阳光能源控股有限公司

股票代码： 00757.HK

2024年度全年业绩

2024 Annual Results

Solargiga Energy

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Market Overview 1

1.1 Global Newly Installed PV Capacity Exceeds Expectations

BloombergNEF: Global newly installed PV capacity reached 599GW in 2024

- Global newly installed solar PV capacity grew by about 34.9% year-on-year in 2024; the rise of emerging markets is injecting new momentum into the global PV market

Global Market Performance:

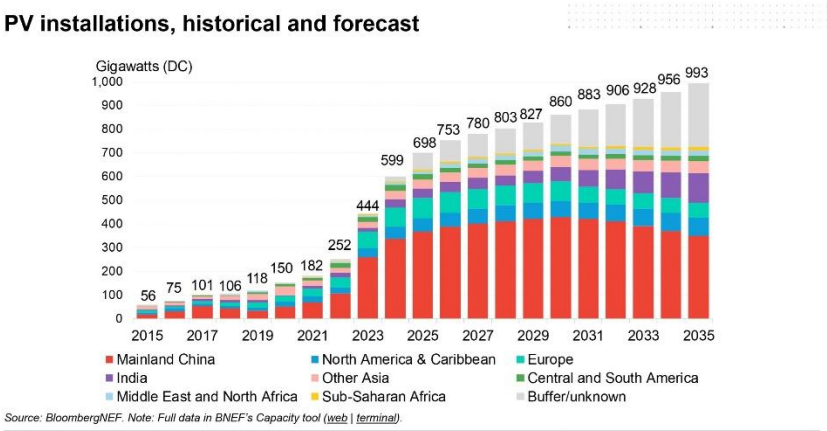
- According to the China Photovoltaic Industry Association (CPIA), the number of global GW PV markets increased to 37 in 2024
- Exports of approximately 235.93GW of PV modules, up 13% year-on-year compared to 2023, with demand performing better than expected

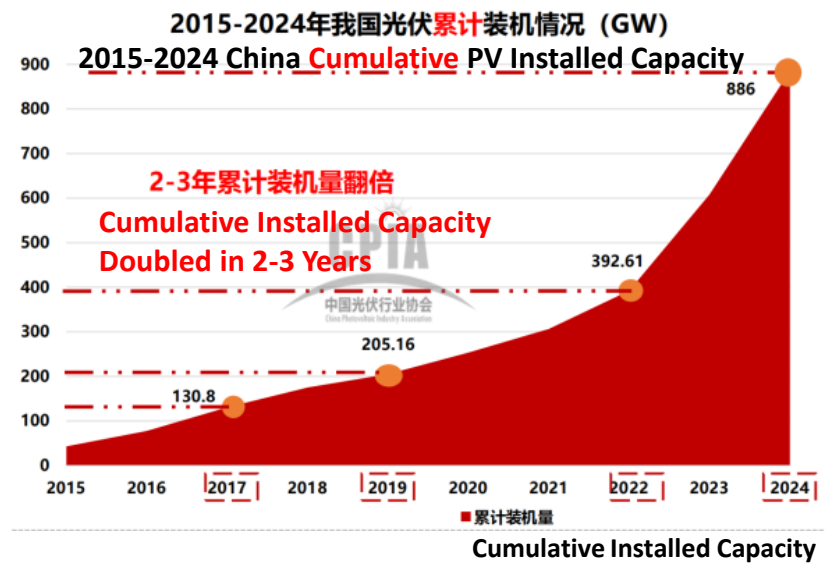
- Among them, the Middle East market ranked first with a growth rate of 99%, followed by the African market with a growth rate of 43%, the Asia-Pacific market with a growth rate of 26%, and the American market with a growth rate of 10%, while the European market was the only regional market with a negative growth rate, with the volume of imports decreasing by 7%

Overall demand in China:

- During the year, China newly installed PV capacity reached 277.57GW, up 28.3% year-on-year, with cumulative PV capacity exceeding 886GW

- The year-end rush for installations boosted overall new capacity in China, leading to a historic high in annual new installations and exceeding initial expectations
- Centralized projects accounted for 57% of new installations; commercial and industrial projects accounted for 32% of new installations; and household projects accounted for 11% of new installations





1.2 Short-term Challenges Intensify for PV Industry Capacity Clearance Enters Later Stages

Phase-wise Imbalance in Supply and Demand Structure Across the Industry Chain

- Periodic overcapacity has led to oversupply in the market, continued decline in product prices, and fluctuations in raw material costs, which have periodically affected the profitability of PV module manufacturers
- During the reporting period, there were significant price declines in silicon parts, wafers, cells, and modules, leading to widespread pressure on gross margins across all stages, along with a noticeable supply-demand mismatch
- There remains considerable uncertainty regarding future capacity release, and there is still a cautious sentiment in the spot market

Cash flow from operating activities under short-term pressure

- Affected by the rapid decline in overall supply chain prices, China's domestic installed capacity of PV products (silicon wafers/cells/modules) and overseas exports generally showed a trend of increasing volume and decreasing prices during the reporting period
- Supply and demand imbalance and price competition place short-term pressure on enterprises' profitability and cash flow, and overcapacity and technology iteration cycles increase investment return risk for enterprises, etc
- The significant fluctuations in raw material prices and the squeeze on profit margins at various stages further impact the profitability and cash flow of enterprises in the industry
- The PV industry has undergone about a year of market clearing across the entire supply chain. Although the capacity reduction cycle is still ongoing, it has begun to enter its later stages

Rising Trade Protection Intensifies Industry Competition in the Short Term

- Countries are adopting trade barrier measures and vigorously promoting localization policies to achieve their clean energy transition goals, aiming to accelerate the localization process of the new energy supply chain
- During the reporting period, the US, European Union, India, and other major traditional PV markets implemented a series of trade protection measures. The increasing trade barriers pose a threat to China's export-driven trade, which relies on price advantages
- The PV manufacturing sector is clearly experiencing a relaxed supply-demand balance and intensified competition in 2024, and profitability is expected to remain under pressure till 2025

1.3 PV Industry Remains Promising During the Energy Transition Process

Global Energy Transition Drives Market Demand Growth

- The International Renewable Energy Agency stated that by 2030, global energy-related carbon dioxide emissions are expected to decrease by 3%, and the figure will reach 51% by 2050. This requires the G20 to make significant strides in adjusting energy structures, aiming to triple renewable energy installed capacity to 9,400GW by 2030 and to increase it sevenfold from 2023 levels to 24,900GW by 2050
- Photovoltaic generation has become the most cost-effective source of electricity for most countries and regions. With the gradual release of PV demand in emerging countries and the active implementation of supportive policies by governments, the global GW-level PV market is expected to grow further in the future

National Policies Drive Marginal Improvements in Supply and Demand Landscapes

- The global energy transition is facing profound adjustments in energy patterns triggered by international geopolitical conflicts, prompting various regions to increase support for energy transition. For example, in the emerging market of the Middle East, countries like Saudi Arabia, the UAE, and Oman are leading the way. With strong government support and efficient advancement of a series of utility-scale projects, market demand is showing significant growth. The Asia-Pacific market is benefiting from the continuous promotion of favorable green energy policies, leading to a notable increase in installed capacity growth. In Southeast Asia, countries like Malaysia are providing tax exemption quotas for photovoltaic projects as governments actively promote the development of renewable energy
- Driven by national policies, the proactive initiatives of the China PV Industry Association, and the self-discipline awareness of enterprises, various stakeholders have begun to explore methods to stabilize market pricing systems and regulate industry competition. The supply and demand relationship in the PV industry has started to show positive marginal changes

Technological Innovation and PV+ Application Drive the Sustainable Development of the Industry

- PV technology is rapidly evolving, with TOPCon accounting for over 70% and becoming mainstream. New cost-reduction technologies such as BC, HJT, perovskite, and tandem are flourishing. PV companies are actively investing in next-generation cell technologies to reduce costs and increase efficiency during the industrialization process
- The integration and innovation of PV with construction, AI, and transportation sectors bring new opportunities, creating green buildings with power generation functions and promoting the development of the construction of green transportation infrastructure

Corporate Overview 2

2.1 Company Profile

Make the World a Better Place

Solargiga was established in 2000 and listed in Hong Kong in 2008 (stock code: 00757.HK). The Company integrates R&D, production, sales and applications of solar photovoltaic (PV) modules, the design, installation, operation and maintenance of PV systems, the R&D, production and sales of semiconductor monocrystalline silicon. With more than 2,000 employees, the Company's production bases are located in Jinzhou, Liaoning and Yancheng, Jiangsu, and branches in Suzhou, Beijing, Japan, Germany and Australia. Its business footprints cover domestic and major global PV markets. After more than 20 years of development, Solargiga is committed to providing high-quality PV products and services to global customers and promoting the development of the clean energy industry.

发展成就

Listed in Hong Kong on 31 March 2008 (757.HK)

Top 20 PRC PV Module Companies in 2024 (NO.14)

PVBL Global Photovoltaic Brand Value (Module) Top 20 (No.12)

PVBL 2024 Global Photovoltaic Top 100 (No.76)

The Most Influential PV Module Companies in 2024

2024 Distributed Photovoltaic Gold Product Award

National High-tech Enterprise

National Photovoltaic Manufacturing Industry Specified Conditions Admission Regulated Enterprise

Top 500 Global New Energy Companies in 2024 (No.282)

Top 500 PRC Energy Companies (Group) in 2024 (No.323)

Top 100 PRC Photovoltaic and Energy Storage Brands in 2024 (No.56)

National Green Factory

National Intelligent Photovoltaic Pilot Demonstration Enterprise

National Intellectual Property Advantage Enterprise

Photovoltaic Testing Center with China National Accreditation Service for Conformity Assessment' s laboratory accredited

National Model Enterprise of Harmonious Labor Relations – Excellent Enterprise

2.2 Shareholding Structure

阳光能源控股有限公司
SOLARGIGA ENERGY HOLDINGS LIMITED

Mr. Tan Wenhua
and his associates
21.43%

Hiramatsu
International Corp.
8.78%

施丹红女士

Individual
Shareholder
5.48%

HKEX 香港交易所

Public
Shareholders
64.31%

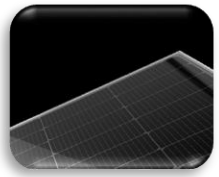
** as of December 31, 2024*

2.3 Production Capacity and Product Range

Continuing Operations

Main Business:

As a leading high-tech enterprise, Solargiga Energy Holdings Limited’ s main business covers the R&D, production and sales of solar PV modules, PV systems and semiconductor materials. The Company is devoted to promoting the development of renewable energy, providing efficient and reliable clean energy solutions through continuous technological innovation and industry chain integration.

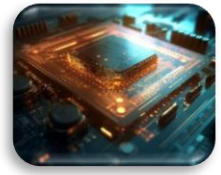


Module

The monocrystalline products have become mainstream in the market. Solargiga is committed to the development and sales of monocrystalline high-efficiency module products, such as N-type TOPCon modules, large-format modules, zero busbar modules, rectangular modules, N-type heterojunction with intrinsic thin layer (HJT) modules, flexible modules, offshore floating modules, and multi busbar all-black modules etc. high-end products.

System

The photovoltaic system business includes traditional distributed power station EPC business, Building Applied Photovoltaics (BAPV) business and Building Integrated Photovoltaics (BIPV) business, including customized building materials crystalline silicon modules (pure color, imitation stone, pattern series, featured with self-sufficiency in energy, enabling off-grid and moveable zero-carbon mobile building products etc , offering customers green building, LEED, near-zero energy building consultancy services, customized design and certification services.



Semiconductor

The Group is engaged in the production and sales of 6–8 inches semiconductor grade monocrystalline silicon ingot with heavy doping (including arsenic, antimony, phosphorus and boron products which are at the leading level of the industry) and 6–8 inches semiconductor grade monocrystalline silicon ingot with lightly doping. The Group is planning to increase in research and development, and production of multiple varieties of 8-inches semiconductor monocrystalline silicon for integrated circuit and 13–15-inches semiconductor monocrystalline silicon in 2025.

2.4 Global Customers

Overall Strategy:

Based in China, Solargiga is deeply cultivating the Asian market, and at the same time vigorously expanding the markets of Europe, South America and Australia.

Key Layout:

Domestically, Solargiga has established the branch in Suzhou and Beijing to expand the marketing presence, meanwhile to strengthen the service and development of large state-owned enterprise customers and further consolidated the sales channel strategy.
Overseas, Solargiga has established branches in Osaka **Japan**, Siegen **Germany**, and Sydney **Australia**, to develop various product sales channels and develop new customer bases.

Global footprints:

Solargiga has been actively cooperating with global customers, with business footprints in more than 30 major PV and semiconductor markets domestically and globally.

Core Business 3

3.1 PV Module Production Capacity Segment

Production Capacity 10.2GW

- Product sizes compatible with M10/G12

Jinzhou Base: 1.9GW

Jianhu Base: 8.3GW

3.1 Business Performance

PV module business

In 2024, the Group focused on the manufacturing and sales of downstream photovoltaic modules, achieved the following business objectives and results through coordinated efforts in marketing, technology, and production:

1. Increased the proportion of its own orders and strategically reduced production under specific market conditions to enhance operational dynamism of the Group
2. Optimized customer structure, established direct supply relationship with major customers, and reserved orders
3. Developed four leading household brand customers, with household distributed orders steadily increasing
4. Took advantage of the "small, fast, and flexible" strategy in the new round of the industry adjustment cycle
5. Maintained investment in research and development and promoted sustainable business through technological innovation

3.1.1 Optimized Order Structure, Strategically Reduced Production to Enhance Operational Dynamism of the Group

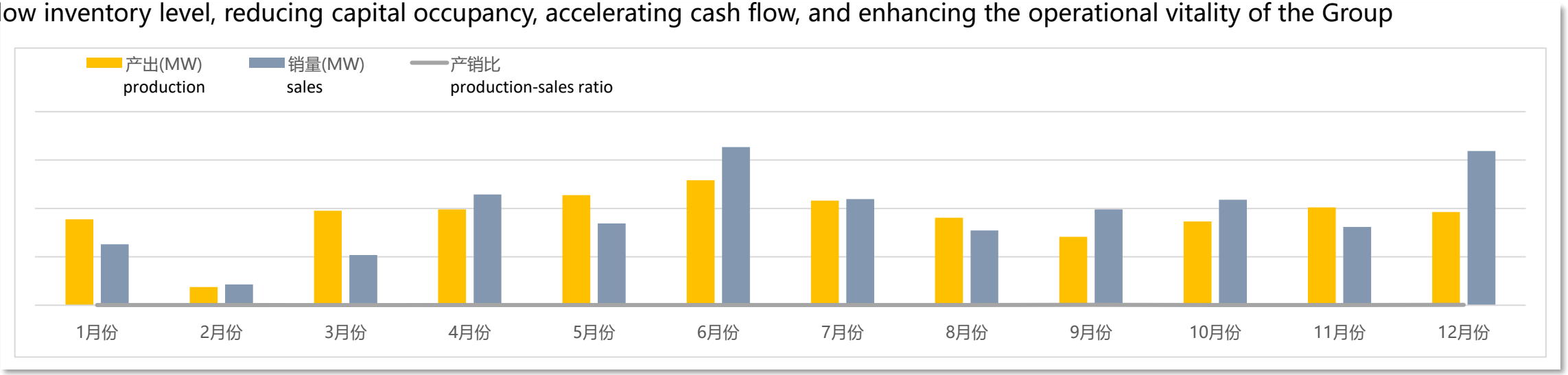
PV module business

Significant Growth in Domestic Direct Sales Order Volume

- In 2024, the Company actively adjusted its order structure and put more efforts into developing its own orders
- Despite being significantly impacted by the severe imbalance in industry supply and demand, the processing business faced considerable challenges; however, the direct sales segment still achieved substantial growth against the trend

Strategically Reduced Production and Achieved Annual Production-Sales Ratio of 103%

- Frequent fluctuations in product prices and the instability of raw material costs have introduced significant uncertainty into production costs, leading to substantial risks associated with blind expansion of production capacity
- In response to the complex environment, the Company took measures to reduce production, focused on improving product quality, and ensured the stability of the Company’ s operations, demonstrating its resilience and strong market adaptability
- The domestic annual production-sales ratio achieved 103%, ensuring a stable operating rate on the production side while maintaining a low inventory level, reducing capital occupancy, accelerating cash flow, and enhancing the operational vitality of the Group



3.1.2 Continuously Optimized Customer Structure, New Clients Became Core Strength

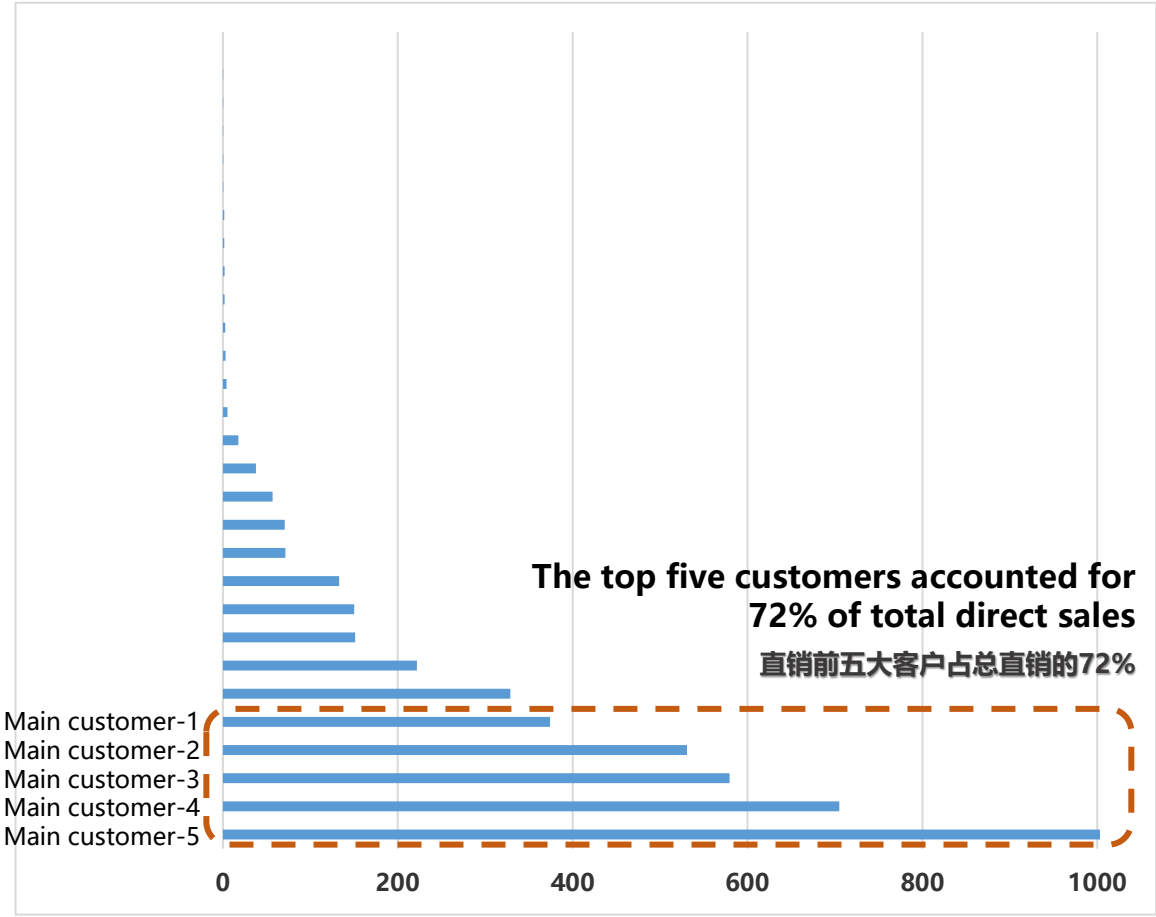
PV module business

Sales to New Domestic Customers Accounted for 43% of the Annual Sales Volume

- In 2024, the Group developed a total of 16 new customers, and sales to new customers accounted for 43% of annual sales, optimising the customer structure and injecting vitality into the Group's sustainable operations
- With a steady increase in the proportion of distributed household PV products, the Group maintained stable cooperation with newly developed **four major leading household PV brands**
- Leveraging the geographical advantage of its Beijing office, the Group actively sought new customers in other fields and **developed multiple new major clients among state-owned enterprises** in 2024

Secured 19 Projects in the Year, Sufficient order reserved

- As competition in the industry enters a white heat, bidding for domestic projects is becoming more difficult, requirements are increasing and barriers are rising
- In 2024, the Group has secured a total of **19 projects** with a capacity of **3,088MW**; 18 projects to be announced and 9 projects to be opened for bidding; there are sufficient order reserves to guarantee stable operation and sustainable development of the enterprise



3.1.3 Leveraging "Small, Fast, and Flexible" Strategy in the New Cycle

Core competitiveness of the Company

"Small" : The Group has continued to focus on the R&D and manufacturing of modules. It has concentrated resources on technology R&D and process improvement to enhance the performance and quality of PV modules, and also established closer cooperative ties with upstream raw material suppliers to ensure stable supply and reasonable price of raw materials, control costs, achieve refined management of production processes, reduce costs and improve efficiency.

"Fast": With a clear corporate structure and flat management, information transfer is efficient and smooth, enabling quick response to market changes and opportunities, as well as quick decision-making to seize market opportunities.

"Flexible": Amidst rapid changes in market demand, a high degree of flexibility in management enables the Group to quickly modify its operating strategies and adjust production lines to meet the customization needs of customers. When cooperating with partners, the Group can establish diversified cooperation models with upstream and downstream enterprises according to different project requirements, integrate resources from all parties, and achieve complementary advantages.

3.1.4 Adhering to Technological Innovation to Drive Business Sustainability

Core competitiveness of the Company

New materials

- Achieved the design and R&D of an innovative quick-install frame. The self-developed frame does not require bolts and can be installed through the combination of structural components, improving installation efficiency by 20-25%. The new frame profile and reduced height on side B result in a 5-8% reduction in frame weight, reaching a high technical level in the industry

New technologies

- By conducting validation experiments on various packaging materials, optical module loss is significantly reduced and module performance is improved
- The use of high-transparency adhesive film, double-layer coated liquid, gap film, reflective solder ribbon, light-converting film, half-cut passivation technology and other efficiency-enhancing materials has increased the proportion of high-power modules and further reduced module costs
- During the industrialization research of the new 0BB battery welding technology, by reducing the stress concentration issues of weld points and main busbars, the mechanical strength and long-term reliability of the modules have been improved, taking the lead in innovating the 0BB battery welding technology

New products

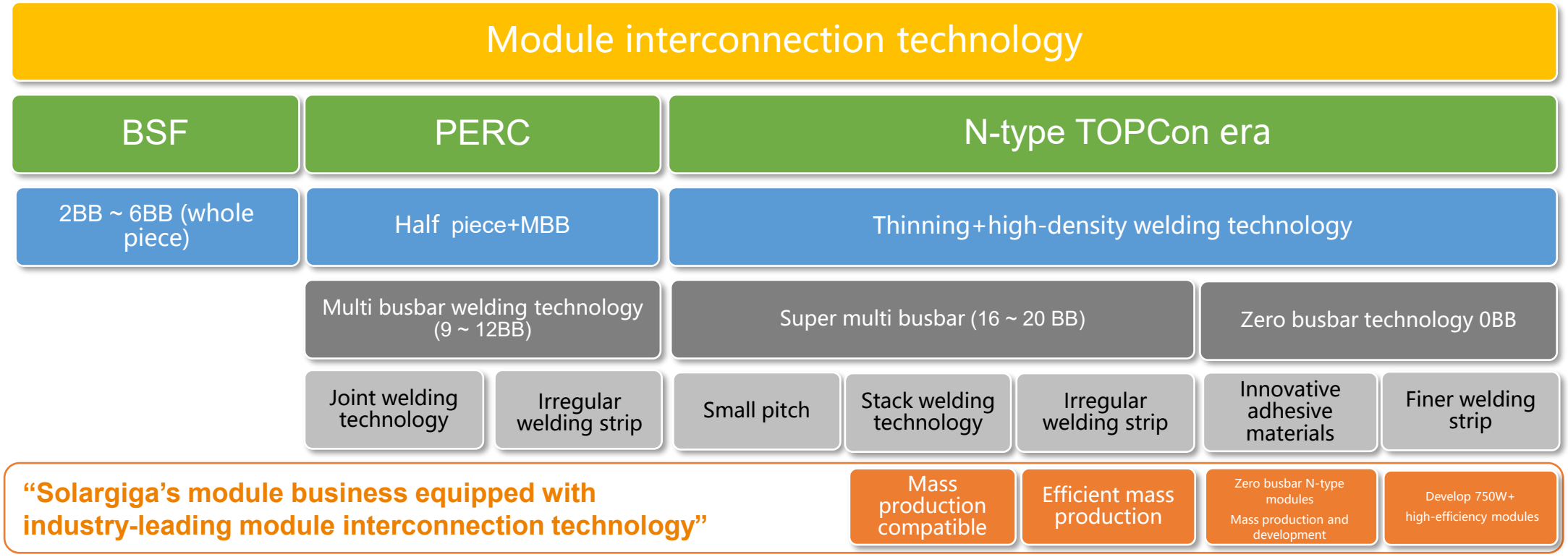
- To address market changes and tap the new product market, the Group has developed a variety of large-format rectangular chip modules and square chip modules. The maximum power of module shipments has reached 705-710W, achieving industry-leading standards
- The Group' s technical R&D team has designed and developed differentiated products such as flexible modules, steel frame modules, dust-proof frame modules, 1.6mm double-glass lightweight modules, ultra-high mechanical load modules, and portable installation for distributed components. The team has also completed the floating integrated design and development of offshore modules to meet module demand from different markets and enhance competitiveness

3.1.4 Industry-leading Module Interconnection Technology

Core competitiveness of the Company

The Group boasts industry-leading module interconnection technology with years of development in the PV sector

- The module interconnection technology has demonstrated outstanding performance and advantages in all aspects, from advanced welding technology to intelligent connection system, and from optimized circuit design to innovative material application
- In terms of technical reserves, the Group started the R&D and mass production of N-type products as early as 2018. In addition, by proactively formulating the N-type TOPCon technology roadmap and promising technology roadmaps such as HJT and BC, as well as cooperating with Westlake University in the joint R&D of perovskite and other cutting-edge technologies, the Group has been able to enhance its core competitive advantages
- Possessing extensive experience in the mass production of N-type modules, the Group can quickly respond to market demand, provide customers with high-quality and high-performance PV modules and green solutions, and drive the development of the entire PV industry



3.1.4 Reliable Product Quality, Excellent Product Performance

Core competitiveness of the Company

Focus on R&D to drive business development

The Group has established a number of national and provincial innovation platforms and assembled a group of technical R&D personnel. Through these efforts, the Group has developed packaging solutions for single-glass TOPCon battery module packaging solutions, solved issues related to moisture resistance of TOPCon batteries, launched the brand-new TOPCon battery single-glass series products, and promoted the product design of a series of 18X battery modules, thus providing continuous impetus to the Company's development.

Product quality among the best in the industry

The Group has obtained the Laboratory Accreditation Certificate from CNAS, demonstrating that its laboratory meets the requirements of national accreditation standards in terms of technical capabilities, management standards and quality systems. To date, the Company has received certifications from several authoritative institutions in the industry, including CQC, VDE, TÜV Rheinland, TÜV SÜD for new products such as 183N/210R/210N/HJT. Among them, the N-type products performed well in the reliability test conducted by TÜV SÜD, achieving industry-leading standards. As of 1H2024, the Company has obtained 185 product patents, including 60 invention patents.

Excellent outdoor empirical test performance

The 182N/P modules has passed the extreme cold weather outdoor empirical test in Mohe, the northernmost part of China, and won the "Best Quality Award for Outdoor Empirical Test Performance under Extreme Cold Conditions in Mohe" (漠河極寒條件下戶外實證最佳品質獎). The Group’s 182N/210N/HJT products were among the first batch of modules to enter the outdoor empirical test base in Wenchang, Hainan, the southernmost part of China, which is characterized by high temperatures and humidity. These products achieved remarkable performance in terms of power generation and attenuation rate even under high temperature and humidity conditions. The module products also passed the most effective wind load resistance empirical test in the country, demonstrating extraordinary tolerance and stability.


CQC certification


VDE certification


Extra-stringent tests


INMETRO in Brazil


JET in Japan


Fire Prevention in Italy


CNAS certified laboratory

3.1.5 Continuous Lean Capacity and Production

Core competitiveness of the Company

Lean module production capacity

Production indicators exceed industry average

Jinzhou Production Base: The yield rate of 182N type has achieved 99.83%, the P type has achieved over 99.93%, the N type fragmentation rate has achieved 0.34%, and the P type has achieved below 0.18%, reaching the advanced level of the industry. In 2024, the Jinzhou production base will achieve 100% quality inspection, which is at the advanced level in the industry.

Jianhu Production Base: Focusing on cutting-edge technology, fully devoting itself to industry-leading automation, AI intelligence+, subverting the traditional production model, with a coverage of more than 90% of the production line automation, and a 100% utilization rate of automation; the energy consumption cost is controlled at 0.009 RMB /W, 100% full quality inspection, and the component yield rate is above 99.8%, which is better than the industry average.

Production takes full advantage of policy subsidies

The Group has actively launched R&D and experimental projects to ensure lean manufacturing. The research institute and test line at the Jianhu production base are entitled to government policy subsidies in Yancheng. These include:

- Newly purchased R&D testing equipment will receive government subsidies based on related investments
- The government will provide financial rewards in proportion to Jianhu’ s actual registered foreign investment
- For the Jianhu production base reached different sales grade to give a one-time maximum of 8 million RMB of corresponding subsidies
- The factory of the Jianhu production base will be exempted from rent upon start of production
- The factory buildings and supporting facilities used by the institute will be designed and renovated by the government free of charge

3.2 Operating Performance

EPC Business

01

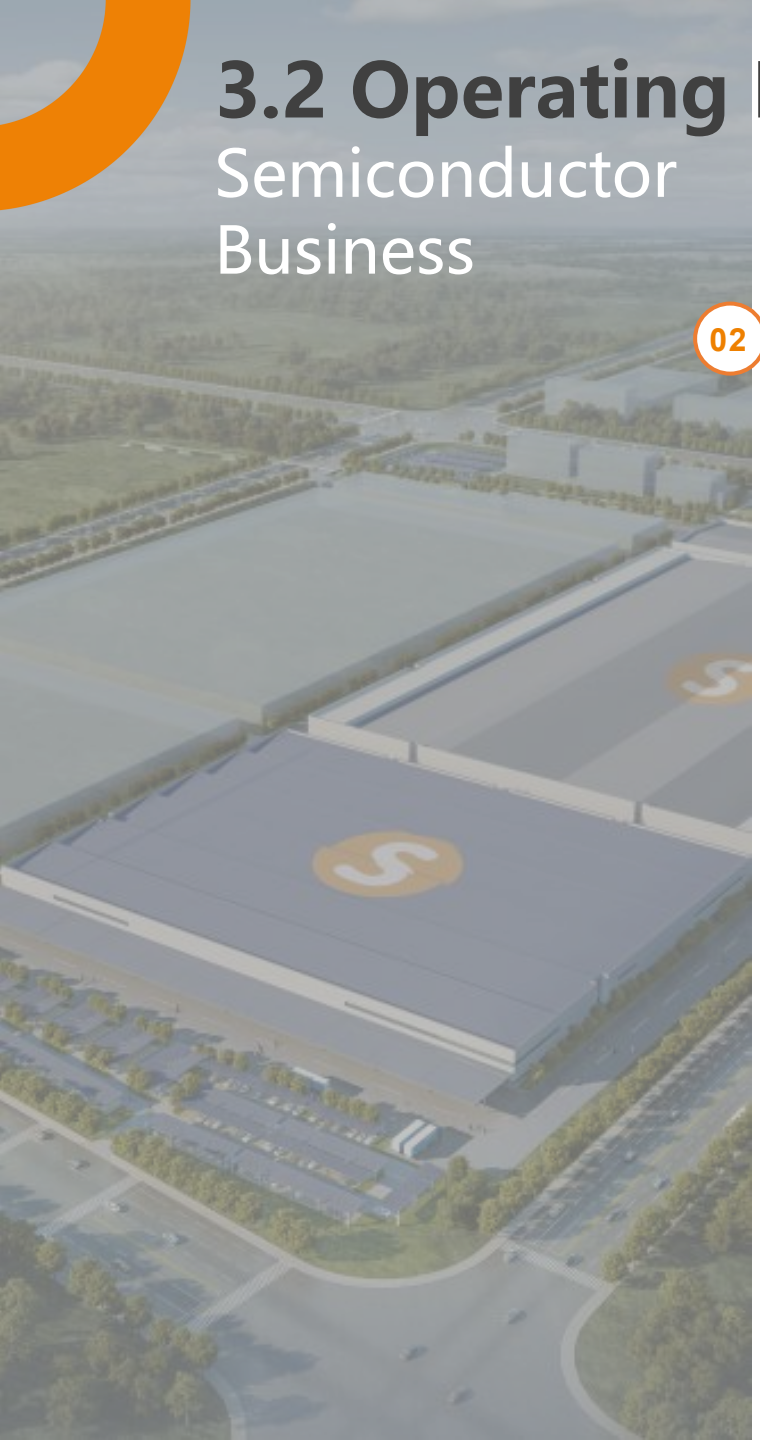
Construction and operation of PV power plants (EPC)

New production line completed: In the first half of 2024, the **BIPV crystalline silicon module R&D and production line with the largest unit capacity in China** was established in Yancheng, which realized the customization of module size and color, and launched special crystalline silicon module products such as imitation stones and color patterns, achieving low-cost mass production.

- During construction of the BIPV production line, a complete set of professional BIPV testing equipment was installed to conduct more in-depth research and development on the light transmittance, conversion efficiency, safety and durability of BIPV modules
- Based on BIPV technology, a new type of zero-carbon mobile building product has been developed, which integrates small-scale prefabricated buildings with customized photovoltaics and energy storage, enabling off-grid energy operation and electricity, and providing customers with green buildings, LEED, near-zero energy building consulting, special design and certification services
- In the first half of the year, zero-carbon mobile buildings launched a total of eight product series, which have been applied in Nanjing, Yancheng and other places

3.2 Operating Performance

Semiconductor Business



02

R&D, production and sales of monocrystalline silicon semiconductors

Turnaround of operating results in 2024, and the sales performance significantly improved compared with the same period last year.

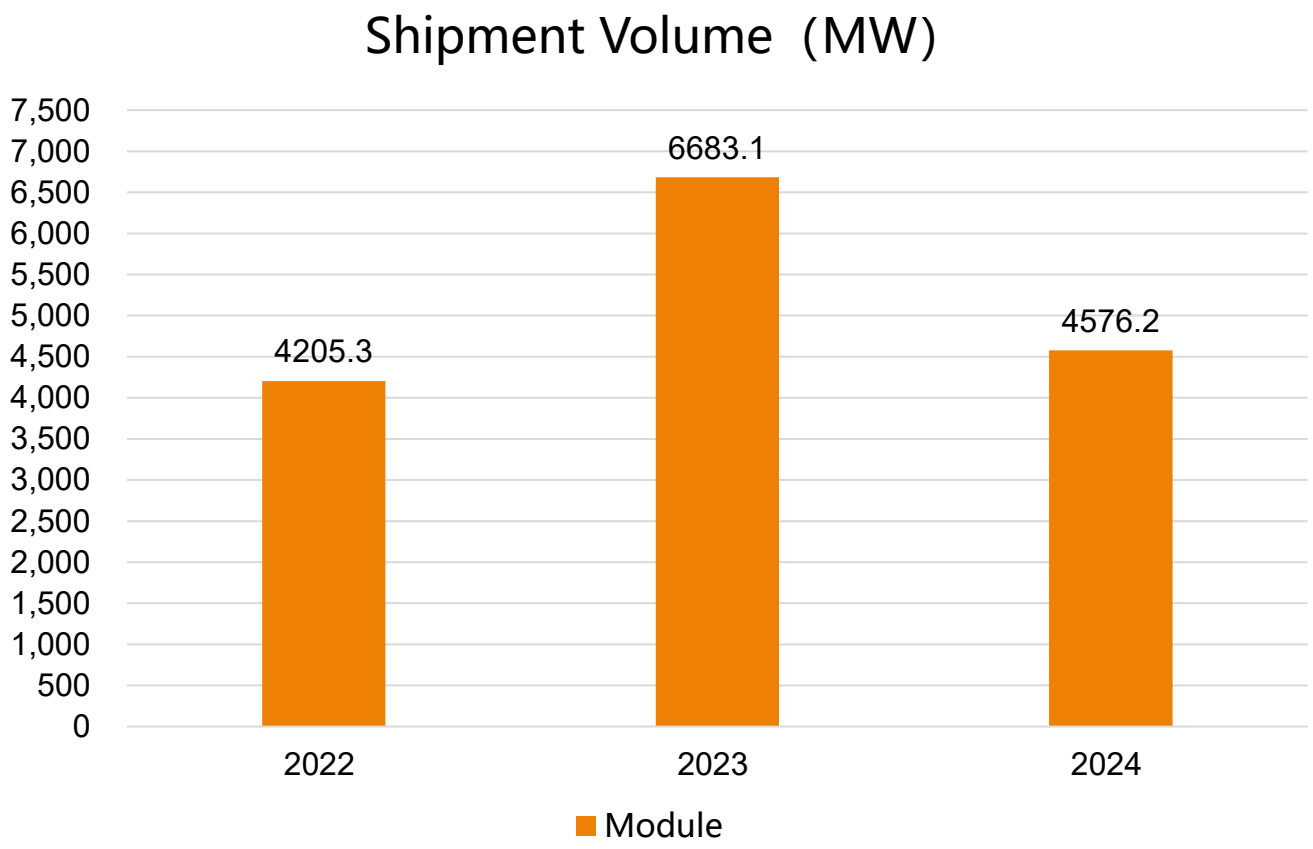
Upgrade of monocrystalline silicon semiconductor production equipment

- In the first half of the year, 20 sets of production equipment were added and 10 sets of production equipment were upgraded
- A new 2,000 sqm factory was constructed, adding 120 tons of advanced 6-16-inch production capacity.
- Eliminated outdated 4-5-inch production capacity and converted obsolete equipment to produce 6-inch monocrystalline silicon
- Once in production, the new project will help boost revenue and profitability

Financial Review 4

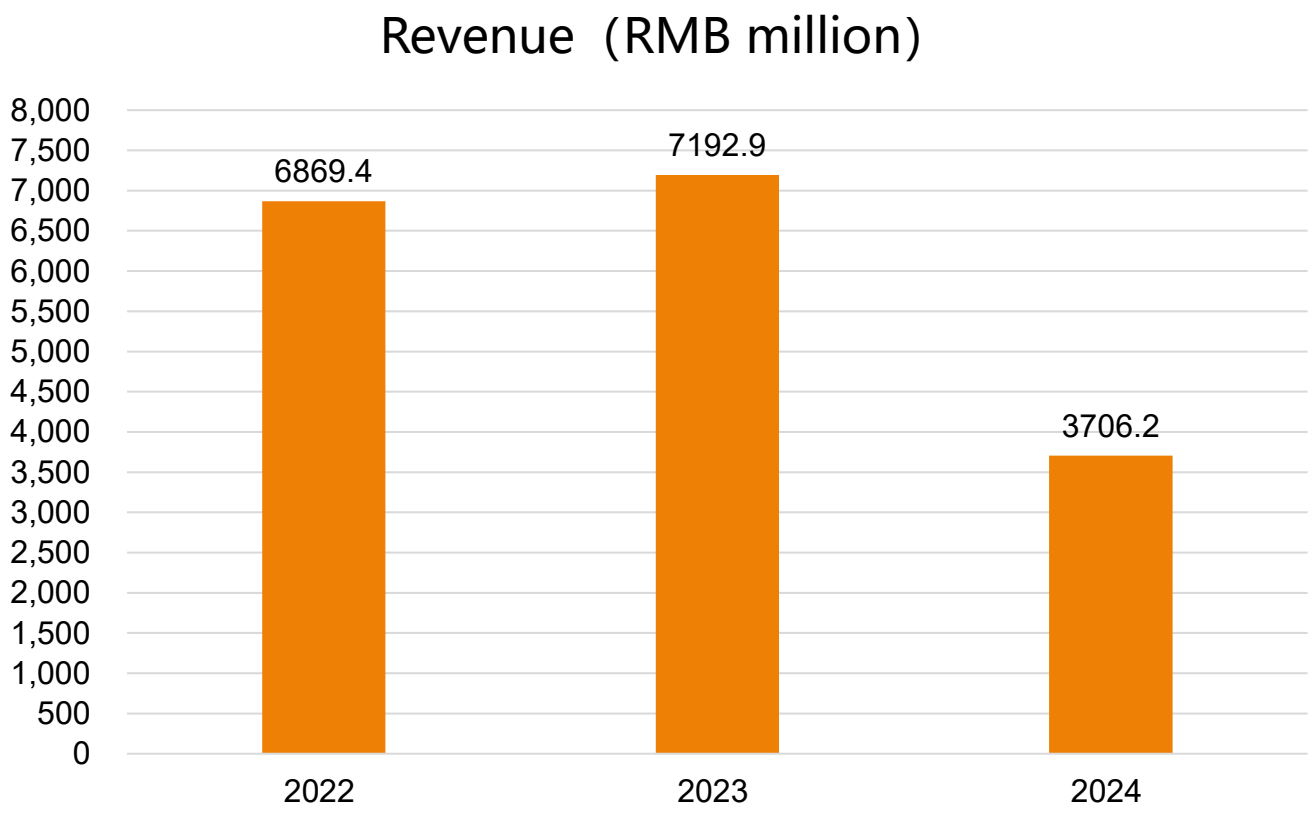
Financial Review

Shipment Volume



Financial Review

Revenue



Financial Review

2024 Annual Financial Results Highlights

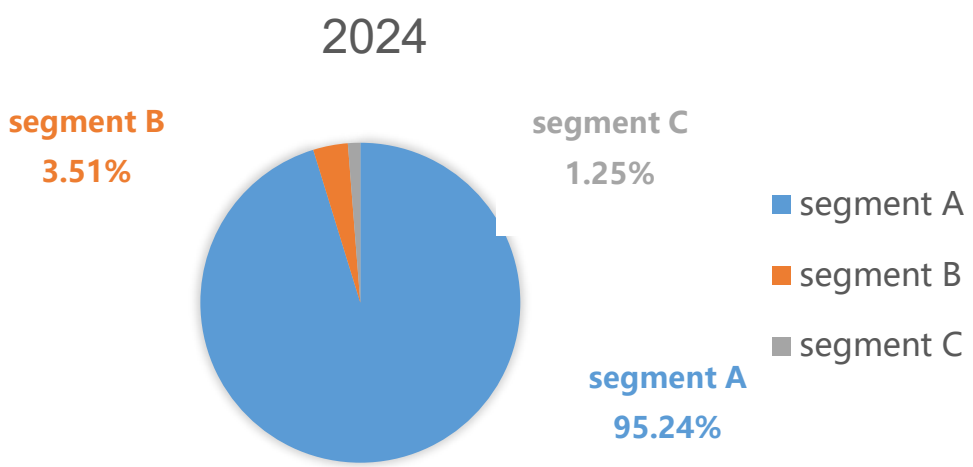
- The Group recorded a gross profit of approximately RMB104.0 million and a gross profit margin of 2.8% for the year ended 31 December 2024, as compared to a gross profit of approximately RMB458.0 million and a gross profit margin of 6.4% in 2023, which decreased by 77.3% and 3.6% points respectively. The decrease was mainly due to a sharp decline in photovoltaic module prices

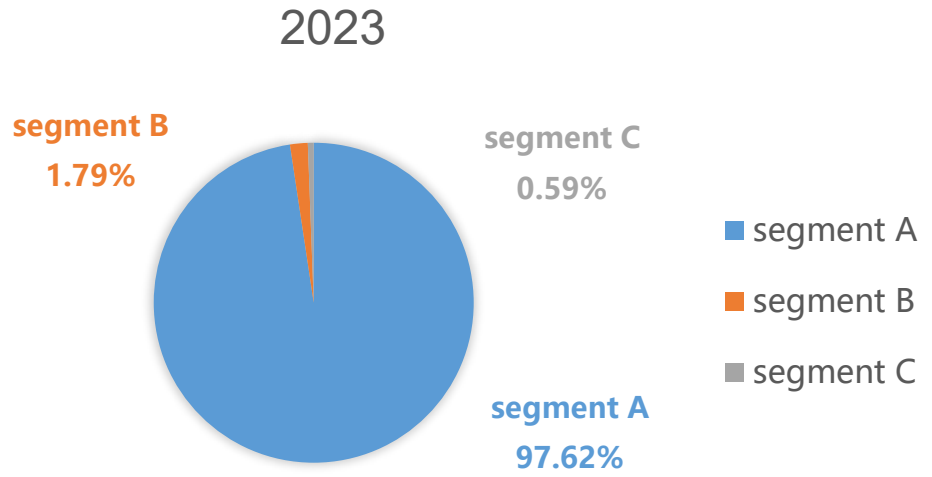
- During the year, the Group' s earnings before interest, taxes, depreciation and amortization ("EBITDA") were approximately RMB-11.2 million (-0.3% of the revenue) (2023： approximately RMB387.0 million, 5.4% of the revenue). The main reason for the decrease in EBITDA was attributable to the decrease in revenue and gross profit during the year

Continuing Operations	2024	2023
Revenue (RMB million)	**3,706.2**	**7,192.9**
Gross Profit (RMB million)	**104.0**	**458.0**
Gross Profit Margin (%)	2.8%	6.4%
EBITDA (RMB million)	(**11.2**)	**387.0**
Loss/Profits for the year attributable to owners of the parent (RMB million)	(**227.1**)	**111.9**
Basic earnings per share (RMB cents)	(**6.83**)	**3.37**

Financial Review

2024 Revenue Breakdown

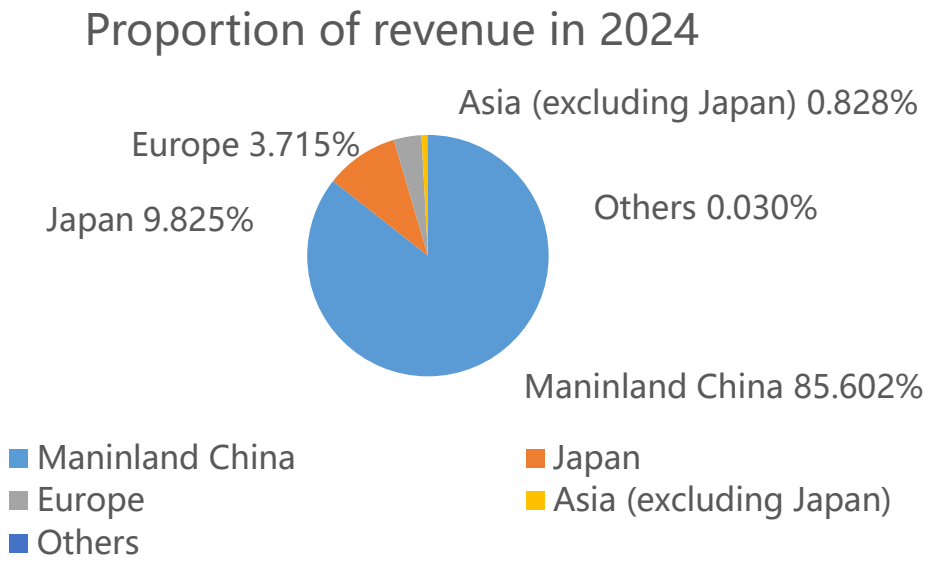


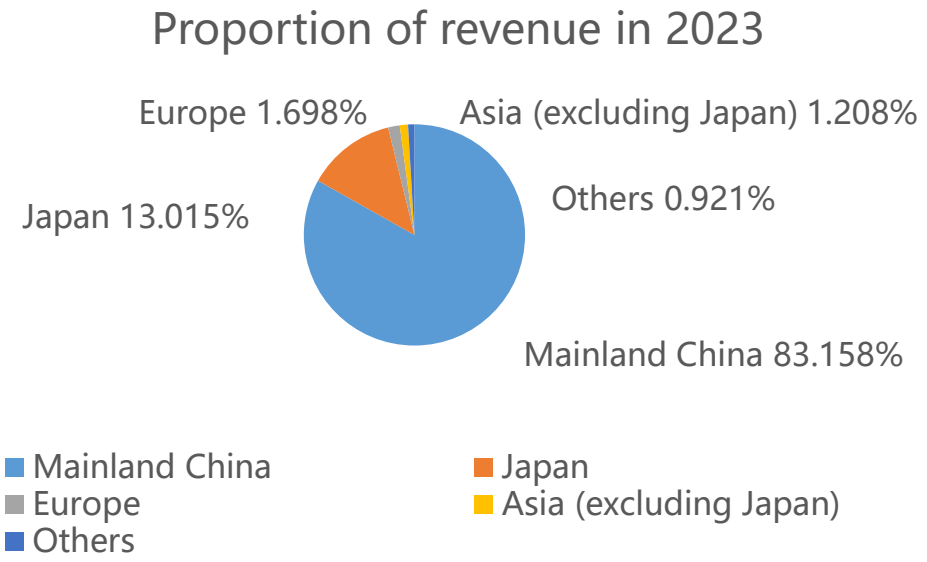


Segment	Operating business	2024 (RMB thousand)	2023 (RMB thousand)	Change
A	The manufacture and trading of photovoltaic modules	**3,529,839**	7,021,656	-49.7%
B	The construction and operation of photovoltaic power plants	**129,947**	128,667	+1.0%
C	The manufacture and trading of semiconductor, the trading of monocrystalline silicon solar cells and others	**46,412**	42,530	+9.1%
	Total	**3,706,198**	7,192,853	-48.5%

Financial Review

Market Distribution





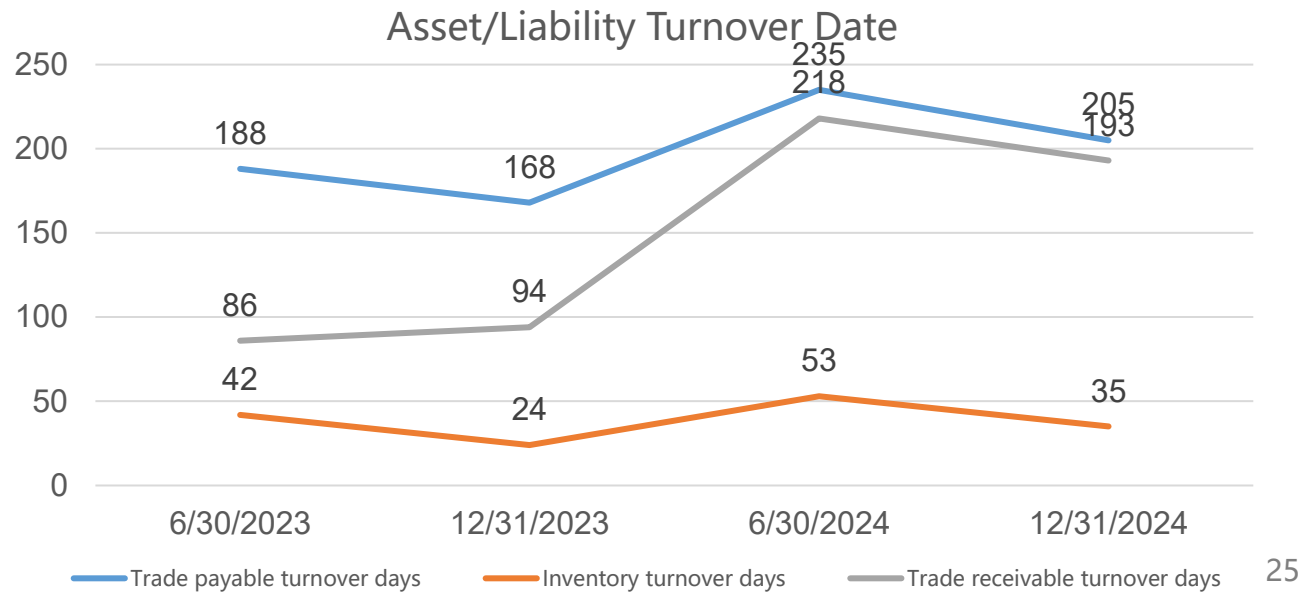
Revenue	2024 (RMB thousand)	2023 (RMB thousand)	Change
Mainland China	**3,172,582**	5,981,401	-47.0%
Japan	**364,145**	936,124	-61.1%
Europe	**137,683**	122,170	12.7%
Asia (excluding Japan)	**30,680**	86,882	-64.7%
Others	**1,108**	66,276	-98.3%
Total	**3,706,198**	7,192,853	-48.5%

Financial Review

Key Financial Indicators

- Due to a reduction in the external shipping volume of photovoltaic modules, the inventory turnover days of the year increased to 35 days
- The sales of photovoltaic modules accounted for over 95% of the Group' s overall sales for the year. According to the standard terms of the industry' s module sales contracts, the recovery of certain module receivables depends on the construction progress of the photovoltaic power plant. For instance, some trade receivables can only be recovered after the customer' s photovoltaic power plant is connected to the grid. Therefore, the trade receivables turnover days of module business are generally longer. Trade receivables turnover days for the year has increased to 193 days (31 December 2023: 94 days) due to the settlement delay by some customers. The Group did not experience any significant credit risks due to strict credit control policies
- The trade payables turnover day was 205 days for the year, which was significantly higher when compared to 168 days as at 31 December 2023. The Group would like to utilise its operating funds in a more strategic manner for business growth. Under stable and frequent co-operations, the suppliers have increased our credit lines and payment terms

Turnover Day Analysis	31/12/2024	31/12/2023
Inventory Turnover (Days)	35	24
Trade Receivables Turnover (Days)	193	94
Trade Payable Turnover (Days)	205	168



Financial Review

Key Financial Indicators

- The operating activities resulted in a net cash inflow of approximately RMB180.9 million in 2024, compared to a net cash outflow of approximately RMB692.1 million in 2023. The main reasons for the net cash inflow from operating activities is the reduction in trade receivables and the release of pledged deposits due to the Group' s settlement of trade payables
- The Group's overall liabilities was reduced by RMB1454.5 million to reduce liabilities levels and financial costs

Cash flow	2024 (RMB million)	2023 (RMB million)
Net cash inflow/outflow from operating activities	180.9	(692.1)
Liabilities	**2024 (RMB million)**	**2023 (RMB million)**
Total current liabilities	2,748.6	4,121.8
Total non-current liabilities	272.0	353.3

Future Prospects & Strategies

5

5.1 Future Prospects and Strategies

Module Business

Increase investment and deepen intelligent manufacturing

- **Increase investment**: Renovate and expand the capacity of two major production bases and increase investment in technology research and development to accurately meet the customization needs of overseas customers and respond to the ever-changing market environment; the degree of automation of the second workshop of Jinzhou production base will reach 93% after the renovation, exceeding the industry average by 7%
- **Intelligent manufacturing**: Introduce advanced production technologies and automation systems, combine with AI technology and use IoT and big data analytics to achieve intelligent monitoring and optimization of production processes

Technological innovation and intellectual property cooperation

- **Industry-university-research cooperation**: Establish a joint R&D platform with West Lake University and other key universities to conduct research on cutting-edge technologies such as perovskite
- **Product technology R&D path**: In the short term, it will focus on iterating and upgrading existing products, and in the medium to long term, it will continue to research and develop N-type BC modules, over 750W+ high-power modules and other high-efficiency products

Sustainable operation and stable development

- **Strengthen cost control and supply chain management**: Refine cost management, strengthen supply chain management, establish an early risk warning mechanism, and identify and respond to various risks in a timely manner
- **Global layout strategy**: Deeply cultivate key regional module export markets, and develop networks in Asia, Europe, Latin America, and the Middle East and Africa; actively map out zero-carbon mobile building products overseas

Market expansion and brand building

- **Optimize customer structure and tap into customer depth**: Strengthen cooperation with existing key customers, explore potential customer groups, secure order base and build a sustainable customer structure
- **Build a Globalized Brand Image:** Build a globalized Brand Image; actively participate in charitable activities, fulfill social responsibilities, and enhance social image

5.2 Future Prospects and Strategies

EPC Business

Seek entry points for new business cooperation:

- Develop the operation and maintenance market and undertake operation and maintenance projects outside the Group
- Based on the existing business, the Company started to develop the "self-supported power plant" and "gifted power station" model to expand business scale

Actively respond to relevant national favorable policies:

- There is a large number of existing residential buildings available for renovation in the country, which will create continuous demand for customized BIPV modules as they better match the architectural beauty
- Due to its mobility and off-grid operation, the newly developed zero-carbon mobile buildings can be widely used in new industries such as cultural tourism, commerce, and urban management. The state issued the "Opinions on Promoting the High-Quality Development of Service Consumption" and other documents this year, emphasizing the need to strengthen the construction of national cultural and tourism consumption model cities and promoting the development of new businesses such as camping

Strengthen investment in production, education and research:

- Strengthen industry-university research cooperation with Southeast University in low-carbon construction, smart construction, carbon utilization and storage (CCUS), and promote the integration of PV buildings and zero-carbon building product technology

Lead industry standardization:

- Establish systematic protection of intellectual property rights. Zero-carbon mobile buildings integrate architecture, photovoltaics, and energy storage in technologies such as PEDF, building intelligence, and intelligent power integration
- Take the lead in national and local industry standardization and expand the application base of BIPV products

Global layout of new BIPV products:

- Based on the research and development of new products, adjust sales channels, expand into new industries and fields such as cultural tourism, urban management, and production base construction, and apply a series of zero-carbon building products
- Actively expand overseas markets and promote zero-carbon mobile building products to meet the needs of some countries for energy supply and saving construction labor

5.3 Future Prospects and Strategies

Semiconductor Business

Expand the market share of key products:

- Focus on the development of 6-inch semiconductor monocrystalline silicon and actively invest in the research and development of 8-inch semiconductor monocrystalline silicon
- Aim to establish a production and management system with 8-inch monocrystalline as the core product within three years to meet market demand for higher performance and larger size monocrystalline silicon
- Plan to increase R&D and scale production of multi-species 8-inch IC semiconductor monocrystalline silicon and 13-15-inch semiconductor monocrystalline silicon in 2025

Cross-sectoral applications of silicon carbide semiconductors:

- Vigorously develop 8-inch monocrystalline silicon carbide, increase R&D investment, and optimize production processes to ensure mass production within three years

International cooperation to accelerate development of new products:

- Joint research and development with Japanese optoelectronic semiconductor companies to jointly develop optoelectronic semiconductor materials and devices
- Aim to achieve mass production of 12-inch optoelectronic semiconductor monocrystalline silicon within three years, and provide high-performance core materials for optoelectronic semiconductors

Map out differentiated paths such as special-shaped silicon:

- Previously developed and sold special-shaped silicon products in small batches, and will continue to expand the variety and production capacity to meet the growing demand for these products in the market

Solargiga Energy

THANK YOU