部 Process Management $( \star \star \star \star )$

The Investor-relations and Brand department took the lead in setting up the report preparation team, and the President and the Vice President were responsible for the reporting key point control and direction. The preparation team was responsible for the identification of stakeholders, and collected opinions of stakeholders by carrying out questionnaire surveys, and conducting interviews. The substantive issues were identified in accordance with major corporate matters, national policies, industry benchmarking analysis, and stakeholder engagement. The Company planned to release the report via official website and to present the print and online versions of report, WeChat-based report, and so on, achieving excellent performance in the aspect of process.

### Materiality (★★★★☆)

"The Report" announced some key issues related to the field of electric production which include carrying out macroscopic policies, guaranteeing safety production, promoting green power, setting up new project assessment, saving resources and energy, developing circular economy, decreasing "Three Waste" discharging and governing environment issues around factories. In this way, "The Report" obviously meets the standard of Materiality.

#### Completeness $(\star \star \star \star)$

The main contents of the Report disclosed 78.3 percent of core indicators of the industry from the aspects of "CSR Management", "Our Environment", "Our People", "Our Community" achieving excellent performance in the aspect of completeness.

### Balance ( $\star \star \star \star$ )

The Report disclosed detailed negative indicator information such as the "employee turnover", "gearing ratio", "total number of work-related fatalities," "unplanned outages", "general or above level equipment malfunctions", achieving excellent performance in the aspect of balance.

### Comparability $( \star \star \star )$

The Report disclosed a few horizontal indicators including the "total installed capacity", " poverty alleviation projects scale", " forerunner programmes scale". The comparability needs to be strengthened





### Readability ( $\star \star \star \star$ )

"The Report" was carried out around the topic of "bringing the green power into real life". The main focuses were on "environment, safety, employee and community", whose framework was clear, logic was distinct and the length was proper. The flow diagram, the sketch map and related photos were used directly in this "Report", which made "The Report" more refined and smooth as well. The innovation of the cover page and the special design of the inner content were added with the main business of the enterprise, which stressed the characteristics of this enterprise so that to enhance the inimitable symbol of "The Report". Taking the above factors into consideration, "The Report" was no doubt Readability.

### Innovativeness $( \star \star \star \star )$

"The Report" conducted the research method of questionnaire surveys and interviews so that it improved the degree of participation between two stake-holders. The materiality of "The Report" was scientific and effective. By optimizing the report and redacting organization system, the brand department was involved actively. In this case, the effect of publicity and communication effect were greatly improved. This was the first time to import the service of rating report by a third-party, which made "The Report" more normative and reliable at the same time. The character of innovativeness was shown. Chinese Academy

## Overall rating $( \star \star \star \star )$

According to the assessment of the rating team, the "GCL New Energy 2016 Corporate Social Responsibility Report" was awarded a rating of four-star. It is an excellent CSR report.

### IV. Suggestions for improvement

The data of key performance indicators for three years in a row shall be increased, so as to further improve the reporting comparability.

### **Rating team**

Team leader: Zhong Hongwu, director of the Research Center for Corporate Social Responsibility of the Economics Division of Chinese Academy of Social Sciences. Team Members: Guo Yi, Professor of the School of Economics of Beijing Technology And Business University

Process evaluator: Wang Zhimin

ommitte

Vice-chairman of Chinese Expert Committee on CSR Report

Head of the rating group

Date of issuance: July 12, 2017



Scan QR code to view rating files of GCL New Energy







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