

An aerial photograph of a dense, vibrant green forest. A light-colored dirt road or path winds through the center of the forest, curving from the top right towards the bottom left. The trees are tall and closely packed, creating a rich texture of green. The overall scene is bright and natural.

**SUSTAINABILITY  
REPORT  
2022**  
--

**SINGERON**

# About the Report



This is the eighth sustainability report released to the public by Sungrow Power Supply Co., Ltd., which intends to openly communicate with stakeholders on the Company's sustainability philosophy, the specific actions and performances, and respond to sustainability concerns of all parties in a systematical way.

## Basis for Preparation

This report is prepared in accordance with the *Sustainability Reporting Standards* (2021 version) released by the Global Reporting Initiative (GRI). Meanwhile, the *Recommendations of the Task Force on Climate-Related Financial Disclosures*, the *Social Responsibility Guidelines for Companies Listed on the Shenzhen Stock Exchange*, and the *CASS Guidelines for Preparing Social Responsibility Report in Chinese Enterprises (4.0)* are used for reference.

## Reporting Period

This is an annual report covering the period from January 1, 2022 to December 31, 2022, with certain contents going beyond the timeframe. The most recent report was released in April 2022.

## Scope of Report

This report covers Sungrow and subsidiaries/organizations under its control, and the scope is consistent with that of the Company's Annual Report. Refer to the List of Main Organizations for enterprises covered in the disclosure.

## Disclosure of Report

This report is disclosed simultaneously with Sungrow's Annual Report 2022. All financial data involved herein are consistent with those disclosed in the *Annual Report 2022 of Sungrow Power Supply Co., Ltd.* released to China's A-share market. The Annual Report has been audited by an independent third party. Unless otherwise specified, the currency used in this report is CNY.

## Names and Designations

To facilitate presentation and reading, Sungrow Power Supply Co., Ltd. in this report is referred to as "Sungrow", "the Company" or "we/us" based on the specific context, and subsidiaries/organizations under Sungrow's control are referred to as "Affiliate(s)" in this report. For the full name and abbreviation of the enterprises mentioned in this report, please refer to the List of Main Organizations.

## Access to Report

This report is made in both Simplified Chinese and English, available in paper-based and electronic versions. The electronic version is available for download on Sungrow's official website ([www.sungrowpower.com](http://www.sungrowpower.com)). In case of any discrepancy between the Simplified Chinese version and the English version, the former shall prevail.

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# Chairman's Statement

## Cao Renxian

Chairman of Sungrow Power Supply Co., Ltd.

As global energy and climate issues remained acute in 2022, business operation faced enormous challenges, while the green economy embraced development opportunities. Being a citizen of the Earth, Sungrow went to all lengths in search for solutions to the most imminent challenges of the times. By firmly focusing on the new energy industry, we maintained concentrated and made continuous efforts to lower the cost of renewable energy power generation. As of the end of 2022, we achieved a cumulative installed capacity of 340+GW of inverter equipment worldwide, reducing carbon dioxide emissions by nearly 380 million tons on an annual basis.

We were deeply aware that, as the major player in transformation, companies should leverage their technological expertise to continuously and systematically advance emissions reduction of themselves and along the supply chain. In 2022, we expanded the scope of carbon inventory and achieved 45% of green power consumption by building PV power stations in company facilities and purchasing green power directly, hence to quickly close in on the objective of using 100% green power. By vigorously advancing R&D innovation, we successfully developed the world's first 35 kV PV inverter. We embedded the green concept into the full life-cycle of products, and were awarded the Demonstration Enterprise of Green Design for Industrial Products. We joined EP100, set up smart energy management platforms, carried out digital upgrade and transformation of facilities and systems, and improved energy productivity. In the meanwhile, we continued leading the sustainable development of the supply chain, encouraged partners to embrace low-carbon transformation, and contributed to a green supply chain.

In the past year, Sungrow comprehensively strengthened ESG management, started development of the *Sungrow Principles*, and incorporated ESG into the Company's core philosophy, in parallel to the mission, vision, and values. We adhered to operational excellence and benign governance to lay a solid foundation for assuming environmental and social responsibilities. We established



the Digital Transformation Management Committee to improve the all-around digital competency, maximize efficiency, and build a propeller for rapid business growth. We continually delivered outstanding products and services to create long-term values for customers worldwide. We added "innovative & respectful" into our values to foster an inclusive, diversified, and equal organizational atmosphere, and grow an innovative team with international perspectives. We donated CNY 10 million to set up a public welfare fund, and kicked off global volunteer service programs to pass on love and care to those in need.

Under the guidance of the global Net Zero Emissions target, Sungrow confirmedly takes greenization, convenience, and digitalization as the future trend of energy development. With solar power, wind power, energy storage, new energy vehicles, and hydrogen energy joining in the energy network, a diversified energy system with a digital foundation will be shaped, allowing green energy to be truly capitalized on by millions of residences. Sungrow will adhere to the mission of "Clean power for all" and rely on the advantageous clean power conversion technology, to collaborate with partners around the world, actively address major global challenges with professionalism, and jointly shape a sustainable future.

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# At a Glance



## About Us

As a key high-tech enterprise in China, Sungrow Power Supply Co., Ltd. (Stock code: 300274) specializes in R&D, production, sales and services of new energy equipment, such as solar energy, wind energy, energy storage, hydrogen energy, electric vehicles, mainly provides photovoltaic inverters, wind energy converters, energy storage system, floating PV system, new energy automotive driving system, EV charging station, renewable hydrogen production system, smart operation and maintenance, and commits itself to providing first-class life cycle solutions of clean energy.

Since the establishment in 1997, the Company has been concentrating on the field of new energy power generation, adhering to market demand orientation, and taking technological innovation as the propellant for development. The Company has cultivated a professional R&D team with solid R&D experiences and strong capabilities of independent innovation. Sungrow has successively undertaken more than 20 national key science and technology programs, led the drafting of multiple national standards, and is one of the few companies in the industry that have mastered a number of independent core technologies.

Photovoltaic inverters, Sungrow's core products, have been accredited by TÜV, CSA, SGS, and other international authorities, and sold to more than 150 countries and regions in the world. Sungrow's cumulative installed

capacity of inverter equipment across the world has been above 340GW by the end of December 2022.

The Company has successively won the awards of China Grand Awards for Industry, National Manufacturing Single Champion Demonstration Enterprise, Top 50 Innovative Chinese Companies, National Intellectual Property Demonstration Enterprise, Global Top 500 New Energy Enterprises, and Best Companies to Work For in Asia. Sungrow is a company with state-level post-doctoral research workstation, a national high-tech industrialization demonstration base, a national enterprise technology center, a national industrial design center, a national green factory, and ranks among the best in the global new energy power generation industry in terms of comprehensive strength.

In the future, Sungrow will adhere to its mission of "Clean power for all", accelerate the development of clean energy power generation system integration based on the new energy equipment business, innovate and expand new business in the field of clean power conversion technology, keep in close contact with the customers, actively participate in global competition, and strive to build itself into a trusted world-class company.

## Organization Structure



Organization Structure

## Corporate Strategy

Sungrow identifies "Focusing on the field of clean power, building a technological leading edge and brand reputation through low-cost innovation and vertical development, achieving rapid and sustainable growth" as the overall strategic guideline. While remaining concentrated on the new energy sections including solar energy, wind

energy, energy storage, electricity and hydrogen energy, the Company continues to explore its main business, holds a critical position in the new energy industry through market and technology synergy, and makes professional contributions to the global low-carbon development.

## Core Concepts



Mission

Clean power for all



Vision

To be the global leader of clean energy conversion technology



Values

Honest & Reliable,  
Excellent & Open-minded,  
Innovative & Respectful, Customer First

## Global Presence

Sungrow continues to advance its globalization strategy, and has set up 20+ subsidiaries overseas. Photovoltaic inverters as the Company's core product are sold to more


than 150 countries around the world. By the end of 2022, the Company has achieved a cumulative installed capacity of 340 GW of inverter equipment worldwide.



# A Recap of 2022

## Annual Results

 **40.26** billion CNY  
Operating income

 **3.59** billion CNY  
Net profit attributable to shareholders of the listed company








Item	Year 2022	Year 2021	Year 2020
Operating income (CNY)	40,257,239,155.34	24,136,598,726.55	19,285,641,347.02
Net profit attributable to shareholders of the listed company (CNY)	3,593,410,009.26	1,582,707,374.76	1,954,308,244.82
Net profit attributable to shareholders of the listed company after deducting net non-recurring gains and losses (CNY)	3,385,797,303.38	1,334,589,366.45	1,846,326,102.70
Net cash flow from operating activities (CNY)	1,210,498,485.89	-1,638,632,122.77	3,088,658,224.59
Basic earnings per share (CNY/share)	2.42	1.08	1.34
Diluted earnings per share (CNY/share)	2.42	1.08	1.34
Weighted average ROE	20.95%	13.05%	20.36%
	<b>As at End 2022</b>	<b>As at End 2021</b>	<b>As at End 2020</b>
Total assets (CNY)	61,626,211,527.11	42,840,130,915.46	28,002,933,994.86
Net assets attributable to shareholders of the listed company (CNY)	18,666,305,389.67	15,655,063,485.71	10,455,904,743.14

Major Accounting Data and Financial Indicators  
in Sungrow's Annual Report of the Last Three Years





## Annual Honors

Honors/Awards	Awarded by
 Demonstration Enterprise of Green Design for Industrial Products	Ministry of Industry and Information Technology
 Most Innovative Chinese Companies	Forbes China
 China's 500 Most Valuable Brands	World Brand Lab
 Enterprise of Best Practices in Achieving the Sustainable Development Goals (Carbon Peaking and Carbon Neutrality)	Global Compact Network China
 Nominee for the Paulson Prize for Sustainability	Paulson Institute
 2022 Best Companies to Work For In Asia	HR Asia
 Top Company 2022	Kununu

## Annual Events

### NO.1

Ranked No. 1 for global PV inverter shipments, successfully secured green power supply for major global events including the Winter Olympics, the World Cup, and COP27

### NO.1

Introduced the industry-leading "3-in-1 professionally integrated" liquid-cooling energy storage system, with the global shipments of energy storage systems ranking No. 1 among Chinese manufacturers for 7 consecutive years

### 125 kW

Released the PV-Storage-Charging Green Power Solution for residences, and led the global residence energy independence transition. Launched new industrial and commercial products globally, with 125 kW high-power products leading the industry

### 35 kV

Modular Technology and Equipment for New Medium-Voltage PV Power Generation Units, one of the National Key Research and Development Plan programs, passed acceptance, giving birth to the world's first direct-mounted 35 kV medium-voltage PV inverter

### NO.1

Sungrow Renewables continued to hold the first place in the list of global PV developers

### iSolarRoof

Sungrow's residential PV developed the innovative iSolarRoof residential intelligent design software, enabling installed capacity to double

## 53 %

Sungrow's wind power converters hit a new record of global shipments with an increase of 53% year-on-year

## NO.1

Completed design and delivery of the first 200 MW floating PV system in a 100-meter-deep area, and continued leading the global market share for five consecutive years

## 90 %

Sungrow Smart O&M enlisted the National Specialized Little Giant enterprise, achieving a 90% increase in business size

## 1000 Nm<sup>3</sup>/h

Sungrow Hydrogen's 1000 Nm<sup>3</sup>/h alkaline electrolyzed water hydrogen production system won international accreditation, and a PEM hydrogen production system of 200 Nm<sup>3</sup>/h was delivered

## 30 kW

Launched the Sungrow 30 kW charging pile in Europe and enabled batch deliveries, continually leading the charging technology transformation

## SaaS

Sungrow iCarbon SaaS Platform and the Six Steps to Carbon Neutrality were released to offer one-stop zero carbon solutions across the full life cycle

## 25<sup>th</sup>

Successfully held the 25th anniversary celebration and received a number of honors including the Best Companies to Work For in Asia and Top Company 2022. Sungrow Business School was awarded the Most Influential Education Brand in 2022

## 500,000

Sungrow E-Power's No. 500,000 electric control product of the year left the factory

## 10 million

Made a donation of CNY 10 million to set up a special public welfare fund and kicked off global volunteer service programs

Ranking data comes from China Energy Storage Alliance, IHS Markit, and SERIS.



Key Performances	UoM	Year 2022	Year 2021	Year 2020
Operating income	CNY	40,257,239,155.34	24,136,598,726.55	19,285,641,347.02
Total profit	CNY	4,133,961,610.05	1,892,672,136.23	2,181,541,884.75
R&D expenses	CNY	1,692,156,198.42	1,161,389,788.60	806,352,266.48
Cumulative number of patents	Pcs	2877	1952	1568
Customer satisfaction	%	93.8	93.5	92.8
Percentage of local procurement	%	99.0	98.0	84.8
Environmental Performance	UoM	Year 2022	Year 2021	Year 2020
Investment in environmental protection	10K CNY	729.3	348.2	279.5
Percentage of green power consumption	%	45	35	23
Total water consumption	cbm/year	316,713	206,133	201,217
Water consumption per CNY 10,000 of output value	cbm/10K CNY	0.068	0.085	0.104
Total power consumption	kWh/year	114,337,023	72,205,295	52,973,714
Comprehensive energy	tons of std. coal/year	14407.6	9141.5	6851.0
Energy consumption per CNY 10,000 of output value	kg of std. coal /10K CNY	3.58	3.79	3.55
Total COD emission	tons/year	43.764	37.928	38.569
Ammonia/nitrogen emission	tons/year	5.184	3.463	3.529
Total solid waste discharge	tons/year	1967.96	1406.02	751.34
Hazardous waste discharge	tons/year	189.47	43.11	43.01
Total water discharge	tons/year	253,370	164,906	160,974
Greenhouse gas emission	tCO <sub>2</sub> e	43257.09	38234.46	/
Scope 1	tCO <sub>2</sub> e	3458.53	2323.46	/
Scope 2	tCO <sub>2</sub> e	39798.56	35911.00	/
Utilization of recycled resources	%	55.9	52.3	51.0
Social Performance	UoM	Year 2022	Year 2021	Year 2020
Total employees	Persons	9239	6726	4492
Number of R&D staff	Persons	3647	2734	1824
Number of minority employees	Persons	107	86	52
Number of employees with disabilities	Persons	12	12	13
Number of female employees	Persons	900	634	400
Percentage of female employees	Persons	1762	1217	761
Percentage of female employees	%	19.07	18.09	16.94
Percentage of female managers	%	13.45	14.21	12.6
Social insurance coverage	%	100	100	100
Labor contract coverage	%	100	100	100
Employee turnover (voluntary)	%	16.68	14.94	11.38
Organizational health	%	87.7	87.8	86.0
Employee training investment	10K CNY	1501.8	1220.8	936
Employee training coverage	%	100	100	100
Health and safety investment	10K CNY	3821.8	2617.0	1485.2
Major safety incidents	Times	0	0	0
Work-related deaths	Persons	0	0	0
Charity donations	10K CNY	748.07	526.20	1413.2

# Sustainability Management

## A Sustainability Management System in Progress

### Advancing Sustainability Management

Following the sustainability principle of “Green Mission, Better Life”, Sungrow attached great importance to and practiced sustainability management from top to bottom throughout 2022. The Company started development of the *Sungrow Principles*, and incorporated ESG into the core philosophy, in parallel to the mission, vision, and values, so as to leverage ESG as an important tool to empower the sustainability. Relying on the Company's executives and key functions, such as the Quality Center, the Procurement Center, the Audit Division, the Human Resources Center, and the Brand Center, we comprehensively explored the appeals and expectations of stakeholders, benchmarked the best practices of top companies worldwide, fostered a sustainability culture inside the Company, and optimized the practices and actions of business units in environment, social responsibility, and corporate governance, hence to promote the development of sustainability systems and enable the Company to grow rapidly and sustainably in the long run.

### The Sustainability Report Working Group

Sungrow started releasing annual sustainability reports since 2016. Under the project leadership of executives, the Brand Center set up the Sustainability Report Working Group in collaboration with the Strategy Center, the Board Office, the Audit Division, the Quality Center, the HR Center, the Procurement Center, and the Production Center, to prepare the report in accordance with the GRI requirements and the Company's management practices. The Working Group was also accountable for optimizing the metrics system, implementing the various sustainability measures, and building sustainability competitiveness.

### Capacity Building

The Company vigorously advanced sustainability and ESG capacity building, closely watched global ESG trends and regulatory requirements for disclosing corporate ESG practices, and responded to the hot topics in the capital market. Executives and the Sustainability Officer made adequate communication internally and externally, to jointly explore ESG trends and guide the Company's practices in business ethics, energy conservation/consumption reduction, and supply chain due diligence. The Company encouraged sustainability practitioners to participate in external training, and invited external experts to facilitate the GRI Standards 2021 training to the Sustainability Report Working Group in 2022. The Company participated in UNGC's Climate Ambition Accelerator (CAA) and Target Gender Equality Accelerator (TGE) programs to strengthen professional capacity building, and set up a featured column on sustainability in the Company's OA system to communicate cutting-edge knowledge to employees and grow the sustainability culture.

## Communication with Stakeholders

Stakeholders understanding, recognizing, and supporting Sungrow's sustainability efforts lays a solid foundation for the Company to advance the relevant work in a continuous and effective way. Sungrow highly valued communication with various stakeholders, including shareholders/investors, customers, employees, suppliers, regulators, NGOs, and members of the community where the Company operates. We established an effective mechanism for stakeholder identification and participation, clarified key issues related to environment, social responsibility, and corporate governance, and managed to timely communicate and disclose relevant information, collect feedback and opinions from stakeholders, and accept their supervision. We explored various forms of stakeholder engagement, including

releasing sustainability reports, updating the sustainability section of our official website, participating in external meetings and forums, replying customer inquiries, interacting with media, and communicating the progress of ESG practices with business personnel on a regular

basis. Going forward, the Brand Center plans to optimize the internal ESG communication mechanism, periodically communicate ESG progresses with relevant departments, and actively respond to stakeholders' issues of concern.

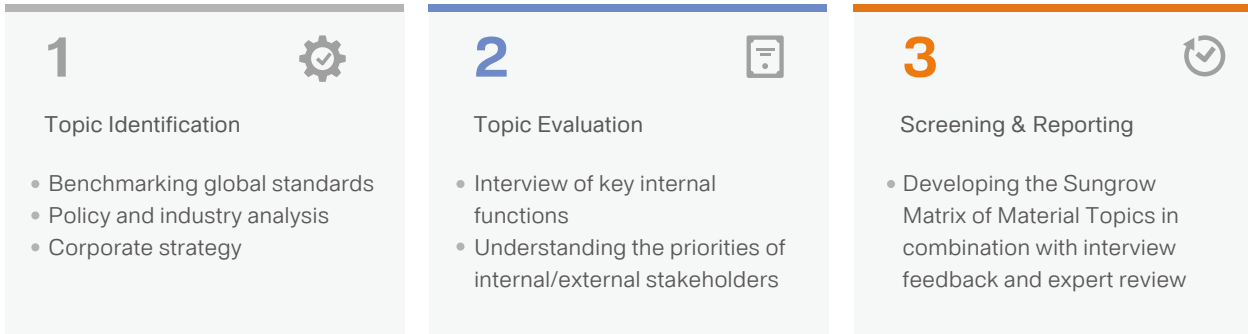
Stakeholders	Key Topics of Concern	Mode of Communication
Shareholders/Investors	<ol style="list-style-type: none"> <li>1.Constant profitability</li> <li>2.Compliance and risk management</li> <li>3.Anti-corruption</li> </ol>	<ol style="list-style-type: none"> <li>1.Annual report, half-year report, announcements</li> <li>2.Shareholders Meeting</li> <li>3.Performance briefing</li> <li>4.Investors conference</li> <li>5.Feedback platform via phone/mail/website</li> <li>6.Survey questionnaire</li> </ol>
Customers and Consumers	<ol style="list-style-type: none"> <li>1.Customer health and safety</li> <li>2.Product quality and safety</li> <li>3.Customer information security</li> <li>4.Digital transformation</li> <li>5.Customer service</li> <li>6.Supply chain social responsibility evaluation</li> </ol>	<ol style="list-style-type: none"> <li>1.Customer meetings</li> <li>2.Customer satisfaction survey</li> <li>3.Global service network</li> <li>4.Exhibitions, forums, conferences and other events</li> </ol>
Suppliers/Distributors/Contractors	<ol style="list-style-type: none"> <li>1.Procurement practice</li> <li>2.Anti-corruption and compliance</li> <li>3.Win-win cooperation</li> </ol>	<ol style="list-style-type: none"> <li>1.Procurement activities</li> <li>2.Website(s), social media</li> <li>3.Forums, conferences</li> <li>4.Training and evaluation</li> <li>5.Field visit and investigation</li> </ol>
Employees	<ol style="list-style-type: none"> <li>1.No child labor and no forced or compulsory labor</li> <li>2.Diversity and equal opportunity</li> <li>3.Occupational health and safety</li> <li>4.Employee training and development</li> <li>5.Compensation and benefit</li> </ol>	<ol style="list-style-type: none"> <li>1.Employee representatives' conference</li> <li>2.Induction training</li> <li>3.Routine communication &amp; training</li> <li>4.Employee satisfaction survey</li> <li>5.WeChat culture group</li> <li>6.Sungrow Speak-up, the Warm Sunshine forum</li> </ol>
Government/Regulators	<ol style="list-style-type: none"> <li>1.Compliance and risk management</li> <li>2.Supporting local economic development</li> <li>3.Public welfare volunteer activities</li> </ol>	<ol style="list-style-type: none"> <li>1.Routine communication &amp; reporting</li> <li>2.Specific investigations and field meetings</li> <li>3.Meetings/Seminars</li> </ol>

Stakeholders	Key Topics of Concern	Mode of Communication
Government/Regulators	<ol style="list-style-type: none"> <li>4. Corporate governance</li> <li>5. Energy saving and emission reduction</li> </ol>	<ol style="list-style-type: none"> <li>3. Meetings/Seminars</li> <li>4. Standard/Policy formulation, feedback of comments</li> <li>5. Website(s), social media</li> </ol>
NGOs/International Organizations/Professional Institutions	<ol style="list-style-type: none"> <li>1. Response to international initiatives</li> <li>2. Contribution to the UN Sustainable Development Goals</li> <li>3. Contribution to economy, environment and society</li> </ol>	<ol style="list-style-type: none"> <li>1. Forums, conferences, and similar events</li> <li>2. Cooperative programs on sustainability</li> <li>3. Visits and interviews</li> </ol>
Communities	<ol style="list-style-type: none"> <li>1. Supporting local economic development</li> <li>2. Rural revitalization</li> <li>3. Reducing negative impacts on communities</li> <li>4. Public welfare volunteer activities</li> <li>5. Energy saving and emission reduction</li> </ol>	<ol style="list-style-type: none"> <li>1. Field visit and investigation</li> <li>2. Feedback of comments</li> <li>3. Website(s), social media</li> </ol>
Media/Opinion Leaders/ Industry Organizations	<ol style="list-style-type: none"> <li>1. Driving industrial development</li> <li>2. Responsible marketing</li> <li>3. Information disclosure and transparency</li> </ol>	<ol style="list-style-type: none"> <li>1. Forums and seminars</li> <li>2. Visits and interviews</li> <li>3. Website(s), social media</li> </ol>
Environment	<ol style="list-style-type: none"> <li>1. Use of energy</li> <li>2. Waste management</li> <li>3. Energy saving and emission reduction</li> <li>4. Hazardous substances</li> <li>5. Biodiversity</li> </ol>	<ol style="list-style-type: none"> <li>1. Visit reception</li> <li>2. Website(s)</li> <li>3. Standard/Policy formulation</li> </ol>

## Identification of Key Topics

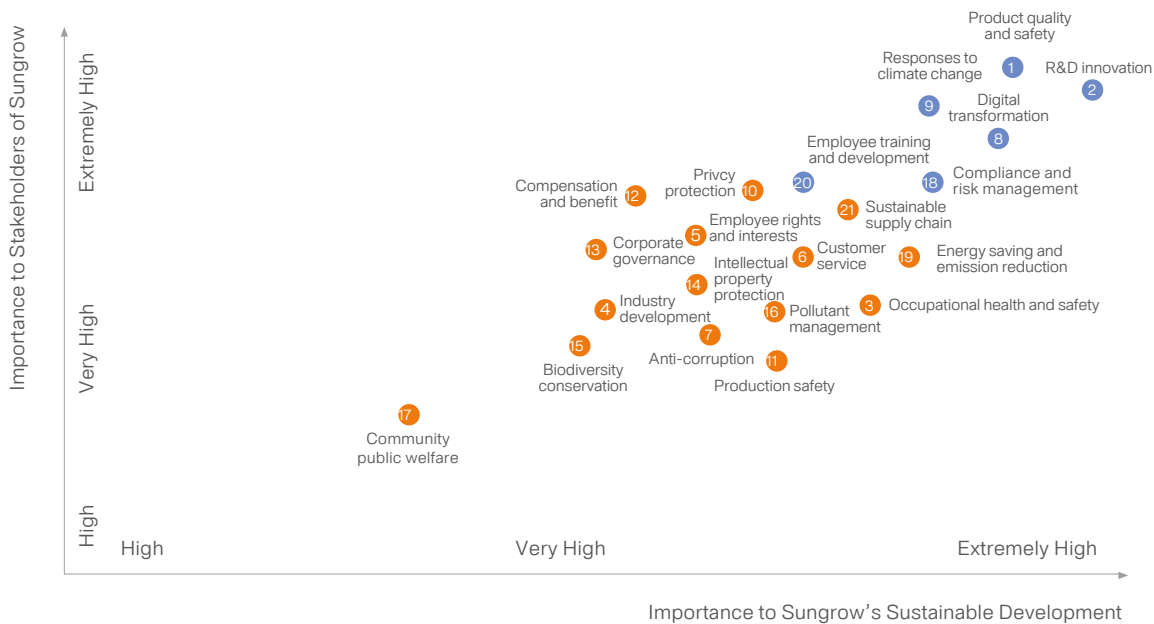
Based on the Company's development strategy, industry characteristics, feedback and expectations of internal and external stakeholders, as well as global sustainability trends, Sungrow followed relevant sustainability/social responsibility standards, guidelines, and initiatives at

home and abroad, and identified a three-stage model (topic identification, topic evaluation, screening and reporting) to analyze and evaluate material sustainability topics of the Company.



After review by the management and evaluation by stakeholders, the following material topics were identified for disclosure in the sustainability report: product quality and safety, R&D innovation, digital transformation, responses to climate change, energy conservation and emission reduction, compliance and risk management,

employee training and development, and sustainable supply chain. The topics were prioritized according to the respective level of importance to stakeholders and the Company’s sustainable development.



Sungrow 2022 Sustainability Report - Analysis of Material Topics

## External Engagement and Initiatives

Being a responsible corporate citizen, Sungrow is committed to advocating the key topics of sustainability in collaboration with stakeholders. In 2022, the Company joined EP100 and made commitments to deploy the Company’s energy management system by 2028, and increase energy productivity by at least 35% than that of

2018, continuing to assume corporate responsibilities for sustainable development worldwide. By participating in industry organizations and assuming critical functions, the Company joins hands with partners to assist in industry development and innovation. The main organizations Sungrow has joined are as follows:

Organization	Role
United Nations Global Compact	Member
RE100 (Renewable Energy 100)	Member
EP100 (Energy Productivity 100)	Member
China ESG Leaders Association	Member
China Photovoltaic Industry Association	Vice President
China Power Supply Society	Vice President
China Green Supply Chain Alliance	Director
Trust and Integrity Enterprise Alliance	Member
Asian Photovoltaic Industry Association	Vice President
ACFIC New Energy Chamber of Commerce	Vice President
China Renewable Energy Society	Director
China Energy Storage Alliance	Vice President
China Industrial Design Association	Director
New Energy Electrical Appliances Alliance	Vice President
New Energy Association of Anhui Province	Vice President






## Sungrow's Contribution to SDGs






Sungrow practices United Nations' 17 Sustainable Development Goals (SDGs) and has identified 10 of them as closely related to the Company. We comprehensively advance responsible and sustainable corporate gover-

nance and business practices, to pursue a harmonious win-win between commercial values and social values.





SDG	Corresponding Chapter(s)	Our Actions
	Employee Development Quality Excellence	<ul style="list-style-type: none"> <li>•Make every effort to protect the occupational health and mental health of employees, continue to increase investment in safety, and take preventive measures against occupational diseases</li> <li>•Restrict and control the use of hazardous substances, dispose of wastes in a harmless way</li> </ul>
	Employee Development Contribution to Community	<ul style="list-style-type: none"> <li>•Establish a three-level training architecture, offer diversified training programs to accelerate employees' career development</li> <li>•Actively participate in the industry-academy-research cooperation to underpin industry technological progress and foster human resources</li> <li>•Carry out in-depth public welfare activities in education, and help the community education to grow</li> </ul>
	Employee Development	<ul style="list-style-type: none"> <li>•Uphold the principle of Equal Pay for Equal Work, and promote gender equality</li> <li>•Employees are legitimately entitled to parental leaves; the return rate hits 100% for both male and female employees</li> <li>•Focus on the career development of female employees, offer equal career development channels and promotion opportunities to female employees; female accounts for 13.45% of the total management personnel</li> </ul>
	Delivering Customer Value	<ul style="list-style-type: none"> <li>•Devote to the R&amp;D, promotion, and application of clean power conversion technology, focus on new energy sections, continuously drive the cost of clean energy down through technological innovation</li> <li>•PV inverters, the Company's core product, are sold to more than 150 countries around the world, the installed capacity of inverter equipment grows rapidly</li> </ul>
	A Recap of 2022 Employee Development	<ul style="list-style-type: none"> <li>•Seize the strategic opportunity of rapid new energy growth around the globe, achieve significant improvement in operating performance</li> <li>•Offer equal opportunities for all employees, provide competitive compensation, and take multiple measures to ensure employee safety</li> <li>•Comply with international human rights laws and regulations, secure the basic human rights of employees, including those in the supply chain</li> </ul>

SDG	Corresponding Chapter(s)	Our Actions
	Delivering Customer Value	<ul style="list-style-type: none"> <li>•Continually enforce R&amp;D innovation to enable constant technological progress and accelerate product iteration</li> </ul>
	Employee Development	<ul style="list-style-type: none"> <li>•Value employee diversity, create an equal and inclusive work environment, provide open, transparent, and respectful work platforms; prohibit child labor and forced/compulsory labor, communicate this requirement to suppliers, supervise and audit on a regular basis</li> </ul>
	Safeguarding the Environment	<ul style="list-style-type: none"> <li>•Join the RE100 Initiative and commit to use 100% green power by 2028</li> <li>•Join the EP100 Initiative to improve internal energy efficiency</li> <li>•Insist on responsible sourcing and green procurement, establish a quality and resilient Sungrow supply chain ecosystem</li> </ul>
	Special Feature: Responding to Climate Change	<ul style="list-style-type: none"> <li>•Uphold the mission of “Clean power for all”, actively respond to global initiatives, vigorously promote global pollution reduction and carbon reduction efforts by increasing the development and utilization of renewable energy and improving energy efficiency; contribute to delivering the global climate goals in a professional way with a green power usage ratio of 45% in 2022</li> </ul>
	External Engagement and Initiatives; Reinforcing Corporate Governance	<ul style="list-style-type: none"> <li>•Join the United Nations Global Compact (UNGC), promote responsible business practices on a global scale</li> <li>•Comply with the various laws and regulations as well as corporate governance and business ethics, establish and optimize the punishment and corruption prevention systems as well as the normalized supervision, complaint and whistle-blowing channels</li> </ul>

Special Feature

# Responses to Climate Change

## Governance

Sungrow embeds the sustainability philosophy into the Company's business operation and management. Each department assumes respective responsibilities for climate-related performance, and shares climate-related metrics and targets. As the leading department, Quality Center collaborates with Equipment & Utilities Department, Production Center, divisions, Administration Center, Procurement Center, Finance Center, Human Resources Center, Strategy Center, Brand Center, Audit Division, Process & Digitalization Center, and Central Research Institute to advance sustainability efforts, and regularly reports to the Board of Directors on key climate-related topics and the delivery status of key indicators.

### Governance Structure

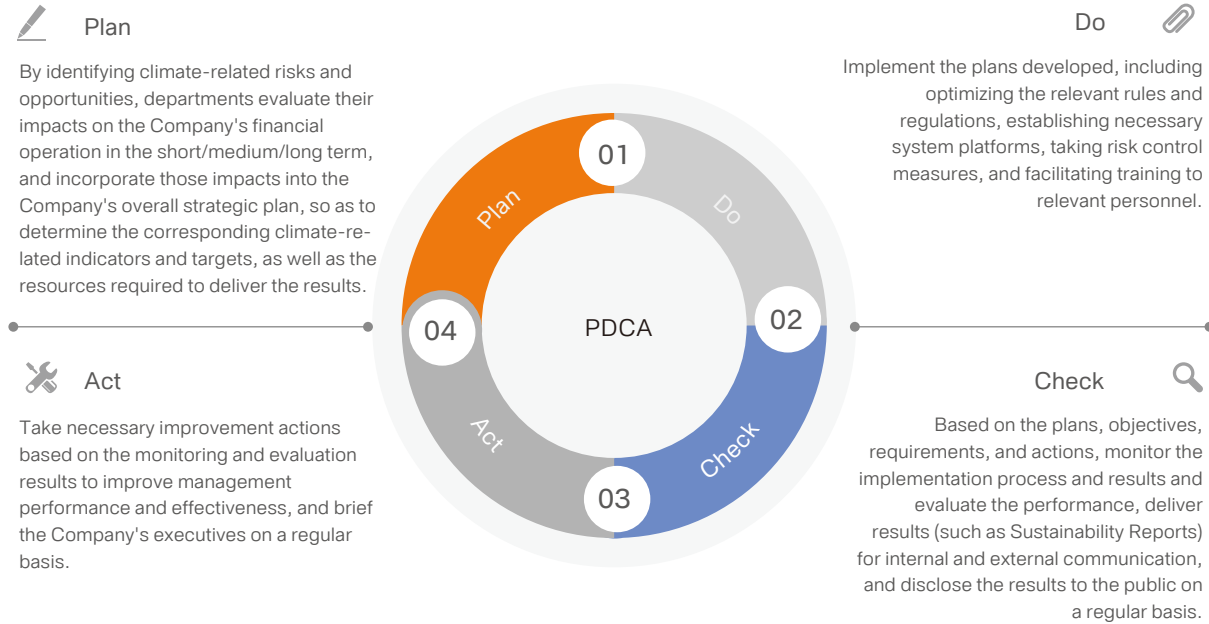
Department	Responsibilities
Quality Center	<ul style="list-style-type: none"> <li>Research on international and domestic climate-related policies, regulations, industrial best practices and experiences.</li> <li>Organize identification and assessment of climate-related risks and opportunities</li> <li>Organize the implementation of the Company's environment, social responsibilities, and energy management systems</li> <li>Organize the Company's carbon verification and promote environmental impact assessment and improvement throughout the product lifecycle</li> <li>Organize climate-related training</li> </ul>
Strategy Center	<ul style="list-style-type: none"> <li>Develop and maintain climate-related strategies, assess climate-related risks and opportunities, and incorporate climate-related work into the Company's overall strategic plan</li> <li>Review the performance of sustainability related metrics and targets</li> </ul>
Equipment & Utilities Department	<ul style="list-style-type: none"> <li>Statistically analyze the Company's power consumption data, and carry out power and energy saving transformations and upgrades</li> <li>Manage the Company's equipment introduction, maintenance, upgrade and phase-out</li> <li>Manage rooftop PV systems, coordinate and implement demand optimization, peak load shifting, and green power consumption, schedule the Company's power resources</li> </ul>
Production Center	<ul style="list-style-type: none"> <li>Manage the power and energy consumption of production equipment</li> <li>Explore and implement process upgrade and other energy-saving measures, promote the optimization of internal logistics</li> <li>Develop plans for new plants, production lines, and process facilities, and identify the most energy-saving</li> </ul>
Divisions	<ul style="list-style-type: none"> <li>Be responsible for products' green design, such as using environmentally friendly materials, and considering sustainability in product packaging design</li> <li>Be responsible for external logistics, prioritize new energy vehicles, optimize transportation plans to reduce energy consumption in the process</li> </ul>
Administration Center	<ul style="list-style-type: none"> <li>Manage power and energy consumption in ancillary areas such as offices and canteens</li> <li>Implement power-saving measures in ancillary areas such as offices</li> <li>Oversee the administrative fleet</li> </ul>
Procurement Center	<ul style="list-style-type: none"> <li>supply chain, and take corresponding control measures</li> <li>Define climate-related development objectives for supply chain, and constantly follow up on the delivery of objectives</li> <li>Other supplier-related surveys and data collection, such as collecting suppliers' carbon emissions and product carbon footprints during the company-wide Scope 3 carbon inventory</li> </ul>

Department	Responsibilities
HR Center	<p>Be responsible for publicizing the Company's climate-related culture and energy-saving awareness            Make plans for climate-related human resources, foster a sustainability culture</p>
Brand Center	<p>Prepare sustainability reports, disclose sustainability progress at the official website            Communicate and collaborate with government authorities and 3rd party institutions on climate-related issues, disclose the Company's progress in addressing climate change in a constant and transparent way            Coordinate and manage the Company's climate-related public welfare activities, organize employees to offer volunteer service</p>
Audit Division	<p>Operational and management audits, business audits, establishment of integrity and compliance mechanism, anti-fraud investigations</p>
Process & Digitalization Center	<p>Build and maintain the support platform for sustainability informatization</p>
Finance Center	<p>By identifying climate-related risks and opportunities, evaluate the impact of major risks and opportunities on financial condition, financial performance, and cash flow, and incorporate it into financial plans            Manage the cost related to responding to climate change            Cooperate with audits and disclose climate change-related financials</p>

## Working Mechanism

Following the PDCA (Plan - Do - Check - Act) model and a risk-based thinking, we make sure that the process is sufficiently covered with resources and management support, we identify opportunities for improvement and

take actions, and we implement preventive and control measures to minimize the adverse impacts of climate and leverage the opportunities that arise.



In 2022, the Company held multiple sustainability related training sessions, including ESG Management Training, ISO14064, ISO14067 and other professional training. The training was attended by more than 150 participants in total, enabling climate-related staff to continuously upgrade their professional abilities. At the end of the year, the Company held an online ESG knowledge training for

suppliers, during which Sungrow's ESG requirements were communicated to the 170+ participants. In addition, the Company was involved in multiple sustainability forums to exchange climate-related management experiences with leading companies in the industry, learn from the industry role models, and constantly improve its professional competency.

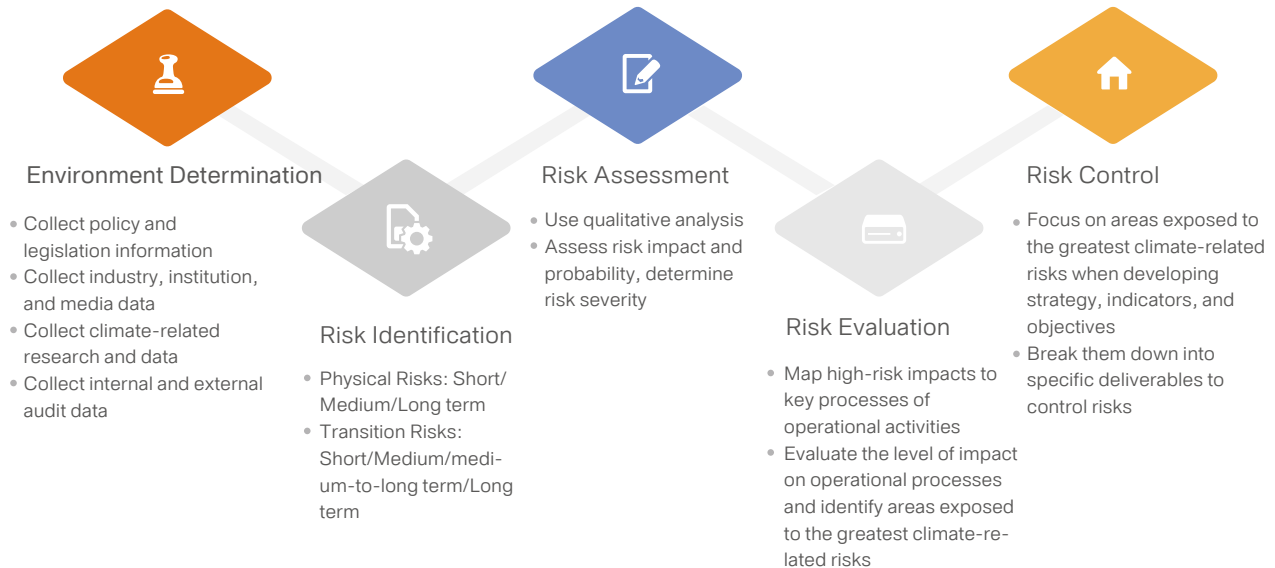
## Risk Management

### Risk Assessment and Control

While climate change plays an increasingly important role in the Company's operation and development nowadays, climate-related risks and opportunities are crucial for the Company's sustainable development in the medium to long term. Sungrow incorporates climate risks into the Company's overall risk assessment and control process, and enforces risk management throughout the entire business process. Through a comprehensive assessment of the climate risk impacts and the probability of risks, we identify the respective risk level, and develop targeted response plans for high-risk items, to ensure the normal and effective operation of the Company's risk management and internal control systems.

Quality Center is responsible for collecting climate-related information from various parties, including the government, society, and internal functions. It then reviews the information and reports to the management team on a regular basis. The management team and execution teams identify and verify the risks, sort them in a rational and objective way, and appropriately integrate

climate-related risks into the overall risk management of the organization, so as to generate a list of climate-related risks and key controls that provides input and grounds for the formulation and modification of climate-related strategies as well as the determination of metrics and targets.



## Physical Risks and Transition Risks

### Physical Risks

Physical climate risks pose complex impacts on the Company's physical operations, supply chain integrity, field services, and other production and operation processes. As extreme weather becomes increasingly frequent nowadays, the Company must include physical risks into the scope of risk assessment, to ensure adequate readiness of all functions when risks actually arise, prevent physical risks from resulting in multiple risks in finance, market, operation, and reputation.

Sungrow mainly operates in Hefei City of Anhui Province, China, where the headquarters, R&D and production workshops are located. It is a place in the middle and lower reaches of the Yangtze River featuring the subtropical monsoon climate. A number of the Company's sales, R&D, and production facilities are located in Beijing, Shanghai, Nanjing, Huainan (adjacent to Hefei, with similar geographical conditions), Bangalore of India, and Chonburi of Thailand. Calculated by production capacity, approximately 80-90% of the production capacity comes from the Hefei region, so climate change around Hefei has a significant impact on the Company's operations.

Sungrow's products and services are widely distributed to more than 150 countries, covering urban, rural, coastal, island, desert, and high-altitude environments. The Company's supply chain is mainly located in Mainland China, while some key components (such as semiconductors) are sourced overseas, mainly from Europe, the United States, East Asia, and Southeast Asia, subject to complex climate change impacts in those areas.

By collecting and evaluating climate change data from IPCC, CDP and other domestic and international meteorological services, as well as geographical, climatic, and environmental data from the area where the Company operates, we have identified potential physical risks related to the Company's operation as flood, blizzard, heatwave, extreme weather, sea level rise (frequency and severity), which pose impacts on the Company's operation, labor availability, supply chain, and other aspects.

Time span

Severity of impact

Short term: 0-1 year; medium term: 1-5 years  
 medium-to-long term: 5-10 years;  
 long term: 10 years and above

Determined according to the impact level and likelihood of climate risks: Financial loss, reputation loss, litigation or fine, loss of strategic partner, and etc. are considered in the impact level;  
 The frequency or interval of risk is considered in the likelihood.

Risk Category	Risk	Impacts on Sungrow	Climate Scenario	Major Areas Subject to Impact	Time Span	Severity of impact
Climate disaster	Flood	<ul style="list-style-type: none"> <li>Logistics is interrupted, resulting in product delivery delays; supply chain is interrupted, affecting product delivery and production, causing operating cost to increase;</li> <li>Employee commuting and safety are affected, resulting in production efficiency reduction and personnel injuries;</li> <li>Plant area is flooded, causing damages to production infrastructure, increasing maintenance/replacement cost and capital expenditure.</li> </ul>	RCP2.6 RCP8.5	Hefei, China Bangalore, India Chonburi, Thailand	Long Medium -to-long	Minor Mild
Climate disaster	Blizzard	<ul style="list-style-type: none"> <li>Logistics is interrupted, resulting in product delivery delays; supply chain is interrupted, affecting product delivery and production, causing operating cost to increase;</li> <li>Employee commuting and safety are affected, resulting in reduced production efficiency and injury to personnel;</li> <li>The procurement of cold-proof materials and use of heating equipment leads to an increase in company expenses.</li> </ul>	RCP2.6 RCP8.5	Hefei, China	Long Medium -to-long	Minor Mild
Climate disaster	Heat-wave	<ul style="list-style-type: none"> <li>Hot working environment is no longer suitable for production in the short term, resulting in reduced working hours or suspended production, and a decrease in operating income;</li> <li>Grain production decreases, commodity prices and operating cost increase;</li> <li>Fire risk increases, resulting in casualties, damage to infrastructure and production equipment, and increased capital expenditure.</li> </ul>	RCP2.6 RCP8.5	Bangalore, India Chonburi, Thailand	Medium -to-long Medium	Mild Major



Risk Category	Risk	Impacts on Sungrow	Climate Scenario	Major Areas Subject to Impact	Time Span	Severity of impact
Climate disaster	Extreme Weather	<ul style="list-style-type: none"> <li>Meteorological services issue orange or red meteorological alerts, some business activities may have to be suspended;</li> <li>The Company is subject to direct infrastructure damage or indirect damages caused by broken trees or fallen power lines, resulting in related capital expenditure to increase.</li> </ul>	RCP2.6	Worldwide	Medium	Mild
			RCP8.5		Medium	Major
Climate change	Sea-level rise	<ul style="list-style-type: none"> <li>Operations in coastal areas may be affected, which require relocation or structural change, resulting in increased capital expenditure;</li> <li>Ports currently in use are flooded or damaged, resulting in product delivery delays; supply chain is interrupted, affecting product delivery and production, causing operating cost to increase.</li> </ul>	RCP2.6 RCP8.5	Shanghai, China Bangalore, India Chonburi, Thailand	Long Medium -to-long	Minor Mild

The Company takes the following measures in response to the physical risks:

Risk Category	Actions by Functions
Flood & Blizzard	<ul style="list-style-type: none"> <li>Logistics Department - Makes plans for multiple types of transportation, schedules transportation in advance according to the meteorological alerts to avoid the flood/blizzard period and secure product transportation;</li> <li>Supply Chain - Plans material procurement and shipment in advance to build safety stock for the flood/blizzard period;</li> <li>Operation Department - Develops an overall flood control plan for the plant area, such as building ground drainage systems, installing flood gates, and provisioning flood control materials;</li> <li>Operation Department - Develops an overall cold-proof plan for the plant area, such as maintaining the proper operation of heating facilities, provisioning snow-melting agents/anti slip blankets/tyre chains, renting snow throwers;</li> <li>Operation Department - Actively communicates with meteorological services, watches for meteorological alerts, and notifies the plant in advance to get emergency ready;</li> <li>Increase training on natural disaster prevention and protection to ensure the safety of personnel and facilities.</li> </ul>

Risk Category	Actions by Functions
Heatwave	<ul style="list-style-type: none"> <li>● Operation Department - Makes plans for cooling measures, such as maintaining the proper operation of cooling facilities, provisioning heatstroke supplies;</li> <li>● Strategy Department - If necessary, plans in advance to relocate plants and offices subject to heatwaves to high-latitude areas.</li> </ul>
Extreme Weather	<ul style="list-style-type: none"> <li>● Operation &amp; Strategy Departments - Simulate future climate performance in plant and office areas using climate models to assist in targeted investment decision-making.</li> </ul>
Sea-level Rise	<ul style="list-style-type: none"> <li>● Strategy Department - Plans in advance to relocate plants and offices subject to high risk of sea level rise to high-latitude areas;</li> <li>● Procurement Department - Develops suppliers for the same category across multiple regions to ensure raw materials supply.</li> </ul>

## Transition Risks

As climate issues become increasingly challenging nowadays, measures responding to climate change must be combined with actions to reduce or eliminate greenhouse gas emissions, hence to upscale the benefits. Such measures include using clean energy and low-carbon electrification, promoting zero-carbon and low-carbon transportation, and improving air quality. Operating mainly in the new energy section, Sungrow specializes in R&D, manufacturing, sales and service of solar energy,

wind energy, energy storage, hydrogen energy, electric vehicles, and other new energy power supply equipment, which is positively correlated with worldwide climate improvement actions. In the RCP2.6 scenario, Quality Center has led the strategy, brand, and marketing functions to jointly identify the following transition risks related to the Company's operation: policy/legislation, technology, and market preferences.

Risk Category	Risk	Description	Major Areas Subject to Impact	Time Span	Severity of impact
Policy/ Legislation	Carbon market price goes up	Governments may include the industry the Company belongs to into carbon emission regulation; carbon market price and operating cost may rise in parallel.	Hefei, China	Medium -to-long	Mild
Policy/ Legislation	Introduction of carbon tax	Governments may introduce import and export carbon taxes, resulting in raw material import and finished product export costs to increase.	Hefei, China	Medium -to-long	Major
Policy/ Legislation	Mandatory proportion of electric vehicles in use	Governments may request a certain proportion of vehicles in the Company's control to be electric vehicles, the cost of vehicle upgrade may be high, resulting in increased operating cost.	Hefei, China	Medium -to-long	Mild
Policy/ Legislation	Enhanced regulatory efforts for high emission industries	Governments may further strengthen regulatory efforts for high energy consuming industries, such as mining, metallurgy, and petrochemicals, which may drive prices of various basic raw materials up and increase procurement cost.	Hefei, China Bangalore, India Chonburi, Thailand	Medium -to-long	Major
Technology	Emergence of new renewable energy technologies	The Company must continually invest in renewable energy technology reserve, and closely keep pace with new technology development, in order to meet higher standards for products and services. As a result, research and development cost increases.	Hefei, China	Medium -to-long	Major
Technology	Transition to low emission	The Company's transition to products and services of lower emission incurs additional expenses.	Hefei, China	Medium -to-long	Major
Market Preference	Low-carbon products prevail consumer markets	Consumers prefer low-carbon and environmentally friendly products, which may lead to increased raw material and production costs.	Worldwide	Long	Minor

The Company takes the following measures in response to the transition risks:

Risk Category	Actions by Functions
Carbon market price goes up & introduction of carbon tax	<p>Reduce carbon emissions along the entire production and operation process to enable reduction in carbon tax and carbon market transaction cost:</p> <ul style="list-style-type: none"> <li>• Reduce energy consumption in production and produce in a eco-friendly manner; optimize high energy consumption processes, use energy-saving equipment, and adjust energy consumption structure to realize carbon reduction in operation;</li> <li>• Prioritize green design and green raw materials in R&amp;D to reduce product carbon emissions.</li> </ul>
Mandatory proportion of electric vehicles in use	<p>Make overall plans to gradually upgrade from fuel-based vehicles to electric vehicles for logistics and employee commuting, maximize the utilization of transportation tools:</p> <ul style="list-style-type: none"> <li>• The Company's shuttle buses have been fully upgraded to electric vehicles;</li> <li>• Gradually upgrade vehicles in the Company's possession;</li> <li>• Prioritize new energy transportation tools in logistics selection.</li> </ul>
Enhanced regulatory efforts for high emission industries	<p>Adopt green procurement and green design in procurement and R&amp;D processes to minimize the use of high emission materials and drive the procurement cost down:</p> <ul style="list-style-type: none"> <li>• Adopt green design in R&amp;D to avoid the use of high energy consuming raw materials; use novel eco-friendly raw materials as the main components of products;</li> <li>• Make full considerations in procurement to develop low emission suppliers and expand the possibilities of raw material selection;</li> <li>• Coach suppliers on carbon reduction and urge them to reduce carbon emissions.</li> </ul>
Emergence of new renewable energy technologies	<p>Increase R&amp;D investment, grow global R&amp;D centers in Shanghai, Nanjing, Shenzhen, and Germany, preempt potential new renewable energy markets to increase revenue:</p> <ul style="list-style-type: none"> <li>• The Company has set foot in the research and development of hydrogen energy and other new energies, striving to become a technological pacesetter in hydrogen production.</li> </ul>
Transition to low emission	<ul style="list-style-type: none"> <li>• Adopt green production methodologies, optimize high energy consumption processes, upgrade to energy-saving and low-consumption, and use green power;</li> <li>• Adopt modular design and take reliability improvement measures in service to reduce maintenance consumption.</li> </ul>

## Strategy

Assuming the mission of “Clean power for all”, Sungrow makes in-depth exploration in the field of clean power, and is committed to addressing the challenges in producing, converting, storing, and using clean power with technological progress. We strive to lower energy cost, raise the proportion of green energy worldwide, offer more efficient and convenient ways to use energy, and allow more people to get involved, ultimately enabling affordable, safe, and smart low-carbon energy to be accessible for all, and making unremitting contributions to a greener planet.

### Business Strategy

Sungrow identifies “Focusing on the field of clean power, building a technological leading edge and brand reputation through low-cost innovation and vertical development, achieving rapid and sustainable growth” as the overall strategic guideline. While remaining concentrated on the new energy sections including solar energy, wind energy, energy storage, electricity and hydrogen energy, the Company continues to explore its main business, holds a critical position in the new energy industry through market and technology synergy, and makes professional contributions to the global low-carbon development.

Adhering to the brand position of “technologic power”, Sungrow insists on high level of R&D investment, delves into the energy-saving and emission-reduction scenarios of various industries, continually innovates and delivers outstanding products and services, to help customers reduce emissions, save resources, and lead partners in the ecosystem towards low-carbon transformation. By the end of 2022, the Company has achieved a cumulative installed capacity of 340 GW of inverter equipment worldwide, achieved an annual output of 471.1 billion kWh of clean power, and reduced carbon dioxide emission by nearly 380 million tons\* per annum.

\*On the basis that 1 kWh of power generated by a PV power station reduces CO<sub>2</sub> emission by 0.8 kg.

## Metrics and Targets

### Carbon Emission Management

The Company actively implements carbon inventory and carbon footprint standards, and practices transparent and science-based verification for low-carbon development. To assume corporate responsibilities, the Company started company-wide carbon inventory in 2020, established independent inventory capabilities in 2022 and extended the inventory coverage to India Plant and Thailand Plant. The following data is correlated to the Company's risk identification and analysis results. Carbon inventory enables the Company to get insights on the carbon emission of each operation process, and provides fundamental data support for addressing climate-related risks, reducing carbon emission, and improving the Company's competitiveness and stability. In 2022, the Company avoided 23,331.44 tons of carbon emission by directly purchasing green power and generating power with rooftop PV power stations in plant areas, offset 10,265.40 tons of carbon emission by purchasing I-REC, making significant achievements in emission reduction. The Company's carbon emission results in 2022 as verified by a third-party institution are shown in the below:

Company	Scope	Year 2021	Year 2022	% of Change
Sungrow Power Supply Co., Ltd.	Scope 1	2323.46	3310.98	+42.50%
	Scope 2	35911.00	37816.49	+5.31%
India Plant	Scope 1	/	141	/
	Scope 2	/	936	/
Thailand Plant	Scope 1	/	6.55	/
	Scope 2	/	1046.07	/

Note: Sungrow and Sungrow Energy Storage are included in Sungrow Power Supply Co., Ltd. Scope 2 emission is calculated according to the 2022 grid carbon emission factor of 0.5703 t CO<sub>2</sub>/MWh.

Carbon Emission Data of the Organization for the Past Two Years (tons of CO<sub>2</sub> eq./year)

After the verification, processes that result in top carbon emissions are mapped to the risks and hotspots identified, which are treated as the key processes of concern and addressed with specific action plans and targets. The Company analyzes changes in the verification data every

year to find out the root cause, identifies new directions of management and control as well as opportunities for carbon reduction, and incorporates them into the detailed work plan for the next year, thereby continually improving how the Company responds to climate change.

Top	Scope	Item	Main Content
1	2	Out-sourced power	Non-green power from utilities used in the Company's operational activities
2	1	Refrigerant	Refrigerants spilled from air conditioners, dehumidifiers, and vehicles within the Company
3	1	Gasoline/Diesel consumption of vehicles	Gasoline/diesel consumed by internal and external logistics vehicles and commuting vehicles in possession or under the control of the Company

Top 3 Greenhouse Gas (GHG) Emissions

### Carbon Neutrality Roadmap

The Company has joined the RE100 Initiative, committing to use 100% renewable energy in its manufacturing and operations worldwide by 2028. For that, the Company has developed short-, medium-, and long-term action plans, and split the targets into annual KPIs of relevant

departments, including quality control, R&D, procurement, equipment, administration, and logistics. Strategy department supervises the execution of annual targets, optimizes and adjusts the target values and corresponding carbon reduction measures in a timely manner.

Overall Target	Carbon neutrality in operations by 2028		
Action Plan	Actions	Progress to Date	Status
	Installing rooftop PV power stations	<p>PV power stations have been installed on the roofs of completed plant and office buildings, rooftop power stations have been planned for the Phase II buildings and upcoming Phase III buildings in the industrial park. Rooftop PV power generation efficiency improved in 2022 thanks to hardware renovation and algorithm upgrades, use of power generated by in-house PV power stations increased by 17.84% year-on-year</p>	In progress
	Directly purchasing green power	<p>The Company has joined the RE100 Initiative, committing to use 100% clean power by 2028. Anhui Province introduced direct purchase of green power in 2021, and the Company has participated in the purchase. In 2022, the Company used 45% of green power and this rate will increase by 10% every year in the years to come</p>	In progress
	<p>Joining EP100 to improve energy efficiency and optimize the use of energy consuming equipment</p>	<p>The Company has joined the EP100 Initiative, committing to obtain ISO50001 certification for all major sites and increase energy efficiency by at least 35% by 2028 on top of the 2018 data</p> <p>Saved about 100,000 kWh of power annually by strengthening the management of air conditioning devices and implementing standardized and precise control to</p> <p>Improved lighting efficiency by about 30% and saved about 20,000 kWh of power annually by upgrading energy inefficient fluorescent lamps to high-efficiency LED lamps</p> <p>Reduced energy consumption by 17.76% by renovating the air compressors and adding an intelligent management system</p>	In progress
Increasing the ratio of electric vehicles	<p>Switched employee shuttle buses to pure electric vehicles; eliminated fuel-based vehicles in principle when purchasing new administration vehicles; prioritized electric vehicles in logistics arrangement, optimized internal and external logistics routes to shorten the distance of product shipping</p>	In progress	

Overall Target	Carbon neutrality in operations by 2028		
Action Plan	Actions	Progress to Date	Status
	<p>Low carbon product evaluation and carbon reduction initiative</p>	<p>Conducted product carbon footprint accounting and EPD certification following ISO14067, ISO14044, ISO14025 and other standards; assessed climate and environmental impacts across the entire product lifecycle</p> <p>Completed carbon footprint evaluation and certification of two main inverter products; carbon footprint and EPD certification of three different types of inverters (centralized, string, and residential) are in progress in parallel</p> <p>Sorted out materials with high emissions based on the existing carbon footprint accounting results, and developed carbon reduction plans for such materials</p> <p>Collaborated with suppliers to accelerate value chain carbon footprint quantification and carbon reduction efforts through supply chain coaching/training and supplier carbon reduction performance evaluation</p>	<p>In progress</p>
<p>Building a zero-carbon campus</p>	<p>Gradually enabled refined energy and carbon emission management through PV power generation, energy storage, clean energy supply, and the smart energy management platform</p>	<p>In progress</p>	

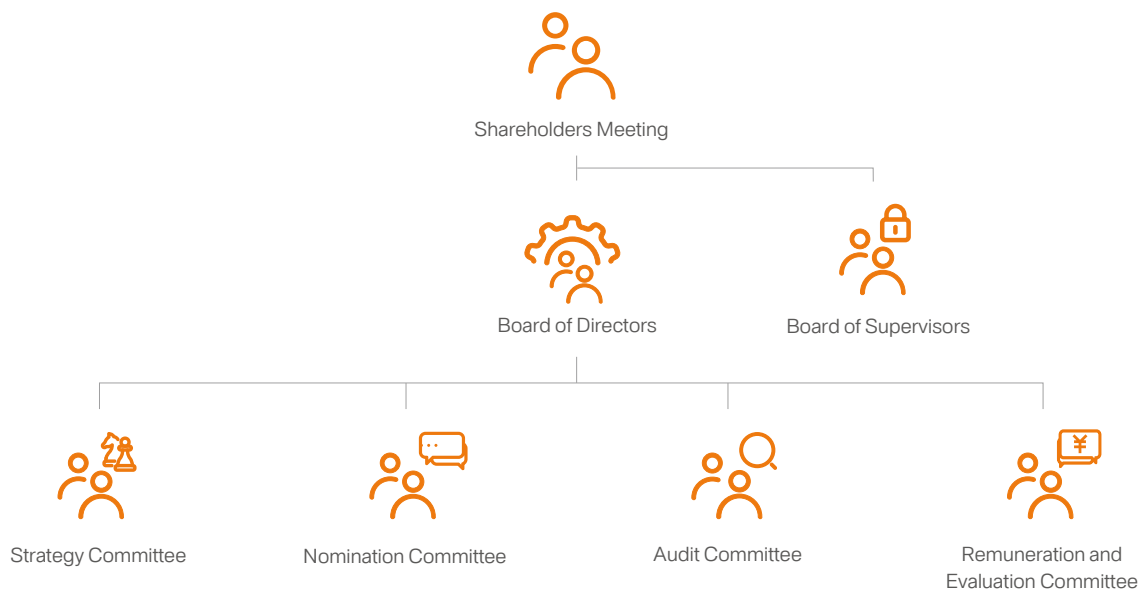


# 01

## Reinforcing Corporate Governance

### Corporate Governance

#### Governance Structure



According to relevant laws, regulations, and normative documents, including the *Company Law of the People's Republic of China*, the *Securities Law of the People's Republic of China*, the *Rules Governing the Listing of GEM Stocks at the Shenzhen Stock Exchange*, and the *Guidelines of Standard Operation for Companies Listed on the GEM of the Shenzhen Stock Exchange*, Sungrow has formulated the *Articles of Association*, the *Information Disclosure Management System*, and other policies as a listed Company, established a corporate governance structure consisting of the Shareholders Meeting, the Board of Directors, and the Board of Supervisors, which contributes to a governance system that is scientific and standardized, with clearly specified rights and responsibilities, featuring mutual restriction and balance as well as efficient operation, so that the Company's governance transparency and effectiveness are constantly improved.

The Company highly values the effectiveness and operability of normative governance documents, and use them to guide the Company's governance practices. In the reporting period, subject to the relevant laws, regulations, and regulatory rules, and in combination with the Company's actual situation, the *Articles of Association* and other policies were revised and updated, which further improved the level of corporate governance.

#### Shareholders Meeting

The Shareholders Meeting is the highest authority of the Company. The Company convenes and holds the Shareholders Meeting in strict accordance with the Rules for the *Shareholders Meeting of Listed Companies*, the *Articles of Association*, and the *Rules of Procedure for the Shareholders Meeting*, making sure shareholders legally exercise their rights and interests, and all shareholders are treated equally. The Company also provides convenience for shareholders to participate in the Shareholders Meeting and exercise their rights.

#### Board of Directors

Taking diversity of the Board of Directors for consideration, the background of directors has been continually enriched in order to improve the competence and the comprehensive governance level of the Board of Directors. Currently, the board consists of 8 directors who bring along profound professional experiences in the industry or extensive exposure in management. Among them, 3 independent directors are experts in legal affairs, finance, and renewable energy, complementary to those with an enterprise background; 1 director is female, accounting for 12.5% of the total board members. The Board of Directors cautiously implements resolutions reached at the Shareholders Meeting, diligently performs its duties and obligations, so as to ensure the Company moves forward in a sustainable, healthy and stable way. Meanwhile, the Board of Directors promotes operational compliance, and safeguards the legitimate rights and interests of the Company and public shareholders.

The Board of Directors consists of several special committees, such as the Strategy Committee, the Nomination Committee, the Audit Committee, and the Remuneration and Appraisal Committee. The committees have clearly defined roles and responsibilities, operate independently, effectively balance and coordinate, promoting the Company's production and operation to progress in an efficient, scientific and compliant manner.

#### Board of Supervisors

The Board of Supervisors is the supervisory body of the Company, which supervises the legitimacy and compliance of major transactions, related party transactions, financial status, as well as directors and senior executives. The Board of Supervisors consists of 3 supervisors, including 2 employee representatives.

For detailed information on corporate governance, please refer to the 2022 Sungrow Annual Report available at the Company's official website. The Shareholders Meeting, the Board of Directors, the Board of Supervisors, and the Special Committee of the Board of Directors are responsible for reviewing major issues related to the Company's development. In 2022, the Company held 9 board meetings, 2 shareholders' meetings, and 6 supervisors' meetings.

The remuneration of directors and supervisors is determined by the Shareholders Meeting, and the remuneration of executives is determined by the Board of Directors. Directors, supervisors and executives who hold an office in the Company receive remuneration according to their specific positions. The remuneration of directors, supervisors and executives is determined and paid in accordance with the *Working Instruction of the Remuneration and Appraisal Committee*, based on their job performance, work competency, job grade, and etc. For the remuneration package of each director, supervisor and executive, refer to the Company's 2022 Annual Report.

## Investor's Rights

The Company has formulated the *Regulations on Investor Relations Management* and assigned dedicated positions and personnel to maintain open communication with investors, securities analysts and other parties, allowing them to fully understand the Company's strategy, operation and development dynamics. The Company serves investors in a number of ways, such as online performance briefing, investors conference, investor hotline, email, and corporate website, and discloses information about the Company to the capital market and investors in a timely, proactive, and detailed manner. The Company adequately secures the rights and interests of small and medium shareholders. The Shareholders Meeting has adopted a cumulative voting mechanism. Through a combination of on-site voting and online voting, each and all shareholders can get involved and exercise their rights. In 2022, the Company organized 5 field investigations for institutions, made online performance briefing for the 2021 Annual Report and the 2022 Half-Year Report, answered 172 questions raised by investors through the Shenzhen Stock Exchange's investor relations interaction platform, and maintained online and offline communication on corporate governance, development strategy, business status, sustainability, production and operation, and other issues concerning investors, making sure that the Company's business development information is fairly accessible to all investors.

The Company strictly follows the *Regulations on Information Disclosure Management* to fulfill its informa-

tion disclosure obligations and ensure the genuineness, accuracy, integrity and timeliness of information disclosed. At the same time, the Company strictly practices the *Insider Registration Management Regulations of Listed Companies* to standardize the reporting, transmission and confidentiality of major internal information, thereby securing insider information, allowing shareholders to get updated of the Company's operating dynamics, financial status and progress of major issues in a timely manner, and effectively safeguarding the legitimate rights and interests of all investors. In 2022, the Company disclosed 4 periodic reports and made 104 temporary announcements. The Company's information disclosure performance was rated A in the information disclosure assessment organized by the stock exchange, and there was no information disclosure incident in the reporting period.

## Risk Management

Sungrow incorporates the risk management process throughout the entire operation, implements dedicated control of major risks, and actively advances the development of the risk control information platform by referencing external regulatory requirements, laws and regulations as well as relevant punishment cases. The Company pushes information on major internal and external risks in a timely and effective manner, continues to optimize the risk control system, and establishes a three-level risk management mechanism on the foundation of business units, functional departments, and the Audit Division, so that the Company's risk management and internal control systems function properly and effectively.



### Business units

Strengthen self-management and self-control over risk businesses

On the foundation that business units strengthen self-regulation and the control department reinforces risk management, the Company continues to expand the coverage of internal audit, audits, supervises and assesses the authenticity, legitimacy and effectiveness of various business management activities and financial activities, as well as the compliance of internal control according to the annual audit plan, so as to help business units identify and solve problems, and provide valid solutions for cost reduction and efficiency improvement. By examining risk-exposing businesses through internal



### Functional departments

Effectively control the risks before, during and after business operation processes through business design, process management, contract review, credit management, process monitoring, payment collection and other measures to mitigate operational risks

audits, a total of 150 non-conformities were identified in 2022, among which 140 were effectively corrected, accounting for 93%. Internal audits pushed business management to evolve at the system level and management improvement measures to solidity, preventing similar problems from happening again. During the reporting period, there were no major administrative penalties, lawsuits, or major defects in internal control that should be disclosed.



### Audit Division

Audit and inspect the Company's main businesses, supervise and urge all personnel to do their parts with integrity, ensure all risk management measures are effectively implemented

## Business Ethics

### Operational Compliance

Sungrow honors the corporate values and embeds the compliance concept into the Company's operation and employees' routine work. Through constant optimization of the law-abiding and compliant operation system, all business activities of the Company are carried out in a legitimate and compliant way. Diversified law-abidance and compliance training is facilitated through multiple channels, so as to enhance employees' risk control

capacity in the business process. In addition, the Company specifically requests all employees and their family members to take necessary avoidance measures and prevent conflicts of interest when holding shares, taking offices, taking part-time jobs, doing or referring businesses. As the next step, the Company plans to establish a compliance system according to ISO37301.






### Anti-corruption

The Company has zero tolerance for corruption of any kind. As such, an independent function - the Audit Division - is set up specifically for anti-corruption. By reinforcing the deterrent power, strengthening system

boundaries, and establishing self-discipline awareness, the department ensures the Company's business operates in a compliant, orderly and efficient manner.

Corruption prevention

The Company proactively optimizes its corruption prevention mechanism. In 2022, the *Code of Conduct for Sungrow Executives and Managers*, the *Regulations on Internal Audit and Supervision*, the *Regulations on Integrity and Self-Discipline* were revised, and the *Regulations on Whistle-blowing and Appealing* was formulated to provide guidance for anti-corruption. All employees were required to sign the *Employee's Commitment to Integrity and Self-discipline* when joining the Company, and to date the Commitment was 100% signed and included in employees' performance management. All suppliers and distributors were required to sign the *Integrity Pact*, and the signing rate was 100%. The Company communicates anti-corruption and integrity requirements through publicity, training, negative examples, and promotes the corporate culture of integrity and self-discipline, to safeguard the healthy development of the Company.

-  The training is attended by all new employees
-  2 dedicated integrity training sessions for those in high-risk areas
-  Pushed integrity reminders and integrity warnings on holidays 5 times
-  Launched the *Integrity at Sungrow Starts Here* anti-corruption course
-  Sent routine correspondences to partners to reinforce self-regulation

Whistle-blowing mechanism

Sungrow has established efficient, unblocked, open and transparent whistle-blowing channels. Every employee may report business ethic violations via phone, WeChat, or e-mail at any time. In case of any objection to the result, the Whistleblower may directly report the case to the executive in charge of the investigating department and request a fair and impartial result. Sungrow's Integrity Hotline: 0551-6532 6873 Email: [complain@sungrowpower.com](mailto:complain@sungrowpower.com)

Punishment and Improvement

The Company has zero tolerance for corruption of any kind. During the reporting period, 7 typical incidents of employee(s) violating the *Regulations on Integrity and Self-Discipline* were investigated and treated. 13 employees' employment contracts were lawfully terminated because of serious violation of the Company's integrity regulation, among which 2 were transferred to judicial authorities for suspected crime. In addition, 7 suppliers were punished due to corruption-related violations.

The Company formally communicates treatment of corruption incidents to all employees or suppliers in a timely manner, so as to effectively warn and deter violations. For corruption incidents discovered, the Audit Department and the business department will investigate

the conditions and modes of corruption, hence to identify blind spots and deficiencies in management, and improve existing systems, processes or management modes to prevent similar incidents from happening again.

## Whistleblower Protection

In 2022, the Company formulated the *Regulations on Whistle-blowing and Appealing* to standardize the whistle-blowing and appealing procedures, protect the

legitimate rights and interests of Whistleblowers and those being accused.

Procedures for dealing with whistle-blows and appeals

Case Acceptance	Accountable department: Audit Division Process Time: 2 workdays
Case Assignment	Accountable department: Audit Division Process Time: 1 workday
Case Investigation	Accountable department: Investigating department assigned <small>(Audit Division, Legal &amp; Compliance Division, Human Resources Center, Process &amp; Digitalization Center, Quality Center)</small> Process Time: 2 weeks/1 month/2 months/6 months, subject to the case type
Feedback of Results	Accountable department: Investigating department assigned/executive in charge Process Time: 3/5 workdays

Rewarding and protecting Whistleblowers

Those who provide valid clues/evidences and assist in verifying the case will be rewarded an appropriate proportion of the verified amount; Whistleblower's information is strictly kept confidential, so as to safeguard personal safety and legitimate rights and interests of whistleblowers, insiders, and their close relatives. Discrimination or retaliation against them is strictly prohibited. Any violation will be punished in accordance with the *Regulations on Employee Reward and Punishment*. In case a crime is committed, it will be transferred to the judicial authorities.

Protecting the legitimate rights and interests of those being accused

The Company prohibits malicious complaints and false accusations, promptly clarifies and explains to the organization of the accused. If necessary, remedies such as eliminating effects, restoring reputation, and making economic compensation will be taken to protect the legitimate rights and interests of the accused.

## Information Security and Privacy Protection

Following the overall principles of “respond agilely, make correct decisions, and act efficiently”, the Company has formulated more than 30 regulations on information security and privacy protection based on ISO/IEC 27001, ISO/IEC 27701, and other relevant standards. Such regulations, including the *Information Security and Privacy Protection Manual*, the *Information Security and Privacy Protection Compliance System*, and the *Security Management System for Third-Party Information Technology Suppliers*, help to secure the rapid growth of the Company's business, and continually empower all divisions and subsidiaries to improve information security and privacy protection capabilities, and optimize security systems.

At the organizational structure level, the Company established the Digital Transformation Management Committee in 2022 as the highest leadership and review body for information security and privacy protection management, assuming full responsibilities for the Company's information security and privacy protection management. Under the leadership of the Committee, the Information Security Team took the lead in managing information security and privacy protection. At the same time, information security work groups were established in divisions and subsidiaries for implementation in respective departments.

In addition, the Company has formulated the *Regulations on Data Asset Security Management* to define data security related responsibilities, standardize the data lifecycle management process as well as the data classification and grading criteria, to prevent data leakage, theft, damage, loss and other security incidents, ensure the confidentiality, integrity, and availability of data, and promote the use, flow, and sharing of data. All divisions and subsidiaries involved in data processing activities shall comply with the Regulations on Data Asset Security Management, establish and implement detailed work plans on data security management according to the characteristics of department and business, and secure business and system data within their authorities. They shall also implement data classification and grading following the Company's data security classification and grading criteria, clarify data security positions and responsibilities within their authorities, and propose management standards for data access and use. They shall promptly report information security incidents following the Information Security Incident Response Mechanism, and cooperate with the Information Security Department in dealing with information security incidents.

## CASE

The iEnergyCharge series of products have obtained the GDPR-based personal data protection verification certificate issued by SGS, including an iOS app or an Android app for Google Play, and the Sungrow Charge Management System. The products follow the General Data Protection Regulation (GDPR) to process users' personal data, secure users' rights as data subjects and safeguard personal data during product use.



## Intellectual Property Protection

Insisting on “Defending the Sungrow Industry with Intellectual Property”, Sungrow constantly enriches its intellectual property pool and is awarded the National Intellectual Property Demonstration Enterprise. The Company has established the Intellectual Property Center, the Decision-making Committee, and the Patent Review Committee, formulated a complete set of strategic plans and systems on intellectual property, including the *Regulations on the Patent Application*, the *Regulations on Patent-related Work*, the *Regulations on Patent Rewarding*, the *Regulations on the Expert Panel’s Work in the Patent Evaluation Committee*, the *Management Measures for Patent Agencies*, the *Regulations on Patent Value Evaluation*, and the *Regulations on the*

*Management of Patent Liaison Officers*, to promote intellectual property protection. In 2022, 1,756 new patent applications were filed, accounting for a patent application growth rate of 57%, which add up to 5,410 patent applications cumulatively, including 4,691 in China and 719 overseas. A total of 2,877 patents were awarded cumulatively, accounting for a growth rate of 47.4%, among which 1073 were invention patents, accounting for 37.3%.

While protecting our own intellectual properties and trade secrets, we also respect the intellectual properties and trade secrets of others. We have taken the specific measures as follows:



### Patent application

Patent application: File patent applications in time to secure intellectual property



### Patent alert

Process patent intelligence deeply, analyze competitors’ patents and products to get a comprehensive understanding of development trends and competition status in the professional domain, use patents effectively to formulate strategies



### Patent operation

Search for and analyze patent-related risks, effectively mitigate product infringement risks

## Advertising

Following Sungrow’s global marketing strategy, the Company has set up a two-way communication mechanism between the brand and the market. In such a mechanism, the Brand Center is responsible for coordination, while the divisions are responsible for respective implementation and promotion. They improve professional abilities through communication and training every year, in order to advance advertising and marketing efforts in a systematical approach. In addition, the Company has formulated various regulations on content management, media communication, and public opinions management, such as the *Regulations on Website Management*, the *Regulations on Media Operation* and

*Management*, and the *Regulations on WeChat Official Account Management*, and requested the Company’s advertising and marketing platforms to strictly comply with local privacy policies as well as other laws and regulations, standardize the release and management of marketing advertisements, and accept the supervision and guidance of the information and supervision authorities. In 2022, there was no incident of regulatory investigation or punishment due to the Company’s unlawful advertising, and there was no business violation or breach of marketing and promotion regulations.



# 02

## Delivering Customer Value



### R&D Innovation

#### R&D System

With a focus on enhancing independent innovation capabilities, the Company has set up six R&D centers in Hefei, Shanghai, Nanjing, Shenzhen as well as in Germany and the Netherlands. The Company constantly optimizes the R&D organizational structure, R&D management mechanism and process, innovates throughout the entire process from product R&D, engineering design, intelligent manufacturing, to digitalized management. With core technologies as the propeller, Sungrow's R&D team continually upgrades existing product lines, maintains product iterations, and provides leading technological support for the Company to deliver globally competitive products and services. Along the entire process of new product development, from project creation to project closure, production and sales, transportation and maintenance, and to lifecycle management, Sungrow adheres to the principles of continuous technological innovation, continuous cost reduction in product R&D and operation, continuous

improvement in utilizing energy and resources, and environmental protection, to actively assume social responsibilities in design and development, and support the green development of the Company.

The Company's R&D structure consists of the Central Research Institute and the R&D task-forces of divisions. The Central Research Institute is responsible for exploring cutting-edge technologies, making high-value intellectual property plans in advance, and addressing critical technical challenges, which provides an efficient platform service and innovation management mechanism for the Company's product and technology development, and fosters R&D and management professionals to build core technological competitiveness. Each division has set up an independent platform R&D center and a R&D task-force. The platform R&D center is responsible for developing general and cutting-edge technologies specific to the division, while the R&D task-force focuses

on customized R&D close to the business. The task-force also derives technical demands from business demands, and forward them to the platform R&D center. After evaluating the demands, the platform R&D center may decide to take the challenge themselves or escalate the demands to the Central Research Institute. Technologies required by key projects of each division will be broken into smaller items, and the completion rate of key projects will be included in the performance review of the division head and relevant R&D personnel.

The Company's R&D mechanism is in coordination with the R&D strategy, which leverages the IPD (Integrated Product Development) system to offer APQP (Advanced Product Quality Planning) and CMMI (Capability Maturity Model Integration) in response to specific business demands. The mechanism is expanded based on the application software currently in use and the embedded software development project management, in order to bridge the gap in the original IPD process that is over-focused on hardware development, and provide rational grounds for software development projects. Meanwhile,

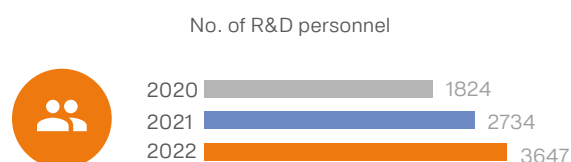
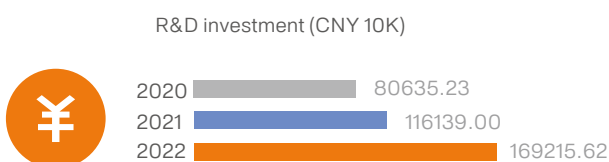
the IPD process can be adaptively innovated for products of different divisions, hence to provide process management required for product development. For example, APQP is included to cope with the product characteristics and customer needs of Sungrow E-Power and the Wind Power Division. While IPD+APQP+CMMI approach has been adopted as the overall development model, different combinations may be applied to different R&D projects to ensure quality of the TR1-TR6 process.

In addition, the Company has established the IPMT (Integrated Portfolio Management Team) composed of heads in R&D, production, finance, human resources and strategy to define overall strategic goals and lead the Company's R&D efforts. The Company has set up the ITMT (Integrated Technology Management Team) to formulate the Company's technology development strategy for the next 3 to 5 years as well as directions of technology breakthrough and technology roadmap plan for the next 2 to 3 years, providing technical guidance and decision-making to R&D task-forces of divisions.

## R&D Investment

The Company further consolidates its positioning as a "technologic power", increases R&D investment, and develops the high-end technological human resources pool to maintain the long-term innovation capability. In

2022, the Company invested CNY 1.69 billion in research and development, an increase of 45.7% over the previous year; the technological R&D headcount reached 3,647, accounting for 39.5% of total employees.



## Product Innovation

With the support of the R&D system and R&D investment, Sungrow continues to advance product innovation. The Company has released the 2023-2027 Technology

Roadmap to communicate the technology plans for PV, energy storage, and other businesses in the next five years.

Product Innovation Cases

1+X Modular Inverter: Based on the profound insight into market trends and demands, Sungrow makes significant innovation to traditional inverters. The first-to-market 1+X modular inverters feature advantages of both string inverters and centralized inverters, creating a new

category of their own. At a unit power of 1.1 MW, multiple inverters can be connected in parallel to shape a flexible sub-array of 1.1 MW to 8.8 MW, making station configuration more flexible and operation and maintenance easier.

Performance advantages: Flexible sub-array of 1.1 MW to 8.8 MW addresses diversified needs of different markets around the globe, and optimizes CAPEX and OPEX. Single channel MPPT for each unit effectively improves power generation in complex terrains. Plug-and-play modular design of key components improves operation and maintenance efficiency by more than 70%, greatly reducing operation and maintenance cost. The product meets the diversified needs of optical storage AC/DC coupling, significantly improves the flexibility and economy of optical storage power stations. The reverse charging function allows two-way energy flow and supports various applications such as peak shaving and frequency modulation.



1+X Modular Inverter

Liquid-Cooled Energy Storage Systems - PowerTitan, PowerStack: Featuring a combination of power electronics, electrochemistry, and grid support technologies, the systems take the lead in the integrated development of the energy storage industry. Different from the traditional energy storage integration method of simple superposition, the systems are designed and manufactured

independently top-to-toe to enable high compatibility between software and hardware, data interconnectivity across various processes, and consistency in control logic, so that the energy storage systems including battery, PCS, and EMS operate collaboratively and professionally, the safety and efficiency of energy storage improve.

Performance advantages: The intelligent liquid-cooling temperature control technology, coupled with the multi-stage variable diameter current sharing design, enables a cell temperature difference less than 2.5 , extends battery life by more than 2 years, and allows a 100 MW power station to generate additionally 60 million kWh of power within the service life. Millions of big data are collected with the 4D sensor technology, which are fed to the progressive standby algorithm for intelligent adjustment of heat dissipation efficiency based on operating conditions, reducing auxiliary power consumption by more than 30%. Intelligent cluster level management enables millisecond-level current sharing control, adjusts charging and discharging by battery cluster intelligently, addresses the cask effect of parallel connection, and increasing the system's discharge capacity by 7%.



Liquid-Cooled Energy Storage Systems  
- PowerTitan, PowerStack

## Innovation Incentives

In order to motivate technological innovation, the Company has formulated the *Regulations on Patent Rewarding*, set up the Value Patent Award, the Patent Intelligence Award, the Evaluation Panel Award, and the Special Award for Contribution to Annual Technological Innovation to acknowledge patents in different stages. In 2022, a total of 1,878 person-time was awarded with a reward amounting to CNY 3.498 million. The Company also held the TRIZ Innovation Empowerment Training Camp to help business departments solve technical problems and deliver project results. The Training Camp helped R&D personnel to improve their abilities to identify, analyze, solve problems, and broadened their innovative thinking. At the second TRIZ Innovation Empowerment Training Camp in 2022, 95 innovative proposals and 49 patents were produced, 32 students received the TRIZ Level 1 Certificate.

## Industry Growth

continues to promote industry growth by a number of means, such as establishing industry platforms for collaboration and exchange, accelerating technological progress, leading and participating in the revision of Chinese and international standards, and strengthening industry-academy-research cooperation. The Company actively collaborates with peer businesses, governments, and industry associations to share technologies and experiences in the new energy section, explore cutting-edge trends, and accelerate industry evolution.

The Company is actively involved in formulating and revising standards in the field of clean power conversion, offers fundamental support to the industry, and leads the standardized development of the industry. In 2022, the Company presided and participated in the formulation of 4 standards, adding the total number of standards it has been involved to 45. The Company has formulated the *Regulations on Industry-Academy-Research Programs*, the *Regulations on Attendance Management of Interns at the Central Research Institute*, and the *Instructions on Industry-Academy-Research Program Review*, in order to standardize the

management of Industry-Academy-Research programs. In 2022, the Company initiated 26 cooperation programs with Hefei University of Technology and Shanghai Jiaotong University, and all the programs are progressing smoothly right now.

## Sustainable Supply Chain

### Sustainable Procurement

In 2022, the Company formulated the *Supplier Code of Conduct* to define supplier's social responsibility requirements of in respect of law compliance, labor rights and human rights, health and safety, environment, and business ethics, and request suppliers to comply with all applicable laws and regulations of the country where they operate. 89.6% of suppliers have signed the *Supplier Code of Conduct*. Suppliers are encouraged to abide by globally recognized industry standards and best practices, in order to constantly improve the ESG management level.

### Responsible Sourcing

The Company continues to develop a sustainable green supply chain, pushes suppliers to implement sustainable development practices, safeguard human rights and labor rights, restrict or control the use of hazardous substances, and eliminate the use of conflict minerals. To prevent corruption and commercial bribery in the procurement process, the Company entered into *Integrity Pact* and *Supply Agreement* with each and all qualified suppliers of production materials, set up the *Supplier Blacklist* to prevent commercial bribery and malicious fraud, and strengthen the Company's disciplinary measures against supplier breaches. The Company also introduced the *Procurement Code of Conduct* and the *Implementation Rules for Procurement Confidentiality* to standardize the integrity behavior of personnel at all levels and prohibit seeking personal benefits for any reason.

### Responsible Minerals Supply Chain

Tantalum, tin, tungsten, gold, and cobalt play an essential role in electronic products. Sungrow makes not direct purchase of minerals and requests suppliers not to use conflict minerals. In the 2022 Conflict Minerals Reporting Template (CMRT) survey, 88 key material suppliers completed self-assessment, and no violation of conflict minerals regulation in the supply chain was reported. Suppliers are required to sign the *Supplier Code of Conduct* and the *Supply Agreement*, making commitments on the compliance of conflict minerals, and prohibiting the use of conflict minerals. This Agreement is signed by 99.2% suppliers. In addition, the Company includes conflict minerals in the ESG audit scope, and conducts audits on suppliers, hence to push conflict minerals investigation upstream and make sure minerals from conflict-affected and high-risk areas are not used in products, directly or indirectly.

### Green Supply Chain

Being a company that researches, develops, and manufactures new energy power supply equipment, Sungrow's energy consumption and waste emission in the production process accounted for only a relatively small part of the environmental impacts across the entire industrial chain, and no pollution is generated during the operation of the equipment. Most of the resources consumption and emission come from companies in the upstream of the supply chain. The Company encourages suppliers to improve environmental performance and lower environmental risks in various ways, including establishing the environmental management system, reducing pollutant emissions, developing and using environment-friendly products or services. When developing new suppliers, their production environment is investigated, their environmental protection efforts are evaluated from time to time through audits or manufacturing supervision activities, and the outcomes are included in the supplier qualification evaluation. In 2022, the Company conducted a survey on the sustainability status quo of 74 suppliers, followed by product carbon footprint accounting to 15 of them.

### Localized Procurement

The Company insists on localized procurement practices to promote local economic development, create employment opportunities, and effectively save energy and time in transportation, hence to reduce environmental impacts. In 2022, 99% of products and services purchased by the Company come from China.

## Supply Chain Management



### Supplier Management Systems and Processes

The Company focuses on compliance and sustainability of supply chain management, and has set up the supplier sustainability management regulations according to ISO9001, ATF16949, ISO14001, ISO45001, ISO26000, SA8000 and other international standards and guidelines. For the development and introduction of production material suppliers, the Company has formulated the *Work Instructions on Supplier Development* which clearly requires suppliers to establish a management system following the IATF16949:2016, pass the entry-level certification of ISO9001:2015, and strive to obtain ISO14001 and ISO45001 certifications. The percentage of suppliers who have passed the above certifications is 96%, 68.8%, and 50.7%, respectively. For suppliers of materials and devices that have environmental protection requirements, ROHS, REACH and other hazardous substance control systems must be in place, and effective third-party test reports must be provided.

Sungrow embeds ESG into the entire procurement lifecycle management, and prepares the *Supplier ESG Standard Audit Report* based on the *Supplier Code of Conduct*. Suppliers are requested to complete ESG self-assessment, continuously reduce supply risks, and

enhance supply chain risk control. In order to develop suppliers of key material categories, potential supplier audits are conducted in accordance with the *Supplier ESG Standard Audit Report*. In 2022, four supplier ESG audits were completed on-site in 2022. The Company has identified child labor, forced/compulsory labor, occupational safety, and environmental permits as ESG red lines. Suppliers violating the red lines must undergo rectification and acceptance before continuing to cooperate with the Company. Among these four suppliers, three were rated low-risk and one medium-risk. For issues discovered during on-site audits, suppliers were required to find out the root cause, take corrective and preventive actions, and rectify non-conformities. For suppliers who perform well in ESG, Sungrow increases their shares in procurement and prioritizes them in business cooperation; for suppliers who perform poorly in ESG, especially those who breach guidelines or regulations, Sungrow requests them to rectify within a specified period of time, while reducing their shares in procurement and limiting or canceling business cooperation with them.

### Supplier Capability Improvement

To assist the sustainable development of supply chain and enhance risk prevention, Sungrow organizes ESG awareness training for suppliers on a regular basis to communicate the Company's supply chain ESG promotion and carbon reduction plans, ESG concepts, and practices of key topic. In 2022, a total of 170+ suppliers participated in ESG awareness and carbon footprint training with a total training time of 5 hours.

## Quality Excellence

Sungrow attaches great importance to quality management, always practices the quality strategy of "*Pursuing quality excellence*, constantly meeting and exceeding the expectations of global customers", and implements total quality management. By creating a quality culture of full engagement and implementing various management system standards, all business processes progress continuously and efficiently.

### Quality Culture

With GB/T 32230-2015 Guidelines for Quality Culture Development in Enterprises as the reference, the Company sets up a quality culture framework, makes overall planning and systematic design for quality culture building, develops an annual quality culture construction plan and breaks it down into the responsibilities of each department.

Shaping a quality culture atmosphere: The Company has formulated the *Improvement Control Procedure*, the *Regulations on Rationalization Proposals*, the *Measures for Managing QC Group Activities*, and the *Measures for Promoting Continuous Improvement* to encourage innovation and improvement of all employees. In 2022, 5,028 rationalization proposals and 664 improvement proposals were made, and 20 QCC quality improvements were implemented, which constantly promoted process improvement and raised process performance. In 2022, a total of 6,068 person-time participated in

quality culture activities, a year-on-year increase of 49.2%. As such, a quality culture atmosphere featuring full participation, full process improvement, continuous innovation, and pursuit of excellence was shaped.

Facilitating quality training: Sungrow continues to optimize its quality management system, and comprehensively popularizes quality knowledge to lay a solid foundation of quality awareness and cultural concept among all employees. In 2022, the Company conducted in-depth surveys to identify the needs of respective business units, planned 63 exclusive quality courses that cover quality system management basics, universal quality science, and advanced quality management. Relevant courses were recommended to trainees at different levels, such as the *Total Quality Management and Zero Defect* and the *Building Excellent Sustainable Quality Leadership* courses for managers and executives; courses on quality tools and methods for front-line personnel, such as ISO9001, ISO9004, QC080000 and other standards as well as the Failure Mode and Effect Analysis (FMEA), Production Parts Approval Process (PPAP), and Quality Control Circle (QCC).



## Quality System Management

Taking ISO9001:2015 Quality Management System as the foundation, the Company has introduced IATF16949:2016 Quality Management System Requirements for Automotive Production and Relevant Service Parts Organizations, CMMI Level 3, ISO26262:2018 *Road Vehicles - Functional Safety*, ANSI/ESD S20.20 Protection of Electrical and Electronic Parts, Assemblies and Equipment as well as other industry and product systems to build a holistic, reproducible, and differentiated quality management system and maintain efficient operation. At the same time, the Company followed ISO37301:2011

Compliance Management System, ISO22301:2012 Business Continuity Management System, ISO27001:2022 Information Security Management System, and ISO27701:2019 Privacy Information Management System to identify gaps in internal operation, accelerate rectification of deviations, continuously improve and consolidate the operational foundation of the management systems, thereby improving the Company's responsiveness to risks and ensuring the quality development.



**Sungrow Power Supply Co., Ltd.**

Accreditation	Accreditor	Accreditation	Accreditor
Quality Management System ISO9001:2015	SGS	Energy Management System ISO50001:2018	TÜV
Environmental Management System ISO14001:2015	SGS	Laboratory Accreditation ISO/IEC 17025:2017	CNAS
Occupational Health and Safety Management System ISO45001:2018	SGS	Capability Maturity Model Integration CMMI L3	PKT
Hazardous Substances Process Manage- ment System IECQ QC 080000:2017	SGS	ESD Management System ANSI/ESD S20.20:2014 IEC-61340-5-1:2016	SGS
Social Responsibility Management System SA8000:2014	SGS		

**Sungrow Energy Storage Technology Co., Ltd.**

Accreditation	Accreditor	Accreditation	Accreditor
Quality Management System ISO9001:2015	SGS	Social Responsibility Management System SA8000:2014	SGS
Environmental Management System ISO14001:2015	SGS	Energy Management System ISO50001:2018	TÜV
Occupational Health and Safety Manage- ment System ISO45001:2018	SGS		

**Sungrow Renewables Development Co., Ltd.**

Accreditation	Accreditor	Accreditation	Accreditor
Quality Management System ISO9001:2015 GB/T 50430-2017	CQC	Occupational Health and Safety Management System ISO45001:2018	CQC
Environmental Management System ISO14001:2015	CQC		

**Sungrow FPV Sci.& Tech.Co.,Ltd.**

Accreditation	Accreditor	Accreditation	Accreditor
Quality Management System ISO9001:2015	CQC	Occupational Health and Safety Management SystemISO45001:2018	CQC
Environmental Management System ISO14001:2015	CQC	Hazardous Substances Process Manage- ment System IECQ QC 080000:2017	SGS

## Hefei Sungrow E-Power Technology Co., Ltd.

Accreditation	Accreditor	Accreditation	Accreditor
Quality Management System ISO9001:2015	SGS	Automotive Industry Quality Management System IATF16949:2016	BV
Environmental Management System ISO14001:2015	SGS		
Occupational Health and Safety Management System ISO45001:2018	SGS	Functional Safety System ISO26262:2018	SGS

## Implementing Quality Initiatives

The Company has formulated the *Regulations on Managing Targets and Metrics*. Annual targets are released at the beginning of the year, and broken into different levels for monthly, quarterly, and annual monitoring according to the metrics type. For metrics failing the targets, improvement measures are developed, and follow-up actions are taken on a continual basis. In 2022, the quality pass rate of products reached 99.64%.

Sungrow implements the IPD process throughout product development, assigns quality representatives to get deeply involved in product development, and actively responds to diversified customer requirements. By introducing APQP+CMMI and using FMEA and other tools, Sungrow ensures all quality risks are adequately identified and mitigated.

The Company has established the *FMEA Management Specification* and the *Regulations on Product Reliability Testing*. In the early stage of project development, the Company is oriented to the ultimate goal of delivering satisfying products/services and being customer first, identifies risks early in the aspects of reliability, electro-

magnetic compatibility, compliance, operability, customer perception, software portability and safety, works out *the Quality Management Plan*, and enforce quality control throughout the entire product lifecycle. The Company also makes plans for quality objectives of new products, monitors and assesses the objectives across the entire lifecycle.

Having completely identified the requirements of ISO9001:2015, the Company has formulated the *Non-Conforming Product Control Procedure* based on the actual operation inside the Company. Non-conforming products are identified and isolated, the records of non-conforming products are maintained, and a digitalized system is used in combination for intelligent control, hence to prevent unexpected use and delivery of non-conforming products. In addition, a standard process is followed to track the disposal of non-conformities as well as the progress of corrective and preventive measures, and the closed loop problem-solving standard in the air industry is benchmarked to solve quality issues and continuously improve product quality.

## Customer Service

### Delivering Extraordinary Service

With local service as the core and an intelligent system platform as the support, Sungrow builds a service support system featuring close online and offline collaboration, provides services and solutions covering the full life cycle of products, and improves service efficiency and response with professionalism, hence to constantly exceed customer expectations and delivering greater value to customers.

The Company builds a service network with a worldwide footprint and continuously optimizes its layout. As of today, six global service regions have been established, covering 85+ service outlets and 280+ authorized certification service providers. With such a network, Sungrow is capable of serving customers in more than 150 countries, and rapidly responding to various customer service requests. In 2022, the Company continues to upgrade and optimize the Global Service Platform to optimize customer interaction, search, traceability, reporting, and other system functions. On the foundation of improving the basic system functions, the Company further upgrades service efficiency and user experience to closely respond to customer demands.

### Customer Training

As the global business expands, the Company pays close attention to supporting and investing in customer training and technical services. A three-level technical support system is established, which consists of business regions, the global technology empowerment department, and R&D. Assuming a hub role in the three-level technical support system, technical support engineers of the global technology empowerment department not only deeply participate in product development and continuously improve the installability and maintainability of products as service representatives, but also support rapid close-loop problem-solving on-site and large-scale project delivery. Skills training is facilitated to customer operation and maintenance

teams via hands-on, in-house or live streaming sessions, in order to standardize product safety and technical operations, improve the competency level of op&m engineers, and continuously empower customers.

In addition, the Company has established a Product Training and Practice Center to offer hands-on training to customers. Taking a combined approach of “theory + practice”, internal trainers certified by the Company explain system principle, electrical principle, structure, and process of products, and enhance trainee’s hands-on skills through practical sessions including functional configuration, grid connection and debugging, fault simulation, and fault recovery. Innovative training modes such as live streaming are used for remote trainees. In 2022, 200+ on-site sessions, 6 in-house sessions, and 9 live streaming sessions were extended to customers, safeguarding the entire lifecycle of products.

### Customer Safety

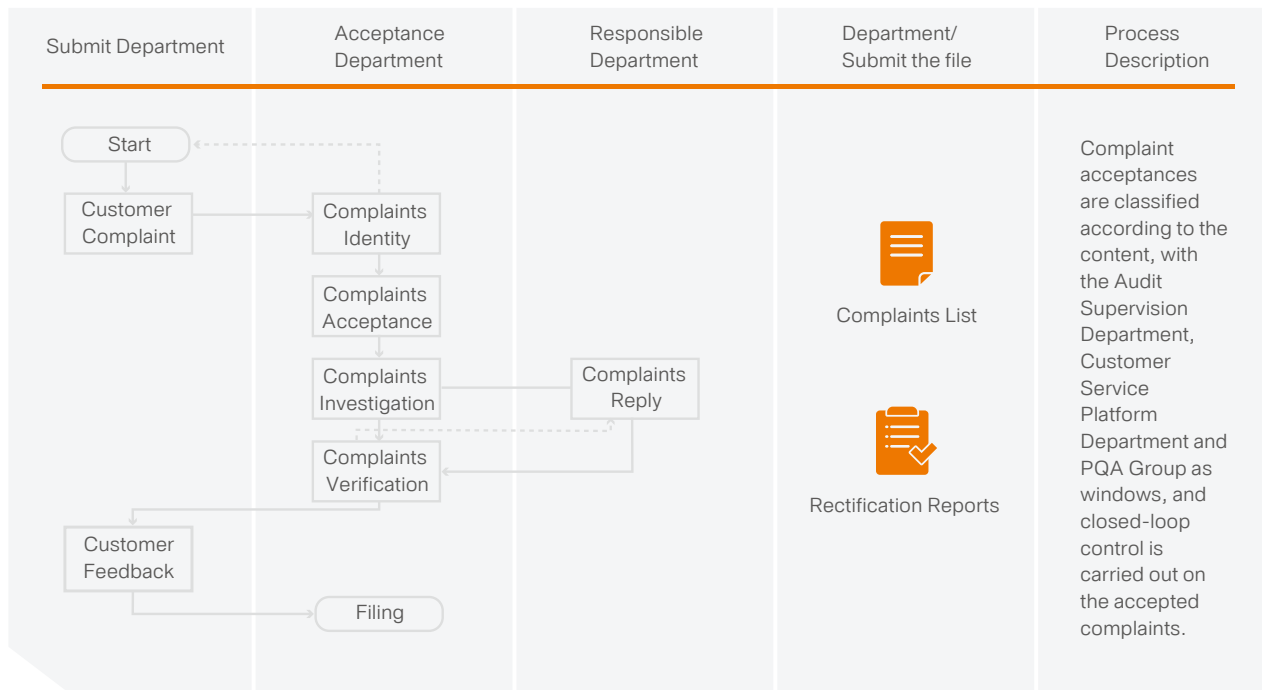
Before introducing products into a market, the Company conducts standard surveys and joint evaluations to ensure product compliance in the target market, improve market acceptance, and guarantee customer safety. In 2022, PowerTitan liquid-cooled energy storage system underwent the UL 9540 certification system evaluations, passed cell safety, electrical safety, structural safety, and fire safety tests, and was awarded the certificate by TÜV, making it the only large-scale ground energy storage integration system in China that passed the dual “battery system + PCS” certification. Sungrow strictly abides by national laws, regulations, and industry protocols, and proactively communicates product knowledge and safety precautions to customers. For example, safety instructions, precautions for electrical connection safety, as well as troubleshooting and maintenance information is available in user manuals shipped with products. User Manual, Installation Guide, and other documents corresponding to each product model are also immediately available at Download Center on the corporate website.

## Customer Satisfaction Survey

With a focus on being customer-oriented and improving customer satisfaction, the Company continues to optimize its internal satisfaction measurement system following the relevant requirements of GB/T 19038-2009 *Guidelines for model and methods of customer satisfaction measurement*, GB/T19039-2009 *General rules of customer satisfaction measurement*, and ISO10001/2/3 Quality management - customer satisfaction guidelines. The measurement system covers brand image, expected quality, perceived quality, perceived value, customer satisfaction, and loyalty. In 2022, the Company optimized the satisfaction measurement process by segmenting the respondents, leveraging multi-channel measurements and redesigning the marketing and service satisfaction survey questionnaire. The customer satisfaction rate of the year was 93.78%.

## Customer Complaint

To safeguard customers' rights and interests, the Company has established diversified customer communication channels including the corporate website, complaint hotline, email, mail, and interview. Following the *Regulations on Customer Complaint Management*, the Company has set up a customer complaint response mechanism, and implemented a first-point-of-contact accountability system. Complaints on internal violations, post-sales service, and products are taken by different departments, which are then dealt with in a standardized approach following the principles of "respond quickly, guaranteed investigation for every single complaint, timely feedback, correct and prevent". In 2022, the Company received 7 customer service complaints in total. All complaints were timely investigated, analyzed, and treated with a 100% response rate.



Complaint Management Process

In response to product quality related complaints, the Company has formulated the *8D Management Regulations*, the *Regulations on Product Fault (Failure) Feedback and Disposal*, and the *Product Quality Risk Control Measures*. Complaints are graded and close-loop problem-solving actions are taken according to

GB/T29076 Execution requirements for quality problem close loop of aerospace product, hence to minimize negative effects and customer damage resulted from quality issues, continue to improve customer satisfaction, meet and exceed customer expectations.

## CASE



In May 2022, overseas customer E experienced a string inverter failure, during which the chassis cover plate fell off. In response to the situation, a special team was set up and three solutions were proposed. By simulating the leakage and short circuit of bus capacitors, baking film capacitors, and charging combustible gas, the team conducted nearly 10 tests to verify the effectiveness of the solutions. After 105 days of collaborative efforts, the problem was effectively solved to customer's satisfaction.



## Digital Transformation

As the Company's business grows rapidly, operating costs are facing challenges. In order to improve the Company's core competitiveness, accelerate digital transformation, and ensure the resource input and decision-making efficiency along the digital transformation process, the Company has established the Digital

Transformation Management Committee, and developed an long-term investment plan for digitalization. The Company gradually evolves from being information-based to digitalized and intelligent, shaping a smart company that is online, shared, and transparent, enabling business restructuring and global leadership.

Digitalization 1.0 (Informatization) - Lay a solid informatization foundation and optimize systems.



Key measures

Streamline business flows and information flows; eliminate data silos; enable scenario-based data analysis and utilization; implement process reengineering and process optimization; improve process efficiency.

Digitalization 2.0 (Digitalization) - Integrate internal and external data to deliver business transparency.



Key measures

Integrate internal and external data through system synergy, intelligent manufacturing systems, and digital plants; deliver business transparency to enable digitalized management based on decision values by shaping a digitalization corporate culture.

Digitalization 3.0 (Intelligentization) - Empower decision-making with intelligent analytics.



Key measures

Empower business and assist in business decision-making with AI-based analytics; promote business model innovation and assist in business model upgrading; develop holistic manufacturing partnership.

# 03

## Safeguarding the Environment



### Energy Management

Sungrow started implementing ISO50001 Energy Management System and was accredited in 2017. The Company has established a full and effective set of energy management procedures, processes, and systems, while continuing to explore better solutions for energy management, driving energy consumption down by increasing management granularity, implementing energy-saving measures and technological transformation. The *Regulations on Consumption Reduction* standardizes daily energy consumption management, improves employees' consumption reduction awareness,

and comprehensively advocates green design, green production, and green operation, hence to create an environment-friendly and energy-saving business, reduce energy conservation, eliminate wastes, lower production and operating costs, and accelerate the sustainable and healthy development of the Company.

The Company's comprehensive energy consumption in 2022 was 14,407.57 tons of standard coal, an increase of 58% over 2021, mainly contributed by power consumption in the new Thailand Plant and capacity expansion of the Hefei Plant. The energy consumption per unit output value was 0.0899 tons of standard coal/MW, maintaining a downward momentum.

Year	Total Power Consumption (kWh/year)	Electricity as in standard coal (kg/year)	Total non-electrical consumption (as in standard coal: kg/year)	Overall energy consumption (as in standard coal: kg/year)	Energy consumption per CNY 10K of output value (as in standard coal: kg/CNY 10K)	Energy consumption per unit of product (as in standard coal: kg/kW)
2020	52973714	6510469	340504	6850973	3.55	0.0948
2021	72205295	8874031	267474	9141505	3.79	0.0907
2022	114337023	14052020	355554	14407574	3.58	0.0899

Name: 1. The standard coal conversion factor is subject to *GB/T 2589-2008 General principles for calculation of the comprehensive energy consumption*

2. The energy consumption per unit of product is calculated based on the rated power of products

#### Energy Consumption of Sungrow and Affiliates

## CASE



Unit power consumption before reconstruction (kWh)	Unit power consumption after reconstruction (kWh)	Unit power saving (kWh)	Annual power saving (kWh)
180.00	101.25	78.75	4081927.50

#### Energy-saving renovation of the inverter testing equipment

The original PV150 parallel loading mode was reconstructed to the current PV180 independent loading mode. After the reconstruction, power consumption reduced from 56.25 kWh to 22.5 kWh, with a single load lasting for 2 hours. After hardware and software upgrade, the platform working time reduced from 3 hours to 2 hours, enabling an energy saving of 78.75 kWh per test and an annual saving of 4,081,927.5 kWh. With refined management and renovation of lighting, air conditioning, air compressors, and aging platforms, the Company saved energy by at least 4,418,107.35 kWh in 2022.

The Company has joined the EP100 Initiative, committing to deploy the energy management system by 2028 and increase energy efficiency by at least 35% on top of the 2018 benchmark. In 2022, the Company launched multiple energy-saving and emission reduction activities to progress refined energy management driven by technology and management.





### Technology energy saving

In terms of PV power station management, the Company's overall PV power generation increased by 1942115 kWh in 2022.

In terms of technology-driven energy conservation, grid-connection of the 5 MW/8.1 MWh liquid-cooling system in the industry park, module replacement of the PCB rooftop power station and other renovation efforts contributed to an increase in PV power generation. After grid-connection of the industrial park, daily power generation increased by 8,000 kWh, and annual power generation increased by 1,712,000 kWh (with grid-connection started in June). After the PCB roof renovation, annual power generation increased by 101,583 kWh.



### Manage Energy Conservation

In terms of management-driven energy conservation, multiple energy conservation meetings were held, production schedules were optimized for peak load shifting. Professional operation and maintenance was organized for power stations owned by the headquarters to clean the PV modules and regularly eliminate defects. In 2022, total power generated by power stations owned by the headquarters increased by 128,532 kWh.



## Green Operation

### Green Products

In a broad sense, green products refer to those produced, used, and disposed in line with environmental requirements, those posing little to no harm to the environment, and those that can be reused or recycled. Being a national level green plant and a demonstration enterprise of green design for industrial products announced by the Ministry of Industry and Information Technology, Sungrow follows ISO14067, ISO14044, and ISO14025 standards for product carbon footprint accounting and EPD certification, and evaluate potential impacts on climate and environment throughout the entire product lifecycle. As of today, the Company has completed carbon footprint evaluation and certification of two

main inverter products, with carbon footprint and EPD certification of three different types of inverters (centralized, string, and residential) in progress in parallel. Based on the accounting results, the Company sorted out materials with high emissions, and developed carbon reduction plans for key materials. In consideration that the Company's products are intended for the global market, Sungrow proactively implements RoHS/REACH management following IECQ QC 080000:2017 to ensure compliance with the EU regulations. No feedback on RoHS/REACH violation was received from customers or customs.



### Raw Materials Sourcing

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The Company takes a responsible approach to source major product materials by comprehensively considering the environmental impacts of raw materials and strictly restricting the use of hazardous substances.



### In Design and Manufacturing

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Taking a containerized product for example, in order to save metal raw materials and reduce tonnage for ocean and land shipping, weight reduction designs were made to the container. After three rounds of simulation, the weight was reduced from 6.5 tons to 3.5 tons by adjusting the materials and beam structure, welding corrugated plates to open containers, and changing 8-layer stacking to 4-layer, which enabled a 29.2% reduction in raw materials.



### In Packaging

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Sungrow comprehensively rolls out the use of environment-friendly materials and recyclable packaging materials, such as gradually replacing paper and plastic packaging with EPE, EPP and other buffering materials. The Company also encourages suppliers in the nearby to abandon disposable packaging and use recyclable turnover shelves or crates instead.



### In Shipping

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In domestic land shipping and ocean shipping, the Company implants the low-carbon concept throughout the entire business process. For land shipping, new energy fuel trucks are preferred; for ocean shipping, liners with the shortest range and larger container capacity are preferred in order to reduce energy consumption. High energy consuming transportation methods such as air freight is avoided.



### In Use

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When put in operation, modules of the 1+X centralized inverter run independently. In case one unit fails, the other units remain normal operation, ensuring a higher uptime rate of the power station and minimizing power generation loss. In addition, plug-and-play modular design is adopted for key components, which allows them to be easily replaced by two persons, hence to improve op&m efficiency by more than 70% and greatly reduce op&m cost.



### In Recycling

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The Company leverages no-cost plants to advance the sorting, maintenance, testing, and demonstration of faulty equipment, display prototypes and R&D prototypes, thereby reducing energy consumption and enabling recycling.

## Green Building

With a focus on environment-friendly buildings, the Company strengthens the management of new building, guides all of the Company's construction work in process with the principles of green, recyclable and low carbon, and introduces the *Assessment standard for green building* (GB/T50378-2019) or the LEED certification to new constructions. For buildings without green building requirements, efficient and energy-saving HVAC systems are used, high-efficiency hardware and intelligent control strategies are preferred for lighting and electrical appliances.

The Sungrow Plaza that is about to be completed is built in accordance with the two-star requirements of the *Assessment standard for green building*. Sungrow Plaza mainly consists of offices, canteens, and garages, in which the following environment measures are taken:

rainwater recycling, water-saving irrigation, durable decorative materials, efficient lighting appliances, intelligent lighting control systems, PV systems, remote measurement systems, and high-strength materials.

For buildings without green building requirements, PV power stations are built on the roofs of industrial plants, energy-saving materials such as aluminum zinc plated rock wool sandwich panels and 6+12A+6LOW glass are used on the exterior walls to reduce heat conduction. Energy saving lamps are used in the plant area, energy-saving transformers in the distribution room, and water-saving sanitary appliances in toilets. For air conditioning in shopfloors, VRV, water-cooled screw type, or centrifugal systems are used to reduce energy consumption. All elevators used are products with a Level A energy rating.

## Green Mobility

Sungrow advocates green mobility and is replacing fuel-base vehicles with electric vehicles step by step. The Company has upgraded all shuttle buses to electric vehicles by now, and gives preference to hybrid vehicles or new energy vehicles when purchasing new vehicles for business purposes. Nearly 50% of employee commuting has gone green (electric bus, subway, public transportation). To address the needs of new energy vehicles, the Company has been upscaling new energy charging infrastructure in the campus, and requested a minimum of 20% parking spaces to be equipped with charging piles for parking lots newly built. Parking spaces with charging piles account for 50% of the total parking space in Stage III of the Industry Park, and charging piles are being added to parking spaces in the old campus. In order to advocate the low-carbon and environmental protection concept, the Company has raised the standard of public

transportation subsidies, to encourage employees to consider green commuting options such as the subway. Sungrow plans to include business use of private EV into the subsidy range in 2023.

## Water Resource Management

The Company's water supply comes from the municipal tap water network and the fire water network, which is mainly used for utilities and office, canteen, and fire emergencies. The Company has introduced a 3rd-party company and set up the Water-Saving Leadership Team to formulate water conservation development plans and water-saving plans, optimize water-saving management systems and daily water conservation efforts, carry out

water consumption data collection, analysis, water-saving communication and training. Through the 3rd-party company, the Company advances water-saving technological transformation and introduces water-saving facilities, and has completed the water balance test and other related work. In 2022, the Company was awarded the title of Water-Saving Enterprise in Hefei.

## Pollutant Control

The Company introduced and established ISO14001 Environmental Management System in 2010, developed a series of environmental management procedures and system documents for environmental aspects identification and control, waste management, pollution control facilities management and so on, providing a variety of grounds and support for the Company's environmental efforts, and ensuring the effective progress of environmental protection work across the years.

In 2022, the Company expanded the coverage of ISO 14001 to assist in the continuous improvement of environmental targets. In 2022, Sungrow Power Supply Co., Ltd. was not involved in any environmental pollution incident or punishment by ecology and environment authorities. The Company was included in the Positive List of Environmental Impact Assessment by the Bureau of Ecology and Environment of Hefei.

## Investment in Environmental Protection

The Company has long been committed to promoting the environmental governance level and pursuing long-term sustainable growth. By increasing investment in environmental protection publicity, optimizing processes, conserving resources, reducing waste, and lowering pollutant emissions, the Company achieves its pollution control and consumption reduction targets. In 2022, the Company spent CNY 7.29 million in environmental protection, an increase of approximately 109% over the previous year, mainly due to the investment in environmental protection infrastructure and increased op&m cost.

## Effluents Treatment and Discharge

The Company and affiliates discharge no industrial effluents in the production process. For domestic sewage generated, the Company has contracted a qualified third-party inspection service provider to monitor the quality on a regular basis. Septic tanks are cleaned according to the agreed schedule by the public sanitation service, making sure the Company's drainage meets the criteria of municipal sewage treatment plants and avoiding excess discharge.

Throughout operation, the Company has taken a number of measures to reduce water consumption, which mainly include advertising water-saving policies, attaching save-water signs at water taps, introducing detergent-free tableware cleaning equipment, reviewing contractors' water-saving performance, and increasing the use of chillers.

Year	Annual water consumption (ton)	Water consumption per unit production capacity (kg/kW)	Total water discharge (ton)	Annual COD emission (ton)	COD emission per unit production capacity (kg/GW)	Total ammonia/nitrogen emissions (ton)	Ammonia/nitrogen emission per unit production capacity (kg/GW)
2020	201217	3.73	160974	38.569	0.741	3.529	0.0674
2021	206133	2.81	164906	37.928	0.506	3.463	0.0459
2022	316713	2.73	253370	43.764	0.378	5.184	0.0447

## Solid Waste

Solid waste generated in Sungrow's daily operation includes industrial waste and domestic garbage. To minimize the environmental impacts of solid waste, the Company sorts, collects, stores and disposes industrial waste in accordance with local laws and regulations. The Company also proactively works with suppliers to lower the threshold for end-of-life waste recycling and promote the comprehensive disposal of industrial waste. In 2022, the resource recycling rate of the Company's general industrial solid waste reached 55.9%, a year-on-year increase of 6.9%. Industrial waste is included in a government regulatory platform for standardized storage, log-keeping and other management, hazardous waste is disposed by qualified hazardous waste disposal services, domestic garbage is collected and disposed by the municipal sanitation service on schedule. With the capacity release of Sungrow Energy Storage's new products and the operation of Sungrow Hydrogen, the volume of hazardous

waste increases. While ensuring compliance in disposal, Sungrow actively seeks for raw material substitution and adds recycling facilities to minimize hazardous waste generation.

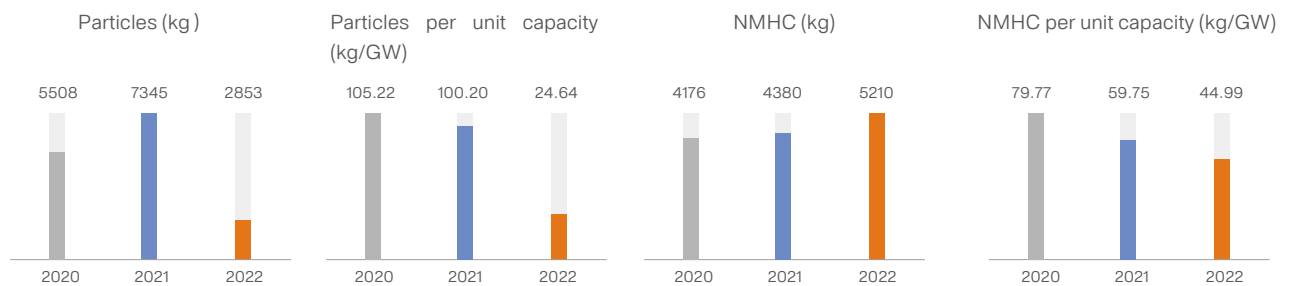
The Company keeps pushing waste reduction at work by all means, such as encouraging process innovation to enhance the development and introduction of environment-friendly materials, trying the best to make waste recyclable and harmless, improving product packaging design and protection to minimize packaging consumables, introducing reusable turnover boxes for logistics, exploring deeply in product development and pre-production to improve product recyclability and reduce resource consumption, and gradually advancing refined pre-sorting and classification of waste to improve the level of resource utilization in recycling.

Metrics	UOM	2022	2021	2020
Total waste generated	ton	1967.96	1406.02	751.34
Non-hazardous waste generated	ton	1778.49	1362.91	935.14
Non-hazardous waste recycled or regenerated	ton	764.87	/	/
Recycle rate of industrial waste	%	55.90	52.30	51.00
Non-hazardous waste harmlessly incinerated (including energy recovered)	ton	1013.62	/	/
Hazardous hazardous waste	ton	189.47	43.11	43.01
Hazardous waste disposed to the requirements of laws and regulations	ton	189.47	43.11	43.01
Environment- or ecology-related major fines	Per	0	0	0

## Emissions Reduction

At Sungrow, gas emissions mainly include particles generated in the welding process, non-methane hydrocarbons (NMHC) from the volatilization of device coating process raw materials, and the canteen oil fume. Gas emissions from production process are treated with professional waste gas treatment facilities, canteen oil

fume is treated with standard oil fume purification devices. The Company contracts a qualified third-party environmental inspection service to monitor waste gas outlets, and includes gas emissions in the annual application for pollution discharge permits.



For waste gas treatment of the Company's new projects, processes specified in the latest governance guidelines of ecology and environment authorities are prioritized. At the same time, low VOC raw materials are introduced and used to reduce VOC generation, existing waste gas treatment facilities are upgraded and renovated, traditional wet dust removal process is replaced by efficient dry filtration. As a result, the Company's overall waste gas

treatment capacity is increased, gas emissions are significantly reduced. The unit emission of particles decreased by 75.4% year-on-year, the unit emission of NMHC decreased by 24.7% year-on-year.

## Vibration Absorption and Noise Reduction

To provide a better work experience for employees and minimize impacts to communities in the surrounding, the Company requires that low noise variants should be prioritized during the selection of equipment. For vibrating and noise-generating equipment, vibration absorption foundations should be arranged. For noise-generating equipment, Equipment Department leverages the information system to keep an eye on the relevant information and schedule routine maintenance. In case of

exceptional situation, on-site personnel may also scan the code to report and request immediate treatment. For existing noise-generating equipment, comprehensive vibration reduction, sound insulation, sound absorption, and noise reduction measures are taken, such as adding dampers to the air duct outlets, building sound insulation enclosures, and using flexible connections.

## Ecological Conservation

When developing and constructing new energy power stations, Sungrow respects, conforms to, and protects nature, strictly implements relevant laws and regulations, proactively takes the impacts of decisions and activities on environment into consideration, and strengthens hazards prevention and control as well as environmental protection along the whole process. The Company has developed a comprehensive project environmental protection system covering project planning, preparations, initiation, review and commencement, including the

*Regulations on Project Initiation Management*, the *Regulations on Project Review Management*, and the *Regulations on Project Commencement Management*, to dynamically control the entire project period and key milestones. In project planning, unused land and abandoned land should be prioritized, so as to enable harmonious and sustainable development of new energy projects and ecological environment with reuse and composite use of wasteland and abandoned land.

Project site selection

Prioritize wasteland and abandoned land, verify prohibitions and restrictions in ecological environment protection, so as to identify the preliminary range of project site.

Project initiation and review

Rule out environment-related prohibitions in project development according to preliminary documents issued by competent authorities. For environment-related restrictions, organize professional evaluations to identify a feasible implementation plan, and optimize the project property line map on such a basis.

Pre-commencement

Obtain administrative approvals, such as EIA, water-related administrative permits (water conservation, flood assessment, etc.), approval for using forest/grassland/wetland, and composite project approval in advance. Carry out project construction within the scope of administrative approval, and prevent potential ecological impacts.

Project construction

The Company has developed the *Management Manual - Project EHS Management*, the *Regulations on Environmental Factors Identification, Environmental Impact Assessment and Control*, and other documents to advance project planning in accordance with the Safety Design chapter. Construction is strictly controlled within the designed land acquisition boundary that is identified with fences or barricades. For mountain projects, protective measures should be taken and interception/drainage ditches should be built according to the actual situation, to prevent water flows from over-washing the surface. For water surface projects, prevent oil leakage from polluting the water body. Wind power projects should maintain a minimum distance from the living environment, to prevent civil construction, lifting operation, and water surface piling from causing additional disturbance to the surrounding. In the meanwhile, an environmental factors control log should be maintained throughout the construction process, inspections and acceptance of green construction should be organized.

Besides environmental protection, the Company also values the livelihood concerns involved in the developing power station projects. For project construc-

tion as well as operation and maintenance, local labor should be given a priority so as to drive local economic development.



#### For agriculture-PV and fishery-PV complementary projects

Sungrow engages local agricultural authorities and agricultural research institutes to determine the feasibility and variety/breed selection. Farmers have the priority to rent the land for agricultural purpose, unless it is in a power-hazard area with electricity, they will generally prioritize renting back.



#### For mine rehabilitation projects

The Company assesses settlement stability in advance before commencing any new energy engineering, and includes backfilling of the mining area in project cost calculation. For special blocks, chain supports and other technologies may be utilized to achieve efficient land use.



#### In the case of project sites with cemeteries

Relocation of cemeteries should be preferably considered. If relocation is not practical, dedicated passages should be reserved for sacrifice activities, and a safe distance should be considered for fireworks used in sacrifice.

## CASE



In 2022, Sungrow's Soil Rehabilitation and PV Power Generation Integration Demonstration Project in Renhua of Guangdong Province was shortlisted for the Paulson Prize for Sustainability. The Paulson Prize aims to explore solutions to improve the natural ecological environment, address the imminent challenges of ecosystem degradation and biodiversity loss facing China, and promote harmonious coexistence between human and nature.





# 04

## Jointly Shaping Ecological Harmony



### Employee Development

#### Employee Rights and Interests

##### Employee Diversity and Equality

As a globally-operation organization, Sungrow values employee diversity and is committed to creating an inclusive and equal-opportunity workspace. The Company has formulated the *Management Procedure for Prohibiting Discrimination and Disciplinary Measures* to prohibit discrimination related to race, religion, gender, age, pregnancy, or disability in recruitment, promotion, and compensation. In the 2022 headcount, female accounted for 19.07%, including 171 female managers, accounting for 13.45% of total managers. 107 employees come from ethnic minority and 12 are disabled. The Company insists on a localized employment policy to create employment opportunities for local residents and promote local economic development. In 2022, Sungrow

had 900 local employees overseas, with a localized employment rate of 99.6%. Overseas subsidiaries formulate and implement localized policies based on local laws and regulations, and give priority to candidates from the area when recruiting management personnel and employees. The Company completely eradicates forced or compulsory labor and child labor in physical operation, has formulated the *Management Procedure for Child Labor and Underage Labor* to specifically prohibit child labor and forced or compulsory labor in recruitment and at work. This requirement is also communicated to all suppliers, with regular supervision and audit followed to ensure the compliance.

### Trade Unions and Democratic Management systems

Trade union, the employment dispute mediation committee, and workers' congress are set up in the Company to facilitate open, trusting and transparent two-way communication, and effectively safeguard employees' rights to know, participate and supervise. Employees can share opinions and make suggestions by various means, such as the OA platform, WeChat groups, the Sungrow Speak-up, the Warm Sunshine forum, cultural messengers, and organizational health surveys. The Audit

Division has formulated the *Regulations on Internal Audit and Supervision* as well as other policies to support the process. For appeals made, no one is allowed to ask for or find out the personal information of the appellant in order to secure the appellant's privacy and prevent the appellant from retaliating acts. The Company only investigates the facts and pushes for a resolution to improve employees' satisfaction and sense of belonging.

### Collective Agreement

Being people-oriented, the Company has entered a *Collective Agreement* with employee representatives to clarify requirements on work compensation, work safety,

female employee protection, skills training, work rest and holidays.

### Employee Data Protection

The Company has formulated the *Regulations on Employee File Management*, the *Confidentiality Policy*, and the *Work Rules for Confidentiality Supervision*, to

safeguard employees' privacy in recruitment, employee relations, and training.



#### Recruitment

Manage candidates information in an integrated way and prohibit storing the information on personal computers; hide candidate information in the database and apply passcode protection for viewing and exporting;

Candidates upload personal information to the onboarding data collection system directly.



#### Employee Relations

Assign a dedicated keeper for the employee file room; request OA approval from managers of the borrowing department and the file owner's department for borrowing employee files;

Maintain access permissions and configure menus in the system for relevant operators.



#### Training

Where an employee list is required when making internal announcements, simply include name, work ID, or other identifiable information.

## Human Resources Structure

As of the end of 2022, Sungrow had a total of 9,239 employees worldwide, an increase of 37.4% over 2021, including 7,477 male and 1,762 female. The Company

recruited 3,756 new employees in 2022, including 3,024 male and 732 female.

### A Young Team

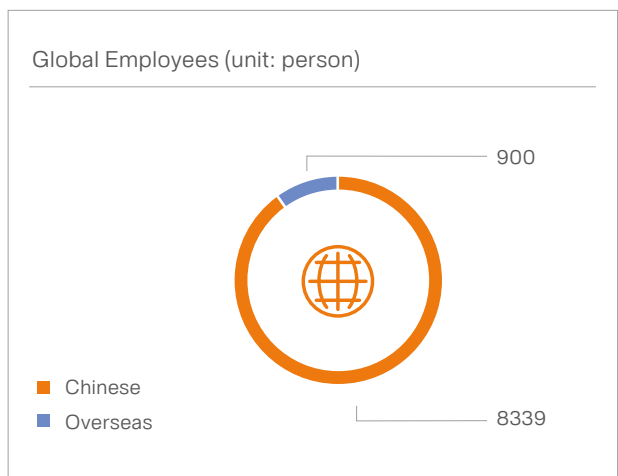
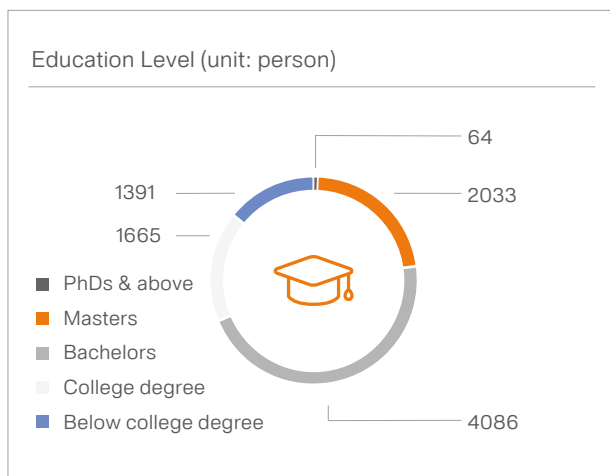
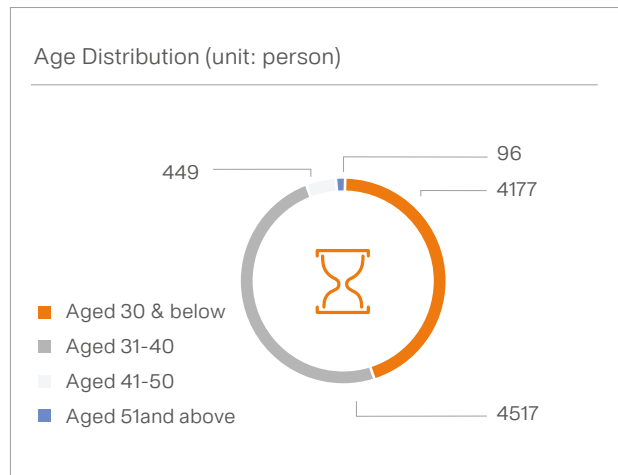
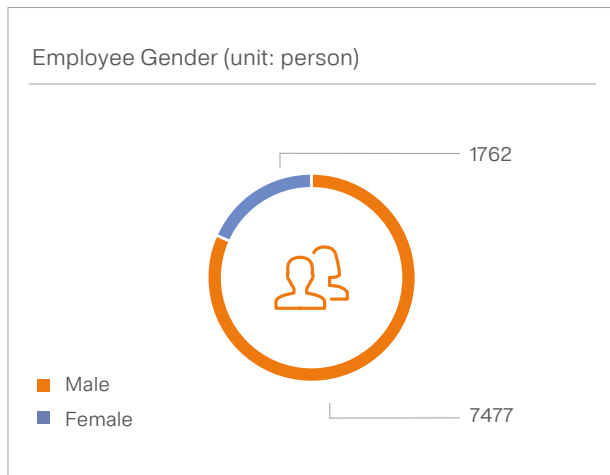
The Company attaches great importance to succession planning in human resources, encourages young people to take on core positions and inject new vitality into operations. As of the end of 2022, 8,694 employees were under the age of 41, accounting for 94.1% of the total headcount. Among new hires in 2022, 2,263 were aged 30 and below, 1,369 were aged 31 to 40, 106 were aged 41 to 50, and 18 were aged 51 and above.

### A Well Educated Team

With a focus on R&D, the Company keeps recruiting high-end human resources. At present, there are 64 doctorate holders in the Company (an increase of 42.2% year-on-year), 2,033 master's degree holders (an increase of 35.9% year-on-year), and the overall level of education background further improves.

### A Globalized Team

The Company actively builds a globalized team while advancing localized employment policies, creating employment opportunities for various regions around the world.



## Compensation and Benefit

### Compensation and Incentive Systems

With market pay as reference and following the compensation concept of “pay for position, pay for capability, and pay for performance”, the Company has established a value evaluation mechanism that is performance-oriented as well as capability- and position-based, and a value distribution mechanism aiming to reward unremitting value contributors, which includes job authority, salary, bonus, equity, benefit, medical assurance, and career opportunities, providing employees with competitive

compensation and benefit. In order to implement the diversified development strategy and motivate rapid business evolvement, the Company combines agile short-term incentive programs with medium to long term strategy-oriented incentive policies, applies differentiated performance and incentive strategies to different businesses, driving them to achieve strategic objectives and contributing to the sustainable development of the Company.

### Employee Benefits

The Company strictly implements the policy of paid leaves as well as the various statutory leaves, including parental leave and vacation to care for aged parents in hospital added in 2022. Employees are entitled to a diversified benefits system. In addition to basic benefits such as social insurance and housing provident fund, supplementary commercial insurance is provided for all employees, which cover death, disability, accidental medical treatment, hospitalization medical treatment, and serious illness. The Company also provides employees with diversified welfare programs, including flexible working hours, holiday benefits, health benefits, team building, and various subsidies.



Type of Benefits	Content	Coverage
Basic	Social insurance, housing fund, allowances	All employees
Care	Holiday benefits, high-temperature subsidy, wedding gift, baby gift, hospitalization visit, condolence, physical examination, travel, team building, female employee benefits, birthday gift, commercial insurance, paid holidays, long-term business trip allowance, transportation subsidy, employee shuttle bus, employee dormitory, working meal	All employees
Special	Settlement subsidy	Eligible employees

Sungrow’s diversified benefits

Region/Country	Type of Benefits
U.S.	401K plan; dental/ophthalmic/medical insurance plans; personal insurance and short/long-term disability insurance; FSA (Flexible Spending Account) Plan; annual leave and 2 additional days on top of statutory holidays; other statutory benefits
Europe	Meal voucher subsidy; transportation subsidy; birthday benefits; free office supplies such as coffee, fruit and snacks; statutory benefits; additional commercial insurance from Allianz/Cigna
Middle East	Team building benefits; benefits on holidays including Ramadan/Eid al Fitr/Women's Day/Eid al Adha/Christmas; birthday benefits; paid leave; employee and family visas; employee and family insurance

Localized benefits in overseas subsidiaries

## Career Development

### Equal Employment

The Company has passed the SA8000:2014 certification, and signed employment contracts with each and all employees. In 2022, Sungrow practiced the principle of "be business-focused and be globally oriented" in recruitment to assist in business success. The Company strictly follows the *Labor Law* and the *Law on Employment Contract* as well as the policies and regulations of the countries where the Company operates, and has formulated the *Regulations on Recruitment and Employment*. The Company values and safeguards the legitimate rights and interests of all employees, insists on people-orientation and equal employment, strictly

prohibits discriminative, exclusive, restrictive, or biased behavior, speech and text related to race, skin color, gender, age, language, religion, and ethnicity. The Company practices equal pay for equal work, and offers equal starting salary to employees of different genders. The Company complies with the same minimum salary standard, with the minimum salary in all regions higher than the local standard. Under the general principle of equal employment, the Company conducts the qualification review and due diligence of new hires in order to evaluate and verify candidates' integrity and competence.

### Career Development

In order to ensure the efficient operation of the Company's strategic objectives and organizational processes, promote the people-position match and effectively motivate, the Company has formulated the *Regulations on Employee Qualification Management*, offered dual channels (management and professional) for career development, and helped employees improve their professional areas. The Company organizes employee qualification certification every year, has defined specific promotion criteria as well as an open and fair evaluation process. In 2022, a total of 1,126 employees passed the qualification certification, among which 884 were promoted, accounting for a promotion rate of 78.50%.

The Company's management personnel mainly come from inside of the Company, internal employees are preferably considered when there is a job vacancy.

At the same time, the Company encourages effective flow of human resources internally, hence to make reasonable assignments, widen employees' growth channels, and address business needs. The Company has established an open internal rotation mechanism, allowing employees to realize personal values through internal recruitment, job transfer, rotation, and secondment. Employees are also offered the opportunities for overseas rotation, so as to develop a global vision.

## Employee Training

Following the employer brand philosophy of Green Mission, Better Life, Sungrow has established a three-level training architecture (the corporate level, the division/center level, and the department level) based on the Company's business category, operation stage and key strategic initiatives. The architecture takes full consideration of the Company's strategic plan and employees' personalized needs for growth, offers diversified learning opportunities and platforms according to the various training goals and needs, and makes use of internal and external knowledge resources to develop training courses that are in line with the Company's status quo and future needs, hence to accelerate employees' growth and shape a learning organization. In addition, the Sungrow Business School is set up to concentrate on the training and development of higher-level leadership and grow managers' strategic insight, business management, innovation and team management capabilities.

The Company has designed professional and personalized learning and development programs, such as the Sungrow New Generation for new hires from open

recruitment, the Sunflower Program for new hires from campus recruitment, the Management Start Line for management trainees, the Quick Transition Program for new managers, the Management Acceleration for front-line managers, and the Mainstays and the Advanced Leadership for middle and senior managers. In addition, the Going Global program, including spoken English improvement, English Level-up, Cross-Culture Talk, TOEIC training, helps employees to take on a globalized journey; the E-learning platform enhances knowledge sharing, provides a growth space for employees, and helps them realize their personal values.

In 2022, the Company leveraged online and offline learning platforms to expand training coverage, broaden learning scope, and enrich learning content. Centered around the value proposition of "accelerate employees' growth and fulfill employees' dreams", the Company facilitated training on leadership, professionalism, and versatility. In 2022, the Company invested more than CNY 15 million in training, achieved a training coverage of 100%, and an average training hours per capita of 28.62.

Corporate level	Leadership development  Induction for new hires  General capability improvement  Universal course development  Professional capability improvement  Learning platform	Leadership of executives/middle-level managers and their backup; management skills of front-line managers/high-potentials and their backup  General training for new hires recruited openly/from campus  General capability training  Corporate-level universal course development  Professional capability improvement programs  Sungrow E-learning
Division/Center level	Professional capability improvement	Various training activities to enhance the professional capabilities of divisions
Department level	Job skills improvement	System compliance training, job competency and knowledge/skills training, job skills training for new hires, other training required by customers

Training Hierarchy

## CASE



In 2022, Sungrow introduced the Quick Transition Program for new managers to help them make the role shift successfully and adapt to the new position. Three Quick Transition sessions were delivered in the year, 127 new managers were trained, and 116 trainees made open replies on the statement of work. Feedback was received from both trainees and their superiors that the Program enabled new managers to quickly make the transition and improve significantly, especially in areas such as assigning tasks to subordinates, communicating with others, and management thinking.



## Employee Care

### Work-Life Balance

Sungrow continually enriches the life of employees by improving hardware facilities and planning a range of cultural and sports activities, creating good opportunities and conditions for employees to develop interests and hobbies, and promote work-life balance. The Company has set up an employee development center consisting of library, gym, recreational room, badminton court, table tennis court, dance room, band rehearsal room, and counseling room. A number of organizations, including the Joy Run Club, bands, and other sports associations are set up, with a variety of competitions held throughout the year. In addition, the Company pays attention to employees' mental well-being, and sets up a counseling hotline to help employees relieve stress.

As the year 2022 marked the 25th anniversary of Sungrow, the Company launched a number of cultural activities. Flexible work hours were introduced to create

an agile work atmosphere and stimulate vitality and creativity at work. A number of effective employee experience improvement actions were taken to implement the service concept of "You care about work, I care about you", which provided to employees with warm service experience and improved their satisfaction. Family leave was introduced for employees in special positions, and financial assistance was provided to employees suffering from major illnesses.

### Caring for Female Employees

The Company values the special rights and interests of female employees by taking a number of assurance measures. Female employees are entitled to marriage leave, breastfeeding leave and maternity leave up to statutory standards; Mommy's Rooms are set up for those in breastfeeding period and dedicated seats are provided in employee canteens for those in pregnancy; commercial Female Health Insurance is offered to all female employees and female-specific items are included in physical examinations for female employees; monthly women-only allowance is provided and exclusive

activities in various forms are held for female employees. In 2022, a total of 305 employees enjoyed parental leaves, including 311 male and 56 female. The return-to-work rate was 100% for both male and female employees, and those who had returned to work for more than one year accounted for 91% (male) and 86% (female).

### Employee Service

The Company offers respecting, enthusiastic, considerate and efficient employee services, and organizes monthly/annual satisfaction surveys to widely collect

employees' opinions and satisfy their personalized needs to the maximum extent.

#### Catering supply



The Company operates all canteens in a standard way, makes sure food safety is under control at all times by taking a number of measures, including testing pesticide residue of supplies, taking food samples, maintaining food safety traceability, creating well-lit and clean kitchens. Sungrow offers a wide selection of meals to address the different needs of employees, holds the Gourmet Festival and other activities, and surveys employee dining experience on a quarterly basis. Employees' satisfaction on catering supply scored between 75 and 85 last year.

#### Accommodation



Sungrow provides free accommodation for employees, with a per capita space exceeding 10 square meters. Regular inspections are conducted to the dormitory to rule out safety hazards and ensure the proper operation of supporting facilities. The Company also provides accommodation subsidies.

#### Travel and commuting



To cope with the market-oriented and self-service scenarios, Sungrow leverages business travel platforms to facilitate employee travel. Shuttle buses are provided for in-city commuting, and the vehicles pick and drop briefly to avoid traffic concerns in the plant area.

#### Living facilities



According to the actual needs of employees, the Company sets up charging poles, supermarkets, barbershops, vending machines in the campus to facilitate employees, and coordinates resources to provide more parking spaces for employees.



# Operational Safety

## Safety Management

Throughout the operation process, Sungrow insists on the guidelines of “being people-oriented, placing safety first, and promoting harmonious development”, prioritizes employees’ safety and health, and continuously expands coverage of the ISO 45001 system. With the help of advanced system models, the Company optimizes safety management modes and encourages the participation of all employees in work safety.

Sungrow has established a plan to identify environmental and occupational health risks within the Company, regularly updates, identifies, and evaluates changes in risk and related impacts in the operation process. The Company has also established a change management processes for critical EHS elements, so as to provide safety prevention guidance when introducing new equipment, facilities, technology, and materials. In addition, the Company updates the EHS regulatory standard library on a regular basis, and timely releases interpretation of important regulatory standards, in order

to promote the rapid implementation of standards.

In 2022, the Company facilitated training on the *Production Safety Law* to 208 middle-level and senior management personnel, and offered online learning to all employees, aiming to comprehensively improve their understanding of safety and strengthen company-wide awareness of production safety.

In daily production and operation, Sungrow has released procedures for rewarding rationalization suggestions and improvement proposals, in order to encourage and attract employees to exercise their sense of ownership and participate in the Company's safety management. With positive incentives, the Company intends to push employees to proactively watch for and identify potential risks at workspace and enhance safety vigilance. In 2022, 117 rationalization suggestions and 664 improvement proposals were received from employees, an increase of 37.6% and 18.6% respectively over the previous year.

### Safety Investment

Paying great attention to employees' health and safety, Sungrow constantly increased investment in safety management and safety facilities in recent years. In 2022,

the Company invested CNY 38.22 million in safety facilities and safety operation, an increase of 46.1% over 2021, accounting for a per capita increase of 6.1%.

Safety Investment (in CNY 10K)



Per Capita Safety Investment (in CNY 10K)



### Learning from Accidents

In order to keep improving workplace safety and prevent employees from experiencing possible pain and trauma, the Company conducts regular inspections in the plant area to look for hidden dangers and follow up the timely rectification of problems found. In case of work-related injuries, occupational diseases, and near misses, the occupational health and safety management team

immediately starts investigating the cause of the accident, work out improvement and corrective measures as soon as possible, and constantly follows up till the measures are implemented. Accident investigation reports are announced company-wide to alert all employees and prevent similar accidents from happening again.

Name	Total Working Hours	Major Accidents	General Accidents	Accidents with Serious Injuries	Accidents with Minor Injuries	Total Lost Worktime Rate
Sungrow	11756601	0	0	1	9	0.851
Sungrow Energy Storage	1705739	0	0	0	1	0.586
Sungrow Hydrogen	175302	0	0	0	1	5.704
Sungrow Renewables	2684700	0	0	0	0	NA
Sungrow FPV	355814	0	0	0	0	NA
Sungrow E-Power	550269	0	0	0	0	NA
Sungrow (Nanjing)	338853	0	0	0	0	NA
Sungrow (Shanghai)	336987	0	0	0	0	NA
India Plant	337272	0	0	0	0	NA
Thailand Plant	260399	0	0	0	0	NA

Note: NA = Not Applicable

## Occupational Health

The Company strictly abides by the *Law on the Prevention and Control of Occupational Diseases* to prevent, control and eliminate occupational disease hazards, prevent and treat occupational diseases, and safeguard employees' health and related rights and interests. In accordance with national regulations, Sungrow identifies occupational disease hazards and conducts workplace inspections on a regular basis, promptly discloses the results to those exposed to hazards, and reports the situation to the occupational disease hazard management platform. The Company facilitates pre-job and on-job occupational safety and health training to employees in positions with occupational hazards, making sure they correctly use relevant occupational disease protection equipment and

personal supplies.

For employees exposed to hazards, the Company organizes pre-job, on-job and off-job physical examinations in accordance with health monitoring requirements. Proper arrangements are made for those with related occupational contraindications, making sure they are not involved in hazard-exposed operations. Employees' occupational health records are maintained in the cloud, so that employees can be instantly informed of the related occupational hazards and complete the occupational disease examination conveniently. In 2022, all employees of Sungrow and its affiliates received physical examinations, and transfers were arranged for those with related occupational contraindications.

## Capacity Building

To refresh employees' safety knowledge and skills, Sungrow offers extensive communication and training every year, including safety training for new employees and featured courses covering electrical safety, first aid, special equipment, environment management, chemical safety, and hazardous waste disposal. The average

training hours per capita on occupational health and safety in 2022 was 15.85. In addition, the Company supports personalized safety demands of employees, and coordinate resources to provide them with the required training.

To enhance safety awareness in daily work, the Company posts educational tweets on topics closely related to employees' work, such as electrical safety, traffic safety, occupational disease prevention and treatment, and precautions for high-temperature operation, allowing employees to get more EHS knowledge and improve their response to emergencies. In 2022, the Company held

emergency skills competition, safety knowledge contest, and fire drills, refreshed employees' understanding with fun activities. The Smart Safety Experience Hall will be put into operation in the near future, which will provide more employees with multidimensional perspectives on safety awareness and improve the effectiveness of safety training.

## Emergency Management

Emergency plan plays a vital role in protecting all employees. The Company timely updates and reports the Emergency Plan every year, has formulated the *Emergency Preparedness and Response Control Procedure* to actively promote the development of its emergency response system. Sungrow has set up a safety emergency management team to ensure quick response to emergencies, including allocating resources and providing countermeasures.

In 2022, the Company conducted 45 EHS drills targeting high-risk and accident-prone items in EHS risk identification. The drills covered 1,790 person-time, an increase of 71.2% year-on-year. To improve emergency responsiveness, the Company enforces standardized management of emergency supplies and increases emergency supply spots to supplement emergency supplies in the plant area.



## Contribution to Communities

Sungrow practices sustainability in operation and leverages its business advantages and resources to improve the lives of residents in the surrounding, and contribute to local communities. The Company collaborates with governments, customers, enterprises, and non-profit organizations in various countries to launch a number of activities, including rural revitalization, disaster assistance, and public welfare donations, so as to benefit the communities along the Company's operations. In order to progress the public welfare volunteer service effectively, ensure the rational and efficient use of public welfare funds, and practically fulfill corporate social responsibilities, the Company formulated the *Regulations on Managing External Donations in 2022*, developed implementation plans for public welfare products, and empowered public welfare volunteer service in the

aspects of system, process, and resources. Making full use of its advantages and professional capabilities, the Company rolled out public welfare volunteer programs in ecology and environment protection, support for education, technology and human resources, poverty alleviation, community growth, and disaster assistance. With 11,000 suitable trees and edible bamboo planted cumulatively, the Sun Forest program has been included in *China's Sustainability Cases in Industrial and Information Technology* released by China Federation of Industrial Economics. In addition, the Company set up a dedicated public welfare fund and launched the Sungrow Global Volunteer Service Program, to repay the care and support received from society. Throughout the year, the Company made a total donation of CNY 7.48 million.

## A Dedicated Public Welfare Fund

On September 5, in response to the theme of the Charity Day of China — Participating in Charity Efforts, Spreading Truth, Kindness and Beauty, Sungrow set up a dedicated public welfare fund of CNY 10 million at Hefei Charity Federation to support the Federation’s exploration of goodness practices under common prosperity. During

the reporting period, the Company donated scholarship to Chengguan No. 5 Primary School in Jianhe County and Changqing No. 2 Primary School in Danzhai County of Guizhou Province through the Federation, in order to promote rural education.

## Sungrow Volunteer Services

The Company introduced the Volunteer Management Platform and launched the Global Volunteer Service Week program. From November 29th to December 5th every year, volunteers may pick an area that is closely related to their functions, and participate in volunteer activities worldwide in the same theme. With a focus on ecology and environment protection, a number of activities were held in Hefei, Beijing, Shanghai, Munich, San Francisco, and Phoenix, including the Plastic Workshop, Canvas Shoes Painting, community renovation, Clean Park, and Vegan Week. Currently, there are 230 registered volunteers in the Company. In the future, Sungrow will further optimize the volunteer management system, plan diverse global activities, expand the number of registered volunteers and increase volunteer service hours.



## Poverty Alleviation

Sungrow proactively interacts with the local government of where the Company operates, surveys and visits impoverished areas and population. In 2022, the Company offered assistance to the Vocational and Technical High School in Lingbi County of Anhui Province and the Saryoba Middle School in Singapore, donated funds to renovate the village, school, water tower, and clinic in Saryoba.

## Community Development

Sungrow closely integrates social responsibilities with corporate development, and proactively responds to the national strategy of rural revitalization. Sungrow Renewables donated a 200 kW residential PV power station in Jiulianshan of Fuyu City, to help residents improve their quality of life and enable joint development with the local

community. In remote areas such as Gansu and Qinghai, the company set up Sungrow Smart Classrooms and Sungrow Elderly Care to watch for the growth and education of vulnerable children as well as the physical and mental health of the elderly.

## Disaster Recovery Assistance

In 2022, the Company donated supplies to Shaanxi, Jilin, Hunan (Changde City) and Anhui (Huainan City).

## Looking into the Future



Upholding the mission of “Clean power for all” and maintaining focused on new energy sections including solar energy, wind energy, energy storage, electricity, and hydrogen energy, Sungrow collaborates with internal and external stakeholders to assist in the global transformation towards a green and low-carbon society, and promote the delivery of the United Nations 2030 Sustainable Development Goals.

In the future, the Company will optimize the sustainability management system, integrate the corporate strategy and functional businesses with the sustainable development, advance sustainability from the decision-making level, the management level, and the execution level, enhance communication with stakeholders and prioritize efforts in key topics. The Company will seek for ISO50001 certification for all major sites with a minimum annual increase of 10% in green power consumption, strengthen assessment of climate and environmental impacts throughout the product lifecycle, promote all manufacture-related suppliers to sign the *Supplier Code of Conduct*, drive the sustainable development of the industrial chain, and continuously enhance the development resilience of ourselves and partners in a complicated environment.

Sungrow will also integrate the sustainability philosophy with the corporate culture, spare no efforts to build a sustainable culture that is innovative, inclusive and empowering, practice a responsible and sustainable business model, and actively contribute to the society. Together, we wish to implement sustainable development in our global business operation through an optimal management mechanism and the joint efforts of all Sungrow employees.



# List of Main Organizations

Full name	Abbreviation
Sungrow Power Supply Co., Ltd.	Sungrow
Sungrow Renewables Development Co., Ltd.	Sungrow Renewables
Sungrow Energy Storage Technology Co., Ltd.	Sungrow Energy Storage
Sungrow FPV Sci.& Tech.Co.,Ltd.	Sungrow FPV
Hefei Sungrow E-Power Technology Co., Ltd.	Sungrow E-Power
Sungrow Hydrogen Sci.&Tech.Co.,Ltd	Sungrow Hydrogen
Sungrow Power (Shanghai) Co., Ltd.	Sungrow (Shanghai)
Sungrow Power (Nanjing) Co., Ltd.	Sungrow (Nanjing)
SUNGROW DEVELOPERS INDIA PRIVATE LIMITED	India Plant
SUNGROW DEVELOPERS(THAILAND)CO.,LTD.	Thailand Plant



# Appendix

## GRI Content Index

Statement of use	Sungrow has reported in accordance with the GRI Standards for the period January 1 to December 31, 2022
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI sector standard(s)	No applicable sector standard

GRI Standard / Other Resources	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
<b>General Disclosures</b>					
<b>GRI 2: General Disclosures 2021</b>	2-1 Organizational details	About Us; Global Presence			
	2-2 Entities included in the organization's sustainability reporting	List of Main Organizations			
	2-3 Reporting period, frequency and contact point	About the Report			
	2-4 Restatements of information	Refer to the respective sections of the Report			
	2-5 External assurance	Independent Assurance Statement			
	2-6 Activities, value chain and other business relationships	About Us; Global Presence; Sustainable Supply Chain			
	2-7 Employees	Employee Development			
	2-8 Workers who are not employees	Employee Development	2-8-a 2-8-b 2-8-c	Confidentiality constraints	Not to be disclosed for confidentiality reason
	2-9 Governance structure and composition	Corporate Governance			
	2-10 Nomination and selection of the highest governance body	Corporate Governance			
	2-11 Chair of the highest governance body	Corporate Governance			
	2-12 Role of the highest governance body in overseeing the management of impacts	Chairman's Statement; Sustainability Management			
	2-13 Delegation of responsibility for managing impacts	Chairman's Statement; Sustainability Management			
	2-14 Role of the highest governance body in sustainability reporting	Chairman's Statement; Sustainability Management			
	2-15 Conflicts of interest	Corporate Governance			

GRI Standard / Other Resources	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
	2-16 Communication of critical concerns	Sustainability Management			
	2-17 Collective knowledge of the highest governance body	Sustainability Management			
	2-18 Evaluation of the performance of the highest governance body	Corporate Governance; Sustainability Management	2-18-b 2-18-c	Confidentiality constraints	Not to be disclosed for confidentiality reason
	2-19 Remuneration policies	Corporate Governance			
	2-20 Process to determine remuneration	Corporate Governance			
	2-21 Annual total compensation ratio	Omitted	2-21-a 2-21-b 2-21-c	Confidentiality constraints	Not to be disclosed for confidentiality reason
	2-22 Statement on sustainable development strategy	Chairman's Statement			
	2-23 Policy commitments	Business Ethics; Sustainable Supply Chain; Employee Development			
	2-24 Embedding policy commitments	Business Ethics			
	2-25 Processes to remediate negative impacts	Business Ethics			
	2-26 Mechanisms for seeking advice and raising concerns	Business Ethics			
	2-27 Compliance with laws and regulations	Refer to the respective sections of the Report			
	2-28 Membership associations	External Engagement and Initiatives			
	2-29 Approach to stakeholder engagement	Sustainability Management			
	2-30 Collective bargaining agreements	Employee Rights and Interests			
<b>Material Topics</b>					
<b>GRI 3: Material Topics 2021</b>	3-1 Process to determine material topics	Sustainability Management			
	3-2 List of material topics	Sustainability Management			
<b>Economic Performance</b>					
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	Sustainability Management			
<b>GRI 201: Economic Performance 2016</b>	201-1 Direct economic value generated and distributed	A Recap of 2022; Annual Report			
	201-2 Financial implications and other risks and opportunities due to climate change	Special Feature: Responding to Climate Change			
	201-3 Defined benefit plan obligations and other retirement plans	Employee Benefits			
	201-4 Financial assistance received from government	Refer to the Annual Report			



GRI Standard / Other Resources	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
<b>Market Presence</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Management; Employee Development			
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage 202-2 Proportion of senior management hired from the local community	Employee Development  Employee Development			
<b>Indirect Economic Impacts</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Management; Contribution to Communities			
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported 203-2 Significant indirect economic impacts	Contribution to Communities  Contribution to Communities			
<b>Procurement Practices</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Management; Sustainable Supply Chain			
GRI 204: Procurement Practices 204	204-1 Management of material topics	Sustainable Supply Chain - Sustainable Procurement			
<b>Anti-corruption</b>					
GRI 3: Material Topics 2021	3-3 Proportion of spending on local suppliers	Sustainability Management; Anti-corruption			
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption 205-2 Communication and training about anti-corruption policies and procedures 205-3 Confirmed incidents of corruption and actions taken	Anti-corruption  Anti-corruption  Anti-corruption			
<b>Anti-competitive Behavior</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Management; Business Ethics			
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Business Ethics			
<b>Energy</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Management; Energy Management			
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Energy Management	302-1-d	Not applicable	The Company is not involved in the sale of internal energy

GRI Standard / Other Resources	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
GRI 302: Energy 2016	302-2 Energy consumption outside of the organization	Omitted	302-2-a 302-2-b 302-2-c	Information unavailable	The Company is involved in many business relations and value chain nodes, hence it is not feasible to consolidate the actual external energy consumption
	302-3 Energy intensity	Energy Management			
	302-4 Reduction of energy consumption 302-5 Reductions in energy requirements of products and services	Energy Management Energy Management			
<b>Water and Effluents</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Management; Green Operation; Pollutant Control			
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Green Operation; Pollutant Control			
	303-2 Management of water discharge-related impacts	Green Operation; Pollutant Control			
	303-3 Water withdrawal	Green Operation; Pollutant Control	303-3-a 303-3-b 303-3-c	Information incomplete	The Company collects total water consumption data only. Water withdrawal by source or by fresh water/other water as well as water withdrawal in areas with limited water resource are not quantified
	303-4 Water discharge	Pollutant Control	303-4-a 303-4-b 303-4-c	Information incomplete	Detailed water discharge data not collected
	303-5 Water consumption	Pollutant Control	303-5-b 303-5-c 303-5-d	Information incomplete	Detailed water consumption data not collected
<b>Emissions</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Management; Special Feature: Responding to Climate Change			
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Special Feature: Responding to Climate Change - Metrics and Targets			
	305-2 Energy indirect (Scope 2) GHG emissions	Special Feature: Responding to Climate Change - Metrics and Targets			
	305-3 Other indirect (Scope 3) GHG emissions	Omitted	305-3-a 305-3-b 305-3-c 305-3-d 305-3-e 305-3-f 305-3-g	Confidentiality constraints	As the Company is involved in many nodes along the value chain, Scope 3 data is still being collected and verified.

GRI Standard / Other Resources	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
	305-4 GHG emissions intensity	Omitted	305-4-a 305-4-b 305-4-c 305-4-d	Information unavailable	To reflect Scope 3 emissions comprehensively and truthfully, the relevant information will be disclosed at an appropriate time. The Company completed Scope 3 inventory in 2021 and 2022 and passed third-party verification. We are currently working with upstream and downstream stakeholders to take emission reduction measures and drive emission down throughout the entire value chain.  GHG emission intensity by product is not calculated due to the large number of products
	305-5 Reduction of GHG emissions	Special Feature: Responding to Climate Change - Metrics and Targets			
	305-6 Emissions of ozone-depleting substances (ODS)	Omitted	305-6-a 305-6-b 305-6-c 305-6-d	Not applicable	The Company was not involved in significant emission of related gases in the reporting period; therefore, the data is not collected
	305-7 Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	Omitted	305-7-a 305-7-b 305-7-c 305-7-d	Not applicable	The Company was not involved in significant emission of related gases in the reporting period; therefore, the data is not collected
<b>Waste</b>					
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	Sustainability Management; Pollutant Control			
<b>GRI 306: Waste 2020</b>	306-1 Management of material topics	Pollutant Control			
	306-2 Waste generation and significant waste-related impacts	Pollutant Control			
	306-3 Waste generated	Pollutant Control			
	306-4 Waste diverted from disposal	Pollutant Control			
	306-5 Waste directed to disposal	Pollutant Control			
<b>Supplier Environmental Assessment</b>					
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	Sustainability Management; Sustainable Supply Chain			
<b>GRI 308: Supplier Environmental Assessment 2016</b>	308-1 New suppliers that were screened using environmental criteria	Sustainable Supply Chain			

GRI Standard / Other Resources	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
GRI 308: Supplier Environmental Assessment 2016	308-2 Negative environmental impacts in the supply chain and actions taken	Sustainable Supply Chain	308-2-a 308-2-b 308-2-c 308-2-d	Confidentiality constraints	Not to be disclosed for confidentiality reason
<b>Employment</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Management; Employee Development			
GRI 401: Employment 2016	401-1 New employee hires and employee turnover  401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees  401-3 Parental leave	A Recap of 2022; Equal Employment  Employee Care  Employee Care	401-1-b	Confidentiality constraints	Not to be disclosed for confidentiality reason
<b>Labor/Management Relations</b>					
GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Management; Employee Development			
GRI 402: Labor/Management Relations 2016	402-1 Minimum notice periods regarding operational changes	Corporate Governance; Employee Development			
<b>Occupational Health and Safety</b>					
2021 GRI 3: Material Topics	3-3 Management of material topics	Sustainability Management; Employee Development			
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system  403-2 Hazard identification, risk assessment, and incident investigation  403-3 Occupational health services  403-4 Worker participation, consultation, and communication on occupational health and safety  403-5 Promotion of worker health  403-6 Promotion of worker health  403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships  403-8 Workers covered by an occupational health and safety management system  403-9 Work-related injuries	Safety Management  Safety Management  Occupational Health  Capacity Building; Safety Management  Capacity Building  Employee Care; Occupational Health  Occupational Health  Quality Management  Operational Safety	403-8-a	Information unavailable	The information is currently unavailable, and cannot be disclosed completely

GRI Standard / Other Resources	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
	403-10 Work-related ill health	Safety Management	403-10-b 403-10-d 403-10-e	Information unavailable	The information is currently unavailable, and cannot be disclosed completely
<b>Training and Education</b>					
<b>GRI 3: Material Topics 2021</b>	3-3 Management of Substantive Issues	Sustainability Management; Employee Development			
<b>GRI 404: Training and Education 2016</b>	404-1 Average hours of training per year per employee  404-2 Programs for upgrading employee skills and transition assistance programs  404-3 Management of Substantive Issues	Employee Training  Career Development  Employee Development	404-1-a	Information unavailable	Average hours of training is not split by gender and employee category
<b>Diversity and Equal Opportunity</b>					
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	Sustainability Management; Employee Development			
<b>GRI 405: Diversity and Equal Opportunity 2016</b>	405-1 Diversity of governance bodies and employees  405-2 Ratio of basic salary and remuneration of women to men	Corporate Governance; Human Resources Structure  Compensation and Incentive Systems	405-2-a	Confidentiality constraints	Not to be disclosed for confidentiality reason
<b>Non-discrimination</b>					
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	Sustainability Management; Employee Rights and Interests			
<b>GRI 406: Non-discrimination 2016</b>	406-1 Incidents of discrimination and corrective actions taken	Employee Rights and Interests			
<b>Child Labor</b>					
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	Sustainability Management; Employee Rights and Interests; Sustainable Supply Chain			
<b>GRI 408: Child Labor 2016</b>	408-1 Operations and suppliers at significant risk for incidents of child labor	Employee Rights and Interests; Supply Chain Management			
<b>Forced or Compulsory Labor</b>					
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	Sustainability Management; Employee Rights and Interests; Sustainable Supply Chain			

GRI Standard / Other Resources	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
<b>GRI 409: Forced or Compulsory Labor 2016</b>	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Employee Rights and Interests; Sustainable Supply Chain			
<b>Local Communities</b>					
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	Sustainability Management; Contribution to Communities; Pollutant Control; Ecological Conservation			
<b>GRI 413: Local Communities 2016</b>	413-1 Operations with local community engagement, impact assessments, and development	Sustainability Management; Contribution to Communities; Pollutant Control; Ecological Conservation			
	413-2 Operations with significant actual and potential negative impacts on local communities	Energy Management; Pollutant Control; Ecological Conservation			
<b>Supplier Social Assessment</b>					
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	Sustainability Management; Sustainable Supply Chain			
<b>GRI 414: Supplier Social Assessment 2016</b>	414-1 New suppliers that were screened using social criteria	Supply Chain Management			
	414-2 Negative social impacts in the supply chain and actions taken	Supply Chain Management	414-2-c 414-2-d	Not applicable	No major adverse impact (actual or potential) on society
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	Sustainability Management; Quality Excellence; Customer Service			
<b>GRI 416: Customer Health and Safety 2016</b>	416-1 Assessment of the health and safety impacts of product and service categories	Quality Excellence; Customer Service	416-1-a	Information unavailable	The information is currently unavailable, and cannot be disclosed completely
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Quality Excellence; Customer Service			
<b>Customer Privacy</b>					
<b>GRI 3: Material Topics 2021</b>	3-3 Management of material topics	Sustainability Management; Information Security			
<b>GRI 418: Customer Privacy 2016</b>	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Information Security			

## Ten Principles of the UN Global Compact

Contents		Location
Human Rights		
Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights	Employee Development; Sustainable Supply Chain
Principle 2	Businesses should make sure that they are not complicit in human rights abuses	
Labor		
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	Employee Rights and Interests
Principle 4	Business should eliminate all forms of forced and compulsory labor	
Principle 5	Business should effectively abolish child labor	
Principle 6	Business should eliminate discrimination in respect of employment and occupation	
Environment		
Principle 7	Businesses should support a precautionary approach to environmental challenges	Special Feature: Responses to Climate Change; Green Operation
Principle 8	Business should undertake initiatives to promote greater environmental responsibility	
Principle 9	Business should encourage the development and diffusion of environmentally friendly technologies	
Anti-Corruption		
Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery	Anti-corruption

## The Task Force on Climate-Related Financial Disclosures (TCFD) Recommendations Framework

TCFD	Contents	Location
Governance Strategy	<p>Disclose the organization's governance around climate-related risks and opportunities</p> <p>Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning</p>	<p>Special Feature: Responses to Climate Change-Strategy</p> <p>Special Feature: Responses to Climate Change-Strategy</p>
Risk Management	Disclose how the organization identifies, assesses, and manages climate-related risks	Special Feature: Responses to Climate Change-Risk Management
Metrics and Targets	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities	Special Feature: Responses to Climate Change-Metrics and Targets

# Independent Assurance Statement



## ASSURANCE STATEMENT

### SGS- CSTC'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE SUNGROW POWER SUPPLY CO., LTD. FOR 2022

#### NATURE OF THE ASSURANCE/VERIFICATION

SGS-CSTC STANDARDS TECHNICAL SERVICES CO., LTD. (hereinafter referred to as 'SGS') was commissioned by Sungrow Power Supply Co., Ltd. (hereinafter referred to as 'SUNGROW') to conduct an independent assurance of the 2022 Sustainability Report (hereinafter referred to as the Report).

#### INTENDED USERS OF THIS ASSURANCE STATEMENT

This Assurance Statement is provided with the intention of informing all SUNGROW's Stakeholders.

#### RESPONSIBILITIES

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

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

#### ASSURANCE STANDARDS, TYPE AND LEVEL OF ASSURANCE

The SGS ESG & Sustainability Report Assurance protocols used to conduct assurance are based upon internationally recognised assurance guidance and standards including the principles of reporting process contained within the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards) GRI 1: Foundation 2021 for report quality, GRI 2 General Disclosure 2021 for organisation's reporting practices and other organisational detail, GRI 3 2021 for organisation's process of determining material topics, its list of material topics and how to manage each topic, and the guidance on levels of assurance contained within the AA1000 series of standards.

The assurance of this report has been conducted according to the following Assurance Standards:

- SGS ESG & SRA Assurance Protocols (based on GRI Principles and guidance in AA1000)

Assurance has been conducted at a moderate level of scrutiny.

#### SCOPE OF ASSURANCE AND REPORTING CRITERIA

The scope of the assurance included evaluation of quality, accuracy and reliability of specified performance information as detailed below and evaluation of adherence to the following reporting criteria:

- GRI Standards 2021 (In Accordance with)

#### ASSURANCE METHODOLOGY

The assurance comprised a combination of pre-assurance research, on site interviews with relevant employees located at SUNGROW'S Headquarter, No. 1699, Xiyou Road, High-Tech Industry Development Zone, Hefei City, P. R. China and subsidiary company Sungrow Hydrogen Sci. & Tech. Co., Ltd, located at No. 108 Shilian South Road, High-tech Industry Development Zone, Hefei City, P. R. China. Documentation and record review and validation with external bodies and /or stakeholders where relevant.

#### LIMITATIONS AND MITIGATION

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

The assurance scope only covered the headquarter of SUNGROW and above-mentioned subsidiary company, did not involve assurance of the original data of other branches and subsidiaries.

The assurance process only involved interviews with the heads of relevant departments and certain employees and consultation with relevant documents did not involve external stakeholders.



#### **STATEMENT OF INDEPENDENCE AND COMPETENCE**

The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and 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, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with CCAA Registered ISO 9001 auditor, ISO 14001 auditor, ISO 45001 auditor, CSR Lead Assuror, ISO 37001 Auditor, ISO 37301 Auditor etc.

#### **FINDINGS AND CONCLUSIONS**

##### **ASSURANCE/VERIFICATION OPINION**

On the basis of the methodology described and the verification work performed, the information and data contained within the Report verified is accurate, reliable, and provides a fair and balanced representation of SUNGROW's sustainability activities in 2022.

The assurance team is of the opinion that the Report was in accordance with all the content and reporting principles in GRI Standards 2021.

##### **Reporting Rules**

###### **Accuracy**

The data and information collection mechanism are objective and complete, and through accurate qualitative and quantitative descriptions, it was easy to evaluate the impact on the organization.

###### **Balance**

SUNGROW truthfully disclosed sustainable development topics based on stakeholder expectations

###### **Clarity**

The report adopted various expressions such as text description, charts, graphics, photos, and combined case analysis to make it easy for stakeholders to understand.

###### **Comparability**

SUNGROW had disclosed performance indicators in 2022, previous data of partial indicators were disclosed, which could help stakeholders to understand and compare the improved performance year by year.

###### **Completeness**

Through good stakeholder communication, SUNGROW identified key issues of stakeholders and reflected significant economic, environmental and social impacts, enabled stakeholders to evaluate the impact of SUNGROW during the reporting period.

###### **Sustainability Context**

EVE had presented the efforts on sustainability development related to economic, environmental and social aspects and combined the performance in the wide context as well.

###### **Timeliness**

The data disclosed by SUNGROW was within the reporting cycle and enabled stakeholders to timely obtain information and make reasonable decisions.

###### **Verifiability**

The data and information in the report could be traced and verified through internal good control and documented records

###### **Management Approach**

The Report had disclosed the management approach of identified material topics.

###### **General Disclosures**

The general disclosures were in accordance with GRI 2: general disclosures 2021.

**Topic-Specific Disclosures**

SUNGROW's topic-specific disclosures related to the material topics in economic, environmental, and social aspects were in accordance with GRI Standards 2021.

**Findings and recommendations**

Good practices and recommendations for sustainability report and management process were described in the internal management report which has been submitted to the management of SUNGROW for continuous improvement.

Signed:

A handwritten signature in black ink, appearing to be 'David Xin', written in a cursive style.

For and on behalf of SGS-CSTC

**David Xin**

**Sr. Director – Knowledge**

**16/F Century Yuhui Mansion, No. 73, Fucheng Road, Beijing, P.R. China**

**Apr. 18, 2023**

# Reader's Feedback



**Dear readers:**

Thank you for reading this report! In order to provide you and stakeholders with more valuable information, enable you to supervise our social responsibility practices, and improve our capability and level of fulfilling social responsibility, we sincerely hope that you can evaluate this report and make valuable comments and suggestions.

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Your feedback and suggestions may be submitted in the following ways:

Tel: +86 551 6532 7877

E-mail: [csr@sungrowpower.com](mailto:csr@sungrowpower.com)

Mailing Address: No. 1699 Xiyou Road, High-tech Industry Development Zone, Hefei, P.R. China.

Brand Center of Sungrow Power Supply Co., Ltd.

Zip code: 230088

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**Feedback questionnaire:**

- 1、 Did you get the information you seek for from this Sustainability Report?  
Yes General No
- 2、 Do you think this Sustainability Report fully reflects the economic responsibilities of Sungrow Power Supply Co., Ltd.?  
Yes General No
- 3、 Do you think this Sustainability Report fully reflects environmental health and safety responsibilities of Sungrow Power Supply Co., Ltd.?  
Yes General No
- 4、 Do you think this Sustainability Report fully reflects the social responsibilities of Sungrow Power Supply Co., Ltd.?  
Yes General No
- 5、 Do you think this Sustainability Report fully reflects the product and service responsibilities of Sungrow Power Supply Co., Ltd.?  
Yes General No
- 6、 Do you think the content arrangement and layout design of this Sustainability Report are convenient for your reading?  
Yes General No
7. Supplements:

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Thank you for your feedback and valuable time!



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Sungrow Official Website



Sungrow Official WeChat