



CHINA
ENERGINE

From Engine to New Energy

CHINA ENERGINE INTERNATIONAL (HOLDINGS) LIMITED

中國航天萬源國際(集團)有限公司*

Stock Code 股份代號 : 1185



Corporate
Social Responsibility
Report

2016

* For identification purpose only

CONTENTS



02

About
this Report



03

Group
Profile



05

Stakeholder
Engagement



06

Workplace
Quality



12

Environment
Conservation



15

Operating
Practices



20

Community
Participation

About this Report

Reporting Period

Financial year of 2016

This Corporate Social Responsibility Report covers the business of the Group across all regions. The major scopes of the report are as follows:



Workplace Quality



Environment Conservation



Operating Practices



Community Participation



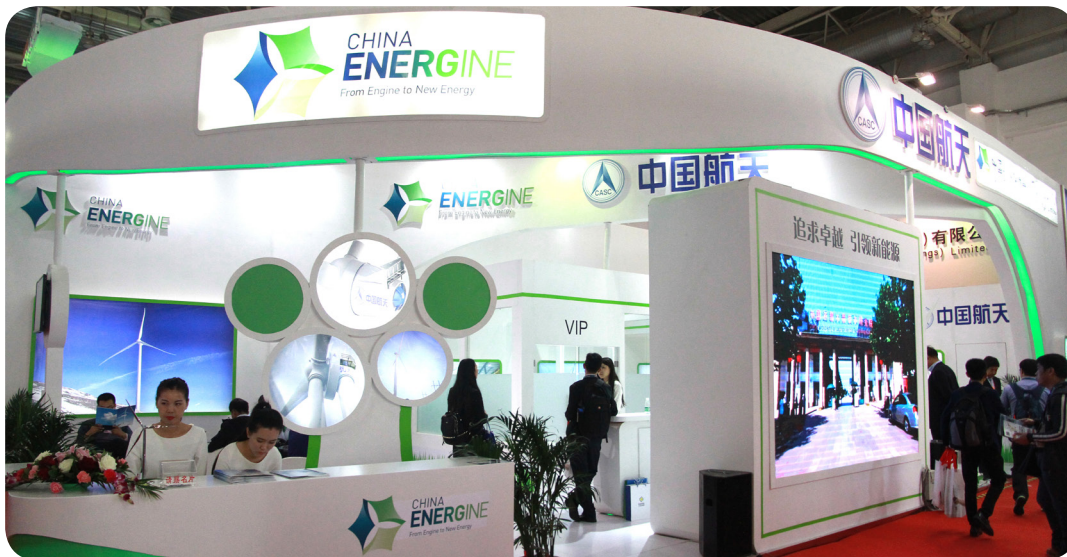
Group Profile

China Energin International (Holdings) Limited ("China Energin") is one of a few high-end and high-growth new energy enterprises that has top technology research and development capability and resources whilst succeeding in their commercialisation.



China Energin focuses on the development of businesses which are strongly supported by the state, comprising manufacture of wind turbines, development of wind farm, distributed energy, wind-solar energy storage integration and graphene energy storage. The Group has capabilities for the research and development and production of wind turbines as well as the design, construction and operation of wind farm across the wind power industry chain. The Group has hitherto accumulated a history of over 15 years of experiences in self-research, development and production in several new energy-saving and environmental conservation businesses, such as self-research and development of excitation magnetic directdrive gearless wind turbine, graphene energy storage battery and power management system, all of which have entered industrial operations successfully.

Group Profile



China Academy of Launch Vehicle Technology, the Group's major shareholder and a subsidiary of China Aerospace Science and Technology Corporation, is the place of origin of China's launch vehicles and the largest entity for research, design and manufacture of launch vehicles. The Academy has finished tasks on science research, design and manufacture of launch vehicles with outstanding performance. In addition, it conducted active capital operation by capitalising on the capital market mechanism in Hong Kong to restructure the new energies and materials application technologies developed by its utilising aerospace hi-tech with the assets of China EnerGINE. As such, we complemented each other's advantages and grew stronger, paving a solid foundation for the Group's fast and healthy development.

Over the years, the brand of Aerospace has great influence over various regions across the nation. Meanwhile, since Aerospace has been developing the wind energy industry for a long period of time, a very good development relationship has been established with various provinces and good partnership relationship is also maintained with the top five power companies. Moreover, as China EnerGINE has been engaging in the production of automotive components, such as automotive engine management system and automotive sealing system for a long period of time, the Group has maintained close business relationships with large automobile manufacturing groups such as the First Automotive Works Group ("FAW"), Dongfeng Automobile Co., Ltd. ("DFAC") and SAIC Motor Corp. Ltd. ("SAIC Motor").



Stakeholder Engagement

We value the importance of stakeholder engagement and understand various stakeholders have different expectations on our sustainable development. We therefore communicate and establish long-term relationship with our stakeholders through various channels by reference to which, we develop our business strategies so as to enhance the transparency of the Group and the stakeholders' confidence in the sustainable development of the Group.







Stakeholders	Channels of communication	Content
Shareholders/ Investors	<ul style="list-style-type: none"> Annual general meeting Annual reports, interim reports and announcements Direct communications Corporate website 	<ul style="list-style-type: none"> Financial performance Business sustainable development Investment and contribution to community Corporate transparency
Customers	<ul style="list-style-type: none"> Forum of cooperation Technology exchange meeting Meeting of manufacturing progress 	<ul style="list-style-type: none"> Technologies of turbines Delivery arrangement of turbines
Employees and professional team	<ul style="list-style-type: none"> Training sessions Work-life-balance activities Charitable activities Periodic performance appraisal 	<ul style="list-style-type: none"> R&D and manufacturing technologies of turbines Safety management of production lines Integrity and business conduct Sustainable development strategy
Government	<ul style="list-style-type: none"> Direct communications Face-to-face meetings 	<ul style="list-style-type: none"> Government policy implementation Local development strategy Business integrity Responsible social enterprise
Community	<ul style="list-style-type: none"> involving in community activities 	<ul style="list-style-type: none"> Education Sustainable development with contribution to the society
Suppliers	<ul style="list-style-type: none"> Site visits and reviews Close communications Meeting of manufacturing progress Annual assessment 	<ul style="list-style-type: none"> Corporate reputation Delivery of materials Industry experience and expertise

Workplace Quality



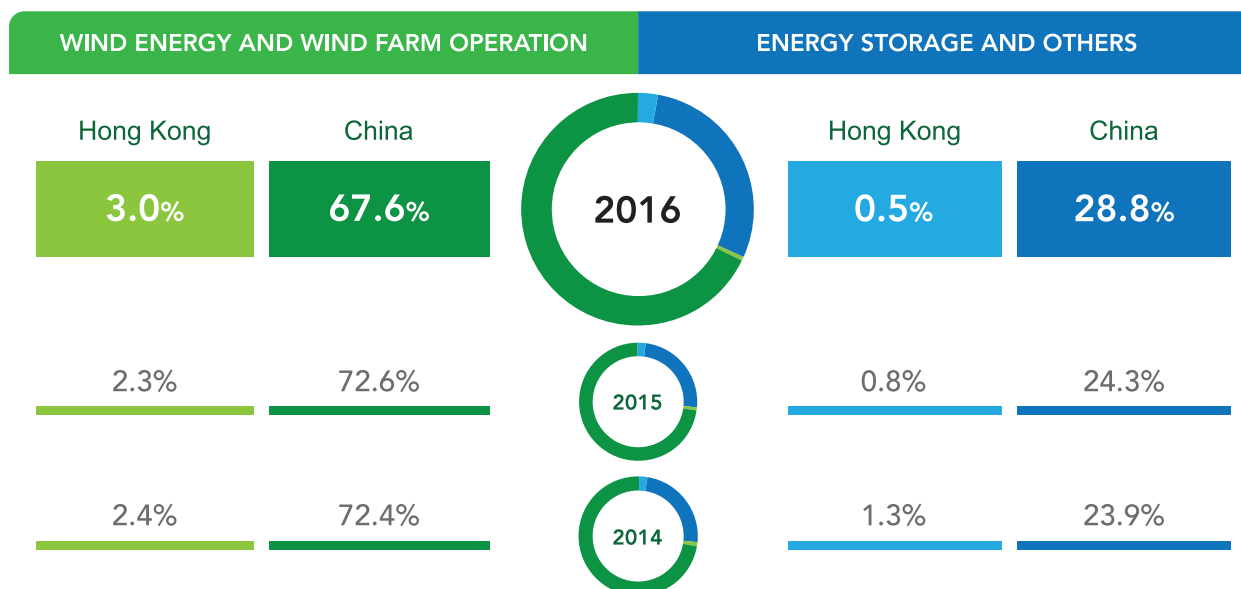
The Group upholds the core value of “leverage employees’ talents to full play and win-win in harmony”, values the importance of human resources. Promotion of enhancing in organizational capacity and adding in employees’ value are the core task of the Group, with a combination of the enterprise strategic development and high-end talent reserve needs for implementing a sustainable human resources policy. Human resources structure is optimised as an entry point for accelerating to establish a marketized labor and employment mechanism. Establishment of employment qualification is focused on for actively exploring an incentive and restraint mechanism in cope with the enterprise competitiveness. Capitalizing on salary cost control is grasped in strictly specifying corporate two-tier revenue allocation management. The improvement of the team professional quality is oriented in continuing to enhance the educational training of employees. A platform for employees’ full development in the enterprise is being built so as to achieve the sustainable development of the Group based on the win-win in harmony of both the Group and employees.

Total number of employees by age group and gender:

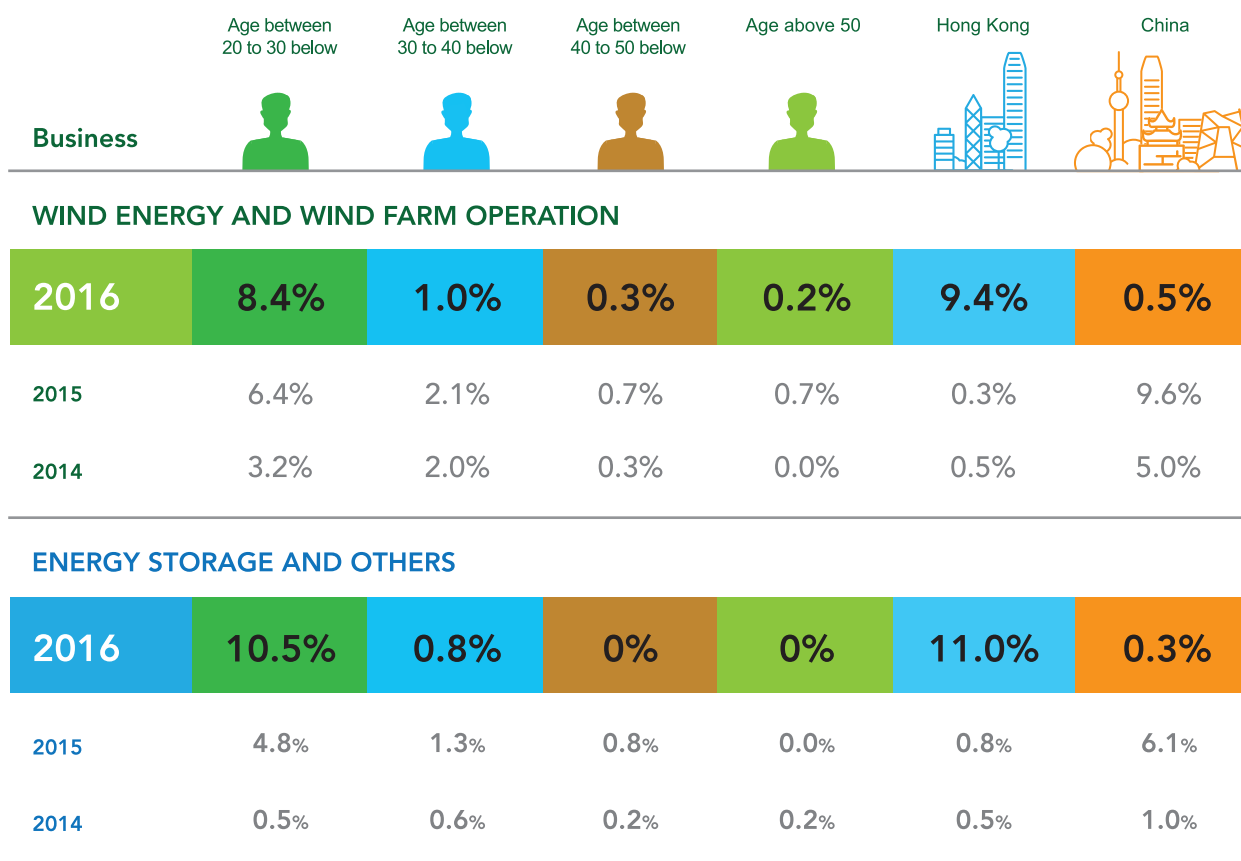
	Age between 20 to 30 below	Age between 30 to 40 below	Age between 40 to 50 below	Age above 50	Male	Female
Business						
WIND ENERGY AND WIND FARM OPERATION						
2016	55.5%	5.1%	8.9%	1.2%	57.8%	17.9%
2015	45.2%	15.8%	9.4%	4.5%	54.4%	20.5%
2014	44.4%	18.6%	10.2%	0.3%	58.9%	19.8%
ENERGY STORAGE AND OTHERS						
2016	13.0%	9.4%	5.9%	1.0%	13.5%	10.8%
2015	10.2%	8.4%	5.5%	1.0%	14.7%	10.4%
2014	13.5%	8.4%	4.4%	0.3%	11.4%	9.9%



Total number of employees by geographical area:



Turnover rate of employees by age group and geographical area:





Health and safety

In parallel with holistic planning the landscape of the corporate wind power industry chain, the Group also places much emphasis on environment, occupational health and safety, and safety production standards. Overlooking occupational safety may result in safety incidents, operations delay, adversely affecting the image of the Group. In addition, the handling works after the safety incidents may cause a significant amount of expenses, affecting the profits of the Company.

In 2016, the Company formulated the objectives and management solutions relating to environment and occupational health and safety for 2016.



Occupational health and safety objectives

To accomplish the works relating to level two of corporate production safety standard in Beijing

According to the rating scheme of corporate production safety standardisation for the manufacturing industry in Beijing, Beijing Engeneer was self-evaluated as an enterprise reaching the standard of level two in Beijing.

The safety standardisation management system developed by the Company basically complies with the requirements set out in the "Universal Standard of the Two-Level Review

of Production Safety Standardisation for the Manufacturing Industry in Beijing". The responsibilities of all functional departments were specifically defined. These departments carried out production safety standardisation activities in accordance with their respective terms of reference. Letters of commitment to production safety objectives were signed by departments of all levels. A safety responsibility system in relation to all functions and levels was established and regular inspections and assessments were conducted. The objectives and measures of production safety were implemented. The Group regularly organised various forms of cultural activities and training programmes

in relation to safety in order to equip its employees with a stronger safety awareness and facilitate the initial establishment of a safety culture system within the Group.

2014, 2015 and 2016



Number of work-related fatalities : 0



Lost days due to work injury : 0



The Group had a comprehensive safety and risk identification and evaluation for its operating activities. The control measures were effective and the safety equipment and protective facilities were in compliance with the requirements of national standards and regulations. With satisfactory production safety conditions, the Group developed a work permit system for its direct operation process to strictly monitor and ensure safety during direct operation.

In conclusion, during the standardization process of production safety, the management of the Group stressed on its importance; junior staff of all departments were allowed to play their roles in production safety, the Group reinforced their knowledge, awareness and operation skill on production safety in its pursuit of better production safety standard.

Development and training

Education training by levels and categories

From 2015, starting from the perspectives of the requirements for building talent teams, the qualification requirements for taking posts and business needs, the Group systematically rationalized the training needs, identified the training focuses for different teams, different levels and different posts, establishing a training programme system by taking into account the qualification requirements for taking posts, in enhancing training in a systematic, targeted and effective way.

Meanwhile, the Group kept broadening the coverage of education and training, with the training rate significantly improved as compared to 2014. By introduction of external advantageous training resources, nearly 120 employees were dispatched for occupational training throughout the year. As for in-house trainings, the Group offered its assistance to relevant departments to complete 8 trainings serving for 115 person-times in total. In addition, we have dispatched four selected young elites to participate in the series of ideal belief trainings held by CALT. 28 employees succeeded to obtain certificates upon completion of the special assignment training. Compared to the annual training plan set at the beginning of this year, the completion rate against the whole-year training plan reached 95%. Meanwhile, the Group continued to increase closed-loop management in relation to education and training, fully implementing trainings through evaluation of training effects, consolidation of excellent training courses and emphasis of effect-steering trainings.

In 2016, the Company's total training was 807 person-times, training scale 1,964 man-days, training coverage reaching more than 90%. This provided an advantageous support and service for the development of Company's business and enhancement of the team quality.





Building a system for employee development in practice

With advancing the job qualification work as the foothold, the Group has established an employee training mechanism for evaluating the capability of employees in a scientific way, driving the enhancement of the business competence of employees and promoting the career development of employees. Review and authentication was completed in relation to post qualification of 44 technology research & development staff from our technology R&D center and energy storage center. Also, the Group took the lead to organize and complete the examination to accredit the post qualification of 64 technical staff relating to the first-line general assembling and operation and maintenance services. Besides, it began to explore a quantitative review model regarding professional technology posts. The Group was enabled to enhance staff's working capability by leveraging on occupational development channels, and to cultivate, build and nurture a group of elites with sufficient technology strength through determination of post qualification.



TRAINED EMPLOYEES PERCENTAGE

	Senior management	Management personnel	Science and technology personnel	Technician
2016	100%	92%	100%	88%
2015	100%	52%	100%	57%
2014	100%	70%	100%	62%

AVERAGE TRAINING DAYS COMPLETED BY EMPLOYEES

	Senior management	Management personnel	Science and technology personnel	Technician
2016	14.2 days	3.8 days	7.8 days	2.6 days
2015	12.7 days	3.7 days	7.2 days	3.8 days
2014	13.8 days	3.4 days	5.6 days	4.3 days



Labour standards

The Group strictly regulated the recruitment process, performed the responsibilities of supervision and management, and prevented the breach of laws and regulations on child labour and etc at its very source. The Company reviewed and verified personal information in the recruitment process according to relevant laws and regulations of the State in effort to eliminate the non-compliance fundamentally. The Group strictly complied with relevant requirements of Employment Ordinance in Hong Kong and "Labour Law" of the State and provided various labour protection and safety and health conditions relating to production required by the laws and regulations to ensure employees' safety during their services. Meanwhile, the Group paid remuneration on schedule, provided social insurance in terms of welfare remuneration to safeguard the legal interests of the employees.



2014, 2015 and 2016



Litigation on labour dispute for the Group :

0

Environmental Conservation



Emissions

The Group aims at providing high-quality and efficient wind energy equipment to the users in further supporting the development of new energy industry. The public wishes the Group to provide products that are capable of preventing the environment from pollutions of waste and noise and preventing the adverse impact of safety hazards.

Assuring products in compliance with the relevant regulations of environment, social and safety management

The product designs of the Group meet various national standards of noise and safety, and are equipped with various protective facilities and equipment. Our wind turbines are of directdrive products with no gear boxes, minimizing the use of lubricant oil in large quantity that pollutes the environment, thereby avoiding environmental pollution in operational application to the largest extent.





Environment, natural resources and the use of resources

In 2016, The Company formulated the objectives and management solutions relating to environment and occupational health and safety for 2016.

Environment protection objective:

The Company's centralised waste disposal rate in the Beijing head office was 100% and the recycling rate of hazardous wastes was 100%. Domestic wastes are disposed of by Wanyuan Properties according to the agreement. Hazardous wastes, such as toner cartridges and ink cartridges, were recycled by designated manufacturers.

During maintenance of turbines, all employees of the Engineering Department on the wind farm were required to carry a plastic bag for centralised disposal of wastes, such as disposed cloths and head bands, when entering the towers for inspection. The wastes were then collected in the booster station in the waste disposal areas designated by the wind farm owners for their centralised disposal. The centralised disposal rate could reach 100%.

Adhering to reasonable utilisation and usage of public resources and energy, the Company promoted the value of energy conservation and the disgrace of wastage among its employees. Employees were required to conserve

public resources and energy to the full extent. A weekly inspection system was established to ensure that expenses on resources and energy consumption of the Beijing head office of the Company were under strict control. Significant improvement in annual energy and resources saving was made. According to the statistics of the Company, total annual office power consumption per person decreased by 7.7% compared with last year; annual consumption of bottled water per person decreased by 15% compared with last year; total annual usage of tap water per person decreased by 42.6% compared with last year; total annual office consumption of paper per person increased by 24.9% compared with last year; and total annual fuel consumption on corporate cars increased by 13.8% compared with last year.





Improvement in protection and maintenance of work environment:

According to procedures on monitoring the environment performance and surveillance control formulated by the Company, the Department of External Liaison is responsible for the supervision, surveillance and inspection of the implementation and effectiveness of environmental objectives, indices and management solutions. By filling the "environmental performance inspection record", the Department of External Liaison timely rectified the problems identified during inspection with precautionary measures, and conducted satisfactory survey on workplace environment.



Technical improvement measures and control on environmental safety:

In 2016, the Company formulated and refined several environment protection and safety measures and replaced the light bulbs with energy-efficient alternatives in the Beijing head office. Interior plants were replaced to maintain a greener work environment. All the obsolete wiring boards were discarded. Besides, smoking was fully prohibited. These initiatives allowed the Company to realise its philosophy of a clean office with "effective energy conservation, lower energy consumption, less pollution and higher efficiency".

Operating Practices



Supply chain management

Reliable quality and stable supply chain

The Group keeps reducing the exposure to lowering product quality and reliability as caused by reduction of component costs. In addition, the consistency of product quality was challenged by the excessive suppliers developing components individually. The Group is an integrator of wind turbines requiring extremely demanding standards on the quality control of products to prevent the final quality of products out of control. Cost reduction may affect the cooperation between the Group and the suppliers, leading to unstable supply chain.

The Group strictly implements the “Measures for the Management of the Purchase of Supplies” and has adopted an annual tender approach to invite tenders for components and parts required for the batch production of wind turbines. For special components and parts for which tenders cannot be invited, the Company has adopted an inquiry and negotiation approach for purchase . While effectively reducing the purchase cost, the above standardisation of purchase has advanced the implementation of the purchase model.





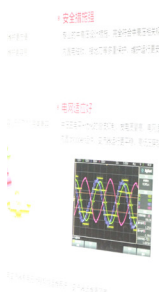
Development and management of supplier

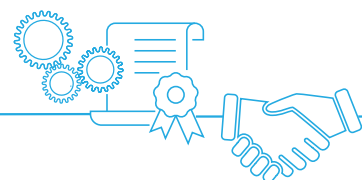
The Company has formulated the specific detailed provisions for the "Annual Appraisal Method of Suppliers", which comprise, inter alia, organising departments including Quality, Operation and Maintenance, Research & Development and Integrated Planning to implement supplier appraisal in relation to which the appraisal indicators include possession of certifications on environmental systems and etc. so as to provide bases for enhancing the quality of suppliers, environmental protection, safety and etc., all of which effectively promoted the improvement of both suppliers and purchase management.

The Group released the annual review on suppliers in due course, which was adopted as the important reference for determining the annual procurement plan. Any update on development of suppliers was effectively monitored, and any weaknesses on the supply chain were alarmed as well. Qualified suppliers providing key components were timely sourced, optimising the Group's supply chain.

In 2016, in accordance with the requirements of the Company on supply chain construction, the Purchase Management Department developed more than 10 new suppliers in respect of key parts such as castings, blades, drives, slip rings, transformers and master control. The development of all new suppliers has strictly complied with the "Measures for the Development and Management of Suppliers", which was jointly appraised and assessed by the departments of Purchase, Quality, Operation and Maintenance and Research & Development, and the related records were made. The development of new suppliers has enriched the purchase channels, avoided the risks caused by sole suppliers and effectively reduced the purchase cost.

上中压风电变流器





The Group organised participating the yearly wind power exhibition, strengthening the exchanges and liaisons with other suppliers in the industry.

Number of suppliers by geographical region and business



WIND ENERGY AND WIND FARM OPERATION

2016	82	33	47	2
2015	47	13	30	4
2014	45	12	29	4

ENERGY STORAGE

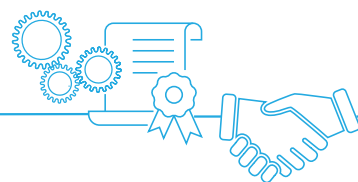
2016	12	4	8	0
2015	9	5	4	0

Product liability

Our customers wish the Group to provide high- quality and efficient wind energy equipment to further support the development of new energy industry. The products we offered will be able to prevent the environment from pollutions of wastes and noise and to prevent the adverse impact of safety hazards.

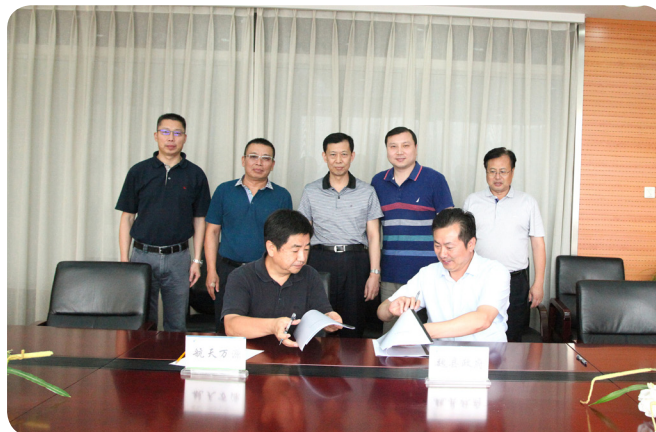
Ensuring product quality

The Group ensured our products reaching 100% passing rate on the assurance test on departing plant for delivery, and wind turbines in wind farms reaching an average utilization rate of 97%. i.e. high standard requirements for the product's quality. In parallel, the Group strictly controlled the product quality of its suppliers in stringently executing the supplier evaluation and control program.



Products guaranteed to comply with the relevant environmental, social, safety and management regulations

Products are designed to meet noise, safety and other national standards and are equipped with a number of protective facilities and equipment. Wind turbines are directdrive products which do not require gearboxes, thus avoiding, to the maximum extent practicable, the use of lubricants that, with its large consumption in use, pollute the environment.



Through the grid compatibility test and the power quality test required by the State and based on the domestic characteristics of domestic grids, the Company has improved its products to enable them to possess the low-voltage ride-through function in assuring the power generation efficiency and operational reliability of the products.

Providing quality services

A dedicated service team is assigned to provide service and technical support (i.e. installation, operation, maintenance) for each project. We have set latest response times in ensuring that customers' issues and requirements are addressed promptly. Regular customer feedback and satisfaction surveys are conducted where customer satisfaction is required to be over 85%. We also guaranteed the supply of spare parts to reduce the downtime occasioned from malfunction.

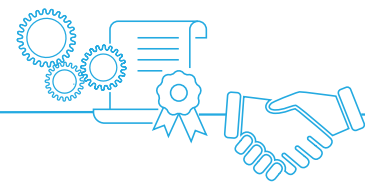
Complaints received in 2014, 2015 and 2016



turbines and turbine blade products : 0



energy storage products : 0



Anti-corruption

The state authorities, shareholders and the public expect the Group to sustain in healthy development, carry out central educational activities in practice, formulate a comprehensive system in strengthening the work of anti-corruption and integrity promotion and refining the regulation system on pursuing integrity in industry, firmly eliminating the breaches of laws and regulations and the occurrence of corruption.



Formulating systems, abiding by rules, strictly implementing "Eight Regulations"

The Company has completed self-examination, self-correction, inspection and rectification as to from the implementation of the "Three Important and One Large" system of important decision-making items, important appointments and dismissals, important project arrangements and large-amount fund operation, to the eight regulations of the central government, involving deployment of offices, and official vehicles, office expenses, conference fees, expenses relating to trips abroad, as well as supplies purchase, project construction,

employee selection and appointment, fund management and use as well as resources allocation. Through improving systems, clarifying responsibilities, advancing the affixing of responsibility and establishing a long-effect mechanism, the Group has ensured the steady implementation of various rectifications.

Deepening education, reinforcing responsibilities, creating an anti-corruption atmosphere

The Group has established an anti-corruption responsibility system in strictly implementing the leadership's "three responsibilities" and "one post, two responsibilities", detailing the implementation of the anti-corruption responsibility as to different posts and different groups targeted. The Group continues to implement the guideline thoughts of "tackling both the problem and its cause, application of punishment and prevention in parallel, focusing on prevention", in carrying out systematic and ongoing integrity education through different propaganda platforms and educational means. We keep deepening implementation of integrity working educational activities with coverage of 100%, building an integrity working atmosphere of "no-one-can-corrupt", "no-one-dares-corrupt" and "no-one-wants-to-corrupt"

Meanwhile, we have a whistleblowing policy to which employees can report, in confidence, any possible misconduct in the Company to the Audit Committee, and we shall then establish a case for following up.

2014, 2015 and 2016



Legal case regarding corruption brought against the Company or employees:

0

Community Participation



Participation of the community work

The Group participates in the community works, viewing the importance of community development. In aligning with the condition of the Company's actual development, we actively participated in charitable activities with the focus on supporting the educational development and promoting youth development. We encouraged more participation in the related activities in strengthening the corporate social responsibility and solidarity of heart and strength, thereby accumulating positive energy for corporate development.

The Company gave donations supporting education to Jiujiu Primary School in Xiahe County, Gannan, Gansu from 2014. The donations for 2015 and 2014 amounted to RMB118,600 and RMB122,800 respectively with 687 beneficiaries. In 2016, we offered youth volunteering service as the window in selecting our best employees to assist teaching in Jinjia Primary School in Xinhe County to commence the event of "Big Hands Pull Small Hands" with the school to make contribution to, and create value for, the community as a light contribution to improve nationalism education and promote national solidarity. We undertake the corporate responsibility in the aerospace industry and the society.





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