SUNGROW
Clean power for all

Sungrow Power Supply Co., Ltd.

2018 Corporate Social Responsibility Report

About the Report

This Corporate Social Responsibility Report 2018 ("CSR Report") is released to the public by Sungrow Power Supply Co., Ltd., for the purpose of truly reflecting the Company's development and practice of corporate social responsibilities in 2018, and helping stakeholders deeply understand the Company's business operations.

Basis for Preparation: This CSR Report, with reference to the CSR preparation requirements of the Guidelines for Preparation of CSR Reports of Chinese Enterprises issued by the Chinese Academy of Social Sciences, is prepared based on the GRI Standards released by the Global Reporting Initiative and in accordance with the Guidelines for Social Responsibilities of Listed Companies of the Shenzhen Stock Exchange.

Time Range: From January 1, 2018 to December 31, 2018.

Release Cycle: This CSR Report is released on an annual basis, and the previous report was released in April 2018.

Scope of Report: The scope covered herein is consistent with that specified in the Annual Report, including Sungrow and its holding subsidiaries/entities, and the "Directory of Major Enterprises" attached afterwards can be referred for more details.

Disclosure of Report: This CSR Report is disclosed after the disclosure of the Annual Report 2018 of Sungrow Power Supply Co., Ltd. The financial data as involved herein are consistent with those as disclosed in the Annual Report 2018 of Sungrow Power Supply Co., Ltd. released on China's A-share stock market. Unless otherwise stated, the currency mentioned herein is denominated in RMB.

Description of Title: Sungrow Power Supply Co., Ltd. as mentioned herein is referred to as "Sungrow", "the Company" or "We" based on the specific circumstances, and Sungrow's holding subsidiaries/entities are referred to as "Member Enterprises" herein, in order to facilitate presentation and reading.

Access to Report: This CSR Report is made in both Simplified Chinese and English, with paper-based and electronic versions. The electronic version hereof is available on the Company's official website (www.sungrowpower.com). In case of any discrepancy between the Simplified Chinese version and English version, the simplified Chinese version shall prevail.

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Message from the President

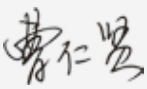
Dear friends,

In recent years, in the face of major challenges of environmental pollution and global warming, developing a low-carbon economy has been a general consensus of all countries in the world. Since its establishment, Sungrow has been committed to the development, promotion and application of clean power conversion technology, and has achieved the leap-forward 10 billion revenue goal and maintained steady growth of business performance amid the fluctuating global new energy market and fierce market competition in 2018.

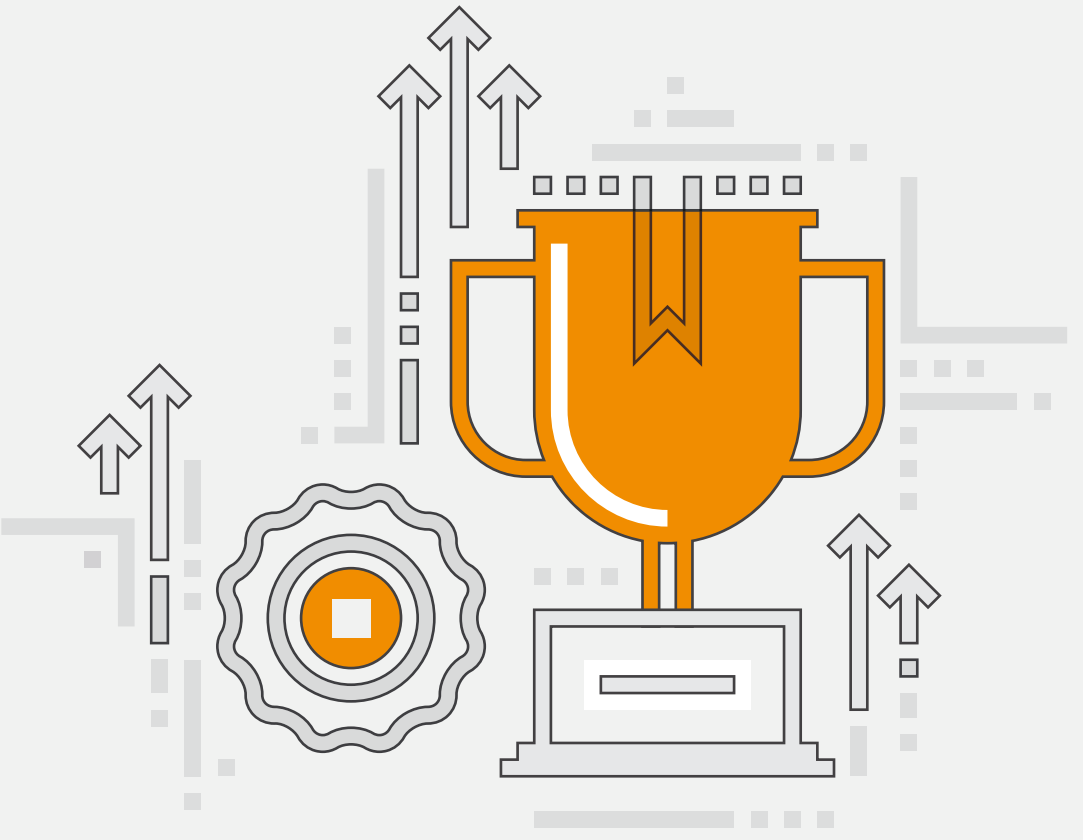
As a responsible corporate citizen， Sungrow should give full play to its own advantages to contribute to society in pursuit of economic benefits. By the end of 2018, Sungrow has installed its products up to 79 plus GW in the global market, transmitting green and clean power to more than 60 countries and regions around the world. Additionally, the Company strives to drive industrial progress with technological innovation, having constructed the biggest Frontrunner Program, realized feed-in tariff approximate to the one of traditional coal. The Company practices aggressively, having carried out new innovational PV demonstration projects such as the wide water surface utilization in mining subsidence area in Huainan and Huaibei, restoration and treatment of heavy metal soil in Shaoguan of Guandong province, and is committed to alleviating poverty by clean power, and focuses on and cares about the young groups.

In the past year, our mission “Clean power for all” has gradually been accepted by the public, and we got a clearer CSR concept and integrated it into all aspects of business operations. This report covers key issues of economic, environmental and social aspects concerned by stakeholders and discloses the social responsibility practices and performance of Sungrow in 2018 and its outlook for the coming year in order to better communicate with the community and create long-term sustainable value for the Company and all parties concerned.

My friend, “building a beautiful China and promoting a conservation culture” was written into our constitution, which has greatly motivated us to focus on the cause of renewable energy innovation and revolution, as well as clean power popularization and application, closely in line with one of the UN’s 17 sustainable development goals of popularizing affordable clean energy. In the future, by actively conforming to the global trend of low-carbon energy and even zero-carbon goal, Sungrow will emphasize harmonious development with the environment and society in pursuit of continuous economic benefits improving, and make our efforts to improve human ecology and create better global environment with constant practical actions.



Cao Renxian
Chairman of Sungrow Power Supply Co., Ltd.



About Us

Company Profile

About Sungrow

Mission Clean power for all

Vision To be the global leader of clean power conversion technology

Values Sincere & pragmatic, precise & open, customer oriented

Located at New&High Technology Industrial Development Zone, Hefei, China, Sungrow Power Supply Co., Ltd. (Stock code: 300274) operates as a state-level key and high-tech enterprise specializing in R&D, production, sales and services of new energy equipment, such as solar energy, wind energy, electric vehicles, mainly provides photovoltaic inverters, wind energy converters, energy storage systems, new energy automotive driving systems, water surface photovoltaic floating bodies, smart energy operation and maintenance services, and commits itself to providing world-class PV power station solutions.

Since its establishment in 1997, Sungrow has always engaged in the field of new energy power generation, adhered to market demand orientation, technological innovation as a power source for its business development, and established a professional R&D team with rich R&D experience and strong independent innovation capability. Sungrow, one of the very few companies in the industry mastering multiple independent core technologies, has successively undertaken more than 20 major projects of national science and technology plan, presided over the drafting of multiple national standards.

Photovoltaic inverter, Sungrow's core product has passed multiple certifications and testing hold by authoritative international organizations such as TÜV, UL, CSA, and been sold in bulk to more than 60 countries including Germany, Italy, Australia, the United States, Japan and India. Sungrow has cumulatively installed 79 plus GW of inverter equipment in the global market as of the end of 2018.

Sungrow has successively won such titles as the "National Key New Products", "China's Famous Brand", "China's Top 30 New Energy Enterprises", "Global 500 New Energy Enterprises", "National Business Enterprise of Observing Contract and Valuing Credit", "Best Employers in Anhui Province", and "Forbes China's Most Potential Enterprises". Sungrow is identified as a state-level post-doctoral research workstation enterprise, national high-tech industrialization demonstration base and national accredited enterprise technology center, with its comprehensive strength ranking first class in the global new energy power generation industry.

In the future, Sungrow will shoulder its mission "Clean power for all", accelerate the development of integration, investment and construction business of photovoltaic power generation system based on the new energy equipment business, innovate and expand new business in the field of clean power conversion technology, constantly keep close to customer demands, actively participate in global competition, and strive to build itself into a respected world-class company.

Performance in 2018

In 2018, guided by philosophy “truth-seeking, innovative, forge ahead, change-embracing and customer-oriented”, Sungrow vigorously expanded overseas market based on domestic market, strengthened marketing capacity of inverters and storage energy in overseas market, continued to optimize product structure, upgraded system solutions, strengthened R&D capacity building, actively launched new products, improved current products and the core technology of main products, and also rapidly developed its PV power station system integration business and floating business.

- Revenue

RMB 10.37 billion

- Profit

RMB 0.81 billion

Major Accounting Data and Financial Indicators in Annual Reports of Sungrow for the Recent Three Years

Item	Year of 2018	Year of 2017	Year of 2016
Operating income (RMB)	10,368,931,999.29	8,886,060,068.67	6,003,662,456.20
Net profit attributable to shareholders of listed companies (RMB)	809,628,201.93	1,024,196,698.41	553,613,069.28
Net profit attributable to shareholders of listed companies after deducting net non-recurring gains and losses (RMB)	699,673,580.29	921,829,838.78	503,541,173.25
Net cash flow from operating activities (RMB)	180,882,222.43	855,355,841.99	865,792,599.19
Basic earnings per share (RMB/share)	0.56	0.71	0.41
Diluted earnings per share (RMB/share)	0.56	0.71	0.41
ROE	11.05%	15.47%	12.60%
	As of the end of 2018	As of the end of 2017	As of the end of 2016
Total assets (RMB)	18,492,650,081.88	16,248,005,972.55	11,656,799,146.66
Net assets attributable to shareholders of listed companies (RMB)	7,705,933,541.79	6,943,775,881.83	5,949,438,965.83

Annual Events

Sungrow adopted the new logo which is more slim and simple and closer to customers, conveying passion, vigor and TECH dynamic.

Sungrow continued to expand overseas markets with a total of 4 plus GW inverters shipped abroad, and the Indian plant was put into production as expected.

Sungrow promoted the 1500V power generation technology from the first round of pilot stage of Frontrunner base to the third round of widespread use; provided exclusive solutions for the largest “Internet Plus” smart energy demonstration project in China.

Sungrow constructed the 500 MW PV Frontrunner Program which has achieved grid-connected power generation smoothly, being a typical demonstration project of photovoltaic grid parity.

The energy storage business ranked first in China for two consecutive years and made a breakthrough across the world. The energy storage projects in Qinghai, Shanxi and Hunan have been successfully put into operation and the performance was also impressive in the overseas markets such as the United States, Japan and Germany.

Sungrow Floating ranked the world first in 2018 on the total installed capacity.

Sungrow Electric Power launched electric control products for high-end passenger vehicles and successfully equipped first-class automobile enterprises such as Geely and Chery, with 50,000 plus vehicles installed with the products.

Sungrow was awarded the “Top 100 Innovative Enterprises in Mainland China in 2018”, “China’s Patent Excellence Award” and “Red Dot Design Award” and also chosen as the “Sample Stock of GEM 50 Index”.

Sungrow’s PV poverty alleviation business helped over 300,000 poverty-stricken households and 2,200 poor villages out of poverty across the country.

The Sungrow Business School was established to serve as a platform for spreading Sungrow culture and enhancing leadership of Sungrow talents.

Helped
300000
poverty-stricken households

2200
poor villages

Annual Honors

Date	Categories of awards	Awarded by
January	The Most Influential Chinese Enterprise in Electronic Information Industry	China Association of Electronic Enterprises
	Top 10 Outstanding Listed Companies of Anhui Province	China Securities Journal, Anhui Association of Listed Enterprises
February	Technology Innovation Center of Anhui	CPC Committee of Anhui, People' Government of Anhui Province
April	2017 China Photovoltaic Brand Rankings 5A Brand Award	China Photovoltaic Brand Laboratory
May	Top 50 Comprehensive Strength Enterprises in Manufacturing Industry	People's Government of Anhui Province
	Outstanding Entrepreneurs in China	China Association of Enterprises, China Entrepreneur Association, China Enterprise Management Science Foundation
July	CSR-Performance Contribution Award for Listed Companies in Anhui Province	Xinhuanet of Anhui Province, Anhui Association of Listed Enterprises
	Three "Red Dot Product Design Awards"	The Organizing Committee of the "Red Dot" Award
September	Outstanding Brand for Poverty Alleviation in Energy Industry in China; Poverty Alleviation Model Innovation Award in China	China Reform Daily, The Energy Industry Poverty Alleviation Summit Forum
October	Top 100 Innovative Enterprises in Mainland China in 2018	Clarivate Analytics
	Innovation Center of Smart Photovoltaic Power System in Anhui Province	Anhui Economic and Information Commission
December	2018 Global Top 500 New Energy Enterprises	China Energy News, China Institute of Energy Economics Research
	China's Patent Excellence Award	State Intellectual Property Office
	Top 100 Invention Patents of Anhui Province	Anhui Intellectual Property Office, Anhui Department of Economic and Information, Anhui Department of Education
	National Standards Implementation Certification for the Management System of Fusion of Informatization and industrialization	China Electronics Standardization Institute

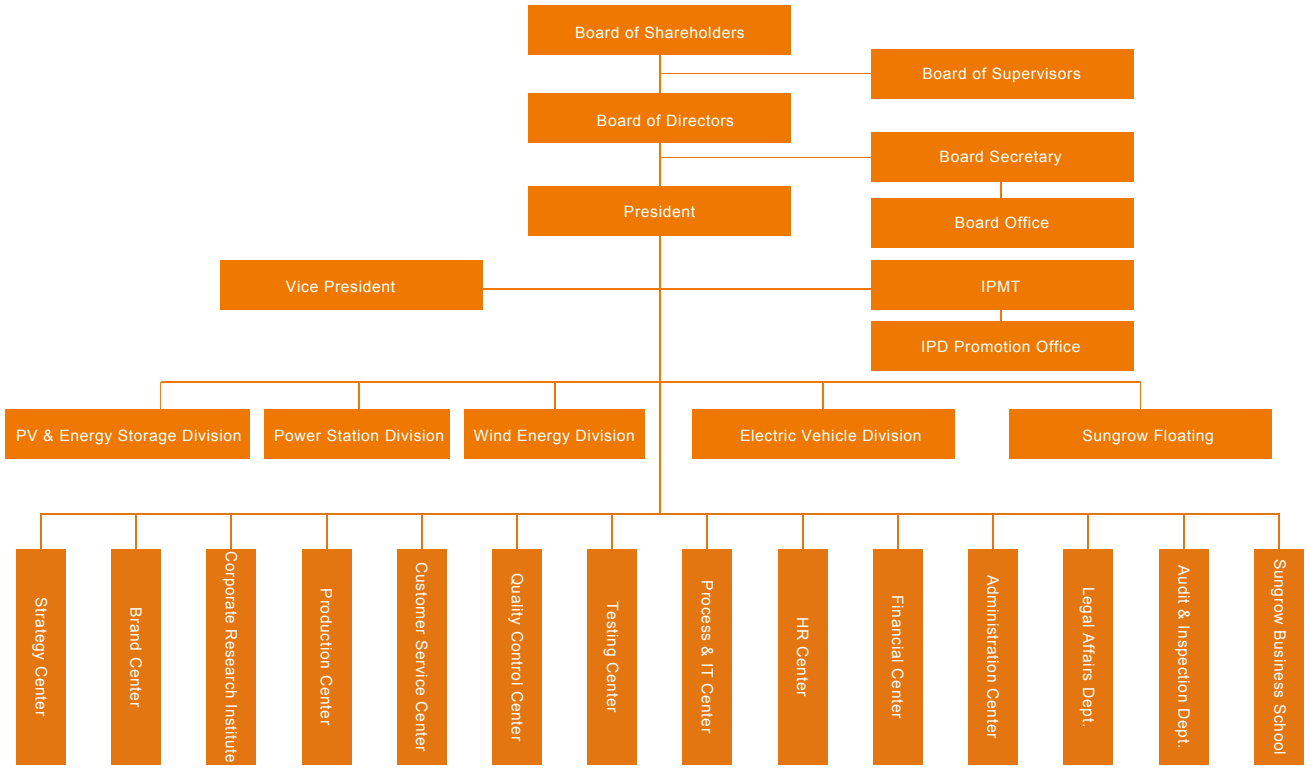
Corporate Governance

Structure Improvement

Standard Governance

Good corporate governance is the footstone and guarantee of enterprise development. The Company will continually consolidate and further improve its corporate governance capability and enhance its competitiveness to return investors with better business performance. In 2018, with excellent corporate governance practices and compliant information disclosure, the Company has constantly improved its corporate governance structure in strict accordance with national laws and regulations and the relevant provisions of the China Securities Regulatory Commission. Detailed corporate governance information is available in the Company's 2018 Annual Report or on the official website.

Organization Structure of Sungrow



- Directors and the Board of Directors

The Board of Directors consists of eight directors, including three independent directors, and the number of members and composition of the Board of Directors conform to the requirements of the relevant laws, regulations and the Articles of Association. The Board of Directors strictly complies with the laws like the Corporate Law, Securities Act and Guidelines of the Shenzhen Stock Exchange for Standardized Operation of Companies Listed on the Growth Enterprises Market and rules & regulations such as the Articles of Association and Rules of Procedure of Board of Directors, effectively fulfills duties conferred by the Company and shareholders, earnestly implements decisions and resolutions passed by the shareholders' meetings, and carries out work honestly and diligently in order to ensure the Company's sustained, healthy and stable development, as well as promote normal operation of the Company and safeguard legitimate rights and interests of the Company and its shareholders.

- Supervisors and the Board of Supervisors

The Company's Board of Supervisors consists of three supervisors, including two employee representative supervisors. The number of members and the composition of the Board of Supervisors conform to the requirements of the relevant laws and regulations. The supervisors can seriously perform their duties in accordance with the requirements of Rules of Procedure of the Board of Supervisors and they exercise supervision on the Company's major transactions, related party transactions, financial position, as well as the legal compliance of the directors and senior executives during the performance of their duties.

Compliant Business

Compliant business operation is the guarantee for the healthy and sustainable development of enterprises. Abiding by the values of "Sincere & pragmatic, precise & open, customer oriented", Sungrow strives to cultivate a corporate culture with business ethics and compliance principles. The Company strictly observes all laws and regulations and stringent corporate governance and business ethics standards in all operation activities, and constantly improves the law-abiding management system through systematic management, training, and multi-channel communication, with an aim to obtain long-term trust and support of stakeholders. As required by the relevant information disclosure requirements of listed companies, Sungrow has no major administrative penalties or litigations to be disclosed in 2018.

Internal Control Risk

Sungrow has established a strict internal control system. The Company's internal audit and supervision are directly led by the Board of Directors and constitute an important part of the Company's internal control system. The Company's internal control aims to establish and improve the internal control system for the Company's primary business management activities, supervise system enforcement and clean governance construction, carry out evaluation of the implementation effects, strengthen the monitoring of violations of laws and rules, effectively operate and continuously optimize the internal control system, reduce the Company's operating risks, thus providing supports and guarantees for the normal and efficient operation of the Company's business management activities.

- Internal Control Construction

In response to the expansion of the Company's business scale and the rapid increase in the total number of employees, the Audit & Inspection Department took the lead and revised the internal control basic rules and regulations such as the Regulations on Internal Audit & Supervision and Regulations on Employee Integrity and Self-discipline in 2018, standardized the Company's internal control standards under new circumstances, and supervised and urged the improvement and enforcement of other systems. In terms of supplies of the power station and procurement work, the Audit & Inspection Department supervised the improvement of procurement responsibilities assignment and procedures under unified management of the group procurement center, strengthened standardization of procurement procedures, and further reduced the procurement costs through large-scale purchase, strengthened the product quality control with the focus on examination of supplier qualifications, receiving inspection, process monitoring, and inspection of finished products, etc. in a wide range, strengthened management efforts on product R&D, engineering construction, continually complied with the requirements on quality, schedule, cost management, safety and compliance of R&D projects, strengthened financial information review and information disclosure to ensure that financial information is objective, fair and truthful to reflect the Company's performance and financial position, and established a good public image.

- Internal Supervision

The Audit & Supervision Department, under the leadership of the Company's Board of Directors, mainly conducted auditing and self-inspection on the Company's businesses in respect of power station project, procurement management, receivables, stock control, sales, R&D, investment, logistics management, financial management, and subsidiary operations in 2018, with a coverage rate of over 90% for the Company's primary businesses, so as to ensure standardized business operations and effective control of operational risks.

- Integrity, Self-discipline and Anti-corruption

The Company established and improved a system for punishing and preventing corruption, with particular emphasis on preventing corruption at the source. The Company made the Regulations on Audit & Supervision, Provisions on Integrity and Self-discipline and Integrity Agreement, and publicized and promoted these rules and regulations in various occasions and repeatedly emphasized the importance of integrity.

Through routine analysis, operational audit, risk control, complaints, investigation and reporting, the Company conducts investigations on possible corruption issues and further confirms high-risk corruption issues to identify the risk of integrity.

The Company established a regular monitoring-and-reporting channel, and standardized the handling mechanism of complaints and reports. The Audit & Supervision Department will strictly check and follow closely each complaint, focus on investigating the violations of laws and regulations, and provide anonymous protection to the reporters. In 2018, based on reporting information on illegal activities and with support and help of public security organs, the Company has identified employees suspected of committing crimes and dismissed them in accordance with law.

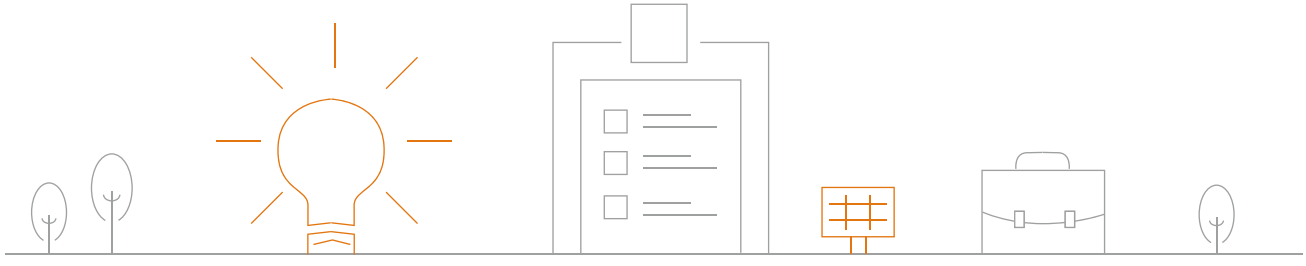
Case

On July 5, 2018, the Company held the Anti-corruption Warning Workshop to enhance integrity awareness and supervision of employees at key departments and key positions and to make employees deeply understand clean governance and develop an awareness of anti-corruption.

Intellectual Property Protection (IPR)

The Company regularly conducts IPR risk assessment, establishes a specialized patent search and analysis platform to conduct risk investigations through search and duplicate checking and issue patent risk-analysis reports, and actively takes counter measures to prevent infringement of others' intellectual property rights. The Company also monitors if our own intellectual property right was infringed and protects own rights through administrative and judicial approach.

In 2018, Sungrow further strengthened the training on intellectual property rights which have greatly raised the intellectual property awareness of those active participants. The Company, together with the National IPR Training (Anhui) Base of the University of Science and Technology of China, has co- organized a series of online learning courses on intellectual property with a total of 179 participants completing all learning tasks and obtaining the course-completion certificate.



Investor Relations Management

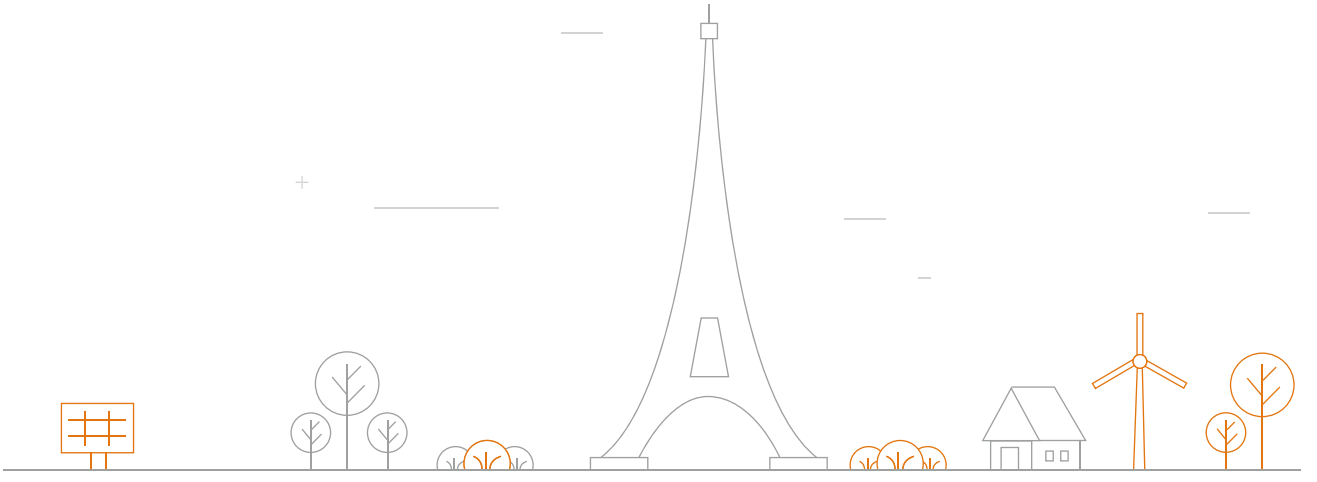
With the purpose of strengthening information communication between Sungrow and investors, improving the corporate governance structure, and protecting the legitimate rights and interests of investors especially the social public investors, the Company has formulated the Information Disclosure Management System and Investor Relations Management System and upheld the principles of full disclosure, compliant disclosure, equal opportunity for all investors, honesty and trustworthiness, efficiency and low-cost, and interactive communication etc. The external communication includes but not limited to the Company's development strategies, legal information disclosure and explanation, disclosure of business management information and major events as required by law, corporate culture building, and other relevant information.

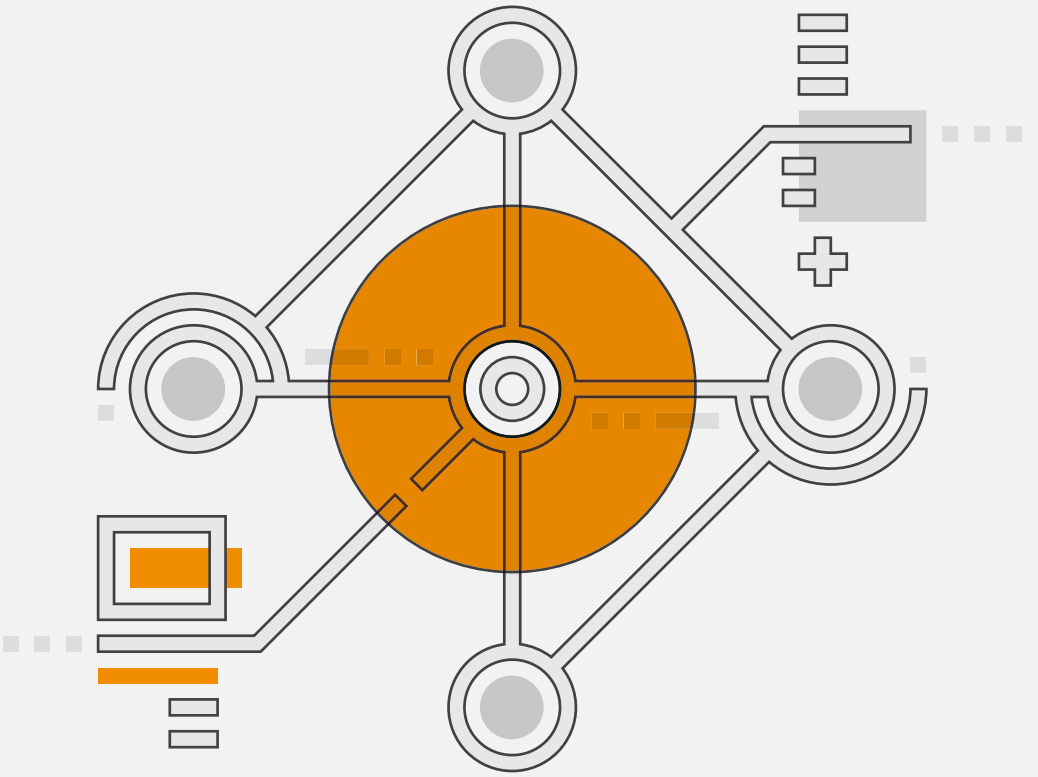
Sungrow designates specialized posts and personnel to maintain exchanges and communication with investors and securities analysts, and ensures them fully understand the Company's strategies, operations and development trends. The Company serves investors by means of investor hotlines, online performance briefings, investor E-mails, and on-site receptions, and insists on timely, proactive, and detailed delivery of the Company's information to the capital markets and investors.

Case

Sungrow ranked 30th for private enterprises and 10th for GEM companies at the Listed Enterprise Innovation Index Ranking jointly issued by the Chinese Securities Journal, Sina Finance, Anhui Innovation Research Base and other research institutes on December 8, 2018.

The Company offered various suggestions feedback channels to shareholders, such as the Investor Hotline (0551-65325617), the Investor Service E-mail (dshms@sungrow.cn / kangml@sungrowpower.com), and the Shareholders' Meeting. More than 140 pieces of announcement materials were disclosed in the whole year. The performance forecasts and periodic reports were disclosed in a legal, compliant, truthful, and accurate manner and strictly followed the regulations of the China Securities Regulatory Commission and Shenzhen Stock Exchange, without any false statement or retrospective adjustment on performance status. Sungrow got the first grade A at the information disclosure assessment work of 2017 organized by the Shenzhen Stock Exchange in July 2018.





CSR Management

CSR Concept and Model

Sungrow closely follows the corporate mission “Clean power for all” and forms the CSR concept of “A better life with green mission” considering the Company’s development strategy and expectation of various stakeholders. We continually strengthen responsibility management, implement responsibility practices, focus on harmonious and balanced development of environment and society in pursuit of economic benefits, and always take the responsibility of improving human living environment, and strive to improve the positive impacts and minimize negative impacts on the environment and society, and commit ourselves to achieving a win-win situation with stakeholders such as shareholders/investors, customers, employees, partners, the environment, and society.

Liability to stakeholders

Ensure harmonious and balanced development of environment and society, operate compliantly and constantly create economic value to satisfy shareholders/investors

Environmental responsibility

Shoulder a green mission for better global environment

Responsibility to clients

Ensure quality upgrading, stick to the customer oriented concept, create value for customers and satisfy them

Responsibility to community

Sincerely give back to the community with gratitude to achieve a harmonious society

Responsibility to partners

Forge ahead together, cooperate to achieve a win-win situation, help parterner achieve success

Responsibility to employees

Adopt the people-centered approach and care employees and help them realize their dreams

CSR Management System

The Company has established a social responsibility leading group, which is led by the Chairman and consists of senior executives, and heads of the Brand Center, Strategy Center, Administrative Center, HR Center, Quality Control Center, Procurement Center, Finance Center, and Office of the Board of Directors. The leading group takes charge of guiding and practicing the Company’s social responsibility matters, and ensuring the further implementation of the social responsibility work by improving assessment indicators.

Meanwhile, the Brand Center took the lead in establishing a working group for the preparation of CSR Report to constantly improve the preparation level, in order to better demonstrate the Company’s practices and development in terms of corporate social responsibility to the community.

CSR-related Issues

In 2018, the Company established a three-stage analysis model—Identification, Assessment and Screening—for major substantive issues related to social responsibility to scientifically analyze the substantive issues to be highlighted in the report.

Identification

- International standards comparison
- Policy and industry analysis
- Corporate development strategy
- Identifying 38 CSR-related issues

Assessment

- Questionaire survey among stakeholders to choose key issues for them
- Interview and questionaire survey among the Management to choose key issues for the company
- Expert Appraisal
- Identify 20 key CSR-related issues

Screening

- Screen out substantive issues
- Identfy report boundary
- Report of substantive issues
- Screen out 7 high-level substantive issues, 10 middle-level substantive issues and 3 low-level substantive issues

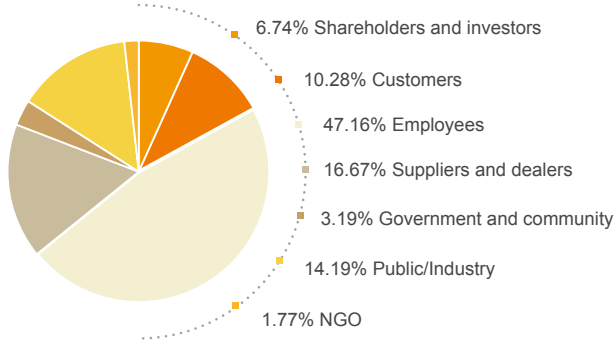
Issues Identification

Sungrow has identified a total of 38 CSR related issues through comparison with international standards, and analysis of policy and industry development and company development strategy.

International standards comparison	Policy and industry analysis	Corporate development strategy
Mainly compare with the standards of GRI's Sustainable Development Report, and ten principles of the UN Global Compact to screen out key issues in line with global trend of CSR development.	Follow the development priorities of global and domestic industries, and refer to the social responsibility guidelines for listed companies of the Shenzhen Stock Exchange to identify industry-specific issues that are highly relevant to the Company.	Identify social responsibility issues that are consistent with the Company's development strategy plan.

Issues Assessment

The Stakeholders are invited to participate in the online questionnaire survey to identify key issues and order of priority and the importance degree of these issues to them.The Company conducts interviews and questionnaire surveys over the Management and invites CSR experts to assess to finalize 20 major issues.



Screening out Reports

The key information to be highlighted and priority order of key issues in the report are determined based on the substantive analysis matrix of issues and grading of the Company management and stakeholders.

① Customer health and security

② Energy conservation and emission reduction

③ Waste management

④ Enterprise profitability

⑤ After-sales service

⑥ Compliance to national laws and regulations

⑦ Boosting industry development

⑧ Product quality

⑨ Employee health and security

⑩ Customer information security

⑪ Targeted poverty alleviation

⑫ Anti-corruption and compliance

⑬ New energy development and utilization

⑭ Avoiding child labor and forced labor

⑮ Employees' career development

⑯ Supporting local economic development

⑰ Diversity and equal opportunity

⑱ Reducing negative impacts on community

⑲ CSR evaluation for the supply chain

⑳ Charitable donations

Stakeholders Communication and Involvement

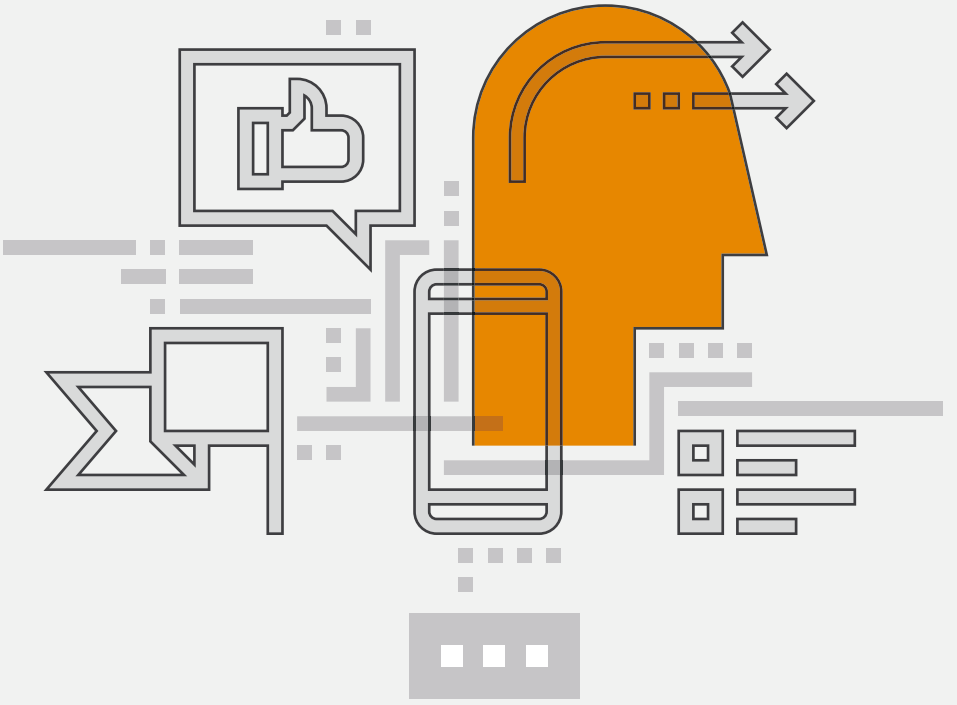
The Company mainly has seven categories of stakeholders involving shareholders/investors, customers, supply chain management, employees, government/community, public/industry, and the environment. In 2018, we conducted an online survey on these stakeholder groups, and scientifically identified the CSR issues concerned by various parties, and determined the key information to be highlighted in the report through substantive analysis of the issues. We have established different communication channels for stakeholders of different features to form normal communication.

Stakeholders	Key issues concerned by stakeholders	Means of communication for stakeholders
Shareholders/ investors	Enterprise profitability Anti-corruption and compliance	Company annual report, interim report and announcement Shareholders' meeting Investors meet-and-greet Feedback platform like phones, emails and websites Questionnaire survey
Customers	Customer health and security Product quality Customer information security After-sales service	Customer meeting Customer satisfaction poll Global service network
Supply chain management	CSR evaluation for the supply chain	Procurement activities Website and social media Forum and meeting Training and evaluation Interview and market survey Satisfaction survey
Employees	Avoiding child labor and forced labor Employee health and security Employees' career development Diversity and equal opportunity	Employees' Assembly Regular communication and training Employee satisfaction survey Wechat Culture Group Sungrow Comments Book
Government/ communities	Observing national laws and regulations Supporting local economic development Targeted poverty alleviation Reducing negative impacts on community Charitable donations	Routine communication and report Special research and on-the-spot meeting Meetings and forums Formulating standards and policies and suggestion feedback Websites
The public/ industry	Boosting industry development	Forum activities On-site reception and interview Websites
Environment	Development and utilization of new energy Waste management Energy conservation and emission reduction	Visits and receptions Websites Formulating standards and policies

External Participation and Initiatives

Sungrow actively participates in the activities of industry associations, and maintains close communication with the industry and contributes to the development of the industry through attending events, exchanging information and holding key posts. List of some associations that Sungrow joins:

Name of association	Post
China Power Supply Society	Vice President Unit
China Photovoltaic Industry Association	Vice President Unit
Photovoltaic Committee of China Renewable Energy Society	Council Member Unit
Wind Energy Equipment Division of China Agricultural Mechanization Association	Vice President Unit
PCS Standards Development Working Group of China Industrial Association of Power Sources	Deputy Head Unit of the working group for energy storage systems and PCS Head Unit
National Energy Internet Industry and Technology Innovation Alliance	Standing Director Unit
Asian Photovoltaic Industry Association	Deputy Chairman Unit
China Energy Storage Alliance	Vice President Unit
Trust and Integrity Enterprise Alliance	Council Member Unit
China Green Supply Chain Alliance	Council Member Unit
Photovoltaic Green Ecology Organization (PGO)	Vice President Unit
New Energy Association of Anhui Province	President Unit
Anhui Province Power Engineering Association	Vice President Unit
China Electric Power Promotion Council	Vice President Unit



CSR Practices

Shoulder the Green Mission as a World Leader

Develop the International Market

According to the 2018 World Energy Outlook published by the International Energy Agency, with the rising demands for electricity in developing economies, the core goal of economic development and emission reduction strategy is to produce cleaner, affordable and accessible electricity. It is expected to increase the proportion of renewable energy power from current 25% to 40% by 2040.

Vigorously developing clean, low-carbon, safe and efficient renewable energy is the best way of speeding up clean energy utilization, optimizing the energy structure and improving energy efficiency and also the best choice to achieve sustainable development of energy, environment and economy, as well as an inevitable trend of energy development.

To this end, Sungrow continually strengthened its strategic plan of globalization and actively responded to China's Belt and Road Initiative. In 2018, the Company mainly developed the South American market and Southeast Asian market, such as Vietnam. The Company has established a manufacturing base in India and several branches in the Middle East, Turkey, and Spain, striving to deliver first-class system solutions for the global new energy market. By the end of 2018, the Company's core product PV inverters have been sold in bulk to more than 60 countries including Germany, Italy, Australia, the United States, Japan, India, etc. The Company has accumulated more than 79 GW of inverter equipment installed in the global market.

Case

In July 2018, the Company's India plant was successfully put into operation with an annual production capacity of 3 GW. It is a photovoltaic inverter manufacturing base invested and built overseas by Sungrow, having delivered better products and more efficient service experience to local customers and achieved global supply and further enhanced the Company's global delivery capability.

Serve the State Strategy

In 2018, China implemented the new energy security strategy of "Four Revolutions&One Cooperation" and focused on the strategic goal of promoting non-fossil energy share in total energy consumption to reach 15% by 2020 and 20% by 2030 and fully drove high-quality development of renewable energy technology. As a leader in renewable energy enterprises, Sungrow actively responds to the national strategy, continuously highlights clean power, and further ups investment in developing renewable energy, with the businesses in photovoltaic, wind power, energy storage, electric vehicles and floating PV systems having got rapid growth.

Focus on Clean Power

With technology advance, the era of grid parity for renewable energy is approaching. The global energy structure will speed up transformation, which will popularize from those traditional key countries to emerging markets, and clean energy will enter a period of sustained rapid growth. We are also ready to welcome the era of replacing fuel vehicles with electric ones. Meanwhile, the Company has realized the phased goal of "being the world-class and achieving ten-billion value". In such a case, Sungrow established its vision for the next 5-10 years to "become a global leader in clean power conversion technology" and determined the overall strategic policy of "focusing on the clean power field and promoting diversification in a low-cost and innovative manner, making efforts to improve the market, technology and their synergy to achieve rapid and sustainable growth".

In the field of photovoltaics, Sungrow maintained the global leader in inverter market in 2018 with the global shipments up to 16.7 GW. As of the end of 2018, the Company has accumulated **79** plus GW of inverter equipment shipped all over the world. During the reporting period, we have made a breakthrough in expanding domestic and international markets in terms of inverter business and released more than 10 new products, covering household, distributed products, poverty alleviation, Frontrunner Program, utility-scale solar plants and other markets.

The Company also achieved significant growth in integration business of power station systems. In 2018, the power stations constructed have reached 1,450 MW, with an income of RMB **5,867,860,792.41** and an increase of 25.7% from 2017. We played an active leading role in the national Frontrunner Program and photovoltaic poverty alleviation project.

In response to many operational difficulties behind the rapid development of new energy, the Company launched Sungrow Smart Maintenance S3 — the power station-level custodial operation and maintenance. With the inverter as the core and relying on the smart energy management platform to access all photovoltaic power stations, and through modern Internet of Things technology, artificial intelligence and big data analysis, Sungrow Smart Maintenance S3 can upgrade from previous single equipment maintenance to the whole-life-cycle custodial operation and maintenance across the power station, reduce operation and maintenance costs, and lift power generation by 3% plus.

In the field of energy storage, the Company based on the domestic market constantly expanded its overseas market, with the energy storage business achieving early fivefold year-on-year growth and ranking first in China for two consecutive years. In the same year, the national first energy storage inverter test standard "GB/T 34133-2017 Energy Storage Inverter Testing Methods Code" was officially implemented, and the Company has actively engaged in shaping the Code, having provided strong technical support for China's energy storage products and technical standards.

In the field of wind power, the Company's converters cover 1500~10000 kW power level and 690V and 3300V voltage level, ranging from full-power wind energy converters to double-fed wind energy converters with all domestic mainstream converter models available. They are suitable for all kinds of wind environments such as salt fog, alpine region, plateau, coastal region, high humid climates etc. and widely used in more than 100 wind fields in Inner Mongolia, Gansu, Fujian, Jiangxi, Hunan, Yunnan, Guizhou, Anhui, etc., with accumulated utilization of more than 5 GW.

Case

In December 2018, Sungrow together with the China Three Gorges New Energy Co., Ltd. constructed the 500 MW PV project of Frontrunner Program. Being a typical demonstration of photovoltaic grid parity, this project has achieved grid-connected power generation with feed-in tariff RMB 0.31/kilowatt-hour, lower than the local coal-desulfurization standard feed-in tariff.

16.7 GW
2018 inverter global shipments

1450 MW
The construction scale of PV stations in 2018

25.7%
Year-on-year income growth

In the field of new-energy vehicles, the Company's products adopt modular design with perfect functions, low energy consumption, long driving range, high reliability and the maximum efficiency up to 98.5%. The Company launched electric control products for high-end passenger vehicles in 2018 and successfully equipped first-class automobile enterprises such as Geely and Chery, with 50,000 plus vehicles installed with the products.

In the field of floating system, the Company ranked first in terms of installed capacity in 2018, and obtained more than 30 patents in respect of advanced floating bodies, anchors, inverted booster floating platforms, system operation and maintenance, etc., and led or engaged in formulating dozens of standards for floating system technology.

98.5%
The maximum efficiency

Boost Industry Development

On February 23, 2018, Sungrow was approved to build the "Anhui Clean Power Conversion Technology Innovation Center". The center will always centralize in clean power conversion technology, aim at the three core objectives of being more efficient, more integrated and more intelligent and strive to make a breakthrough in core technology of clean energy conversion and carry out R&D and testing work of key components around the domestic and international SCI-TECH frontiers and strategic needs of industry development; offer power technology, standard evaluation and consultation regarding renewable energy power generation technology to serve as basis for the country to lay down relevant policies.

As a talented leader in clean power conversion technology and guided by the principle of "adapting to local conditions with scientific design", the Company proposed the system solution of "1500V + large square matrix + high DC/AC ratio" which greatly reduced the power generation cost and was widely used in the world. The photovoltaic system has facilitated the arrival of grid parity era.

In 2018, the Company presided over and participated in drafting 12 industrial standards such as the PV Power Station Combiner Box Monitoring Technical Code, the Energy Storage Converter Testing Technical Code, and the Wind Turbine Double-fed Converters Technical Standards.

In addition, the Company has actively organized and participated in industry forums and seminars to share insights on industry development issues.

Case

In November 2018, at the annual photovoltaic meeting of China, Chairman Cao Renxian said that "new energy enterprises should emphasize more on cost reduction, quality upgrading and efficiency improvement rather than only on operation expansion as in the past, and insist on promoting multi-energy complement and synergy with low-cost innovation to achieve grid parity earlier".

Boost TECH Innovation

TECH Innovation System

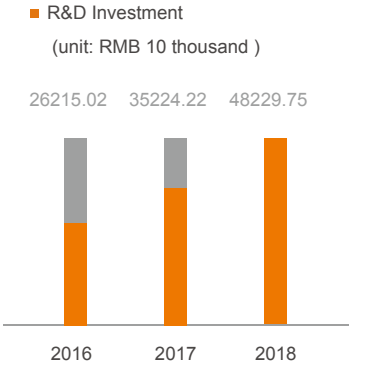
Sungrow has been engaged in the field of clean power for more than 20 years, and has always considered technological innovation as the source of enterprise development with an increase of R&D investment year by year and in a constant manner. The Company has actively conducted a series of technical research and development and developed and applied various advanced and key generic technologies, having formed a technology innovation network with international influence and competitiveness that can satisfy the needs of the Company's future planning and industrial innovation.

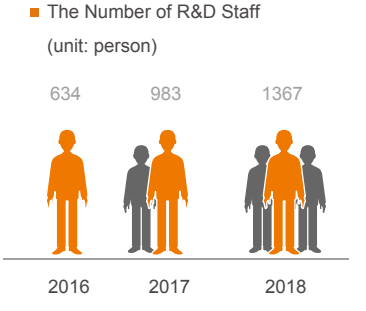
In the long-term R&D practice, the Company has adhered to the market-oriented and innovation-based principles and formed its own unique new product R&D management model and strategy. The Company has established the customer-oriented R&D model and introduced advanced IPD management method to improve the positive effect of market demand and product production process on product development and strengthen the teamwork R&D concept. What's more, the Central Research Institute built by the Company followed the idea of "Theory Formation, Pre-research, Backup, Developing, Production and Elimination Generation by Generation", and focused on frontier issues of the new energy industry in the next three years and lay a solid foundation for realizing the Company's strategic goals in the next 3 to 5 years and sustainable and rapid development in the future by depending on professional work and teamwork and fully utilizing and coordinating internal and external resources.

The Company has formulated the "Management Measures for Produce-Learn-Research Project", and by fully exploiting its own advantageous resources in clean power conversion, worked closely with universities such as Hefei University of Technology, Zhejiang University, Tsinghua University, Yanshan University, Shanghai Jiaotong University, Anhui University, and China Electric Power Research Institute. We jointly built research teams with strengths and characteristics, carrying out sustained and in-depth research around specific research direction and priorities, and received a large number of graduate students to undertake research tasks every year. The Company takes the lead in forming Produce-Learn-Research collaborative innovation ecology and strengthens technical exchanges and personnel training.

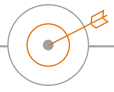
Cultivate Innovative Teams

Sungrow attached great importance to R&D and innovation and its R&D strength has further enhanced with constantly increasing investment in R&D field. Currently, the R&D personnel account for 39.96% of the total number of employees and mainly consist of masters and doctors and the core workforce all acquired 10 plus years of R&D experience. The Company also establishes long-term cooperation with many well-known universities in China and keeps sharply attuned to the cutting-edge technology in the industry, and places emphasis on bringing in new blood for the R&D team. In addition to talent investment, we also invest heavily in research and development and testing equipment and platform construction.





Sungrow established the Patent Decision-making Committee back in 2012 to guide the Company in organizing patent-award activities and approving the patent awards. The Company set up various awards such as the Value Patent Award, Award for Patent Information, the Special Award for Technology Innovation and Excellent Patent Worker to encourage technological innovation and protect the rights of inventors.



Case

In 2018, the Company set up "Sun Longlin Innovation Studio" to carry out innovative research work around innovation and efficiency, learning and training, technical breakthrough, mentoring and experience exchange. The studio consists of 8 members including 6 masters, all of whom have bachelor degree or above and quest for technological innovation. The studio has applied 49 patents for invention and 50 patents for utility model.

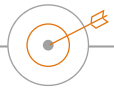
Innovation Achievements

The Company filed 338 new patent applications in 2018, of which the patents for invention accounted for 56%, and had an accumulative total of over 1,500 applications, taking the leading position in the industry.

Heavyweight awards in the field of patents: China's Patent Excellence Award and Top 100 Patents for Invention Award of Anhui Province.

According to the "Top 100 Innovative Enterprises in Mainland China in 2018" released by Clarivate Analytics, the world's leading intelligent information service provider, Sungrow rose from the previous fourth tier to the second tier and was the only enterprise on the list in Anhui province.

In addition, Sungrow actively undertook national and provincial science and technology projects. In 2018, the new energy automobile technology innovation project titled "Key Technology and Industrialization of Highly Integrated and Highly Reliable Electronic Control System of New Energy Vehicles" got approved by Anhui Province. The Company has undertaken more than 40 national and provincial science and technology projects as the end of 2018.



Case

In recent years, Sungrow has conducted in-depth systematic research on the five-level technology of photovoltaic inverters. The Company has begun to apply for related patents since 2011 with 2 new applications and 4 new authorized patents in 2018. With in-depth research on the technology, the Company has applied for 84 patents and even 23 overseas patents and PCT patents for some crucial frontier technologies, building up the Company's patent portfolio for the technology. By the end of 2018, we got 65 authorized patents including 14 authorized ones abroad. The overall patent layout and authorized patents abroad further speak to the Company's patent quality and value and full application of patent layout and portfolio strategy.

Protect Environment with Green Power

Global warming and climate change have become the most important global issue of our time. As a responsible corporate citizen, Sungrow pays close attention to global climate change trend, actively responds to environmental challenges, and seeks to build harmonious relationship with the environment. While exploring the high-quality development path oriented by “Ecology First” and “Green Growth”, we build green plants, deepen energy conservation and emission reduction, and establish environmental protection warning and emergency mechanism, striving to pursue sustainable development of the environment and enterprises. In 2018, the Company had no any environmental pollution incidents caused by air pollutant discharge and water pollution.

Improve Environment Management

The Company has constantly perfected the environmental management system through practical exploration and concept innovation.The General Safety & Environment Department is in full charge of the Company’s enviromental health and safty (EHS) management and control work. The Company has formulated the “Three Simultaneous Measures for EHS Management of Construction Projects”, implemented energy conservation and emission reduction actions, strengthened environmental advocacy and education and exercised supervision and inspection which has laid a good foundation for implementing environmental protection and energy conservation and emission reduction in an orderly manner.

EHS Management System

Sungrow highly emphasizes the importance of EHS management system to corporate development and social responsibility. Sungrow has established a systematic prevention and management system in environmental protection, occupational health and safety, energy conservation, pollution reduction, and strengthening health and safety training, and constantly enhanced EHS performance and have achieved good results.

As of 2018, the Company and member enterprises have been certified as follows:

Company name	Certification
Sungrow Power Supply Co., Ltd.	ISO14001:2015、OHSAS18001:2007、SA8000:2014、IECQ-QC080000:2017、GB23331-2012
Sungrow-Samsung SDI Energy Storage Power Supply Co., Ltd.	ISO14001:2015、OHSAS18001：2007、SA8000:2014
Sungrow Floating Module Sci.& Tech. Co., Ltd.	ISO14001:2015、OHSAS18001:2007、IECQ-QC080000:2017

Environmental Emergency Plan

As required by the national environmental emergency management regulations and with an aim to avoid and reduce environmental impacts and property losses caused by emergencies as well as enhance employees' emergency response awareness, the Company calls on all staff to actively learn and master emergency knowledge and response skills to improve their self-rescue and mutual-aid ability and secure own lives and properties.

The Company set up an emergency management team responsible for daily emergency management and emergency drills. The emergency drills are conducted regularly to check the Company's emergency mechanism and ensure it is prepared enough to respond to emergencies at any time. The Company regularly summarizes and analyzes the drill process to improve emergency ability and practical skills and strengthen communication, coordination and cooperation among emergency organizations and personnel.

Energy Conservation and Emission Reduction

In order to promote the concept of energy-saving and high efficiency development and respond to the national basic policy of saving resources, the Company developed the energy management system in 2017 to continuously improve energy management level and achieve various energy-saving goals to promote the Company's sustainable development. In 2018, we have gradually implemented a series of energy-saving and emission-reduction actions as follows: enhancing in-system cycling in virtue of technological development; upgrading experimental test equipment to achieve multi-platform sharing and improve utilization rate; eliminating high energy consumption equipment step by step; encouraging subcontractors such as canteen contractors to adopt water-saving measures; replacing energy-saving LED lamps to reduce lighting energy consumption and emission of hazardous wastes from the lamps; developing universal product carriers to reduce the use of carrying tools; packaging products in corner-protecting manner to reduce the use of packaging materials .

In 2018, Sungrow also realized high-quality, high-efficiency and environmental-friendly production by establishing the digital workshop so as to build an industry-leading intelligent manufacturing mode of PV digital inverters, and ensured an intelligent and informatization process with precision, energy-efficiency and green environmental protection at pre-manufacturing, in-manufacturing and post-manufacturing stages of PV inverters.

The Company commissioned qualified third-party testing agencies to monitor domestic sewage, industrial exhaust gas, noise at the factory boundary, and fume from the canteen on a quarterly basis. The domestic sewage, industrial waste gas, noise at the factory boundary, and fume from the canteen were all up to standard emissions.

In response to China's calls for new energy construction, the Company built a 4.9 MW distributed photovoltaic plant on the rooftop of factories, in order to accelerate the large-scale application of photovoltaic power generation in China, and play a leading role in the demonstration of photovoltaic power generation. In 2018, the accumulated power supply of the Company's rooftop photovoltaic power stations was 4.55 MW which can reduce carbon dioxide emissions by about 4,500 tons annually.

Energy consumption of Sungrow and its member enterprises

Year	Total water consumption (Unit: m^3/year)	Total power consumption (Unit: kWh/year)	Electric energy (Converted to standard coal) (Unit: kg/year)	Total energy consumption except for electric energy (Converted into standard coal) (Unit: kg/year)	Comprehensive energy consumption (Converted into standard coal) (Unit: kg/year)	Comprehensive energy consumption per ten thousand output value (Based on standard coal)	Water consumption per ten thousand output value (Unit: m^3/RMB ten thousand)
2016	97,703	10,985,491	1,350,110	62,079	1,412,189	2.21	0.153
2017	86,730	15,879,377	1,951,575	229,983	2,181,558	2.48	0.099
2018	102,064	32,853,482	4,037,692	238,455	4,276,138	4.12	0.098

Note: The water and energy consumption of Sungrow and five member enterprises in 2018 are as shown in the above table. By comparison, the water consumption in 2018 increased by 15,334 tons (17.7%) compared to 2017, the electricity consumption increased by 15,879,377 kWh (106.9%) compared to 2017, the water consumption intensity dropped by 0.001 tons/RMB ten thousand, and the electricity consumption intensity increased by 1.64 tons of standard coal/RMB ten thousand (66.1%). The rising electricity consumption is mainly due to the high electricity consumption of the new business of floating system manufacturing.

Classification of energy consumption of Sungrow and member enterprises in 2018

Company name	Power consumption (kWh)	Natural gas (m^3)	Liquefied gas (m^3)	City gas (m^3)	Steam (m^3)	Raw coal (kg)	Diesel (L)	Gasoline (L)	Fuel oil (L)
Sungrow	17,121,510	63,628	0	10	0	0	25,890	67,135	0
Sungrow (Shanghai)	232,800	0	0	0	0	0	0	0	0
Sungrow (Jinzhai)	445,561	0	0	0	0	0	460	0	0
Sungrow (Qinghai)	18,881	0	0	0	0	0	0	0	0
Sungrow Floating	13,812,030	0	0	0	0	0	720	0	0
Sungrow-Samsung SDI	1,206,500	11025	0	0	0	0	5,138	623	0
Indian Plant	16,200	0	0	0	0	0	0	1,357	0

Note: The data of Indian Plant covers from June to December, 2018.

Material procurement, use and recycling of Sungrow and member enterprises in 2018

Company name	Material type	Material name	Material purchase amount	Actual use	Recycling amount	Cyclic utilization rate	Unit
Sungrow	Production materials	Chassis/cabinet	437,044	469,370	0	0	pcs
	Production materials	Electric reactor	2,513,411	2,749,981	0	0	pcs
	Production materials	Transformer	2,384,591	2,816,211	0	0	pcs
	Production materials	Chip	44,720,133	40,858,529	0	0	pcs
	Production materials	Module	2,221,323	2,032,632	0	0	pcs
	Production materials	Cable	9,489,672	10,365,721	0	0	m
	Production auxiliary materials	Detergent	2,360	2,112	0	0	kg
	Production auxiliary materials	Three-proofing lacquer	19,614	18,964	0	0	kg
	Production auxiliary materials	Flux	19,597	18,992	0	0	kg
	Production auxiliary materials	Tin	5,732	5,312	0	0	kg
Sungrow Floating	Production auxiliary materials	Solder paste	2,246	2,114	0	0	kg
Sungrow-Samsung SDI	Production raw materials	Granule	12,432	13,856	1,424	10.2%	t
	Production raw materials	Battery	149.5	148.3	0	0	MWh
	Production raw materials	Container	240	237	0	0	pcs

Case

With an aim to coordinate the recycling, reuse and sales of the Company's direct materials, indirect materials, left materials and production waste to control the increase of sluggish materials in the inventory, the Company set up a "value-free" plant in June 2014 which recycled those useless materials and processed those reusable materials and promoted companies to reuse them. In 2018, the plant handled materials with the value of RMB 58.34 million in total (RMB 33.7 million for sluggish materials and RMB 24.64 million for waste disposal).

Waster Treatment

Waste Discharge of Sungrow and Some Member Enterprises in 2018

The Company attaches great importance to environmental protection. The sewage discharge, air pollutant discharge, noise at the factory boundary and industrial waste (general waste & hazardous waste, the same below) generated during production and operation must fully comply with all relevant national and local regulations. In addition to the simultaneous construction of pollution control devices and facilities at the initial stage of construction projects, it also requires sufficient organizational guarantees and technical guarantees in respect of personnel guarantees, operating procedures, monitoring and control, and environmental emergency plans, in order to ensure the sustainable development of the Company and prevent the occurrence of pollution incidents.

Year	Total wastewater emissions (Unit: ton/year)	Total COD emissions (Unit: ton/year)	Total NH_3-N emissions (Unit: ton/year)	Total exhaust gas emissions (Unit: m^3/year)	Nitrogen oxides (Unit: ton/year)	Sulfur oxides (Unit: ton/year)	Smoke particles (Unit: ton/year)	Total solid waste (Unit: ton/year)
2016	78,162	17.95	1.63	4,812	0	0	0.64	106.51
2017	69,384	16.25	1.42	5,576	0	0	0.74	142.8
2018	81,651	18.109	1.676	15,175	0	0	0.958	314.1

Water Pollution Discharge of Sungrow and Some Member Enterprises in 2018

Company name	Total wastewater emissions in 2018 (ton)	Total COD emissions in 2018 (ton)	Total ammonia nitrogen emissions in 2018 (ton)	Is it included in the municipal pipe network (Yes/No)	Is it up-to-standard discharge (Yes/No)	Discharge direction and way
Sungrow	67,841	15.603	1.357	Yes	Yes	Arrive at the sewage treatment plant through the municipal pipe network.
Sungrow (Shanghai)	1,347	0.323	0.027	Yes	Yes	Arrive at the sewage treatment plant through the municipal pipe network.
Sungrow (Qinghai)	546	0.131	0.011	Yes	Yes	Arrive at the sewage treatment plant through the municipal pipe network.
Sungrow (Jinzhai)	1,134	0.261	0.023	Yes	Yes	Arrive at the sewage treatment plant through the municipal pipe network.
Sungrow Floating	8,621	1.293	0.216	Yes	Yes	Arrive at the sewage treatment plant through the municipal pipe network.
Sungrow-Samsung SDI	2,163	0.498	0.043	Yes	Yes	Arrive at the sewage treatment plant through the municipal pipe network.

Treatment Measures for Waste Discharge of Sungrow and Some Member Enterprises in 2018

Sungrow	The domestic sewage enters the municipal pipe network after being treated in septic tanks, and reaches the discharge standards after being treated by the municipal sewage treatment plant.	SMT; wave-soldering; reflow soldering; the spraying waste gas of the conformal coating reaches the discharge standards after being treated by filtration and activated carbon adsorption.	Waste packaging materials and general industry solid wastes are recycled by specialized recycling agencies, domestic garbage is disposed of by the sanitation department, and other hazardous solid wastes are disposed of by qualified units.
Sungrow (Shanghai)	The domestic sewage enters the municipal pipe network after being treated in septic tanks, and reaches the discharge standards after being treated by the municipal sewage treatment plant.	No industrial waste gas	Waste packaging materials and general industry solid wastes are recycled by specialized recycling agencies and other domestic garbage is disposed of by the sanitation department.
Sungrow (Qinghai)	The domestic sewage enters the municipal pipe network after being treated in septic tanks, and reaches the discharge standards after being treated by the municipal sewage treatment plant.	No industrial waste gas	Waste packaging materials and general industry solid wastes are recycled by specialized recycling agencies and other domestic garbage is disposed of by the sanitation department.
Sungrow (Jinzhai)	The domestic sewage enters the municipal pipe network after being treated in septic tanks, and reaches the discharge standards after being treated by the municipal sewage treatment plant.	No industrial waste gas	Waste packaging materials and general industry solid wastes are recycled by specialized recycling agencies and other domestic garbage is disposed of by the sanitation department.
Sungrow Floating	The domestic sewage enters the municipal pipe network after being treated in septic tanks, and reaches the discharge standards after being treated by the municipal sewage treatment plant.	The waste gas from injection molding and blow molding is absorbed by high voltage static and activated carbon and treated by UV photolysis; The dust from the shattering process is treated by bag dust-cleaning.	Waste packaging materials and general industry solid wastes are recycled by specialized recycling agencies, domestic garbage is disposed of by the sanitation department, and other hazardous solid wastes are disposed of by qualified units.
Sungrow-Samsung SDI	The domestic sewage enters the municipal pipe network after being treated in septic tanks, and reaches the discharge standards after being treated by the sewage treatment plant in the New & High Tech Zone.	The fugitive emissions are achieved after the welding fumes are absorbed by the smoking instrument.	Waste packaging materials and general industry solid wastes are recycled by specialized recycling agencies, domestic garbage is disposed of by the sanitation department, and other hazardous solid wastes are disposed of by qualified units.
Indian Plant	The domestic sewage enters the municipal pipe network after being treated in septic tanks, and reaches the discharge standards after being treated by the municipal sewage treatment plant.	No industrial waste gas	Waste packaging materials are recycled by specialized recycling agencies and other domestic garbage is disposed of by the local qualified units.

Total waste gas emissions, smoke (powder) dust and other important exhaust emissions of Sungrow in 2018

Company name	Total waste gas emissions in 2018 (10,000 m)	NOX emissions in 2018 (ton)	SOX emissions in 2018 (ton)	Total emissions of soot particles in 2018 (ton)	Total emissions of non-methane hydrocarbon (ton)	Total VOC emissions in 2018 (ton)	Source types and ways
							Organized exhaust gas
Sungrow	7,822	0	0	0.862	0.418	0	/
Sungrow (Shanghai)	0	0	0	0	0	0	/
Sungrow (Jinzhai)	0	0	0	0	0	0	/
Sungrow (Qinghai)	0	0	0	0	0	0	/
Sungrow Floating	0	0	0	0	0	0	Organized exhaust gas
Sungrow-Samsung SDI	7,353	0	0	0.096	0.842	0	/
Indian Plant	0	0	0	0	0	0	/

Most of the external packaging materials among the general solid wastes of the Company and member enterprises were recycled in 2018 to reduce emissions and avoid secondary pollution to the environment. Each member enterprise can complete all environmental protection procedures from application, approval, transfer, and disposal in accordance with the requirements of the environmental protection department for hazardous wastes, and has entrusted qualified units to conduct compliant disposal.

Solid waste disposal of Sungrow and some member enterprises in 2018

Company name	Total amount of solid wastes in 2018 (ton)	Among: The amount of domestic wastes (ton)	Among: Industrial solid wastes (non-hazardous wastes) (ton)	Among: The packaging materials (ton)	Total hazardous wastes (ton)	Hazardous waste treatment methods				Waste disposal and comprehensive utilization or additional utilization
						Recycling (ton)	Incineration (ton)	Landfill (ton)	Other (ton)	
Sungrow	232.3	141	45.7	22.1	23.5	0	20.3	0	13.2	0
Sungrow (Shanghai)	2.9	2.4	0.2	0.3	0	0	0	0	0	0
Sungrow (Jinzhai)	2.8	2.1	0.2	0.5	0	0	0	0	0	0
Sungrow (Qinghai)	6.2	4.1	0.6	0.8	0	0	0	0	0	0
Sungrow Floating	24.7	8.1	1.2	13.3	2.1	0	2.1	0	0	0
Sungrow-Samsung SDI	41	7.6	20.03	13.35	0.02	0	0	0	0.02	0
Indian Plant	4.4	1.6	0.6	2.2	0	0	0	0	0	0

Green Operation

Reduce Negative Impacts on Community

As one of the first group of green demonstration plants in China, Sungrow has always been practicing a green manufacturing system. The Company abides by the principle of “intensive plant, harmless raw materials, clean production, waste recycling, and low-carbon energy” and adheres to the green development strategy. The concept of clean production runs throughout the whole manufacturing process, building a green low-carbon product system to achieve the goal of energy conservation in energy management activities and facilitate the Company’s green production.

To reduce the negative impacts of our daily operations on community and environmental violations caused by the lack of pollution control facilities in power station projects, the Company has continually improved its response measures.

Sungrow has actively sorted out the environmental laws and regulations and conducted regular compliance evaluation. The Company usually intervenes in the early stage of the project with conformance evaluation like the environmental impact assessment to avoid startup before approval is granted. The Company conducts regular trainings for environmental management personnel to improve their environmental management knowledge and levels and publicizes the environmental protection measures and testing data of projects with pollutant discharge in advance and on a regular basis to ensure the public/community residents understand the Company’s environmental management status. Besides, as one of the first group of environmental education demonstration bases in Hefei City, the Company also organizes environmental education activities to show our green concept to the public, and strengthens spot check, inspection and maintenance of pollution control facilities and conducts regular environmental emergency drills to ensure effective and ongoing operations of these facilities.

The “Standard Management Measures for Safe and Civilized Construction of Power Station Projects” formulated by the Company explicitly stipulates the requirements of safe and civilized construction, from environmental protection input in project budget, to ensure construction and operation pollutants are discharged up to standards and in a compliant manner.

Investment and costs in environmental protection facilities

Company name	Investment in environmental protection facilities in 2018 (RMB 10,000)	Operation of environmental protection facilities in 2018 (RMB 10,000)	Purpose
Sungrow	103.2	93.4	Greening, debug, septic tank and grease trap cleaning, garbage disposal, operation and testing of exhaust gas treatment devices, hazardous waste disposal, panel cleaning, environmental testing and assessment
Sungrow (Shanghai)	0	1.6	Panel cleaning, greening, environmental testing
Sungrow (Qinghai)	1	1	Grease trap cleaning, septic tank cleaning, greening, environmental testing
Sungrow (Jinzhai)	1	1	Garbage clearance, greening and environmental testing
Sungrow Floating	37	12.6	Operation and testing of exhaust gas treatment devices, hazardous waste disposal, garbage clearance
Sungrow-Samsung SDI	1	9	Welding fume collection devices, greening and maintenance, debug, septic tank cleaning, environmental testing, preparation of environmental emergency plan
Indian Plant	0.7	3.2	Greening, debug and garbage clearance

Green Office

Sungrow also strongly advocates green office, strives to create a resource-saving enterprise, strengthens conservation management and supervision to jointly promote sustainable and healthy development of the Company.

In 2018, the Company revised and improved the Conservation Management Measures with some rules as follows: save water and electricity and properly set the air conditioner temperature; the office area shall use natural light whenever possible and water-saving signs are designed to remind all employees to build water-saving awareness; promote paperless office and speed up internal information flow through information platform to improve management efficiency and reduce management costs; reasonably arrange the dispatching and use of vehicles and minimize vehicle use and oil consumption; save R&D materials and lower equipment depreciation and costs; cut down the number of equipment, strongly promote public sharing and repair or reuse of second-hand goods; and strictly approve new purchases that those low-energy, high-efficiency, and long-life equipment and tools should be preferential choices.

Green Product Design

Sungrow consistently promotes green product design and integrates green concept into the product life cycle. We introduce early-warning systems, such as safety and environmental risk assessment, from the R&D stage to achieve greening in the source and apply the “environmental zero load” goal to the circulation links including product design, product packaging and transportation. At present, our all PV products have adopted the coating technology and we try to design the new products to share boxes and accessories for appearance structure and packaging materials which are all made of EPE or renewable paper meeting the environmental requirements. We gradually add recyclable signs and mark the environmental protection level on products to reduce “environmental load” during circulation. For solid waste in production, we conduct classified management and integrated utilization and take waste-reduce measures to realize recycle and resource regeneration.

Satisfy Customer Demands with Better Quality

Quality Assurance

Construct Quality Management System

Sungrow attaches great importance to the construction of quality management system, constantly improves the quality, environment, profession and safety certification of the Company and its subsidiaries, and always adheres to the concept of "striving for excellence with ingenuity" and adopts the quality strategy of "building the first brand with excellent quality". The Company practices the IATF16949:2016 quality management system based on ISO9001:2015 which highlights some advanced concepts such as "customer-oriented", "emphasis on defect prevention and reduction of deviation and waste" and "continuous improvement" and cares for customers and satisfies their needs to improve customer satisfaction which is 92.4 for the year of 2018. The Company pays sustained attention to business performance and improves process performance indicators to achieve cost reduction and efficiency increase, and continually improves and perfects workflow system through internal audit, management reviews, QCC, excellent quality awards and other activities. The Company has established a scientific and efficient integrated management system in constant pursuit of excellence, having further improved the quality of products, engineering and services and formed a quality brand with international competitiveness.

Highly Emphasize Quality Training

The Company attaches great importance to improving the level of management system, introduces quality concepts and common sense trainings in new employee induction trainings, consolidates standard operating procedures, and improves quality knowledge and quality awareness through publicity at morning meetings, on-site billboard, and e-learning online learning platform. In 2018, the Company organized trainings on the Six Sigma Green Belt, FMEA, CMMI implementing standard, and QC080000:2017 (new version), and paid great attention to quality trainings.

Establish Measurement Standard System

In 2018, Sungrow passed the strict inspection of Hefei Quality and Technology Supervision Bureau and was awarded the Measurement Standard Assessment Certificate, symbolizing the formal establishment of the Company's measurement standard system.

First-rate Service

Innovate in Service Management

In line with the aim of “serving customers”, the Company advocates the service concept of “customers are always right”, and further refines each link on this basis to form a unique global after-sales service management system.

- Service Platform

The Company employs the global SMP service management platform to realize digitalized and platform-based management and control over the service process and promotes visualization of service process, which has strengthened the management of product life cycle and customer information.

- Service Training

The Company further improves the training service system, invests more intraining resources like training organs, funds, software and hardware etc., investigates and understands training needs of customers and employees, sets up scientific and reasonable training courses, and organizes cross-regional service experience exchanges and business sharing activities based on the differences of service needs and models on the client side in different markets, and communicates with distributors in advance and organizes trainings for distributed and household products.

- Service Network

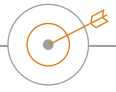
The Company has optimized the construction of service outlets to improve local service ability, and has built 10 provincial service centers, 13 local service outlets and 53 overseas service outlets which scatter in Europe, America, Australia, and Southeast Asia etc. Meanwhile, to form a service network covering the whole sales area, the Company has built an Indian Service Center as a global engineering service center to fully support the service needs for other overseas regions.

- Service Resources

The Company integrates all service resources and develops and cultivates service providers based on its local advantageous service resources to practice localization of service resources; it adopts the regionalized management regarding local services with the local manager responsibility system to improve service response speed and ensure high efficiency of commissioning for scattered projects and projects in remote areas to achieve full coverage in terms of all products and services.

- Spare Parts

The Company establishes an management system for spare parts inventory, improves market forecast for spare parts, strengthens product-life-cycle management and builds service ability programs; implements the parts management system, properly controls safety stock, improves promptness and deliverables of spare parts; ensures that the spare parts are available at outlets and service providers at any time to shorten maintenance response time and lower service costs.



Case

Sungrow established a local integrated service center in the United States in 2018 after in Germany and the Philippines. The Center was equipped with complete supporting service facilities, including local spare-parts inventory, local maintenance center and 7*24h technical consulting support, and also organized professional technical training for local customers and engineers of North America, which not only met diversified business demands in North America, but also created high-value service experience for customers to achieve core value.

Upgrade Service Experience

Customer Service Satisfaction Survey in 2018

Year of 2018

Service satisfaction: 93.83%

Degree of satisfaction:

Very satisfied: 100~90%

Satisfied: 89~80%

Okay: 79~60%

Dissatisfied: 59~40%

Very dissatisfied: 39%~0

In response to the customer evaluation of after-sales services in 2018, the following two outstanding issues were analyzed and summed up. The Company responded in a timely manner, conducted a cause analysis and proposed rectification measures.

Customer feedback

- Prepare some quick-wear spare parts on project site to ensure promptness of service.

- Hope your company can provide a practical training material for on-site personnel to train customers.

Analysis of causes

- The Company did not prepare some quick-wear spare parts on site so that the supply of spare parts was not prompt in some remote and underdeveloped areas without good transportation and advanced logistics.

- The Product Installation Manual and User Manual are available with the product but the product fault analysis is not deep enough.

Rectification plans and counter measures

- Prepare quick-wear spare parts in advance at project site of underdeveloped areas without good transportation and advanced logistics to guarantee the supply of spare parts in a timely manner and shorten the average fault correcting time.

- Produce the Common FailuresTroubleshooting Guide and strengthen training for operation and maintenance personnel on the customer side and enhance the ability of on-site operation and maintenance personnel in solve troubleshooting problems.

Case

Zheng Xiaodong is a Sungrow service engineer. In June, he received a notice that the grid-connected operation was to be completed so he travelled overnight to the project scene. In the heat-waved Gobi Desert, he installed cooling air flues with the construction team and carefully inspected more than 300 inverters to ensure a smooth grid-connected process. He was highly praised by the general contractor for professional skills and professional dedication.

Respond Actively to Customer Complaints

The Company actively protects customer's rights and interests. When the products fail, the centralized process is established to report product failures as soon as possible, and the Company follows up the cause analysis, and timely develops corrective and preventive measures. In this way, the Company gradually forms and establishes a product failure information database, promotes to perfect FMECA and propels to build a transparent and rapid response mechanism for the quality management system with the product quality improved and customer satisfaction enhanced.

Protect Customer Privacy

The Company places great emphasis on protecting customer information and privacy, and secures customer information through strict operational procedures. The Company strengthens training and education for employees, implements pre-employment confidentiality training for all new employees and signs complete NDA and non-competition clauses with them. The Company records employees' confidential training into their files as complete legal basis for them to fulfill obligations to keep business secrets during post and honour confidentiality agreement and non-competition clauses after departure. During the reporting period, the Company complied with all relevant laws and regulations regarding privacy protection and has not received any complaints about privacy disclosure against us from the official agencies.

Realize Employees' Dreams with "People First" Idea

Safe and Secure Production

The Company highly values the occupational health and safety of employees, having established a sound occupational health and safety management system and formulated and implemented multiple occupational health and safety management regulations. In 2018, the Company continually invested in testing and monitoring occupational hazards and procuring safety equipment at work sites. The Company also increased input in safety facilities among member companies in 2018, with a total of RMB 115.02 million input in safety facilities and operations and with an annual occupational health checkup coverage rate reaching 100%. Continuous investment on safety has played a vital role in providing employees with a safe workplace and advancing the Company's sustainable development.

In 2018, the Company and its member enterprises have not received any reports on general work safety production accidents, major safety accidents, major occupational disease incidents and fire incidents (statutory accidents as classified by the Government of China). The headquarters performed well but the subsidiaries need to be improved.

Company name	Project description	Amount (RMB 10,000)	Project description	Amount (RMB 10,000)
Sungrow	Fire control attendant, transformation of safety protection facilities, procurement of emergency supplies	418.3	Safety inspection and rectification expenses; equipment maintenance, overhaul, calibration, testing; occupational disease checkup, occupational hazards detection and evaluation expenses; special equipment inspection; procurement of safety protection articles; training and continuing education	622.5
Sungrow (Shanghai)	procurement of firefighting equipment	1	Safety inspection and rectification expenses; equipment maintenance, overhaul, calibration, testing; procurement of safety protective articles	5.5
Sungrow (Qinghai)	Procurement of emergency supplies, occupational disease prevention facilities	2	Safety inspection and rectification expenses, procurement of labor protection equipment, detection and evaluation of occupational hazards	1.5
Sungrow (Jinzhai)	Procurement of emergency supplies, occupational disease prevention facilities	2	Safety inspection and rectification expenses, procurement of labor protection equipment, detection and evaluation of occupational hazards	6.8
Sungrow Floating	Procurement of emergency supplies, occupational disease prevention facilities	3.2	Safety inspection and rectification expenses, procurement of labor protective articles, occupational health checkup, occupational health testing and evaluation costs, fire protection inspection, special equipment testing	20.3
Sungrow-Samsung SDI	Procurement of fire-pump room and emergency supplies, occupational disease prevention facilities	12.5	Safety inspection and rectification expenses; equipment maintenance, overhaul, calibration, testing; occupational health checkup, occupational health testing and evaluation costs; special equipment testing; training and continuing education	46.3
Indian Plant	Procurement of emergency supplies, occupational disease prevention facilities	2.1	Safety inspection and rectification expenses; equipment maintenance, overhaul, calibration, testing; occupational health checkup, occupational health testing and evaluation costs; special equipment testing; training and continuing education	6.2

A list of safety indexes of Sungrow and its member enterprises in 2018

Company name	Total number of employees	Total working hours (hour)	Major accident	Ordinary accident	The number of severe injuries	The number of minor injuries	The number of industrial accidents	Injury rate per 200,000 working hours	Mortality rate per 200,000 working hours	Number of lost time cases	Recordable accidents	Total lost time case rate	Recordable accident rate	The total number of diagnosed occupational diseases
Sungrow	2,912	6,289,920	0	0	1	3	8	0.27	0	4	6	0.26%	0.40%	0
Sungrow (Shanghai)	101	218,160	0	0	0	0	0	0	0	0	0	0	0	0
Sungrow (Qinghai)	24	51,840	0	0	0	0	0	0	0	0	0	0	0	0
Sungrow (Jinzhai)	39	84,240	0	0	0	0	0	0	0	0	0	0	0	0
Sungrow-Samsung SDI	164	354,240	0	0	0	0	0	0	0	0	0	0	0	0
Sungrow Floating	136	293,760	0	0	0	1	4	0.68	0	3	6	1.22%	2.44%	0
Indian Plant	45	97,200	0	0	0	0	0	0	0	0	0	0	0	0

The Company revised and improved the EHS-related education and training system that the training effect evaluation system was included to strengthen the overall training effect by connecting the internal and external. In 2018, the total duration of trainings on EHS and social responsibility of the Company and its member enterprises totaled 13102.5 hours, and the number of participants was 4,532. Among them, the number of training participation per capita was 1.3, and the training hours per person were 3.8 hours, increased by 9.4% from 2017. Through these trainings, the Company and its member enterprises effectively improved employees' awareness of environmental protection and occupational health and safety, and improved their ability in preventing occupational hazards and handling emergency incidents, and also enhanced the management levels of managers in this regard.

Company name	Legal trainings					Awareness trainings			Specialized trainings		
	Required attend-ance	Actual attend-ance	Compl-etion rate%	Time (hour)	Training courses	Partic-ipants	Time (hour)	Training courses	Partic-ipants	Time (hour)	Training courses
Sungrow	1052	1027	98	2	Three level safety education, introductory safety education and training	1235	4	EHS basic concepts and requirements	890	3	Machine safety, personal protection, emergency & first aid skills and exercises, fire-fighting training
Sungrow (Shanghai)	11	41	100	1.5	Three level safety education, introductory safety education and training	54	2	EHS basic concepts and requirements	51	2	Emergency & first aid skills and drill knowledge, social responsibility standards learning
Sungrow (Qinghai)	9	9	100	1.5	Three level safety education, introductory safety education and training	18	2	EHS basic concepts and requirements	10	2	Emergency & first aid skills and drill knowledge, social responsibility standards learning, labor protection appliance wearing
Sungrow (Jinzhai)	14	14	100	1.5	Three level safety education, introductory safety education and training	14	3	EHS basic concepts and requirements	106	3	Emergency & first aid skills and drill knowledge, social responsibility standards learning, labor protection appliance wearing
Sungrow-Samsung SDI	146	146	100	1.5	Three level safety education, introductory safety education and training	115	3	EHS basic concepts and requirements	343	3	Machine safety, personal protection, emergency & first aid skills and exercises, fire-fighting training
Sungrow Floating	94	94	100	1.5	Three level safety education, introductory safety education and training	60	3	EHS basic concepts and requirements	147	3	Emergency & first aid skills and drill knowledge, social responsibility standards learning, labor protection appliance wearing
Indian Plant	39	45	100	1.5	Three level safety education, introductory safety education and training	45	2	EHS basic concepts and requirements	68	3	Electrical safety, machine safety, personal protection

Protection of Employee Rights and Benefits

Safeguard Rights and Interests of Workers

The Company strictly abides by the labor law and signs labor contract with all employees. The Company insists on legal employment and has no illegal use of child labor or forced labor.

The Company advocates equal employment and anti-discrimination. We have a diversified workforce and do not recruit employees based on age, gender, country, ethnicity, etc.The total number of employees reached 3,421 in 2018, an increase of nearly 29% from 2017. Among them, 40 employees were from minority region and accounted for 1.17%; 210 were foreign employees and made up 6.1%; 13 were disabled employees and represented 0.38%.

There were a total of 330 management personnel with 4 minority ones accounting for 1.2% and 35 female ones making up 10.06%.

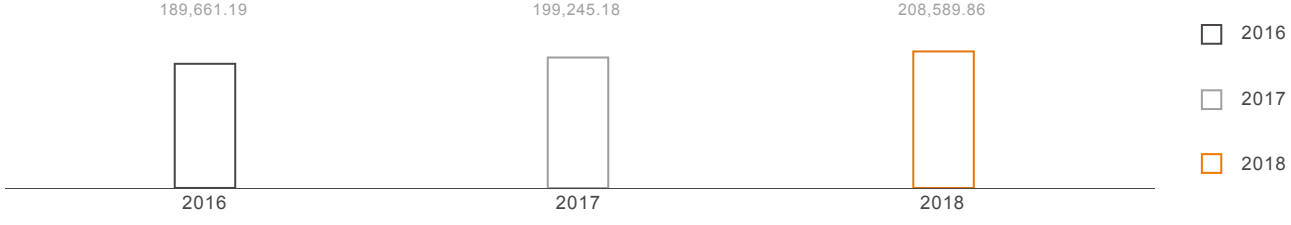
The employees were from all parts of the world and were all rooted in our various operation sites to support local economic and cultural development and talent construction. 1,776 employees came from Anhui province in 2018 accounting for 52% of the total workforce.

All employees at operation sites of the Company are paid more than local minimum wage, which is in line with local labor laws and regulations. The Company has always adhered to principle of fairness and anti-discrimination, achieved equal pay for different sex workers and abided by the standards of same minimum wage and equal pay for equal work.

The Company purchases social insurance for all employees with 100% coverage rate.

The Company encourages employees to take paid leave and focus on both work and rest. The Company's per capita paid annual leave was 6.5 days in 2018.

Annual per capita income from 2016 to 2018 (Unit: RMB)



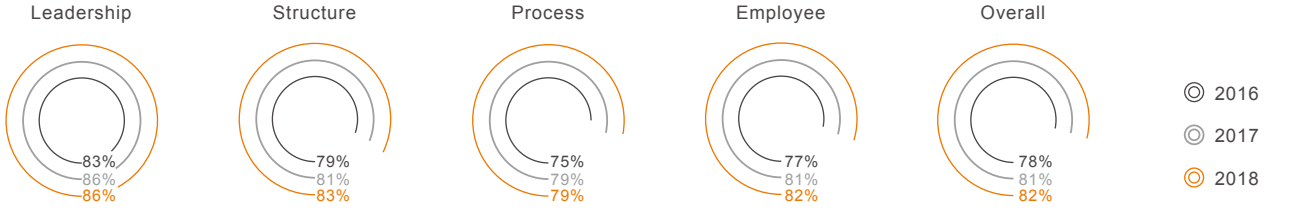
Sungrow Diversified Welfare

Types of welfare	Welfare contents	Scope
Basic welfare	Social insurance, housing fund, allowance	All employees
Caring welfare	Holiday benefits, allowance for high temperature, marriage gifts, birth gifts, hospitalization sympathy fee, condolence fee, medical examination, tour, team building, female employee benefits, employee birthday gifts, commercial insurance, paid leave, care for long-term business trips, travel allowance, shuttle bus, employee dormitory, working meals	All employees
Special welfare	Fuel subsidies, interest subsidies for housing, installment purchase loans	Employees who satisfy the Company's requirements

Enhance Democratic Management and Improve Employee Satisfaction

Sungrow has set up a trade union to effectively safeguard employees' right to know, to be heard and to oversee and helped employees understand the development of enterprises and engage in the management through the Employees' Assembly and rationalization proposal system.

The Company has conducted "organizational health degree" survey for ten consecutive years, designed questions in aspect of leadership, structure, process and employees, conducted questionnaire surveys to collect data and prepare analysis reports, and made improvements to those aspects with a low approval degree. In 2018, a total of 2,716 questionnaires were collected and the organizational health degree reached 82 %.



Case

The Sungrow India Plant has always observed local laws and respected local cultural history and customs since it was put into production, and has created many jobs for the local region and promoted local manufacturing, which was high recognized and supported by the local government. The Indian Plant insisted on legal employment in safeguarding the rights and interests of laborers and had no illegal use of child labor or forced labor and no discrimination against anyone and ensured the freedom of association for all employees. The Company purchased housing fund and national insurance for all employees with 100% coverage rate, and all employees and their families were included in the protection plan.

In order to create a democratic environment for making suggestions and build a cultural network to listen to the voices of employees and constructing a platform and channel truly reflecting feelings of the employees, the Company has set up RTX, WeChat group, Sungrow Advice Book, and “The Sun and the Wind” online forum to encourage employees to exchange ideas, expand common ground, coordinate relationships and express their heart true feelings. Having received the feedback of employees, the Company would make efforts to help solve problems and continuously improve and enhance employee satisfaction and sense of belonging. In 2018, the “Sungrow Advice Book” has received a total of 11 letters concerning life, asking for help, offering work proposals etc., and we have replied properly and also offered support to them and resolved their difficulties about process, canteen, work, life etc.

Talent Team Construction

The Company strictly abides by relevant laws and regulations, perfects a fair and legal employment environment and a healthy and safe working environment, safeguards employees’ rights and interests and fully exploits and realizes employees’ value.

Personnel Structure

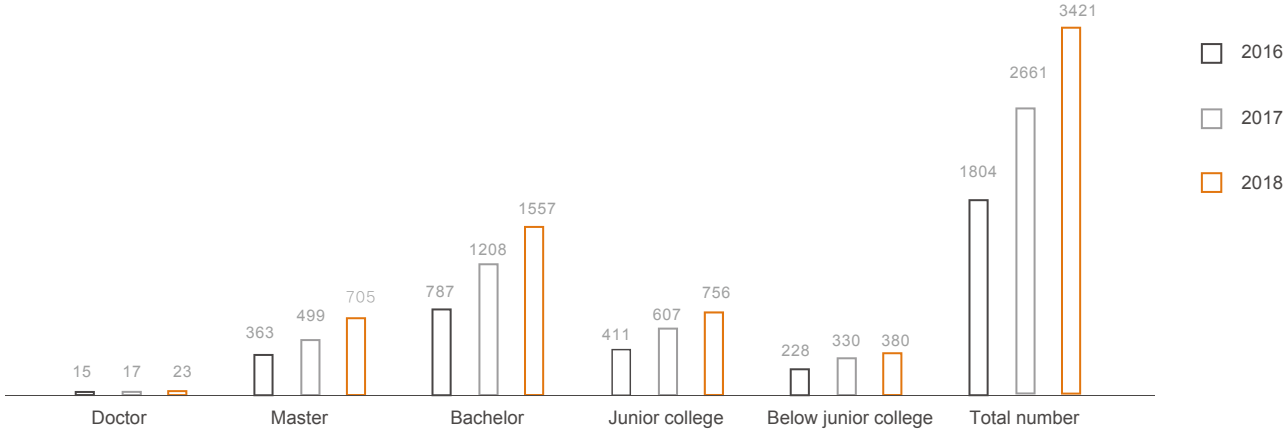
Sex ratio

Male
2900 (person)

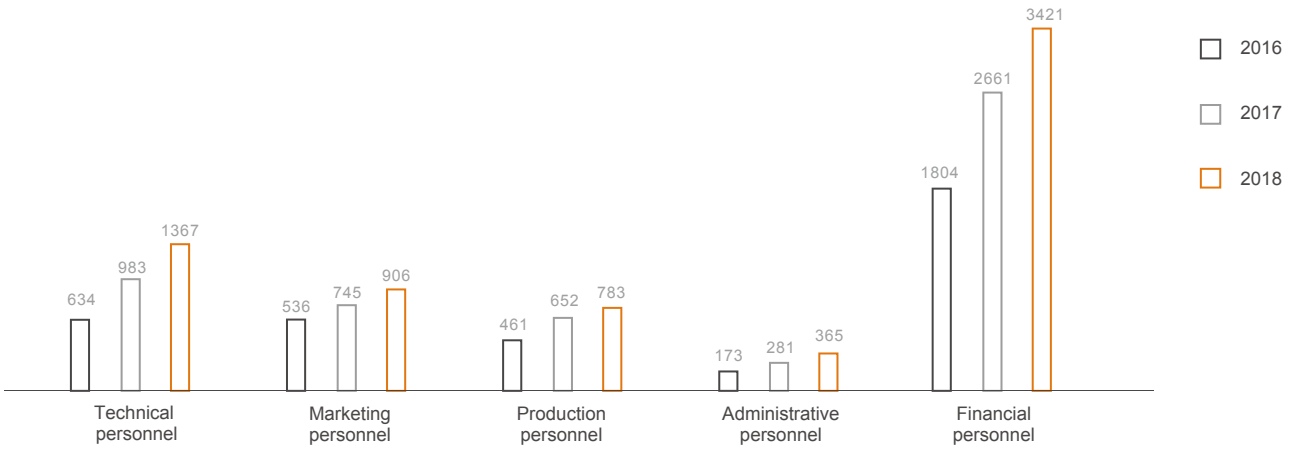
Female
521 (person)

Total number
3421 (person)

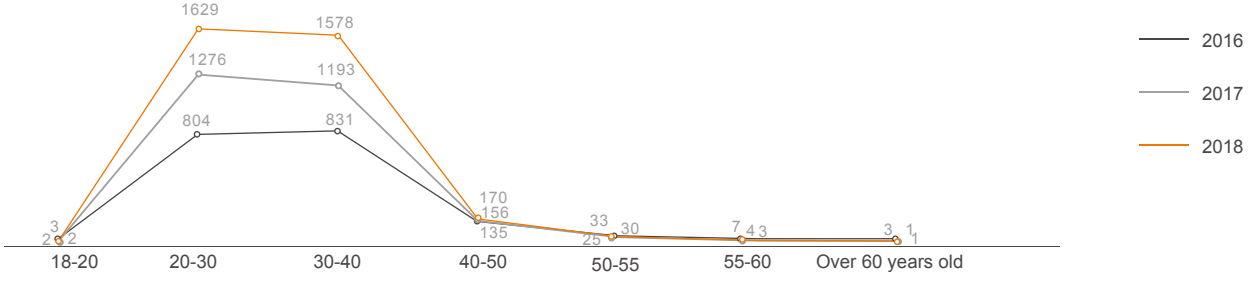
Degree of education (Unit: person)



Post classification (Unit: Person)



Age distribution (Unit: Person)



Campus Recruitment

In 2018, the Company continually strengthened publicity of school recruitment, and innovated in school recruitment methods: initially conclude the Employer Brand highlights; establish project team for school recruitment; the online application system, mobile phone and PC application systems are put into use at the same time; link the campus talk to the Company's strategy; further optimize the process of the "Open Day" activity for management trainees; smoothly launch face-to-face activities with senior executives. The Company also organized the campus ambassador recruitment and slogan collection activities in the recruitment process as part of warm-up and promotion program for the recruitment to boost the Employer Brand image of the Company. The Company has carried out 12 campus publicity and recruitment activities, 2 selective open day activities and one open day activity for management trainees throughout the year.

Employees' Career Development

The Company conducts the evaluation of employee qualifications every year, so as to ensure the efficient operation of the Company's strategic goals and organizational processes, lay the foundation for person-post matching and effective incentives, and promote the scientific, normalized and standardized management of the Company's position system. Besides, the Company divides the development path of employees into three categories: management class, profession class, and operation/execution class.

In terms of qualification assessment, the Company takes capacity and performance as the orientation, follows the principles of cross-development, promotion and demotion availability, and fully considers employees' personal qualities, capacities and work achievements during promotion evaluation. At the same time, employees can follow a single-channel development, or horizontal or cross-channel development. Employees' qualifications can be upgraded or degraded based on their business performance or the results of duty during the service period. In 2018, a total of 498 employees participated in the Company's promotion evaluation of qualifications, among who 360 employees applied for B7 and below and 138 employees applied for B8 and above. (83 employees participated in the appraisal interview and 67 passed with an approval rate of 88%)

Employee Training

The Company pays sustained attention to the competency development needs of employees, and always carries out human resources work around the organizational development goal of “building an incentive and empowerment system to create high-performance organizations and first-class talent teams” and the talent development strategy of “promoting employees’ development and achieving employees’ dreams”.

With the purpose of positively spreading our core values of “Sincere & Pragmatic, Precise & Open, Customer Oriented” and developing excellent leadership and global perspective of employees, the Company established the Sungrow Business College on September 17, 2018, which aims to comprehensively improve the capacities of middle and senior management talents. Currently, the High-level Leadership Class started its first courses with a total of 26 students who gave positive feedback on the curriculum and learning results.

Case

“The most valuable part of the training at the Business College is the biggest difference from the previous training sessions: the learning team discussed the lecture contents repeatedly and we needed to go over the course in the evening. I think the model means true learning for me that I can really learn and apply the knowledge, instead of leaving all memories behind after the training as in the past even though I felt shocked and passionate in the middle of the training. Only when I learned and mastered it can I really apply it in routine management work.”

——Feedback from student of Sungrow Business School

In addition, the Human Resources and related business units are responsible for developing leaderships of the current front-line managers/new front-line managers/ front-line backup managers and gradually building a learning organization:

1. The Company conducted 89 induction trainings for 1,300 plus new recruits, and first introduced the Management Trainee Program as a diversified talent training method integrating on-the-job learning, companion growth, specific ability training, and action learning workshop. It adopted the "coaching tutor" method, and focused on creating future management talents and improving the talent pool through "teaching, supporting and leading" of professional senior executives.

2. Management Acceleration- The New Manager Training Program aims to assist new managers in transiting the role from "self-managing to managing others" and achieving the goal of "strengthening management concept and improving management skills and management behaviors". The program adopted the form of "individual learning deposit plus completion assessment" to enhance the personal application of learning results. In 2018, the program applied to participate in the National CSTD Learning Project Design Competition and won the National Silver Award.

3. The Internal Trainer Program has solved the issue of lack of basic curriculum system for external audit training. The Program in 2018 focused on the curriculum system on production of the external audit training in urgent need and organized two experience internalization activities around the concept of "dominance of implied experience, curriculum of dominant experience and systematization of curriculum standards". As of the end of 2018, the Program had 177 certified courses to be available and 208 certified lecturers.

4. The PMP Project Management Training, the Product Manager Program and other specific projects offered ongoing professional training to employees of different levels to meet their constantly upgrading learning needs.

5. A number of activities were organized through "Sungrow e-learning" platform, such as the Learning Champion Challenge, the Micro-course Competition, and Point Reward. The Micro-course Competition as the key project produced 68 excellent works, and also promoted the learning mode, design idea and production of the micro-course and served as a fast-sharing platform gathering all kinds of knowledge in various fields of the Company.

6. The "Sungrow e-learning" platform has accumulated a total of 37277 person times since it was initiated one year ago, with 16459 person times in the Company's own courses accounting for 44.15%.

阳光e起学
Sungrow e-learning

37277
person-time
accumulative learning

16459
person-time
self-developed
courses learning

Performance incentive

The Company has established a performance management system consisting of Organization Performance Management Regulations, Employee Performance Management Regulations, and Management Rules for Performance Management of Executive Positions. The Company vertically divided its strategic objectives into business units/central level/department level and employee level goals so that each department and employee actively promotes to achieve their performance goals at all levels based on the performance goals and tasks.

For the performance management of organizations and employees, the head of each department/business unit is the first responsible person who takes charge of the routine implementation and supervision of performance management including performance planning, performance coaching, performance evaluation, performance interview and feedback, resource support for employees, etc.

The Company conducts regular performance appraisals of all employees, objectively and fairly evaluates the performance and contributions of employees, and establishes the value distribution and incentive mechanism of “sharing value based on contributions” to lay a basis for the decision making like adjusting salary and posts, training development and other medium-and-long-term incentives, etc. The Company not only expects to achieve the organizational performance goal through performance management, but also regards it as part of talent management, aiming to support employees to better achieve their personal development goals and strive to “achieve a win-win situation for both sides”. All employees of Sungrow were assessed regularly in terms of work performance in 2018.

Case

The Company headquarters actively provides technical support and training to local employees in the Indian Plant. The Plant also equips employees with job skills and training resources for career development, and organizes more than ten trainings on supply chain management and procurement, product testing awareness, finance, accounting and SAP, ISO concept, internal audit and performance and management system, to encourage employees to fully grasp the opportunities and achieve personal career development goals while promoting development of the Company.

Living Guarantee of Employees

Enrich Life of Staff members

The Company provides diverse supports for its employees to enrich cultural life of employees, and safeguards employees’ legal rights and interests in terms of hardware facilities, cultural platforms, cultural activities, and democratic management systems, thus improving employee satisfaction.

Type	Content
Facilities	The Company has set up a Staff Growth Center equipped with library, gym, chess and card room, badminton court, table tennis court, dance studio, and band rehearsal room, having greatly enriched the employees' spare-time life.
Recreation and sports platforms	The Company forms Yue Running Group, Tangchao Poetry Club, band, various types of ball associations, etc., so a group of congenial employees can enjoy life here. Additionally, the Company has WeChat culture group, Sungrow electronic periodical and other cultural exchange platforms to share cultural stories and insights.
Cultural activities	In 2018, the Company held a variety of cultural activities, and successively carried out company-level cultural activities such as the Annual Meeting, Family Carnival, Trailwalk and Skill Contest, to enhance employees' understanding towards the history and culture of the Company and enhance their sense of belonging through such celebration ceremonies and rituals. In addition, the Company also organized some theme activities such as the International Women's Day, Double Seventh Festival, Christmas, The Voice of Sungrow etc. to enable employees to feel the meaning of festival in a relaxed festive atmosphere. It also regularly launched association events such as badminton contest and the "Sungrow Cup" athletic activities, allowing employees to share their experience and knowledge in the competitive atmosphere and experience the power of teamwork. These activities added fun to the employees' leisure life and create a more harmonious and active working atmosphere for everyone.
Cultural incentive system	The Company brings in the incentive system such as the Team Building Management Regulations and Instant Incentive Management Regulations and allocates certain cultural funds to encourage employees to organize team activities and reward workers with outstanding performance. This can not only enhance mutual understanding and exchanges among employees in the Company while creating a good teamwork atmosphere within the company, but also can stimulate employees' enthusiasm, arouse their initiative on skills and work, and encourage the more advanced to bring along the less advanced by setting good examples for their personal growth.

Sungrow attaches great importance to the promotion and transmission of cultural genes, and transmits and displays its mission, vision and core values to all employees by means of multiple approaches, and provides guidance on employees' behaviors. For this purpose, the Company prints the profile in employee manual for employees to understand the system and norms, creates the Sungrow collected stories recording good deeds and people stories of employees to inherit corporate culture and spirit, and produces Sungrow electronic periodical to share fresh news of each quarter and serve as a platform for employees to speak out freely, creating positive, relaxed and warm cultural atmosphere.

Care for Female Staff

The Company highly values the protection of female employees' rights and interests. The Company grants women workers statutory holidays such as marriage leave and maternity leave according to legal standards, provides monthly special subsidies to them, and arranges special health checkup programs as well as the special "Female Health Insurance" for them. The proportion of female employees returning to work and retaining jobs after maternity leave is 100%. All female employees are given a welfare card worth RMB 200 on the International Women's Day every year, and the Company holds various forms of activities for female employees every two years on that day, such as flower arrangement, mountain climbing, DIY oil painting, office portrait shooting.

Help and Support Staff Difficulties

For colleagues who have major diseases or whose relatives have major diseases, the Company actively organizes charitable donations and the senior management and employees all extend a hand to them.

Hand-in-hand to Achieve Win-win Cooperation

Supply Chain Management

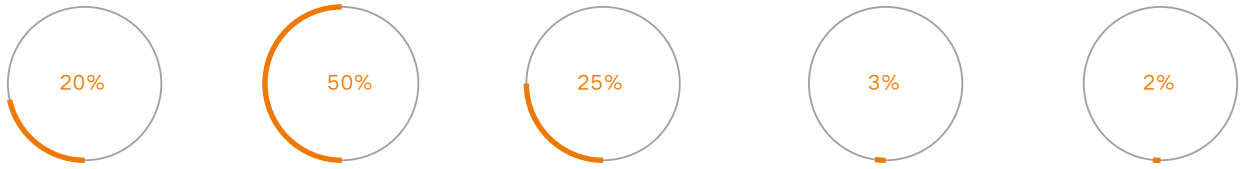
A transparent, reliable and sustainable supply chain is the basis for the excellent quality of the Company. The Company sincerely cooperates with its suppliers, makes lean innovation, and establishes long-term, trustful, and sustainable partnerships. Besides, the Company integrates the idea and requirements of CSR into supply chain management and supplier selection and adopts the "procurement responsibility system" to jointly create a competitive supply chain system with suppliers and achieve deep cooperation and win-win results.

Sustainable Development

The Company keeps improving the supplier management system all the time. In 2018, through optimizing the procurement system, the Company basically purchased materials by means of tendering for the leveraged projects and expanded cooperation with qualified suppliers with active will and manufacturing capabilities for non-project procurement, having further promoted the openness of procurement information. The electronic information exchange level with suppliers has been further strengthened with the continuous upgrading of the e-procurement platform, which has expanded the suppliers' information reply, opinions and suggestions and feedback etc.

In 2018, the Company revised the supplier performance evaluation system document, so it became more fair and comprehensive in assessing the supplier work and the desire for cooperation of different suppliers has enhanced to a greater extent.

The supplier performance evaluation grades in 2018 are as follows



Out of the need to build a sustainable supply chain management system, Sungrow actively promotes the widespread use of SA8000 certification in the supply chain, and requires all suppliers to obtain system certificates on occupational health and safety, environment and quality management and other management system certification. The proportions of suppliers certified in 2018 were 16%, 41%, and 95% respectively. In the future, the Company will gradually improve the selection criteria of suppliers, and give preference to those certified companies as partners, and expand the scope of cooperation with certified companies.

Green Procurement

The Company insists on implementing green procurement that all supplier partners shall sign the ROSH commitment. In addition to this, the Company also made stricter requirements for green procurement and gradually required all suppliers to implement the REACH directive in 2018. Currently, the Company's supplies warehouse is at a high greening level and in continuous improvement in this regard.

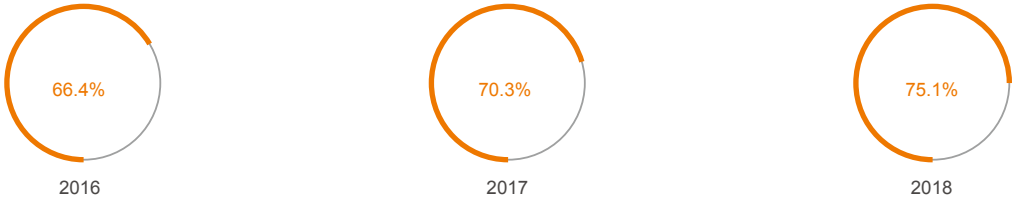
Procurement Compliance

Sungrow requires each supplier to sign an integrity agreement during the procurement tender process, and assesses the supplier's integrity through anonymous feedback at the supplier e-procurement platform and unscheduled integrity promotion programs, in order to avoid violations of business ethics and damage to the Company's integrity management, and establish a healthy, efficient and competitive supply chain system. The Company's Audit & Inspection Department conducts unscheduled supervision over procurement activities and invites the government and judicial departments to conduct legal education to procurement personnel.

Localized Procurement

Sungrow persists in establishing long-term partnerships with suppliers. Also, Sungrow continuously supports the economic development of operating sites, reduces the impact of logistics links on the environment, and actively promotes localized procurement.

The proportion of local procurement (domestic procurement) in 2016 to 2018 is 66.4%, 70.3% and 75.1% respectively, which is on rise year by year.



The Company has established complete localization measures for supplies available near the operation sites. The Company achieved local procurement of various kinds of materials through implementing capacity assessment, closed-loop rectification, capacity improvement, and capability monitoring of new supplier near the operation sites. The local procurement examples are as follows: Sungrow Floating processed the floating devices at the local; Sungrow (Jinzhai) purchased the packaging materials at the local; the Indian Plant purchased raw materials and auxiliary materials at the local; some projects purchased a number of auxiliary supplies at the local. The local procurement of these materials further enhanced the local economic development.

Dealer Management

As an important business segment of the Group's strategic layout, Sunhome (Sungrow residential photovoltaic business) focuses on the business core value of "multi-generation", and builds a comprehensive distribution service system throughout the country to provide high-quality products and services to all dealers and end users.

Relying on the Group's resources on research and development, capital, technology, brand etc., Sunhome built a residential PV vertically integrated and sustainable channel ecosystem through overall development on organizational guarantee, product R&D, marketing model, financial services, installation and after-sales and formed a stable and win-win community of shared interests between the Company and dealers ; Sunhome, through the whole process design of sales management, delivery system, marketing, installation and after-sales, has effectively improved end-user customer satisfaction and market share, maximizing the value of products and services and creating more value for all customers.

The Company has developed detailed market segmentation strategies, improved dealer management rules, and optimized access conditions and support and incentive policies; and through overall support to the dealers, the Company helped create ten million level dealers and supported more dealers to become bigger and stronger to maintain strategic partnerships with Sungrow.

Overall support to the dealers

Under influence of the new policy "5·31" in the photovoltaic industry in 2018, the Company signed with more than 400 key dealers throughout the year, which has more than doubled compared with 2017, covering two thirds provinces and cities nationwide, with the service network expanding to counties, districts and villages. The Company developed business strategies based on local conditions, improved the loyalty of dealers and continuously optimized the distribution partner program to enhance the confidence of dealers. Its intensive distribution service network makes clean energy available to consumers at home, having faithfully fulfilled the mission of "Clean power for all".

Communication and Exchange

Sungrow emphasized collaborative innovation with suppliers and has established regular exchange mechanism at various levels, including business talks, technical exchanges, quality training, high-level reciprocal visits, and supplier conferences. The senior management also actively participated in the communication with suppliers, directly listened to their voices, objectively accepted their opinions and suggestions and promoted to eliminate the obstacles and inefficiencies in the cooperation between the two parties, and thus enhanced confidence of both sides in building in-depth cooperation. Additionally, to standardize the daily communication with suppliers and improve communication efficiency, the procurement center also launched a mini-program for making appointments for visitors. Partners can learn the timetable and reserve with relevant personnel in advance through the mobile APP, which greatly improves efficiency in communication and conducting exchange data statistics.

Besides, Sunhome attached great importance to achieving coordinated development with many partners, and formed a strong collaborative strategic alliance with customers through interviews and visits, marketing meetings, centralized training and other forms of communication mechanisms.

The Company regularly conducted comprehensive skills & service training for dealers and service providers on a monthly basis and fully assisted dealers in quickly improving integrated professional skills on operating organs and offering services to effectively enhance customer satisfaction and market share; the Company's senior executives actively engaged in exchanges with dealers and got their feedback by means of interviews, telephone calls, WeChat, etc., efficiently promoted cooperation with customers and upped cooperation confidence; The staff at provinces and districts also maintained close communication with partners based on the method of "the minor motivates the major, and integrate the minor and major" and consciously maintained market operation order and brand image to effectively solve specific problems.

Case

In January 2018, Sungrow held the supplier meeting titled "Open Cooperation & Lean Innovation" in Hefei and 500 suppliers were invited to attend. At the meeting, Sungrow and supplier partners explored issues such as synergy and openness, technology innovation and quality improvement, and strived to build a more competitive Sungrow supply chain system to achieve in-depth cooperation and a win-win situation.

Give Back to Society with a Grateful Heart

PV Poverty Alleviation

PV poverty alleviation is one of the ten targeted poverty alleviation projects certified by the state, and has become an important measure for the industry to help the poor and win the fight against poverty. Sungrow actively responds to the call of the government and based on its expertise and capabilities in the new energy field, practices the model of PV poverty alleviation to improve the self-made and self-running capabilities of poor families.

With an aim to construct poverty alleviation demonstration projects and quality projects that truly reassure the government and satisfy the mass, Sungrow has tried the “concentrate construction and contiguous development” mode in many cities. We chose the proper poverty reduction method guided and supported by the government, and then conducted unified planning and implementation, site investigation, design and construction and application for grid connection to take full advantage of resource distribution. Besides, the Company strengthened management at the key project parts such as equipment quality, installation process, project debugging and acceptance, and controlled over the PV project from its source in the whole life cycle to maximize the efficiency of poverty alleviation projects.

Case

When constructing the village-level PV poverty alleviation project at Huaibin County, the Sungrow project personnel carried the materials personally and installed the bracket components in raincoat to complete the construction work because there was impounded surface water at the project sites due to rainy season and vehicles were blocked from passing. They were on the spot to solve problems during the day, summed up work and arranged plans at night, and coordinated the parties involved in the project to solve various difficulties and successfully realized grid-connected generation for the first time.

——Huaibin County Huaishang Transportation Co., Ltd.

As of the end of 2018, the Company’s PV poverty alleviation business has covered 16 provinces such as Anhui, Zhejiang, Shandong, Hubei, Guangxi, Hebei, Henan and Sichuan, helping 300,000 poverty-stricken households and 2,200 poverty-stricken villages, with a total scale of 1.2 GW.

In addition, as of now, the Company has cumulatively donated 5,100 kW PV power stations in Yongqiao District, Xiaoxian County, Sixian County, Lingbi, Susong, and Taihu Lake in Anhui Province and donated 1070 kW PV power stations in Sichuan, Shanxi, Guangxi, Gansu and Jiangxi.

The Company currently also undertakes the operation and maintenance of 760 MW PV poverty alleviation power stations for nearly 18,000 poverty-stricken households and more than 2,000 poverty-stricken villages in Jinzhai County, Yuexi County in Anhui Province, Caoxian County in Shandong Province and other places, ensuring the annual revenue from power generation at RMB 3,000 for poverty-stricken households.

Case

In August 2018, Yuexi County, a revolutionary base in the Dabie Mountains, was removed from the list of national-level poverty-stricken counties, which was also the first of shedding the “national poverty-stricken” title in Anhui Province. The Company’s PV poverty alleviation project played a crucial role in the process.

From 2015 to 2017, Sungrow has built 309 village-level power stations and 6,000 household power stations in 24 villages and towns of Yuexi County in three phases with a total capacity of 50 MW. By the end of 2018, the project has reached a total power generation of 12,196,800 kWh, having helped 26,949 poor households to shake off poverty and become rich. In the next 25-year life cycle, the average annual power generation of these power plants can reach about 51.6 million kWh with the average annual income totaling about RMB 50.56 million.

In addition, to broaden the income sources, Sungrow also organized professional training for power station administrators and recruited poor households to do some basic operation and maintenance work such as cleaning components and weeding at the power station.

“I can now get salary on a monthly basis in addition to the annual income of RMB 3,000 from poverty alleviation for my family which I would have been impossible to even think of before.”

—— Wang Zhizhong, a villager from Hetu Town, Yuexi County

Serve the Society with Public Welfare Projects

Sungrow persists with input in public welfare projects with the annual donation exceeding RMB 5.2 million. Furthermore, the Company focuses on cultivating young group's clean energy awareness and environmental protection concepts, and continuously expands the scope of public welfare practices to benefit more young people. Sungrow mainly undertakes public welfare programs in two fields: poverty alleviation and science education.

"Teenage Dream+"

To continuously enrich the CSR work, the Company started the "Teenage Dream+" public welfare project in 2018. The project focused on students in poverty-stricken areas with weak infrastructure and harsh teaching and living conditions to broaden their horizons and help realize their dreams with a series of ongoing caring activities. The Company has donated RMB 100,000 and 10,000 books to build "Sungrow Bookshelf" in five needy schools in Xiao County, Anhui Province.

Cao Renxian, Chairman of Sungrow, personally chose books and wrote a message on the title page "wish all kids read every fable", and expressed his hope that all kids can keep company with the book and have a happy and fulfilling childhood.

Youth Green Laboratory

Sungrow, Anhui Market News and Hefei Evening News co-established the youth green laboratory study program for teenagers, and invited students from the target school Jinzhai Huashi Primary School to visit and experience. Students first visited the rooftop PV plant and finished the PV power generation experiment, and finally experienced in person the water surface PV power generation process at Liangyuan, Feidong of Hefei. All students were amazed at the magic of PV power generation on the tour.

> "The heat wave can't stop our passion for craving for knowledge when we got to the photovoltaic power station on the roof. We listened carefully to the explanations of the staff and teachers, and had great interests in clean power."
>
> —— Chang Xinyue, Class 7 from Hefei Xinhua Experimental Middle School

Other Donations

Donation projects	Amount (RMB 10 thousand)
“You and Me, on the Road of Poverty Alleviation” project, Yingdong District, Fuyang, Anhui	20
Guangxi United Front Tongxin Water Tank	30
Drilling Project in Dakeng Village, Tiepu Town, Xiangqiao District, Chaozhou City	2
Yunnan Lianghe Funds Donation Project	50
Poverty Alleviation Funds for Xiayi County, Henan	2
Zuoquan Public Welfare Cycle Race	4
The Motor Cross-country Championship at Libu Yangshan	3
The Operation & Maintenance Monitoring Access System at Lingbi County	20
Yeji District Communication Module Donation Project	6
The Operation & Maintenance Platform Donation at Lan Country of Shanxi and Haiyuan of Ningxia	60
The Operation & Maintenance Platform and Equipment Donation at Dongxiang, Jishishan, Guanghe and Linxia of Gansu	300
Scholarship for the College of Electrical Engineering, Zhejiang University	8
Scholarship for the College of Electrical Engineering, Hefei University of Technology	5.1

Integrate into the Community with a Warm Heart

While continuously pursuing technological innovation and sustainable development, Sungrow also lays stress on communication with local communities, and by concerted efforts of internal employees, it has performed well in organizing personnel visits, cultivating outstanding industrial talents, and supporting cultural and sports activities in the community.

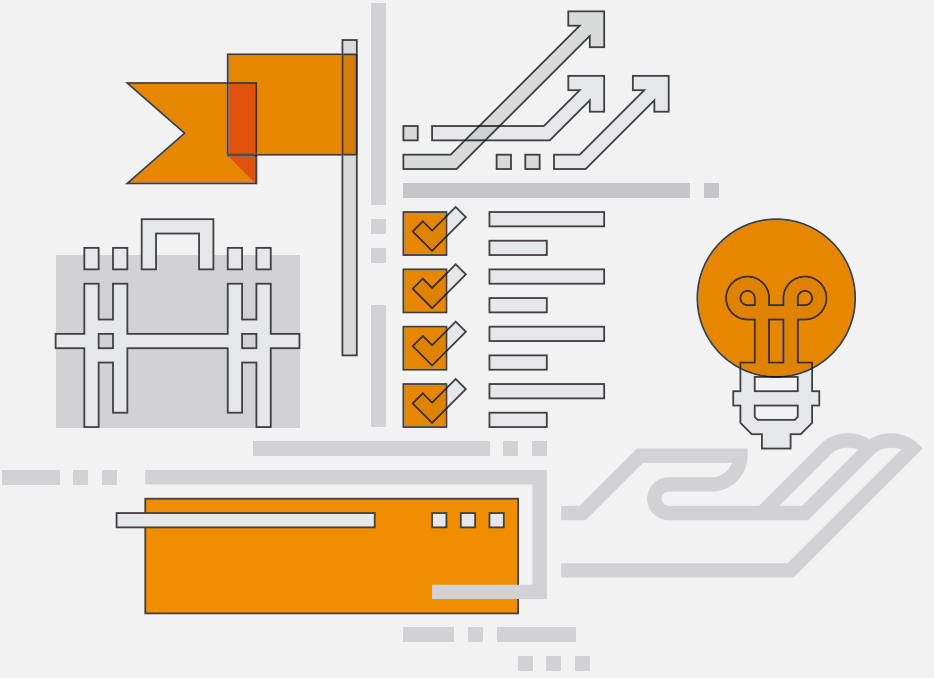
A total of more than 2,000 college, primary and secondary school students from the provincial/municipal Party Schools, Youth Class of the University of Science and Technology of China, Hefei University of Technology, Hefei University, Huashi Primary School visited the Company for study in 2018.

Additionally, the Company actively participates in community-related public welfare activities. In 2018, in the “Welcome New Year & Realize Little Wishes” activity organized by Hefei High-tech District, the Company formed a help & support team with 8 families from Jingui community and helped the target families realize their New Year wishes and spread warmth of the New Year.

The Company also participates in local community activities. The Company’s Basketball Association took part in the “Color Cup” basketball game of Jingui Community and Sungrow Yue Running Group competed in the Hefei City Running Contest. It strengthened cooperation with local communities and enterprises through own participation in community activities.

Case

Since October 2018, Sungrow has held four events at Indian Institute of Technology and the University of Punjab to introduce the broad market prospects of solar energy and popularize renewable energy knowledge to more than 200 local college students.



CSR Performance

Economic Performance	Unit	Year of 2018	Year of 2017	Year of 2016
Operation Revenue	RMB	10,368,931,999.29	8,886,060,068.67	6,003,662,456.20
Total profit	RMB	922,640,011.92	1,161,780,736.92	668,135,709.91
Tax paid	RMB	277,966,905.65	303,526,321.78	190,484,703.28
R&D input	RMB	482,297,536.91	352,242,228.54	262,150,242.32
New patents	Pcs	338	308	238
Customer service satisfaction	%	93.83	92.13	93.1
Percent of suppliers passing the quality certificate	%	95	82	64
Percent of suppliers passing the environmental certificate	%	41	36	22
Percent of suppliers passing the occupational health and safety management system certification	%	16	7	/
Number of major suppliers	Pcs	122	108	101
Local procurement ratio	%	75.1	70.3	66.4

Environmental Performance	Unit	Year of 2018	Year of 2017	Year of 2016
Environmental protection input	RMB ten thousand	265.7	168	112.5
Carbon dioxide emissions	ton/year	10660.4	5437.7	3520.6
Total water consumption	cubic meter/year	102,064	86,730	97,703
Water consumption per RMB ten thousand output value	cubic meter/RMB ten thousand	0.098	0.099	0.153
Total power consumption	kWh/year	32,853,482	15,879,377	10,985,491
Comprehensive energy consumption	tons of standard coal/year	4276.1	2181.2	1412.2
Energy consumption per RMB ten thousand output value	kg/RMB ten thousand	4.12	2.48	2.21
Total COD emissions	ton/year	18.109	16.25	17.95
Ammonia-nitrogen emissions	ton/year	1.676	1.420	1.630
Total solid waste discharge	ton/year	314.1	142.8	106.51
Hazardous waste discharge	ton/year	25.62	10.2	7
Wastewater discharge	ton/year	81,651	69,384	78,162

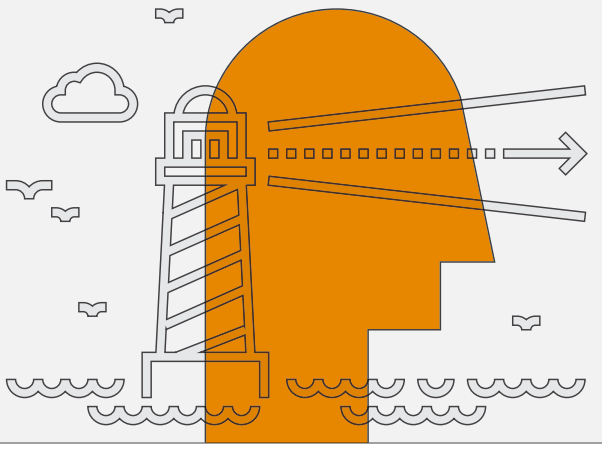
Social performance	Unit	Year of 2018	Year of 2017	Year of 2016
Number of R&D personnel	Person-time	1367	983	634
Total number of serving staff	Person-time	3421	2661	1804
Number of minority employees	Person-time	40	31	17
Number of disabled employees	Person-time	13	13	13
Number of foreign employees	Person-time	210	107	60
Proportion of female managers	%	10.6	10.3	8.5
Social insurance coverage ratio	%	100	100	100
Labor contract signing rate	%	100	100	100
Employee voluntary turnover rate	%	13.2	11	7.25
Input in employee training	RMB ten thousand	586	407	204
Employee training coverage rate	%	100	100	100
Health and security input	RMB ten thousand	1150.2	1023.4	770
Health and security training person-time	Person-time	4051	3473	2587
Poverty alleviation size	MW	495.9	638.6	93.6
Charitable donations amount (not including power station and operational equipment)	RMB ten thousand	135.1	151	37.5

Outlook for 2019

Sungrow will continually shoulder the mission of “Clean power for all”, and positively expand global market. By providing superior clean power products and services, Sungrow intergrates into and promotes the sustainable development of more countries and regions, taking more global responsibility. At the same time, according to the Company’s real situation, Sungrow continuously optimizes the organizational structure of CSR management, as well as perfecting the communication mechanism with stakesholders, gradually realizing the normalization and standardization of CSR management.

The Company will continue studying and exploring the CSR information disclosure mechanism, and regularly publish social responsibility reports and disclose responsibility practices and performance, plan and carry out social responsibility exchange activities, take the initiative to accept social supervision and take our own CSR road.

Sungrow will give full play to its advantages in capital and technology and its demonstration role, and build a multi-level three-dimensional poverty alleviation structure through the “Household Poverty Alleviation Stations + Village Collective Poverty Alleviation Stations + Centralized Poverty Alleviation Stations” to eliminate poverty, and contribute to creating greater value for improving human ecology and creating a beautiful earth while achieving sustainable development of the Company.



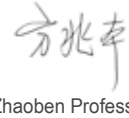
Expert Comments

In recent years, there are more and more Chinese corporations going global, participating deeply in global competition. Since Chinese economy is transforming from quantitative increase to qualitative increase, more Chinese corporations start to focus on corporate social responsibility for long term and sustainable development. Among them are leading companies whose CSR considerations are not limited to consistent contributions to social economy, environment and charity, but to use their advantages and influences to attend and motivate related parties to create a wonderful future for humanity.

Sungrow Power Supply Co. Ltd. 2018 Corporate Social Responsibility Report makes us see the vision and practices of a responsible corporate citizen. Closely combining with the corporation mission “Clean power for all”, Sungrow teases out the relationship in depth between human society and industrial development, coming up with the social responsibility idea “Green Mission, Better Life”. Under guidance of the idea, Sungrow initiates a series of excellent practices: with efforts of all stakeholders, Sungrow constantly optimizes responsibility management, promotes itself and cooperative partners to realize green operations and sustainable development, positively complies with the global energy developing trend of low-carbon or even zero-carbon; through continuous research innovations and quality revolutions, Sungrow leads the globe, drives energy revolution, deeply works in charity, such as educational support, targeted poverty alleviation, community sustainable development, aggregating employees’ love to constantly contribute to the society through effective and pragmatic actions.

As a non-financial information disclosure, CSR report related parties are more extensive, and also shoulder communication and promotion functions at the same time. Herein I suggest Sungrow properly disclose prospective subjects concerned by stakeholders. The potential influences brought by subjects, such as the hot topic of energy transformation at the Two Sessions, ecosystem improvement, continuous main pollutant emission declination, accelerative settlement of wind, solar and hydroelectricity absorption problems and industry developing trend, on the company future development can be described in a particular column in the report.

At last, I hope Sungrow can set up a good example both in clean power technology conversion field and social responsibility management through continuous innovation, and to create more value for the society as a main force in the construction of a beautiful China and wonderful earth.



Fang Zhaoben Professor
Management College, University of Science and Technology of China

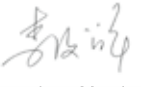
Energy and climate issues are intertwined and affect each other. Facing the challenge of global climate change, energy corporations should shoulder more arduous responsibility, regarding environment protection as their own mission and investing in more resources. China being the hugest country of energy production and consumption worldwide, what responsibility should Chinese energy corporations take under an energy revolution background? Sungrow set up a good example.

Sungrow is committed to the mission “Clean power for all”. The core of CSR is to fulfill energy demands on the basis of sustainable development. First of all, it needs a plenty of technical talents and capital investment to boost sustainable innovation and to develop advanced products of clean power conversion, substantially improving customers’ operational performance and environmental performance, producing more, cleaner and more economical clean energy, such as solar energy and wind energy. Meanwhile, we should make sure of the safety of employees, business partners and communities, and continuously cut down energy and water consumption in enterprise operation to support green economy development.

For Sungrow, taking responsibility means to use professional capability, righteous and ethical behaviors to provide support, help and constant optimization for all stakeholders, including realizing employees’ dreams, forging ahead with partners, gratefully integrating in community, assisting poverty alleviation and devoting to public welfare etc.

Besides demonstrating multiple efforts and practices for a sustainable development, Sungrow 2018 CSR report also presents its exchanges with related parties and listening to different external voices to optimize corporate operation and responsibility management. I believe this report could be an effective communication channel to facilitate Sungrow to exchange with other social parties and to create long-term and sustainable value all together.

Energy is a global topic. At a time of profound innovation in global energy layout, I hope more Chinese energy enterprises like Sungrow can play a more important role in the process of global energy innovation, provide more public products and shoulder more responsibility to further improve Chinese energy companies’ global competitiveness and brand influence, and make donation to build a community of shared future for mankind.



Li Junfeng, Director Committee Member
Professional Committee of Renewable Energy, China Energy Research Society

Directory of Major Enterprises

Full name	Abbreviation
Sungrow Power Supply Co., Ltd.	Sungrow
Hefei Sungrow New Energy Technology Co., Ltd.	Sungrow New Energy
Sungrow (Shanghai) Co., Ltd.	Sungrow (Shanghai)
Sungrow (Qinghai) Co., Ltd.	Sungrow (Qinghai)
Sungrow (Jinzhai) Co., Ltd.	Sungrow (Jinzhai)
Sungrow-Samsung SDI Energy Storage Power Supply Co., Ltd.	Sungrow-Samsung SDI
E-power Technology Co., Ltd.	Sungrow Electric Power
Huainan Sungrow Floating Module Sci.& Tech. Co., Ltd.	Sungrow Floating
SUNGROW DEVELOPERS INDIA PRIVATE LIMITED	Indian Plant

GRI Standards Index

GRI Standards	GRI Items	GRI Index	Page to refer
GRI 102:	102-1	Name of the organization	Cover,p05,back cover
General Disclosures	102-2	Activities, brands, products, and services	p05
	102-3	Location of headquarters	p05
	102-4	Location of operations	p05,p21
	102-5	Ownership and legal form	p09-10
	102-6	Markets served	p05,p21
	102-7	Scale of the organization	p21,p42-44
	102-8	Information on employees and other workers	p41-42
	102-9	Supply chain	p50-51,p59
	102-10	Significant changes to the organization and its supply chain	p50-51
	102-11	Precautionary Principle or approach	p10,p27,p37
	102-12	External initiatives	p19
	102-13	Membership of associations	p19
	102-14	Statement from senior decision-maker	p03
	102-15	Key impacts, risks, and opportunities	p03,p21
	102-16	Values, principles, standards, and norms of behavior	p05,p09-11,p43-44
	102-17	Mechanisms for advice and concerns about ethics	p09-11,p18
	102-18	Governance structure	p09
	102-19	Delegating authority	p15
	102-20	Executive-level responsibility for economic, environmental, and social topics	p15-17
	102-21	Consulting stakeholders on economic, environmental, and social topics	p15-18
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	102-23	Chair of the highest governance body	p09
	102-24	Nominating and selecting the highest governance body	p09-10
	102-25	Conflicts of interest	p09-11
	102-26	Role of highest governance body in setting purpose, values, and strategy	p09,p15
	102-27	Collective knowledge of highest governance body	p03,p22
	102-28	Evaluating the highest governance body's performance	p15-17
	102-29	Identifying and managing economic, environmental, and social impacts	p15-17
	102-30	Effectiveness of risk management processes	p15-17
	102-31	Review of economic, environmental, and social topic	p16
	102-32	Highest governance body's role in sustainability reporting	p15-16
	102-33	Communicating critical concerns	p16
	102-34	Nature and total number of critical concerns	p16-17
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Dear readers:

Thank you for reading this CSR Report! In order to better provide you and stakeholders with valuable information, and at the same time promote your supervision on our CSR work and improve our capacities and level of fulfilling social responsibilities, we very much hope that you can evaluate this CSR Report and present your valuable opinions and suggestions.

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6、Do you think the content arrangement and layout design of this CSR Report are convenient for your reading?
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7. Supplements:

Thank you for your feedback and valuable time!

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