SUNGROW POWER SUPPLY CO., LTD.
Company Profile/Development Introduction

Sungrow is focused on new energy equipment and system solutions of solar energy, wind energy, energy storage and electric vehicle etc.

1997 Company established
1998 Southern Xinjiang Railway
2002 Township Electrification Program
2003 The first grid-connected inverter
2004 The First Prize of Science and Technology Progress of Anhui province
2008 Bird’s Nest of Beijing Olympics
2009 Wu Bangguo, former Chairman of the NPC Standing Committee, visited Sungrow
2009 Company listed, China’s Well-known Trademark
2010 Shanghai World Expo, National Postdoctoral Scientific Research Workstation
2011 The First Prize of National Energy Science and Technology Progress
2011 The efficiency of Sungrow inverters widely hit 99%
2012 National Enterprise Technology Center
2013 2014 National Enterprise of Observing Contracts and Honoring Credit
2014 The First Prize of National Energy Science and Technology Progress
2015 Established new mission “Clean power for all” and new vision “To be the global leader of clean energy conversion technology”
2016 Chinese president Xi Jinping inspected Smart New Energy Power Generation System of Sungrow
2017 Sungrow Indian factory put into production, Sungrow’s annual revenue hit 10 billion RMB
2018 2018 Sungrow Indian factory put into production. Sungrow’s annual revenue hit 10 billion RMB
Company Profile/Mission, Vision, Values

Mission  Clean power for all
Vision   To be the global leader of clean energy conversion technology
Values  Sincere & Pragmatic  Precise & Open  Customer Oriented
Chinese president Xi Jinping inspected Smart New Energy Power Generation System of Sungrow.

Guo Jinlong, former member of Political Bureau of the CPC Central Committee and Vice Premier, inspected Smart New Energy Power Generation System of Sungrow.

Hanzheng, Member of the Standing Committee of Political Bureau of the CPC Central Committee and Vice Premier, visited Sungrow President Cao Renxian.

Wu Bangguo, former Chairman of the NPC Standing Committee, visited Sungrow.

Liu Yandong, former member of Political Bureau of the CPC Central Committee and Vice Premier, visited Sungrow.

Guo Jinlong, former Secretary of Anhui Provincial Party Committee, awarded to the Sungrow chairman Cao Renxian.

Li Jinbin, Secretary of Anhui Provincial Party Committee, visited Sungrow.
Company Profile/Main Businesses

- PV Inverter
- Energy Storage Conversion and Energy Storage System
- New Energy Automotive Driving System
- Floating Body, Floating Power Generation System
- Smart Operation and Maintenance
- Wind Energy Converter
- New Energy Plant Integration

Clean power for all
The PV inverter shipments ranked No.1 globally for 4 consecutive years and No.1 nationally for 10 consecutive years.
Sungrow paid great attention to selecting and cultivating innovative talents, and built long term cooperation with a number of research institutes, such as Hefei University of Technology, Zhejiang University and China Electric Power Institute, making efforts to supply healthy scientific and learning organization atmosphere for technical talents.
Research & Innovation/Innovative Platform

World-class scientific research equipment

- 3MW experimental PV plant
- 10M EMC chamber
- 3MW energy storage microgrid test platform
- Large, medium and small test chambers for various conditions
- 35kV 16MW high voltage laboratory
- 2MW full power motor dragging platform
**Research & Innovation**/Innovative Pattern

Leading pattern of IPD

**Product Strategy**

- Understand market
- Market segment
- Portfolio analysis
- Formulate market segment strategies and plans

**Market Management**

- Manage segmented market and evaluate performance

**IPMT**

**IPD Workflow**

- Idea
- Plan
- Develop
- Verify
- Publish
- Life cycle management

**Platform and Technology Development**

- To start off with customer’s demands, to end up with products meeting customer’s demands
- Normative and scientific product development process to ensure product development efficiency and reliability
- Focus both on technology and product, constantly enhance technology accumulation and build up new core technological advantages
- Leading the technical trend and presided over the national standards formulation of PV industry
- GB/T 30427-2013 Technical Requirements and Test Methods for Grid-connected PV Inverters
- …
Sungrow has applied for more than 1600 patents and obtained more than 1052 patents, 373 of which are for invention.
Product & Service/Inverter and related equipment

PV inverters, system solutions and smart operation and maintenance
Mastered core inverter technology of PV systems, making PV plants more professional, more efficient and more intelligent.
Product & Service/Wind energy converter

Wind energy converter

Wind power generation system
Product & Service/Energy storage converter and related equipment

Energy storage converters and system solutions

Utility energy storage converter  Commercial and industrial energy storage converter  Residential energy storage converter

Accumulator battery  Energy storage converter  Transformer  Power grid
New energy driving system is applicable to various new energy vehicles, such as passenger vehicles, buses and special vehicles, providing clean and reliable power for automobile.
Product & Service/PV floating body and related equipment

Floating body of water surface PV plant
Product & Service/Sungrow smart operation and maintenance

Shared operations, custodial operations, PV plant optimization, testing and evaluation

Enjoy the high yield

Improve equipment availability

Steady increase in power generation

Stable earnings of power generation
Product & Service/Lean manufacturing
### Corporate certification

- ISO 9001:2015
- ISO 14001:2015
- OHSAS 18001:2007
- SA 8000:2014
- IATF 16949:2016
- IECQ QC 080000:2012

### Product certification

- TÜV (Europe)
- SGS (Europe)
- UL (North America)
- CSA (North America)
- VDE (Grid-connected in Germany)
- CGC (China)
- CQC (China)
- CEPU (Grid-connected in China)
Product & Service/Professional integrated service

Pre-sales/under-sales service
- Project consulting
- Technical support
- PV plant overhaul
- Installation and debugging
- Training and guidance
- Intelligent service

After-sales service and in-depth service
- System online monitoring
- Tour-inspection and upgrading
- Maintenance
- Generation performance evaluation and optimization
- Cloud platform service

System online monitoring
Tour-inspection and upgrading
Maintenance
Generation performance evaluation and optimization
Cloud platform service
Product & Service/Market expanding

- Sungrow has cumulatively installed 82GW+ of inverter equipment worldwide, ranking No.1 globally for 4 consecutive years and No.1 nationally for 10 consecutive years.
- Sungrow positively expanded overseas markets and the products have been exported to more than 60 countries including Europe, the USA, and Southeast Asia.
- Sungrow has a leading volume of exports. The products have been exported in bulk to high-end markets such as Germany, Japan.
- The trademark of Sungrow has been registered in more than 160 countries in Europe, America, Asia and Africa.

5MW PV plant of Shanghai World Expo
Power generation system of Olympic Bird’s Nest
China’s first concession project (Dun Huang 10MW)
Market & Performance/Application References

Inverters applied to utility PV plants

- 300MW utility PV plant in Ningdong, Ningxia
- 5MW PV plant of the first stage of Front-runner in Datong, Shanxi
- 150MW string PV plant of Olympic Hospitality Gallery in Xuanhua
- 20MW energy storage PV plant in Xingyi, Guizhou
Market & Performance/Application References

Inverters applied overseas

- 75MW PV plant in Thailand
- 2.25MW commercial rooftop PV plant in the USA
- 5MW PV plant in the USA
- 100kW commercial rooftop PV plant in Japan
Market & Performance/Project References

Development, design, construction, investment and operation of PV plant (ground-based)

- 100MW utility PV plant in Jiuquan, Gansu
- 50MW demonstration project of Front-runner Base in Datong, Shanxi
- 40MW fishing-solar complementary PV plant in Shitang, Hefei
Market & Performance/Project References

Development, design, construction, investment and operation of PV plant (distributed)

- 100MW PV plant in Hefei - the national distributed PV demonstration area
- China’s first distributed PV project certificated by TÜV - PV plant of Guangzhou Yima
- Hefei Xinmin community PV plant
- Demonstration project of residential PV plant
**Market & Performance/Application References**

**Floating body, floating power generation system**

- 40MW floating PV plant in Panji, Anhui
- 150MW demonstration floating PV project in Guqiao, Anhui - the world’s largest floating PV plant
- 100MW floating PV plant in Weishan, Jining
- 102MW PV plant in Xinji - the world’s first floating panda plant
Market & Performance/Application References

Wind energy converters widely applied to large wind plants

180MW wind plant in Diaoyutai, Jiangxi

144MW wind plant in Qiqin, Jiangxi

100MW Nan Xuanfeng wind plant in Hui county, Henan

96MW wind plant in Zhaïke, Guyuan, Ningxia
Market & Performance/Application References

Energy storage business

9WM30MWh energy storage microgrid project in Nima, Tibet

7MW23.5MWh energy storage microgrid project in Shuanghu, Tibet

10MW5.5MWh frequency modulation grid-connected project in Qihai

The yield maximization project of combined PV and energy storage in Japan
Market & Performance/Application References

Solutions for new energy vehicle motor control, auxiliary drive control and drive

Ankai
Golden Dragon
NLM Motor
Jiangling Motors
Smart maintenance solutions/various cases of PV plant operation and maintenance

120MW utility PV plant in Lingbi

50MW utility PV plant in Yangquan, Shanxi

12MW distributed PV plant of JAC upscale and electric light truck factory

70MW poverty alleviation PV plant on Sufu gardening farm, Yu’an, Liu’an
Mission: Clean power for all
Vision: To be the global leader of clean energy conversion technology
Values: Sincere & pragmatic, precise & open, customer oriented

Strategic policy: focus on clean power, promote related diversification through low-cost innovation, enhance the ability of marketing, technology and their synergy, realize rapid and sustainable growth.

**Business portfolio**

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Sungrow in 2025

- Revenue: 50 billion RMB
- CAGR keeps 25%
- Full realize business and brand internationalization
- Core businesses rank No.1 in the industry

Now to 2020

- Revenue: 20 billion RMB
- The first stage of internationalization
- Core businesses rank top 3 in the industry
THANK YOU!