

2024

**Environment, Social and
Governance Report**



HONGYUAN GREEN ENERGY CO., LTD.
Stand Toward the Light and Walk in the Light

<https://www.hysolar.com/>



HY SOLAR

Dreams and wishes may be far,
but they can be fulfilled with
dedicated pursuit.

CONTENTS

Introduction 04

Report highlights	04
Development milestones	05

Chairman's Message 06

About us 08

Group overview	08
Honors and certifications	10
External engagement	11
Progress on the United Nations Sustainable Development Goals (UN SDGs)	12
Contributions to society	14

Value creation 16

Economic performance	18
Sector contributions	19
Product innovation	20
Quality service	26
Sustainable supply chain	28

Index 70

GRI content index	70
IFRS industry-based index	76
Verification statement	77
Report profile	80

Governance 30

Policy commitment	32
Sustainability management	34
Stakeholder engagement	36
Corporate governance	38
Risk management	41
Business ethics	42



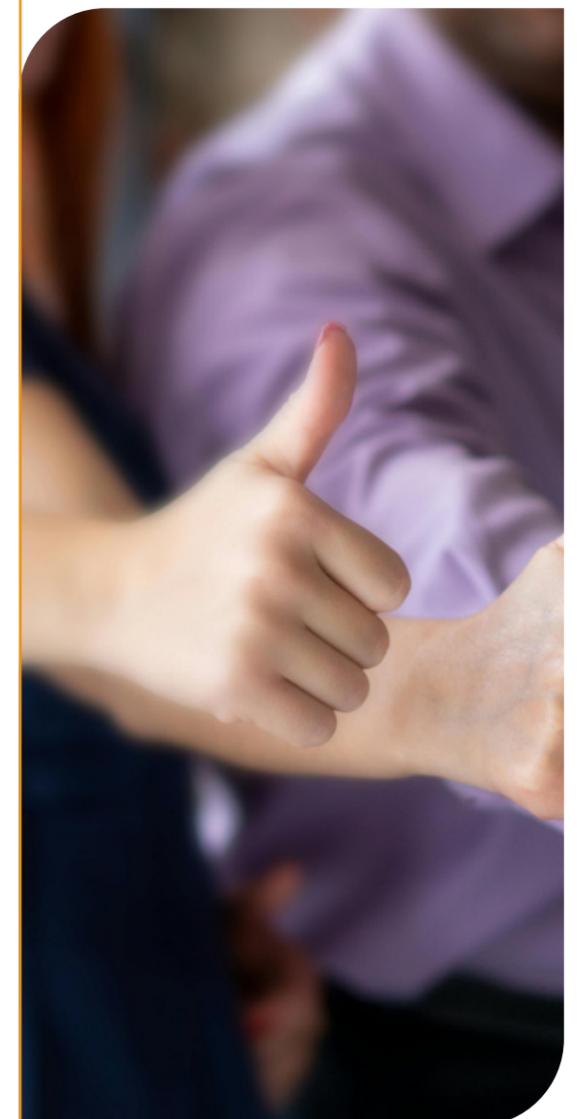
Low-carbon 46

Climate change	48
Environmental compliance management	51
Energy management	54
Water management	56
Pollutant emission and waste management	58
Biodiversity	59



Humane orientation 60

Employees' rights and benefits	62
Talent cultivation	65
Occupational health	67



Introduction

Report highlights

Environment

Environmental protection investment	76.9356 million yuan	100% compliance with air pollutant emission standards
energy conservation optimization projects	36	100% compliance with wastewater discharge standards
water conservation & recycling projects	16	Zero environmental violations

Society

coverage of collective contracts for employees	100	252 new patents added this year
employee participation in performance assessment	100%	Zero incidents of discrimination, harassment, forced labor or child labor
coverage of employee skills training	100%	Training all employees and staff: approximately 160,000 hours

Economy & governance

Revenue:	730,236.40 (ten thousand yuan)	Zero cases of fraud, bribery, anti-misconduct, anti-monopoly, or money laundering
cases of confirmed information security incidents	Zero	Zero major information security incidents
employee coverage of integrity practice training	100	25 internal audit projects completed

Development milestones

HY Solar (Wuxi) honored as a zero-carbon factory

During the reporting period, HY Solar Co., Ltd. was awarded the certificate as a Type I 5-star "zero-carbon factory" issued by the China Quality Certification Center, marking the first zero-carbon factory of HY Solar. The company was awarded green certifications for its module factories, including the Certificate of Verified Carbon Unit (VCU) Retirement and the International Renewable Energy Certificate (I-REC).



HY Solar and Munich RE entered into a strategic cooperation agreement

A signing ceremony was held at SNEC 2024 in Shanghai for the strategic cooperation relationship between HONGYUAN Green Energy Co., Ltd. ("HY Solar, the company, us") and Munich Reinsurance Company ("Munich Re"). Munich RE will provide a 15-year product & material warranty and a 25/30-year power linear warranty service for the PV modules of HY Solar. This serves as a full third-party assurance to downstream clients in the value chain who use our products on a large scale, and represents Munich RE's full accreditation of HY Solar's constantly excellent technology and outstanding quality.



Sustainability performance



In August 2023, the company released to the public its first 2022 Environmental, Social and Governance (ESG) Report. As of April 2025, we have consecutively released 3 ESG reports. During the reporting period, there were no restatements of information arising from disclosure errors.



Machinery
Ranking in machinery sector by the overall score 21/567

In May 2024, the company was consecutively rated BBB by the Wind ESG Rating and ranked 21/567 in the sector by the overall score.



In October 2024, the company was rated A by Chindices ESG rating and ranked 10/453 in the sector by the corporate governance.

HY Solar
Sector classification in GICS Level 3: Machinery manufacturing
The company's sector ranking in GICS Level 3 21/453
Data updated on: October 31, 2024

Chairman's Message

Looking back to 2024, despite increasing global economic turbulence and geopolitical conflicts, achieving carbon neutrality remains a global consensus and an action goal. As a photovoltaic full-industry-chain integrated enterprise with over two decades of expertise in the new energy sector, HY SOLAR has consistently adhered to the vision of "Cleaner Energy, Better World" in its development philosophy, guided by the strategic guideline of "Innovation in Technology, Intelligence in Service". We promote sustainable development through green energy, always at the forefront of green energy transition while striving to set a benchmark for high-quality sustainable development.

We uphold technology as the "primary energy," forging the core engine for high-quality development. HY SOLAR focuses on the innovation and breakthrough of core technologies. In 2024, the company continued to introduce top-tier industry talents, and established a large-scale R&D base of 5,000 square meters with CNAS standard to continuously enrich its product matrix with cutting-edge innovations. In collaboration with leading academic institutions such as Zhejiang University and Lanzhou University, the company has promoted cooperative R&D and talent cultivation, accelerating the pace of innovation in the PV industry and achieving substantial results. The company has further strengthened its commitment to green and low-carbon manufacturing. In 2024, it invested nearly 80 million yuan in environmental protection, enhancing resource utilization efficiency and reducing greenhouse gas emissions through measures such as energy conservation and emission reduction, resource recycling, renewable energy utilization, and product design optimization. Notably, subsidiary HY SOLAR (Wuxi) was awarded the "Five-Star Zero-Carbon Factory" certificate, while Hongyuan New Material was recognized as a "National Green Supply Chain Management Enterprise". These achievements underscore our dedication to delivering green and low-carbon PV products and services, strengthening green supply chain management to build a sustainable ecological environment.

ESG has long become an essential requirement for HY SOLAR, serving as a powerful driver to build a value community and a core competitive edge for the future. For years, we have engaged in diversified cooperation with upstream and downstream partners in the industrial chain, strengthened environmental and social responsibility management in the supply chain, and continuously fostered a more inclusive and friendly community of shared value and ecological sustainability, jointly constructing a green and sustainable value chain. In 2025, we will remain true to our original aspirations, taking innovation as the foundation to pursue excellence in quality and cost efficiency. We will elevate our ESG management capabilities, accelerate the realization of ESG's potential value, and drive the high-quality advancement of green energy to empower China's PV industry to energize the world with green power and achieve even greater milestones.

Chairman of HY Solar
Yang Jianliang

About us

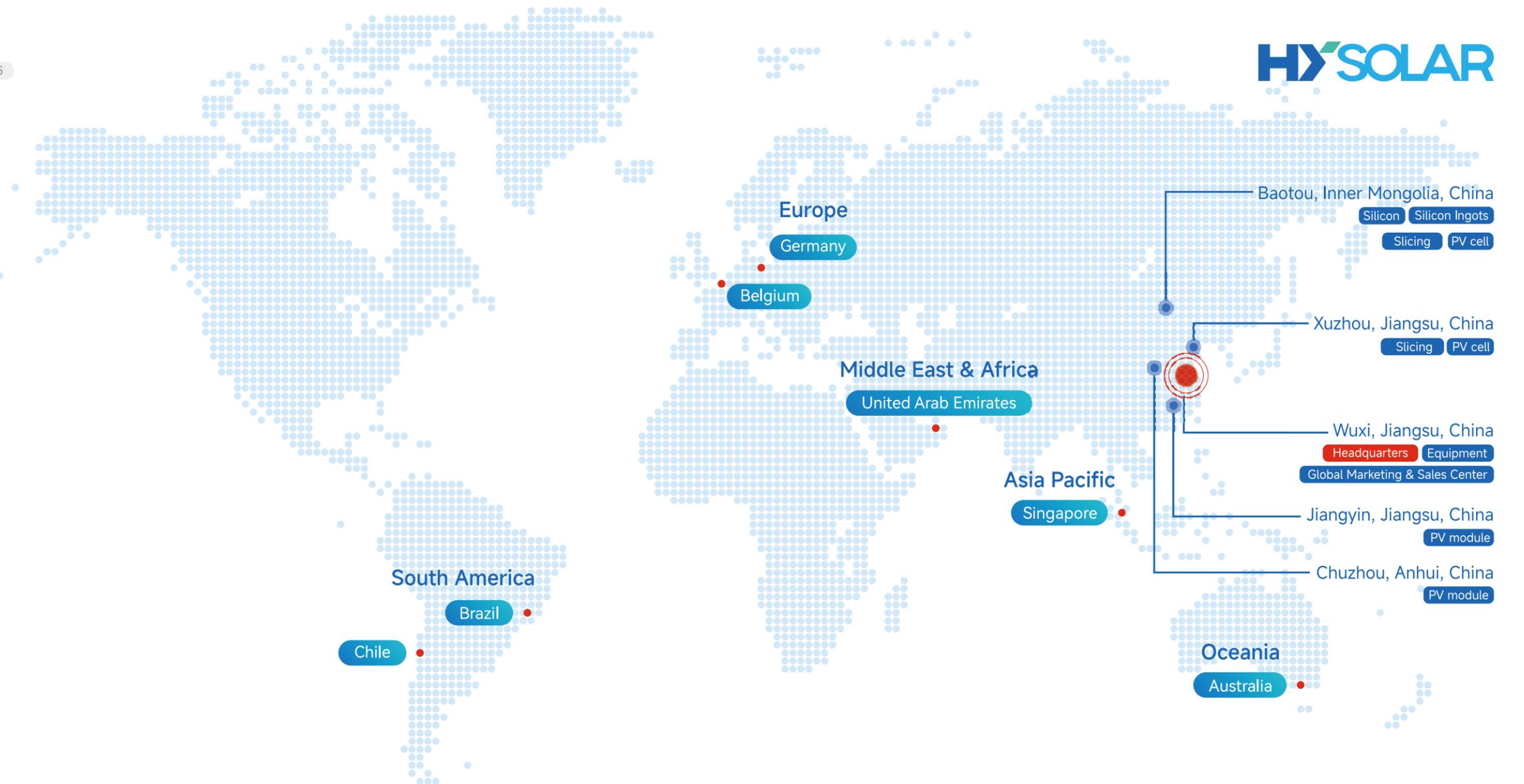
Group overview

GRI 2-1 | GRI 2-6

HONGYUAN Green Energy Co., Ltd., established in 2002 (formerly known as "Shangji CNC"), is a photovoltaic full-industry-chain product and service provider focusing on innovation and application in the new energy sector. It was listed on the Shanghai Stock Exchange in 2018 with the stock code 603185. As a representative of private new energy enterprises, the company has developed into a rare full-industry-chain ecological enterprise in the new energy sector after more than two decades of innovation and development.

Currently, the company has built several core R&D and manufacturing bases in Qingshan and Guyang of Inner Mongolia, Xuzhou, Wuxi and Jiangyin of Jiangsu, and Chuzhou of Anhui, completing its layout of 150,000 tons of industrial silicon, 100,000 tons of polycrystalline silicon, 75GW of silicon wafers, 45GW of batteries and 35GW of modules. The company has been ranked as one of the "Manufacturing Company 500 China", "Global Top 500 New Energy Enterprises" and "Top 100 Private Energy Enterprises in China" for many years.

Looking ahead, HY Solar will remain committed to deepening its strategy of "Offering Intelligent Service with HONGYUAN technology" under the carbon-peaking and carbon-neutrality goals, collaborating with its partners across various fields to develop the global new energy market and build a technological, green and intelligent new HONGYUAN with the vision of "making energy cleaner and making world better" and the win-win business philosophy that is oriented to the market, clients centered and linking resources.



Headquarters
Wuxi, Jiangsu, China

Global Marketing & Sales Center
Wuxi, Jiangsu, China

Overseas Regional Headquarters
 Asia Pacific: Singapore
 Europe: Germany
 South America: Brazil
 Oceania: Australia
 Middle East & Africa: United Arab Emirates

Manufacturing Bases
 Equipment: Wuxi, Jiangsu, China
 Slicing: Baotou, Inner Mongolia, China
 PV cell: Xuzhou, Jiangsu, China
 PV module: Chuzhou, Anhui, China
 Silicon: Baotou, Inner Mongolia, China
 Silicon Ingots: Baotou, Inner Mongolia, China
 Slicing: Xuzhou, Jiangsu, China
 PV cell: Baotou, Inner Mongolia, China
 PV module: Jiangyin, Jiangsu, China

Honors and certifications

HY Solar

- 2023 Jiangsu High-Quality Development Benchmark Enterprise
- PVBL 2024 "Top 100 Global PV Brands"
- PVBL 2024 "Top 20 Silicon Wafer Brands"
- 2024 Global Top 500 New Energy Enterprises
- 2024 Good PV - Top 10 PV Cell Brands
- Most Influential PV Module Enterprise of 2024

Hongyuan New Material (Baotou)

- Inner Mongolia's Top 100 Private Enterprises
- Inner Mongolia's Top 50 Private Manufacturing Enterprises
- Recognized by the enterprise technology center at the autonomous region level
- Industrial design center of the autonomous region
- "Green Supply Chain Enterprise" of national green manufacturing

Hongyuan New Material (Xuzhou)

- Jiangsu Province private science and technology enterprise
- Intellectual property marking and filing
- High-tech enterprise
- Jiangsu Province four-star cloud enterprise

Hongyuan Energy (Baotou)

- Baotou Stronghold Party Branch of 2023
- "Outstanding Contributions to Production Value Award" for 2024 in Baotou Jinshan Economic Development Zone
- "Outstanding Contributions to Fixed Asset Investment Award" for 2025 in Baotou Jinshan Economic Development Zone

HY SOLAR (Wuxi)

- 5-Star Certificate for the Zero-Carbon Factory
- CQC 5-Star After-market Services Certificate

*A selection of the awards presented in 2024

	ISO 14001	ISO 45001	ISO 50001	ISO 9001
HY Solar	✓	✓		✓
Hongyuan Energy (Baotou)	✓	✓		✓
Hongyuan New Material (Baotou)	✓	✓	✓	✓
HY Solar (Wuxi)	✓	✓	✓	✓
Hongyuan New Material (Xuzhou)	✓	✓	✓	✓

External engagement

GRI 2-28

- China Photovoltaic Industry Association
- China General Machinery Industry Association
- Wuxi Enterprise Federation
- Wuxi New Energy Industry Association
- Wuxi Xuelang Chamber of Commerce
- PV CYCLE

Progress on the United Nations Sustainable Development Goals (UN SDGs)

As the world economy confronts multiple risks, it has become a global initiative to gather strength to address common challenges. Driven by the UN SDGs, HY Solar remains committed to implementing meaningful practices.

			<p>1 NO POVERTY</p>  <ul style="list-style-type: none"> Participate in community donations to help the underprivileged Generate employment opportunities with fair wage practices 	<p>3 GOOD HEALTH AND WELL-BEING</p>  <ul style="list-style-type: none"> Strictly implement the occupational health and safety measures File health records Organize the Safety Month event 	<p>7 AFFORDABLE AND CLEAN ENERGY</p>  <ul style="list-style-type: none"> Build distributed photovoltaic on plant rooftop 	<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>  <ul style="list-style-type: none"> Provide reliable, efficient and eco-friendly solar products 	<p>10 REDUCED INEQUALITIES</p>  <ul style="list-style-type: none"> Insist on equal pay for equal work
<p>4 QUALITY EDUCATION</p>  <ul style="list-style-type: none"> Conduct large-scale employee training 	<p>5 GENDER EQUALITY</p>  <ul style="list-style-type: none"> Manage hiring and promotions on the principle of equality 	<p>6 CLEAN WATER AND SANITATION</p>  <ul style="list-style-type: none"> Manage and control wastewater discharges from production processes Explore measures for water resource treatment and recycling 	<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>  <ul style="list-style-type: none"> Join PV CYCLE to build a PV recycling system Strengthen supply chain responsibility management 	<p>13 CLIMATE ACTION</p>  <ul style="list-style-type: none"> Conduct climate-related scenario analyses and product carbon footprint certification Create a "zero-carbon factory" 	<p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>  <ul style="list-style-type: none"> Conduct regular integrity training and promotion Formulate a Supplier Code of Conduct Establish a risk management mechanism 		

Contributions to society

GRI 203 | GRI 413

United in its commitment to charity, HY Solar took on its corporate social responsibility and commitment through concrete actions. The company organized various volunteer activities, agricultural assistance activities, charitable donations, employee condolences, etc., with a cumulative amount of about RMB510,000, showcasing its love and dedication to society.

Community donation

HY Solar wholeheartedly dedicated to community development



We participated in community building through public welfare donations to constantly strengthen community assistance, support education and optimize public services, adding vitality to the community while improving residents' quality of life.



Condolence and public welfare activities in Spring Festival



Condolence for retired party members



Condolence and public welfare activities in Spring Festival



Condolence and public welfare activities in Mid-Autumn Festival

Educational support

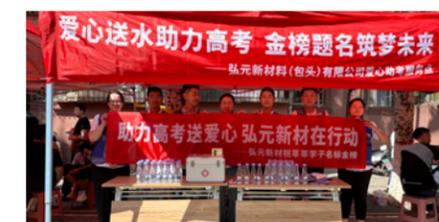
HY Solar supported education for youth development.

Attaching great importance to education development, HY Solar has been dedicated to helping students succeed and paying close attention to examination dynamics, escorting the children's growth. We donated RMB300,000 to support the charity of Binhu District, Wuxi City, which was directed to the Hongshawan Excellent Education Fund, and assisted in the creation of two schools and community activities, enhancing educational progress and fostering community development and prosperity through practical and effective actions.

Hongyuan Energy (Baotou) donated sportswear and school supplies to underprivileged students in the poverty-stricken community while fulfilling six students' wishes by completing the community's "order" mission.



During the college entrance examination in the same year, Hongyuan New Material (Baotou) set up a charity service kiosk, distributing 1,000 bottles of mineral water and 500 fans to help the examinees.



We have secured great achievement in volunteer services, demonstrating our strong concern for social responsibility with practical actions and various volunteer activities.

Volunteer services

HY Solar volunteers devoted love



Workers tree-planting activities



Volunteer snow removal in the community



Neat arrangement of bicycles for a beautiful city



We engaged in village-enterprise cooperation and paved the way for prosperity with the community. HY Solar (Wuxi) participated in the "Village and Enterprise Going Forward Together for Common Wealth through Supply-Sale Cooperation" initiative and received the title of "Endorser of Common Wealth". With its care for the community, Hongyuan New Material (Baotou) purchased local slow-selling watermelons to strengthen community ties and contribute to shared prosperity goals. Hongyuan Energy (Baotou) has signed a Co-Location and Co-Construction Agreement with the poverty-stricken community and attended the joint meetings of the co-construction units on a quarterly basis.

Village-enterprise cooperation

Join hands with the community for prosperity



Value creation



- Economic performance P18
- Sector contributions P19
- Product innovation P20
- Quality service P26
- Sustainable supply chain P28

R&D input: RMB **339.35** million

Number of new patents added during the year: **252**

Renewable energy use: **6,318.56** MJ

Percentage of new suppliers evaluated with questionnaires containing environmental and social indicators: **100** %

Number of suppliers identified as subject to significant negative environmental/social impacts: **0**

Economic performance

GRI 201 | GRI 202 | GRI 203 | GRI 415 | IFRS RR-ST-000.A | IFRS RR-ST-000.B | IFRS RR-ST-000.C

Economic performance

Item	Indicator	Unit	2024	2023	2022
Direct economic value generated	Revenue	Ten thousand yuan	730,236.40	1,185,887.62	2,190,943.66
	Operating costs	Ten thousand yuan	878,480.44	1,135,225.42	1,871,574.54
Economic value assigned	Employee salary and benefits	Ten thousand yuan	12,823.12	20,089.49	11,853.57

Market performance

Indicator	2024	2023	2022
Ratio of starting salary of regular employees to the minimum salary	1:1	1:1	1:1
Ratio of starting salary of male employees to the minimum salary in Wuxi City	1:1	1:1	1:1
Ratio of starting salary of female employees to the minimum salary in Wuxi City	1:1	1:1	1:1

Indirect economic impact

Indicator	Unit	2024	2023	2022
Donations and public welfare programs	Ten thousand yuan	51.32	195.87	563.06
Rural revitalization	Ten thousand yuan	0	6.50	7.90



Sector contributions

In 2024, HY Solar made remarkable achievements in promoting the development of the renewable energy sector. The company has delivered multiple high-quality projects with particularly impressive test data, demonstrating its excellent capacity in enhancing PV module efficiency. Actual testing data shows that N-type modules generate 6.15% more electricity than conventional modules.



Guangdong Maoming Agri-Photovoltaic Complementary Project



InterSolar South America 2024, Brazil



UAE World Future Energy Show (WFES)



Belgium InterSolution 2024



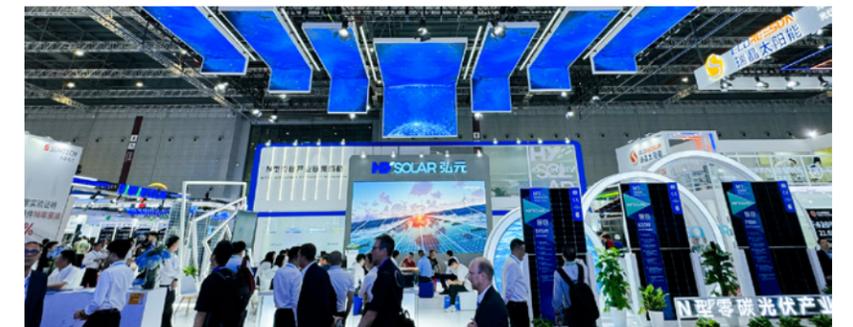
Open Energies 2024, France



Spain GENERA 2024



InterSolar Europe 2024, Munich, Germany



SNEC 17th (2024) International Photovoltaic Power Generation and Smart Energy Exhibition & Conference

Product innovation

GRI 301

Shaping the future: Developing the blueprint for a product innovation system

The company is committed to promoting the development and application of green energy through R&D and innovation of advanced solar technology. We firmly believe that technological innovation is the key driver of corporate sustainability. Through continuous technological innovation, we aim to enhance the conversion efficiency and reliability, reduce costs and expand market share of PV products, becoming a world-leading provider of solar energy solutions.

R&D team building

Constantly introduce and cultivate high-quality R&D talents to set up a professional R&D team.

Infrastructure

Invest in and build the HY Solar (Wuxi) R&D and Testing Center, equipped with internationally advanced testing equipment and a laboratory management system.

R&D input

Annually invest a certain percentage of revenue in R&D to ensure that our technology maintains its leading position.

The company has a total of **594** patents at present

with **252** patents added during the year

R&D team: **635** persons

Ratio of R&D personnel to the total employees: **10** %

R&D input: RMB **339.35** million

Conversion efficiency in serial production: **26.90** %

Product lifecycle management

As an important player in the new energy field, HY Solar understands the significance of full product lifecycle management to sustainable development. The company is committed to reducing the environmental carbon footprint and negative impacts of our products at every stage, including design, production, use and disposal, promoting green transformation and sustainable development across the sector.

Product design

In the development of products, we take light weight design as an important consideration, while holding toxic and hazardous substances under strict management and control. We incorporate RoHS and other standards into our hazardous substance management process and resolutely eliminate materials containing toxic and hazardous elements to minimize the potential harm of our products to the environment. In addition, the company is committed to producing low-carbon and high-efficiency PV products through analysis and management of the carbon emission during the entire product life cycle and with R&D and design as the core.



RoHS certificate



Carbon footprint certificates for modules

Material selection

Regarding material selection, we prioritize local materials to reduce carbon emissions during transportation. In addition, we select materials that can be recycled and recovered at the end of solar PV products and strive to increase the proportion of recyclable raw materials in our products for a better utilization rate of resources.

Indicator	Unit	2024	2023	2022
Total weight of materials used to produce and package the organization's main products and services (non-renewable materials)	Ton	6,466.10	3,996	3,847
Total weight of materials used to produce and package the organization's main products and services (renewable materials)		25,630.13	1,682	3,114
Percentage of recycled feedstock used to manufacture the organization's main products and services*	%	46	48	50

Note: In 2024, the recycled feedstock used to manufacture our main products and services was packaging materials, and the values of which were denominated as the average usage percentage by HY Solar, Hongyuan Energy (Baotou), Hongyuan New Material (Baotou), HY SOLAR (Wuxi) and Hongyuan New Material (Xuzhou).

Clean manufacturing

We improve resource utilization efficiency and reduce greenhouse gas (GHG) emissions through such measures as energy management, emission reduction, resource recycling & renewable energy utilization, zero-carbon factory construction, supply chain management and product design optimization, reducing the negative impacts of production and operations on the environment. The company used 6,318,557.81 GJ of renewable energy in 2024

In 2024, the company used
6,318,557.81 GJ
of renewable energy

Rooftop PV and new energy applications

Hongyuan New Material (Baotou) practices the concept of green development, optimizes its energy structure, and puts its independently-built 6MW distributed PV power station into operation. With an annual power generation of approximately 5.6 million kWh, the power plant meets the company's electricity demand and reduces CO₂e emissions by approximately 3,193.68 tons.



Case HY Solar (Wuxi) 2MWH PV Rooftop Project

HY Solar (Wuxi)'s Class D warehouse is covered by a color steel tile roof structure with a rooftop area of 12,800 square meters. 182 bifacial modules are used and paved as fixtures. It generates a total electricity of 2MWH, is connected to the grid at a low voltage and can independently generate electricity for its consumption. It generates electricity of about 200,000kwh monthly on average in summer mode from July to October and about 100,000kwh monthly on average in winter mode from November to June, making annual estimated power generation about 1.6 million kwh, equivalent to a reduction of about 929.60tCO₂ emissions.



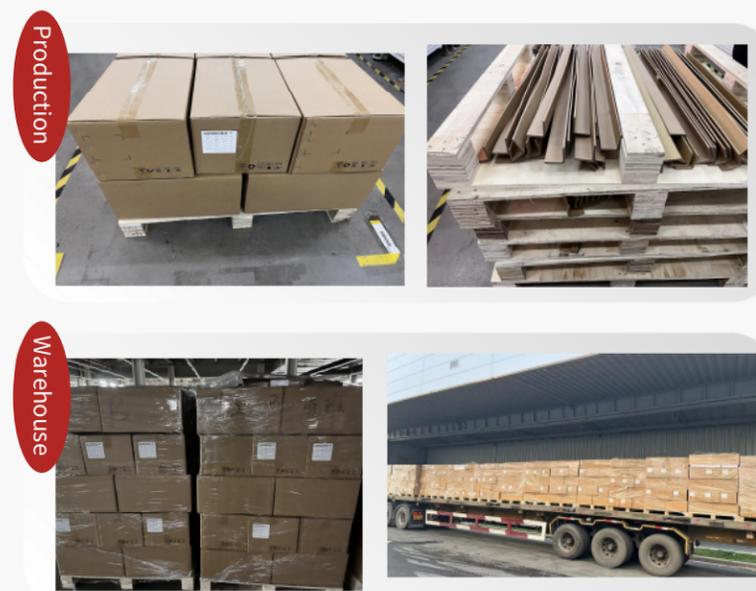
2MWH PV rooftop

Material packaging

The company constantly explores green packaging solutions, with a priority on the use of recyclable, biodegradable and lighter packaging materials. We set up a packaging material recycling system, developing a recycling program for recyclable packaging materials and encouraging relevant parties to participate in packaging material recycling. During the reporting period, the company recycled and used 3,290.48 tons of packaging materials.

Case HY Solar (Wuxi) Battery Sheet Packaging Materials Recycling Project

In 2024, HY Solar (Wuxi) formulated a recycling program for wooden pallets, EPE liners & covers, cardboard boxes, long-paper corner protectors, inner packaging boxes, and hollow sheets. Production-line parallel recycling is implemented in accordance with the established recycling standards, which specify the unpacking operation mode and the number of each recycled pallet, and the warehouse is divided into separate bins to place recycled materials. Regarding transportation, the battery side and the module side share logistics vehicle information. The warehouse on the module side prepares goods according to the vehicle information and dispatches fully-loaded vehicles whenever possible. Packaging materials are continuously transported back to the battery side, and 13 batches have been transported back to Xuzhou, totaling 340 pallets.



Green logistics

Regarding logistics and transportation, we dispatch vehicles reasonably based on the daily shipment volume while integrating orders and optimizing transport plans to ensure that each shipment is made with a full load and at full tonnage. In addition, we optimize the layout of overseas warehouses and change land transportation to water transportation based on the overseas distribution points to reduce carbon emissions and energy consumption during material transportation; We adopt a Warehouse Management System (WMS) to improve the speed and accuracy of goods processing in the warehouse in automated and intelligent ways, enhancing logistics efficiency, reducing operation costs and reducing carbon emissions.

Disposal and recycling at the product end

The company keeps collecting and recycling raw materials of PV modules for reuse, and builds a closed loop of green ecology through the establishment of a perfect recycling system and continuous exploration and adoption of advanced recycling technology. We have formulated the "Management Specifications on Use of P-Type Recycling Material", "Management Specifications on Use of N-Type Recycling Material", and "Recycling Standards of Seed Crystals" to standardize the recycling management of the recycling material generated during production, reducing usage risk and lowering costs.

Case Raw Material Utilization Enhancements Project

In April 2024, Hongyuan New Material (Baotou) reused the outsourced silicon material by lengthening the silicon at the single-crystal furnace table through the new silicon material technology application scheme and the optimized cleaning process. Subsequently, we began reusing four takeout raw materials: silicon tube waste, unusable material, scrap material, and falling silicon material, which are recycled as soon as they meet qualification standards and are continuously recycled with a stable process to reduce the total amount of takeout silicon material. The raw material utilization rate was enhanced by 0.26% after the reuse of the takeout silicon in this manner, simultaneously reducing manufacturing costs and improving overall material utilization.



Silicon tube waste



Unusable material



Scrap material



Falling silicon material

Develop new products with universities

We collaborate with multiple universities to develop new technologies and products, accelerate the transformation and application of technology achievements and enhance our competitive strength.

Industry-academia-research cases

Application for cooperation with Zhejiang University:
Unveiling and Commanding Project - R&D of Large-Diameter (≥ 12 ") Semiconductors Monocrystalline Silicon Without Magnetic Field

Application for cooperation with Lanzhou University:
Key R&D and Achievement Transformation Program (Science and Technology Supporting Ecological Protection and High Quality Development of the Yellow River Basin) Project - R&D of Key Technology for New Generation of Highly Durable Graphite Electrode Columns¹

Application for cooperation with Lanzhou University:
Application for Technology Program R&D Project of New Generation of High Efficiency N-type Low Oxygen Monocrystalline Silicon

Development in cooperation with Nanjing Institute of Technology:
N-type TOPCon High-Efficiency Crystalline Silicon Solar Cell Project, with innovative technology covering boron diffusion three-step to source, thick-film alumina oxide passivation and new slurry system, the cells have been supplied to multiple front-line clients.

¹ The project is still pending approval

Leading change to tackle technology innovation challenges

In the face of ever-changing technology innovation, the company has adopted a series of measures to ensure it maintains the leading position in the fierce market competition:



Introducing international standards: Our R&D and Testing Center is established according to ISO 17025 standards and operates according to the requirements of the CNAS certification system, ensuring the accuracy and reliability of testing results.

Digital management: LIMS laboratory management system is adopted where all the information of instruments, equipment, testing tasks, personnel and testing process are incorporated for digital management to improve the testing efficiency and project management level.

Large-scale R&D base: The laboratory covers 5,000 square meters and is equipped with 28 types of equipment, totaling 58 sets.

Quality service

GRI 416 | GRI 417 | GRI 418 | IFRS RR-ST-410a.1

Quality construction

With the updating of technology and products, HY Solar places greater emphasis on delivery quality and client satisfaction, always taking product quality as the core of delivery and client satisfaction as the starting point of service, hoping for a deeper, more pragmatic, detailed and thorough quality management and client relationship management. We establish a whole-life cycle, closed loop quality management mechanism from the supply chain management to after-market services, proposing and tracking the quality objectives and supervising the quality responsibility of each production and service process.

HY Solar observes the local laws and regulations on product quality, promotes the construction of internal quality management system according to the international quality management standards, formulates and executes the quality control plan, reduces the deviation of the product process and improves the success rate of the product quality design through the tools including Design Failure Modes and Effects Analysis (DFMEA) and Process Failure Modes and Effects Analysis (PFMEA) to ensure that the product quality level meets the design planning and client expectations. During the reporting period, the production base has passed ISO 9001 Management System Certification and IEC 62941 PV Module Quality Management System Certification.



IEC 62941 PV Module Manufacturing Quality System Certificate

As information-based development has become a consensus in the PV sector, HY Solar has rapidly laid out a new mode of intelligent operation and maintenance, introduced the Material Management System (SAP), Warehouse Management System (WMS), Manufacturing Execution System (MES), Equipment Automation Programming (EAP), Statistical Process Control (SPC) System and other smart factory information-based systems, broken down the management requirements for reliability risks step by step to achieve full-process automation from the in-warehouse of raw materials to the out-warehouse of finished products and an information-based closed loop for business operations, enhancing PV module production efficiency, lowering costs and improving the company's economic efficiency and market competitiveness.

HY Solar (Wuxi) R&D and Testing Center is established in accordance with ISO 17025 standard and conducts sampling and testing of production lines and products based on this standard and CNAS laboratory accreditation standards. The laboratory adopts the LIMS management system and is capable of performing a full set of tests according to IEC 61215 and IEC 61730 standards. The company labels, segregates, evaluates and disposes of nonconforming products in accordance with the Nonconforming Product Control Procedures to prevent nonconforming products from entering production, use or project delivery.

Client demands				
Project management	Introduction of new technologies	Raw materials management	Process 6S management	After-sales management
ISO 9001	SAP	WMS	MES	IEC 62941
	EAP	SPC	LIMS	

Client satisfaction

Client service

The company enhances client satisfaction by improving its service process and response mechanism. We conduct the factory audit, product inspection, and handle client complaints in accordance with the "Management Procedures for Client Services", invite clients to evaluate their satisfaction with product quality, service quality, price, and delivery quality, have in-depth exchanges with our clients to identify potential problems, and adopt client suggestions to enhance our overall services and to shape our brand image. Research results show that multiple service quality indicators have received full scores from many clients.

Complaint handling

Aim to contact clients within 24 hours for initial feedback, and conduct prior consultation on resolution deadlines and non-remedial preventive measures

Failure analysis

Adopt an 8D Analysis approach to determine and analyze, and set up a cross-department special task force to analyze, investigate, and deal with the case

Remediation and prevention

Perform permanent improvement with client accreditation, and constantly track product quality management & control to prevent recurrence

Results of client satisfaction



Silicon wafer side
Hongyuan New Material (Baotou)
94
points

Battery side
Hongyuan New Material (Xuzhou)
95.95
points

Module side
HY Solar (Wuxi)
97.62
points

During the reporting period, HY Solar (Wuxi) continued to receive external recognition for its comprehensive after-market services system and excellent service standards, passed the national standard GB/T 27922-2011 "Commodity Aftermarket Services Evaluation System" evaluation and certification, and was awarded a five-star (the highest level) certificate.



After-sales service certification of goods

Responsible marketing

HY Solar builds a clear brand perception, and puts responsible marketing into practice. It produces and uses promotional materials in accordance with the Advertising Law of the People's Republic of China and the Responsible Marketing and Consumer Protection Policy, ensuring clients' right to be informed. We provide multi-language and detailed product brochures to convey true, accurate and full product information, ensuring clients receive assured products and services. In addition, the company has entered into a Distributor Authorization Letter to regulate trademark use, advertisement placement, etc. During the reporting period, there were no incidents of non-compliance involving marketing communications, product and service information & logs.

Sustainable supply chain

GRI 308 | GRI 414 | SASB RT-EE-440a.1

The company manages its supply chain under the concepts of fairness, safety and transparency, implements regulations including the "Procedures for Procurement Management and Control" and the "Supplier Management Procedures", and practices full-life management on supplier onboarding, on-site evaluation, due diligence review and deactivation, with its key attention to suppliers' management on environmental protection, labor rights and interests, and business ethics, aiming to avoid the negative impacts of the supply of materials on the production and operation and to fend off corporate social responsibility risk within the supply chain.

Related clause	Key attention
<p>Supplier management code Procurement Management Control Procedure Supplier Management Procedure Supplier Code of Conduct Supplier Due Diligence and Evaluation Sheet</p> <p>Supplier statement Confidentiality Commitment Letter Commitment to Anti-Commercial Bribery and Anti-fraud Commitment to Safety and Environmental Protection Commitment to Legal Employment</p>	<p>Qualification system Production and Operation License MSDS, RoHS, REACH Intellectual Property Certificate Three-Standards-In-One System Certificate</p> <p>Environmental protection Environment management compliance Natural resource use and air pollution Climate resilience & GHG emissions reduction Water, wastewater & hazardous materials management Conflict minerals</p> <p>Human rights guarantee Anti-forced labor and child labor Anti-discrimination Occupational health and safety Standard working hours and wages Freedom of association and collective bargaining Female worker protection</p> <p>Corporate action Anti-corruption and commercial bribery Anti-money laundering and counter-terrorism financing Information protection and data safety Fair competition and antitrust Conflict of interest Intellectual property Export trade compliance Whistleblowing and protection Secondary suppliers management</p>

The company conducts a comprehensive review of the suppliers in terms of material quality, service quality, sampling effect, environmental & social evaluation, etc., based on which it classifies and grades the suppliers, implements rewards and punishments, and provides training to the suppliers on defects.

Level-A excellent suppliers	Level-B qualified suppliers	Level-C general suppliers	Level-D unqualified suppliers
Priority on cooperation	Normal procurement	Training to suppliers based on demerits	Disqualify as a supplier temporarily and require full correction within the time limit; If such correction fails, eliminate the supplier

Sustainable supply chain empowerment

To refine supply chain risk management, HY Solar (Wuxi)'s Procurement Department conducts specialized "ESG Sustainable Development" training to enhance purchasing officers' skills and expertise.



Indicator ¹	Unit	2024	2023	2022
Number of new suppliers signing the statement	Supplier(s)	127	263	39
Percentage of new suppliers evaluated with questionnaires containing environmental and social indicators	%	100	100	100
Number of suppliers identified as subject to significant negative environmental/social impacts	Supplier(s)	0	0	0
Number of suppliers receiving training/conducting improvement	Supplier(s)	0	0	0

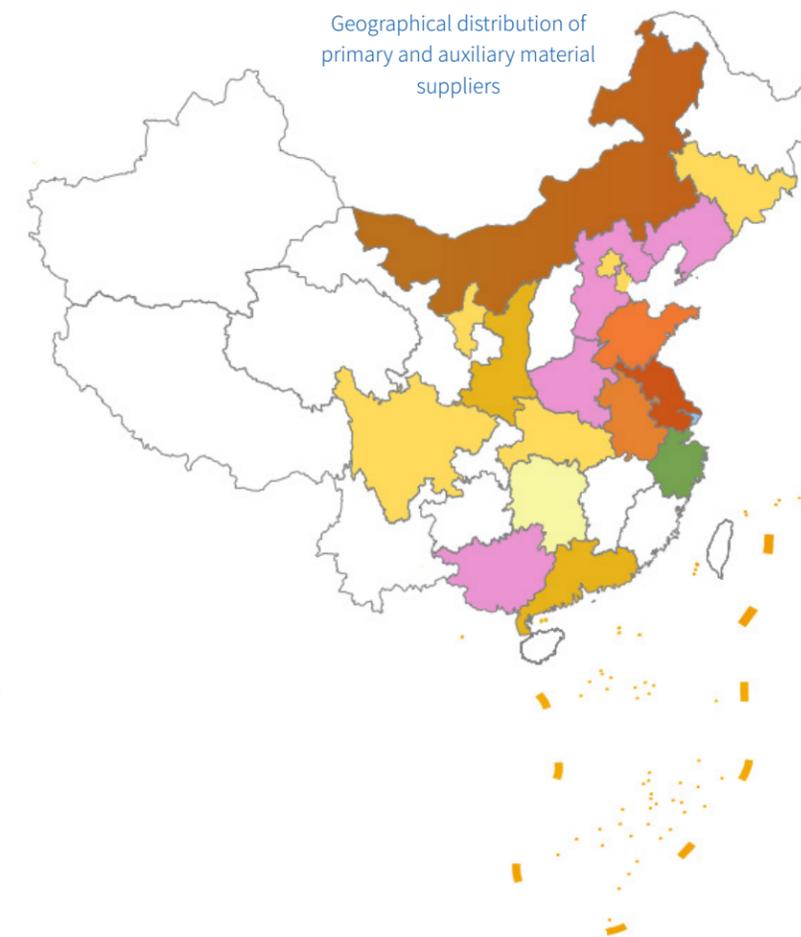
¹ Statistical caliber: Hongyuan New Material (Baotou), Hongyuan New Material (Xuzhou), and HY Solar (Wuxi).

While meeting internal procurement needs, we prioritize localized procurement to partner with local suppliers, reduce transportation cycles and lower environmental impact.

Indicator		Hongyuan New Material (Baotou)	Hongyuan New Material (Xuzhou)
Percentage of procurement expenditures within the province where the company is located (%)	2024	81.21	82
	2023	31.75	58
	2022	80	88

HY Solar undertakes not to apply or sell any conflict minerals or derivative products, and requires its suppliers to take active measures to avoid using any conflict minerals in their products.² All the self-operated minerals and the minerals used in our processing bases are sourced from domestic mineral refining and smelting plants, with a clear place of origin, compliant governance and no human rights violations.

Geographical distribution of primary and auxiliary material suppliers



² It refers to metallic minerals such as gold (Au), tantalum (Ta), tungsten (W), and tin (Sn) produced from mines in conflict zones controlled by non-government military groups or non-military factions in the Democratic Republic of the Congo (referred to as 3TG).

Governance



- Policy commitment P32
- Sustainability management P34
- Stakeholder engagement P36
- Corporate governance P38
- Risk management P41
- Business ethics P42

Proportion of independent directors: **43** %

Proportion of female directors: **14** %

Employee coverage rate of integrity series training: **100** %

Confirmed cases of corruption: **0**

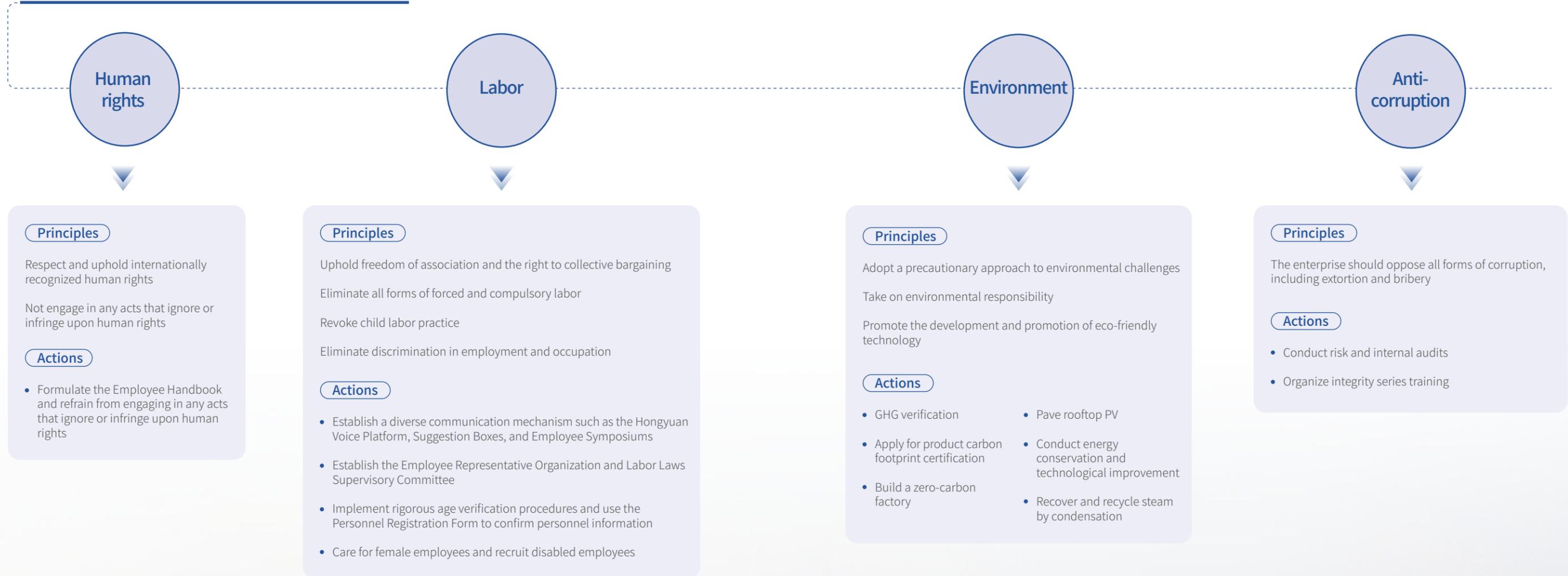
Base coverage rate of the integrity risk identification: **100** %

Confirmed information security incidents: **0**

Policy commitment

GRI 2-23 | GRI 2-24 | GRI 2-30 | GRI 405 | GRI 406 | GRI 407 |
GRI 408 | GRI 409 | GRI 411

Ten Principles of the United Nations Global Compact



Human rights

Principles

Respect and uphold internationally recognized human rights

Not engage in any acts that ignore or infringe upon human rights

Actions

- Formulate the Employee Handbook and refrain from engaging in any acts that ignore or infringe upon human rights

Labor

Principles

Uphold freedom of association and the right to collective bargaining

Eliminate all forms of forced and compulsory labor

Revoke child labor practice

Eliminate discrimination in employment and occupation

Actions

- Establish a diverse communication mechanism such as the Hongyuan Voice Platform, Suggestion Boxes, and Employee Symposiums
- Establish the Employee Representative Organization and Labor Laws Supervisory Committee
- Implement rigorous age verification procedures and use the Personnel Registration Form to confirm personnel information
- Care for female employees and recruit disabled employees

Environment

Principles

Adopt a precautionary approach to environmental challenges

Take on environmental responsibility

Promote the development and promotion of eco-friendly technology

Actions

- GHG verification
- Apply for product carbon footprint certification
- Build a zero-carbon factory
- Pave rooftop PV
- Conduct energy conservation and technological improvement
- Recover and recycle steam by condensation

Anti-corruption

Principles

The enterprise should oppose all forms of corruption, including extortion and bribery

Actions

- Conduct risk and internal audits
- Organize integrity series training

Sustainability management

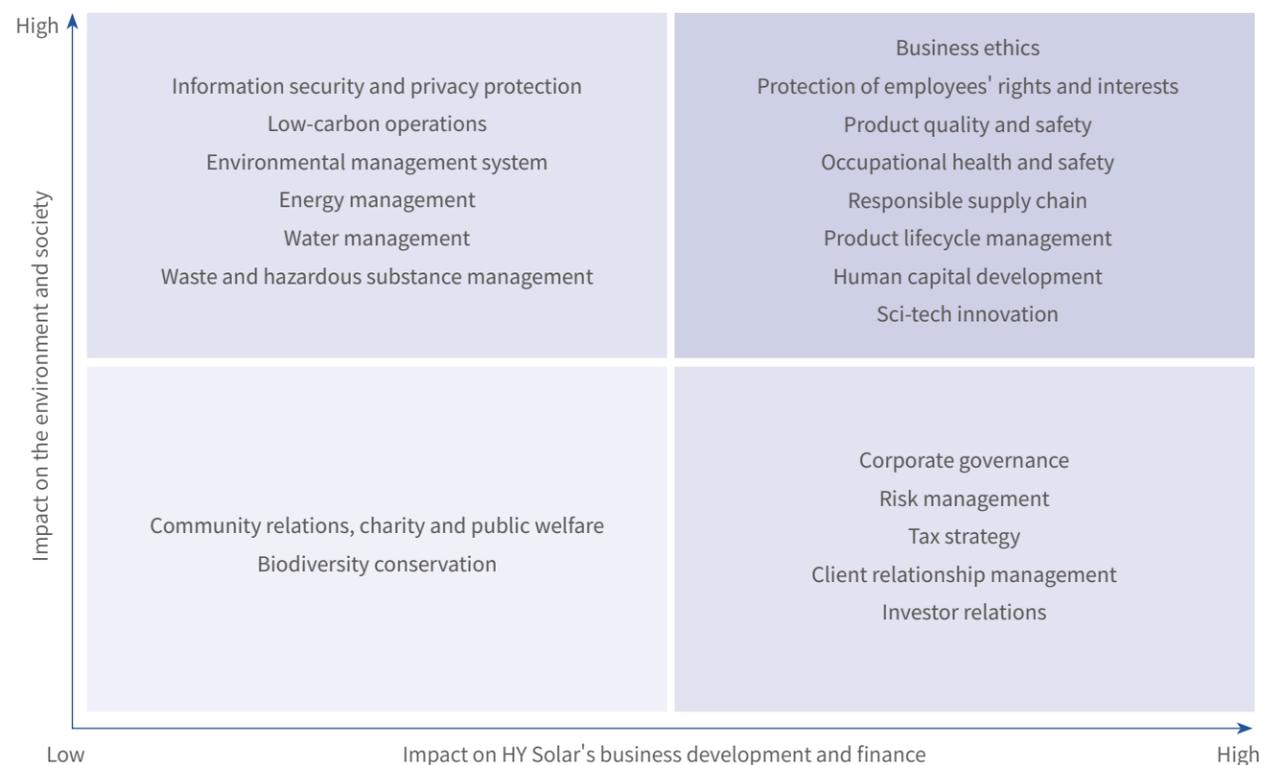
GRI 2-19 | GRI 3 | GRI 2-13 | GRI 2-14 | GRI 2-16 | GRI 2-17

Topics management

The company conducts annual materiality research to identify stakeholders' interest in topics of high relevance to the company. We follow GRI standards for dual substantial analyses, prioritize topics based on sustainability trends and expert advice, and proactively disclose our progress.

Topics for 2024	Topics for 2023	Changes and reasons
Tax strategy	-	Add issues to respond to capital market concerns
Responsible supply chain	Sustainable supply chain Conflict minerals management	Consolidate issues, adjust presentation, and extend issue content
Low-carbon operations	Climate change response Cleantech opportunity	
Environmental management system	Environmental compliance management	Adjust presentation
Protection of employees' rights and interests	Employee recruitment, diversity and inclusion	

Materiality matrix



Structure of the Sustainability Committee



Stakeholder engagement

Stakeholder	Communication channel	Response chapter
Employees (including the labor union)	Employee activities, employee congress, training activities Employee Handbook	Humane orientation
	Hongyuan's Voice	
	Internal mail system	
	Office automation system Notice board	
Shareholders and other investors	Information disclosure	Governance
	Shareholders' meeting	
	Ongoing on-line and off-line communication (investment seminars, performance presentation, SSE E-interactive, investor mailboxes, and hotlines)	
	Media communication	
Clients and consumers	Off-line exhibitions & conferences	Product innovation
	Client satisfaction survey	Quality service
Business partners	Regular supplier training	Sustainable supply chain
	Exchanges and visits	
	Supplier review	
	Feedback from monitoring channels	
Government and regulators	Regulatory meeting	Low-carbon
	Physical inspection	Governance
	Information disclosure	
Non-government organizations	Off-line exhibitions & conferences	Value creation
	Symposia	Governance
	Media communication	Low-carbon
	Corporate publications	Humane orientation
	Press releases	
Local community (including community residents)	Company visits	Humane orientation
	Community volunteering activities	
	Public service activities	

Advanced study of sustainability capacity

Regulators have clear regulations on the training of directors, supervisors and senior officers of listed companies, and the company emphasizes cultivating its employees' capacity in finance, business ethics, green development, low-carbon and social responsibility that are connected with sustainability. During the reporting period, the incumbent independent directors and senior officers fulfilled the compliance requirements and completed the qualification training offered by the Stock Exchange and the Listing Association, while the employee representatives completed the related courses and advanced studies to enhance their sustainable development knowledge.



Corporate governance

GRI 2-9 | GRI 2-10 | GRI 2-11 | GRI 2-15 | GRI 2-19

Corporate governance is a critical focus for investors and the capital market, with a strong governance structure ensuring enterprise value enhancement. HY Solar establishes a corporate governance structure consisting of the shareholders' meeting, the Board of Directors and its Specialized Committees, the Board of Supervisors and the senior management in accordance with the laws, regulations and guidelines of the Stock Exchange to improve its corporate governance and safeguard investors' rights & interests.

Board of Directors

As the highest corporate governance body, the Board of Directors is responsible for the shareholders' meeting. Directors are elected or replaced by the shareholders' meeting in full consideration of the sector in which the organization operates and the diversity and independence of the candidates. The current Board of Directors consists of 7 members, with a Chairman of the Board who is functionally separate from the Chief Executive Officer to avoid potential abuse of power. The Remuneration and Appraisal Committee proposes the remuneration plan for directors, which shall not be implemented until it is approved by the Board of Directors and deliberated and passed at the shareholders' meeting. The remuneration allocation plan for the managers shall be submitted to the Board of Directors for approval. The annual allowance system is adopted for independent directors. Non-independent directors and senior officers receive salaries according to their positions, with reference to the compensation level of similar positions in the same sector, and based on the company's annual performance assessment system and their accomplishment of performance indicators.

43 %
Proportion of independent directors

2
Number of special meetings of independent directors

14 %
Proportion of female directors

10
Number of board meetings

100 %
Attendance rate of directors in person

7
Number of special board meetings

Management system overview

Organization form	A company of a two-tier system with the Board of Supervisors
Director	7 directors (including 1 female director and 3 independent directors)
Chairman of the Board of Directors	Not concurrently serving as the General Manager
Supervisor	3 supervisors (including 1 employee representative supervisor)
Voluntarily established committees	Strategic Committee, Audit Committee, Remuneration and Appraisal Committee, and Nomination Committee
Meetings to strengthen supervision	3 special meetings of independent directors were held in 2024

Shareholders' meeting

The Board of Directors convenes shareholders' meetings in accordance with the Articles of Association to ensure that all shareholders are granted equal status and may fully exercise their rights.

1
annual general meeting

1
extraordinary general meeting

21
proposals deliberated and adopted

Name	Title	Gender	Age	Academic qualification	Experience and skills			Experience and skills			Strategy and Sustainability Committee	Audit Committee	Nomination Committee	Remuneration and Appraisal Committee
					Business operations	Globalization	Marketing & market	Finance	Legal	Technology & manufacturing				
Yang Jianliang	Chairman of the Board	♂	56	Junior college degree	✓	✓	✓			✓	▲	△	△	△
Yang Hao	Director	♂	33	Master's degree	✓	✓	✓	✓	✓					
Hang Hong	Director	♀	57	Junior college degree	✓			✓						
Ji Fuhua	Director	♂	55	Bachelor's degree			✓			✓				
Zhu Xiangjun	Independent director	♂	56	Master's degree	✓			✓			△	▲		▲
Wu Ge	Independent director	♂	57	Doctor's degree	✓	✓					△	△	△	△
Ji Weixi	Independent director	♂	64	Doctor's degree	✓					✓	△		▲	
Hang Yuebiao	Chairman of the Board of Supervisors	♂	56	Junior college degree			✓			✓				
Chen Nianhuai	Supervisor	♂	51	Junior college degree	✓	✓	✓					/		
Zhu Yongzhong	Employee representative supervisor	♂	57	Junior college degree			✓							

Note: "▲" denotes the position of committee director, whereas "△" denotes the position of committee member.

Board of Supervisors

The number and composition of the Board of Supervisors meet the requirements of laws and regulations. Taking on the responsibility to shareholders, all supervisors diligently supervise the behavior of directors and senior officers in performing their duties. The Board of Supervisors drafts a remuneration and performance incentive plan for supervisors and submits it to the shareholders' meeting for consideration. Supervisors are remunerated in accordance with the positions they hold, with reference to the compensation levels of similar positions in the same sector, and based on the company's annual performance assessment system and the accomplishment of performance indicators.

33 %

Percentage of employee representative supervisors

6

Number of supervisory board meetings

100 %

Attendance rate of supervisors in person

Investor communication

HY Solar communicates and interacts with its investors, emphasizing listening to investors' feedback and improving market value management. We update our operation information through the "Investor Relations" column on our website, results briefing sessions, shareholders' meeting, SSE E-Interactive and other channels to inform investors of our status. The company was awarded level B in 2024 by the Stock Exchange in the information disclosure assessment.

80

Number of notices released

39

Number of responses to SSE E-Interactive

4

Number of performance briefing sessions

17

Number of responses to questions from the performance briefing sessions

Tax governance

The company accurately calculates all taxes and charges, makes tax returns on time, avoids tax risks in strict accordance with applicable national laws and regulations, and accepts the inspection and supervision of tax and other competent authorities in accordance with the law. We formulate and constantly improve our Tax Management System, specifying the requirements for such management tasks as tax policy research, formulation of tax planning and scheme, management of daily tax matters, tax inspection and risk management.

Major taxes

Value-added tax
Urban maintenance and construction tax
Corporate income tax
Teaching supplements

Tax incentives

Corporate income tax Preferences for high-tech enterprises; Corporate income tax preferences for encouraged enterprises in the western region

Value-added tax: Additional deduction policy, immediate levy and refund for software products

Risk management

IFRS RR-ST-410a.2 | SASB RT-EE-250a.1 | SASB RT-EE-250a.2

We realize that the stakeholders' awareness of participating in corporate governance is growing stronger with the times, and there is an expectation for enterprises to fulfill their legal obligations and proactively assume environmental and societal responsibilities. The Board of Directors serves as the company's highest risk governance body, responsible for planning and establishing the risk management structure, formulating risk management policies & related guidelines and supervising the implementation of risk management measures, which shall cover quality management, environmental protection, work safety, labor contract, M&A and investment, etc., to ensure the safety of assets, personnel, production, quality, environment, reputation and other elements. By regularly collecting feedback from various departments and conducting risk assessment meetings, we identify potential legal, market, operation and other risks to evaluate the risks we face and measure their severity and likelihood. In addition, the Legal Department formulates the Management Measures for Legal Affairs to regulate the company's business behavior, and carry out trainings on legal knowledge and contract review practice.

Under the guidance of the Management Measures Internal Audit, we executed a total of 25 internal control and evaluation projects during the year, including financial audit, exit audit, special audit, etc., and identified 45 non-conformities, of which 31 have been corrected and the remaining 14 are being followed up and controlled.

Review content

HSE risk

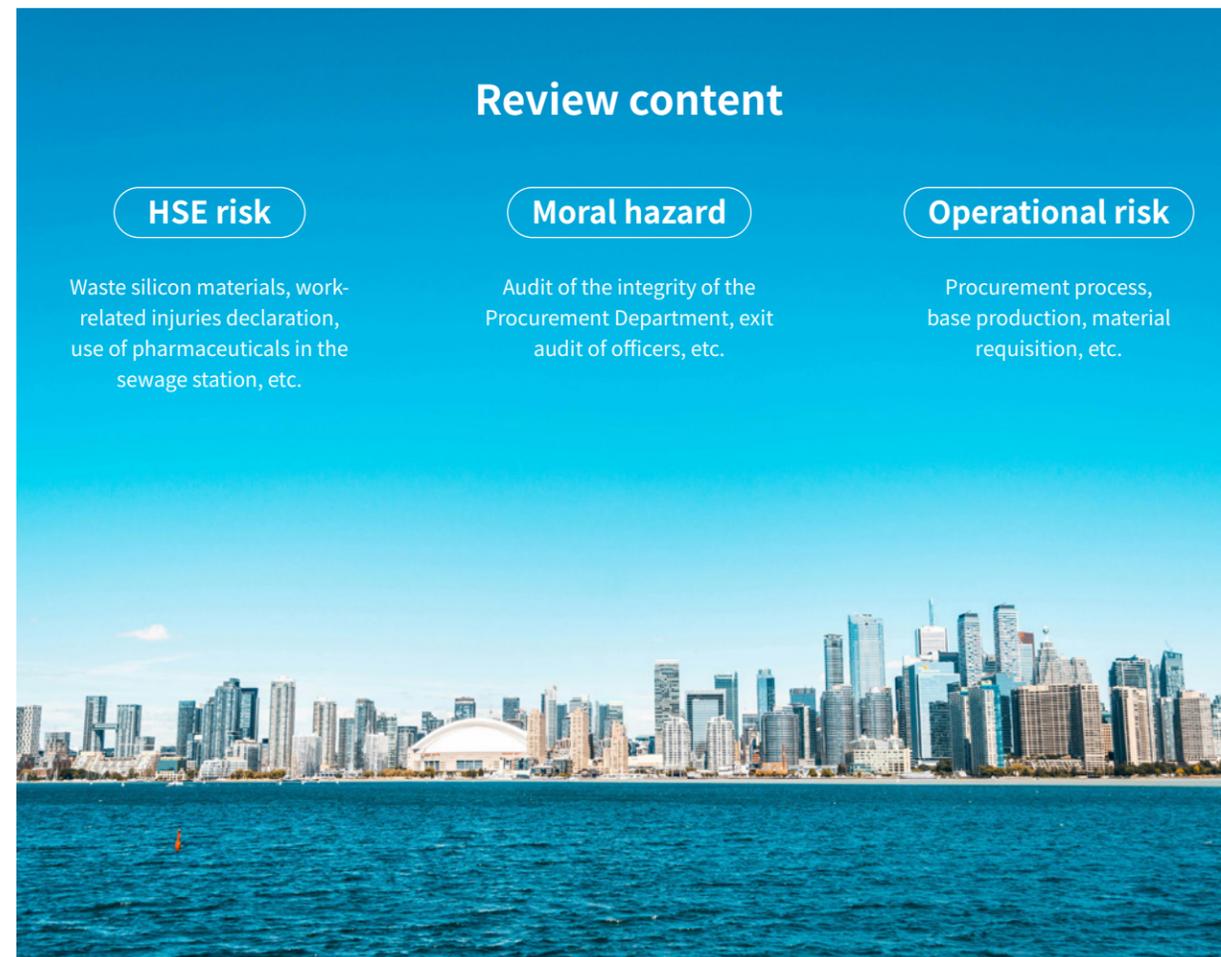
Waste silicon materials, work-related injuries declaration, use of pharmaceuticals in the sewage station, etc.

Moral hazard

Audit of the integrity of the Procurement Department, exit audit of officers, etc.

Operational risk

Procurement process, base production, material requisition, etc.



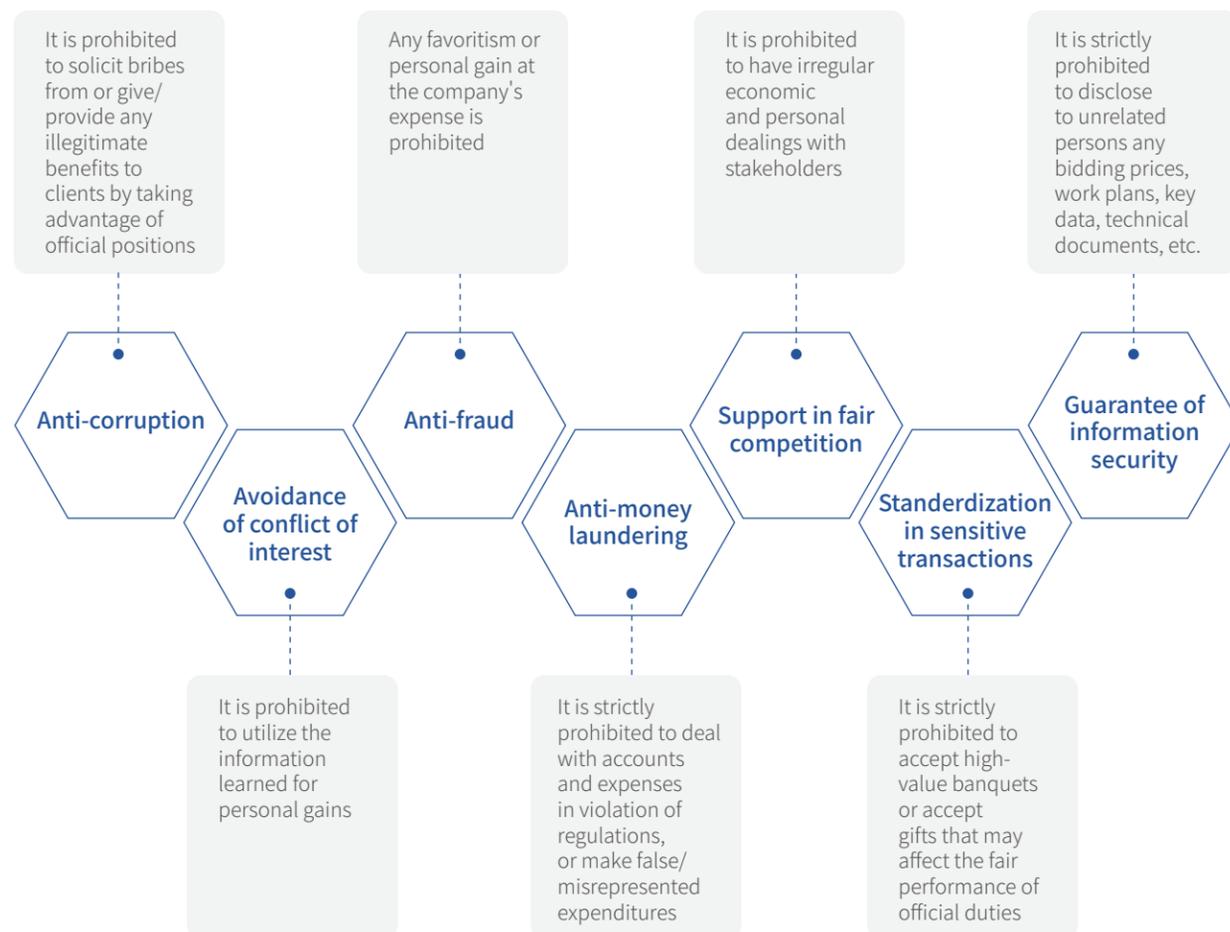
Business ethics

GRI 2-16 | GRI 2-10 | GRI 2-11 | GRI 2-15 | GRI 2-19 | SASB RT-EE-510a.1 | SASB RT-EE-510a.2 | SASB RT-EE-510a.3

Mechanism guarantee

Incorporating "integrity" and "pragmatism" into its core values, HY Solar is committed to shaping a corporate image of integrity, trustworthiness and professionalism in all business activities while building a vibrant and healthy industrial ecosystem. The company attaches importance to the construction of integrity culture by formulating the Anti-Unfair Competition System, the Integrity Management System, the Supplier Code of Conduct, the Supplier's Honest Cooperation Agreement and other series of documents to regulate the business behavior of its officers, employees and suppliers. All subsidiaries conduct an annual re-examination of the integrity risks associated with key positions such as Procurement, Sales, Production, R&D, Finance and HR, identify the integrity risks by analyzing the systems and processes, position duties and personnel behaviors, and implement tiered management for positions with different risk levels in accordance with the level of integrity risks.

Management content



Culture construction

To implement the work concept of "addressing both symptoms and root causes, prioritizing prevention and maintaining all-hands supervision", the company regularly carries out integrity promotion activities for employees and suppliers, improving stakeholders' recognition & understanding on integrity risks and fostering a risk management culture aligned with business operations. Internally, the company has all employees sign the Commitment to Integrity Practice upon recruitment, and has adopted a variety of approaches for regular integrity education, emphasizing the prohibition of bribing clients in any form, the prevention of slinging mud on competitors, and the reinforcement of employees' bottom-line awareness. Externally, we have revised the Supply Contract Template, reorganized and compiled a new version of the Supplier Integrity and Confidentiality Commitment Letter to ensure the consistency of the integrity clauses and organized suppliers to re-sign the new version. The Procurement Department regularly publicizes the company's integrity policies to suppliers to ensure their awareness of the integrity policies.



Publicity of integrity whistleblowing

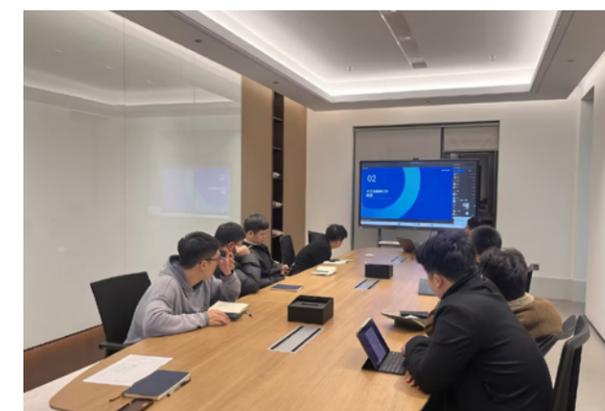
Series training on integrity



Training on integrity management system



Prevention of work-related crimes in corporate settings



Training on anti-unfair competition

Whistleblowing management

HY Solar has set up a mechanism for whistleblowing to engage both internal and external partners in integrity construction. The related parties may report the company on fraud, malpractice, falsehood and other unethical behaviors of employees or partners' personnel through e-mail, telephones, letters and other ways they consider convenient and safe. We take measures to ensure the confidentiality of whistleblowers' personal information and all reported data, and to eliminate and crack down on any retaliation against whistleblowers or witnesses. During the reporting period, the company was not subject to any external anti-corruption investigation or punishment.

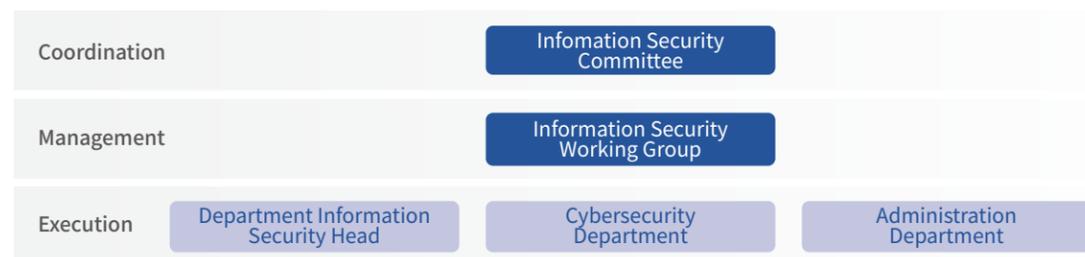
Reporting E-mail: hongyuanjc@hongyuanxcl.com

Reporting tel.: 0086 18921275176

Mailing address for reports: General Manager Office,
No. 158 Nanhu Middle Road, Binhu District, Wuxi City,
Jiangsu Province

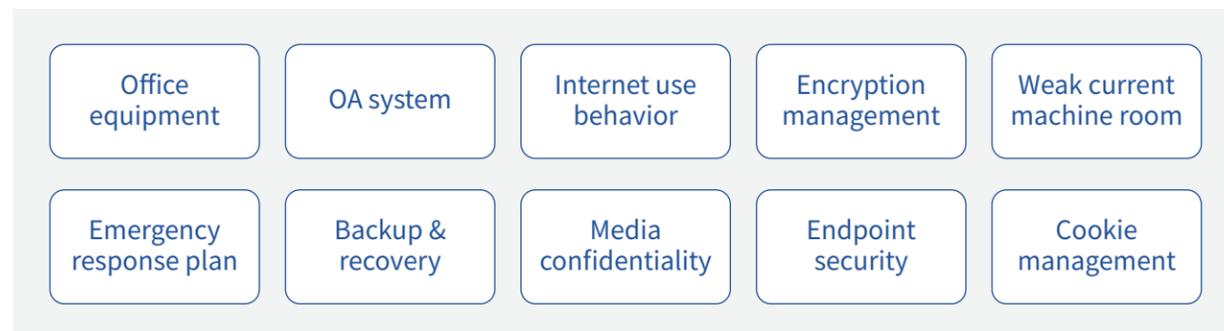
Information security

The rapid development of information technology and the popularization of digitalized network systems have significantly enhanced business operational & production efficiency, but they have also brought about network information security risks including network disruptions, hacker attacks and data leakage. HY Solar attaches importance to the information asset security of employees and partners by implementing a "three lines of defense" mechanism of information security, ensuring robust information security governance and enhancing measures to protect the company's information assets & personal data.



"Three lines of defense" of information security

To strengthen system resilience and minimize human errors, the company constantly strengthens information security management through overall planning -- from system improvement to reinforcement works, network monitoring to personal management, and hardware upgrades to software optimization, including regular software and system updates, security evaluation, monitoring of malicious activities, formulation of emergency response plan, etc.

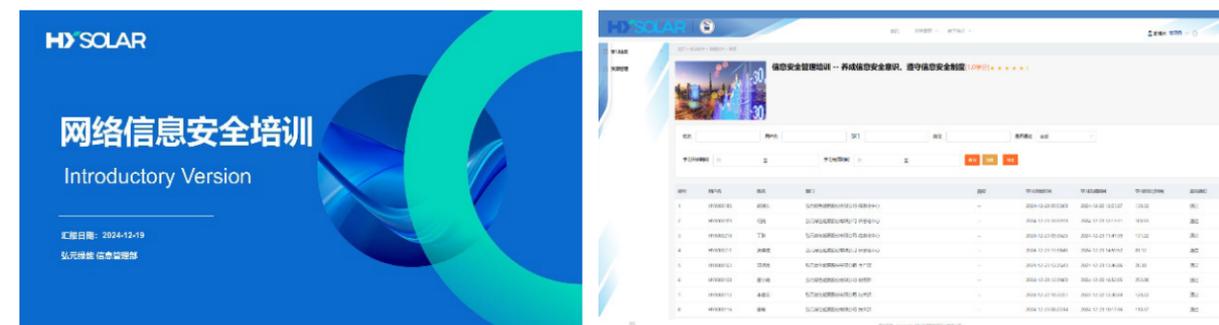


Information security defense system

Information security precaution measures

Internal

- Sign the Information Security Confidentiality Agreement with employees
- Regularly conduct social engineering phishing email drills and server vulnerability drills
- Carry out information security education & training and push posters & desktop messages
- Implement strict access control policies and restrict permissions according to job responsibilities & needs
- Configure multi-layer firewalls, WAF systems and antivirus software to identify and protect against external attacks
- Regularly review the server login logs
- Take encryption protection for files with encryption system
- Regularly execute server & system data information backup & recovery drills
- Conduct due diligence on the purchased cloud platform and validate audit reports prepared by third parties
- In 2024, a qualified third-party organization was engaged to conduct vulnerability scans across all plants, with remediation and recovery being made based on the test report



Information security management training materials and records

Indicator	Unit	2024	2023	2022
Employee coverage rate of integrity series training	%	100	100	100
Signature rate of Supplier Integrity Commitment Letter	%	100	100	/
Case generated via whistleblowing channels	Case(s)	0	0	0
Confirmed corruption case	Case(s)	0	0	0
Coverage ratio of integrity risk identification bases	%	100	100	/
Confirmed information security incident	Case(s)	0	0	0
Stakeholders affected by information security issues	Person(s)	0	0	0
Push rate of online platform information security trainings	%	100	100	/

Low-carbon



- Climate change P48
- Environmental compliance management P51
- Energy management P54
- Water management P56
- Pollutant emission and waste management P58
- Biodiversity P59

Environmental performance

Environmental input: RMB **76.9345** million yuan

Renewable energy consumption: **6,318.56** MJ

Circulating water consumption: **146,879,300** tons

Number of energy conservation optimization projects: **36**

Number of water conservation & recycling projects: **16**

Air pollutant emission: **100** % compliance

Wastewater emission: **100** compliance

Number of environmental violations: **0**

Climate change

GRI 302 | GRI 305 | TCFD A | TCFD C

As a crucial component of renewable energy, PV businesses are facing unprecedented challenges and opportunities in the context of accelerating global climate change. As a leading enterprise in the PV sector, HY Solar profoundly understands the challenges that climate change poses to the global environment and economy. To constantly monitor and evaluate climate change risks and opportunities while taking proactive countermeasures to promote low-carbon transformation of the enterprise itself and its value chain, we are establishing a climate change control system structured around four pillars: governance, strategy, risk management, and indicators & targets based on the guiding principles of International Financial Reporting Standards (IFRS) and the Task Force on Climate-related Financial Disclosures (TCFD).

Governance

The company places significant emphasis on climate change issues, integrating them as a key consideration in its operation strategy. Based on our sustainable management structure, we have established a climate change governance system led by the Board of Directors, guided the Sustainability Management Committee to formulate and improve its climate change related strategies, supervised and reviewed the action practices for climate change, and managed climate change risks and opportunities in a sustainable and effective manner from top to bottom.

Strategy

Our long-term goal is to become carbon neutral. The company closely integrates its climate strategic approaches with its business decisions by evaluating both the actual and potential impacts of climate change on its business, strategy and financial planning. We aim to comprehensively formulate our climate strategic planning from GHG emissions management, energy management, resource management, carbon market to system construction. By leveraging newly developed clean technologies and optimized production processes, we aim to create green low-carbon PV products and services, implement green low-carbon manufacturing practices and build a sustainable ecological environment.

Risk management

The company is committed to establishing a climate change governance system. Looking ahead, we will consider our business characteristics and internal & external development environments while fully identifying and evaluating the climate-related impacts, risks and opportunities to formulate the process for identifying, analyzing and controlling climate-related risks and opportunities. We will integrate climate risk management into the existing risk management system to constantly monitor and evaluate our capacity to cope with climate change, enhancing our climate resilience.

As of the end of the reporting period, Hongyuan New Material (Baotou) has taken the lead in fully identifying the climate risk types, evaluating and analyzing their impacts, and formulating the countermeasures, which lay the foundation for its subsequent construction of a comprehensive climate risk control system.

Climate-related impact, risk and opportunity management

Risk type		Impact analysis	Countermeasure
Acute entity risk	Extreme weather, cyclones/typhoons, hurricanes, extreme heat, unusual rainfall, floods, droughts, earthquakes, etc.	<ul style="list-style-type: none"> · May cause malfunctions, operation disruptions and damages to production equipment, resulting in lower production efficiency, higher maintenance costs and damaged products; · May cause power disruption or even plant destruction in extreme cases, posing a threat to lives and property safety of staff and clients; · May lead to production and transportation disruption, affecting the production capacity of the company and its suppliers and leading to delay in delivery. 	<ul style="list-style-type: none"> · Formulate an emergency response plan, strengthen emergency monitoring, promptly release relevant information and carry out emergency drills · Select more robust raw materials, conduct regular inspection and maintenance, strengthen the inspection of external power facilities, and set up backup power sources · Equip emergency supplies, establish emergency rescue teams, conduct emergency drills, and enhance personnel's emergency response capacity
Chronic entity risk	Temperature change	<ul style="list-style-type: none"> · Temperature change may indirectly affect equipment operation and lead to equipment malfunction; Sustained high temperature may affect the efficiency of the operating personnel 	<ul style="list-style-type: none"> · Strengthen the ventilation of workshops, set up air conditioners, fully recover heat energy for heating and issue cooling materials in summer to lower the temperature of workshops and ensure a suitable working environment
Policy risk	Regulations and policies governing carbon emissions are tightening	<ul style="list-style-type: none"> · Given our global client base and the presence of our plants in multiple countries, the increasingly stringent policies regarding climate change and carbon emission worldwide will lead to greater regulatory compliance pressures 	<ul style="list-style-type: none"> · Set up a strategic analyses team to track and analyze policies regarding global climate change and carbon emissions · Study the potential impact of regional policies and regulations on our business in cooperation with third-party organizations and make timely adjustments · Conduct compliance review on our suppliers, implement monitoring, formulate green supply chain goals and management policies, and eliminate suppliers at risk
Technology risk	Competitiveness of low-carbon technologies	<ul style="list-style-type: none"> · Low-carbon has become the mainstream trend in the development of wind turbine technology, and fierce market competitiveness demands more resources for R&D to maintain the industry-leading position, otherwise we will lose market competitiveness 	<ul style="list-style-type: none"> · Set up R&D Center to constantly strengthen technology investment and promote low-carbon technology innovation · Overcome traditional technology limitations by leveraging multiple exclusive core technologies
Legal risk	Litigation on net-zero carbon products	<ul style="list-style-type: none"> · Differences of public understanding in net-zero carbon concepts and environmental attributes of products may lead to litigation. 	<ul style="list-style-type: none"> · Ensure that the zero carbon concepts used in product promotion and sales are unambiguous, based on expert advice · Establish a specialized Legal Department to help the company avoid litigation-related risks
	Legislation on climate change	<ul style="list-style-type: none"> · With the advancement of the dual-carbon target, China may introduce laws and regulations to specifically address climate change, imposing more stringent demands on the optimization of the energy structure for the entire society 	<ul style="list-style-type: none"> · Enhance compliance management, strictly implement laws and regulations, early plan the production & discharge design and manage with improved standards · Participate in formulating and drafting product-related standards · Help clients achieve energy transformation and enhance their environmental performance by leveraging the advantages of our products and technology
Market risk	Client behavior change	<ul style="list-style-type: none"> · Clients have a gradually increasing demand for renewable energy and low-carbon wind turbine products · Stringent requirements on product carbon footprint may cause Envision to lose product orders 	<ul style="list-style-type: none"> · Upgrade technology to improve power generation efficiency, reduce kWh cost and gradually increase market share · Optimize product carbon footprints through the product life cycle environmental impact assessment, low-carbon product design, and other projects · Constantly track and feedback changes in market demands and promptly adjust business planning
Reputational risk	Increase in concerns or negative feedback from stakeholders	<ul style="list-style-type: none"> · Stakeholders are quite concerned about the green and low-carbon performance of the company and its products · Any inconsistency between the company's claimed climate action goals and program implementation, versus its actual actions, may damage its reputation 	<ul style="list-style-type: none"> · Commit to being the first in the sector to achieve carbon neutrality across the value chain · Invite third-party organizations for full value chain carbon verification · Regularly announce to the public the fulfillment of the company's climate change goals and milestone action plans

Indicators and targets

HY Solar follows the international climate action goals and relevant initiatives, and responds to the global average temperature rise control goal under the Paris Agreement and China's strategic goals of "carbon peaking by 2030 and carbon neutrality by 2060". To accelerate the implementation of its carbon neutral goals, the company formulates goals and indicators of energy, water resources, wastes, etc., manages its GHG emissions, constantly monitors the target implementation, and makes every effort to address climate change.

GHG management

The company constantly conducts quantification of its GHG emissions at the organization level. During the reporting period, HY Solar (Wuxi) verified its GHG emissions for 2023 and formulated GHG improvement actions to facilitate the company's steady progress on its path toward sustainability. In 2024, the company quantified its total GHG emissions at the organization level (Scope 1 and Scope 2) resulting from the consumption of natural gas, gasoline, diesel and outsourcing electricity within its operations boundary, totaling 2,087,356.14 tons of carbon dioxide equivalent.

GHG emissions at the organization level (Scope 1 and Scope 2):

Indicator	Emission source	Unit	2024	2023	2022
Scope 1: Total direct GHG emissions			2,696.33	8,784.70	530.11
Scope 1: Direct GHG emissions	Natural gas	Tons of carbon dioxide equivalent	2,251.28	8,238.18	155.38
	Gasoline		293.74	299.31	181.02
	Diesel		151.31	247.20	193.71
Scope 2: Indirect GHG emissions from energy	Outsourcing electricity		2,084,659.81	1,683,056.76	1,100,561.76
Total GHG emissions (Scope 1 and Scope 2)			2,087,356.14	1,691,841.46	1,101,091.88
Emission intensity of ten thousand yuan output value		Tons of carbon dioxide equivalent / ten thousand yuan output value	2.86	1.43	0.50

Note: The scope of operation boundary at the organization level in 2024 includes HY Solar, HY SOLAR (Wuxi), Hongyuan Energy (Baotou), Hongyuan New Material (Baotou), Hongyuan New Material (Baotou) and Hongyuan New Material (Xuzhou). Only the GHG emissions from natural gas, gasoline, diesel and outsourcing electricity are quantitatively calculated.

Environmental compliance management

GRI 302 | GRI 303 | GRI 306

Environmental management system

HY Solar strictly adheres to the Environmental Protection Law of the People's Republic of China and other national and local environmental protection laws and regulations, placing significant emphasis on the impact of its operations on the environment. The company has established a systematic environmental management system, formulated environmental protection responsibility system and built a comprehensive environmental management structure, clarifying the division of labor and responsibilities at all levels and integrating environmental management into its businesses. As of the end of the reporting period, all operations sites of the company have passed ISO 14001 Environmental Management System Certification. In 2024, the company's investment in environmental protection amounted to RMB 76.9345 million yuan, including the costs for renovation environmental protection facilities, disposal of hazardous wastes, renovation of rainwater and sewage pipes, remediation under emergency response plans, environmental monitoring, etc.

Environmental protection risk management

The company has formulated the Control Procedures for Identification and Evaluation of Environmental Factors and Procedures for Identification of Dangerous Sources and Risk Evaluation, and regularly conducted environmental risk identification, evaluation, and management & control measures to ensure full alignment of all activities with environmental protection standards. We have set clear environmental goals and indicators for important environmental impact factors, and developed corresponding management plans and emergency response plans to control key environmental factors. During the reporting period, the company did not incur any administrative penalties for breaches of the environmental protection laws and regulations, nor were there any major incidents involving pollutant leakage or environmental violations.

Environmental training

Hongyuan New Material (Baotou) has formulated the Environmental Protection Education and Training System, conducting online and offline environmental protection training through routine and special environmental protection education, training on the environmental emergency response plan, etc. Environmental emergency management training and drills have been regularly conducted, with all trainings being recorded in detail and filed. The training covered general knowledge of environmental protection laws and regulations, identification of environmental factors, as well as management practices regarding solid waste, environment, energy conservation & emission reduction, and major hazardous sources. In 2024, the company organized 64 environmental protection training sessions for all employees, which were attended by 5,707 employees and lasted for 20,000 hours.

In 2024
the company organized
64
environmental protection training
sessions for all employees

The number of participating
employees reached

5,707

The training duration exceeded
20,000
hours

Subsidiaries	2024 environmental targets	Fulfilment in 2024
HY Solar (Wuxi)	100% compliance of domestic sewage and rainwater discharge	Fulfilled
	100% compliance of VOCs discharge	Fulfilled
	100% compliance of day and night noise discharge	Fulfilled
	100% compliance of hazardous waste disposal	Fulfilled
	100% compliance of general solid waste disposal	Fulfilled
Hongyuan Energy (Baotou)	Zero soil & water pollution accidents	Fulfilled
	100% wastewater reuse, and 100% compliance of waste gas emission	Fulfilled
	100% compliance of solid waste & hazardous waste disposal	Fulfilled
	100% synchronized operation of environmental protection management facilities	Fulfilled
	100% compliance of plant boundary noise	Fulfilled
Hongyuan New Material (Baotou)	Zero environmental pollution accidents with media exposure or impact at the municipal level and above	Fulfilled
	Zero environmental pollution accidents	Fulfilled
	100% implementation of the environmental emergency response plan	Fulfilled
Hongyuan New Material (Xuzhou)	100% soundness & operations of environmental protection facilities	Fulfilled
	100% collection of solid waste and hazardous waste	Fulfilled
	100% management, control and compliance of environmental emission indicators	Fulfilled
	100% disposal of environmental protection facility operation abnormality	Fulfilled
	Zero EHS government penalty incidents	Fulfilled



Special training on environment and energy conservation & emission reduction



Training on general knowledge of environmental protection laws & regulations, and solid waste management



Special safety training on environmental factor identification



Training on management requirements for major dangerous sources



Training on hazardous chemical safety management



Drills and training on warehouse chemical leakage

Energy management

GRI 302 | TCFD A | IFRS RR-ST-130a.1 | SASB RT-EE-130a.1

Taking energy management as an important strategic task, HY Solar strictly abided by relevant laws and standards, and formulated the Energy Management Standards, as well as other regulations and process mechanisms regarding energy management. We set up a functional department responsible for energy management to clarify energy management responsibilities, establishing and implementing an efficient energy management system. During the reporting period, Hongyuan New Material (Baotou), HY Solar (Wuxi) and HongYuan New Material (Xuzhou) have passed the ISO 50001 Energy Management System Certification, which will cover more production bases.

Energy use

Environmental performance

Indicator	Unit	2024	2023	2022
Natural gas	m ³	1,045,289.93	13,830,709.00	77,706.16
	GJ	37,221.21	492,490.84	2,767.00
Gasoline	L	133,534.82	141,547.74	75,530.16
	GJ	4,174.95	4,425.47	2,361.44
Diesel	L	56,323.76	95,056.23	74,405.00
	GJ	2,020.46	3,409.87	2,669.07
Outsourcing electricity	kWh	3,132,874,805.00	2,951,177,915.00	1,929,794,431.00
	GJ	1,122,788,349.30	10,624,240.49	6,947,259.95
Total energy consumption	GJ	11,321,765.91	11,124,566.67	6,955,057.47
Consumption of outsourcing electricity as a percentage of total energy consumption	%	99.62	95.50	99.89
Energy intensity of ten thousand yuan output value	GJ/ten thousand yuan output value	15.50	9.38	3.17

HY Solar takes on its heavy responsibility for energy conservation and efficiency with practical actions, and each base actively explores and carries out energy reduction technology transformation with its own process characteristics to effectively improve energy use efficiency. The company sets clear its yearly energy management targets and organizes relevant trainings to enhance the employees' energy management awareness and skill level. In 2024, the company promoted a total of 36 energy conservation optimization projects.

Case

Technology Transformation Project for Restoring the Automatic Control System

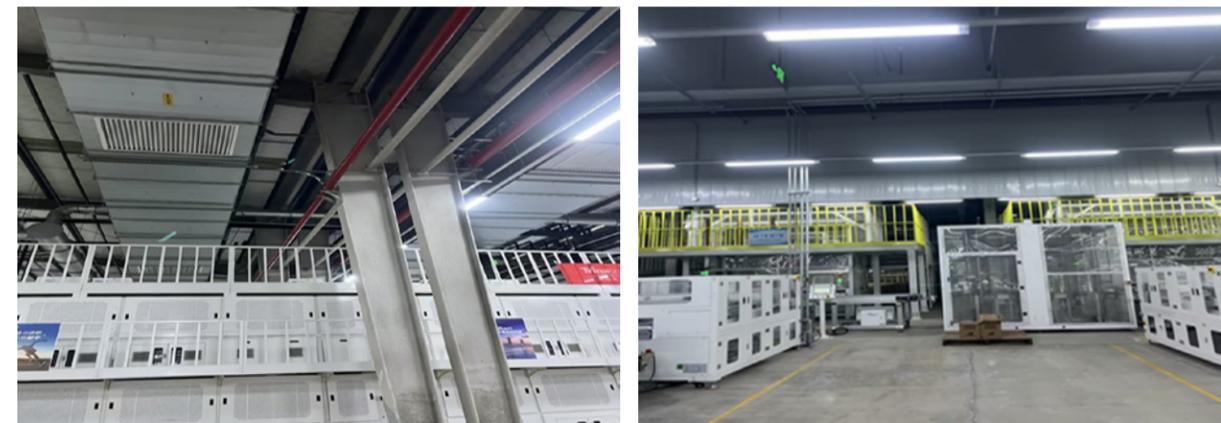
Through its technology transformation project for restoring the automatic control system, Hongyuan Energy (Baotou) aimed to save energy, reduce carbon, lower energy costs, decrease the workload of skilled technicians in process design and master control, optimize the reduction process, reduce reduction power consumption, enhance secondary conversion rate, and help increase the deposition rate of polycrystalline silicon.



Case

Temperature retrofit at lamination/string welding zone

By installing metal wall panels around the lamination area, adding removable sliding doors at the front and rear assembly lines, and retrofitting the discomfort of the operators in the lamination area and other actions, HY Solar (Wuxi) controlled the temperatures before lamination and at places like curing test areas, alleviating operators' discomfort in the lamination area while reducing the operation of power-consuming equipment. Take air-conditioners as an example, this could save about 663,600kwh of electricity annually on the assumption that they operate 300 days a year.



Temperature Retrofit Project at Lamination/String Welding Zone

Case

Energy conservation technology reform of heat recovery pumps in the PV cell workshop by changing the working frequency

In 2024, Hongyuan New Material (Xuzhou) adjusted the speeds of the heat recovery circulating water pumps for different working conditions by temporarily connecting the standby chilled water frequency control cabinets to the pump motors for frequency control, in order to make the equipment operate in a more efficient and safe manner. We completed the energy conservation technical transformation of the heat recovery circulating water pumps by changing the working frequency, and further optimized their operational parameters. During the transition season, a single heat recovery pump (220 KW) was connected to the control cabinet of the standby chilled water pump and operated at the changed working frequency (30 Hz) for about 5 months, saving about 300,000 kwh of electricity per year on the premise that the pressure and flow rate were met. Obvious energy conservation and economic benefits were realized at the PV Cell Workshop.



Water management

GRI 303 | IFRS RR-ST-140a.1 | IFRS RR-ST-140a.2 | IFRS RR-ST-410a.2

HY Solar strictly abided by national laws & regulations and local policies, and gradually established a perfect water management system to constantly strengthen water use management and optimize the water consumption structure. The company sources its water from municipal water pipeline network and fire water pipeline network, primarily for use in production operations, office utilities and fire emergency situations. During the reporting period, there were no negative impacts on local water resources in terms of water extraction, consumption or discharge.

The company attached great importance to water management, and each production base formulated its water resource use targets according to its own characteristics of water use in production. The company implemented water-saving measures, including the recycling of steam condensate water, the recycling and renovation of condensate water from air-conditioning rooms, the supply of diluted alkali wastewater to washing towers, etc. These measures minimized the water resource consumption from the source to reduce the operation risk arising from water shortage. During the reporting period, the company has completed 16 water conservation measures and water recycling projects, with a recycled water of 146,879,278.70 tons.

Case Steam Condensate Water Recycling Project

0.4 MPa steam surplus would occur when there were a large number of reduction furnaces operating during production process of polycrystalline silicon, and more steam surplus would occur in case of full-scale production (where about 72 reduction furnaces were operating). By adding a steam condensing device, Hongyuan Energy (Baotou) condensed and recycled the excessive 4 kg steam with the dry air cooler to significantly reduce energy consumption and costs for water treatment & water replenishment, saving energy and water resource while reducing GHG emissions.



Hongyuan New Material (Baotou) technology renovation of reclaimed water softening system Phase II

Hongyuan New Material (Baotou) adopted a mixed process composed of filtration with bag filters, ultrafiltration device, UV sterilization and reverse osmosis in its technology renovation of reclaimed water reuse system Phase II. The process was characterized by its advancement, simple & stable operation, high automation, simple equipment pipelines, a short construction period, etc. The project was designed with a water intake capacity of 2,500 m³/d, producing 2,250 m³/d of water through net ultrafiltration and yielding 1,350 m³/d from the reverse osmosis system. The produced water met the requirements for cooling tower water. Reclaimed water softening system Phase II produced reclaimed water at 15 tons/hour per day and machine pressurized and filtered water at 80 tons/hour per day, which could reclaim 2,520 tons of water per day if calculated comprehensively.



Indicator	Unit	2024	2023	2022
Total water intake		10,080,437	9,307,220.88	6,824,387
Total water discharge	t	6,168,759	4,344,412	2,038,524.60
Total water consumption		5,871,043	4,515,265.88	4,785,862.40
Circulating water consumption	t	146,879,278.70	/	/

Pollutant emission and waste management

GRI 306 | SASB RT-EE-150a.1 | SASB RT-EE-150a.2

HY Solar strictly complied with applicable laws, regulations and standards on environmental protection, defining specific management requirements for various discharges and wastes and preparing the relevant procedure documents. All functional departments made sure through close collaboration that pollutants were managed and disposed of in a manner that minimized the impact of production and operations on the ecological environment.

Air pollutant management

The air pollutants produced during the company's production are mainly nitrogen oxides, sulfur oxides and particle matter. We formulated internal management documents including, the Management Measures for Wastewater, Waste Gas and Noise, the Management and Control Procedures for Wastewater, Waste Gas and Noise, etc. We engaged a qualified third-party environmental testing organization to test regularly in strict accordance with the requirements outlined in the pollutant discharge permit, with all of the test results meeting the relevant requirements. During the reporting period, there was no accident of excessive emission of waste gas, and air pollutants were discharged in 100% compliance with standards.

Air pollutants was discharged in **100%** compliance with standards

Wastewater management

The company strictly abided by the applicable laws and regulations. In accordance with relevant laws and based on the characteristics of its own production process, each production base formulated wastewater management procedures and conducted continuous monitoring. Hongyuan Energy (Baotou) reclaimed all of its production wastewater after treatment at its wastewater treatment station, realizing zero discharge. As for domestic wastewater, the canteen wastewater was pre-treated through the kitchen-specific grease trap facilities, combined with the general domestic wastewater pre-treated by septic tanks, and treated by the industrial silicon treatment facilities for domestic wastewater to ensure that it reached Level 3 of the Integrated Wastewater Discharge Standard, before being sent to the Park's wastewater treatment station for subsequent treatment. During the reporting period, 100% of the company's overall wastewater was discharged in compliance with standards.

100% of the company's overall wastewater was discharged in compliance with standards

Case Water Reclaiming Project of Drainage Outside the Sewage Station

Hongyuan New Material (Baotou) has built a sewage station, and the treated water met all indicators and requirements for reclaimed water. To reduce the consumption of tap water during production, Hongyuan New Material (Baotou) decided to launch the Water Reclaiming Project of Drainage Outside the Sewage Station Phase I and Phase III for technology innovation for reduced or zero discharge. The wastewater discharged from the sewage station was sent to the power station for reuse, and it replaced the supplementary tap water in the power station and was recycled outside the closed cooling tower after treatment so that water resource was saved. After the completion of the project in 2024, based on the data of the base period and the statistical period, this Project reduced the water intake per product unit by 8.94 m³/t, or saved water by 558,742.49 m³ per year calculated on the basis of the annual production discounted with the load in the base period. Water was reclaimed by 1,530.8 m³/d after sewage treatment and reused at the machining workshop and circulating cooling tower, resulting in reduced sewage discharge of 558,742.49 m³ and annual energy consumption of 23.36 tce (equivalent value).



Waste management

The company formulated internal management measures such as the Management Measures for Solid Waste Pollution and the Management Measures for Hazardous Waste, and managed and disposed of wastes based on the categories. The company's solid waste mainly falls within three categories: general waste, domestic waste and hazardous waste. General solid waste is centrally stored by category at the temporary storage room for general solid waste and the waste slag shed, pending regular handover to a qualified unit for treatment; Domestic waste is collected through garbage cans that are categorized and labelled, pending regular treatment; For hazardous waste, a qualified third part is engaged for treatment in strict accordance with the relevant laws and regulations. In addition, the company conducts training for operators and officers involving in hazardous waste once a year, with training records maintained. During the reporting period, there was no accident in which the company was subject to penalty for its pollutant exceeding the standards or discharged in violation of regulations.

Indicator	Unit	2024	2023	2022
Hazardous waste		660.58	59.64	10.69
General solid waste	t	55,638.53	31,760.72	29,100
Total waste volume		56,299.11	31,820.36	29,110.69

Noise management

The company has formalized related noise management measurements and set up responsible departments for noise management in accordance with regulations and standards such as the Emission Standard for Industrial Enterprises Noise at Boundary. We conducted spot check and maintenance of equipment generating pollution, immediately dealing with any abnormalities; took appropriate blocking and isolation measures for noise sources to ensure that the noise at the plant boundary complied with the standards; and equipped its employees with noise protection devices during operation in the vicinity of noise pollution sources to ensure their physical and mental health, improve their working experience while reducing impacts on the neighboring communities. During the reporting period, the company received no noise complaints.

Biodiversity

GRI 304

The company attaches constant importance to issues regarding ecosystem and biodiversity protection, and strictly adheres to the ecological protection redline. None of the company's base projects are developed, constructed or sited within, near or outside natural resource conservation areas, nor in biodiversity-rich regions outside conservation areas. We take ecological impacts into account during the site selection of a new project. During production, we implement clean production, take measures to prevent and control pollution, manage and control the risk of soil and groundwater pollution, and endeavor to reduce the negative impacts of GHG emissions, discharges and resource use on biodiversity during operation. During the reporting period, there were no significant impacts on biodiversity attributable to the company's production and operation activities, or its products and services.

Humane orientation



- Employees' rights and benefits P62
- Talent cultivation P65
- Occupational health P67

Employee coverage rate of collective contracts: **100** %

Proportion of female employees: **22.20** %

Compliance rate of industrial noise: **100** %

Number of chemical leakage, fire and explosion, serious injury and death accidents: **0**

Coverage rate of medical examination and health records: **100** %

Training all employees and staff: approximately **160,000** hours

Employees' rights and benefits

GRI 2-7 | GRI 2-8 | GRI 401 | GRI 402 | GRI 410

In strict compliance with local laws and International Labor Organization conventions, HY Solar formulated a series of internal management measures, implemented the labor contract and collective contract system to ensure the full protection of employees' basic rights and interests such as labor compensation, rest and leave, occupational health and safety, social insurance, and vocational skills training. In addition, we have established a sound employee welfare and care system and standardized welfare management through such documents as the Employee Handbook and the Management Measures for Employee Welfare to attract, retain and incentivize outstanding employees.

Meanwhile, we firmly oppose any form of discrimination, adhere to the principle of equality and fairness, and provide every employee with fair development opportunities; We prohibit forced labor and child labor to ensure that all employees are legally admitted to the company and have reached the age of 18, maintaining the fairness and legality of the labor market.

Within the reporting period



No

accidents of child labor, forced labor, discrimination or harassment occurred

No

complaints about child labor, forced labor, discrimination or other labor

Employee coverage rate of collective contract is **100** %

Rights and interests protection

We fully respect employees' legal rights of free assembly and free association, encouraging them to join the labor union. We are committed to creating a diversified, equal and inclusive working atmosphere where every employee can experience a sense of belonging and value.



Diversity and inclusion

The company always adheres to the principle of acceptance and inclusiveness, and provides equal working opportunities for the disabled. During the reporting period, we recruited 46 disabled employees. We constantly improve our system to fully protect disabled employees' rights and interests. Hongyuan Energy (Baotou) has developed the Management Standards of Disability Subsidies, clarifying the amount of subsidies for disabled employees.

Protection of women's rights and interests

We always respect and attach great importance to female employees, and are committed to protecting the women employees' rights and interests. The total number of employees in Hongyuan 2024 is 6,347, of which 1,409 are women, accounting for 22.20%. We implement the Law of the People's Republic of China on the Protection of Women's Rights and Interests and other applicable laws and regulations to ensure the full protection of working mothers' legitimate rights and interests. In particular, Hongyuan Energy (Baotou) organized mental health lectures for female employees, provided two cancer screenings, set aside mother and baby rooms, and arranged maternity checkups and granted breastfeeding leave. Hongyuan New Material (Xuzhou) took measures to protect female employees' rights and interests, such as presenting benefits on International Women's Day. Hongyuan New Material (Baotou) organized the "521 Theme Activity: Caring for Female Employees", distributing free milk powder to pregnant women.



Complete employee communication channels

We have established a diverse communication mechanism such as the Hongyuan Voice Platform, Suggestion Box, and Employee Symposium to ensure that employees can effectively voice their ideas. Hongyuan New Material (Xuzhou) Base addressed all 259 pieces of employee voices within a week, with a handling rate of 100%, and organized 7 offline seminars and interviews, attended by a total of 230 person times. Hongyuan New Material (Baotou) has set up the "Employee Voice Channel" to collect employees' opinions.



Democratic Life Meeting



Hongyuan's Voice



Employee Suggestion Box

Meticulous employee care

Hongyuan cares for its employees at the utmost. Hongyuan New Material provided cash assistance in total amount of RMB38,202 for employees with serious illnesses in 2024. Hongyuan Energy (Baotou) responded swiftly by organizing fund-raising and providing timely condolences when employees encountered difficulties. Each subsidiary implemented various employee care initiatives, such as Baotou New Materials coordinating the enrollment of non-local employees' children and HY Solar providing accommodation for non-local employees.



Staff Dormitory



Staff Bookstore



Staff Innovation Workshop

Diversified employment and internationalized strategy

The company upholds the concept of professional and human-based protection of employees' rights and interests when developing overseas markets. Flexible office policy is adopted for the overseas sales team to support home office and abandon the traditional clock-in practice. With a focus on employee care, we send employees blessing emails and e-cards during festivals. Currently, foreign employees account for 87.5% of the overseas team, demonstrating our diversified and internationalized recruitment strategy.

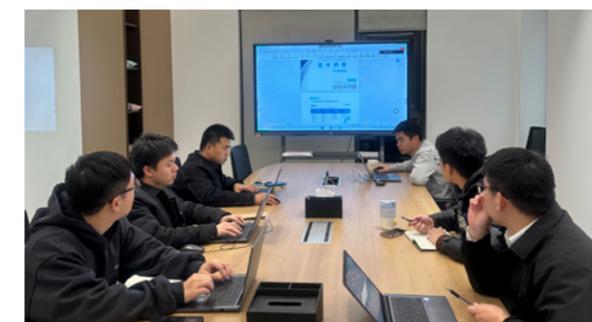
Talent cultivation

GRI 404

Talent cultivation injects inexhaustible power for business development. We summarized training experience from the previous year, comprehensively updated the annual training plan and talent development management system, and provided case studies, sales skills training, product knowledge training, English training, etc. in light of the direction of position development to enhance the staff's competence in actual practice and problem-solving.



New employees training



Training on answering frequently asked questions by customers



English training



Silicon material application knowledge training



Tax knowledge sharing



PV industry chain training

The company's talent development management system comprises the Management Measures for Talents and the Management Measures for Promotion and Demotion, which clearly outline career development paths and promotion mechanisms to ensure fair and structured talent growth. The company attaches importance to the exploitation and utilization of internal training resources, and invites external experts to conduct lectures on such fields as safety management, technology skills and career development, including laws training, exclusive training for female employees, and business ethics training, enhancing employees' comprehensive quality and professionalism.

We sort out the present state of talents, understand their distribution and structure through the annual talent inventory report, and adopt the nine-grid classification approach to accurately evaluate the employees' performance and capacity. Based on the inventory results, the company develops targeted training plans and promotion programs for all-round development and full utilization of talents, with measures including providing more development opportunities and resources for star employees, formulating personalized career development plans for key employees, and increasing attention and counseling for employees facing challenges.



The company conducted regular skill competitions and labor union activities, encouraging employees to constantly improve their skills and pursue excellence. Hongyuan New Material (Baotou) selected the position experts and presented generous bonuses through the fierce competition in the "Hongyuan Gold Craftsmen", significantly boosting employee enthusiasm and initiative.

Employees included in performance appraisals account for **100** % of all employees

	Senior management		Middle management		General management		General employees	
	Total training hours	Training hours per capita	Total training hours	Training hours per capita	Total training hours	Training hours per capita	Total training hours	Training hours per capita
HY Solar	200	20	1,228	68	820	48	11,600	32
Hongyuan New Material (Xuzhou)	0	0	220	10	2,750	50	58,413.6	50.4
Hongyuan Energy (Baotou)	360	40	2,400	40	4,400	40	64,800	60
Hongyuan New Material (Baotou)	16	2.67	30	0.71	94	0.35	120	0.05
HY Solar (Wuxi)	2	1	462	22	1,280	40	11,812	13.61

Note: 1. Unit: hour for all.
2. Only basic foundation induction training is available for overseas, with a coverage rate of 100%.

Occupational health

GRI 403

Regarding employees' occupational health and safety as the cornerstone of corporate Sustainability, the company has completed a comprehensive safety management system. We implement the policy of "Safety Foremost, Prevention First and Comprehensive Treatment" to safeguard employees' life and health rights in the workplace; We establish the cross-departmental Work Safety Management Committees and Work Safety Office covering the persons in charge of each operation line and employee representatives, to ensure the resource input for work safety management.

All of our production bases have passed the ISO 45001 Occupational health and safety system certification, and have been awarded as a Level 2 or Level 3 standardized work safety enterprise.

Performance in 2024

Compliance rate of industrial noise	Chemical leakage incident	Fire and explosion accident
100 %	0	0
Serious injury or fatality incident	Coverage rate of medical examination and health records	Occupational health and safety emergent incident
0	100 %	0
Major and above work safety liability accident	Workplace fatality incident due to production-related accidents	Lost labor rate per 200,000 man hours
0	0	0.437

We formulated the management measures and implementation rules covering safety training, occupational health and safety examination, purchase of safety equipment in strict accordance with the applicable laws and regulations to safeguard employees' occupational health & safety and create a stable safety management environment for production.

We provided full medical examination service, including pre-employment, in-service and exit medical examination, to ensure employees' health. All costs for medical examination were covered by the company, demonstrating our deep concern and significant attention to employees' health.

Demonstrating the excellent safety management performance

During this year's Safety Month, Hongyuan New Material (Xuzhou) organized a series of training and drills on occupational health and safety surrounding the theme of "Everyone talks about safety and everyone knows emergency measures", including comprehensive safety inspections, special safety inspections, emergency response drills, safety knowledge promotions, quizzes and ERT team drills, significantly enhancing employees' safety awareness and emergency handling capacity.



We constantly increase occupational health and safety education, with a focus on such key areas as laws & regulations, safety operation procedures, new employee orientation, emergency response plan, and firefighting & special operations; adopt various methods such as three-level safety education, specialized type of work education, and recurrent safety education, to ensure that employees receive comprehensive safety knowledge and skills; and promptly organize qualification safety training & retraining, practical operations and emergency drills to enhance employees' occupational health awareness and capacity.



Drill for workshop chemical leakage



Special training on accident analyses and preventive measures



Training on EHS hazard identification



Special safety training on environmental factor identification



Special training on hidden danger investigation and management



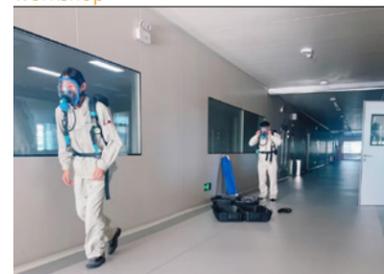
Emergency drill for mechanical injury in post-treatment workshop



Emergency drill for scald accident in quality inspection center



Special emergency drill for exhaust gas workshop



Drill for treatment of poisoning, suffocation and argon leakage in quality inspection center



Emergency drill for anti-electric shock in electrical workshop

Index

GRI content index

Statement of use	HY Solar Co., Ltd. has reported in accordance with the GRI Standards for the period from 1 January 2024 to 31 December 2024.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	NA

Disclosure	Location	Omission
GRI 2: General Disclosures 2021		
The organization and its reporting practices		
2-1 Organizational details	About us	
2-2 Entities included in the organization's sustainability reporting	Report profile	
2-3 Reporting period, frequency and contact point	Report profile	
2-4 Restatements of information	None	
2-5 External assurance Activities and workers	Verification statement	
Activities and workers		
2-6 Activities, value chain and other business relationships	About us	
2-7 Employees	Humane orientation	
2-8 Workers who are not employees	Humane orientation	
Governance		
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	Sustainability management	
2-13 Delegation of responsibility for managing impacts	Sustainability management	
2-14 Role of the highest governance body in sustainability reporting	Report profile	
2-15 Conflicts of interest	Business ethics	
2-16 Communication of critical concerns	Stakeholder engagement	
2-17 Collective knowledge of the highest governance body	Sustainability management	
2-18 Evaluation of the performance of the highest governance body	Corporate governance	

Disclosure	Location	Omission
2-19 Remuneration policies	Corporate governance	
2-20 Process to determine remuneration	Corporate governance	
2-21 Annual total compensation ratio	/	Confidentiality constraints, personal information of employees involved will not be disclosed temporarily.
Strategy, policies and practices		
2-22 Statement on sustainable development strategy	About us	
2-23 Policy commitments	Policy commitment	
2-24 Embedding policy commitments	Policy commitment	
2-25 Processes to remediate negative impacts	Business ethics	
2-26 Mechanisms for seeking advice and raising concerns	Stakeholder engagement	
2-27 Compliance with laws and regulations	Corporate governance	
2-28 Membership associations	About us	
Stakeholder engagement		
2-29 Approach to stakeholder engagement	Stakeholder engagement	
2-30 Collective bargaining agreements	Employees' rights and benefits	
GRI 3: Material Topics 2021		
3-1 Process to determine material topics	Sustainability management	
3-2 List of material topics	Sustainability management	
GRI201: Economic Performance 2021		
3-3 Management of material topics	Value creation	
201-1 Direct economic value generated and distributed	Value creation	
201-2 Financial implications and other risks and opportunities due to climate change	Climate change	
201-3 Defined benefit plan obligations and other retirement plans	Employees' rights and benefits	
201-4 Financial assistance received from government	See the annual report	
GRI 202: Market Presence 2016		
3-3 Management of material topics	Value creation	
202-1 Ratios of standard entry level wage by gender compared to local minimum wage	Value creation	
202-2 Proportion of senior management hired from the local community	/	Information incomplete, there are many subsidiaries, and accurate data cannot be disclosed temporarily.
GRI 203: Indirect Economic Impacts 2016		
3-3 Management of material topics	About us	

Disclosure	Location	Omission
203-1 Infrastructure investments and services supported	About us	
203-2 Significant indirect economic impacts	About us	
GRI 204: Procurement Practices 2016		
3-3 Management of material topics	Sustainable supply chain	
204-1 Proportion of spending on local suppliers	Sustainable supply chain	
GRI 205: Anti-corruption 2016		
3-3 Management of material topics	Business ethics	
205-1 Operations assessed for risks related to corruption	Business ethics	
205-2 Communication and training about anti-corruption policies and procedures	Business ethics	
205-3 Confirmed incidents of corruption and actions taken	Business ethics	
RI 206: Anti-competitive Behavior 2016		
3-3 Management of material topics	Business ethics	
206-1 Legal actions for anti-competitive behavior, antitrust, and monopoly practices	Business ethics	
GRI 207: Tax 2019		
3-3 Management of material topics	Corporate governance	
207-1 Approach to tax	Corporate governance	
207-2 Tax governance, control, and risk management	Corporate governance	
207-3 Stakeholder engagement and management of concerns related to tax	Corporate governance	
4 Country-by-country reporting	/	Not applicable, country reports are not available.
GRI 301: Materials 2016		
3-3 Management of material topics	Product lifecycle management	
301-1 Materials used by weight or volume	Product lifecycle management	
301-2 Recycled input materials used	Product lifecycle management	
301-3 Reclaimed products and their packaging materials	Product lifecycle management	
GRI 302: Energy 2016		
3-3 Management of material topics	Energy management	
302-1 Energy consumption within the organization	Energy management	
302-2 Energy consumption outside of the organization	/	Information unavailable, energy consumption related to upstream and downstream categories and activities has not been collected.
302-3 Energy intensity	Energy management	

Disclosure	Location	Omission
302-4 Reduction of energy consumption	Energy management	
302-5 Reductions in energy requirements of products and services	Energy management	
GRI 303: Water and Effluents 2018		
3-3 Management of material topics	Water management	
303-1 Interactions with water as a shared resource	Water management	
303-3 Management of water discharge-related impacts	Pollutant emission and waste management	
303-3 Water withdrawal	Water management	
303-4 Water discharge	Water management	
303-5 Water consumption	Water management	
GRI 304: Biodiversity 2016		
3-3 Management of material topics	/	Not applicable, all the development, construction and site selection of the company's base projects are not in, near or outside the natural resource reserve areas rich in biodiversity.
304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Biodiversity	
304-2 Significant impacts of activities, products and services on biodiversity	/	Not applicable, all the development, construction and site selection of the company's base projects are not in, near or outside the natural resource reserve areas rich in biodiversity.
304-3 Habitats protected or restored	/	Not applicable, all the development, construction and site selection of the company's base projects are not in, near or outside the natural resource reserve areas rich in biodiversity.
304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	/	Not applicable, all the development, construction and site selection of the company's base projects are not in, near or outside the natural resource reserve areas rich in biodiversity.
GRI 305: Emissions 2016		
3-3 Management of material topics	Climate change	
305-1 Direct (Scope 1) GHG emissions	Climate change	
305-2 Energy indirect (Scope 2) GHG emissions	Climate change	
305-3 Other indirect (Scope 3) GHG emissions	/	Information unavailable, data on other indirect (Scope 3) GHG emissions have not been collected.
305-4 GHG emissions intensity	Climate change	
305-5 Reduction of GHG emissions	Climate change	
305-6 Emissions of ozone-depleting substances (ODS)	/	Not applicable, the organization does not involve ozone depleting substances (ODS) emissions in its processes, products and services.
305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Pollutant emission and waste management	

Disclosure	Location	Omission
GRI 306: Waste 2020		
3-3 Management of material topics	Pollutant emission and waste management	
306-1 Waste generation and significant wasterelated impacts	Pollutant emission and waste management	
306-2 Management of significant waste-related impact	Pollutant emission and waste management	
306-3 Waste generated	Pollutant emission and waste management	
306-4 Waste diverted from disposa	Pollutant emission and waste management	
306-5 Waste directed to disposal	Pollutant emission and waste management	
GRI 308: Supplier Environmental Assessment 2016		
3-3 Management of material topics	Sustainable supply chain	
308-1 New suppliers that were screened using environmental criteria	Sustainable supply chain	
308-2 Negative environmental impacts in the supply chain and actions taken	Sustainable supply chain	
GRI 401: Employment 2016		
3-3 Management of material topics	Employees' rights and benefits	
401-1 New employee hires and employee turnover		Information unavailable, the company did not count this information.
401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employee	Employees' rights and benefits	
401-3 Parental leave	Employees' rights and benefits	
GRI 402: Labor/Management Relations 2016		
3-3 Management of material topics	Occupational health	
402-1 Minimum notice periods regarding operational changes	/	Not applicable, this information is not involved.
GRI 403: Occupational Health and Safety 2018		
3-3 Management of material topics	Occupational health	
403-1 Occupational health and safety management system	Occupational health	
403-2 Hazard identification, risk assessment, and incident investigation	Occupational health	
403-3 Occupational health services	Occupational health	
403-4 Worker participation, consultation, and communication on occupational health and safety	Occupational health	
403-5 Worker training on occupational health and safety	Occupational health	
403-6 Promotion of worker health	Occupational health	
403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational health	
403-8 Workers covered by an occupational health and safety management system	Occupational health	
403-9 Work-related injuries	Occupational health	
403-10 Work-related ill health	Occupational health	

Disclosure	Location	Omission
GRI 404: Training and Education 2016		
3-3 Management of material topics	Talent cultivation	
404-1 Average hours of training per year per employee	Talent cultivation	
404-2 Programs for upgrading employee skills and transition assistance programs	Talent cultivation	
404-3 Percentage of employees receiving regular performance and career development reviews	Talent cultivation	
GRI 405: Diversity and Equal Opportunity 2016		
3-3 Management of material topics	Employees' rights and benefits	
405-1 Diversity of governance bodies and employees	Employees' rights and benefits	
405-2 Ratio of basic salary and remuneration of women to men	/	Not applicable, personal information of employees involved will not be disclosed temporarily.
GRI 406: Non-discrimination 2016		
3-3 Management of material topics	Employees' rights and benefits	
406-1 Incidents of discrimination and corrective actions taken	Employees' rights and benefits	
GRI 407: Freedom of Association and Collective Bargaining		
3-3 Management of material topics	Employees' rights and benefits	
407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Employees' rights and benefits	
GRI 408: Child Labor 2016		
3-3 Management of material topics	Employees' rights and benefits	
408-1 Operations and suppliers at significant risk for incidents of child labor	Employees' rights and benefits	
GRI 409: Forced or Compulsory Labor 2016		
3-3 Management of material topics	Employees' rights and benefits	
409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Employees' rights and benefits	
GRI 410: Security Practices 2016		
3-3 Management of material topics	/	Information unavailable, the company did not count this information.
410-1 Security personnel trained in human rights policies or procedures	/	Information unavailable, the company did not count this information.
GRI 411: Rights of Indigenous Peoples 2016		
3-3 Management of material topics	/	Not applicable, the company did not count this information.
411-1 Incidents of violations involving rights of indigenous peoples	/	Not applicable, the company did not count this information.
GRI 413: Local Communities 2016		
3-3 Management of material topics	Contributions to society	
413-1 Operations with local community engagement, impact assessments, and development programs	Contributions to society	
413-2 Operations with significant actual and potential negative impacts on local communities	/	Not applicable, all operating points do not involve an actual or potentially significant negative impact on the local community.

Disclosure	Location	Omission
GRI 414: Supplier Social Assessment 2016		
3-3 Management of material topics	Sustainable supply chain	
414-1 New suppliers that were screened using social criteria	Sustainable supply chain	
414-2 Negative social impacts in the supply chain and actions taken	Sustainable supply chain	
GRI 415: Public Policy 2016		
3-3 Management of material topics	/	Not applicable, the countries where the company operates do not involve political donations.
415-1 Political contributions	/	Not applicable, the countries where the company operates do not involve political donations.
GRI 416: Customer Health and Safety 2016		
3-3 Management of material topics	Quality service	
416-1 Assessment of the health and safety impacts of product and service categories	Quality service	
416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Quality service	
GRI 417: Marketing and Labeling 2016		
3-3 Management of material topics	Quality service	
417-1 Requirements for product and service information and labeling	Quality service	
417-2 Incidents of non-compliance concerning product and service information and labeling	Quality service	
417-3 Incidents of non-compliance concerning marketing communications	Quality service	
GRI 418: Customer Privacy 2016		
3-3 Management of material topics	Business ethics	
418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Business ethics	

IFRS industry-based index

Topic and metric

Topic	Metric	Unit	Code	2024
Energy management	Total energy consumption	GJ		11,321,765.91
	Percentage of grid power	%	RR-ST-130a.1	99.61
	Percentage of renewable electricity	%		0.39
Water management	Total water withdrawal	t	RR-ST-140a.1	10,080,437
	Total water consumption	t	RR-ST-140a.2	5,871,043

Metric

Metric	Unit	Code	2024
Total capacity of photovoltaic (PV) solar modules produced	MW	RR-ST-000.A	4,454.88

Verification statement

Independent Verification Statement



Verification Statement: EIV2 121740 0005 Rev. 00

To the management and stakeholders of HONGYUAN Green Energy Co., Ltd.,

TÜV SÜD Certification and Testing (China) Co., Ltd. (hereinafter referred to as "TÜV SÜD") has been engaged by HONGYUAN Green Energy Co., Ltd. (hereinafter referred to as "HY Solar" or "the Company") to perform an independent third-party verification on HONGYUAN Green Energy Co., Ltd. 2024 Environment, Social and Governance Report (hereinafter referred to as "the Report"). During this verification, TÜV SÜD's verification team strictly abided by the contract signed with HY Solar and provided verification regarding the Report in accordance with the provisions agreed by both parties and within the authorized scope stipulated in the contract.

This Independent Verification Statement is based on the data and information collected by HY Solar and provided to TÜV SÜD. The scope of verification is limited to the given information. HY Solar shall be held accountable for authenticity and completeness of the provided data and information (contains assumptions, projections, and/or historical facts).

Scope of Verification

Time frame of this verification:

- ❖ The Report contains the data disclosed by HY Solar during the reporting period from January 1st, 2024 to December 31st, 2024, including governance, environmental and social information and data, methods for management of material issues, actions/measures and the Company's sustainability performance during the reporting period.

Physical boundary of this verification:

- ❖ The on-site verification sampling took place at below listed location:
158 Nanhu Middle Road, Xuelang Sub-district, Binhu District, Wuxi, Jiangsu Province, China.

Scope of data and information for the verification:

- ❖ The scope of verification is limited to the data and information of HY Solar and all companies under its operational control covered by the Report.

The following information and data are beyond the scope of this verification:

- ❖ Any information and contents beyond the reporting period of this Report; and
- ❖ The data and information of HY Solar's suppliers, partners and other third parties; and
- ❖ The financial data and information disclosed in this Report that have been audited by an independent third party are not verified again herein.

Limitations

- ❖ The verification process is conducted in the above scope and places. Sampling and verification are adopted for the data and information in the Report by TÜV SÜD, and only the stakeholders within the Company are interviewed; and
- ❖ The Company's standpoint, opinions, forward-looking statements and predictive information as well as the historical data and information before January 1st, 2024 are beyond the scope of this verification.
- ❖ TÜV SÜD's verification conclusions are based on the analysis of the data and information collected by TÜV SÜD and may not identify all problems and conditions, nor constitute a guarantee of the credibility or status of the subject of verification.

Basis for the Verification

TÜV SÜD Certification and Testing
(China) Co., Ltd.
No.151 Heng Tong Road,
Shanghai 200070

Page 1 of 3
Tel: +86 21-61410123
Fax: +86 21-61408600
Web: www.tuvsud.com

ID: C08_EIV_F_10_03E Version: 2 Effective Date: 08 Feb 2025 Page 1 of 3

Independent Verification Statement



Verification Statement: EIV2 121740 0005 Rev. 00

This verification process was conducted by TÜV SÜD's expert team with extensive experience in the economic, environmental, social and other relevant areas and drew the conclusions thereof. The verification conforms to the following standards:

- ❖ *International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements Other than Audits or Reviews of Historical Financial Information, Limited Assurance*
- ❖ *Sustainability report verification programme operation rule (CCB_EIV_GR_002E Rev02)*

In order to perform adequate verification in accordance with the contract and provide reasonable verification for the conclusions, the verification team conducted the following activities:

- ❖ Preliminary investigation of the relevant information before the verification;
- ❖ Confirmation of the presence of the topics with high level of materiality and performance in the Report;
- ❖ On-site review of all supporting documents, data and other information provided by HY Solar; tracing and verification of key performance information;
- ❖ Special interview with the representative of HY Solar's management; interviews with the employees related to collection, compilation and reporting of the disclosed information; and
- ❖ Other procedures deemed necessary by the verification team.

Verification Conclusions

According to the verification, we believe that the data and information presented in HY Solar 's report are objective, factual and reliable, without systematic problems, and can be used by stakeholders.

The verification team has drawn the following conclusions on this Report:

Inclusivity	HY Solar has identified the internal and external stakeholders such as shareholders and investors, employees, clients and consumers, business partners, governments and regulatory authorities, NGO, and local communities (including residents), etc., and established a stakeholder communication mechanism to collect the demands of stakeholders on a regular basis.
Materiality	HY Solar has established the prioritization process of material topics determination, identified and assessed the priority of the sustainability topics which are highly related to the industry, the Company disclosed the strategy, management approach as well as sustainability performance in corporate operation, therefore the Report's adherence to materiality principle is guaranteed.
Responsiveness	HY Solar has disclosed the management approach and performance of high material topics that stakeholders concern, such as Business Ethics, Protection of Employee Rights, Product Quality and Safety, Occupational Health and Safety, Responsible Supply Chain, Product Lifecycle Management, Human Capital Development, and Technological Innovation, etc., and has established a communication mechanism, to fully respond to the demands and expectations of stakeholders.
Impact	HY Solar has established a sustainability governance system directly led by the Board of Directors. The Company has formulated ESG policies and strategic planning, established a regular stakeholder engagement mechanism, and conducts periodic assessments of key ESG

ID: CCB_EIV_F_10.03E Version: 2 Effective Date: 08 Feb 2025 Page 2 of 3

Independent Verification Statement



Verification Statement: EIV2 121740 0005 Rev. 00

issue management effectiveness. Additionally, HY Solar has been compiling annual ESG reports comply with GRI standards for three consecutive years, systematically enhancing its environmental, social, and governance capabilities. The Company strictly adheres to the AA1000 Accountability Principles, ensuring inclusivity, materiality, and responsiveness in its governance processes. By incorporating the principle of impact, HY Solar focuses on the actual and potential impacts of ESG issues on both the Company and its stakeholders, continuously optimizing its decision-making mechanisms to drive high-quality sustainable development.

Recommendations on Continuous Improvement

- It is recommended that HY Solar further improves its sustainability management system and strengthens ESG practices to support the Company's stable development.

Statement on Independence and Verification Capability

TÜV SÜD is a trusted partner of choice for safety, security and sustainability solutions. It specializes in testing, certification, auditing and advisory services. Since 1866, the company has remained committed to its purpose of enabling progress by protecting people, the environment and assets from technology-related risks. Today, TÜV SÜD is present in over 1,000 locations worldwide with its headquarters in Munich, Germany. Through expert teams represented by more than 26,000 employees, it adds value to customers and partners by enabling market access and managing risks. By anticipating technological developments and facilitating change, TÜV SÜD inspires trust in a physical and digital world to create a safer and more sustainable future.

TÜV SÜD Certification and Testing (China) Co., Ltd. is one of TÜV SÜD's global branches and has an expert team whose members have professional background and rich industrial experiences. TÜV SÜD and HY Solar are two entities independent of each other and both TÜV SÜD and HY Solar and their branches or stakeholders have no conflict of interest. No member of the verification team has business relationship with the Company. The verification is completely neutral.

Signature:

On Behalf of TÜV SÜD Certification and Testing (China) Co., Ltd.

Zhu Wenjun
TÜV SÜD Sustainability Authorized Signatory Officer
March 03rd, 2025
Shanghai, China

Note: In case of any inconsistency or discrepancy, the simplified Chinese version "Independent Verification Statement CN" of this verification statement shall prevail, while the English translation is used for reference only.

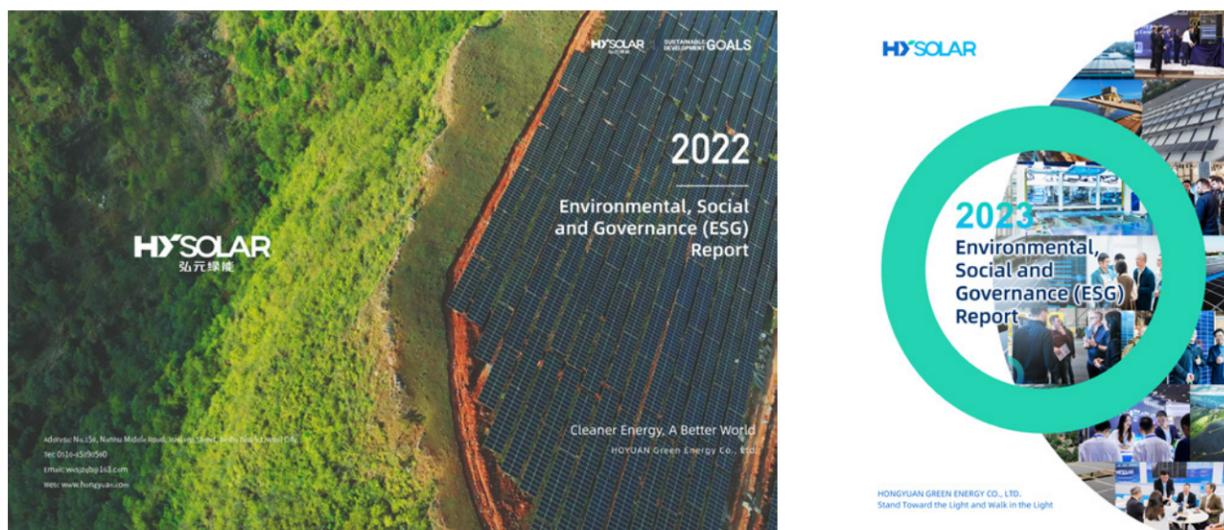
ID: CCB_EIV_F_10.03E Version: 2 Effective Date: 08 Feb 2025 Page 3 of 3

Report profile

GRI 2-2 | GRI 2-3 | GRI 2-5 | GRI 2-5

The HONGYUAN GREEN ENERGY CO., LTD. 2024 Environmental, Social and Governance Report (hereinafter referred to as the "Report" and the "ESG Report") of is the third ESG report of HY Solar Co., Ltd. which aims to present our management methods, practices and performance in the field of environmental, social and governance to all stakeholders fairly and objectively.

Unless otherwise specified, the financial data in the report are in RMB. The report is published on an annual basis, and the last report was published in April 2024.



[↑ Click on the cover to get the report](#)

Time frame

From January 1, 2024 to December 31, 2024, some information is slightly expanded.

Organizational scope

This report covers HY Solar Co., Ltd. and its subsidiaries. For ease of writing, some entities will appear in the report with abbreviations, and their business types and referencing relationships are described as follows:

Business type	Full name of the company	Abbreviation
Headquarter, equipment	HONGYUAN GREEN ENERGY CO., LTD.	HY Solar, the company, we
Silicon	Hongyuan Energy Technology (Baotou) Co., Ltd.	Hongyuan Energy (Baotou)
Silicon wafer	HOYUAN New Material (Baotou) Co., Ltd.	Hongyuan New Material (Baotou)
Module	HY SOLAR Co., Ltd.	HY SOLAR (Wuxi)
	YuanTech Solar Co., Ltd.	YuanTech Solar
Cell	Hongyuan New Material (Xuzhou) Co., Ltd.	Hongyuan New Material (Xuzhou)

Reporting basis

In accordance

Global Reporting Initiative GRI Sustainability Reporting Standards (2021)
Self-regulatory Guidelines for Listed Companies of the Shanghai Stock Exchange No. 1 - Standardized Operation Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial)

With reference

Sustainability Accounting Standards Board (SASB) Sustainability Accounting Standards for Electrical and Electronic Equipment Industries
IFRS S2 Industry-based Disclosure Requirements Volume 44 Solar Technology and Solution Developers
Task Force on Climate-Related Financial Disclosures (TCFD)
United Nations 2030 Sustainable Development Goals (UN SDGs 2030)
The Ten Principles of the United Nations Global Compact (UNGC 10 Principles)

Data source

The cases and data in the report are all from the original records or financial reports of the actual operation of the company. Unless otherwise specified, the currency types and amounts involved in this report are measured in RMB.

Confirmation and assurance

This report was approved by the Board of Directors on April 29, 2025.
This report has obtained the "limited guarantee" opinion issued by TÜV SÜD Certification and Testing (China) Co., Ltd. Please refer to the "Verification statement" for details.

Report acquisition

This report is available in electronic PDF format at:

- Shanghai Stock Exchange website (www.sse.com.cn)
- Company website (www.hysolar.com)
- HY Solar WeChat public account

Contact Information

Address: 158 Nanhu Middle Road, Binhu District, Wuxi City, Jiangsu Province
Contact number: 0510-85958787
Contact email: pr@hysolar.com



HONGYUAN GREEN ENERGY CO., LTD.

Address: 158 Nanhu Middle Road, Binhu District, Wuxi City, Jiangsu Province

Contact number: 0510-85958787

Contact email: pr@hysolar.com



Wechat



Wechat Channel



LinkedIn



YouTube