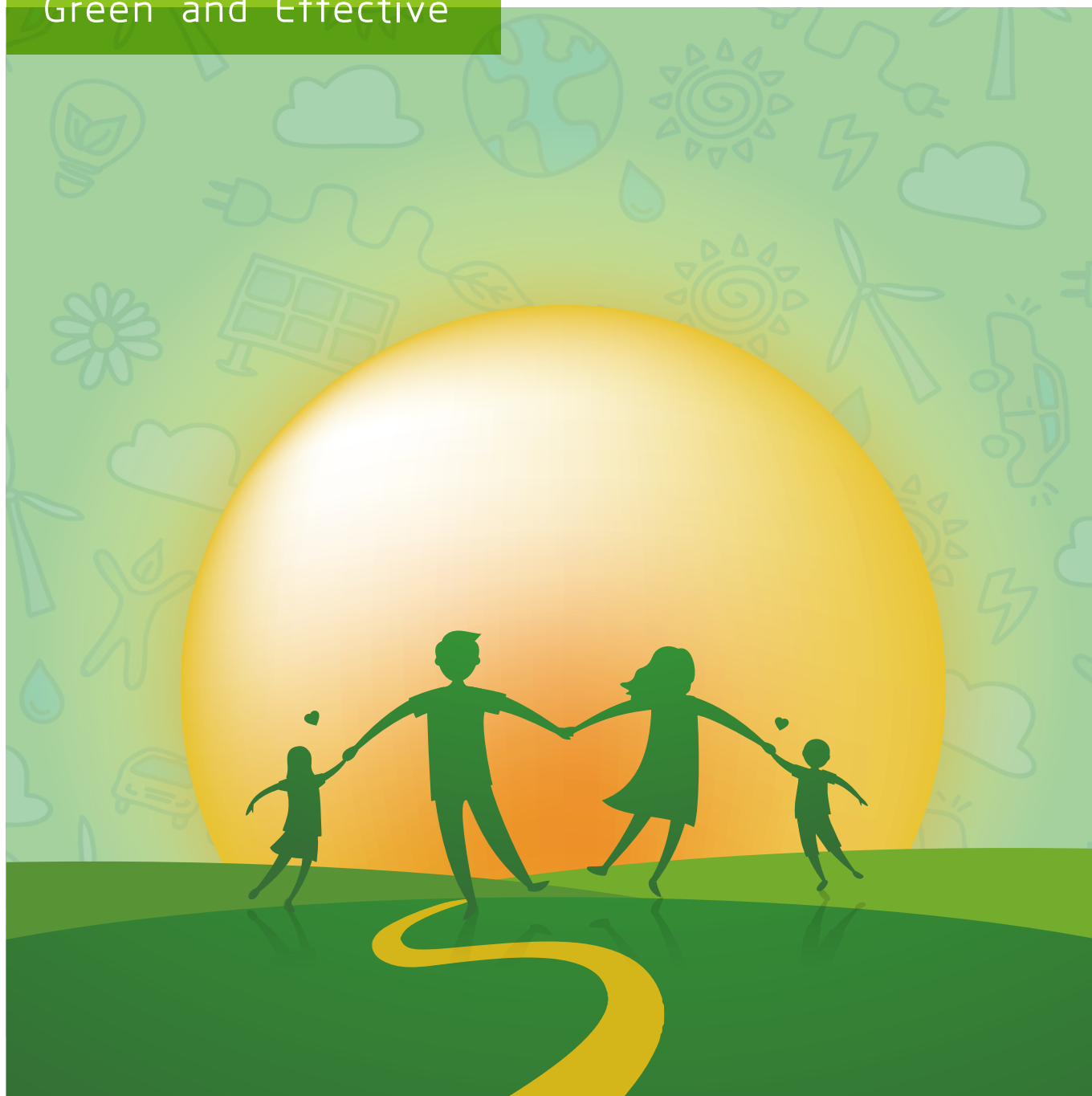




**Sungrow Power Supply Co., Ltd.**  
2016 Corporate Social Responsibility Report

Green and Effective





One faith, twenty years.

The sun powers my growth.



## President's Address

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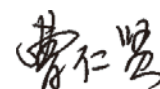
Dear friends of all circles:

Founded in 1997, Sungrow has developed from a simple equipment manufacturer to a system solution supplier; at present it is dedicated to pushing forward an in-depth integration of energies on a larger stage with increasing followers and clearer future predictable.

Over the past years, the worldwide Sungrow team has contributed in driving the global development of the renewable energy power generation and other low carbon resources. Sungrow is 20 years old. It has thought deeply on how to achieve sustainable development and to play its role as an excellent corporate citizen with our efforts and improvements around our customers and other stakeholders in helping to raise their value by providing high-quality clean energy products and services; this is the key focus of Sungrow's sustainable development goals.

The sharp changes to the global energy pattern and the economic development modes continued in 2016. We spared no efforts in studying and analyzing the trends, satisfying the wants and needs of the market, and pursuing excellence and pushing forward all of our key projects and accomplishing our annual business objectives. By the end of 2016, the Sungrow products achieved the accumulated installed capacity of more than 38 gigawatts globally, supplying clean power in countries across the globe. Furthermore, we have always attached great importance to improving our work concerning the environment, occupational health and safety, employees and community, and others involved in the enterprise operations and enthusiastically, continuing to grow our corporate citizenship responsibilities. You can access to the information about our advancement and efforts in "2016 Corporate Social Responsibility Report".

Based on the previous efforts, Sungrow will grow vigorously "under the sun". In the context that the green low-carbon development has become more and more a social consensus, we will continue our new energy equipment business, accelerate the development system integrated photovoltaic and wind energy technologies, invest and innovate and explore new business items such as the driving system for clean energy vehicles and energy internet, and make efforts to promote combination of energies to improve customer satisfaction in an effort to become a world-class new energy enterprise. With the significant growth in business size and market leadership, Sungrow will also shoulder more social responsibility in a conscious and voluntary manner. It will continually play its role well to satisfy its customers, investors and employees, and the community, and perform better on sustainable development.



CAO Renxian

President of Sungrow Power Supply Co., Ltd.



# About This Report



"2016 Corporate Social Responsibility Report" was released to the public by Sungrow Power Supply Co., Ltd., aiming to give a true reflection of Sungrow's development and practice of corporate social responsibility over 2016 and give a public report of its operational information to its shareholders and employees, the government, its customers and consumers, partners, community people and other stakeholders, thus helping the said stakeholders have an in-depth perspective of Sungrow's social responsibility practices.

**Basis of Preparation:** Sungrow had followed the core program of "Sustainability Reporting Guidelines" (G4) of the Global Reporting Initiative (GRI) in preparing this report. This Report also follows "Guidance on Social Responsibility of Listed Companies in Shenzhen Stock Exchange" and refers to the CSR compilation requirements of "Guideline for Chinese Enterprises to Prepare Social Responsibility Reports" of the Chinese Academy of Social Sciences.

**Time Range:** This Report covers the period from January 1, 2016 to December 31, 2016.

**Release Cycle:** This Report is an annual report. Last report was released in September 2016.

**Scope of Report:** The scope covered by this Report is consistent with "2016 Annual Report of Sungrow Power Supply Co., Ltd." that was released in the A-share market.

**Disclosure of Report:** This Report is disclosed after "2016 Annual Report of Sungrow Power Supply Co., Ltd.". The financial data concerned in this Report are consistent with "2016 Annual Report of Sungrow Power Supply Co., Ltd." that was released in the A-share market. The amounts referred to in this Report, unless otherwise stated, are denominated USD. (The exchange rate of the report is based on the central parity of the RMB exchange rate against the US dollar for the last working day which is published by the State Administration of Foreign Exchange. 2016: 1 US dollar against the RMB 6.9370 yuan; 2015: 1 US dollar against the RMB 6.4936 yuan; 2014: 1 US dollar against the RMB 6.1190 yuan; 2013: 1 US dollar against the RMB 6.0969 yuan; 2012: 1 US dollar against the RMB 6.2855 yuan.)

**Description of Names:** To facilitate presentation and reading, Sungrow in this Report is also called "the Company", "Sungrow" or "the listed company"; Sungrow and its member enterprises contained in the consolidated statements are called "the Company", "Sungrow"; the controlled subsidiary/unit under Sungrow is called "member enterprise" in this Report. And the enterprise names appearing in this Report are defined with full name and shortened name with details in "Enterprise Name Definition Table" appended to this Report.

**Access to Report:** This Report is prepared in simplified Chinese and English languages, both in printed and electronic forms. The electronic version of the Report can be downloaded from the Sungrow official website "www.sungrowpower.com". When there is any conflict between the simplified Chinese version and the English version, the simplified Chinese version shall prevail.

**Verification of Report:** Sungrow has entrusted an external organization that works independently and has no conflict of interest with Sungrow to implement independent verification of this Report in simplified Chinese and issue a verification statement in Chinese and English languages. The verification scope of the 2016 Report is Sungrow Hefei Headquarters and Sungrow-Samsung SDI.

If you want to learn more information concerning the social responsibility concept, strategy and related practices of Sungrow, please log on the Sungrow website (www.sungrowpower.com) or contact the report preparing organization (see the back cover).



# CONTENTS



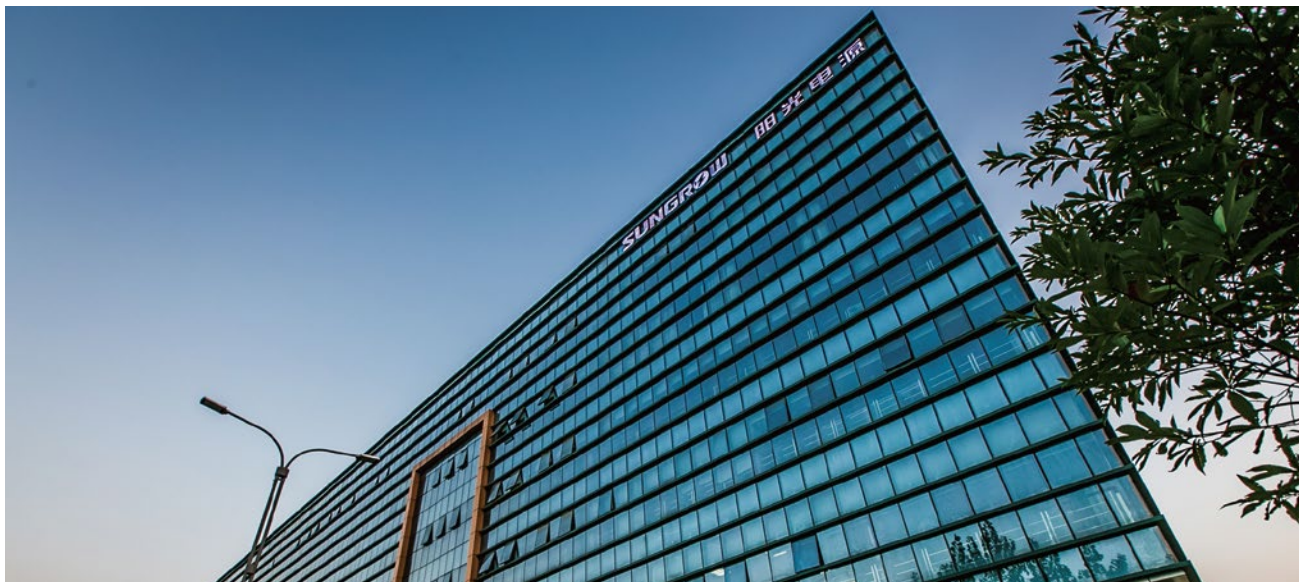
Annual Milestones	05
Company Profile	06
Keeping Close to Customers and Focusing on Energy Integration	07
Effective Operation Helping to Achieve Sustainable Growth	29
Pursuing Excellence, Realizing Quality Assurance	39
Building a Green Homeland with Sungrow	45
Going Hand in Hand, Opening up the Cause of Solar Power	59
Reducing Pollution and Restoring Our Beautiful World	69
Rewards and Recognition	74
Performance Indicators	75
Social Indicators	76
List of Major Companies Disclosed in This Report	77
Other Definition Tables	78
Definition of Nouns	80
SGS Audit Statement	81
Feedback Table	84
GRI4 Index of General Standard Disclosure	85
Description of Forward-looking Statement	89

# Annual Milestones



- January ● Sungrow's 3300V medium voltage wind energy converter, the first of its kind in China, passes the test of China Energy Wind Turbine R&D Center.
- April ● General Secretary of the CPC Central Committee & President Xi Jinping visits Sungrow smart energy power generation system. Sungrow won enough attention and praise from the leaders of the Party & Government for its innovative development.  
Sungrow's new energy vehicle motor controller wins the "Red Dot Award", the highest award in industrial design. The vehicles using such motor controllers had accumulating mileage of 400,000,000 kilometers.
- May ● Sungrow releases its 2.5MW inverter and booster integration solution and receives orders involving 1GW in India.
- June ● Sungrow's invests domestically in China's largest 1500V smart PV station, which was connected to the grid in the PV "Top Runner" base of Datong City, Shanxi Province; soon after, Sungrow wins bids for some PV "Top Runner" base projects in Yangquan City, Jining City, Huainan City and Huaibei city.
- July ● Sungrow successfully raises capital through a private stock offering, including funds of 382 million dollars for expanding its production capacity and investment scale in clean energy.  
Sungrow-Samsung SDI, the company's energy storage joint venture, has its energy storage headquarters put into production for the manufacturing of lithium batteries, energy storage inverters, energy management systems and other core devices for the Tibet Shuanghu micro-grid system and Gansu Jinchang 100MW photovoltaic power storage station.
- August ● Sungrow takes the lead globally in providing 1500V string inverters with the inverter efficiency and power indices ranked highest in the global market.
- September ● Sungrow releases its first Corporate Social Responsibility Report .  
Its PV poverty alleviation which is available in Anhui Province, Hubei Province, Shandong Province, Sichuan Province, Guangxi Province, and Zhejiang Province, helps and supports more than 50,000 poor households and 800 poor villages.
- October ● Sungrow is approved to set up a "National-local Joint Engineering Research Center", wins the "Chinese Outstanding Patented Invention" award, and makes the national key R&D project "critical technology for connecting distributed photovoltaic power station to the grid flexibly" approved.
- December ● In order to push forward the upgrading of the floating photovoltaic industry and accelerate its in-depth extension in the industry chain, Sungrow invests in building an advanced floating body research and development and manufacturing base in Huainan City and partially connects the Huainan 40MW floating power station, the world's largest floating PV station, to the grid successfully.

## Company Profile



**Mission:** We are always devoting ourselves to “Green and Effective”, giving clean power to more people.

**Vision:** To become a world-class provider of renewable energy power generating equipment and system solutions.

**Values:** Sincere & Pragmatic Precise & Open Customer Oriented

Incorporated in 1997 and located in Hefei State Hi-tech Industry Development Zone, Sungrow is China's key high-tech enterprise on research and development, production, sales and services of the equipment for solar energy, wind energy and energy storage. Sungrow has the main products including photovoltaic inverters, wind converters, energy storage systems, driving systems for new energy vehicles, and it is committed to providing world-class PV station solutions. It began to be listed in the Growth Enterprises Market of Shenzhen Stock Exchange in November 2011 (stock code: 300274).

Since its incorporation, Sungrow has always been focused on the field of new energy power generation; it has allowed market demand to guide the direction of development and made technology innovation boost enterprise development with impressive results achieved. So far, its products have been exported to more than 50 countries such as Germany, Italy, Australia, the United States, and Japan. The Company has won a series of honors such as "National Key New Product", "China Well-known Trademark", "China Top 30 New Energy Enterprises", "Global Top 500 New Energy Enterprises", country-level "Enterprise of Observing Contract and Valuing Credit", "Best Employer" of Anhui Province, etc.; it has been approved to set up a country-level post-directorial research station, chosen as a national hi-tech industrialization demonstration base and a national accredited corporate technology center, "China's most promising enterprise" by Forbes; and its comprehensive strength has made it among the best players of the world's new energy power generation industry.

In the future, adhering to the development mission that "we are always devoting ourselves to 'Green and Effective', giving clean power to more people" and based on the new energy equipment business, Sungrow will vigorously promote the development of the PV power generation system integration, innovate and explore new services on tight combination of the new energy power generation and the electric and electronic technologies, promote combination of energies further, meet customer needs better, take an active part in the global competitions and devote to the social welfare undertakings in an effort to continually develop Sungrow into a respected "world-class enterprise".



## Keeping Close to Customers and Focusing on Energy Integration

Sungrow has always made its strategic system align with having a sustainable development strategy and social responsibility element. With the expansion of size and growing internationalization, Sungrow will continually optimize its management, keep close to its customers, and further focus on the integration of energy.



## Development Strategy

Based on the PV energy business and relying on its profound electric and electronic technology capabilities, Sungrow will expand its business from PV energy to wind energy, energy storage and new energy vehicles and from the product level to the system level, upgrading to next-generation, intelligent energy across the global spectrum. The development strategy of Sungrow can be briefly summarized as

The SUPER strategy:

Smart Energy

User Oriented

PV Industry

Electronic Power Technology

Renewable Energy

## Strategic Goals

Around its core competitiveness on new energies and electric and electronic technologies, Sungrow will keep improving its layout on intelligent energy to drive its sustainable and sound development in the next five years and become a global leading intelligent energy system solution provider to push forward the intelligent application of green energies in the world quickly.

### Strategy Subdivisions

#### 1、Upgrading new energy technologies

Taking efficiency rise as the core, Sungrow has continually increased its R&D investment in the fields of PV, wind energy, energy storage and new

energy vehicles to facilitate the creation of next-generation products, drive the continual upgrading of products and promote the application of new energies, and as a result, make more people enjoy green power.



In the photovoltaic field, it has formed a full line of inverter products including concentrated inverters, string inverters, and household inverters to meet diversified customer needs for ground-mounted PV power plants, distributed PV power plants, and rooftop PV power plants. Sungrow will increase its R&D investment in revolutionary and subversive component-type inverter systems that can give a real-time adjustment of the voltage and current of each component, solving the PV component series-parallel connection mismatch problem by enhancing the power generation capacity of the entire system and promoting the upgrading of the photovoltaic technology in China's new energy systems.



In the field of wind power, Sungrow has undertaken the research subject "7MW full power converter critical technology research and industrialization" of the "Twelfth Five-Year" national scientific and technological support plan and officially received acceptance by the experts panel. Products of different power classes such as 5MW, 6MW, 7MW, 8MW, 10MW can be derived from this technology. This technology broke the monopoly of foreign products and filled up the domestic blank of medium-voltage large-power wind energy converter, and will promote the offshore wind power to develop from the demonstration stage to the sizable production stage.



In the field of energy storage, Sungrow has continually enhanced its investment in scientific research and innovation. It can supply energy storage inverters with single-machine capacity of 5kW-1000kW and lithium battery packs and it can provide a series of leading system solutions on load shifting, micro-grid, and frequency regulation, which help to greatly improve the dispatch of electricity, raise the application portion of the renewable energies, improve the quality of electricity, ensure safe operation of the grid and push forward the development of green power in a larger scale.

In the field of new energy vehicles, Sungrow has formed a full line of integrated motor control products for passenger cars, buses and private cars on the principle of safety and stability, high energy effectiveness, and it has sped up the construction of the power train capacity and explored the V2G system solutions to boost green development in the traffic field.





## 2、Developing intelligent new energy resources

To mainly address the difficulty of grid stability due to the large-scale application of the new energy power generation systems, Sungrow has researched and developed an intelligent energy solution integrating new energy power generation, energy storage and energy management system, which help build the intelligent interaction between the supply and the demand side of energy. The matching and management of the power generation side and the power consumption side helps to change the people's power consumption habits to save energy in a smarter manner, which improves the whole community's energy efficiency and promotes the continual rise in the application portion of the new energies in the region and even the community.

## 3、Popularizing the green power

Sungrow keeps exploring the applications of new energy power generation and vigorously popularizes photovoltaic power generation and other types of new energy power generation through a wide range of new type application technologies such as complementation of fishery and PV, hydropower and PV, agriculture and PV, subsidizing area reconstruction, integrated PV building; the application of PV power generation, energy storage and other micro-grid systems in the power-absent areas resolved the power problems of the Western China in shortage of power, overseas countries in shortage of power, and islands with no power available and provides safe, reliable and green power for customers; popularize photovoltaic, micro-grid and other new energy power generation systems and applications in Southeast Asia, Central Asia and Africa in combination of China's "The Belt and Road" initiative to bring power to the undeveloped areas.



## 4、Pushing forward green development

Working hand-in-hand with environmental protection organizations/non-profit organizations to give publicity to the concepts of environmental friendliness, environmental protection and energy conservation for use of green power and reduction of carbon emissions and air pollution has been a key focus for Sungrow. Other goals include: Enhancing the management level of the environmental, occupational health and safety and social responsibility management systems and making the concept of social responsibility influence the relevant parties concerned; Popularizing PV poverty alleviation as PV power generation is environmentally friendly and it is targeted and effective to aid the poor; producing top new energy power generation products, build top new energy power generation stations, explore cutting-edge smart new energy technologies to practice and drive green development; Actively popularizing the application of smart new energy to gradually improve China's energy structure and reduce the fossil energy consumption, thus reducing environmental pollution while promoting economic development and realizing sustainable development of the community in a true sense.

## Sustainable Development Strategy



Sungrow's sustainable development goals can be divided into short-term goals, medium-term goals and long-term goals (vision).

### Short-term goal

Based on its core technologies on electric power and electronics, the Company takes efficiency as the core to promote the upgrading of the PV, wind energy, energy storage, new energy vehicles and other new energy-based products, does a good job in pushing forward the application of the new energy technologies in China and even in the world, and becomes China's leading enterprise on social responsibility and sustainable development in the new energy sector.

### Medium-term goal

Adhering to the concept of sustainable development, the Company will upgrade itself from providing products to providing intelligent energy solutions and continually increase the consumption percentage of renewal energies oriented by safety and system efficiency, become one of the best organizations on social responsibility in China's intelligent energy sector and gear with the international practices on sustainable development.

### Vision

Become one of the most respected international enterprises in the new energy field; make social responsibility and sustainable development penetrate in every aspect of business of Sungrow and make them become the basic norms of behavior for all the staff.

## Strategic Steps

- Continuously improved the quality of the inverter on efficiency and quality, expanded the business of photovoltaic power stations, explored new energy vehicle business, and gradually built smart energy system solutions to promote green power.
- Continuously improved the customer service system, the service efficiency and the customer satisfaction.
- Established and gradually improved the EHS management system, and made it executed in all business sectors.
- Established and improved the social responsibility system and made it executed in all business sectors.
- Established and gradually improved the social welfare service system and continued to expand the range of public welfare receivers.

2009  
-2015

2016

- Focused on developing energy storage series products, improved the smart energy system solutions, vigorously developed PV poverty alleviation, and promoted green power.
- Built an online customer service system to upgrade the service level and improve the service quality in all respects.
- Promoted the quality and EHS policies to be further executed in all business segments.
- Continually promoted the construction of the social responsibility management system and built indices collection and other systems.
- Continually promoted the PV poverty alleviation-centered public welfare system to cover more people.

- Focus on the development of highly effective component-based inverter systems to form a full line of large, medium, small and minor products to promote the upgrading of China's photovoltaic technologies; develop ground photovoltaic power stations, rooftop-mounted photovoltaic power stations and home photovoltaic power stations, explore the construction of distributed power trading platforms to promote the application of photovoltaic and energy storage technologies in scale to drive the green energy development in scale.

- Render value-added services such as station maintenance, intelligent cleaning, remote diagnosis, big data services and entrusted operation and maintenance to effectively improve customer satisfaction.

- Promote the quality and EHS policies to be executed in all business segments.

- Continually promote the construction of the social responsibility system, improve the collection system, the inspection process, the monitoring system and the evaluation system.

- Further improve the public service system for helping the poor students and providing sponsorship for scientific research on the basis of PV poverty alleviation in an effort to develop the Company's public good brand.

2017



## Supporting Actions

- Increased R&D investment to make a comprehensive upgrade of PV inverters, wind energy converters, new energy vehicle driving systems around the customer demands, and established the Power station Division to promote the photovoltaic systems.

- Established a high-quality customer service network in the world, continually enhanced the level of professional services and shortened the response time.

- Actively promoted the implementation of the EHS strategy in all business sectors and member enterprises through the QA Department.

- Established and developed the corporate social responsibility report leading group and working group and improved the social responsibility data collection system.

- Established and pushed forward the public service system strategy focusing on PV poverty alleviation, power supply for areas without electricity and helping poor students and enhanced the investment in the social service sector.

2009  
-2015

2016

- Established a joint venture with a global leading battery company dedicated for energy storage systems, formed a smart energy system integrating new energy power generation, energy storage, and energy management system, and implemented such system projects successfully in some western areas in short of power, overseas countries in short of power, and some islands without power available.

- The Customer Service Center led in building an online customer service system to improve the service quality.

- The quality and EHS policies were promoted and implemented in all segments further under the guidance of the QA Department.

- Put up a social responsibility data collection system and improved the responsible person system for collection of social responsibility indices to ensure the quality of the information collected.

- Promoted the PV poverty alleviation business by product supply, project construction, project operation, etc. to continually expand the beneficiary groups.

- Strengthen the atmosphere of innovation, increase innovation efforts and continually invest in R&D in an effort to promote technologies, products and solutions to upgrade.

- Establish a professional operation and maintenance company to upgrade the operation and maintenance system, build a big data service platform to fully meet the diverse needs of customers.

- Promote and implement the quality and EHS policies in all segments in a complete and profound manner under the guidance of the QA Department.

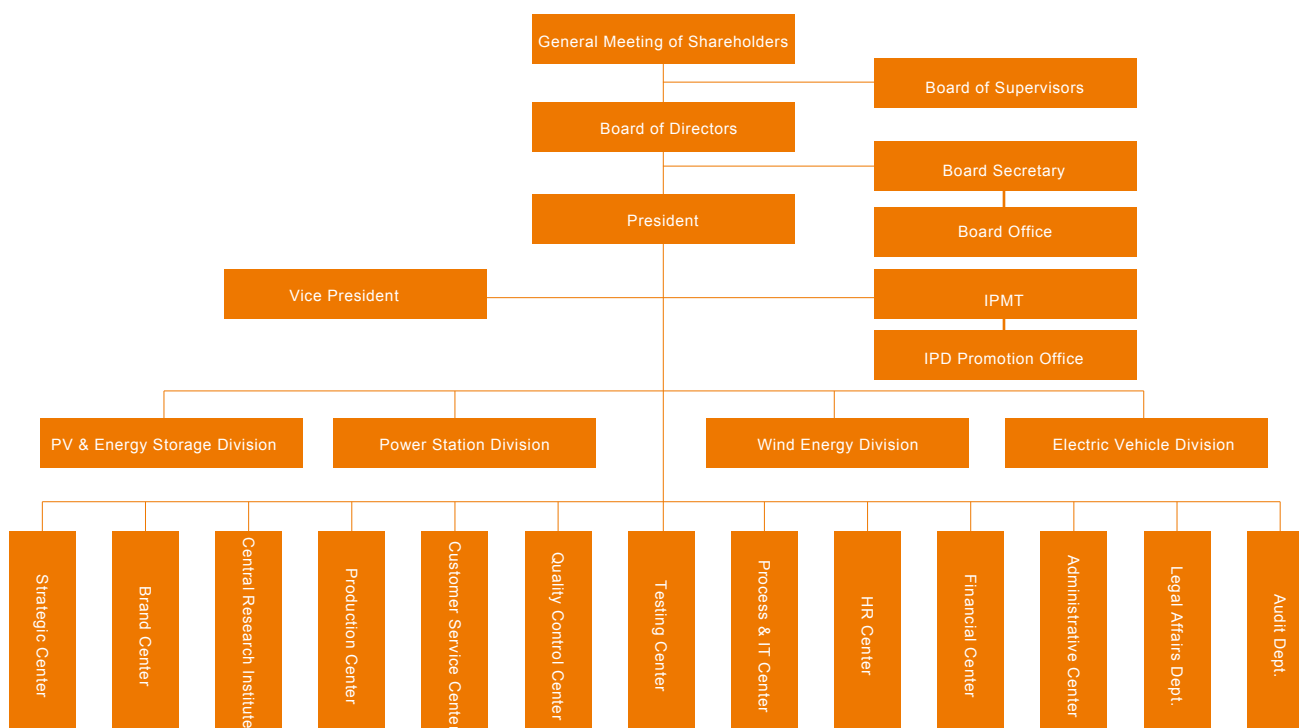
- Improve the social responsibility index system, continually optimize the social responsibility data collection system and establish a monitoring and evaluation system.

2017

## Efficient Management

Sungrow sorted out the functions and processes of each unit and made definite the division of responsibilities to improve the organization efficiency in April 2016 after the end of the streamlined organization transformation for a group. And it continually pushed forward its informatization to improve the work efficiency. Under the information application framework of "ERP-based core peripheral support system for IT management of the whole operation process", Sungrow put up or upgraded "SAP ERP system, electronic distribution system, after-sales management system, EHR" to build an integrated platform on goods flow, information flow and fund flow, which effectively facilitated to reduce the costs, improve the efficiency and increase the Company's core competitiveness.

### SUNGROW Organization Chart, 2016



## Corporate Governance

For the Report period, the Company had kept improving its corporate governance structure and its internal control system to further realize standardized operation in accordance with "Company Law", "Securities Law", "Code of Corporate Governance for Listed Companies in China", and "Stock Listing Rules of Shenzhen Stock Exchange".

For the Report period, the Company had wholly operated in compliance with relevant requirements with strong independence and conforming information disclosure and its actual operations basically conformed to the requirements in the regulatory documents on listed company governance of China Securities Regulatory Commission.

### (I) Shareholders and general meeting of shareholders

The shareholders of the Company hold equal status according to the shares held and undertake corresponding obligations in accordance with the Articles of Association; the Company convenes and holds general meetings of shareholders according to the provisions and requirements of "Rules for General Meeting of Shareholders of Listed Companies" and "Rules of Procedure for General Meeting of Shareholders" to ensure its shareholders to lawfully exercise the rights and interests, it treats all shareholders fairly and strives to provide convenience for shareholders to participate in the general meeting of shareholders and make them fully exercise the rights as shareholders.

### (II) Company and its controlling shareholders

The Company's controlling shareholder Cao Renxian regulates his behavior in strict accordance with the provisions and requirements of "Rules for Governance of Listed Companies", "Shenzhen Stock Exchange GEM Listing Rules", "Guidelines of Shenzhen Stock Exchange for Standardized Operation of GEM Listed Companies", and "Articles of Association". He has no behavior to directly or indirectly intervene the Company's decision-making and operation activities by avoiding the general meeting of shareholders or do damage to the interests of the Company and its other shareholders, and he has no behavior of occupying the company funds and the Company has not tendered any guarantee for the controlling shareholder. The Company has independent and complete ability in business and independent operation, it is independent from its controlling shareholders in business, assets, staff, organization and finance, and its Board of Directors, board of supervisors and internal organs operate independently.

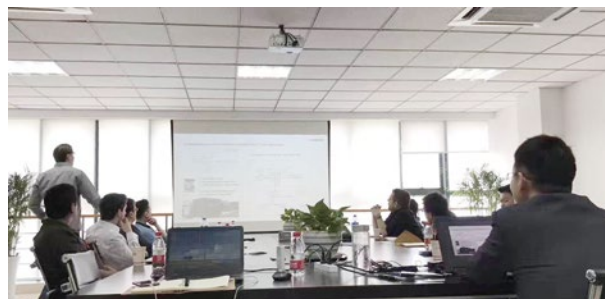
### (III) Directors and the Board of Directors

The Board of Directors consists of eight directors including three independent directors and the number of board

directors and the board composition conform to the requirements of relevant laws and regulations and the Articles of Association. The directors can work in accordance with "Rules of Procedure of Board of Directors", "Independent Director System", "Guideline for Standardized Operation of GEM Listed Companies" of Shenzhen Stock Exchange, attend the meetings of directors and the general meetings of shareholders, perform their duties and obligations diligently and take an active part in relevant training to get familiar with relevant laws and regulations.

### (IV) 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 relevant statutory and regulatory requirements. The supervisors could seriously perform their duties in accordance with the requirements of "Rules of Procedure of the Board of Supervisors" and they exercise supervision in compliance with laws and regulations for the Company's major transactions, related party transactions, financial status and performance of duties for directors and top ranking officers.





**(V) Performance evaluation and incentive binding mechanism**

The Company has a Remuneration and Assessment Committee under the Board of Directors, it has developed "Working Rules of Remuneration and Assessment Committee", established and implemented the performance assessment system and set up a scientific assessment indicators system. The centers, product lines and departments make full use of the performance management tools for planning and management of objectives and performance. Each leader-in-charge is the first responsible person of each responsible department in realizing the annual objective and performance indicator plan. Each department breaks down the work plan to month and week and each specific task in accordance with the sub-objective and performance plan requirements, and strives to promote the achievement of the performance indicators in the required quality and quantity as scheduled, thus ensuring the completion of the Company's annual objectives. The Company carries out regular assessment and objective evaluation of the performance of each responsible unit inside the Company and all the staff, uses the assessment results as the basis for determination of employee remuneration, promotion, demotion, appraisal of the excellent and shift of post.

**(VI) Information disclosure and transparency**

The Company discloses relevant information in a true, accurate, timely, fair and complete manner in accordance with relevant laws and regulations, "Information Disclosure Management System" and "Investor Relationship Management System". And

the Company appoints the board secretary to take charge of information disclosure, coordination of the Company's relations with its investors, receive visiting investors, answer investor questions and provide information for that has been disclosed by the Company for investors. Furthermore, it designates the website [www.cninfo.com.cn](http://www.cninfo.com.cn) as the specific website to disclose its information, designates "China Securities Journal", "Securities Times", "Shanghai Securities News", "Securities Daily", as the specific newspapers for disclosure of its periodic reports to ensure all its shareholders to have the equal opportunity to get information.

**(VII) Stakeholders**

The Company fully respects and maintains the stakeholders' lawful rights and interests, makes emphasis on its corporate social responsibility, actively cooperates with stakeholders, strengthens communication and exchange of information with all parties concerned to realize the coordination and balance of the interests of shareholders, employees and the community, thus jointly pushing forward the Company to develop in a continual and healthy manner.

Good corporate governance is the footstone and guarantee for corporate development. The Company will continually consolidate and improve its governance capability to increase its competitiveness, thus returning the investors with good operation performance.



## Internal Control Construction

### Main Internal Control Construction and Evaluation in 2016

It is clearly provided in the Company's "Regulations on Supervision of Internal Audit" that "the Company will carry out routine audit monitoring in order to regulate corporate governance, enhance internal management, maintain the work effectiveness of each employee and the work atmosphere of incorruption and integrity and improve the Company's core competitiveness further."

Internal Control Construction	Develop and implement the procurement management rules to achieve open and transparent bidding and tendering for procurement of main materials, unified purchasing channels and reducing the procurement costs; strengthen 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; strengthen management efforts on product research and development, continually comply with the requirements on quality, schedule and cost management of R&D projects; regulate the infrastructure construction process of projects, intensify the construction quality, cost, schedule, safety and compliance to effectively prevent risks; strengthen the financial audit to ensure the financial information to be objective and true and give a true reflection of the Company's performance and financial status; strengthen the management and disclosure of the financial report and other information items, regulate the information disclosure process to facilitate the establishment of a favorable social image; improve the internal control measures, enhance the Company's own immune function, establish a supplier integrity and informing system, guide employees to practice honestly and raise the Company's clean construction.
Internal surveillance	Under the leadership of the Board of Directors, the Audit Department focused on auditing the Company's procurement, capital construction, investment, and financial management for effective control of operating risks in 2016.
Clean Corporate Governance Construction	<p>According to the principle of "Exercising effective supervision, preventing operating risks, improving the regulations, supervising and urging compliance management", Sungrow speeded up the establishment and improvement of the system of punishing and preventing corruption, with particular emphasis make on the importance of preventing corruption from the source. The Company has developed employees' declaration of integrity and integrity undertaking since and strengthened integrity undertaking and surveillance of employees of key departments and holding key posts; increase the publicity of integrity and honesty to the employees and invite external judges to give non-corruption lectures to make the concept of clean governance rooted in the heart of each employee.</p> <p>And the Company also developed the integrity undertaking and informing system for the supplier system and gives publicity to its integrity policy and informing ways to suppliers in the aspects of popularization of the relevant system, contract implementation, and meeting communication and its firm attitude towards maintaining an integrity atmosphere at the annual meeting of suppliers; and as a result, the Company has won the suppliers' understanding, support and high degree of recognition and the suppliers could use their practices to show their confidence and support for our policy, thus killing some acts that may infringe the integrity system in infancy and the Company and its suppliers have jointly developed clean and efficient external environment.</p>
Outcome evaluation	The Audit Department received several informing and complaint letters in 2016. They were verified to be caused by the non-preciseness on flow management implementation and operating details in the operating management process and the defects were rectified in time later to ensure all work items to be executed in conformity with relevant rules and regulations. The fairness, openness and impartiality of each task were fully reflected.

## Construction and Implementation of Information Security

Sungrow established unified user management systems in 2016 that the user identity information of a wide range of application systems is managed in a centralized manner to increase the information system security and the ease to use the systems.



Taking use of the opportunity to upgrade the internal "OA" system, the Company's flows and procedures were processed and reformed partly, involving the fields of finance, human resources, procurement, R&D, etc. As a result, an end-to-end operation flow system was formed initially, which helped to reduce the number of ineffective points in the flow and permit relevant persons to play their roles better gradually; the closed ring management was basically realized with the flow, and it was the first time that the management system and the operation flow were combined, which made a foundation for the overall improvement of efficiency in the next phase.

With the development toward group operation, internationalization and intellectualization, in order to realize the easy integration, high efficiency and continuity of the actual business and fully implement the management requirements of group, specialization and refinement, and under the information application frame of implementing the information application framework "ERP-based core peripheral support system for IT management of the whole operation process", the Company will build up or upgrade "SAP ERP system, electronic distribution system, after-sales management system, EHR" and push forward Sungrow-Samsung SDI, Sungrow (Jinzhai) and other member enterprises to implement SAP to gradually build Sungrow a platform integrating goods flow, information flow and fund flow, thus reducing the costs effectively, raising the efficiency and improving its core competitiveness.

## Management of Social Responsibility

The Company has established a sound social responsibility management system to guide and plan the practices of its member enterprises in economic, social and environmental aspects and it resorts to its sound indicator assessment system and promotion system to ensure the execution.

### Concept of Social Responsibility

The Company actively shoulders its due social responsibility. It has proposed its social responsibility policy of "abiding by laws and regulations, protecting the interests of employees and building a green and harmonious homestead". Always with a thankful attitude, it has strived to satisfy the community, the government, its employees and shareholders and all other stakeholders.

### Social Responsibility System Structure

It has set up a social responsibility leading group headed by the Board Chairman and such leading group is responsible for the operation of the social responsibility management system in the Company. It has made its social responsibility organization operate smoothly and strengthened its supervision and control for continual improvement of its performance in social responsibility.

### Social Responsibility Working Group

Sungrow has set up a social responsibility working group whose members are company executives, and responsible persons of the brand center, the strategy center, the administrative center, the HR center, the production center (including Procurement Department), the quality control center, and the financial center with the Board Chairman as its leader; such working group is responsible for guiding and practicing the social responsibility affairs of Sungrow and improving the criteria for evaluation to ensure the effective performance of social responsibility.

### Social Responsibility Report

In order to better display the Company's practice and development in corporate social responsibility, the Brand Center leads in establishment of a report preparation party with members from the strategy center, the administrative center, the HR center, the financial center and the quality control center.

The group members attend the company's organized social responsibility report-related training activities annually and they also take an active part in external social responsibility forums and training courses to improve their report compiling capabilities continually.



## Stakeholders

Stakeholders provide important inputs for Sungrow to optimize its sustainable development management. The Company pays attention to stakeholders' needs and actively creates channels and holds activities to listen to their voices.

Stakeholders	Communication channels and activities
Shareholders (investors)	Improve the corporate governance system Timely disclose the Company's daily information Provide telephone, mail, website and other feedback platforms Hold general meetings of shareholders and investors' meetings
Customers and consumers	Customer satisfaction survey Customer meetings Participate in academic seminars, exchanges and forums, etc. of the industry Establish a sound customer service process and a global service network to timely handle customer complaints
Suppliers	Establish a standardized and transparent supplier invitation to bid and management process Conduct on-site supplier audit Supplier satisfaction survey Supplier training and supplier meeting
Partners/member enterprises	Business visit and survey Hold symposia and training Carry out corporate culture implementation projects
Government/colleges and universities	Surveys and guidance visits Participate in standard and policy formulation and give advice and suggestions Actively participate in government projects Industry-university-research collaboration
Community/NGOs	Take an active part in community projects Participate in various types of public welfare organizations' activities Take an active part in various public welfare activities
Media/the public	Establish a sound information disclosure mechanism Invite the media to participate in the Sungrow meetings Visiting reception and interviews Enhance interaction through the Company's website and WeChat
Employees	Set up a labor union Employee surveys, such as the organization health index survey, the logistical satisfaction survey Establish a long-term HR training mechanism Establish various cultural and sports associations to enrich the employee life Broaden the channels of communication by the WeChat culture group and rationalization proposals
Fellow traders	Participate in industry exchanges

## Stakeholder Participation

### Shareholders (investors)

Sungrow Office of the Board is responsible for feeding back investors' views and appeals;

Institutional investors and other middle and small investors can feed back their views and appeals to the Company through mails, telephone calls or the Company's website;

In 2016, Sungrow held 7 meetings of the Board of Directors, 5 meetings of the board of supervisors and 4 general meetings of shareholders;

In 2016, the Office of the Board of Directors arranged reception of a field research and Sungrow participated in the SSE activity "approaching to listed companies to practice the Chinese dream" that more than one hundred investors visited the exhibition hall and the R&D and production workshops of Sungrow and talked face to face with Mr. Cao Renxian, the actual controller & Chairman of the Board of Directors and Secretary Xie Leping of the Board of Directors, and other executives.

### Customers and consumers

Sungrow attaches great importance to communication with its customers and consumers by taking an active part in various trade fairs and seminars. In 2016, Sungrow had participated in more than one hundred large exhibitions and expositions at home and abroad such as the Int'l Smart Grid Expo. (Japan), the SOLARPOWER International (USA), the Solar Power Expo. (China), SNEC Tenth (2016) International Photovoltaic Power Generation Conference & Exhibition, the Renewable Energy India Expo. (India).

7

Meetings of the Board of Directors

5

Meetings of the board of supervisors

4

General meetings of shareholders



Sungrow carries out customer satisfaction survey every year and the customer satisfaction reached 93.1 in 2016.

Sungrow has developed a journal "TRUTH" dedicatedly for customers and it publishes it one installment a quarter to share the industrial development trend and new technical highlights, etc. The Company provides product training and site services for users regularly; it also establishes service tours in which the Company assigns persons to visit users to give service support; it has also created a country-wide service hotline, providing free 24-hour telephone support for users.



Other key items include: Establish a multi-level complaint process with on-site complaint and telephone complaint available. The site service personnel receive customer complaints, record and feed them back to the Company. For telephone complaint, the service hotline operator receives customer complaint and records the complaint particulars. Judge the complaint effectiveness and make effective complaint informed to relevant department for settlement. Feed back the handling result to the customer. Dial a service phone to follow up whether the customer complaint is settled and whether the customer is satisfied with the handling result; information exchange mechanism: Exchange may adopt the forms of website, e-mail, product description and publicity materials.

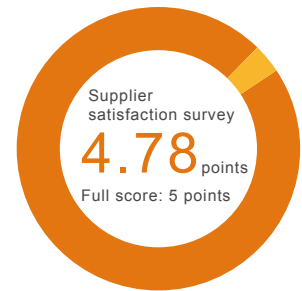


## Suppliers

In 2016, Sungrow revised "Supplier Development Operation Specifications", "Supplier Review and Incubation Operation Specifications", "Supplier Management Regulations" and "Supplier Performance Assessment Operation Specifications". The principal control points including supplier selection, procurement methods, announcement release, supplier access, evaluation of bids, and determination of winning bidder were detailed further; the accounting department completed the setup of a number of cost models to achieve the fine accounting of material costs and effective reduction of the procurement costs.

A suppliers meeting with the theme of "Enjoy sunshine with Sungrow " was held on February 20, 2016, advocating the suppliers and the demander to collaborate in building a competitive supply chain system in the field.

The audit department led the audit of suppliers to ensure the products and services to be safe from the source; furthermore, Sungrow carried out the 2016 supplier satisfaction survey with the overall score of 4.78 points (full score: 5 points), the highest in the past three years; Sungrow received 30 improvement suggestions from its suppliers and the survey outcome showed a remarkable improvement in Sungrow's supplier management practice.



## Partners/member enterprises

Sungrow carried out in-depth corporate culture integration with its member enterprises. It had held a series of activities such as Chinese New Year tea party, colorful cultural and sports activities, the annual choice of excellence, and a variety of training activities to strengthen the communication and cultural exchange among the member enterprises of Sungrow.

Sungrow also took an active part in team construction with its partners or member enterprises and encouraged employees to participate in the "CROSS FIRE" plan to realize the rotation of posts and exchange of employees of different member enterprises in the group scope.



### Government/colleges and universities

In 2016, Sungrow received the attentions and supports from the General Secretary of the CPC Central Committee & President Xi Jinping, the Political Bureau of CPC Central Committee Member & Vice-Premier Ma Kai and other central/provincial/municipal leaders at all levels; it received a total of more than 100 government research and guidance groups that had gave full attention and appreciation to Sungrow's innovation and development achievements.

Sungrow kept smooth communication with the development and reform, science and technology, industry and information technology and other sectors of Anhui Province, Hefei City and Hefei State Hi-tech Industry Development Zone and completed the reporting exchanges with the relevant government sectors in 2016. As a leader in the new energy industry, Sungrow had received the visits of the Counselors' Office of the State Council, the National Energy Administration, the Trademark Office of the State Administration for Industry and Commerce, the Institute of Engineering Thermophysics, and Chinese Academy of Sciences. Sungrow was also invited to give advice when the National Energy Administration developed the national "13th Five-Year" new energy development plan, Anhui Province developed its "13th Five-Year" industrial development plan, Hefei City and Hefei State Hi-tech Industry Development Zone developed the "13th Five-Year" new energy and photovoltaic development plan.

In July 2016, Sungrow participated in "The First Hefei Speech Contest on Good Brands and Good Stories of Enterprises" that was organized by Hefei Economic and Information Technology Commission and was admitted to the final for excellent performance. It performed well together with other 50-odd enterprises in advocating the brand stories and displaying the brand images.

In 2016, Sungrow extended its good relations on industry-university-research collaboration with Tsinghua University, Xi'an Jiaotong University, Hefei University of Technology and other colleges and universities; and President Cao Renxian was invited to Hefei University of Technology to share his experience on innovation and startup many times. More than 2,500 people from the provincial/municipal party school, University of Science and Technology of China, Hefei University of Technology, Hefei University, Hefei Binhu School, Hefei Experimental School, etc. had visited Sungrow in 2016.

2,500

Students come to study



### Community/NGOs

As of the end of 2016, PV poverty alleviation of Sungrow had been available in Anhui Province, Hubei Province, Shandong Province, Sichuan Province, Guangxi Province, Zhejiang Province, aiding more than 50,000 poor households and 800 poor villages; in 2016, Sungrow had donated PV stations for poor village collectives and poor households that are distributed in Guangxi Province, Sichuan Province, Anqing City, Lingbi County and Xiaoxian County in Anhui Province, involving a total power of 3434kW and a total value of about 3.89 million dollars.

In 2016, Sungrow completed five public donations including aiding the poor students and helping disaster relief;

Its donated intelligent PV operation control platform for Anhui Energy Administration is a large data analysis platform based on the domestically largest cloud computation center and it realizes the concentrated operation and control of operation and maintenance of all PV stations for the poor in Anhui Province, which can effectively reduce the power output loss and the operation and maintenance costs. So far, more than 7400 PV stations have been connected to the platform.



### Media/the Public

Sungrow seriously performs his duties in information disclosure in strict accordance with the laws and regulations for listed companies; Sungrow regularly updates its official website and WeChat to strengthen exchange of information with the public and regulate the information disclosure.

Sungrow has set up an independent brand center with brand communication posts available to take charge of the management of relations and communication with the media so as to better render information services; it has launched its official WeChat account sungrowpower to help the public know the information and progress of Sungrow in innovation, internationalization and social responsibility.

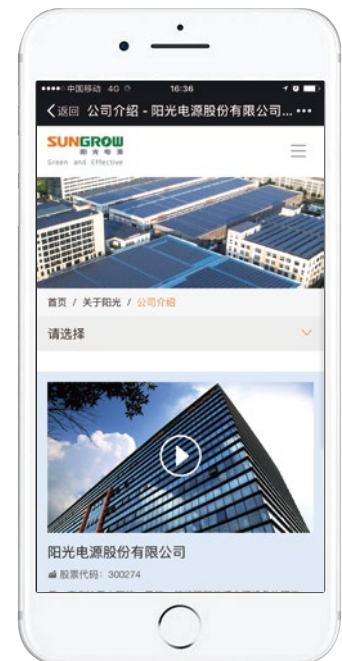
Helping people with

**50,000**

poor households

**800**

poor villages





### Employee

The labor union of Sungrow firmly safeguards the rights and interests of the employees and helps the employees in trouble in a timely and effective manner; and it also regularly holds a variety of cultural and sports activities. Established a WeChat culture group for regular release of stories of excellent individuals/teams, cultural activities, etc. to show staff style and spread the Sungrow culture; further, Sungrow set up the "Sungrow Culture Day" in July 2016 to convey the core values by organizing and planning various cultural activities and giving a popularity of the corporate values, thus making the employees feel the Sungrow culture with zero distance. Furthermore, Sungrow publishes internal quarterly journal "Sungrow", a platform to show the development information of Sungrow and its member enterprises.

The Company and its member enterprises encourage employees to reflect information to the company management and departments through the OA reasonable suggestion process and the WeChat cultural group, guide employees to concern about the Company and its development, take an active part in giving opinions and suggestions, thus giving a true display of the cohesive affinity and creativity of employees; push forward coordination and cooperation among departments, seek after solutions for issues while promoting communication to improve the management performance.

The Company has maintained a favorable overall safety situation and shouldered its responsibility to push forward its member enterprises to maintain work safety and protect personnel safety and property safety.



Trade Exchange

Sungrow highlights participation in trade exchanges. In 2016, Sungrow had participated and spoke in more than 100 industry exchanges including the Fifth New Energy Power System Technology Innovation Conference, the 16th China Photovoltaic Conference, TÜV Rheinland “All Quality Manufacturing” 2016 Photovoltaic Summit and Awards Ceremony, Energy Storage & EV Charging Expo 2016, the PV Forum for the Six Southern Provinces & the Third Guangdong Distributed PV Power Station Forum, 2016 First China Energy Internet Leadership Forum, 2016 China Wind Power Electrical Equipment Technology Summit Forum, the New Energy Bus Innovation Technology Summit Forum.



List of Some Associations and Societies That Sungrow Has Participated in

Name	China Photovoltaic Industry Association	China Smart Photovoltaic Industry Alliance
Title	Vice Chairman	Council membership

Stakeholder Feedback

In 2016, the Company consulted and received interviews and exchanges with Stakeholders for nearly 150 times. We conducted CSR interviews with Zhejiang Huaneng, Infineon, "Energy Outlook", etc. and revised the contents of the report to be disclosed according to the advice of relevant organizations. For example, the power station integration business and the supply chain social responsibility management were added.

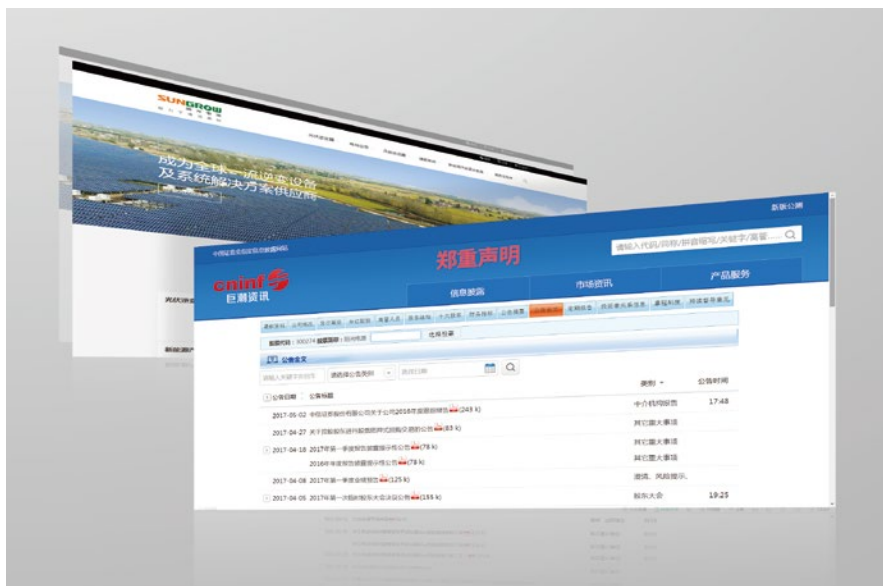
Stakeholders for nearly  
**150** times



Source	Name	Stakeholder feedback
Client	Wind farm of Chinese Huaneng Group Zhejiang Branch in Huangyuan, Yunhe of Zhejiang Province	The principal employee of Sungrow on our site worked in a serious and responsible manner and removed troubles in time for their strong technology capabilities; and they have contributed significantly to the reliable plant operation. We would like to extend our thanks to them.
Suppliers	Infineon Technology (China) Co., Ltd. Yu Daihui, Vice President of Great China	We are very proud to be able to get the long-term trust and recognition from Sungrow. In the future, Infineon will continually cooperate with Sungrow on more innovative products and overall system solutions to generate more green power for the benefit of mankind.
Media	Journal "Energy Outlook" Lv Rongjie, Associate Editor	Sungrow is devoted to the green industry, adheres to green production and provides green products and services, which in itself is a manifestation of social responsibility. Sincerely wish Sungrow to continually innovate in its initiated PV poverty alleviation pattern to supply green power for more people.

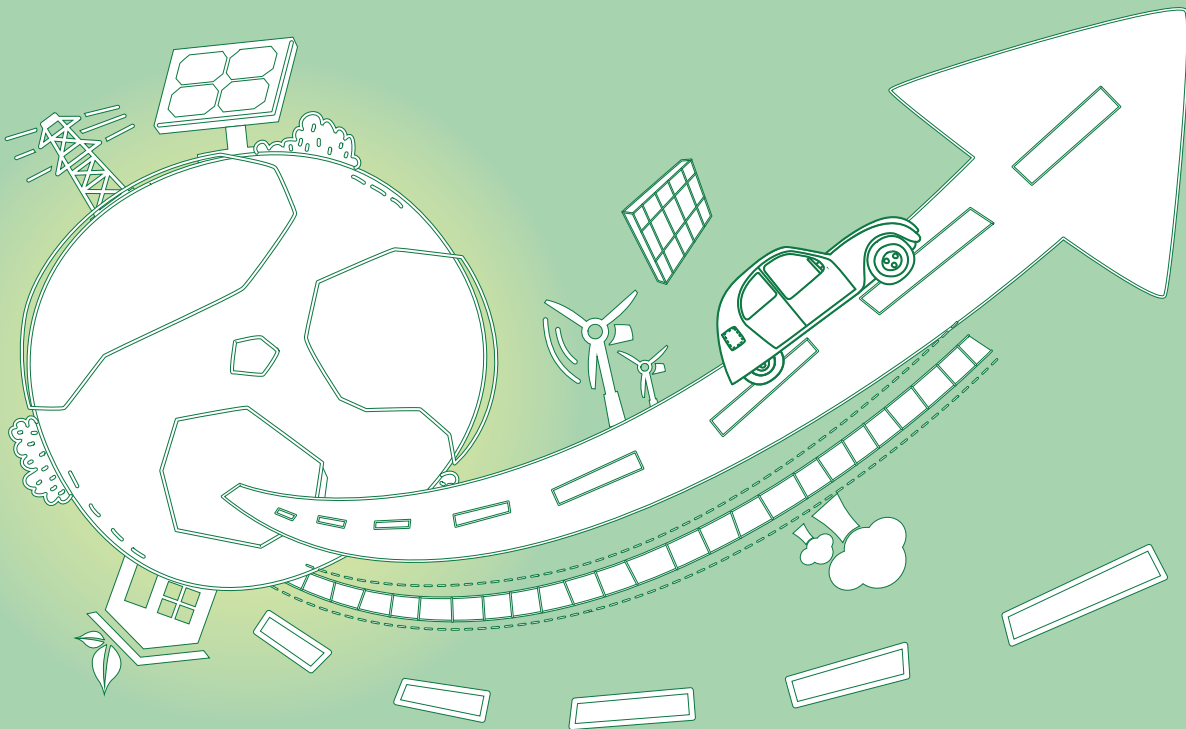
### Individual Investors

Individual investors can get to know the development information of Sungrow in a timely and transparent manner through its official website and its announcements on the website [www.cninfo.com.cn](http://www.cninfo.com.cn), and they can also communicate with the Office of the Board of Directors of Sungrow.



## Effective Operation Helps to Achieve Sustainable Growth

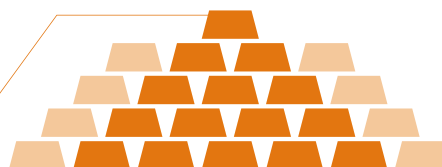
According to the annual operation plan of the Board of Directors at the year beginning and adhering to the philosophy of "hardworking, innovative, persistent and customer-oriented", the company management speeded up the construction of the marketing network and corporate informatization, actively introduced new products and improved existing product lines. It had achieved improvement in the core technology of the main products and meanwhile, it had also achieved rapid development in PV power station system integration in 2016.



## Business Performance

In 2016, Sungrow realized the operating income of USD

**865,455,161.63** dollars



It realized the operating profit of USD

**96,314,791.68** dollars

In 2016, Sungrow realized the operating income of USD 865,455,161.63 dollars, up by 31.39% over 2015; it realized the operating profit of USD 96,314,791.68 dollars, up by 35.66% over 2015.

Item (dollar)	2016	2015	Growth / Declining Rate
The operating income	865,455,161.63	703,653,933.54	31.39%
Net profit attributable to shareholders of the listed company	79,805,833.83	65,510,971.49	30.14%
The net profit attributable to the shareholders of the Listed Company after deduction of the non-recurrent profit and loss	72,587,743.01	59,940,348.88	29.37%

### PV system integration business

The Company took a vigorous leading/demonstration role in the country's focused PV "Top Runner" program and PV poverty alleviation in 2016. Among them, Sungrow's constructed intelligent 50MW PV power station in the PV "Top Runner" base in Datong City, Shanxi Province was successfully connected to the grid, thus the said plant became China's largest capacity one as a 1500V photovoltaic plant. Then the Company won the bids for the PV "Top Runner" base projects in Yangquan, Jining, Huainan, Huaibei in succession. As a result, Sungrow has become a benchmark and model of PV "Top Runner" bases in China. In terms of PV poverty alleviation, Sungrow has expanded business operations to Anhui Province, Hubei Province, Shandong Province, Sichuan Province, Guangxi Province, Zhejiang Province, etc. and aided more than 50,000 poor households and 800 poor villages.

The details are described as below:

Item	Scale of power station	location	Business model	Progress	Inverter supply
Qinghai Golmud Project	30MW	Golmud City, Qinghai Province	BT	Connected to the grid	All self-supply
Xinyi Suxin Project	6MW	Xuzhou City, Jiangsu Province	BT	Connected to the grid	All self-supply
Pizhou Chuneng Project	7.5MW	Xuzhou City, Jiangsu Province	BT	Under construction	All self-supply
Suzhou Lingbi Phase II Project	20MW	Suzhou City, Anhui Province	BT	Connected to the grid	All self-supply
Qinghai Jiepu Green Energy Project	10MW	Hainan Zhou, Qinghai Province	BT	Completed	All self-supply
Yongdeng Hongyang Project	30MW	Lanzhou City, Gansu Province	BT	Connected to the grid	All self-supply
Changfeng Xiatang Phase II Project	20MW	Hefei City, Anhui Province	BT	Connected to the grid	All self-supply
Shanxi Shenmu Project	30MW	Yulin City, Shanxi Province	BT	Completed	All self-supply
Qinghai Delingha Project	20MW	Haixi Zhou, Qinghai Province	BT	Connected to the grid	All self-supply
Huainan Panji Project	40MW	Huainan City, Anhui Province	BT	Connected to the grid	All self-supply
Suqian Luowei Project	10MW	Suqian City, Jiangsu Province	BT	Connected to the grid	All self-supply
Chaohu Langan Project	50MW	Hefei City, Anhui Province	BT	Connected to the grid	All self-supply
Hebei Kangbao Project	20MW	Zhangjiakou City, Hebei Province	EPC	Under construction	All self-supply
Henan Anyang Lunzhang Project	100MW	Anyang City, Henan Province	EPC	Under construction	All self-supply
Hefei Suyang 46MW Distribution Project	46MW	Hefei City, Anhui Province	EPC	Connected to the grid	All self-supply
Yuexi 2016 poverty alleviation project	24.5MW	Anqing City, Anhui Province	EPC	Connected to the grid	All self-supply
Tianjin Yangdong Distributed Rooftop Project	30MW	Tianjin City	BT	Connected to the grid	All self-supply
Yingshang 2016 Poverty Alleviation Project	18.6MW	Fuyang City, Anhui Province	EPC	Connected to the grid	All self-supply
Wuwei 2016 Poverty Alleviation Project	3.6MW	Wuhu City, Anhui Province	EPC	Connected to the grid	All self-supply
Anhui Expressway Distribution Project	3.787MW	Anhui Province	EPC	Connected to the grid	All self-supply
Qianshan 2016 Poverty Alleviation Project	7.2MW	Anqing City, Anhui Province	EPC	Connected to the grid	All self-supply
Huoqiu 2016 Poverty Alleviation Project	2.24MW	Lu'an City, Anhui Province	EPC	Connected to the grid	All self-supply
Funan 2016 Poverty Alleviation Project	18.6MW	Fuyang City, Anhui Province	EPC	Connected to the grid	All self-supply
Lu'an Yu'an 2016 Poverty Alleviation Project	2.088MW	Lu'an City, Anhui Province	EPC	Connected to the grid	All self-supply
Guangyin Aluminum Rooftop Distribution Project	22.5MW	Hefei City, Anhui Province	EPC	Connected to the grid	All self-supply
Macheng 2016 poverty alleviation project	12MW	Huanggang City, Hubei Province	EPC	Connected to the grid	All self-supply
Wangjiang 2016 Poverty Alleviation Project	9.282MW	Anqing City, Anhui Province	EPC	Under construction	All self-supply
Zongyang 2016 Poverty Alleviation Project	8.65MW	Tongling City, Anhui Province	EPC	Connected to the grid	All self-supply
Shucheng 2016 Poverty Alleviation Project	11.7MW	Lu'an City, Anhui Province	EPC	Under construction	All self-supply
Feidong Liangyuan 100MW Project	100MW	Hefei City, Anhui Province	Self-held and operated	Connected to the grid	All self-supply
Shanxi Datong 50MW Project	50MW	Datong City, Shanxi Province	Self-held and operated	Connected to the grid	All self-supply
Lingbi Qingyang 120MW Project	120MW	Suzhou City, Anhui Province	Self-held and operated	Connected to the grid	All self-supply
Fujian Zhangpu Project	100MW	Zhangzhou City, Fujian Province	BT	Under construction	All self-supply
Guangdong Renhua Project	120MW	Shaoguan City, Guangdong Province	BT	Under construction	All self-supply



Furthermore, the Company began to invest in construction an advanced floating body R&D and manufacturing base in Huainan to improve its full line solution providing capability and when the said base is completely built up and put into production, its annual capacity of floating bodies can reach 1000MW. Floating photovoltaic power station is a new application pattern, featuring saving of land resources, realization of comprehensive treatment and protection of water resources and expansion of application of PV power generation and thus enjoying a promising future.

## Product Innovation



Over the past two decades, Sungrow has been committed to the independent innovation of electric and electronic technologies of the new energy field under the philosophy of "scientific design for different applications", and quite a few technologies of Sungrow have reached the international advanced level. In recent years, Sungrow has devoted to some new business fields such as micro-grid energy storage, Internet of energy, multi-energy complementation, new energy vehicle driving systems to respond to the country's advocated development of photovoltaic energy and wind power and other new energies in an effort to usher in the era of new energy-generated power available at parity price earlier; Sungrow also piloted in combining the applications of PV + fishery, PV + agricultural greenhouses, etc. and it also built PV power stations at some coal mining subsidence areas and settling areas to realize the balance of comprehensive treatment and utilization of waste land and waste slopes.

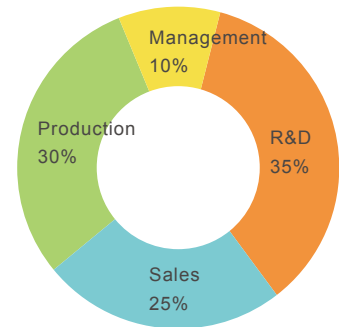
### R&D system innovation

Sungrow has set up a central research institution that is engaged in the research of cutting-edge technologies and its business segments also have their respective R&D organ to carry out specific research and development. So far, the R&D personnel have accounted for 35 percent of the total population of the Company, dominated by masters and doctorates and all the core R&D personnel have at least 10 years of R&D experience. Sungrow has also established long-term cooperation relations with a number of well-known colleges and universities, therefore, it can always pay a close attention to the cutting-edge technologies of the industry. And it also makes emphasis on supplementation of fresh blood to its own R&D team. Besides investment in manpower, Sungrow has invested considerably in R&D, testing equipment, and platform construction.

Based on the R&D and application experience, Sungrow also resorts to the system construction to control the R&D flow and divides the product development process into five stages: approval of project, concept planning, development verification, release, life cycle management and each stage contains technical review on technical feasibility, specification compliance, manufacturability, satisfaction of customer needs so as to realize the full process control from R&D to application, thus ensuring the efficiency and effectiveness of product R&D.

Sungrow also continually implements and improves the ISO9001: 2015 quality management system. The Company's products have passed many international authoritative certifications and tests including UL, TÜV, CE, Enel-GUIDA, AS4777, CEC, CSA. Sungrow has been pursuing technological improvement and solution optimization in all aspects and it has won the trust of an increasing number of PV power station investors by its leap-forward from catching up with European and American opponents a decade ago to getting ahead of more and more of them.

Its R&D expenditure was 37,790,145.93 dollars in 2016, up by **78.48%** over the previous year.



2016 Its R&D expenditure was

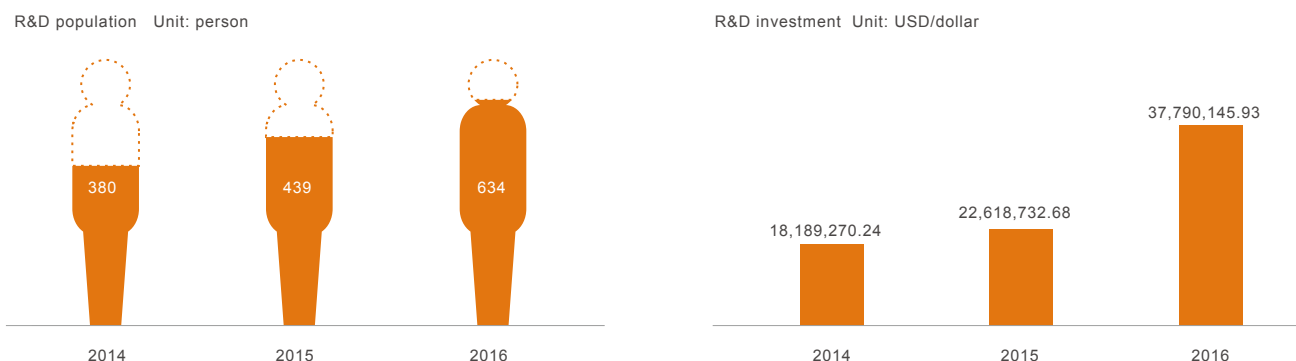
**37,790,145.93**  
dollars



## Advancement of R&D Projects

S/N	Project Name	Project Description	Time for Completion
1	99% series of inverter high-temperature overload project	SG50KTL achieves the maximum conversion efficiency of more than 99% and China efficiency of 98.49%, thus improving the power generation earnings significantly; the DC full load MPPT has the lower limit of 550V to ensure no power restriction in the summer time with good sunlight. The DC side string input can achieve nine ways, the number of input circuits can be configured flexibly according to the sunlight resources of the project location to save the cost of investment for the customer to the utmost 45°C; The product adopts an intelligent fan for heat elimination to ensure lower component temperature rise and longer lifecycle in the same working conditions, and it can achieve full load output below 50°C and continuous AC 1.1 times overload output under 45°C so as to easily respond to the increased output weather and maximize the customer benefits. Furthermore, this product is equipped with the PLC function, which makes the product particularly suitable for mountainous terrain and other complex grid-connection sites, saving the cost of separate communication wiring.	2016.2
2	1500V string project	SG80HV, with rated power of 80kW, photovoltaic DC of 1500V, adopts the 2.5MW photovoltaic matrix combination, saving the cost of DC cables by 30%; the grid-connection alternating voltage is 800V, which can reduce the AC wire and copper bar cost by 50%; adopt the own patent five-level technology to realize the maximal efficiency of more than 99% and the China efficiency of more than 98.5%; adopt the efficient heat-removal system to easily deal with high temperature full output and can operate with 1.1 times of the load for a long term below 45°C. The 10-way string input supports more than 1.25 times overload with the better "input" and "output" capacity, thus contributing lower system cost and higher power output.	2016.2
3	"Inverter" and "transformer" integrated solution project	Container-type medium voltage inverter SG1250-MV is the main new product with three highlights: integration of "inverter" and "transformer", efficient power generation, and intelligent monitoring. The adoption of integrated customer-tailored efficient medium voltage transformer, distribution and monitoring devices makes the system become more concise and realize the integration of "inverter" and "transformer" for unified maintenance in an easier way. The container design facilitates to exercise transportation and installation and shorten the construction cycle for earlier power generation and earlier return. The three-level technology makes the inverter efficiency over 99%, contributing to more efficient power generation. Optimize the internal "inverter" and "transformer" unit integration with the unit square matrix of 1.25MW, featuring lower system loss and more cost effectiveness. The integrated intelligent unit realizes the all-around monitoring inside the square matrix, online analysis and diagnosis and rapid fault locating. The application of unified communication interfaces facilitates joint commissioning and the external intelligent man-machine interface makes the operation and maintenance more convenient.	2016.2
4	Household photovoltaic energy storage system project	PowCube 4.5 can greatly improve the rate of self-generation and self-utilization. It is composed of the SH5K household light storage inverter and SBP4K5 household battery pack with the capacity 4.5kWh. PowCube 4.5 has the system battery port voltage of 48V, belonging to the safe voltage level; and it is equipped with the active core balancing technology and integrated with the battery management system for double protection and reliable operation; when 80% DOD is applied, the cycle index is more than 6000. PowCube 4.5 integrates EMS intelligent management to automatically determine when to be charged and when to be discharged, when to supply power to the grid and when to get power from the grid; it can also be connected with the "intelligent photovoltaic power station management platform" of Sungrow for real-time monitoring and fault pre-diagnosis; it supports Wi-Fi communication, it can directly resort to the Web or the mobile phone APP to achieve intelligent optimization and setup of the power utilization mode that even if one is not at home, he can also easily manage his photovoltaic storage system.	2016.3
5	Dedicated high-protection floating photovoltaic intelligent header box project	PVS-16M-W is an intelligent header box developed by Sungrow dedicatedly for floating photovoltaic power stations. This product has a high protection grade of IP67 and it is specially designed for waterborne photovoltaic power stations against the beat of water waves; optional wireless communication module is configured to reduce the costs of telecommunication cables of the floating power station and relevant construction; furthermore, the product permits flexible wiring for the adoption of MC4 terminal and side incoming line, facilitating the wiring and later maintenance. Therefore, it is the best partner for the floating photovoltaic power station.	2016.3
6	PID attenuation technology R&D and application project	The PID technology with the virtual potential is required for the floating photovoltaic power station located at the "Top Runner" base. The experimental comparison of the two schemes of having PID protection and having no PID protection shows that there is a difference of the power output by more than 10%. Therefore, the PID technology with the virtual potential is used in the water base of the "Top Runner" project for reduction of power generation loss greatly.	2016.3
7	High voltage ride through technology project	Sungrow SG500MX photovoltaic inverter successfully passed the high voltage ride through test in the National Energy Solar Center of China Electric Power Research Institute, becoming China's first of its kind passing such test. High voltage ride through is a new grid connection requirement after the revision of "Technical requirements for connecting photovoltaic power station to the grid", an enterprise standard developed by the State Grid Corporation of China.	2016.4
8	Power station-level energy storage system solution project	This energy storage system stores the excess power into the battery around the limited power line and sends forth the stored power when the grid has a little idle time, carries out charge and discharge once a day, featuring the following advantages: first, there is no need to re-report the grid connection and it can control battery charge flexibly according to the limited power status. Second, there is no need to add any transformer or energy storage inverter and it can reduce the use of cables. Third, it adopts the Samsung SDI lithium battery with high energy density, patented duct design and temperature control system, featuring long battery lifecycle with the 100%DOD cycle index of more than 6000. Fourth, the standard container design makes it movable between different restricted power stations and cycled. Fifth, the energy storage system can give a flexible configuration of the battery capacity according to the generation limits, thus perfectly solving the limited power generation problem. This energy storage system can adjust the output smoothness of the PV power station and improve its stability through the energy distribution algorithm; and its flexible control of the PV station output helps to greatly improve the preciseness of the photovoltaic power prediction, thus making the power station operate in a more smart manner and increasing its friendliness to the grid.	2016.4

## 2014-2016 SUNGROW R&D Population and R&D Investment



### Patents and Achievements

Sungrow's Central Research Institute was founded in 2016, an important and critical year for it to act. It resorted to its forward-looking technology research and product pre-research, development and service of the electrical/device/structure and other public technical platforms, management of intellectual property to enhance the Company's technical reserve and expand its technical advantage ahead of others in the field further.

"The photovoltaic power generation system and the potential drop compensator and converter for such system" developed by Sungrow won "Chinese Outstanding Patented Invention", the highest award of China's patent circle, from the State Intellectual Property Office of the P.R. of China and the World Intellectual Property Organization (WIPO). It is of great significance for the Company to improve its ability of independent innovation and form its independent intellectual property rights and core competitiveness.

The Company applied for 216 patents in 2015: Include 9 PCT items, 48 foreign inventions, 70 domestic inventions, 81 utility models, and 8 designs; the Company was authorized 129 items in 2015: Include 29 domestic invention patents, 94 utility models, and 6 designs.

The Company applied for 238 patents in 2016: Include 1 PCT item, 50 foreign inventions, 3 foreign utility models, 96 domestic inventions, 75 utility models, and 13 designs; the Company was authorized 140 items in 2016: Include 2 foreign inventions, 2 foreign utility models, 46 domestic invention patents, 75 utility models and 15 designs.

## Return to Shareholders

With good faith, Sungrow actively creates value for its shareholders. Since being listed, Sungrow has won the extensive recognition of investors with its social image and internal investment value. While making efforts in creating value, Sungrow also actively repays its shareholders.

As of the end of 2016, the shareholders' equity of the Company had increased by 322% over 2011 when it was listed in the stock market and Sungrow has distributed dividends to its shareholders for five consecutive years since being listed. Sungrow was included in "Global 500 New Energy Enterprises" in 2016 again. It was the sixth time for Sungrow to get such honor since such chart was initiated in 2011.



## Tax Payment Under the Law

The Company is proud of its tax paying performance, a statement of the company's integrity. The group paid taxes totaling **27,459,233.57** dollars in 2016.

The good growth in the tax paid by Sungrow also reflects the improvement of the Company in the operating performance for continual optimization of management.

## Remuneration and Benefits System

The fair, attractive and incentive remuneration system is one of the key factors for the Company to attract and retain capable human resources. To meet the needs of the strategic development, in combination with the operating mode of the divisional system and with a reference to the external market remuneration status, Sungrow has adjusted and optimized its remuneration and welfare system from time to time and designed the remuneration system in a diversified, performance-based and differentiation-allowed manner in consideration of the business characteristics of each division, post group and nature of jobs, thus enhancing the competitiveness of its remuneration system. In addition to annual salary adjustment in consideration of the Company's annual integrated operations, social and economic factors, and employee performance, the Company also considers fully employees' personal career development and adjusts the remuneration of employees with their improvement in capability and job changes in time.

2015-2016 Sungrow Labor Costs (monetary unit: USD/dollar)

Year	Salaries, bonuses, allowances and subsidies	Social insurance premiums	Housing fund	Labor Union funds, employee education funds	Employee benefits	Total
2016	43,986,783.35	1,229,962.95	1,238,483.28	785,026.67	2,082,041.37	49,322,297.61
2015	31,513,892.27	1,019,013.51	1,090,671.51	534,029.01	1,806,729.25	35,964,335.55

2014-2016 Sungrow Per Capita Annual Income Comparison Statement (including remuneration paid to and for employees) (Unit: USD/dollars)

Year	2014	2015	2016
Per Capita Annual Income	22,853.75	24,333.11	27,340.52

\*Note: Per capita annual income, including wages, bonuses, subsidies, allowances, and the Company's borne social insurance premiums, housing fund and employee education expenses, and welfare expenses.

## The Main Enterprise Held by Sungrow in 2016

### Hefei Sungrow New Energy Technology Co., Ltd.

Sungrow established Power Station Division in 2013 to take charge of the development, design and system integration of PV power generation projects as well as power station-level performance optimization and operating maintenance services. And it invested 81.71 million dollars in establishing Hefei Sungrow New Energy Technology Co., Ltd. at the end of 2014. Relying on the solid financing strengthen, outstanding research and development capability of system core equipment, leading system integration design capability, Hefei Sungrow provides overall solutions covering the full life cycle of PV power stations from development, design, construction, transaction, to smart operating maintenance.

Founded in **2014**

### SUNGROW (Shanghai) Co., Ltd.

SUNGROW (Shanghai) Co., Ltd., incorporated in 2011, is responsible for the research and development of some string and household-used PV product items, software items and advanced research items, as well as the sales and business management of the group in the Jiangsu-Zhejiang-Shanghai region.

Founded in **2011**

### SUNGROW (Gansu) Co., Ltd.

SUNGROW (Gansu) Co., Ltd., incorporated in 2012, takes full advantage of the local resources and supports to raise Sungrow's marketing capability and market share in the Gansu region and carries out power station project construction and product production.

Founded in **2012**

**SUNGROW (Qinghai) Co., Ltd.**

SUNGROW (Qinghai) Co., Ltd., incorporated in 2013, takes full advantage of the local resources and supports to raise Sungrow's marketing capability and market share in the Qinghai region and carries out power station project construction and product production.

Founded in **2013**

**SUNGROW (Jinzhai) Co., Ltd.**

SUNGROW (Jinzhai) Co., Ltd., incorporated in 2013, has taken full advantage of the local resources and supports to facilitate the construction of PV poverty alleviation and the layout of distributed power stations locally in the Jinzhai region. It constructs plants and puts finished ones to generate power.

Founded in **2016**

**Sungrow-Samsung SDI Energy Storage Power Supply Co.,Ltd.**

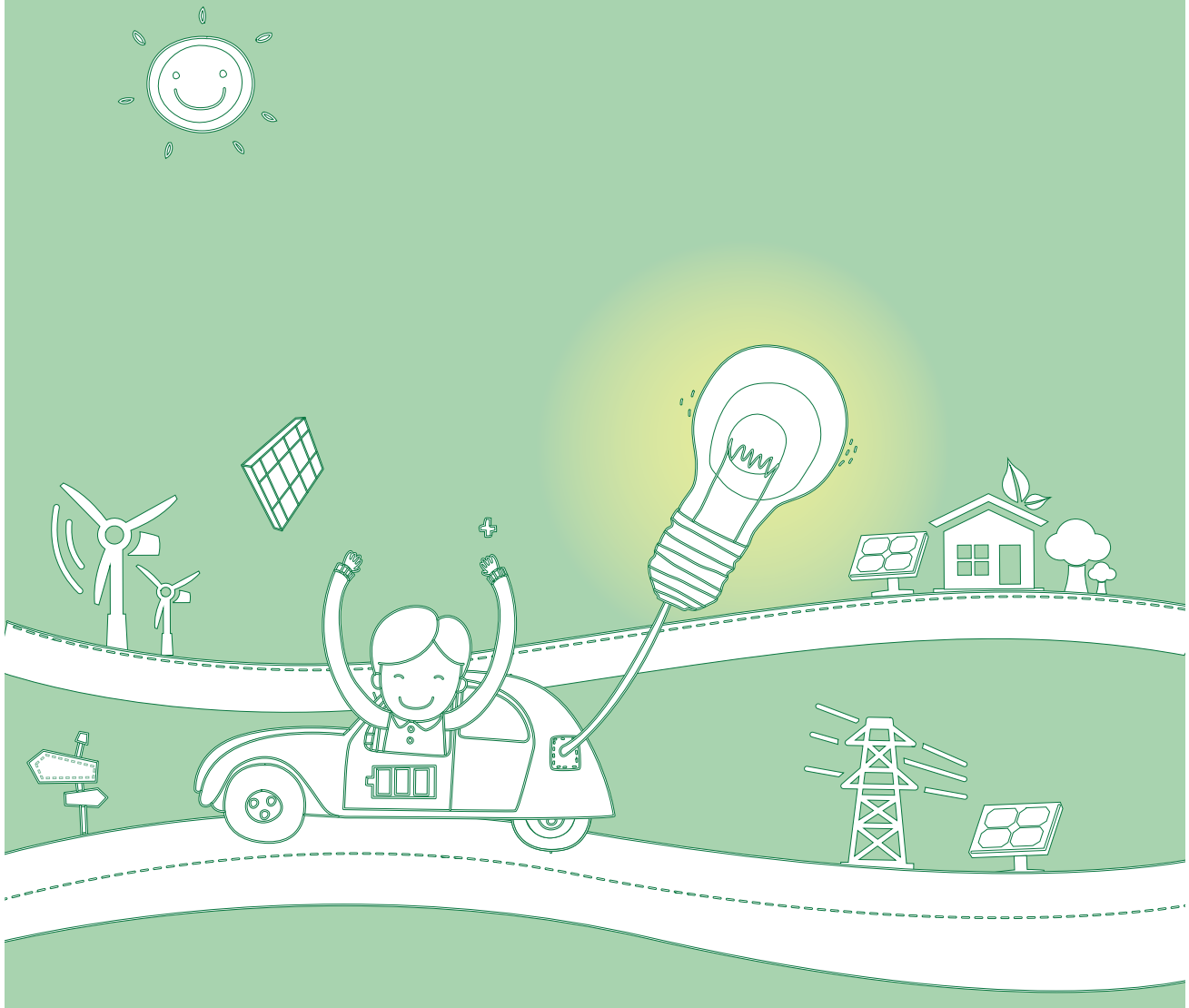
It is a joint venture of Sungrow Power Supply Co., Ltd. and Samsung SDI Co., Ltd. Its 3GM/a energy storage converter project passed the phased environmental acceptance of Hefei Municipal Bureau of Environmental Protection Hefei State Hi-tech Industry Development Zone Branch in November 2016. Relying on the world-leading new energy power transfer technology of SUNGROW and the world-class lithium battery technology of Samsung SDI, Sungrow-Samsung SDI supplies energy storage inverters with the single-machine capacity of 5-1000kW, Samsung lithium batteries, energy management systems and other core energy storage devices, and it also provides advanced system solutions on energy transfer, micro-grid, power frequency regulation.

Founded in **2016**



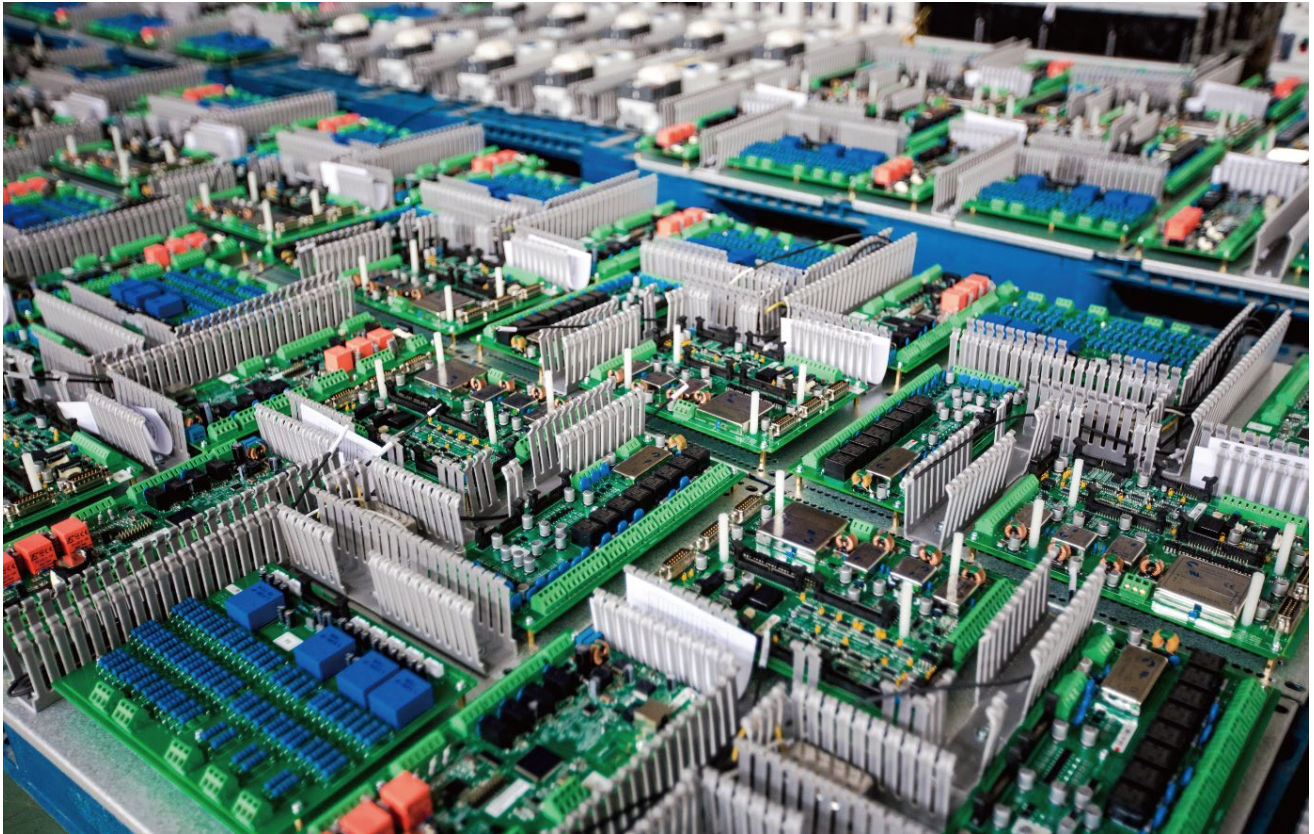
## Pursuing Excellence, Realizing Quality Assurance

Sungrow has been implementing the most advanced quality management system—ISO9001/ISO9004/IATF16949/Performance Excellence Criteria, etc. for many years. Through management and practice, Sungrow continually integrates and optimizes the management process, and improves the organization performance; meanwhile, it formulates the quality strategy of “building the first brand of solar energy with excellent quality” and continually improves it, gradually forming a series of management measures. By applying PDCA, 8D, APQP, FMEA, SPC, PPAP and other tools, Sungrow continually improves products quality and reliability so as to achieve the world-class level.





## Construction of Quality Management System



Sungrow first completed the change of certification version of ISO9001:2015 in 2016, introduces internal and external environmental management, risk management, stakeholder management and other new concepts, and sets a more challenging performance target. By continually improving internal audit, management review, QCC and other activities, relevant processes and systems are continually improved. Build a scientific and efficient integration management system, and continually pursue excellence so as to further improve products, service and brands.

Certification Items	Certification Date	Certification Authority
Certification of Quality Management System	First Certification: July 26, 2002; Latest Certification: June 28, 2016	SGS
Certification of Environmental Management System	First Certification: February 9, 2010; Latest Certification: February 17, 2016	CQC
Occupational Health and Safety Management System	First Certification: February 9, 2010; Latest Certification: February 17, 2016	CQC
Hazardous Substances Process Management System	First Certification: October 23, 2012; Latest Certification: August 2, 2016	SGS
Social Responsibility Management System	First Certification: April 28, 2015; Latest Certification: July 21, 2016	SGS
ISO17025 laboratory accreditation	First Certification: November 2, 2015; Latest Certification: October 25, 2016	CNAS
ISO:TS16949	First Certification: November 24, 2015; Latest Certification: November 10, 2016	BV

## Customer Satisfaction

Presently, the market has entered the fierce competition period and customer satisfaction and loyalty have become important factors to support the brand to keep a foothold in the market; in order to continually meet different needs of customers, through a series of measures such as holding industry seminars, participating in relevant forums, pre-sales technical program service, after-sales training and technical support, the Company has continually improved customer satisfaction and loyalty.

### 2015-2016 Customer Satisfaction Survey



Degree of Satisfaction	Very satisfactory	Satisfactory	Fair	Unsatisfactory	Very unsatisfactory
Score	100~90	89~80	79~60	59~40	39~0

## Paying More Attention to Quality Training

Sungrow pays much attention to enhancing the quality system level. Since the new employee orientation training, it has introduced quality idea and provided common sense training, consolidated standard operating procedure and paid much attention to the quality training work.

## Product Certification

The products of Sungrow have passed several international authorized certification and tests, including TÜV, GL, CSA, BV, CEC and CE.

## Handling of Complaints from Customers

Sungrow pays much attention to the handling of complaints from customers. It has established the quick response mechanism of responding and handling the complaints from customers in time, and formed a triune sales service network with the minimum service radius, shortest arrival and time-limited service and fastest customer calling service. In order to receive and handle the complaints from customers in time and enhance the customer satisfaction, it has made "Measures for Administration of Complaints from Customers" and established and improved the customer complaint handling mechanisms.

The Quality Control Department and Customer Service Center organize people to handle the complaints from customers. After investigating and analyzing the complaints, they make the solutions to the complaints from customers, including rectification scheme and compensation scheme, and organize the implementation after the customers' confirmation until the customers are satisfied. Besides, they will organize the insiders to make the rectification scheme for the complaints and organize the implementation, and feed the internal rectification scheme and implementation result back to the customers according to their needs and get their confirmation.

## Marketing Compliance

In 2016, Sungrow strictly abided by the national laws and regulations in the product sales and publicity. It pays attention to the customers' real delivery demand and stealth technology demand; and with honesty and reputation as the tenet, it constantly listens to the opinions of the customers, tries to improve the product quality, firmly forbids the sales of non-conforming products and strictly performs all the business contracts with the customers; it carries out dynamic monitoring over the performance and service of large projects to ensure high-quality and efficient delivery based on the contract and field service. It gives timely reply to the questions from the customers, and the products and services are thought highly of by the customers. And it tries to realize the cooperation and win-win with customer relationships.





## Supplier Management

Supplier management is an important link of Supply Chain Management of an enterprise. Sungrow has always been committed to building a sustainable purchasing organization and supply chain which fulfills the social responsibility and honestly performs the contracts.

Sungrow has established a strict supplier access system. Before a new supplier supplies its goods, the Supplier Management Department will organize the examination of the supplier's qualification, quality system, quality process and product process, and conduct sample detection, tracking of trial production in small numbers, process certification and investigation on stability. In order to maximally control the risks, the new suppliers should sign relevant agreements, including "Supply Agreement", "Quality Agreement" and "RoHS Promise".

In 2016, the Supplier Management Department made the Supplier Social Responsibility Risk Assessment Table and completed the social responsibility risk assessment of 231 main qualified suppliers, and confirmed the risk assessment of the suppliers with a relatively high level of risk. In the aspect of selection of suppliers, the Company made a check on the compliance of social responsibility of the new suppliers and actively guided the suppliers to gradually introduce SA8000 Social Responsibility System.

When the suppliers supply goods, the Company will make a statistical evaluation on the quality of delivered products, delivery speed and service attitude. According to the degree of risk of influence of the materials supplied by the suppliers on the product quality, the Company will carry out classified management over the suppliers. In case of non-performing products found in the test and use, the Company gives timely feedback to the suppliers for analysis and improvement. Every year, the Company makes irregular routine review on the suppliers, and in case of any problems, it will ask the suppliers to make rectification. Every quarter, the Company makes performance appraisal on the quality of the main suppliers and tutor the factories whose appraisal result is not up to standard and ask them to make the rectification.

## Customer-centered After-sales Service

Based on the service tenet of "serving customers", the Company advocates the service ideas of "being sincere and pragmatic" and that "the customer is always right", further details every link based on it and forms a unique global after-sales service management system.

### 1. Improving the construction of service information platform

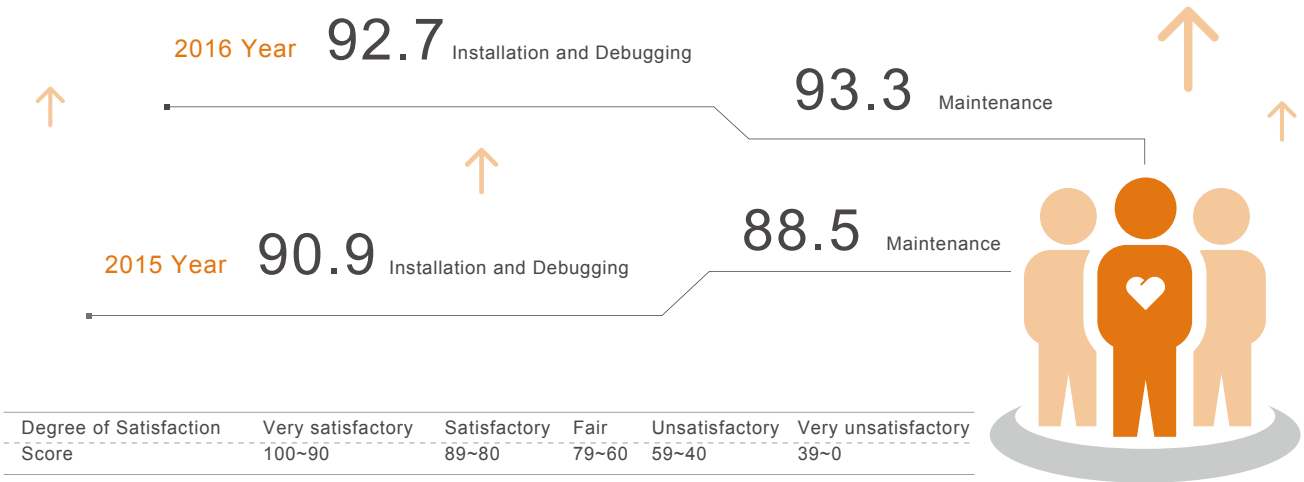
Through the construction of service information platform, strengthen the product full life circle management, establish a perfect management mechanism of accessories, scientifically and reasonably make the service and accessory plan, enhance the service and spare part supply timeliness, and accelerate the construction of global regional service outlets, give full play to the demonstration effect of global regional service outlets and enhance the service response time.

### 2. Strengthening service training management

Improve the training service system, strengthen the construction of training resources, including training organization, training funds and training software and hardware, learn the training demands of the customers and employees, set up scientific and reasonable training courses, increase the development of product self-service training materials, strengthen the technical training of the customer operation and maintenance staffs and service engineers and enhance the customer satisfaction and service satisfaction.



2015-2016 Customer Service Satisfaction Survey



Based on the customers' evaluation on the after-sales service in 2016, the following two prominent problems were analyzed and summarized. The Company gave timely responses, analyzed the reason and put forward rectification measures, and conducted the rectification.

Customer Feedback	Reason Analysis	Rectification Plan and Countermeasures
The Product Specifications are too technical to understand. It is suggested that some PPT training materials to guide the product installation should be developed.	The Product Specifications and training materials are too specialized, technical and complex, and the demands of the customers are not learned.	Learn the demands of the customers through the survey. Based on the demands of the customers, develop a series of self-service product operation and maintenance training material; through the development of training materials, make the customer first-line maintenance staffs rapidly enhance their technical level and adapt to their posts as soon as possible
The service timeliness and technical level and service quality of the service staffs are to be improved.	At present, the product projects are distributed widely, and the project areas have a large span. The existing staff cannot be reasonably allocated, and the regional service outlets are unreasonably distributed.	According to the current business development situation of the Company, in combination with the business characteristics, integrate and optimize the former regional service outlets; every regional service outlet should has the person responsible for corresponding business docking to realize long and lasting service tracking and rapid response; strengthen the service awareness and service skill training of the service staff.

## Building A Green Homeland with Sungrow

The Company conforms to national guiding principles of environmental protection and ecological civilization construction, conducts the development mission of “devoting to green and effective, giving clean power to more people”, strives to improve the environmental quality and practices the green development concept. In 2016, the Company achieved rapid development and meanwhile, it has worked hard in the aspects of environmental protection, energy saving and consumption reduction, pollution and emission reduction, etc. and has achieved a good result.



## Construction and Promotion of EHS Management System

Sungrow pays much attention to the importance of Environmental Health and Safety (EHS) Management System in the enterprise development and social responsibility, and protecting the environment, employees' health and personal safety is the social responsibility of the corporate citizens. On the premise of strictly abiding by the national and local EHS laws and regulations, the Company works hard in the aspects of environmental protection, occupational health and safety, energy saving and consumption reduction, pollution and emission reduction and strengthening the health and safety training and has achieved a good result.

As of 2016, the Company and its member enterprises have obtained the following certificates:

Enterprise Name	Certification Categories
Sungrow	ISO14001, OHSAS18001, SA8000 Certification, IECQ-QC08000 Certification, Work Safety Standardization Second-level Enterprise
Sungrow (Shanghai)	SA8000 Certification

## Environmental Protection

Sungrow creates green plants and green products to practice its commitment to the environment, insists on investment in innovation, emission reduction and resource saving, carries out strict environmental management in the product lifecycle, ensures that the entire process of R&D, procurement, production and customer conforms to the requirement for sustainable development of the environment, and achieves a virtuous circle of symbiotic development of company and environment.

In 2016, Sungrow has installed 14,000,000 kW of inverters and accumulatively installed more than 38,000,000 kW of inverters globally, which can generate clean and green power of 54 billion kWh and reduce the emission of carbon dioxide of as much as 43.2 million tons every year. Along with the development and growth of the Company, the data are rapidly increasing year by year.

Besides, the Company actively explores "PV+" innovation model, provides demonstration for comprehensive environmental treatment and application of new energy industry in the new comprehensive application forms, such as agriculture and PV complementation, fishery and PV complementation, forestry and PV complementation, subsidence area/barren mountain comprehensive treatment PV power station and floating power station, to realize the balance between economic benefit and ecological protection.



### Pollution Treatment

The influence of Sungrow's business activities on the environment mainly lies in the consumption of relevant resources, such as electricity consumption, consumption of natural gas, consumption of tap water and consumption of raw and auxiliary materials. The main sources of environmental pollution are discharge of domestic sewage (main pollution factors are COD,  $\text{NH}_3\text{-N}$ , SS and animal and vegetable oil, etc.), atmospheric emission (main pollution factors: particulate matters, non-methane hydrocarbon, etc.), and discharge of solid waste (mainly including exhausted activated carbon, waste flux, waste cleaning agent, waste duster cloth and gloves, etc.)

The domestic sewage of Sungrow, Sungrow-Samsung SDI joint venture, Sungrow (Qinghai) and Sungrow (Jinzhai) enters the municipal administrative pipeline network after the company's septic tank treatment and is discharged after it is treated in the local sewage treatment plant and reaches the standard. The sewage of Sungrow (Gansu) is first treated in the septic tank of the factory, then treated in the A/O (Anoxic-Oxic) process sewage treatment plant and then discharged after it reaches the standard. The waste gas in the production process of Sungrow is discharged after reaching the standard through activated carbon absorption. The welding fume of Sungrow-Samsung SDI after absorption in smoke absorber is discharged after reaching the standard through unorganized discharge. The hazardous waste of Sungrow and Sungrow-Samsung SDI joint venture is collected and stored in their own companies and sent to the qualified treatment unit for reuse and final treatment, such as burning and landfill. The packaging materials in the general waste of Sungrow and its member enterprises are recycled by the special recycling unit for reuse. The domestic waste is collected and treated by the City Administration Department in a unified way.

In 2016, the Company invested about USD 162,173.85 dollars for environmental protection measures. The constant investment of environmental protection fund plays a crucial role in the sustainable development of the enterprise and protection of the surrounding community environment.



### Some Environmental Improvement Projects:

Technology Introduction	Coverage	Result
For the isopropyl alcohol organic waste gas and non-methane hydrocarbon produced in the welding and spraying sections, such as SMT, wave-soldering, three –proofing painting, and holding tin, the treatment process collection – carbon filter – fan – high altitude discharge is adopted. This process consists of such main equipment as collecting cover, activated carbon filtration device, exhaust fan and control system. The waste gas from pollution sources is collected through the air hose and then enters activated carbon absorption tank for absorption treatment of alcohol, alcohol lysate, aldehydes and benzene; then, the purified waste gas is pumped out by the induced draught system. And the treatment of waste gas is completed.	Welding and spraying sections, such as SMT, wave-soldering, three –proofing painting, and holding tin on the second floor of PCB Workshop	According to relevant national standards, the exhaust funnel should be as high as 15m or higher; through the calculation, the treated waste gas reaches and is lower than the national discharge standard.
For the waste gas produced in the ultrasonic cleaning, the treatment process collection – carbon filter – fan – high altitude discharge is adopted. This process consists of such main equipment as collecting cover, activated carbon filtration device, exhaust fan and control system. The waste gas from pollution sources is collected through the air hose and then enters activated carbon absorption tank for absorption treatment of alcohol, alcohol lysate, aldehydes and benzene; then, the purified waste gas is pumped out by the induced draught system. And the treatment of waste gas is completed.	Ultrasonic cleaning on the second floor of PCB Workshop	The same as above
The second floor, third floor and fourth floor of PCB Workshop are dust-free plants. In order to improve the indoor air quality, several groups of 1-in 1-out pipelines are arranged to draw in air and supply air at the same time to realize the constant circulation of indoor air. This system adopts the treatment process air port – purification – fan – discharge (supply). This process consist of such main equipment as shutters, air cleaning facility, fan and control system.	The second floor, third floor and fourth floor of PCB Workshop	This ventilation system meets the requirements of Code of Design on Building Fire Protection and Prevention, and the standard of GB16297-1996; and the requirement for designed equipment and installation requirements conform to the industry standard and requirement of the government departments.



### Environmental Management Compliance

The Company lays stress on the compliance of laws and regulations for environmental protection, and comprehensively carries out the environmental impact assessment and environmental “three simultaneousness” acceptance system for the new, reconstructed and expanded projects. The production member enterprises incorporate themselves into the legal regulation scope of the local environmental management organization according to the requirements of laws and regulations for environmental protection.

### Some Environmental Improvement Projects:

Member Enterprises	Environment Compliance
Sungrow	The Company's 3GM/a year photovoltaic and wind power generation equipment expansion project passed the environmental acceptance in July 2016. Environmental impact assessment on technical renovation project of medium power photovoltaic inverter automatic production line was approved in August 2016.
Sungrow-Samsung SDI	Preparation for record of environment emergency plan finished in December 2016. Preparation for record of environment emergency plan finished in October 2016. Its 3GM/a year energy storage converter project passed the phased environmental acceptance of Hefei Municipal Bureau of Environmental Protection Hefei State Hi-tech Industry Development Zone Branch in November 2016.
Sungrow (Jinzhai)	Environmental impact assessment on poverty alleviation project of Sungrow (Jinzhai) smart inverter production base was approved in 2016.

According to the result of the environmental monitoring report issued by the local environment monitoring agency or the third party, in 2016, the member enterprises ensured the stable and up-to-standard discharge of "three waste" pollution.

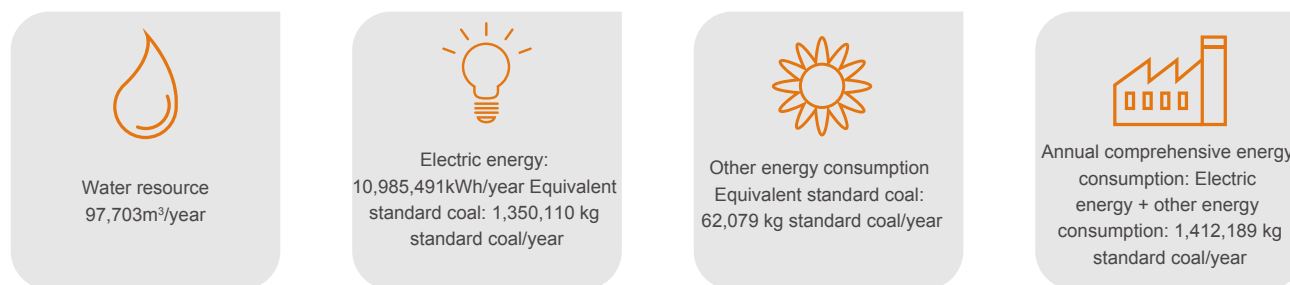
In 2016, the Company and its member enterprises did not have any environmental pollution accidents, and none of them has been or ever included in the list of enterprises with serious pollution published by the national or local environmental protection departments, and none of them has ever suffered from administrative penalty of local environmental management department due to the environmental protection problem.

Note: Some distributed PV power station projects of Sungrow New Energy belong to National Energy Administration GuoNengXinNeng [2013] No. 433 "Interim Measures for Administration of Distributed PV Power Generation Project" Chapter Three Project Record Article 11, so the environmental assessment is not needed.

### Use or Consumption of Resources

Following the national strategy "Made in China, 2025", the Company introduced automation, intellectualization and informatization into whole operation process of manufacturing system to create intelligent factory. The Company was awarded "Intelligent Factory" by Hefei Municipal Commission of Economy and Information Technology.

The data about use or consumption of resources during the Report period are as follows:



## Energy and Resource Consumption of Sungrow and its member enterprises:

Year	Total water consumption (m <sup>3</sup> /year)	Total power consumption kWh/year)	Equivalent standard coal of electric energy (kg/year)	Total energy consumption beyond electric energy (equivalent standard coal) (kg/year)	Comprehensive energy consumption (equivalent standard coal) (kg/year)	Energy consumption per ten thousand dollars output value (kg/10000 dollars)	Water consumption per ten thousand dollars output value (m <sup>3</sup> /10000 dollars)
2015	63,168	8,336,454	1,024,545	48,467	1,073,012	15.20	0.90
2016	97,703	10,985,491	1,350,110	62,079	1,412,189	15.33	1.06

In 2016, the consumption of water resources and energy of Sungrow and its member enterprises is shown in the above table, including Sungrow and four member enterprises under it. Based on the full aperture comparison, the water consumption and power consumption in 2016 rose by 29516t (31.8%) and 2649037 kWh (24.1%) over 2015, respectively. The water consumption intensity rose by 0.104t/10000 dollars (10.8%, for an increase of water consumption in the process of new project expansion) and the power consumption intensity reduced by 0.902t standard coal/10000 dollars (5.6%). The total of water consumption and power consumption is due to the output promotion of the Company and some of the member enterprises under it, but as the company has scaled larger, the member enterprises also remembered to enhance the utilization efficiency of water resources and energy.

Enterprise Name	Categories of Energy Consumed in the Production								
	Power consumption (kWh)	Natural gas (M <sup>3</sup> )	liquefied gas (Kg)	City gas (M <sup>3</sup> )	Steam (Kg)	Raw coal (Kg)	Diesel (Kg)	Gasoline (L)	fuel oil (L)
Sungrow	10,480,470	46,676	0	10	0	0	0	83,300	18,903
Sungrow (Shanghai)	98,146	0	0	0	0	0	0	0	0
Sungrow(Gansu)	12,099	0	420	0	0	0	0	0	0
Sungrow (Qinghai)	30,000	0	0	0	0	0	0	0	0
Sungrow-Samsung SDI	320,816	2,829	0	0	0	0	0	3,714	0
Sungrow (Jinzhai)	43,960	0	0	0	0	0	0	0	0

Note: The actual starting time of production of Sungrow-Samsung SDI and Sungrow (Jinzhai) are July 2016, and August 2016, respectively, so the data cycle is from July to December, 2016, and from August to December, 2016, respectively.

## Material Purchase, Use and Recycling Use of Sungrow and Its Member Enterprises in 2016

Enterprise Name	Category of Materials	Name of Materials	Purchased Quantity of Materials	Actual Use	Recycling Use	Recycling Use ratio (%)	Unit
Sungrow	production material	cabinet	159,960	153,928	0	0	pcs
	production material	electric reactor	973,976	1,016,093	0	0	pcs
	production material	transformer	833,423	841,767	0	0	pcs
	production material	chip	19,220,228	18,770,824	0	0	pcs
	production material	module	681,764	594,453	0	0	pcs
	production material	cable	6,318,000	6,811,432	0	0	pcs
	production material	Cleaning agent	1,013	1,089	0	0	m
	production auxiliary material	Three-proofing paint	5,726	5,911	0	0	kg
	production auxiliary material	Flux	9,470	9,661	0	0	kg
	production auxiliary material	tin bar	8,746	9,422	0	0	kg
	production auxiliary material	tin cream	981	995	0	0	kg
	production auxiliary material	cabinet	159,960	153,928	0	0	kg

## Energy Saving and Emission Reduction

The Company pays attention to the management and planning of energy, preferentially adopts the renewable energy and clean energy to replace the fossil energy, such as fire and power. The factory base is focused in building PV power generation systems and has accumulatively built 4.1MW PV power stations, forming an intelligent optical record microgrid. Every year, it can generate nearly 4.1 million kWh clean power and reduce the emission of carbon dioxide of over 3,410 tons, making the positive environmental impact obvious.

## Energy-saving and Emission Reduction and Water-saving Measures of Sungrow in 2016

No.	Work Content	Target Value	Complete Time	Implementation Scheme	Current Progress
1	Roof Solar Power Generation	4.1 million kWh/year	2016-2020	1. Maintain the normal operation of the solar power generation system; 2. When building new plants, install the roof power generation system at the same time	The installation of generators on the roof of the headquarters of Sungrow and Sungrow-Samsung SDI has been completed; Sungrow new plant is in the planning for construction.
2	Replace fluorescent lamp with LED energy-saving lamps	100%	2016-2020	1. The Equipment Maintenance Department gradually replace the existing lighting lamps of the factory with LED energy-saving lamps in a progressive way, and the replacement should be completed in five years. 2. When the new plant is built and designed, the energy-saving lamps should be designed.	In 2016, 40% of the lamps in the headquarters have been replaced.
3	Up-to-stand and discharge of pollutants	100% qualified	Constantly	1. Regularly replace the activated carbon, monthly maintain the exhaust fan to ensure the normal running of the waste gas treatment facilities; 2. Conduct quarterly detection and real-time dynamic tracking.	Regularly conduct sewage declaration every quarter according to the requirements of the environmental protection bureau, and there is no exceeding-the-standard phenomenon.
4	Reduce the consumption of water, power and natural gas and so on	Reduce 5% every year	2016-2020	1. Make and complete the "Measures for Saving Management" and advocate green office; 2. When choosing the equipment model, select the energy-saving appliances and constantly enhance the product energy transformation efficiency in the equipment research and development	Carry out the energy-saving work according to the requirements for green factory



### Control and Discharge of Environmental Pollutants

The Company pays attention to environmental protection measures. The discharge of sewage, discharge of air pollutants, factory boundary noise and industrial waste (usually general waste & hazardous waste, the same as below) produced in the production and operation process must completely meet the relevant national and local regulations. Apart from the preliminary synchronous construction pollution control devices and facilities of the construction projects, full organization guarantee and technical guarantee should be provided in the cases of environmental management aspects, including personnel guarantee, operation procedures, monitoring control and environmental emergency plan to ensure the sustainable development of the enterprise and eliminate the pollution accidents.

#### Discharge of Water Pollutants of Sungrow and Some of Its Member Enterprises in 2016

Year	Total discharge of waste water (t/year)	Total discharge of COD (t/year)	Total discharge of NH <sub>3</sub> -N (t/year)	Total discharge of waste gas (m <sup>3</sup> /year)	Oxynitride (t/year)	Oxysulfide (t/year)	Dust and particulate matter (t/year)	Total discharge of solid waste (t/year)
2016	78,162	17.95	1.63	4,812	0	0	0.64	106.51

#### Summary Sheet of New “Three Waste” Treatment Facilities of Sungrow and Some of Its Member Enterprises

Enterprise Name	Treatment and Discharge of Sewage	Atmospheric Emission and Pollution Control Measures	Treatment and Discharge of Waste
Sungrow	The domestic sewage enters the municipal administrative pipeline network after the septic tank treatment and is discharged after it is treated in the development zone's sewage treatment plant and reaches the standard.	After the gas produced in the waste flux, cleaning agent and waste three-proofing paint is collected, it is treated through activated carbon absorption and then it is discharged after it reaches the standard.	The hazardous waste such as waste flux, cleaning agent, duster cloth and emulsion is sent to the qualified unit for treatment. Other domestic waste is sent to the environmental sanitation department for treatment.
Sungrow (Shanghai)	The domestic sewage enters the municipal administrative pipeline network after the septic tank treatment and is discharged after it is treated in the development zone's sewage treatment plant and reaches the standard.	No industrial waste gas	The domestic waste is sent to the environmental sanitation department for treatment.
Sungrow(Gansu)	The domestic sewage enters the municipal administrative pipeline network after the septic tank treatment and is discharged after it is treated in the development zone's sewage treatment plant and reaches the standard.	No industrial waste gas	The hazardous waste such as emulsion are sent to the qualified unit for treatment. Other domestic waste is sent to the environmental sanitation department for treatment.
Sungrow (Qinghai)	The domestic sewage enters the municipal administrative pipeline network after the septic tank treatment and is discharged after it is treated in the development zone's sewage treatment plant and reaches the standard.	No industrial waste gas	The hazardous waste such as emulsion are sent to the qualified unit for treatment. Other domestic waste is sent to the environmental sanitation department for treatment.
Sungrow (Jinzhai)	The domestic sewage enters the municipal administrative pipeline network after the septic tank treatment and is discharged after it is treated in the development zone's sewage treatment plant and reaches the standard.	No industrial waste gas	The hazardous waste such as emulsion are sent to the qualified unit for treatment. Other domestic waste is sent to the environmental sanitation department for treatment.
Sungrow-Samsung SDI	The domestic sewage enters the municipal administrative pipeline network after the septic tank treatment and is discharged after it is treated in the development zone's sewage treatment plant and reaches the standard.	After the welding dust is absorbed through the smoke absorber, and the gas is discharged without organization after it reaches the standard.	The waste lubricating oil is sent to Hefei Yuanda Company for treatment. The waste packaging materials should be recycled by the special recycle unit. Other domestic waste is sent to the environmental sanitation department for treatment.

Enterprise Name	Total Discharge of Water of the Current Year (t)	Total discharge of COD of the Current Year (t)	Total discharge of ammonia nitrogen ; lube of the Current Year (t)	Incorporate into the Municipal Pipeline Network or not (Yes/No)	Up-to-standard discharge or not (Yes/No)	Discharge Direction and Way
Sungrow	74,147	16.88	1.43	Yes	Yes	Reaches the sewage treatment plant via the municipal pipeline network
Sungrow (Shanghai)	301	0.188	0.0154	Yes	Yes	Reaches the sewage treatment plant via the municipal pipeline network
Sungrow (Gansu)	393	0.015	0.0333	Yes	Yes	Reaches the sewage treatment plant via the municipal pipeline network
Sungrow (Qinghai)	635	0.367	0.052	Yes	Yes	Reaches the sewage treatment plant via the municipal pipeline network
Sungrow (Jinzhai)	800	0.412	0.060	Yes	Yes	Reaches the sewage treatment plant via the municipal pipeline network
Sungrow-Samsung SDI	1,574	0.064	0.028	Yes	Yes	Reaches the sewage treatment plant via the municipal pipeline network

Note: The actual starting time of production of Sungrow-Samsung SDI and Sungrow(Jinzhai) are July 2016, and August 2016, respectively, so the data cycle is from July to December, 2016, and from August to December, 2016, respectively.

In 2016, the discharge of water pollutants of member enterprises of Sungrow realized the constant up-to-standard discharge which meets the requirements, and the Company did not receive the report of polluting the surrounding environment.

#### Total Discharge of Waste Gas, and Discharge of Dust and other Important Gas of Sungrow in 2016

Enterprise Name	Annual total discharge of waste (*10 <sup>4</sup> m <sup>3</sup> )	Oxynitride (NOx) Annual total discharge (t)	Oxysulfide (SOx) Annual total discharge (t)	Dust and particulate matter Annual total discharge (t)	Non-methane hydrocarbon Annual total discharge (t)	VOC (volatile organic compound) Annual total discharge (t)	Type of emission source and way
Sungrow	4812	0	0	0.64	0.285	0	Organized waste gas
Sungrow (Shanghai)	0	0	0	0	0	0	/
Sungrow (Gansu)	0	0	0	0	0	0	/
Sungrow (Qinghai)	0	0	0	0	0	0	/
Sungrow (Jinzhai)	0	0	0	0	0	0	/
Sungrow-Samsung SDI	0	0	0	0	0	0	/

Note: The actual starting time of production of Sungrow-Samsung SDI and Sungrow (Jinzhai) are July 2016, and August 2016, respectively, so the data cycle is from July to December, 2016, and from August to December, 2016, respectively.

In 2016, the discharge of air pollutants of member enterprises of Sungrow realized the constant up-to-standard discharge which meets the requirements, and the Company did not have the pollution accidents of change in air environmental quality because of emission of waste gas.

In 2016, among the general solid waste of the Company and the member enterprises, most of the waste outer packaging materials were comprehensively utilized and reduced the emission and avoided the secondary pollution of the environment. As for the hazardous waste, the member enterprises can complete all the environmental protection procedures from application, approval, transfer and disposal according to the requirements of the environmental protection department, and entrusted the qualified unit to conduct the treatment which meets the regulations.

#### Treatment of Solid Waste of Sungrow and Some of Its Member Enterprises in 2016

Enterprise Name	Total solid waste in the current year (t)	Domestic waste (t)	Industrial solid waste (non-hazardous waste (voc)) (t)	Packaging materials (t)	Total amount of hazardous waste (t)	Treatment ways of hazardous waste				Waste treatment and comprehensive utilization or add comprehensive utilization
						recycle (t)	Burning (t)	landfill (t)	others (t)	
Sungrow	90	75	3	5	7	0	7	0	0	0
Sungrow (Shanghai)	2	2	0	0	0	0	0	0	0	0
Sungrow (Gansu)	2.21	1.2	0.01	1	0	0	0	0	0	0
Sungrow (Qinghai)	4.5	4	0.2	0.3	0	0	0	0	0	0
Sungrow (Jinzhai)	3	2.4	0.6	0	0	0	0	0	0	0
Sungrow-Samsung SDI	4.8	1.8	3	3	0	0	0	0	0	0

Note: The actual starting time of production of Sungrow-Samsung SDI and Sungrow (Jinzhai) are July 2016, and August 2016, respectively, so the data cycle is from July to December, 2016, and from August to December, 2016, respectively.

#### Investment of Environmental Protection Funds of Sungrow's Member Enterprises in 2016

Member Enterprise	Investment in the environmental protection facilities in the current year (dollar)	Investment in the operation of the environmental protection facilities in the current year (dollar)	Purpose of the Funds
Sungrow	30,272.45	57,950.12	Greening, clearing of septic tank and oil separator, operation of waste gas treatment devices, detection, treatment of hazardous waste, cleaning of battery plate
Sungrow (Shanghai)	0	2,306.47	Cleaning of battery plate, greening, environment detecting
Sungrow (Gansu)	1,441.55	2,162.32	Cleaning of oil separator, clearing of septic tank, greening, environment detecting, operation of waste gas treatment devices
Sungrow (Qinghai)	2,883.09	1,441.55	Cleaning of oil separator, clearing of septic tank, greening, environment detecting,
Sungrow (Jinzhai)	4,324.64	1,441.55	Cleaning of oil separator, clearing of septic tank, greening, environment detecting,
Sungrow Samsung	52,328.10	5,622.03	Welding fume collecting device, greening and maintenance, disinsection, clearing of septic tank, environment detecting, and environmental emergency plan preparation

Note: The actual starting time of production of Sungrow-Samsung SDI and Sungrow (Jinzhai) are July 2016, and August 2016, respectively, so the data cycle is from July to December, 2016, and from August to December, 2016, respectively.

## Occupational Health and Safety



Sungrow promises to provide a healthy and safe working and office space for the employees. In 2016, the Company, from the Group to the member enterprises, constantly and comprehensively made progress in health and safety. And the enterprises, according to the characteristics of other operation risks, actively carried out identification, evaluation and control of various kinds of health and safety risk factors and adopted various engineering improvement and administrative control measures to control and eliminate the risks. In 2016, the Company provided EHS training for employees and carried out relevant education and publicity activities, and focused on enhancing environmental, health and safety awareness of the employees and the whole society. In 2016, on the basis of meeting the requirements of legal mandatory trainings, the Company increased the development of training courses of health and safety series and the training scope. As for the training courses, in combination with the promotion of management system, the Company constantly provided the training about mechanical protection, dangerous operation control (fire operation, work at high place, etc.), identification of source of danger, employee safety observation and fire safety knowledge.

During the Report period of 2016, the Company and its member enterprises did not have general work safety accidents, major work safety and major occupational disease events or fire events (classification of legal accidents of the Chinese government); the overall health and safety trends were an indication that the company had created a safe working environment for its personnel.

In 2016, the Company increased the security investment in safety facilities of the member enterprises, and the investment in the safety facilities and operation reached USD 1.11 million dollars. The constant investment in safety plays a crucial role in the sustainable development of the enterprise while providing a safe working space for the employees.



## Summary of Safety Indicators of Sungrow and the Member Enterprises in 2016

Enterprise Name	Total Empl	Total Working Hours (h)	Statistical Indicators of Domestic Industrial Injuries							Statistical Indicators of International Industrial Injuries				
			Major Event	General Event	Number of Serious Industrial Injuries	Number of Slight Industrial Injuries	Number of Industrial Accidents	Injury rate of 200,000 working hours	mortality of 200,000 working hours	Number of workdays loss accidents	Number of recordable accidents	Rate of workdays loss accidents	Rate of recordable accidents	Total number of occupational diseases
Sungrow	1,598	3,723,840	0	0	0	2	7	0.37	0	2	5	0.18%	0.22%	0
Sungrow (Shanghai)	70	151,200	0	0	0	0	0	0	0	0	0	0	0	0
Sungrow (Gansu)	10	19,600	0	0	0	0	0	0	0	0	0	0	0	0
Sungrow (Qinghai)	20	43,200	0	0	0	0	0	0	0	0	0	0	0	0
Sungrow (Jinzhai)	12	25,920	0	0	0	0	0	0	0	0	0	0	0	0
Sungrow-Samsung SDI	94	99,249.5	0	0	0	0	0	0	0	0	0	0	0	0

Note: The actual starting time of production of Sungrow-Samsung SDI and Sungrow(Jinzhai) are July 2016, and August 2016, respectively, so the data cycle is from July to December, 2016, and from August to December, 2016, respectively. The industrial injury accidents included 2 traffic accidents.

## Investment in Health and Safety of Sungrow and the Member Enterprises in 2016

Enterprise Name	Investment in Safety Facilities		Operation of Safety Facilities	
	Item Description	Amount (dollar)	Item Description	Amount (dollar)
Sungrow	Fire control center, transformation of safety protection facilities, purchase of emergency materials	341,646.24	Expenses for safety inspection and rectification, equipment maintenance, repair, calibration and detection; detection and evaluation of occupational disease hazardous factors	693,383.31
Sungrow (Shanghai)	Purchase of fire fighting equipment	1,441.55	Expenses for safety inspection and rectification, purchase of safety protection articles	720.77
Sungrow (Gansu)	Purchase of emergency materials	1,441.55	Purchase of fire fighting equipment, expenses for safety inspection and rectification	2,162.32
Sungrow (Qinghai)	Purchase of emergency materials, occupational disease Protection facilities	2,883.09	Expenses for safety inspection and rectification, purchase of labor protection appliances, detection and evaluation of occupational disease hazardous factors	2,162.32
Sungrow (Jinzhai)	purchase of emergency materials, occupational disease Protection facilities	2,883.09	Expenses for safety inspection and rectification, purchase of labor protection appliances, detection and evaluation of occupational disease hazardous factors	4,324.64
Sungrow-Samsung SDI	Purchase of emergency materials, occupational disease Protection facilities	40,435.35	Expenses for safety inspection and rectification, purchase of labor protection appliances, expenses for occupational disease examination, occupational health detection and evaluation, fire maintenance detection, special equipment detection.	17,010.23

Note: The actual starting time of production of Sungrow-Samsung SDI and Sungrow (Jinzhai) are July 2016, and August 2016, respectively, so the data cycle is from July to December, 2016, and from August to December, 2016, respectively.

## Occupational Health of Sungrow and the Member Enterprises in 2016

Enterprise Name	Number of people exposed to the occupational hazardous factor	Proportion of people accepting the occupational hazardous posts over all the employees	Number of people accepting the occupational disease examination in the current year	Completion rate of occupational disease examination	Number of Occupational exposure-related examination abnormal result	Abnormal ratio of occupational health examination (10%)	Number of employees participating in the employee industry examination in the current year	Proportion of employees participating in the annual employee industry examination over all the employees	Major occupation hazardous factors
Sungrow	88	5.8%	88	100%	0%	0%	1500	100%	Noise, tin oxide
Sungrow (Shanghai)	0	0	0	/	/	/	57	100%	/
Sungrow (Gansu)	0	0	0	/	/	/	0	100%	/
Sungrow (Qinghai)	10	50%	10	100%	0%	0%	20	100%	/
Sungrow (Jinzhai)	0	0	0	/	/	/	0	100%	/
Sungrow-Samsung SDI	4	4.3%	4	100%	0%	0%	94	100%	Noise, tin oxide

Note: The actual starting time of production of Sungrow-Samsung SDI and Sungrow (Jinzhai) are July 2016, and August 2016, respectively, so the data cycle is from July to December, 2016, and from August to December, 2016, respectively.

## EHS Training and Education

Employee participation is the key factor for improving techniques, management and environment; enhancing awareness and ability of employee through systematic and scientific trainings is the important precondition of enterprise sustainable development. Therefore, the Company encourages employees to widely get involved in various trainings and activities on environment, occupational health and safety and social responsibility to have a better understanding of topic and objective of sustainable development, thus jointly creating green and safe backbone of the enterprise.

The Company requires all employees to receive trainings related to environmental protection and occupational health and safety knowledge since they take office; training contents include: environmental protection, basic knowledge of occupational health and safety, sustainable development and relevant environmental management requirements of the Company as well as basic knowledge of occupational health and safety management and emergency and first aid acknowledge. In 2016, the total accumulative hours of EHS and social responsibility training of the Company and the member enterprises reached 4731 hours; the participants reached 2587 person-times, including: training times per capita was 1.8 times, and the training hours per capita was 3.2 hours, with an increase of 6.7% than that of 2015. These trainings have effectively enhanced environmental protection, occupational health and safety and sustainable development awareness of employees and management level of management personnel.



## EHS Training Activities of Sungrow and the Member Enterprises in 2016

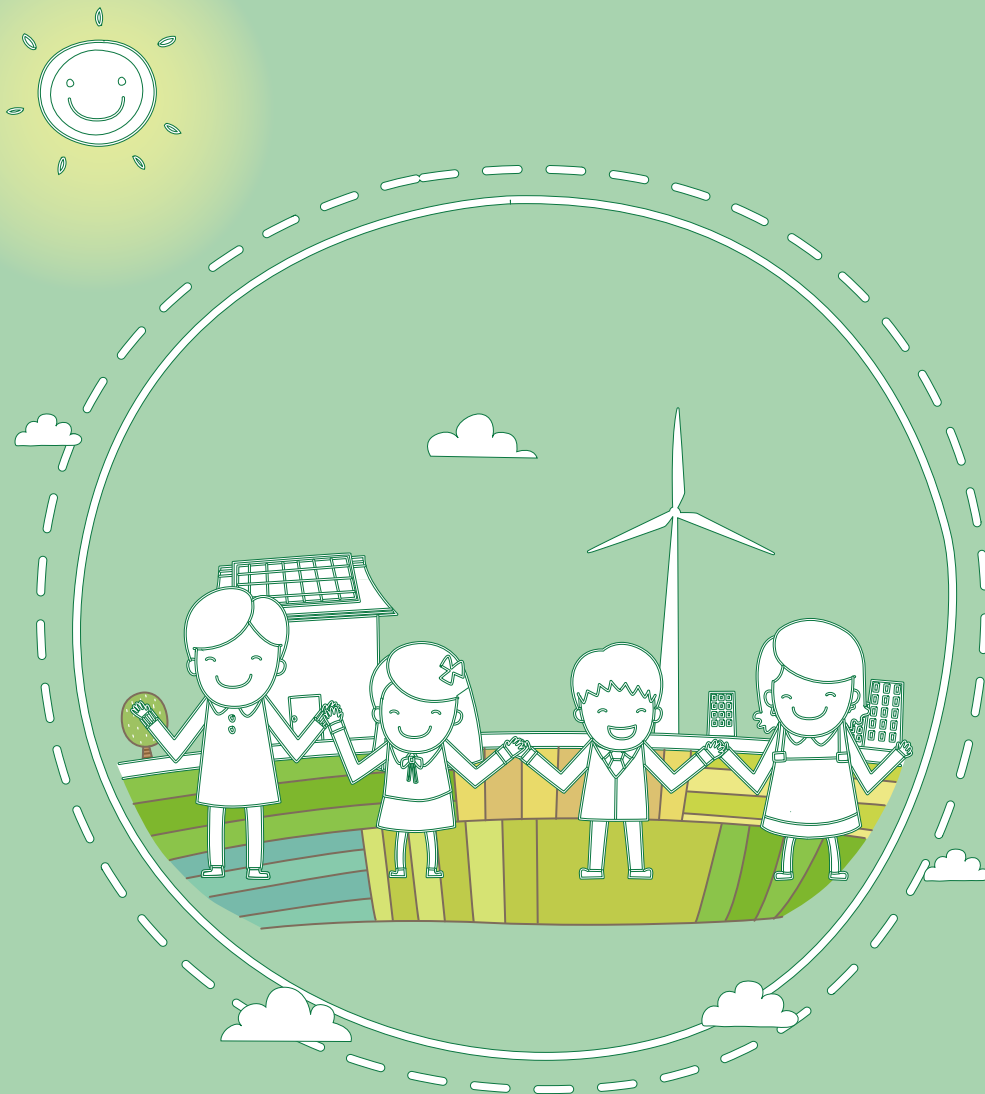
Enterprise Name	Legal trainings				Training course	Awareness training			People participating in the training	Special trainings	
	People who should to participate in the training	People who actually participate in the training	Completion rate%	Period (h)		People participating in the training	Period (h)	Training courses		Period (h)	Training courses
Sungrow	1598	1551	97.1	1.5	Three degree safety education, induction safety education and training	347	2	EHS Basic Concepts and Requirements	452	3	Source of Danger and First Aid
Sungrow (Shanghai)	70	70	100	1.5	Three degree safety education, induction safety education and training	54	1.5	Fire and Electric Shock Emergency Knowledge	54	1.5	First aid skills and drill
Sungrow (Gansu)	10	10	100	1.5	Three degree safety education, induction safety education and training	10	2	EHS Basic Concepts and Requirements	10	2	PPE, first aid training, emergency evacuation, mechanical and electrical knowledge, learning of social responsibility standard, wearing of labor protection articles
Sungrow (Qinghai)	20	20	100	1.5	Three degree safety education, induction safety education and training	20	3	EHS Basic Concepts and Requirements	20	2	PPE, first aid training, emergency evacuation, mechanical and electrical knowledge, learning of social responsibility standard, wearing of labor protection articles
Sungrow (Gansu)	12	12	100	1.5	Three degree safety education, induction safety education and training	12	3	EHS Basic Concepts and Requirements	12	3	PPE, first aid training, emergency evacuation, mechanical and electrical knowledge, learning of social responsibility standard, wearing of labor protection articles
Sungrow-Samsung SDI	94	94	100	1.5	Three degree safety education, induction safety education and training	60	3	EHS Basic Concepts and Requirements	60	3	PPE, first aid training, emergency evacuation, mechanical and electrical knowledge, learning of social responsibility standard, wearing of labor protection articles

The Company proposes for employees to actively participate in the activities and management of health and safety, encourages them to hold various employee self-management activities with rich content to fully safeguard the rights and interests of the employees in health and safety. In 2016, most of the member enterprises had corresponding EHS full-time or part-time staffs. The member enterprises regularly carried out the constant improvement.



## Going Hand in Hand, Opening up the Cause of Solar Power

Sungrow pays attention to sustainable development of talents. Remuneration and incentive system of the company comprehensively covers R&D technology and management backbone at all levels, effectively supports operation at the strategic level, and promotes achievement of short and long term performance objectives of company. It has achieved management objectives of stimulating enthusiasm of staff, encouraging and retaining talents.





## Sustainable Development of Talents

Sustainable development of talents is an important guarantee for realization of enterprise strategy. Sungrow upholds the approach combination of external introduction and internal training, while actively attracting external talents, strengthen internal talents training and upgrading, to create talents echelon with recognition of corporate culture, and with entrepreneurial spirit, thus building high ground of talents. Company attaches importance to introduction and cultivation of talented persons in the place of branch enterprises, and in the aspect of introduction, cultivation and promotion of talents, men, women, ethnic minorities and disabled employees enjoy equal rights.

### Optimized Structure

In terms of number of people, as of December 31, 2016, number of employees around the company amounts to a total of 1804 people, an increase of 22% compared with 2015.

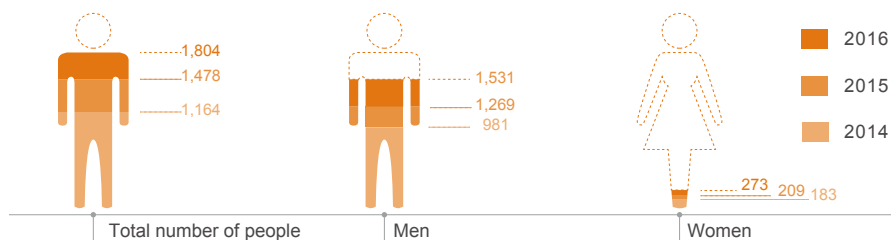
From age point of view, number of employees under the age of 40 of Sungrow in 2016 is more than 91%, young people are backbone of enterprise.

From academic point of view, in 2016, Sungrow continued to increase introduction of highly educated personnel, number of Dr. reached 15, an increase of 25% over the previous year, number of master's degree increased by 45%. We pay more attention to improving overall level of staff education, and employees with education of junior college and above accounted for 88% of total number of staff.

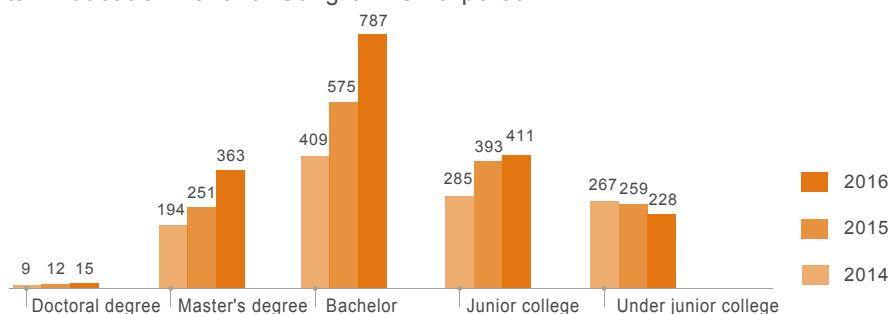
91%

number of employees under the age of 40

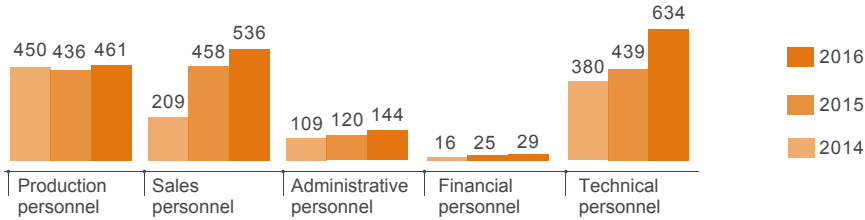
Personnel Structure of Sungrow Unit: person



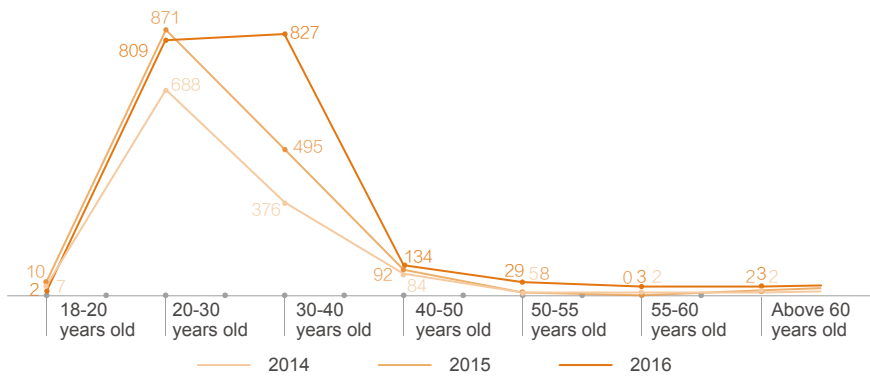
Staff Education Level of Sungrow Unit: person



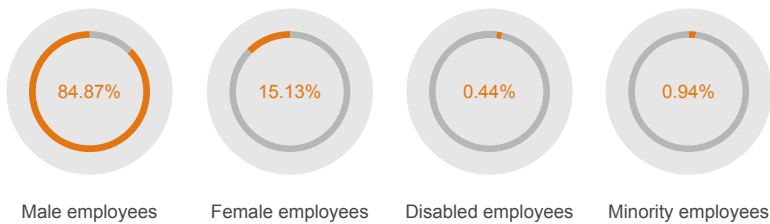
### Job Classification of Sungrow Unit: person



### Staff Age Structure of Sungrow



### Female Employees, Disabled Employees and Ethnic Minority Employees Statistics of Sungrow Unit: person



## Organizational Development Work

While continuing to focus on growth of internal staff, Sungrow has made improvements in internal experience accumulation and employee knowledge management. In 2016, we organized courses training of more than 60 special external courses for a series of project management, purchasing management, and job experience internalization on professional

and technical personnel. Continue to carry out 2 terms for "backbone sailing - excellent manager" training course; for accumulation of professional skills, we carried out four terms of internal experience internalization project, cultivated 83 lecturers, developed 57 internal courses; carried out course internalization for procurement department's new staff with external cooperation, helped procurement department's new employees to quickly grasp procurement skills; revised Sungrow Teaching Hall, focused on soft skills upgrade, different plates and content, staff of different positions and levels enthusiastically enrolled, and actively participated.

The company's training system continues to rely on corporate culture, and we carry out four series of training courses/projects, namely -

"New employee series"

"Leadership development series"

"Professional development series"

"General skills series"

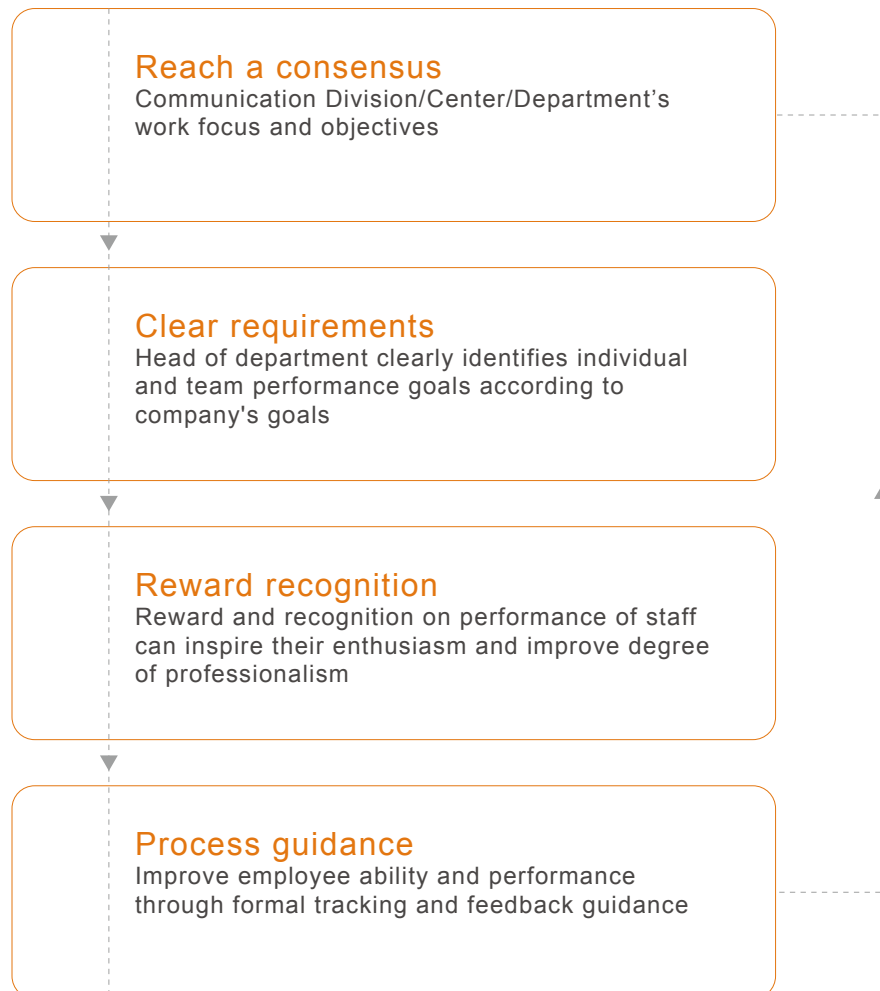


Category		Index	Main contents	Description
Number of trainees				
Management staff	28 trainings	431 people times	Focus on management skills enhancement	
Professional staff	95 trainings	2,367 people times	Focus on job skills	
Production staff	83 trainings	2,104 people times	Focus on experience transfer	
Special training				
Backbone sailing	2 terms	79 people times	Focus on managers' management skills, improve management skills	Complete Phase II and Phase III projects cooperation.
Job experience internalization	4 terms	83 people	Carry out internal sourcing out of position experience from knowledge management point of view	Developed 57 courses, initially set up production class entry-level curriculum system to meet requirements of various types of system audit
Purchasing series	4 trainings	37 people times	Special training on capacity building of procurement series	Simultaneously carried internalization of 4 courses, 1 course has been completed
Project management special item	2 trainings	40 people times	Carry out unity of concept of project management for professional upgrade	Pay attention to project practice and PMP skills certification
New staff training	54 trainings (6 focused trainings; 48 pre-job trainings)	537 people times	Pay attention to staff general skills and corporate culture passing	Prepare 10 courses
External employed training	57 trainings	2,238 people times	Focus on general, tool-based training	
External training	64 trainings	176 people times	Focus on specific needs	

## Staff Development Work

### Performance Management

In order to promote strategic landing and realize business objectives, Sungrow implements organizational performance management model of budget performance integration, regularly collect and monitor company level/1st level key performance indicators, through core performance indicators tracking, assessment and analysis, find performance bias, propose improvement measures, so as to improve operational efficiency and enhance decision-making capacity. In order to promote organizational performance and employee performance to play a synergistic role, promote intra-departmental collaboration, departmental performance results will affect staff performance level distribution within the department.





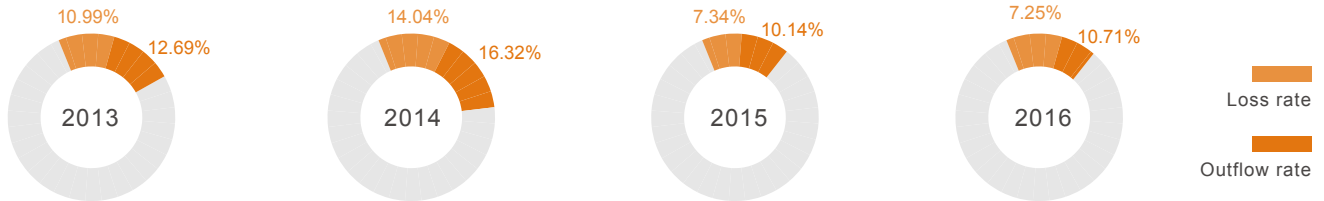
Successful implementation of performance management is related to corporate culture mechanism. The company focuses on improving applicability of performance management system and ensures its integration with corporate culture. In addition to performance evaluation, all employees need to evaluate the values, executives need to do personally, and be the first to set example.

The company has developed company-level performance system around short-term performance objectives and long-term sustainable development strategies, through performance management, delivers goals, gathers resources and builds sustainable development capabilities. In 2016, company's performance objectives and operational indicators have basically realized established goals, operational capacity is continuously improved, and core competitiveness is continuously improved.

The company also attached importance to performance management's role to promote staff development, emphasizes on staff experience and participation. We require departments to improve employee engagement in performance management process. In performance planning phase, department heads are required to clearly communicate departmental goals to the staff and work with employees themselves to develop their performance goals. Employees can only ensure that work objectives and department objectives are highly integrated by understanding formation of organizational and departmental objectives, and complete task with due diligence, thereby enhancing degree of engagement and reduce communication costs. At the same time, promote performance improvement through continuous two-way communication, achieve interaction from top to bottom, encourage employees to spontaneously and voluntarily improve performance, improve their ability, be responsible for their own performance, and achieve personal development.



## Staff Outflow Change of Sungrow



Note: Outflow rate = number of all leaving employees\*2/(beginning + ending total number of staff); Loss rate = number of actively leaving employees\*2/(beginning + ending total number of staff)

## Employee Incentive



Sungrow has established a set of incentives to share the fruits of development with employees. So as to meet realization of staff from basic material needs, security needs, to final career development needs, and thus willing to contribute their own strength for long term for the development of enterprises and individuals.

## Long-term incentive

In view of characteristics of company's business development and future strategic direction, Sungrow has built long-term incentive system framework, from 2013 onwards, implemented "Sungrow Power Supply Co., Ltd. stock options and restricted stock incentive plan", "Sungrow Power Supply Co., Ltd. staff share holding plan (draft)", while the company is preparing other long-term incentive model to continuously improve incentive system, increase cohesion of enterprise, to meet the business layout and strategic development needs.

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### Employee Benefits

Company advocated fair competition and anti-discrimination, in 2016 employees composition, female employees accounted for 15.13%, disabled workers accounted for 0.44%, and minority employees accounted for 0.94%.

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. Company has always adhered to principle of fairness and opposition to discrimination, achieved equal pay for different sex workers and abided by the same minimum wage and equal pay for equal work.

Company complies with labor laws and regulations of operation sites, and provides social insurance and housing reserve fund for all employees according to laws, provides legal leave and diversified benefits. Employees can legally enjoy a variety of statutory paid leave.

Company has signed collective labor contract with all employees through workers' union, and with relevant provisions of collective agreement stipulating advance notice period for consultation and negotiation. Before implementation of major operation changes that may seriously influence employees, we will notify staff and their representatives in advance.

Company supports active participation of employees in activities of party and youth league committees, employees has right to participate in and organize workers' unions according to laws, which is written in the company's rules and regulations, and company provides the necessary facilities and activities. Company is actively concerned about the staff, regularly arranges physical examination, holds health counseling or lectures, and takes the initiative in investing in the health of employees.

Company focuses on protection of staff's personal information and privacy, carry out special person management and strict confidentiality of staff's basic information. Respect employee's right of hearing and appeals, provide an open channel for the employee's complaint and opinion, including e-mail, symposium and other forms, and developed appropriate confidentiality and protection against retaliation. In the event of employee complaints, we should strictly follow the relevant provisions of regulations, under the premise of protection of employee privacy, coordinate and communicate, and give employees satisfactory answer.

Company insists on legal employment and does not have phenomenon of use of child labor or forced labor.



### Workers' Union

Sungrow has workers' union to provide services and security for all employees.

To enhance staff cohesion, enrich staff spare-time life, spread core values of "Sincere and Pragmatic, Precise and Open, Customer Oriented", effectively fulfills functions of workers' union, give full play to role of workers' union as bridge and links, and be advocator and practitioner of Sunshine culture. In 2016, workers' unions actively organized and coordinated to assist various departments of the team in creating atmosphere, organized various activities, activated staff cultural life, and jointly promoted corporate culture building, and fully embodied the company's warm and humane management.

Company has staff development center, including staff restaurants, dormitories, leisure and entertainment places, to meet staff's colorful amateur life, provide staff with warm and comfortable working environment. In 2016, Sungrow workers' union led to organize and carry out staff medical examination, annual meeting of company, skills contest, company anniversary carnival, "sunshine school opening season, green scientific trip", basketball, badminton, table tennis competitions, Qixi music festival, Christmas and other theme activities, which received unanimous approval of staff.

Sungrow also has Culture Team of more than 40 people, team members are Sungrow Culture's practitioners, mainly responsible for guidance and dissemination of core values, and actively participating in the company's workers' union and cultural activities.







## Reducing Pollution and Restoring Our Beautiful World

Sungrow has always been committed to improvement of the living environment by means of clean and efficient, and continuous delivery of green energy; it shoulders social responsibility, and actively participates in poverty alleviation, donation, earthquake relief, PV poverty alleviation and other social welfare undertakings, and achieved good social benefits.



## Value of Social Contribution Per Share

In 2016, Sungrow's per-share social contribution value is 0.12 dollar.

Per share of social contribution value = earnings per share + (tax payable + staff costs + interest expense + total public investment)/ending total share capital, it is comprehensive manifestation of enterprise's contribution to stakeholders of all sectors of community, with great significance in driving corporate social responsibility.

Per-share social contribution value is

**0.12** dollar

## Corporate Citizenship Commitment

To strengthen institutional construction, improve internal control measures, enhance our own immune function, and guide employees to engage in clean governance, and eliminate corruption from source, Sungrow has been committed to establishment of employees clear governance clarification system and clear governance commitment letter, strengthen staff clean governance supervision for key departments/positions; establish supplier integrity commitment and reporting system, with access to high degree of recognition of suppliers. In the day-to-day audit, Auditing Department will send the relevant personnel to judiciary in accordance with the law if it finds evidence that the individual personnel has commercial bribery.

## Social Welfare

### Precise Poverty Alleviation

PV poverty alleviation, as one of "top ten precise poverty alleviation projects" implemented according to determination of State Council, also a new way of poverty alleviation and development work, has obvious industrial drive and social benefits, through construction of photovoltaic power plants, PV poverty alleviation model can drive development of human resources and materials, to poverty alleviation development and combined new energy use and energy saving and emission reduction.



Sungrow actively implements and promotes central government's decision-making arrangement of "precise poverty alleviation, and precise poverty elimination", gives full play to their advantages in new energy industry, and actively implements precise model of poverty alleviation of PV poverty alleviation, and achieved some results.

As early as April 2013, the Company has put forward the proposal of "PV poverty alleviation" to Hefei Municipal Government, and took the lead in piloting PV poverty alleviation in Changlinhe Town, Feidong County, availing the curtain of PV poverty alleviation. After success of pilot, a number of local governments and enterprises came to the scene to observe and study, in July 2013, Hefei City therefore took the lead in introducing "Hefei PV going to countryside for property alleviation pilot implementation plan" in China, and carried out photovoltaic Township poverty alleviation project pilot work in the city's vast rural areas.

At present, PV poverty alleviation has risen into national strategy and is implemented in full swing, and is praised and cared by leaders at all levels, becomes important starting point for poverty alleviation and development work. Sungrow has also accelerated promotion and replication of this precision poverty model in Anhui, Sichuan, Ningxia, Hubei Province and other parts of China. As of the end of 2016, the company's PV poverty alleviation business footprints have been to Anhui, Hubei, Shandong, Sichuan, Guangxi, Zhejiang and other places, helping object of more than 50000 poor households, and 800 poor villages.

Next, as poverty alleviation work is carried out in depth, Sungrow will give full play to enterprises' in advantages in capital, technology and other aspects and leading and demonstration role, build multi-poverty alleviation system through "household poverty alleviation power station + village collective poverty alleviation power station + centralized poverty alleviation power station", help poor areas to accelerate the pace of poverty alleviation, and contribute for the strategic goal of early winning of fight against poverty, and comprehensive building of moderately prosperous society.

In addition, in 2016, the company has cumulatively donated 3214kW photovoltaic power plants in Suzhou City, Xiaoxian County, Huainan City, Chaohu City, Anhui Province and so on, donated 60kW photovoltaic power plant in Yiyang County, Jiangxi Province, donated 100kW photovoltaic power plant in Yuxian County, Shanxi Province, donated 60kW photovoltaic power plant in the poverty village of Long'an County in Guangxi through "The Belt and Road" overseas personnel national condition investigation service corps, with total amount of donation of about 3.89 million dollars.



### Other Donations

Sungrow has been concerned about cause of education in the motherland, in addition to daily business activities, it carried out close cooperation in production and research with Hefei University of Technology, Zhejiang University and other colleges and universities across China, and also often participates in Hope Project and other donation activities.

In January 2016, we donated 2,883.09 dollars to Anhui Hope Project Office;

In May, we renewed scholarship donation agreement with Hefei University of Technology, since 2012, we have provided scholarship of 7,351.88 dollars per year, cumulatively rewarded outstanding undergraduate students, 72 graduate students in Hefei University of Technology Electrical College;

In July, we donated 28,830.91 dollars to Zhegao Town, Chaohu City to help them carry out post-disaster reconstruction;

In July, through Qinghai Provincial Legal Aid Foundation, we donated 100 sets of juvenile legal education series of books;

In December, through "power village", we organized to participate in "future power elite grants" project, and donated 14,415.45 dollars to help 33 poor students to complete their studies.



### Community Service

As the rural PV market is scattered, and volume is small, and due to other practical problems, with the large-scale advance of photovoltaic poverty alleviation projects, difficulties in project supervision and post-operation and maintenance, cumbersome data collection and other issues are increasingly prominent. In view of these practical problems, Sungrow carried out forward-looking exploration and in-depth study, and specifically developed photovoltaic poverty alleviation intelligent management platform.

The management platform can realize real-time data sharing, power station equipment failure alarm, big data acquisition and analysis, and promote the realization of "reduction of loss of power generation", "reduction of human costs on operation and maintenance", "timely warning, and avoiding security risks" and other objectives, so as to enhance level of information management of PV poverty alleviation projects, achieve unity of users and centralized management, unified and hierarchical management of PV poverty alleviation project information resources, and promote PV poverty alleviation work to a new level.

At present, all PV poverty alleviation power stations in Anhui Province are connected to this platform, with a total of more than 7,400.

The Company assumed free maintenance tasks for more than 5,000 PV-poor power stations in Yuexi County, Anhui Province, to escort for stable income of 432.46 dollars per year of poor households.







## Reward and Recognition

Date	Award-granting unit	Award name
February	Industrial and Information Technology Ministry	Industrial enterprises intellectual property rights use benchmark enterprise
July	International Red Dot Award Organizing Committee	Red Dot Award for Best Design Award, Red Dot Award
	China Electronics Information Industry Association	2016 China's top 100 electronic information enterprises
August	ALL China Federation of Industry and Commerce	China 's top 500 private manufacturing enterprises
	Industry Development Promotion Center of Ministry of Industry and Information Technology of the PRC	"Distributed light storage and power generation cluster flexible and key technology and demonstration" project establishment
September	Anhui Federation of Industry and Commerce, Anhui Economic and Information Technology Commission, The Bureau of Commerce of Anhui Province, Anhui Local Taxation Bureau, Anhui Statistics Bureau, Anhui Trade and Industry Bureau, and Anhui Provincial Office, SAT	2016 Anhui Province top 100 private enterprises ranked 50, 2016 Anhui Private Top 20 Export and Import Enterprises
October	National Development and Reform Commission	Renewable Energy Conversion Technology National Local Joint Engineering Research Center
	CGD Organizing Committee	China Good Design Gold Award, China Good Design Award
	Hefei Economic and Information Technology Committee	2016 Hefei Intelligent Factory
	Anhui Economic and Information Technology Commission	Anhui Industrial Boutique
November	Anhui Economic and Information Technology Commission, Anhui Quality Control Association	Anhui Province Quality Award
	Anhui Economic and Information Technology Commission	Anhui Industrial Design Center
	OFweek Solar Photovoltaic Network	2016 Best PV Poverty Alleviation Project Award, Best Inverter Supplier
December	China Red Star Design Award Committee	2016 China Design Red Star Award, Most Popular Award
	State Intellectual Property Office	China Patent Excellence Award
	Anhui Economic and Information Technology Commission	Anhui Province technological innovation demonstration enterprise
	China Energy News, China Energy Economics Research Institute	2016 Global New Energy Top 500 Enterprise, 2016 Global New Energy Enterprise Top 500 Independent Innovation Award
	PVBL China's Photovoltaic Brand Lab	2016 China's 5A Brand of Photovoltaic Brand List, 2016 China's Best Brand Communication Award of Photovoltaic Brand List

# Performance Indicators

## Annual Report Main Accounting Data and Financial Indicators of Sungrow Unit: dollar

item	2012	2013	2014	2015	2016
Net assets attributable to shareholders of listed company	293,765,604.97	335,940,284.49	386,748,074.02	433,361,169.93	857,638,599.66
Basic earnings per share (dollar/share)	0.04	0.09	0.07	0.10	0.06
Diluted earnings per share (dollar/share)	0.04	0.09	0.07	0.10	0.06
Weighted average return on net assets	4%	9.37%	13.04%	16.35%	12.60%

## Economic Indicators Contrast of Sungrow Unit: dollar

item	2012	2013	2014	2015	2016
Operating income	172,354,245.33	347,782,646.86	500,448,994.74	703,653,933.54	865,455,161.63
Investment income	-92,483.29	305,204.38	-2,602,445.23	-217,884.02	1,565,519.51
Operating profit	8,646,278.26	28,837,380.47	45,561,119.06	68,307,836.14	88,408,036.31
Add: non-operating income	5,063,051.29	5,506,323.72	7,709,679.13	8,702,464.24	8,260,020.00
Less: Non-operating expenses	38,859.02	84,133.11	49,947.96	1,164,829.55	353,264.62
Incl.: Loss on disposal of non-current assets	8,293.13	19,927.17	30,638.32	348,640.00	127,590.73
Total profit	13,674,766.14	34,259,571.08	53,220,850.24	75,845,470.84	96,314,791.68
Less: Income tax expense	2,087,986.60	4,567,227.64	6,924,637.94	10,225,345.10	17,587,690.02
Net profit	11,582,483.93	29,692,343.45	46,296,212.30	65,620,125.73	78,727,101.66
Net profit attributable to shareholders of parent company	11,582,483.93	29,692,465.90	46,296,187.06	65,510,971.49	79,805,833.83
Minority gains and losses	-	-122.45	25.24	109,154.24	-1,078,732.17
Tax amount	8,838,689.46	10,425,913.34	15,978,377.98	24,633,421.64	27,459,233.57

## Social Indicators

### Social Indicators of Sungrow

Item	2014	2015	2016
Social contribution per share	0.85	1.31	0.80
Total number of employees (person)	1,164	1,478	1,804
Number of male employees (person)	981	1,269	1,531
Number of female employees (person)	183	209	273
Labor contract rate	100%	100%	100%
Funds paid to and for staff (dollar)	26,601,761.09	35,508,097.25	48,295,797.53
Worker's union coverage	100%	100%	100%
Disabled people employment rate	0.41%	0.68%	0.44%
Total staff training (dollar)	366,072.89	418,873.97	294,075.25
Staff outflow rate	16.32%	10.41%	10.71%
Proportion of female employees returning to work and keeping jobs after maternity leave	100%	100%	100%

### R&D Indicators of Sungrow

Item	2013	2014	2015	2016
Project under research (project)	52	63	45	48
Number of patent applications (patent)	89	185	216	238
Number of authorized patents (patent)	64	100	129	140
R&D personnel (person)	321	380	439	634

# List of Major Companies Disclosed in This Report

Enterprise name definition table

Enterprise full name	Enterprise abbreviation
Sungrow Power Supply Co., Ltd.	Sungrow
Hefei Sungrow New Energy Technology Co., Ltd.	Sungrow New Energy or Power Station Division
Sungrow (Shanghai) Co., Ltd.	Sungrow (Shanghai)
Sungrow (Gansu) Co., Ltd.	Sungrow (Gansu)
Sungrow (Qinghai) Co., Ltd.	Sungrow (Qinghai)
Sungrow (Jinzhai) Co., Ltd.	Sungrow (Jinzhai)
Sungrow-Samsung SDI Energy Storage Power Supply Co.,Ltd.	Sungrow-Samsung SDI



## Other Definition Tables

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"Company Law": "Company Law of the People's Republic of China"

"Securities Law": "Securities Law of the People's Republic of China"

China Securities Regulatory Commission: China Securities Regulatory Commission

Shenzhen Stock Exchange: Shenzhen Stock Exchange

Shenzhen Stock Exchange "Listing Rules": "Rules Governing the Listing of Stocks of Shenzhen Stock Exchange Growth Enterprise Market" (2014 Revised)

Shenzhen Stock Exchange "Normal Operation Guidelines": Normal Operation Guidelines for Listed Company in Shenzhen Stock Exchange Growth Enterprise Market (2015 Revised)

"Information Disclosure Management Regulations": "Information Disclosure Management Regulations of Sungrow Power Supply Co., Ltd."

"External Information Submission and Use Management Regulations": "External Information Submission and Use Management Regulations of Sungrow Power Supply Co., Ltd."

"Information Insider Registration Management Regulations": "Information Insider Registration Management Regulations of Sungrow Power Supply Co., Ltd."

"Annual Report Information Disclosure Important Responsibility Investigation Regulations": "Annual Report Information Disclosure Important Responsibility Investigation Regulations of Sungrow Power Supply Co., Ltd."

Chinese Academy of Social Sciences: Chinese Academy of Social Sciences





# Definition of Nouns

Glossary	Definition
GRI	Global Reporting Initiative
EHS	Abbreviation of Environment, Health, Safety, namely Environmental Health and Safety System Standards
ERP	Enterprise Resource Planning
CSR	Corporate-Social-Responsibility
Cross Fire plan	"Through FireWire" plan, select excellent R&D personnel to transmit to customer technical support line, to provide customers with better technical support services, and provide more career opportunities for employees.
NGO	Non-Governmental Organizations
RoHS	A mandatory standard established by EU Legislation, which is "Directive on Restricting Use of Certain Ingredients in Electrical Appliances". The standard was officially implemented on July 1, 2006, with the aim of eliminating lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and polybrominated diphenylethers in electrical and electronic products.
CE	English CE is abbreviation of French, the English meaning is "European Conformity". "CE" certification is a safety certification, regarded as passport for manufacturer to open and enter the European market. Goods affixed with CE mark mean that they meet safety, health, environmental protection and consumer protection, and a series of requirements expressed by European directives.
TÜV	TÜV is a safety certification mark for German for component products, and is widely accepted in Germany and Europe.
Flight inspection	Flight inspection is a form of follow-up inspection, refers to on-site inspection implemented by inspection department without notice.
Value of social contribution per share	Based on basic earnings per share created by the company for the shareholders, increase tax paid by the company for the state within the year, wages paid to the employees, borrowing interest paid to the bank and other creditors, company's donation amount, and other value amounts created for other stakeholders, and deduct other social costs caused by the company due to environmental pollution, and added amount of value per share of the company for the community calculated.
OA system	By use of Internet/Intranet technology, based on concept of workflow, make enterprise internal staff quickly and easily share information and efficiently work together; change past complex and inefficient manual office, achieve rapid, comprehensive information collection, information processing, and provide scientific basis for enterprise management and decision-making.
Internal control audit	Confirm and evaluate process of effectiveness of enterprise internal control, including confirming and evaluating enterprise control design and control operation defects and defect level, analyze causes of defects, and propose internal improvement control suggestions.
Discharge of pollutants	Pollutants source unit intercepts sewage into collection pipe and discharge after centralized discharge.
ISO14001	It refers to environmental management system, it is developed to address damage more and more serious global environmental pollution and ecological destruction, destruction of ozone layer, global warming, disappearance of biodiversity and other major environmental problems threatening future survival and development of human beings, and conforming to development of international environment protection, and based on needs of international economic and trade development.
OHSAS18001	It refers to international standard jointly launched by the British Standards Association (BSI), Det Norske Veritas (DNV) and other 13 organizations in 1999 ON occupational health and safety management system.
Safety production standardization	It refers to establishment of safety production responsibility system, development of safety management system and operating procedures, troubleshooting and monitoring of major hazards, establishment of preventive mechanisms, regulation of production behavior, so that production links are in line with relevant safety laws and regulations and standards, with personnel, machine, materials, working method, environment, and measurement in good state, and constantly strengthening standardization construction of enterprise safety.
BT	BT investment is an exchange format of BOT. The project is constructed with disbursement of construction side and transferred directly to proprietor after the completion of construction.
EPC	EPC general contractor is responsible for providing the project with the service of "design, procurement, construction" and finally passing the acceptance of the project proprietor.

# SGS Audit Statement



## ASSURANCE STATEMENT

### **SGS-CSTC STANDARDS TECHNICAL SERVICES CO., LTD. SHANGHAI BRANCH'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE SUNGROW POWER SUPPLY CO., LTD.'S CORPORATE SOCIAL RESPONSIBILITY REPORT FOR 2016**

#### **NATURE AND SCOPE OF THE ASSURANCE**

SGS-CSTC Standards Technical Services Co., Ltd. Shanghai Branch was commissioned by Sungrow Power Supply Co., Ltd. (thereafter as "SUNGROW POWER") to conduct an independent assurance of the 2016 Corporate and Social Responsibility Report (2016 CSR Report). The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the text and data in accompanying tables, contained in the Chinese version of the 2016 CSR Report. Data and information for companies other than the two companies including located at No.1699, Xiyou Road, New&High Technology Industrial Development Zone, Hefei City, P. R. China named Sungrow Power Supply Co., Ltd. (Headquarter) and another located at No.788, Mingchuan Road, Boyan Technology Park, Hefei City, P. R. China named SUNGROW-SAMSUNG SDI ENERGY STORAGE POWER SUPPLY CO., Ltd. was not included in this assurance process.

The information in the 2016 CSR Report of and its presentation are the responsibility of the directors and the management of SUNGROW POWER. SGS has not been involved in the preparation of any of the material included in the 2016 CSR Report.

Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of assurance set out below with the intention to inform all SUNGROW POWER's stakeholders.

SGS sustainability report assurance procedure was based on accredited guidance, including GRI report guidance accurate and reliable principle and assurance level by AA1000 series.

This report has been assured at a moderate level of scrutiny using our protocols for:

- evaluation of content veracity; and
- evaluation of the report against the Global Reporting Initiative Sustainability Reporting Guidelines (G4 2013).

The assurance comprised a combination of pre-assurance research, site assurance, and interviews with relevant employees at Sungrow Power Supply Co., Ltd and SUNGROW-SAMSUNG SDI ENERGY STORAGE POWER SUPPLY CO., Ltd. Documentation and record review and assurance with external bodies and/or stakeholders where relevant.

Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process.



#### STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing, verification and certification, providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from SUNGROW POWER, being free from bias and conflicts of interest with the organization, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with Sustainability Reporting Assuror, SAI Registered SA 8000 Lead Auditor, CCAA ISO 14001 Lead Auditor, CCAA OHSAS 18001 Lead Auditor etc.

#### ASSURANCE OPINION

On the basis of the methodology described and the verification work performed, we are satisfied that the information and data contained within 2016 CSR Report verified is accurate, reliable and provides a fair and balanced representation of SUNGROW POWER's sustainability activities in 2016. The assurance team is of the opinion that the Report can be used by the Reporting Organization's Stakeholders.

In our opinion, SUNGROW POWER has chosen an appropriate level of assurance for this stage in their reporting.

#### GLOBAL REPORTING INITIATIVE REPORTING GUIDELINES (G4 2013) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

##### Materiality

SUNGROW POWER has considered reasonably disclosing issues and indicators with materiality to reflect the organization's significant economic, environmental and social impact or substantively influencing the assessments and decisions of stakeholders.

##### Stakeholder Inclusiveness

SUNGROW POWER had effectively identified the stakeholders and established the channel and platform for stakeholder's communication and inclusiveness and took different ways to communication and exchange information. SGS recommended that the methodology of SUNGROW POWER's identification of stakeholders could be more optimized and communication could be more systematized.

##### Sustainability Context

SUNGROW POWER had presented the efforts on sustainability development related to economic, environmental and social conditions and combined the performance in the wide context.

##### Completeness

SUNGROW POWER's report included coverage of material aspects and boundaries, complete to reflect significant economic, environmental and social impacts, to enable stakeholders to assess the organization's performance in the reporting period.

##### Balance

SUNGROW POWER's report respected the balance principle with negative aspects revealing.

**Comparability**

SUNGROW POWER had disclosed performance indicators in 2016, many over years' data were disclosed, which could help stakeholders to understand the improvement performance year by year.

**Accuracy**

SUNGROW POWER's information in the report was accurate, enable to reveal more qualitative and quantitative information for stakeholders. SGS recommended that the organization should clearly define the data summary methodology and rule, and execute the internal training to assure the data accuracy.

**Timeliness**

Assurance to know that the data and information was on a regular schedule and available in time. SUNGROW POWER will report on a regular schedule with one year to assure the good timeliness.

**Clarity**

Report was presented different ways with words, charts, graphics and pictures, also describe with actual cases as well to ensure the stakeholders understanding easily.

**Reliability**

Through information and data collecting, recording, analyzing and disclosing methods managing and controlling in CSR report, the data and information was reliable.

**Signed:**

**For and on behalf of SGS-CSTC Standards Technical Services Co., Ltd. Shanghai Branch**



Ben Tsang  
Director, China and Hong Kong  
Certification & Business Enhancement  
12 May. 2017

B-11/F, No.900, Yishan Road, Xuhui District, Shanghai, China  
**WWW.CN.SGS.COM**



## Feedback Table

Dear reader:

Thank you for reading this Report! We very much hope that you will be able to evaluate this Report and present your valuable advice to help us make continuous improvements to the Report.

You can choose the following advice to provide your feedback:

Contact: Jin Bei: +86 551 65327808

Mail: Brand Center, Sungrow Power Supply Co., Ltd. No. 1699 Xiyao Road, High-tech Zone, Hefei, Anhui Province

Postal code: 230088

E-mail: jinb@sungrowpower.com

Website: www.sungrowpower.com

"Sungrow Power Supply Co., Ltd. 2016 Corporate Social Responsibility Report"  
Feedback Table

Name: \_\_\_\_\_  
Employer: \_\_\_\_\_  
Position: \_\_\_\_\_  
Contact: \_\_\_\_\_  
number: \_\_\_\_\_  
E-mail: \_\_\_\_\_

Feedback questionnaire:

1. Did you get the information you need to know from this Report?
2. Do you think this Report fully reflects the economic responsibility of Sungrow Power Supply Co., Ltd. ?
3. Do you think this Report fully reflects environmental health and safety responsibility of Sungrow Power Supply Co., Ltd. ?
4. Do you think this Report fully reflects the social responsibility of Sungrow Power Supply Co., Ltd. ?
5. Do you think this Report fully reflects the responsibility of Sungrow Power Supply Co., Ltd. for products and services?
6. Other supplements.

Sungrow looks forward to feedback from all walks of life.

# GRI4 Index of General Standard Disclosures

Code	Indicator	Page no.
<b>Strategy and Analysis</b>		
G4-1*	Provide a statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability.	P02
G4-2	Provide a description of key impacts, risks, and opportunities.	P02
<b>Organizational Profile</b>		
G4-3*	Report the name of the organization.	P06
G4-4*	Report the primary brands, products, and services.	P06
G4-5*	Report the location of the organization's headquarters.	P06
G4-6*	Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	P37-38
G4-7*	Report the nature of ownership and legal form.	P14
G4-8*	Report the markets served	P06
G4-9*	Report the scale of the organization	P60
G4-10*	a. Report the total number of employees by employment contract and gender. b. Report the total number of permanent employees by employment type and gender. c. Report the total workforce by employees and supervised workers and by gender. d. Report the total workforce by region and gender. e. Report whether a substantial portion of the organization's work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors. f. Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries).	P60-61
UNGC		
G4-11*	Report the percentage of total employees covered by collective bargaining agreements.	P66
<b>OECD/UNGC</b>		
G4-12*	Describe the organization's supply chain.	P23
G4-13*	Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain.	P23
G4-14*	Report whether and how the precautionary approach or principle is addressed by the organization.	P25
G4-15*	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	P27
G4-16*	List memberships of associations (such as industry associations) and national or international advocacy organizations.	P27
<b>Identified Material Aspects and Boundaries</b>		
G4-17*	a. List all entities included in the organization's consolidated financial statements or equivalent documents. b. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	P03 P37-38
G4-18*	a. Explain the process for defining the report content and the Aspect Boundaries. b. Explain how the organization has implemented the Reporting Principles for Defining Report Content.	P03 P37-38
G4-19*	List all the material Aspects identified in the process for defining report content.	P04
G4-20*	For each material Aspect, report the Aspect Boundary within the organization.	P03
G4-21*	For each material Aspect, report the Aspect Boundary outside the organization.	P03、P37-38
G4-22*	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	P27

Code	Indicator	Page no.
G4-23*	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	P27
Stakeholder Engagement		
G4-24*	Provide a list of stakeholder groups engaged by the organization.	P20
G4-25*	Report the basis for identification and selection of stakeholders with whom to engage.	P21-28
G4-26*	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	P21-28
G4-27*	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.	P21-28
Report Profile		
G4-28*	Reporting period (such as fiscal or calendar year) for information provided.	P03
G4-29*	Date of most recent previous report (if any).	P03
G4-30*	Reporting cycle (such as annual, biennial).	P03
G4-31*	Provide the contact point for questions regarding the report or its contents.	P84
G4-32*	a. Report the 'in accordance' option the organization has chosen (core or comprehensive). b. Report the GRI Content Index for the chosen option (see tables below). c. Report the reference to the External Assurance Report, if the report has been externally assured. (GRI recommends the use of external assurance but it is not a requirement to be 'in accordance' with the Guidelines.)	P03
G4-33*	a. Report the organization's policy and current practice with regard to seeking external assurance for the report. b. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided. c. Report the relationship between the organization and the assurance providers. d. Report whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report.	P03
Governance		
G4-34*	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	P14
G4-35	Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.	P14-16
G4-36	Report whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body.	P14-19
Ethics and Integrity		
G4-56*	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	P06
G4-57	Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines.	P26
G4-58	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistle blowing mechanisms or hotlines.	P17

## Index of GRI4 General Standard Disclosures

Code	Indicator	Page no.
Disclosures on Management Approach		
G4-DMA	a. Explain why this aspect is substantial. Explain the impact to make such aspect become a substantial aspect. b. Explain how the organization manages the substantial aspect or its impact. c. Explain the evaluation of the management approach, including: ȲȲ The mechanism for evaluation of effectiveness of the management approach ȲȲ The result of evaluation of the management approach ȲȲ Any related adjustment to the management approach	P17
Economic		
Economic Performance OCED		
G4-EC1	Direct economic value generated and distributed	P30
Environmental OCED/UNGC		
Materials		
G4-EN1	Materials used by weight or volume	P51
G4-EN2	Percentage of materials used that are recycled input materials	P51
Energy		
G4-EN3	Energy consumption within the organization	P50
G4-EN5	Energy intensity	P50
G4-EN6	Reduction of energy consumption	P50
G4-EN7	Reductions in energy requirements of products and services	P50
Water		
G4-EN8	Total water withdrawal by source	P50
G4-EN21	NOx, SOx, and other significant air emissions	P53
Effluents and Waste		
G4-EN22	Total water discharge by quality and destination	P52
G4-EN23	Total weight of waste by type and disposal method	P54
Compliance		
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	P48
Transport		
Overall		
G4-EN31	Total environmental protection expenditures and investments by type	P54
Social		
Labor practices and decent work OCED/UNGC		
Employment		
G4-LA1	Total number and rates of new employee hires and employee turnover by age group,gender and region	P60-61
G4-LA3	Return to work and retention rates after parental leave, by gender	P66,67
Labor/Management Relations UNGC		
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	P66
Occupational Health and Safety OCED		
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	P55-57
G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	P57



Code	Indicator	Page no.
Training and Education	OCED	
G4-LA9	Average hours of training per year per employee by gender, and by employee category	P61-62
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	P61-62
Diversity and Equal Opportunity		
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	P60-61
Society	OCED/UNGC	
Local Communities		
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	P25, 72
Anti-corruption	OCED/UNGC	
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	P17, 70
G4-SO4	Communication and training on anti-corruption policies and procedures	P17, 70
G4-SO5	Confirmed incidents of corruption and actions taken	P70
Supplier Assessment for Impacts on Society	OCED	
G4-SO10	Significant actual and potential negative impacts on society in the supply China and actions taken	P23
Product and Service Labeling		
G4-PR3	Type of product and service information required by the organizations procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	P43-44
G4-PR5	Results of surveys measuring customer satisfaction	P22

## Description of Forward-looking Statement

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This corporate social responsibility report contains forward-looking statement. This statement has used expressions such as "believe", "assume", "estimate", "expect", "may", "plan", "planning" or similar expressions. All the known or unknown risks, uncertainty and other factors may cause the future actual result, financial condition, assets, development or performance of the company differ from the result, financial condition, assets, development or performance expressed or implied in above forward-looking statement. Such risks and factors include by not limited as:

- The experience of downturn in the industry;
- New laws and regulations or changes of existing laws and regulations raise our operating costs or reduce our profitability;
- The rise of raw materials, especially when we are unable to transfer the cost to our customers;
- Reduction or loss of patent protection;
- Debt issues, especially when these issues are caused by environmental regulations or product liability lawsuits;
- Changes in international currency exchange rates and changes in the overall economic environment;
- Other factors pointed out in the social responsibility report

These factors include the contents of the public report submitted to the Shenzhen Stock Exchange and the China Securities Regulatory Commission and its agencies. Considering such uncertain factors, we remind the readers not to rely too much on these forward-looking statements. The company does not assume any responsibility for this.



We are always devoting ourselves to “Green and Effective” ,  
giving clean power to more people.

## SUNGROW POWER SUPPLY CO., LTD.

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