



新天绿色能源股份有限公司
China Suntien Green Energy Corporation Limited

2018

Environmental,
Social and Governance Report



ABOUT THIS REPORT



SCOPE

Organizational scope: This report covers China Suntien Green Energy Corporation Limited and organizations under its management.

Timeframe: 1 January 2018 to 31 December 2018. Certain items mentioned are outside the aforementioned timeframe.

Publication cycle: This report is published on an annual basis along with the publication of the Company's annual report.



REPORTING STANDARDS

The report was prepared according to the *Environmental, Social and Governance Reporting Guide of Rules Governing in Appendix 27 of the Listing of Securities* on The Stock Exchange of Hong Kong Limited (the "ESG Reporting Guide") and in compliance with GRI standards "core" plan requirements of Global Sustainability Standards Board (GSSB GRI Standards).



REPORTING PRINCIPLE

The report was prepared according to the reporting principles of the ESG Reporting Guide.

Materiality: The report contains a systematic stakeholder engagement along with a questionnaire survey regarding the importance of ESG issues. The materiality matrix is agreed upon by senior management and instructs an in-depth response to issues with high importance. For details on stakeholder engagement and ESG materiality matrix, please refer to the "Environment, Social and Governance Management" - "Stakeholder Engagement" section of this report.

Quantitative: The report discloses the quantitative indicators under the "Environmental" subject area and explains for indicators of non-importance in accordance with the requirements of the Key Performance Indicators ("KPIs") in the ESG Reporting Guide. For the "Social" subject area, the report discloses quantitative indicators to the maximum extent, and will gradually achieve full disclosure in the future.

Balance: The disclosure seeks to achieve objectivity and fairness and truly reflect the effective practices of Suntien's 2018 ESG work. The report discloses issues such as anti-corruption and safety incidents based on the requirements of the KPIs set out in the ESG Reporting Guide.

Consistency: The report follows a consistent range of information statistics, and the scope of subjects covered has no significant adjustments from previous years. Suntien has established a systematic ESG information management system since 2014 and has been conducting annual data comparison since 2015. This report discloses the quantitative information for three consecutive years from 2016.





EXPLANATIONS ON DATA

Financial data in the report are extracted from the 2018 annual report. Other data are extracted from the Company's internal management system and statistics, and partly comprise of data from previous years. Unless otherwise stated, Renminbi is used in this report as its functional currency.



REPORTING FORM

The report is issued in print and electronic versions. Please visit www.suntien.com or www.hkex.com.hk to download the report. Please call 0311-85278707 if you need a print version.



EXPLANATIONS ON ABBREVIATED NAMES

For convenience, expressions including "China Suntien Green Energy Corporation Limited", "Suntien", the "Company" or "we" are used in the report. Regarding major subsidiaries of the Company, Hebei Natural Gas Limited is referred to as "Hebei Natural Gas" and HECIC Newenergy Co., Ltd. is referred to as "HECIC New-energy".



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CHAIRMAN'S STATEMENT



The convening of the 19th National People's Congress of the Communist Party of China in 2018 officially launched a new era in sustainable development and environmental protection. Various past environmental protection policies began to be fully implemented, and the Beijing-Tianjin-Hebei region saw its social energy structure adjustment process reach a peak.

In 2018, as Hebei Province's leading clean energy provider and one of its most important natural gas suppliers, Suntien forged ahead with a range of green initiatives.

In 2018, Suntien continued to promote the development of new energy industries such as wind power. As a national demonstration project, an offshore boosting platform for the 300MW offshore wind power project at Puti Island, Leting, was successfully installed with a total of 40 units hoisted. Twenty three units were hoisted for the 72MW wind power project at Xuyi, Jiangsu Province, achieving a new record of 120m for wheel hoisting. The Dayingtuo project at Kangbao – one of the first national grid parity demonstrations – was approved. Our clean energy business segment seized strategic opportunities, comprehensively deployed new energy developments and utilization, and significantly increased the supply of clean energy such as wind power, photovoltaic power generation, natural gas, etc, further enhancing its market image and influence on sustainable development.

Suntien maintains full communication with all stakeholders and responds to their needs and concerns. We protect the full legitimate rights and interests of our employees, and provide them with broad development space and competitive compensation and benefits, which becomes the, inexhaustible force for the development of our Company. We have increased investment in environmental protection and safe production, and closely scrutinized environmental and safety issues during project construction and operation. We pay attention to improving resource utilization, increasing workplace safety, and reducing the impact of our operations on the environment and people. We have gradually established a sound ESG management system to better manage the Company's environmental and social performance. Given our efforts, in 2018 we were granted the May 1st Labor Award of Hebei Province, and recognized as a "Hebei Province Honesty Enterprise", "Advanced Grassroots Party Organization of Hebei Province SASAC", the 5th "Ethical Construction Model Unit for Employees in Hebei Province" and "Shijiazhuang Best Employer".

Looking forward to 2019, along with the further advancement of the United Nation's Sustainable Development Goals and in-depth development of the National "13th Five-Year" Plan, the process of promoting green and low-carbon development, actively addressing climate change, and creating ecological civilization will be further accelerated. The efforts in environmental governance will continuously increase, and the Battle for Blue Sky will still have a long way to go. In 2019, Suntien will reach a new point of development; seeking new thinking, improving business growth, upgrading technology, and providing a steady flow of clean energy to society. Suntien is embarking on a new journey towards achieving our own sustainable development goals, and those of the world.

ABOUT US

China Suntien Green Energy Corporation Limited was established on 9 February 2010 with contributions made by the promoter shareholders of Hebei Construction & Investment Group Co., Ltd. and HECIC Water Investment Co., Ltd. The Company was listed on the Main Board of the Hong Kong Stock Exchange on 13 October 2010. The Group is a leader in the development and utilization of clean energy in northern China. It has two major business segments: wind power and natural gas.


The Group is engaged in the planning, development and operation of wind farms as well as the sale of electricity, and it owns wind power projects in Hebei, Shanxi, Xinjiang, Shandong, Yunnan, Inner Mongolia, and other regions. Based in Hebei, the Group has invested and developed wind power projects across the country and seeks suitable investment projects overseas. As of 31 December 2018, the Group had a consolidated installed capacity of 3,858.15 MW as well as interests in an installed capacity of 3,482.75 MW. In 2018, the Group's gross wind power generation was 7,676 million kWh with 2,482 utilization hours.

The Group possesses natural gas transmission and ancillary facilities in Hebei Province, and sells natural gas through natural gas distribution channels. As of 31 December 2018, the Group owned 6 long-distance natural gas transmission pipelines, 14 high-pressure branch pipelines, 30 city gas projects, 19 distribution stations, 11 gate stations, 7 CNG refilling stations and 7 CNG primary filling stations. In 2018, the Group's natural gas sales volume was 2,631 million cubic metres.

AS of 31 December 2018

3,858.15  **MW**
Consolidated installed capacity

3,482.75  **MW**
Interests of installed capacity

7,676  **million kWh**
Annual wind power generation

2.631  **million m³**
Annual gas sales volume

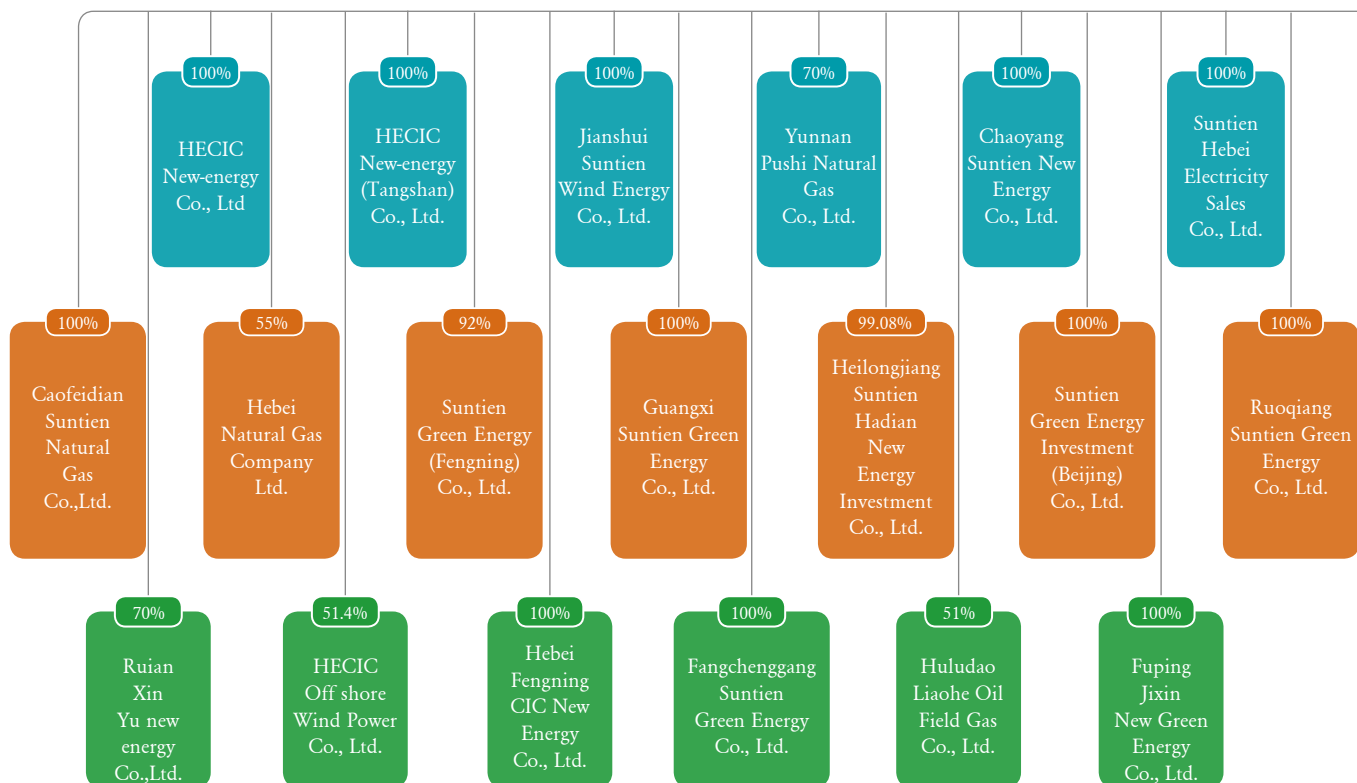


Organizational Structure

As at 31 December 2018, the corporate structure of the Group was as follows⁽¹⁾



新天绿色能源股份有限公司
China Suntien Green Energy Corporation Limited



Notes:

- (1) Please note that the corporate structure chart only includes first-tier subsidiaries of the Company.
- (2) Hebei Suntien Guohua Gas Co., Ltd. is a joint venture of the Company.
- (3) Hebei Jinjianjia Natural Gas Co., Ltd. is a joint venture of the Company.
- (4) Chengde Dayuan New Energy Co., Ltd. Is a joint venture of the Company.
- (5) Hebei Fengning Pumped Storage Co., Ltd. is an associated company of the Company.
- (6) HECIC Group Finance Company Limited is a long-term investment company of the Company.





CORPORATE GOVERNANCE

Internal Controls and Risk Management

In accordance with provisions of the *Company Law of the People's Republic of China*, the *Securities Law of the People's Republic of China*, the *Listing Rules* and other relevant laws and regulations, regulatory documents and the Articles of Association, the Company has gradually improved its rules of corporate governance and introduced terms of reference for all professional committees subsequent to the listing in 2010. According to spirit of the 19th session of national congress of the communist party of China and latest requirements of higher Party organizations, It also completed amending the *Articles of Association* in 2018 to meet operational and management demands and external regulatory requirements.

The Company has an excellent structure of internal control and governance. It has established committees for Strategy and Investment, Nomination, Audit and Remuneration and Appraisal under the Board to supervise and inspect strategy, management appointments, incentive measures, risk control and other aspects of the Company. A Board of Supervisors supervises the internal controls established and conducted by the Board and senior management. In the “Enterprises of Credit in Hebei Province 2018” contest, HECIC Newenergy was awarded the title “Enterprise of Credit in Hebei Province” for the 10th consecutive year.

For the Board’s specific responsibilities and composition, those of the professional committees under it, and those of the Board of Supervisors, please refer to the “Corporate Governance Report” in the *2018 Annual Report of China Suntien Green Energy Corporation Limited (0956. HK)*.

The *Internal Control Manual of China Suntien Green Energy Corporation Limited* clearly details all the risk points inherent to the Company’s operation, its internal control measures and risk point control measures, and the basis of its reasonable and systematic internal control system.

In 2018, the Company continued to develop a comprehensive standardized risk management and control system, including developing a specialist management mechanism who is in charge of internal controls. The Company has developed and revised relevant systems such as its *Comprehensive Risk Management Measures*, *System Management Measures* and *Comprehensive Risk Management Manual*, and disseminated their content through training, thereby gradually improving the monitoring of risk warning indicators.



Anti-Corruption

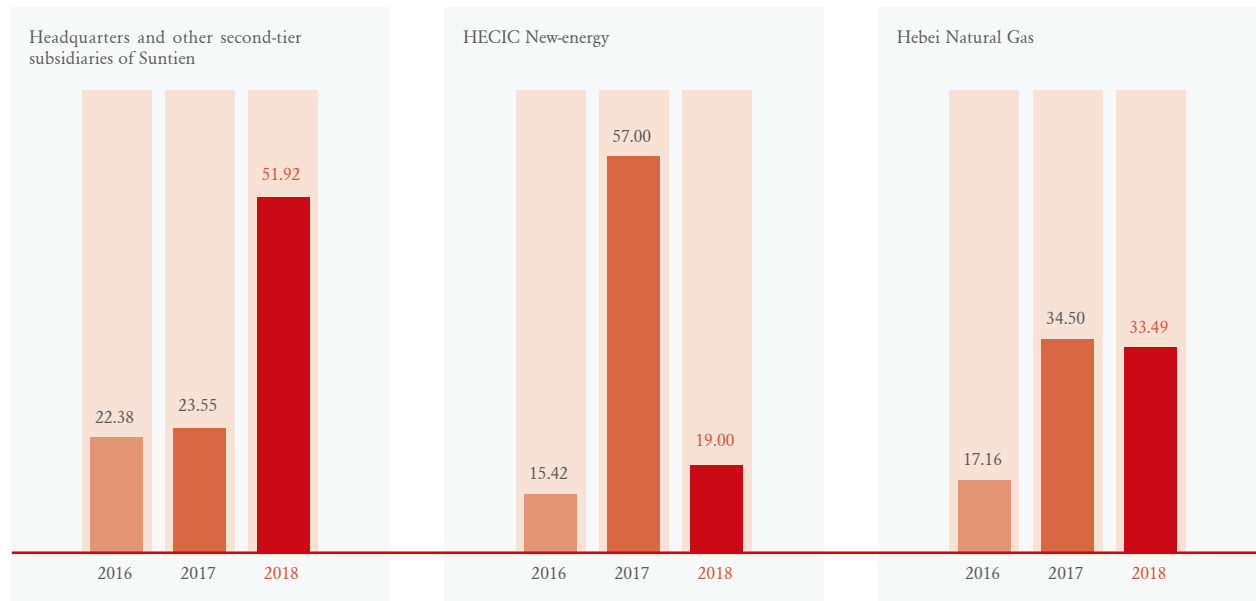
The Company attaches great importance to clean administration and takes rigorous action against corruption in any form. With reference to laws and regulations as well as its actual situation, the Company developed a series of policies and measures such as *Management Measures for the Prevention of Business Corruption*, *Tentative Measures for the Implementation of the Responsibility System for Construction of Honest Administration*, *Detailed Accountability Rules for the Responsibility System for Construction of Honest Administration*, *Tentative Measures for Efficiency Monitoring*, and *Tentative Administrative Procedures for Power Monitoring Mechanism*. These are in whole or in part aimed at preventing corruption at the source. The Company requires people who are responsible for key processes and/or in key positions to sign a *Commitment Letter of Prevention of Business Bribery* with business partners to regulate the behavior of both parties.

The Company provides a bribery reporting box and reporting hot-lines, and has also integrated the development of clean and honest administration into its annual assessment system. The Company has categorized and assessed the level of risks and established a mechanism for reminding, warning and educating staff members about risk and anti-corruption. Through these and other efforts, the Company has maintained a healthy, fair and transparent business environment.

In 2018, Suntien's party committee visited out-of-province grassroots management units to carry out party honesty education activities. These were conducted in six major regions and at five subsidiaries and six preparatory offices to achieve a full coverage. The concept of honesty construction is deeply embedded at the grassroots level of the Company. On 30 September 2018, the Company further strengthened the sense of mission, responsibility, honesty and integrity by convening leading cadres for conference that further emphasized the "Eight-point Austerity Rules" and "One Position with Two Responsibilities". This contributed to the gradual evolution of a comprehensive supervision system consisting of discipline inspection, supervision, finance and auditing, etc; the formation of a supervisory pattern of complementary advantages, resource sharing and work coordination; and the cultivation of a talented team under comprehensive supervision.

During the reporting period, there were no anti-corruption or corruption related litigations against Suntien.

Hours of anti-corruption training per person provided by Suntien



ENVIRONMENTAL, SOCIAL AND GOVERNANCE MANAGEMENT

As an important clean energy supplier in northern China, we wish to make positive contributions to adjusting the social energy structure and alleviating environmental problems. We regard our social responsibilities as integral to and a natural extension of our operations. The introduction of policies for the integrated development of Beijing, Tianjin and Hebei, and various plans for environmental and economic enhancement, have presented new opportunities and challenges to our development and management capacities. We will further optimize the ESG management system and implement the ESG management results to improve our sustainable development abilities, and will strive to play a useful role in the sustainable development of society.

ESG Management System

The focus of Suntien's ESG management system has always been on ESG quantitative performance management. In 2014, as one of the first mainland enterprises to adopt the ESG Reporting Guide, we preliminarily established the Suntien Green Energy ESG Indicator System based on the requirements for disclosure of ESG information. Subsequently, under the leadership of the Board, we built an ESG quantitative information management system covering all important business units. An ESG Report working group was formed, with responsible persons placed in the Integrated Management Department, Human Resources Department, Safe Production Department, Construction Management Department, Business Planning Department, Investment and Development Department and other functional departments, HECIC New-energy and Hebei Natural Gas for the collection of ESG data as well as communication with stakeholders. In 2018, in view of the overall requirements for management system standardization, we reviewed the work mechanisms and processes of ESG information disclosure and the Company's internal management, and gradually improved the daily management and control of key ESG topics based on ESG quantitative management.









With the Company undergoing rapid development and the new energy industry developing under an improving policy environment, we will devote more attention to the orientation of sustainable development and work more closely with the Company's internal ESG management. In 2018, the PRC's new energy industry will continue to focus on wind and solar (photovoltaic) power. We will make better use of our capacities as a new energy supplier to evolve an ESG management system that will serve as a foundation for the Company's sustainable development.

Stakeholder Communication

Maintaining close communication with all stakeholders is vital to Suntien's sustainable development management. Their decisions and actions can make a direct impact on Suntien and by responding to their needs in a timely manner, Suntien gains a continuous driving force for its development. On the other hand, Suntien also directly and indirectly impacts its stakeholders through its products, services and projects. Stakeholder participation can help Suntien to accurately assess the impact of its decisions, make needed adjustments, and more fully realize the potential of mutual sustainable development.

Suntien has reviewed the stakeholders affected by its operations and classified them according to their relative importance, manner of participation, and the corresponding measures taken to respond to their concerns. Effective communication with stakeholders helps us to understand their needs and creates a basis for discussing future cooperative measures – a dynamic which has gradually assumed greater importance among all our departments.

Channels of stakeholder communication and their focus

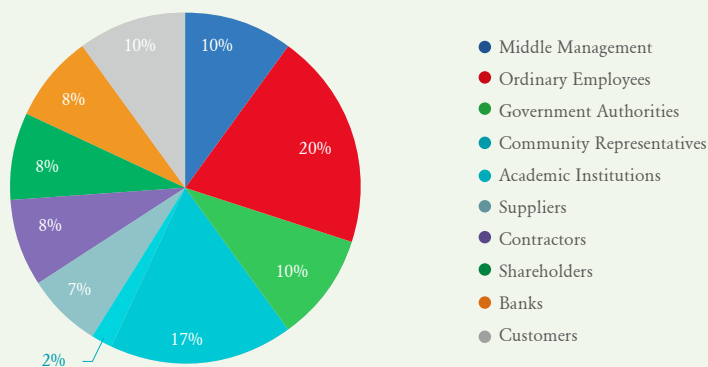
Stakeholder Types	Needs	Responses	Communication Channels
 Shareholders	<ul style="list-style-type: none"> Continuous stable investment returns Timely information disclosure Enterprise operation in compliance with laws and regulations 	<ul style="list-style-type: none"> Improve business diversity Establish a system for regular information disclosure Improve internal compliance system 	<ul style="list-style-type: none"> Annual reports and corporate announcements Information dissemination channels including roadshows
 Employees	<ul style="list-style-type: none"> Decent working environment Ample opportunities for career development Competitive remuneration packages Health and safety protection 	<ul style="list-style-type: none"> Improve internal management systems such as staff recruitment and promotion Enriched daily life Provide diversified employee welfare 	<ul style="list-style-type: none"> Internal website Internal corporate publication Suntien WeChat public account
 Suppliers	<ul style="list-style-type: none"> Fair, just and open procurement process Punctual fulfilment of contractual obligations 	<ul style="list-style-type: none"> Ensure transparency in procurement process and receive internal and external supervision Reasonable management and control of cash to ensure timely payment 	<ul style="list-style-type: none"> Announcements and notices for procurement and tender on governmental websites Corporate corruption reporting hotline
 Customers	<ul style="list-style-type: none"> Continuous, reliable and safe supply of natural gas Timely response to customer demands Service quality improvements 	<ul style="list-style-type: none"> Establish a comprehensive safety supervision and response system Improve customer complaint handling process, establish a responsibility identification system for customer complaints Compile a standardized service manual 	<ul style="list-style-type: none"> Regular community promotions for safe use of gas Visiting dissatisfied customers Conduct customer satisfaction surveys
 Government	<ul style="list-style-type: none"> Drive local and surrounding industry development Enterprise operation in compliance with laws and regulations 	<ul style="list-style-type: none"> Provide job opportunities and pay taxes at the location of operations Cooperate with government supervision and improve internal compliance monitoring Ensure compliance with laws and regulations regarding environment, safety and integrity 	<ul style="list-style-type: none"> Participate in government meetings and regularly visit the government Receive governmental supervision
 Community	<ul style="list-style-type: none"> Contribute to community development Participation in community activities and maintain good communication 	<ul style="list-style-type: none"> Improve local infrastructure in terms of road and power grid construction Aid rural development in terms of assistance provided to designated persons Maintain good communication with local residents and herdsmen 	<ul style="list-style-type: none"> Survey of community representatives Visits in daily operation
 Banks	<ul style="list-style-type: none"> Good creditworthiness and strong ability to pay debts Stable business development 	<ul style="list-style-type: none"> Pay debts on time to maintain creditworthiness Strengthen cooperation with domestic and foreign banks 	<ul style="list-style-type: none"> Regular direct communication
 Academic institutions	<ul style="list-style-type: none"> Continuous investment in innovation Strengthen cooperation with academic institutions to improve ability to apply research results 	<ul style="list-style-type: none"> Increase internal R&D investment, improve intellectual property and innovation management Increase cooperation and exchanges with universities, colleges and other research institutions 	<ul style="list-style-type: none"> Cooperation fairs

Stakeholder Engagement

In 2018, we continued to use questionnaires to collect stakeholder feedback and advice on our ESG work. These frequently referred to the key concerns of domestic and overseas new energy enterprises about managing sustainable development, national and local new energy policies, and industry research reports. In 2018, we identified key ESG topics and invited all stakeholders to comment on them and on our actions in those areas.

To improve the effectiveness of the questionnaire, we introduced it simultaneously with an online survey in 2018. Participating stakeholders could reply using either the paper questionnaire, or online by scanning a QR code with their mobile phone. We also adopted more open method of issuing and collecting, and eventually collected 153 completed questionnaires. Questionnaires were also issued to the Company's senior management to gain an understanding of how various ESG topics impacted Suntien, to elicit their suggestions regarding the Company's decision-making and actions, and to obtain information regarding sustainable development.

Percentages of stakeholders in the 2018 Survey



153

Completed questionnaires



100%

Expressed interest in learning more about Suntien's sustainable development work

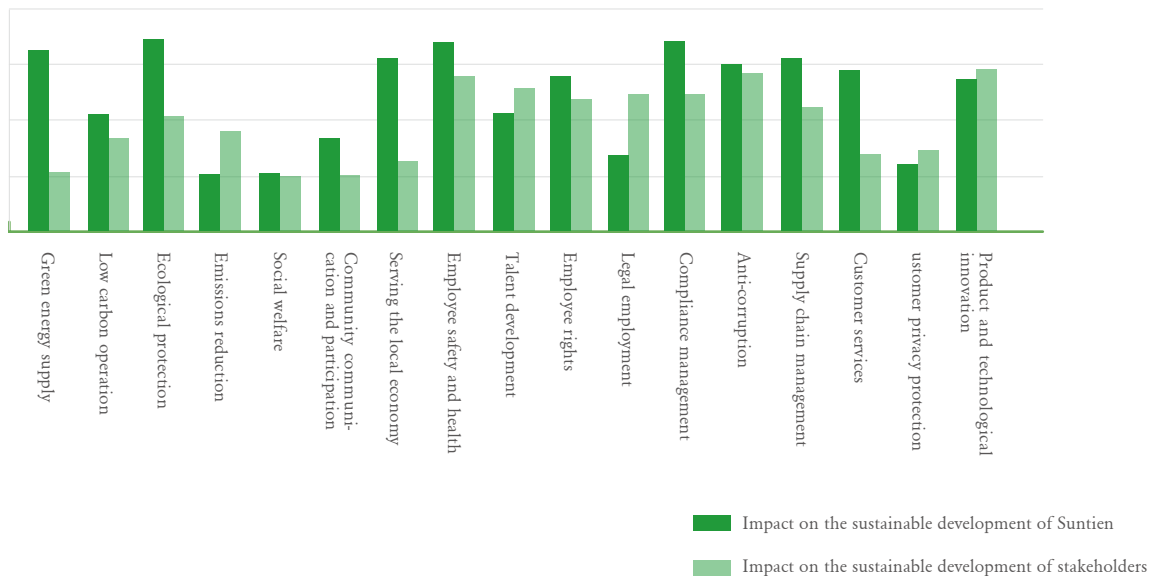
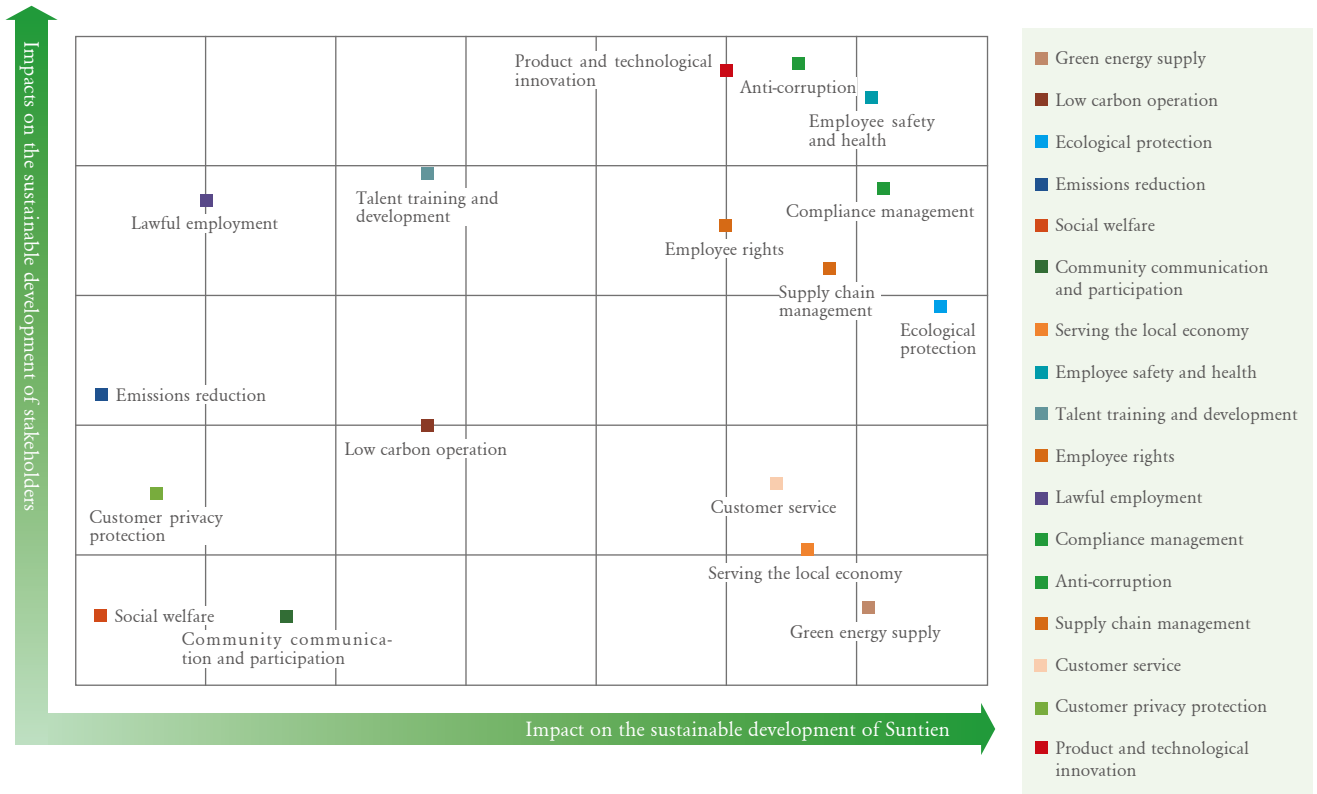


In the 2018 survey, 100% of respondents expressed interest in learning more about Suntien's sustainable development work, compared to 91% in 2016 and 97% in 2017. A total of 98.64% of respondents thought that the ESG report could aid in their understanding of our sustainable development work and better inform them about the Company's sustainable development practices. Ecological protection, staff development and safe production have been major topics for three consecutive years, and stakeholder knowledge in these areas has steadily improved year by year.

The stakeholders recognized Suntien's sustainable development work and gave suggestions about technical innovation, communication, foreign cooperation and public participation. They indicated a desire for the Company to enhance its comprehensive domestic and international cooperation and publicity efforts, improve the frequency of external communications, and actively convey the concept, orientation and content of Company actions through information disclosure and regular meetings, so that stakeholders may better understand the Company's sustainable development efforts.

The survey results provided a useful reference for adjusting our future sustainable actions. They can give us a more accurate perception of changing social demands, and subsequently enable us to make targeted adjustments to the focus of management and control to meet those demands. The results will also have a direct effect on the content of our ESG information disclosures. This report includes targeted disclosures on the topics of most concern.

Matrix of ESG Material Aspects in 2018





01

TACKLING CLIMATE CHANGE

Climate change is a serious challenge for humanity in the 21st century. Renewable energy is crucial to effectively mitigating and controlling the greenhouse gas emissions that are causing destructive change, and is an essential component in green, low carbon development. In China, clean energy is the main direction of implementing structural reforms on the energy supply side, optimization of the energy supply structure, and building a clean, low-carbon, safe and efficient modern energy system. In line with the positive trend in global energy transformation and steady renewable energy industry development, Suntien will continue to enhance its core competitiveness by promoting the development of clean energy and accelerating a diversified scale of business development while focusing on wind power.





Development of Clean Energy

Renewable energy is an important part of the energy supply system. With the continuous expansion of global renewable energy development and utilization, its application costs have rapidly declined. In many countries, this is allowed for renewable energy development to become a core means of tackling climate change. In China, it is also an important measure for driving energy production, energy transformation and consumption.

Objectives under the 13th Five-year Plan for Renewable Energy Development

By 2020, installed hydropower capacity will reach 380 million KW; installed wind power capacity will reach 210 million KW; installed solar power capacity will reach 110 million KW; installed biomass power capacity will reach 15 million KW; and total geothermal heating and utilization volume will reach 42 million tons of standard coal.

Objectives under the 13th Five-year Plan for Energy Development

Percentage of non-fossil energy consumption will increase to more than 15%; percentage of natural gas consumption will increase to 10%; and percentage of coal consumption will decrease to below 58%. Growth of non-fossil energy and natural gas will be three times that of coal, accounting for approximately 68% or more of total energy consumption growth. Through the development of renewable energy, carbon dioxide emissions will be reduced by approximately 1.4 billion tons; sulphur dioxide emissions will be reduced by approximately 10 million tons; nitrogen oxide emissions will be reduced by approximately 4.3 million tons; smoke and dust emissions will be reduced by approximately 5.8 million tons; and water consumption will be reduced by approximately 3.8 billion cubic metres annually.

Reduce

3,126,000  tons

Carbon dioxide emissions

7,792,000  tons

Sulphur dioxide emissions

117,000  tons

Nitrogen oxide emissions

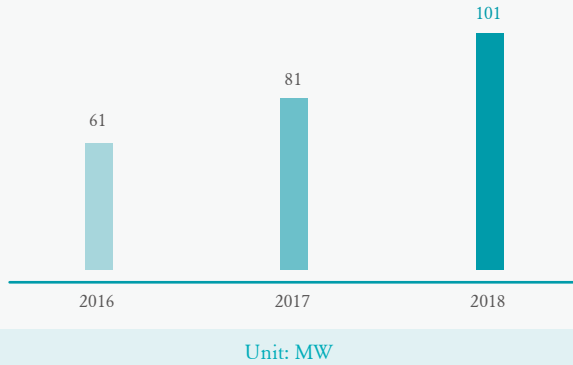
2,126,000  tons

Dust emissions

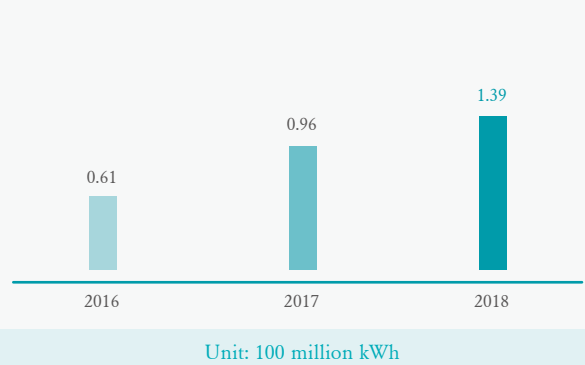
Suntien continued to promote the development, construction and operation of new energy projects in 2018, and further expanded the channel and scope of supplying its renewable energy products. Wind power is the most important renewable energy product for Suntien, and in 2018, the Company focused on the operation of wind farms, promoted the construction of wind power projects, and expanded its reserves of wind resources. It added a consolidated installed capacity of 509.8 MW and generated 7,676 million kWh of electricity through wind power. Suntien first developed photovoltaic power generation as an effective supplement to wind power in regions with rich light resources such as northwestern and northeastern China. During the year, it added an installed capacity of 20 MW and generated 139 million kWh of electricity through photovoltaic means. In 2018, total electricity generated from its main renewable energy products, wind power and photovoltaic power was 7,815 million kWh, an increase of 14% over 2017, and helped reduce carbon dioxide emissions by 3,126,000 tons, sulphur dioxide emissions by 7,792,000 tons, nitrogen oxide emissions by 117,000 tons, and dust emissions by 2,126,000 tons.



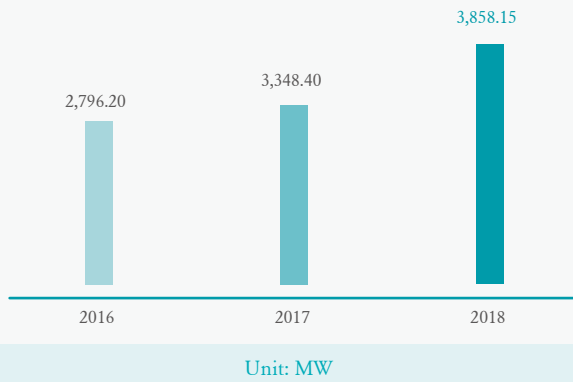
Photovoltaic installed capacity



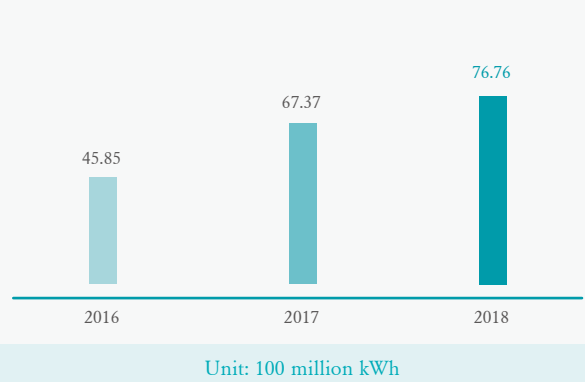
Photovoltaic electricity generation



Wind power consolidated installed capacity



Wind power electricity generation



Renewable energy's greatest contribution to China's "green development" is in alleviating the conflict between energy consumption growth and reduction of greenhouse gas emissions. However, it also needs to overcome natural disadvantages in this respect. Compared to traditional fossil fuel-based energy, renewable energy has disadvantages in terms of distribution, restrictions of natural conditions and difficult storage. Suntien has improved the efficiency of renewable resource use and expanded the sources and uses of renewable energy through resource allocation and the development of a new business. In 2018, Suntien continued to promote offshore wind power and wind power hydrogen production projects to fully utilize natural resources and improve the efficiency of wind energy resource conversion.

Case

Installation of upper block at northern China's first offshore wind farm booster platform

On 18 June 2018, the upper block of the offshore boosting platform for Suntien's 300 MW offshore wind farm demonstration project at Puti Island in Leling, Tangshan, was successfully put in place. Offshore boosting platforms function as the "heart" of offshore wind farms, with this upper block consisting of an integral steel structure with four deck platforms. The platform measures 41.5×30.9 m, while the top level is 26.8m, and its total weight is approximately 2,900 tons.

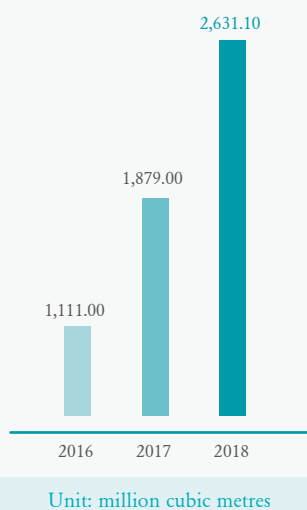
Puti Island is the first offshore wind power project in northern China. Its new offshore boosting platform is also the first 220kV offshore boosting station in northern China.

Case

Suntien and Jizhong Energy Fengfeng Group Co., Ltd. agree to strategic cooperation in hydrogen energy

In November 2018, Suntien and Jizhong Energy Fengfeng Group Co., Ltd. agreed to a strategic cooperation in hydrogen energy. The arrangement leverages on Suntien's advantages in distributed energy applications, renewable energy hydrogen production and hydrogen energy applications, and energy infrastructure construction, while utilising Jizhong Energy Fengfeng Group Co., Ltd's expertise in coal chemical, coke oven gas applications and methanol production. Both parties are to mutually develop hydrogen production, hydrogen energy applications and infrastructure construction, and work together to promote the industrialization and commercialization of hydrogen energy in Hebei Province.

Sales volume of natural gas



As another low-carbon energy source, natural gas can be used to compensate for the inherent disadvantages of intermittent sources such as wind and photovoltaic. It is thus regarded as a complement to the development of renewable energy. In 2017, the National Development and Reform Commission issued the *Notice on Accelerating the Promotion of Natural Gas Utilization*, advocating an increase in the proportion of natural gas in China's primary energy consumption structure, promotion of energy consumption and implementation of clean heating as measures of controlling air pollution. In 2018, Suntien followed through on this proposal by setting up and expanding upstream and downstream supply channels. It subsequently achieved a rapid growth in supply, and the annual sales volume of natural gas was 2,631.1 million cubic metres, a year-on-year increase of 40.01% compared with that in 2017.

While clean energy can broaden prospects for development, it also places new requirements on all related companies. Suntien needs to optimize its industrial structure and expand its upstream and downstream channels to meet the diversified needs of new energy. It further needs to upgrade its professional ability and improve operational efficiency through innovative development and standardized construction in order to keep pace with the green transformation of society. In this case, rapid development has been effectively supported by substantial capital investment. As an innovative financing tool, green bonds and asset securitization can effectively raise and supplement the private capital that such investments urgently need. Suntien accepts the emerging concept of green finance with an open and inclusive attitude. It uses green financial practices, promotes finance innovation, expands financing channels, and promotes effective integration and development of its own business and green finance.

Case

Suntien issues the first renewable green corporate bond in Hebei Province

On 8 March 2018, Suntien issued the first phase of renewable green corporate bonds (amounting to RMB590 million), with Galaxy Securities as the leading underwriter and Ping An Securities as the joint underwriter. Its term is 3+N years with 3.6 times of subscription and the final issuance rate of 5.96%, the lowest rate of renewable bond issuance by a local state-owned enterprise that year. It was the fourth renewable green corporate bond in China and the first in Hebei Province.

The funds raised by the green bond were mainly used for investment, construction and operation of several wind power projects. It reduced the financing cost of RMB3.894 million for Suntien. Its successful issuance not only guaranteed the Company's capital need in the first half of 2018, but also laid a foundation for meeting project construction matching debt funds while improving the Company's image as a green issuer in the open market.

Driving Regional Low Carbon Development

Suntien is based in the PRC with operations originally concentrated around Beijing, Tianjin and Hebei. Its wind farm operations have gradually expanded from Zhangjiakou and Chengde, Hebei Province, to the rest of the country and overseas. However, Beijing, Tianjin and Hebei remain as its developmental foundation, and the Company contributes to the areas' green development and economic transformation on a "win-win" basis.

In 2017, development and reform commissions in Beijing, Tianjin and Hebei jointly created an *Action Plan for Coordinated Energy Development in Beijing, Tianjin and Hebei (2017-20)* which sets quantitative indicators for clean energy and coal-to-gas conversion projects, and specific low carbon emission plans for the 2022 Winter Olympics in Chongli. In 2018, Beijing issued the *Action Plan for Promoting the Beijing-Tianjin-Hebei Coordinated Development for 2018-2020* to further solidify joint air pollution prevention and control mechanisms for the region, and call for the building of a green ecological barrier in the region within three years. In early 2016, all Suntien wind power projects in Chongli were included in the *Phase Three Development Proposal for One Million KW Wind Power Facilities in Zhangjiakou*. In 2017, the Company's wind power projects at Mudaogou, Wuji County and Laozhanghe, Julu County, were included in Hebei Province's wind power development plan for 2017. With the advent of a new action plan for Beijing, Tianjin and Hebei, all clean energy enterprises including Suntien will enter a new stage of development. Suntien needs to speed up development, improve operational efficiency and mobilize enterprise resources to meet the demand for clean energy in these areas.



Case

Exploring hydrogen energy and powering the Winter Olympics in Chongli

In May 2018, HECIC's wind power hydrogen production project (undertaken by the Chongli Xintian Company under HECIC New-energy) received approval from the Zhangjiakou Administrative Examination and Approval Bureau. It is the second large-scale comprehensive utilization project for wind power hydrogen production by HECIC New-energy to be approved, following its 200MW project in Kuyuan.

The hydrogen production segment of the Chongli project has a total designed capacity of 800Nm³/h. In the initial phase, it will be constructed with 400Nm³/h power hydrogen production equipment, while a site for 400Nm³/h power hydrogen production equipment will be reserved for DC wind turbines and related auxiliary structures. Many enterprises and schools - including the Construction & Investment Group, Hebei University of Science and Technology, and the 718th Research Institute of China Shipbuilding Industry Corporation - have contributed to the project's concept of "comprehensively utilizing hydrogen production from off-grid and grid-connected wind power" so that a wind power system need not use the traditional power grid as the only terminal load. In this case, it is intended to be directly applied to the electrolysis hydrogen production industry adapted to wind power characteristics, with finished hydrogen transported to a hydrogen filling station through pipeline network, and finally applied to fuel cell powered vehicles. In this way, a complete industry chain for the comprehensive utilization of hydrogen production from off-grid/grid-connected wind power will be created.

HECIC New-energy will next promote project construction, further increase its involvement in hydrogen energy, participate in the coordinated development of the Beijing-Tianjin-Hebei region and the Winter Olympics in Chongli, and promote the Group's "green development" concept for the energy sector as a positive contribution to a "Technological Winter Olympics" and "zero carbon Olympics".

In response to the State's three-year plan for clear skies, Hebei Province issued the *Three-Year Action Plan for Hebei Province to Defend the Blue Sky* for intensive action to prevent and control air pollution and improve the province's air quality. The plan calls for dramatic change in the region's industrial and energy infrastructures, the promotion of clean heating, and implementation of the *State's Winter Clean Heating Planning in the North Region (2017-2021)* and *Hebei Province Clean Heating Implementation Proposal* to proportionately increase clean energy, develop renewable energy, and expand natural gas resources. To this end, Hebei Natural Gas has accelerated the construction of gas storage and peak facilities to ensure that peak winter season demand for natural gas in the region is met, and is promoting the development of "coal to gas" projects in the region.



Case

Construction of Tangshan LNG Project Phase III formally commences

On 23 March 2018, construction officially got underway on Tangshan LNG Project Phase III. Construction is being overseen by Jintang LNG Company, an associated company of Hebei Natural Gas, and Beijing Gas Group, which has also invested a total RMB2.7 billion. Completion and operation are scheduled for the end of 2020. After its production, the peaking gas supply capacity and extreme weather response capacity were further improved. The continuous gas supply capacity of the receiving station will increase to 31.6 million square metres per day for 2 months in the peak period, and the continuous supply capacity for one month in the peak period will reach 41.2 million square metres per day.

This national energy strategic project is one of Hebei Province's key construction projects, and aims to further improve the peak and emergency gas supply capacity of the Tangshan LNG receiving station in winter. It will effectively alleviate the problem of insufficient natural gas supply in the Beijing-Tianjin-Hebei region while creating a minimum of air pollution.

Participation in Industry Development

The most important issue for sustainable development is the continuity of energy production and consumption patterns. In the past 10 years, for new energy industry, China has made remarkable achievements from lagging behind, catching up to surpassing many other countries. China has attained leadership in the manufacture of equipment, systems application and the scale of power generation, and it dominates the industry's development. For the next phase of the energy revolution, effective further development of the new energy industry will require a joint effort by enterprises, institutions and organizations both within and outside the sector.

In 2018, Suntien participated in a range of communications, exchanges and events to promote the industry's development. Its involvement was partly in the interest of business development, with actions taken in Beijing, Tianjin and Hebei in particular yielding gradual improvements to Suntien's position and industry role. The Company's participation was also in response to government requirements for innovative developments which require more scientific and technical investment (for details, please refer to this report's "Technological Innovation" section). We hope to continue participating in such activities, and to find wider applications of new technologies through the promotion of technological development via cooperation with industry peers.



Case

The China International Photothermal Power Station Conference and CSPPLAZA Annual Meeting

In June 2018, Suntien was an invited participant in the 5th China International Photothermal Power Station Conference and CSPPLAZA Annual Meeting for 2018. Through exchanges with government departments and other participants, Suntien representatives gained insights on cutting-edge technologies and future solar thermal development trends. Discussions also centered on topics such as how the development of China's solar thermal industry will affect the global market, how the related policies of delaying the first batch of demonstration projects will affect further development of the market, and how local supporting policies can best cultivate and develop the solar thermal industry.

The conference attracted developers from domestic and foreign solar thermal sectors as well as over 360 companies from the whole industrial chain, including design, construction, equipment manufacturing and scientific research. It featured 66 exhibitors and more than 800 related professionals, reflecting the industry's current booming status.

Due to the unique characteristics of the new energy industry, its development is to a considerable extent determined by policy orientation. The National Energy Administration issued the *Notice on Printing and Distributing the Guiding Opinions on Energy Work in 2018* and the *Notice on Accelerating the Work of Facilitating the Grid Parity for Wind Power and Photovoltaic Power (the Third Consultation Draft)* to support the sustainable development of wind power by promoting grid parity and non-subsidized wind power projects. The grid parity policy poses a challenge in terms of technological upgrading and innovation for both the wind power and photovoltaic power generation industries. How to further improve core technological innovation, reduce dependence on imports, achieve self-sufficiency, improve the industrial chain, and reduce the cost of power generation are becoming imperative new energy industry issues. Suntien will accordingly increase its participation in, and provide reference information from enterprises for, the formulation of future industry policies and rules.



Case

HECIC New-energy's Dayingtu grid parity demonstration project at Kangbao approved

In November 2018, HECIC New-energy's Dayingtu grid parity demonstration project at Kangbao received approval from the Zhangjiakou Administrative Examination and Approval Bureau. Located in Kangbao County, Zhangjiakou City, the project will have an installed capacity of 100MW and feature a planned 50 wind turbines with a single unit capacity of 2MW.

Dayingtu is one of the first grid parity demonstration projects nationwide, and its approval opens a new chapter of wind power construction for HECIC New-energy. HECIC New-energy will continue its preliminary work to ensure that the project will connect to the grid for power generation as soon as possible.



Case

Suntien sees good results in "Green Certificate" market transaction

In August 2018, HECIC Yanshan (Kuyuan) Wind Energy Co., Ltd. under HECIC New-energy and Arkema (Suzhou) Polyamides Co. Ltd, traded 2,050 green certificates through the national green certificate subscription platform, setting a record for the single highest "Green Certificate" subscription by an international company in the domestic electricity market.

In 2017, the Ministry of Finance, the National Development and Reform Commission and the National Energy Administration jointly issued the *Notice on Trial Implementation of Renewable Energy Green Power Certificate Issuance and Voluntary Subscription System*. It led to a nationwide trial issuance and voluntary subscription of "Green Certificates", and marked a shift in China's new energy development and utilization policies from "rigid direct subsidies" to "marketization".

This transaction with Arkema was HECIC New-energy's first involving "Green Certificates" with an international institution, and its record-setting volume accounted for nearly 7% of the total transaction volume on the "Green Certificate" platform in China. As such, the transaction helped to establish a positive market image and provide a new growth point for the market's subsequent development and improvement in capital turnover. It has made a useful exploration in integrating into the "marketization" of power trading after the issue of delaying in subsidy was resolved.



STEADY SUPPLY OF ENERGY

Stable gas supply and safe operations are prerequisites for Suntien to flourish in the future. Following Suntien's safety concept, which requires prioritizing safety, sharing responsibility, and managing risks before happening, Suntien has been constantly improving the quality of its services and its capacity for technological innovation to provide customers with a stable, convenient supply of high-quality clean energy.

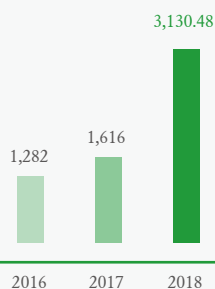


Safety Management

Operational safety is one of the pillars on which Suntien's long-term success depends. Suntien has obtained *Occupational Health and Safety Management System (OHSAS 18000)* certification and develops a comprehensive safety management system, including the establishment of safety system, implementation of safety responsibility system, inspection of hidden dangers and emergency management, the establishment of safety culture, the establishment of safety institutes. With continuous improvement and dynamic circulation mechanism, the safety management system enables closed-loop governance. In 2018, Suntien further enhanced its safety management and increased its input in safe production. By the end of 2018, the Company had recorded no safety incidents.



Investment in operational safety



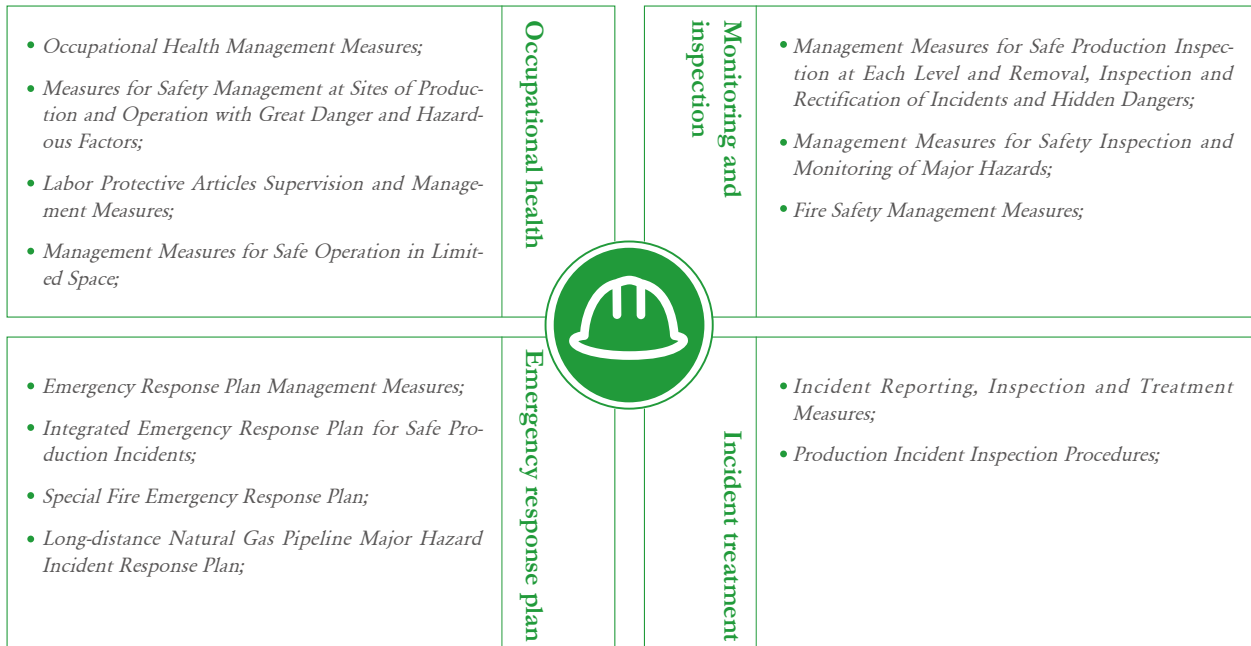
Investment in operational safety 2016-2018 (RMB10,000)

Establishment of safety institutes

The Company has established a Production Safety Committee to lead and coordinate safety-related work. The Safety Committee is led by the President of the Company and composed of people who are in charge of each functional department. Every season, the Safety Committee organizes meetings to analyze Suntien's production safety situation, to guide and supervise the Company's production safety work, and to solve significant production safety issues through rigorous study and effective coordination.

Establishment of safety systems

Suntien places great emphasis on safety system establishment. In accordance with the *Production Safety Law of the People's Republic of China*, the *Production Safety Regulation of Hebei Province*, the *Tentative Measures for Removal, Inspection and Rectification of Incidents and Hidden Dangers in Safe Production* and other relevant laws and regulations, Suntien has formulated extensive management regulations covering the areas of occupational health, emergency response, supervision and inspection, and incident treatment. In 2018, Suntien updated its *Management Measures for Safe Production Inspection at Each Level and Removal, Inspection and Rectification of Incidents and Hidden Dangers of Hebei Natural Gas* to further detail governance principles on management, design, construction, acceptance, and other processes, and specify rectification measures once identifying a potential danger.



Safety responsibility system

In 2018, Suntien proposed a “One Standard and Two Controls” safety management system, which means “one standard per position, one control per person, and one control per matter.” An Establishment Committee was created and empowered to lead and promote intrinsic safety. By formulating *Plan on the Implementation of the Establishment of the Effective Safety Management System*, Suntien specified goals, plans, and milestones. It also created a *Compilation of Manuals on Establishing, Learning and Using the Effective Safety System*, which includes manuals of “one standard per position” for seven typical positions at wind farms, 15 typical operations on “one control per matter,” a 6S management manual, cultural manual, and other documents.

Inspection of hidden dangers and emergency management

The Company maintains a “Double Control” system, which is a double prevention system to classify safety risk and to identify, control, and manage hidden hazards. In 2018, after analyzing and summarizing our experience on the double control system establishment during 2017, the Company issued *Implementation Plan on Building the “Double Control” System for Production Safety* to determine overall strategy, specify related concepts, and set work targets.

To prevent leakages, fires, explosions and other emergencies at urban natural gas pipeline network and minimize their potential damage to people and property, the Company inaugurated a series of emergency exercises and inspections to improve the staff’s ability to handle such situations. In response to the security situation in Xinjiang and to protect Suntien’s staff, the Ruoqiang Suntien Lop Village Wind Farm organized anti-terrorism exercises, practiced counterterrorism tactics and skills. The activities enhanced anti-terrorism awareness and coordination ability once emergency incidents happen.

On 19 June 2018

Hebei Natural Gas practiced emergency procedures for urban natural gas pipeline leakages in Xinji City.

On 11 October 2018

HECIC New-energy and Lingqiu CIC Hengguan Wind Energy Co., Ltd. conducted fire emergency evacuation exercises at Hangfengling Wind Farm.

On 3 July 2018

Hebei Natural Gas Laiyuan Branch carried out emergency valve leakage exercises.

Case

Hebei Natural Gas conducts exercises

On 30 October 2018, Hebei Natural Gas held drills on the *Long-distance Natural Gas Pipeline Major Hazard Incident Response Plan*. Various leakage scenarios for long-distance transmission pipelines were simulated. The practice tested staff's capability on accident identification, emergency plan start-up, on-site repair coordination, logistical support, gas supply resumption, and other key activities.



Case

Hebei Natural Gas earns a national honorary title

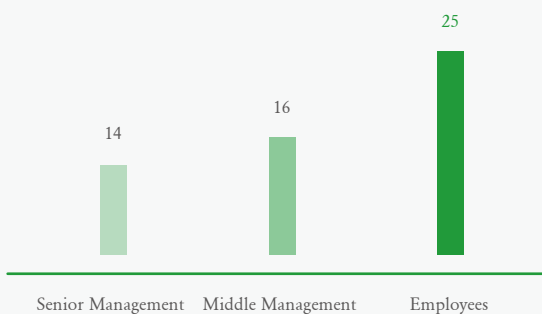
Following the principle of "Centralized Management and Unified Allocation," the Company Maintenance and Repair Center guarantees the safe development of Hebei Natural Gas. Being equipped with excellent equipment and skills, the Center has become a professional emergency team with quick response and strong capability to handle each emergency. The excellent performance earned them the honorary title of "Demonstration Position in National Safe Production for Young People" in 2017.

Building a culture of safety

In response to the National 17th Safe Production Month, Suntien launched a series of Safety Production campaigns to raise awareness of the importance of taking responsibility and applying strict inspection and preventive methods to ensure safety. Associated activities included production safety inspections. HECIC New-energy adhered to the *Plan for Special Rectification of Risks and Hidden Dangers in Safe Production at Crucial Time* and identified a total of 64 general hidden hazards. In addition, Suntien arranged safety educational workshops and organized "Don't turn your eyes away" picture competition to encourage staff to spot hidden hazards.

In terms of safety training, the Company strictly implemented the *Occupational Health Management Measures, Measures for Safety Management at Sites of Production and Operation with Great Danger and Hazardous Factors* and other documents. The Company also invited experts to hold safety training, displayed educational videos, and organized contests to stimulate staff to study the QHSE (quality, occupational health, safety, and environment) system.

Average training hours per person in 2018



On 11 June 2018, Northwest Region staff watched educational videos as part of the Safety Production campaigns.



The Offshore Wind Power Company held a QHSE management system knowledge contest.



Suntien organized its first safety knowledge contest.

Quality Management and Control

With new technologies, equipment, and operational models consistently emerging, the wind power industry has been developing rapidly. To prevent various risks and guarantee quality, Suntien always prioritizes management and control and attaches great importance to the establishment of a quality management system. Since being certified with ISO 9000 quality management system certification in 2010, Suntien has kept improving its management by establishing a comprehensive management system, enhancing peer communication, and honing professional skills. In 2018, Hebei Natural Gas was awarded the honorary title of “National Outstanding Company in Equipment Management.”

In terms of systems improvement, Suntien released *Project Construction Management Measures*, *Construction Project Quality Management Rules*, *Project Construction Progress Management Measures* and other documents. In 2018, Suntien formulated the *Manual on Standards of Wind Farm Projects Construction and Management*, which provides a comprehensive introduction of “standards on wind turbine installation and debugging, construction and management.” This document helps Suntien to further standardize the management in construction, implement management responsibilities, install wind turbines in a systematic, standard and legally compliant manner, and provide guidance for subsequent projects.

In terms of peer communication, the Company invites external experts to share technical knowledge and to discuss market trends and the application progress of state-of-art technologies. In June to November of 2018, the Company organized a series of peer communications covering basic forms of wind turbines, pre-installed booster stations, wind turbine installation and wind power converter, and launched the communication month with focus on engineering technology. These activities have greatly enhanced the staff’s professional skills, brought new ideas, and laid a solid foundation for the Company to manage future projects scientifically and professionally.

The Company has taken various actions to create an environment which is conducive to technical studies, innovation, and self-improvement. In 2018, the Company organized multiple training and competitions, such as new hire training, knowledge contest and skill competitions. These efforts have effectively motivated staff to improve their professional knowledge and practices of wind turbines and facilitated quality control in project construction, production and operation.

Case

HECIC New-energy trained new staff on wind turbine

In July, the Company organized a four-day training to help new staff have a glitch-free learning and transfer process. The training was given by experts from Longyuan Power, who held decades of working experience in the wind power industry, and included multiple sessions, such as in-class presentation, on-site exercises, final examination. Through the four-day training, new staff became familiar with the work content and learned the basic knowledge of the wind power industry.



Hebei Natural Gas held a professional knowledge contest

In November, eleven teams participated in the 2018 Professional Skill Competition held by Hebei Natural Gas. The competition was divided into electrical and natural gas sectors and gave a wide range of staff the opportunity to show their outstanding talents. In the meantime, it functioned as an open and transparent channel for talent selection.



HECIC Group participated in wind power competition

HECIC Group held its 2018 Employee Skill Competition for the Wind Power Sector. Participating staff competed in the areas of theoretical knowledge, professional operation and professional maintenance operation. The contest provided opportunities for many outstanding employees to present their excellent skills in maintaining wind power operation and stimulated employee work passion.



Customer Service

Suntien adheres to the philosophy of “Customer and Quality First,” so as HECIC New-energy and Hebei Natural Gas. For HEIC New-Energy, wind and photovoltaic power are purchased by local power grids. The Company maintains timely communication so that their demands and needs can be promptly and fully satisfied. Hebei Natural Gas mainly serves residential and enterprise users. The Company has developed management rules and position guides including *Standardized Management Measures for Customer Services*, *Standardized Management Measures for Door-to-Door Services*, *Standardized Management Measures for Hotline Center* and the *Complaint Handling Process* to ensure a safe gas supply and excellent customer service. It has also formulated *Rules for Customer File Management* to standardize the management of customer information and secure customer privacy.

To collect and effectively respond to customer feedback, Hebei Natural Gas has developed *Rules for Interview Management on Customer Satisfaction*, which requires follow-up process for every complaint and/or gas leakage incidents. In 2018, the Company recorded a total of 88 complaints and 44 commendation cases, with the overall satisfaction ratio reaching 99.32%.

99.32 % 

Customer satisfaction rate

Number of complaints received in 2016-2018

CUSTOMER TYPE	2016	2017	2018
RESIDENTIAL	89	66	88
NON-RESIDENTIAL	0	0	0

Results of Customer Satisfaction Survey, 2016-2018(%)

CUSTOMER TYPE	2016	2017	2018
RESIDENTIAL	99.2	99.4	99.3
NON-RESIDENTIAL	100	100	94.1*

*Note: The customer service of Hebei Natural Gas conducted a satisfaction survey on non-resident users in 2016 and 2017, and the result was 100%. In 2018, the company opened a complaints hotline to respond to customers' feedback specifically. The statistical result was 94.1%

RMB 163,000 

Investment in safety publicity

8,661.5 Hours 

Providing safety-related services

Safety is a fundamental concern at Hebei Natural Gas. To give customers and the public a better understanding of how to use natural gas safely, the Company organizes “Community Pipeline Safety” campaigns, which includes distributing safety brochures, organizing award-winning quizzes, giving public workshops. In 2018, the Company invested RMB163,000 in safety publicity and provided 8,661.5 hours of safety-related services.

In Chengde, customer service staff placed ten outdoor display boards in seven communities after communicating with property management companies. Approximately 13,400 households, would benefit from having the boards as it presented how to select a natural gas cooker, how to inspect flexible pipes, and how to deal with gas leakages. In Linxi County, Linxi New-energy organized gas safety campaigns with the committees of Cao Village and Hexigang Village. Customer service staff educated residents on basic safety knowledge and measures to deal with emergencies. In Qinghe, Qinghe CIC participated in a campaign led by the local government, “inspection and rectification of hidden hazards,” while advocating the replacement of coal with electricity and gas. Qinghe Company staff outlined principles of gas transmission, gave instructions on the safe use of gas cookers and the maintenance of pipelines, and explained prohibitions in gas use and emergency measures for gas leakages.

Case

Hebei Natural Gas participates in the Safe Production Consultation Day

On 18 June, Hebei Natural Gas participated in the Safe Production Consultation Day in Jinzhou, Xinji, and Shenzhen. The company distributed gas safety brochures, handbags with gas safety slogans, a letter to gas users, and gas pipeline protection brochures to citizens. Representatives answered residents' questions as well as offering useful instructions on how to deal with gas leakages and raising basic knowledge of natural gas safety.



Participation in the “Smiling Service Ambassadors with Politeness, Etiquette and Courtesy” National Tryout

Kongwah Group held its third national “Smiling Service Ambassadors with Politeness, Etiquette, and Courtesy” competition in 2018, attracting 43 entrants from 10 regions across the nation. The Company was awarded the “Prize for Outstanding Organization” in the northern China region, and participants from the Company were named as “Smiling Service Ambassadors.”



Technological Innovation

RMB **8.04** million 
Investment in R&D

4

Patents 

With years of technology development and industry transformation, wind power and other clean energy industry have fully integrated technologies of digitization, informatization, and advanced manufacturing. To keep up with the rapid development and approach to sustainability, Suntien follows a management philosophy of “Changing with the Times” and places great emphasis on R&D and innovation. By taking advantages of many high-tech, such as automation, intelligence, Suntien facilitated the trends of transferring clean energy from supplementary energy to alternative energy. In 2018, the Company invested approximately RMB8.04 million in R&D.

Suntien pays great attention to R&D and establishes an innovation system, which is based on enterprise, oriented by the market, and developed by university-industry collaboration. In terms of protecting intellectual property rights, the Company strictly complies the *Patent Law of the People's Republic of China* and the *Rules for the Implementation of the Patent Law of the People's Republic of China* and manages granted patents systematically. In 2018, Suntien obtained four patents and had no record of any intellectual property rights infringement.

Externally, Suntien strengthens opening and cooperation and strives to establish communication platforms with other entities and organizations. It has organized a variety of technological exchange and workshops to help the industry move forward. In January 2018, Suntien participated in the “Innovating & Dreaming-Exhibition of Technology Innovation Achievements in Hebei Province” held at the Convention and Exhibition Center in Liberation Square, Shijiazhuang. The exhibition displayed 989 technology innovation results from all employee at Hebei Province. Hebei Natural Gas presented four innovation: a wooden wedge anti-leakage clamping device, a new type of wooden wedge, an air-ground integrated drone-based natural gas pipeline safety management system, and a rain cover for valve actuators.



Case

Hebei Natural Gas obtained “Outstanding Work” award at the 4th Chinese Enterprise Micro-course Competition

In 2017, Hebei Natural Gas organized training on the design and development of micro-courses. After going through projects submission, micro-course preparation, review, modification, and other processes, the Company developed a total of 108 micro-courses. One of these courses, “How to Measure the Potential in Power Failure for Pipeline Cathodic Protection,” was awarded a prize for outstanding work at the 4th Chinese Enterprise Micro-course Competition in 2018.





03

BUILDING A DEVELOPMENT PLATFORM

Suntien's growth and development are based on a comprehensive human resources management, good teamwork and hard-working staff. The company follows a principle of building people-oriented and harmonious working atmosphere, it ensures legal and reasonable employment, it also provides a great platform for staff's development and cares about employee's health and life. Suntien strives to help employee to realize their full potential value and promote themselves along with company all the time.



Employment and Welfare

Suntien firmly hires staff in accordance with all relevant laws and regulations like *Labour Law of the People's Republic of China*, *Employment Contract Law of the People's Republic of China*, *Protection of Minors Law of the People's Republic of China* and so on. According to these, Suntien formulated *Employee Management Measures* with specific provisions on recruitment, promotion, reward and punishment. It is explicit about employees' basic rights and obligations and also provides a fair and reasonable working environment. The Company ended any tolerate discrimination on the basis of gender, race, religion, age or political beliefs, and does not employ child or forced labor. If a child laborer is found in the company, he will be took home by arranged person and made sure he's well took care by lawful guardians. In 2018, Suntien signed employment contracts with all employees, and all employees were covered by a collective bargaining agreement. All Suntien's employees are Chinese, and no child laborer or forced employee phenomenon was found in the past year.

Comprehensive and reasonable remuneration could totally arise employee's enthusiasm and enhance internal cohesion with the company. Suntien provides employees with an industry-competitive and incentivizing remuneration, and consistently works on improving its remuneration and welfare mechanism. To this end, it formulated *Remuneration Management Measures* with provisions of employee salary adjustment mechanism to ensure fair and reasonable remuneration management.

Suntien and its subsidiaries won a number of prizes on staff employment aspect in 2018, and completely manifested its efforts and achievements in building harmonious working atmosphere:

- Suntien was awarded "May 1st Labor Award in Hebei Province".
- HECIC New-energy was awarded "Best Employer in Shijiazhuang" for the second consecutive year.
- HECIC New-energy and Suntien New Energy Technology Co., Ltd., were awarded "Outstanding Enterprise in Labor Protection, Laws Abiding and Integrity in Hebei Province".
- HECIC New-energy Haixing Wind Farm was awarded "National Pioneer Worker".
- HECIC New-energy Lianhuatan Wind Farm was awarded "Pioneer Worker in Hebei Province".

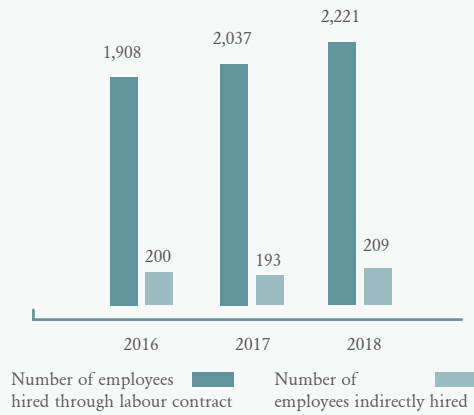
Case

Hebei Natural Gas held human resources workshop to improve awareness on employment compliance

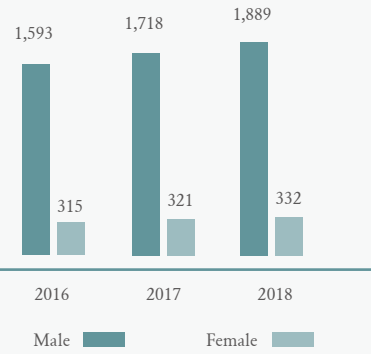
In June 2018, Hebei Natural Gas held the workshop of "Prevention of Legal Risks in Labor Employment", a total of 43 employees participated in this activity, to improve the company's management ability of preventing illegal employment risks. Hebei Natural Gas reviewed human resource problems experienced by its branches, and then adjusted course content based on actual cases and current situation. It also invited professional lawyers to give detailed instructions of employment laws and practical cases, to let employees gain a deep conscious of useful legal provisions and some easily disputed part.



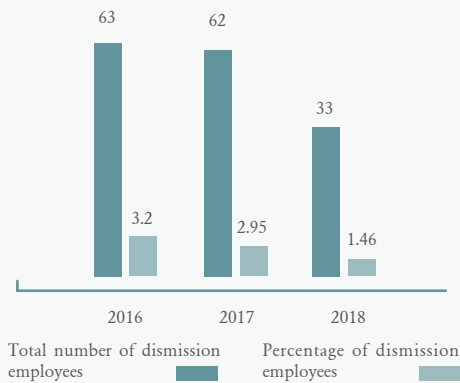
Distribution of employment by employee type, from 2016 to 2018 (person)



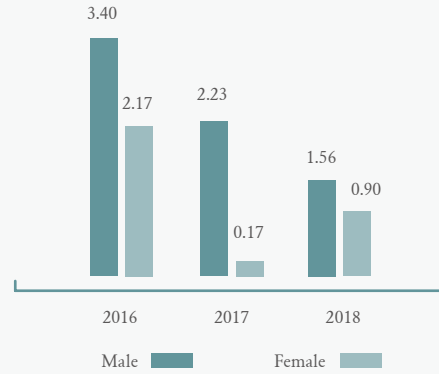
Distribution of employment by gender, from 2016 to 2018 (person)



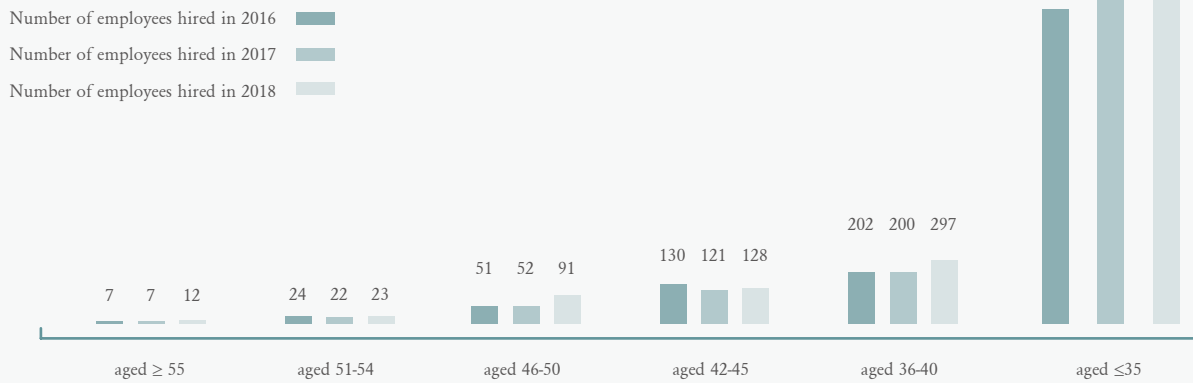
Total number (person) and percentage (%) of dismissal employees, from 2016 to 2018



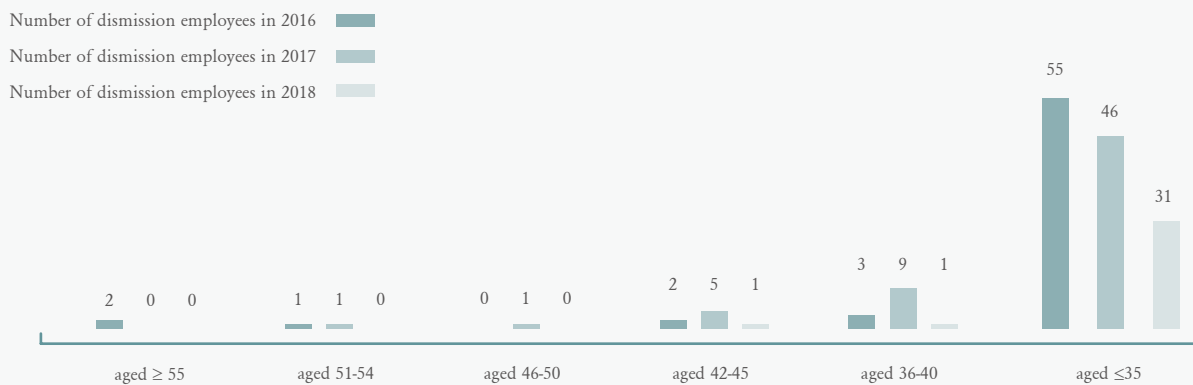
Percentage of dismissal employees by gender, from 2016 to 2018 (%)



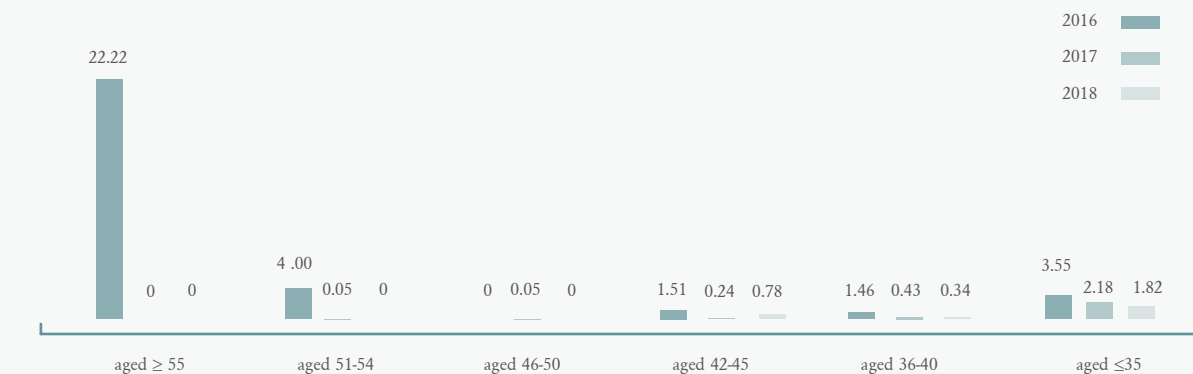
Distribution of employment by age, from 2016 to 2018 (person)



Distribution of dismissal employees by age, from 2016 to 2018 (person)



Percentage of dismissal employees by age, from 2016 to 2018 (%)

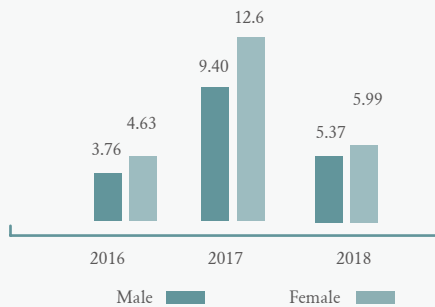


Training and Education

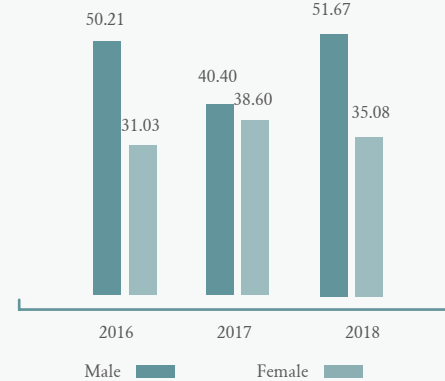
Mature and perfect training system could contribute to corporate culture development and steady operation. Suntien attaches great importance to employee growth and actively creates an atmosphere in which all may aspire to improve their knowledge, skills and enhance competitiveness with the result that employee could sustainably grow along with company's development.

Suntien sets up a range of training contents and management processes in a progressive and logical way. It established *Management Measures for Induction Training of New Employees of China Suntien Green Energy Corporation Limited*, *Management Measures for Internal Training Team of China Suntien Green Energy Corporation Limited* and *Employee Training Management Measures of China Suntien Green Energy Corporation Limited* and other internal systems. In order to meet professional requirements and staff needs, the company offers unique training courses according to different positions, and carries these courses out via on-site training, online teaching or real technical workshops, to strongly ensure that the company could build a diversified and accurate talent team.

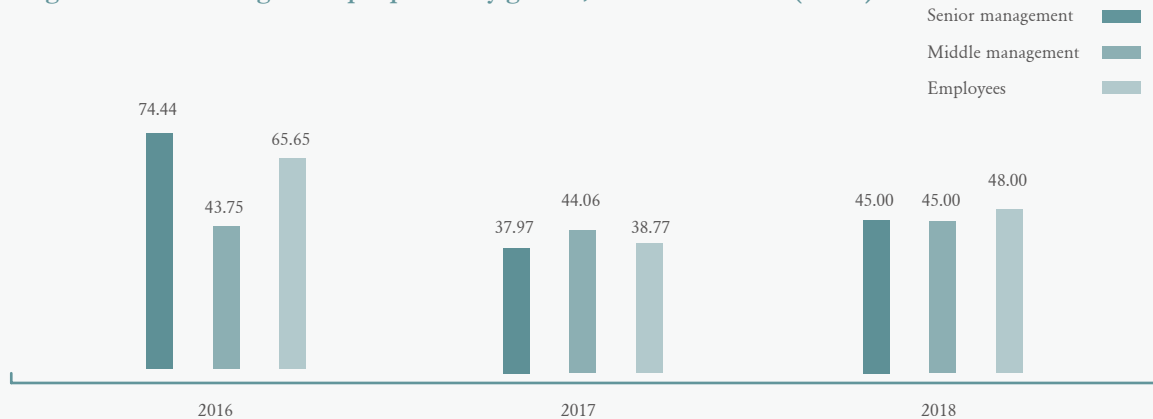
Average number of training sessions per person by gender, from 2016 to 2018 (times)



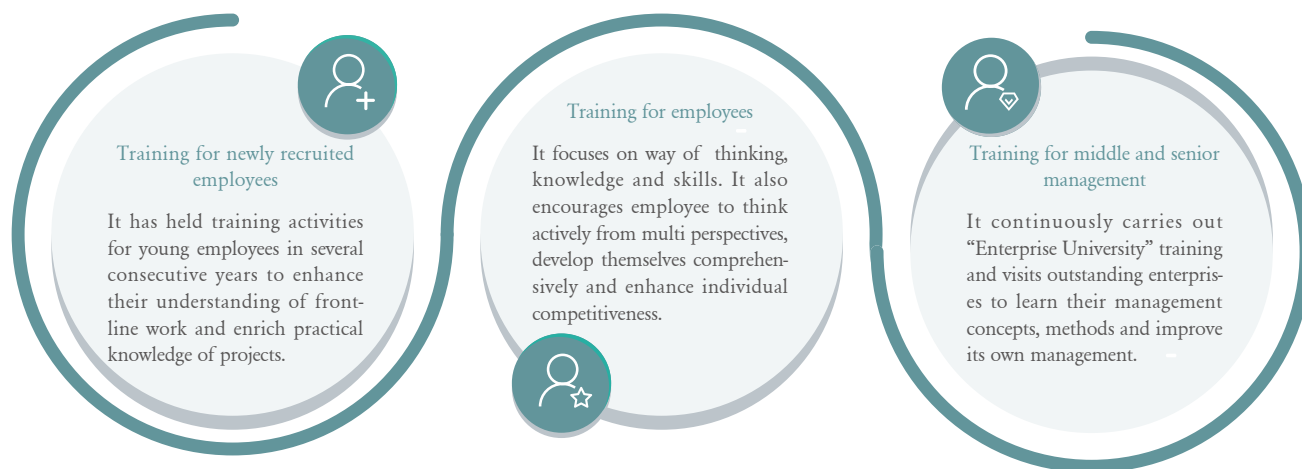
Average number of training hours per person by employee type, from 2016 to 2018 (hours)



Average number of training hours per person by gender, from 2016 to 2018 (hours)



Suntien's employment training system



Case

Suntien carried out training classes for integrated improvement of management

In September 2018, Suntien arranged 50 management members to participate in "Training Classes on Overall Quality Enhancement for Management" held by Tsinghua University. The training covered several topics including target management, performance enhancement, creative thinking, decision-making, enterprise-media relationship and so on. Through such management education courses, the company is able to further refine its management skills while innovate management concept based on a solid theoretical knowledge.

In September 2018, Suntien launched a series of training courses for newly promoted managers, which drew lessons from MINI-MBA concept of developing middle and senior managers. These courses integrated external instructor and internal fostering with topics such as leadership quality, operational management and industry trends. Participants gained a solid understanding of role, function and responsibilities entailed by their new positions.

Case

Suntien organized "Enterprise University" training program- "Learn from Alibaba"

In November 2018, at Alibaba headquarters, Suntien convened "Learn from Alibaba" training classes for middle and senior management. The classes combined intensive lecture and visit of benchmark enterprise to further deeply advance participants' innovation and management ability. A total of 44 members joined this training which was based on actual operation conditions of Suntien. The members selectively and creatively learned from those excellent enterprises' development models and culture, improved their management ability and consolidated talent team.





Case

Suntien held “Experience Front-line” activities for young employees

Suntien thinks highly of young employee’s cultivation and development, and regards young employees as pioneers of corporate. Since 2015, the Company has continuously held “Experience Front-line” activities for young employees, which could enhance their consciousness of practical work in front-line, while steel their will power and physical strength. In 2018, about 16 young employees participated in a series of experiencing front-line activities at Zhong An Wind Farm, a site of HECIC New-energy’s Inner Mongolia Regional Company, which included learning “Spirit of Persistence”, visiting “Most Beautiful Booster Station”, accompanying inspectors on a 9 km electric wire examination tour and visiting microcosmic wind farm sites. These activities strengthen young employee’s group spirit and help them integrate into Suntien more quickly.



HECIC New-energy positively promoted establishment of internal training system to enhance training level

From June 2018, HECIC New-energy and Suntien New Energy Technology Co., Ltd. launched three phases of training lectures about micro-course design and development to advance establishment of internal training system, improve training informatization level and promote innovation of internal training model. The training lectures included background of micro-courses and actual operation. It helped employees master application of information technologies for internal training, enhanced self-learning ability and constructed learning culture for corporate.



Care and Communication

Maintaining open channels of communication with employees and providing stable life condition for them could help to stimulate individual initiative and enhance productivity. Suntien therefore extends its deep care to all employees through *Management Measures for Employee Aids*, these provide clear provisions on conditions and amount of subsidies and assistance as well as management process, devoted itself in solving tangible difficulties of employees in a practical way. Suntien also guarantees female employees' lawful right of maternity leaves, and strives to create an gender equality working environment. In 2018, a total of 35 employees obtained maternity and paternity leave, of whom 88.6% returned to their position after leave.

Suntien takes note of its interaction and communication with employees. Open and easy communication can reinforce cooperation between the company and employees also among employees. To reinforce this dynamic, Suntien formulated *Employee Representative General Meeting Management Measures of China Suntien Green Energy Corporation Limited*. Employee representatives are elected by vote, and regularly communicate with the company on topics ranging from working conditions to employee needs and concerns. The Company frequently acts on solving issues came up with employee representatives in a timely and effective manner.

Suntien organizes employee activities on occasions such as Women's Day and the Spring Festival every year to provide full care about their mind and matter. The company also organized cultural, entertainment and sporting activities which contribute to build a healthy work-life balance.



Case

Suntien provided WeChat platforms for employee self-expression and communication

Suntien is diligently operating official WeChat account "The Suntien Green Energy" which is used to encourage employees to make proposal and carry out some activities relevant to their daily life. The platform provides an efficient and convenient way to show employee's accomplishments, case study of outstanding employee and information of company dynamics.

Special video on "The taste of Home"

In February 2018, Suntien released a special video of "The taste of Home" after one year preparation and production. It traced several employees returning to their hometown from distant places for the Spring Festival, vividly and deeply displayed the struggling and hard-working spirit of workers. Suntien has been caring about every employee and striving to build a warmly home-like atmosphere.

Special activities for "Remain true to our original aspiration and keep our mission firmly in mind"

In June 2018, Suntien launched a special activity to publicize story of outstanding party members. Articles described their accomplishments and high morals in detail and set them as inspiring examples to impel others to serve people better.

Special feature on "Paying Tribute to Workers"

In May 2018, Suntien selected several representative advanced work units, and display the diligent and hard-working characters of Suntien employees by describing growth of these units, fully recognized their efforts paid and contributions to the company.

"Memory - 2018 Series" videos

At the end of 2018, Suntien released a series of videos. The videos depicted the reform measures, developments and changes of the Company experienced in 2018 in employee's point of view.



Case

Suntien launched a tie-dye activity for female employees

In March 2018, Suntien organized a creative and enjoyable tie-dye activity for female employees to inspire their manual ability and aesthetic taste. Under the guidance of professional staff, participants learned not only the basic knowledge of dying fabrics, but also how to carry out manufacturing procedures such as sticking, stitching, binding and embellishing.



Suntien visited front-line and poverty-stricken employees on the eve of the Spring Festival

On the eve of the Spring Festival in 2018, the management of Suntien visited and communicated with front-line, poverty-stricken employees and leading group of poverty alleviation. They learned about the household conditions of poverty-stricken employees to ensure that the company offered practical solutions for their problems and needs.

Suntien launched employee marathon activity

In October 2018, Suntien organized the second “I Exercise and I’m Happy” marathon activity, which appealed over 70 employees to participate. This marathon set up 10-kilometre and 20-kilometre competition groups to let every employee within different exercise ability join this activity. The activity greatly helped employees to enrich personal life and cultivated interest in a healthy and green way.



Suntien held “Meeting friends through reading” activity

In 2018, Suntien held “Meeting friends through reading” activity aimed at “enriching mental and cultural life of employees, strengthening communication and interaction among employees, and building a platform for employees to broaden horizon, communicate freely and promote each other”. The reading activity contributed to the development of a learning-based enterprise, as well as instructed employee to enrich reading interest and personal learning ability.





INDUSTRY UPSTREAM COOPERATION

Suntien advances accountability procurement and ensures that suppliers follow principles and values consistent with ours. Besides, the Company applies strict management measures, tries its best to minimize related environmental and social risks along with our supply chain, and promotes the idea of sustainable development at every stage of the entire life cycle of our operation.





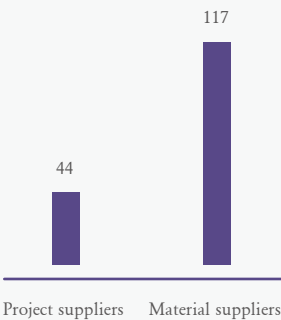
Supply Chain Management

In connection with its business development direction towards new and clean energy, Suntien mainly cooperates with project and material suppliers. Projects suppliers include designers, constructors, and supervisors for the wind power and natural gas businesses, while material suppliers provide materials for operations and offices, including turbines, transformers, natural gas transportation equipment such as pipes and valves, and office equipment and logistical services.

Suntien strictly complies to the *Law of the People's Republic of China on Tenders and Bids*, the *Regulation on the Implementation of the Bidding Law of the People's Republic of China* and other relevant laws and administrative regulations. To establish stable and win-win partnerships with suppliers, Suntien has successively established management systems including *Construction Project Tendering Management Measures*, *Construction project Management Measures*, and *Construction Project Quality Management Measures*. In 2018, Suntien further optimized its supply chain management on material procurement, bidding, requirements on suppliers' qualifications, and supplier evaluation.

Hebei Natural Gas developed *Materials Procurement Management Measures*, which require suppliers to submit letters of commitment on integrity and to refrain from bribery and other improper practices during the procurement process. The Company follows the principles of fair competition and selects suppliers fairly and impartially. Besides, the Company respects and protects intellectual property rights and business secrets. In terms of bidding, Hebei Natural Gas developed *Bidding Management Measures* to regulate the management of project suppliers. The northwest region formulated *Material Procurement Management Measures and Processes* and started to assess its effectiveness on enhancing project quality and investment efficiency.

Number of suppliers in 2018



Number of major supplies to suntien by region in 2018

China	272
America	1
Europe	1



To optimize supplier resources, Hebei Natural Gas developed *Measures for Project Construction Supplier Assessment and Appraisal Management*, which establishes routine, annual and warranty appraisals as a means of reviewing the work of different suppliers. The review covers personnel arrangements, construction safety, progress control, and services quality. It also requires suppliers to fill out the warranty appraisal upon the maturity of the warranty period. HECIC New-energy developed *Measures for Supplier Management* and established “blacklist” and “red list” mechanisms. By regularly updating the *Project Suppliers Directories*, the company establishes a dynamic management system on suppliers.

Communication With Suppliers

In pursuit of win-win results with suppliers, Suntien places great emphasis on the common growth with suppliers and strives to broaden cooperation channels. With an open, equal, cooperative, and mutually beneficial mindset, Suntien strengthens its communication with suppliers through a various way, including regular on-site visits, workshops, and others. Together with our suppliers, Suntien actively explores industry development trends, seeks technical breakthroughs, and continuously optimizes its management model.



Case

HECIC New-energy held wind turbine product technological exchange

Shanghai Electric Wind Power Group Company Limited was invited by HECIC New-energy for exchange on wind turbine product technology. During the activity, experts from Shanghai Electric introduced the 2.XMW low-speed wind turbine product and 3.XMW product, exchanged ideas on and analyzed the technological aspects of large output generators in their future development. The exchange deepened the understanding of HECIC New-energy on new wind turbine models, providing technological support for the development direction in scientific management and professional construction of its future engineering projects.







ENVIRONMENTAL IMPACT CONTROL

“Developing clean energy, building a harmonious home” continues to be a primary mission of Suntien, and the company implements innovative, coordinated, green and open development concepts to achieve that result. The Company strongly believes that protecting the environment is also protecting productivity, and thus strives to accelerate the development of wind power, natural gas and other clean energy markets and construction of projects. Speeding the development of clean energy is also along with preservation of resources and environment. Suntien has positively responded to China’s 13th Five-year Plan for environmental protection to promote the green and sustainable development of the industry by proceeding green and low-carbon development, energy efficiency, emission reduction and building of a green society.

Use Of Resources

Saving resources and improving resource efficiency can not only be economically beneficial, but also could contribute to the long-term development of enterprises and provide solutions for resource shortages and environmental pollution. As part of its social responsibility commitment, Suntien aims to save energy, reduce emissions, improve efficiency and protect the environment in every aspect of its operations. In accordance with *Energy Saving Law of the People's Republic of China*, *Measures for Energy Conservation Pollution Emissions Reduction Management of Hebei Construction & Investment Group Co., Ltd.* and other relevant laws or regulations, the company developed *Energy Conservation and Pollution Emissions Reduction Management Measures* for its headquarters and subsidiaries. This provides clear provisions on responsibility of all departments in terms of energy saving and emissions reduction. It also established a leading group which is responsible for implementation and assessment of company's efforts on energy saving and emissions reduction.

The company requires all entities to set down annual targets for energy conservation and pollution emissions reduction. And they should draw up appropriate plans for their implementation to achieve targets. Suntien also pays attention to promote green office concept and implements green construction in all projects to promote green mechanism to last long-term effect.

Suntien formulated *Technological Upgrading Project Management Measures* to improve existed technologies from production process, technic, research and testing aspects. It consistently improves management way, eliminates outdated, excessive energy consumption and high polluted technology or equipment. These measures aim in guaranteeing project's safety and stability while pursuing low-cost and environmental friendly. Water used in company operation or projects is drawn from municipal water supplier which mean no consumed water is took directly from river, lake or other natural water sources.

Suntien resource conservation measurements

Green management

- Actively publicizing guidelines and policies on energy saving and emission reduction to all employees and enhance the awareness on energy saving and emission reduction in a practical way.
- Incorporating energy saving and emission reduction indicators into entity and individual's performance assessment. Also entity and individual which have made prominent progress in technic development for emission reduction and promotion will be recognized and rewarded.
- Irregularly reviewing the achievements of energy saving and emission reduction targets of all leading groups.

Green office

- Saving electricity: actively promoting video meeting system to replace traditional projector equipment
- Saving paper: promoting development of information systems, reducing demand for paper, advocating paper recycling and two-side printing
- Saving water: reporting to property management enterprise for repairing water leakage and pasting banners of saving water

Green construction

- Carrying out green construction concepts in the design stage of new projects
- Promoting the adoption of new materials, processes, technologies and equipment and striving to eliminate "backward" processes and equipment

Suntien air pollutants in 2018

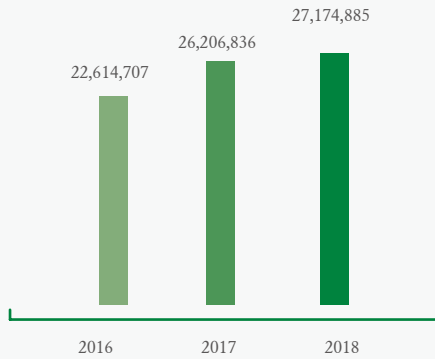
Pollutant type (kg)	
Total emissions of sulphur oxide	29.54
Total emissions of nitrogen oxide	25,676.61
Total emissions of particulate	2,458.39

Suntien energy consumption in 2018

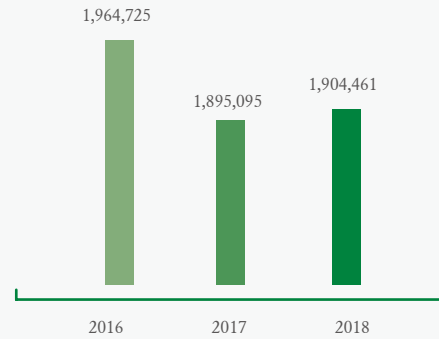
Energy type (unit)	Consumption in 2016	Consumption in 2017	Consumption in 2018
Energy consumption for an output value of RMB10,000 (tce)	0.0137	0.0095	0.0066
Greenhouse gas emissions (tCO ₂ e)	29,687	32,240	32,723
Emissions of carbon dioxide equivalent for an output value of RMB10,000 (tCO ₂ e)	0.0642	0.0457	0.0328

Energy Consumption of Suntien from 2016 to 2018

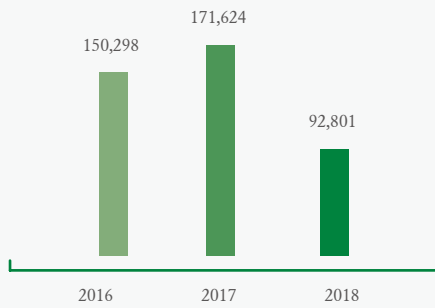
Electricity consumption from 2016 to 2018 (kWh)



Gasoline consumption from 2016 to 2018 (litre)

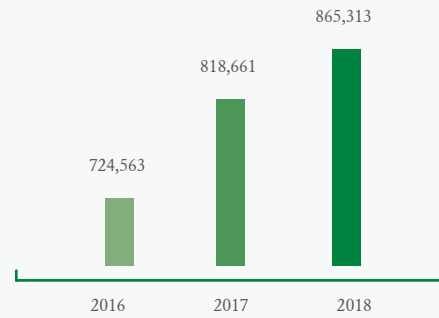


Diesel consumption from 2016 to 2018 (litre)

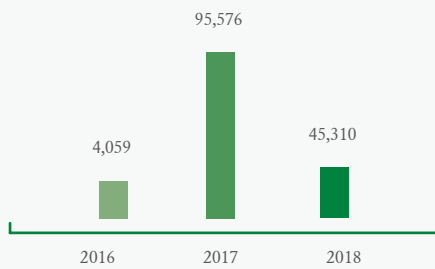


The scope of diesel consumption was adjusted in 2016 which no longer included the 574,448 litres of diesel consumed by contractors.

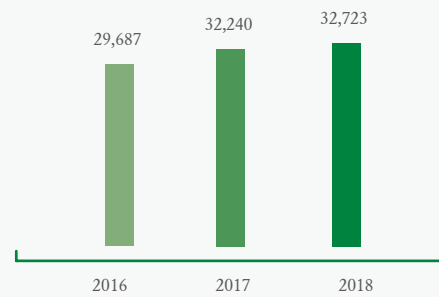
Natural gas consumption from 2016 to 2018 (cubic metre)



Liquefied petroleum gas consumption from 2016 to 2018 (kilogram)



Greenhouse gas emissions from 2016 to 2018 (ton)



Waste Management

It is inevitable to produce a certain quantity of office, construction and living waste in the Company's routine operation. To effectively manage those waste and prevent environmental pollution caused by random disposal, the Company strictly follows *Environmental Protection Law of the People's Republic of China*. The Company considers "Repairing Old Matters and Aecycle Waste Materials, Coordinated Management and Centralized Disposal" as its principle and regulates disposal of waste from all sources including daily office, project construction, operation and maintenance. The Company strives to minimize the negative impact on environment due to waste disposal.

Hebei Natural Gas developed *Equipment Management Measures* and *Environmental Protection Management Measures*, HECIC New-energy developed *Waste Materials Disposal Management Measures* to regulate the management of old and used equipment, improve the efficiency of renewable resources and let waste disposal realize the harmlessness, resource utilization and reduce, finally eliminate resource waste and environmental pollution.

The waste generated during Suntien's project construction and operation would be treated by qualified third parties. Except producing some smoke and waste water during inspection and reparation of equipment, the Company would not discharge other harmful pollutants in its operation process.

Waste from daily office and living	Waste from project construction and operation
<ul style="list-style-type: none"> Recycle waste office paper Manage and recycle waste batteries from office Domestic garbage delivers to waste disposal station by third parties 	<ul style="list-style-type: none"> Earthwork, gravel, sand and concrete are uniformly stacked and regularly disposed by contractor Waste oil, liquid, used batteries and other metal matters are transported to the rubbish station or recycled by third parties Waste packaging materials are recycled

Waste generated and treated by Suntien in 2018

		Generation (ton)	Treatment capacity (ton)
Packaging waste	Wood	3	3
	Plastics	0.5	0.5
	Glass	0	0
	Steel and metal packaging	0	0
Electronic waste		0	0
Construction waste	Earthwork	50	50
	Masonry	5	5
	Wood	2	2
	Scrap metals	10	10
	Mortar and concrete	10	10
Domestic garbage		18.15	5
Office waste		1.9	1

Generation of Hazardous and Non-hazardous Waste of Suntien in 2018 and Intensity

Generation and Intensity of hazardous and non-hazardous waste	
Generation of hazardous waste (ton)	10.2
Intensity of hazardous waste (ton/RMB10,000)	0.00001
Generation of non-hazardous waste (ton)	100.55
Intensity of non-hazardous waste (ton/RMB10,000)	0.0001

Ecological Protection

The sewage, noise pollution and solid waste generated during the construction and operation of projects can potentially cause adverse effect of surrounding environment. In 2018, the National Forestry and Grassland Administration issued *Interim Measures for Approval and Management of Facilities Construction in National Nature Reserves* and drafted *Notice on Standardizing the Construction and Use of Forest Land for Wind Farm Projects (Draft for Soliciting Opinions)*, which propose requirements of site selection for wind farms and construction of forest land.

Suntien positively responses to national policy and does business based on environmental protection. During project construction, it also devotes itself to green construction, effectively and legally manage pollutants discharged; After completing project, Suntien will reclaim project's surrounding land to protect biodiversity. Suntien commits to follow out energy saving and environmental protection concept in the whole process of project construction. In 2018, Suntien invested a total of RMB10,926,800 in environmental protection, mainly for new land projects, and land restoration for wind farms built in 2017.

RMB 10,926,800 
Investment in environmental protection

To prevent environmental disasters, Suntien has developed Policies on *Environmental Emergency Response* according to industry characteristic. Through comprehensive of industry characteristic, the company could estimate its possible occurrence of environmental incidents, then formulates appropriate handling measures and processes for preventing and responding to emergency accidents. Besides this, Suntien also continuously updates emergency manual and annual safety examination of the whole company which could effectively prevent environmental emergency incident. In 2018, Suntien had not been punished due to environmental pollution or illegal emissions, and no record of biodiversity destruction.



Case

Suntien Junan improved drainage to protect surrounding environment

Suntien Junan Wanghai Wind Farm Project's N19 turbine is located at hillside which has a steep slope. Previously, rainfall would be channeled into a simple drain. Due to the steep slope, the rainwater accumulated in simple drain would flow into farmland at the foot of hill in high velocity and cause damage to crops and soil. In 2018, Suntien Junan Branch Company built a sump laid drainage pipes to replace previous simple drain. Thus, rainfall would flow into sump firstly and then drain into adjacent pond through drainage pipes to protect surrounding ecological environment.



Case

Suntien organized employee volunteer to plant trees

On 16 March 2018, Suntien employees was carrying out an annual tree planting voluntary activity in Xiaobilin, Shijiazhuang City. All employees worked together, carried seedlings, shoveled soil, planted seedlings, and finally successfully planted plenty of trees. This voluntary activity are a fulfilment of Suntien’s commitment to beautifying community environment and enhancing environmental protection awareness of its employees.





Case

Offshore Wind Power volunteers launched protection of migratory birds activity

On 14 June 2018, more than 10 volunteers from Offshore Wind Power's employee helped to protect migratory birds at Daqing River Migratory Bird Rescue Station. After understanding basic knowledge of migratory bird's habits, volunteers engaged in feeding migratory birds in designated feeding area and learnt tame process before letting birds return to nature. This activity greatly enhanced employees' knowledge of migratory bird's habits and protection measurements. Moreover, it helped employees and the Company to establish green development idea in an effective way, to integrate concept of protecting environment and animal into daily life and work.





CONTRIBUTING TO SOCIAL DEVELOPMENT

Suntien gives back to society in many ways, including carrying out targeted poverty alleviation work, providing financial assistance to students, and through a range of volunteer services.





Targeted Poverty Alleviation


RMB 545,000
 Investment in Leguo Village's poverty alleviation

In response to national “in-depth implementation of targeted poverty alleviation and getting rid of poverty,” Suntien follows the requirements of the Targeted Poverty Alleviation Working Group of Hebei Province by raising the income of residents of Leguo Village, Huangqi Town, Fengning Manchu Autonomous County, Hebei Province.

With a large but barren land area and sparse population, Leguo Village is located 50km to the north of Fengning County and has a total of 147 poverty-stricken households with 303 people under registration. Since 2016 when Suntien started targeted poverty alleviation, a special working group has been established and conducted in-depth investigation multiple times. The investigations revealed that poor natural resources, poor infrastructure, low collective income and a lack of knowledge to get rich are the significant barriers to the development of the village. After discussing with the village government, the Company prepared a *Three-year Plan on Targeted Poverty Alleviation in Leguo Village* and a *Working Plan of the Working Group in Targeted Poverty Alleviation*.

The year 2018 was the most crucial year in the plan. Suntien paired five village households with one employee and organized “field visits week” and “household visit at harvest month” activities. During these activities, Suntien visited every poverty-stricken household to gain a deep understanding of local conditions. The Company henceforth improved the poverty alleviation accounts of 143 households, including one account for one village, medical guarantee, pension certificate, minimum living guarantee, agricultural comprehensive subsidy certificate, and manual for poverty alleviation. After fully understanding the poverty situation, the Company carried out many targeted projects under the “hematopoietic and endogenous poverty alleviation” model to provide substantial assistance to villagers. At the end of 2018, Suntien had lifted 299 people from Leguo Village out of poverty. The overall poverty rate is now less than 2%. The Company’s total investment in poverty alleviation reached RMB545,000.

“Blood-transfusion” poverty alleviation

Household visit: On the eves of Mid-Autumn Festival, National Day, New Year’s Day and Spring Festival, Suntien visited poverty-stricken households and provided necessities for them.

Material donation: On the eve of 1 July 2018, Suntien organized clothing donations to solve the clothing shortage issue.

Photovoltaic power transmission: Suntien established a photovoltaic power station at Leguo Village and donated revenues into charity and industrial development.

“Hematopoietic” poverty alleviation

Policy publicity: Suntien explained government poverty alleviation policies and favorable policies for farmers while visiting poverty-stricken household.

Industrial poverty alleviation: Suntien provided industrial dividends, integration of agriculture-related funds and free provision of seeds and fertilizers and increased villagers’ income by nearly RMB1,000 each year.

Employment poverty alleviation: Leveraging on its technical advantages, Suntien offered job opportunities such as riverway administrators and forest rangers, which helped 40 poverty-stricken households find employment with an annual income of RMB3,000-8,000.

Building greenhouses: Suntien built eight greenhouses, 20 cold sheds, and ancillary facilities, which were managed by the local government to increase the collective income of poverty-stricken households.

Other branches and subsidiaries of Suntien carried out many assistance activities. Suntien Wind Energy Co., Ltd. undertook the construction of cultural facilities for eight villages including Caogoubao Village, Shangliluo Village and Taojia Village in Caogoubao Township, Yu County. Through communication with local governments and the poor households, on-site visits and other means, Suntien effectively improved village conditions. On 5 February 2018, all employees of Kangbao Project Department of Zhangjiakou Regional Company went to Dongmengjia Village, Mandetang Township, a targeted poverty alleviation center, to celebrate the Spring Festival with the poverty-stricken villagers.

Educational Support

Giving help to children in impoverished mountainous regions is a major component of Suntien’s charity activities. Since the establishment of the “Suntien Volunteer Team” in 2013, voluntary employees have donated over RMB200,000. Suntien has built a “Green Hope” bookstore, multimedia classrooms, music and art classrooms, and computer rooms for Nanhaoting school at Jingxing County, Shijiazhuang. It has also assisted the construction of heating and hot water facilities for the Leguo Village Primary School at Fengning County, Chengde City.

In 2018, after learning that the reading room at the Central Primary School at Ballag Township, Hinggan League, Inner Mongolia, was in urgent need of books, the Company provided a solution by donating a variety of classic children's books which worth ten thousand yuan. Since Qianzhai Village Primary School at She County, Handan, Hebei Province, is located in a very remote place, the 43 students there are left-behind children and it only has three teachers. To mitigate the issue of shortage of teaching appliance, the Company donated TVs, tables and chairs, reading machines, books and sports equipment.

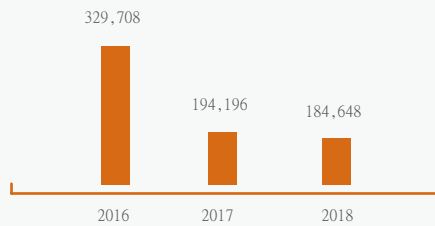


Donating teaching materials to Qianzhai Village Primary School at She County, Handan

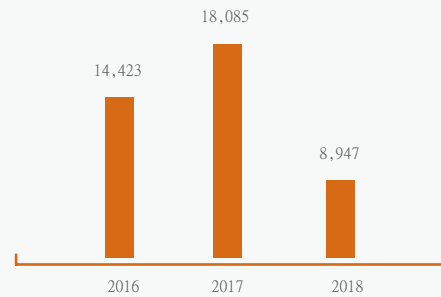
Community Involvement

Suntien has been giving practical support to communities for several years, including organizing volunteer activities and caring for the elder. In 2018, on the eve of World Blood Donor Day, Suntien cooperated with the Blood Center of Hebei Province to raise awareness of the importance of blood donation. In total, Suntien contributed RMB185,000 on charity events and provided a total 8,947 hours of volunteer service during the year.

Total charity expenses, 2016-2018 (RMB10,000)



Total hours spent on charity activities, 2016-2018



Case

Offshore Wind Power Company's volunteers visited elder people and cleaned Li Dazhao Memorial Hall

On 11 July 2018, employees of the Offshore Wind Power Company visited an elderly couple with no family members at Fantuo Village in the east of Yanggezhuang Town, Leting County. The volunteers brought financial aid, edible oil, rice, and other daily necessities. The volunteers also carried out farm work for the couple, who were both in the eighties.

To practice the idea of "two studies, one action," the Company organized employees to volunteer their services at Li Dazhao Memorial Hall. The staff members cleaned three exhibition halls and one ticket hall before the facility's opening.



Completing farmwork for the elderly couple at Fantuo Village

OUTLOOK FOR 2019

The clean energy industry has become an important driving factor for China to promote the energy production and consumption revolution and build a clean, low-carbon, safe and efficient energy system. At the same time, in the context of the China's accelerated subsidies for renewable energy and the promotion of affordable Internet access, the renewable energy industry has ushered in new challenges and has also raised new and higher requirements for the development of Suntien.

Looking forward into 2019, Suntien will continue to implement the decision-making arrangements of the 19th Party Congress thoroughly, implement the green development concept throughout the Company's operations, strictly adhere to the red line of ecological protection, effectively increase the development of natural gas and renewable energy, accelerate technological innovation, and further promote the industry to cleanliness and change to low carbonization direction.

Internally, Suntien will further strengthen the integration of sustainable development concept with corporate strategy and corporate culture, and continuously improve the ESG management and reporting system to form a sustainable culture of endogenous enterprise and promote more sustainable development practices. Externally, Suntien will continue to fulfill its social responsibilities to stakeholders, communicate effectively with stakeholders, identify their reasonable expectations and demands, and integrate into the daily operation practices of the Company, and strive to maximize the comprehensive value of the economy, society and the environment.

Meanwhile, Suntien will adhere to steady operation, carry out scientific and efficient management, create value for shareholders; continuously increase R&D and innovation, consolidate the construction and operation capabilities of wind farms and photovoltaic power plants, improve the conversion efficiency of renewable resources, reduce the cost of electricity, and drive and lead the industry development; continue to protect the legitimate rights and interests of employees and suppliers, and achieve common progress and growth by providing training and building a common development platform; based on maintaining good communication with the community, carry out localized operations and actively expand the coverage and influence of precision poverty alleviation for the benefit of the community .

The banks are pushed far back at full tide, a single sail seems hanging in the breeze. In 2019, Suntien, together with elites from all sectors, will continue to overcome all kinds of challenges, constantly improve the operation standard and corporate governance of the Company with a concept for sustainable development, endeavor to build up the Company as a first-tier provider of clean energy, provide society with low-carbon and efficient energy and create greater values for shareholders.



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B6.2	Number of product and service-related complaints received and how they are dealt with.	31
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GRI STANDARDS INDEX

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Indicators		Pages	Omission
GRI 201: Economic Performance			
	Management Approach	18	none
201-1	Direct economic value generated and distributed	18,P22	none
201-2	Financial implications and other risks and opportunities due to climate change	18	none
GRI 203: Indirect Economic Impacts			
	Management Approach	58	none
203-1	Infrastructure investments and services supported	58	none
203-2	Significant indirect economic impacts	58	none
GRI 204: Procurement Practices			
	Management Approach	46	none
204-1	Proportion of spending on local suppliers	46	none
GRI 205: Anti-corruption			
	Management Approach	11	none
205-1	Operations assessed for risks related to corruption	11	none
205-2	Communication and training about anti-corruption policies and procedures	11	none
205-3	Confirmed incidents of corruption and actions taken	11	none
GRI 302: Energy			
	Management Approach	50	none
302-1	Energy consumption within the organization	50	none
302-2	Energy consumption outside of the organization	50	none
302-3	Energy intensity	50	none
302-4	Reduction of energy consumption	50	none
302-5	Reduction in energy requirements of products and services	-	Not applicable
GRI 304: Biodiversity			
	Management Approach	53	none
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high bio-diversity value outside protected areas	53	none
304-2	Significant impacts of activities, products, and services on biodiversity	53	none
304-3	Habitats protected or restored	none	none
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	none	none
GRI 305: Emissions			
	Management Approach	50	none
305-1	Direct (Scope 1) GHG emissions	50	none
305-2	Energy indirect (Scope 2) GHG emissions	50	none
305-4	GHG emissions intensity	50	none
305-6	Emissions of ozone-depleting substances (ODS)	none	none
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	none	none
GRI 306: Effluents and Waste			
	Management Approach	52	none
306-1	Water discharge by quality and destination	52	none
306-2	Waste by type and disposal method	52	none
306-3	Significant spills	none	none
306-4	Transport of hazardous waste	52	none

Indicators		Pages	Omission
306-5	Water bodies affected by water discharges and/or runoff	none	none
GRI 307: Environmental Compliance			
	Management Approach	50	none
307-1	Non-compliance with environmental laws and regulations	none	none
GRI 401: Employment			
	Management Approach	36	none
401-1	New employee hires and employee turnover	37,38	none
GRI 403: Occupational Health and Safety			
	Management Approach	26	none
403-1	Workers representation in formal joint management worker health and safety committees	26	none
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	26	none
403-3	Workers with high incidence or high risk of diseases related to their occupation	26	none
403-4	Health and safety topics covered in formal agreements with trade unions	none	none
GRI 404: Training and Education			
	Management Approach	39	none
404-1	Average hours of training per year per employee	39	none
404-2	Programs for upgrading employee skills and transition assistance programs	40	none
GRI 405: Diversity and Equal Opportunity			
	Management Approach	36	none
405-1	Diversity of governance bodies and employees	36	none
GRI 413: Local Communities			
	Management Approach	58	none
413-2	Operations with significant actual and potential negative impacts on local communities	58	none
GRI 416: Customer Health and Safety			
	Management Approach	31	none
416-1	Assessment of the health and safety impacts of product and service categories	-	Not applicable
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	none	none

FEEDBACK

Dear readers,

Thank you for taking the time to read China Suntien Green Energy's 2018 Environmental, Social and Governance Report . We look forward to your feedback. Please send us your completed questionnaire by mail, e-mail after scanning, or by fax, or call us directly to offer your opinions.

Address: Block A, Yu Yuan Plaza, No. 9 Yuhua West Road, Shijiazhuang City, Hebei Province, PRC

Postal code: 050000

Email: esg@suntien.com

1. Which type of stakeholders is your institution in relation to Suntien?

- ☐ Shareholder ☐ Employee ☐ Supplier ☐ User ☐ Government ☐ Community ☐ Bank
☐ Academic institution ☐ Other (please specify)

2. Have you read the Environmental, Social and Governance Report of China Suntien Green Energy? (If your answer is no, please ignore items 3, 4 and 5)

- ☐ Yes ☐ No

3. If yes, did you read the print version or the electronic version?

- ☐ Print ☐ Electronic

4. Which version do you prefer?

- ☐ Print ☐ Electronic

5. Your evaluation of the 2018 ESG Report:

·Readability (easy to understand, well designed, intriguing, easy to locate the information required)

- ☐ 3 points (good) ☐ 2 points (mediocre) ☐ 1 point (poor)

·Credibility (whether the information in the report is true and reliable)

- ☐ 3 points (good) ☐ 2 points (mediocre) ☐ 1 point (poor)

·Information integrity (taking into account both positive and negative aspects of performance, whether it meets your information needs)

- ☐ 3 points (good) ☐ 2 points (mediocre) ☐ 1 point (poor)

In addition to the disclosures already made in the report, what else would you like to see?

The reporting team of the 2018 ESG Report of China Suntien Green Energy

April 2019





新天绿色能源股份有限公司
China Suntien Green Energy Corporation Limited

