Solargiga Energy Holdings Limited
陽光能源控股有限公司





2019 Annual Results
二零一九年度全年业绩

香港聯交所上市股份編號：757

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Contents

Solargiga Energy

Corporate Overview

Corporate Overview

- Established in 2001, the largest in Northeast China, high ranked photovoltaic manufacturer of the country. Focus on vertical integration for monocrystalline products, providing one-stop solutions from ingots, wafers, cells, modules to the development, design, construction, operation and maintenance of PV System.
- Listed in Hong Kong on 31 March 2008 (757.HK)
- 2019 Global New Energy Top 500 Enterprises (228); The First Top 50 Enterprises in China's Electronic Materials Industry; Top 3 Industrial Enterprises in Jinzhou City, Liaoning Province, China

Shareholding Structure as at 31 December 2019

Tan Wenhua and his associates 22.18%

Hiramatsu International Corp. 9.47%

Wafer Works Corp. 7.75%

Other Directors 0.49%

Public shareholders - Hong Kong 56.46%

Public shareholders - Taiwan (TDR) 3.65%**

Solargiga Energy Holdings Limited
阳光能源控股有限公司

Number of issued shares 3,211,780,566

** TDRs was delisted with effect from 12 November 2019. The last trading day of the TDRs was 11 November 2019.

Manufacturing base

Mainland China

- Main production base at Jinzhou of Liaoning, Xining of Qinghai, Quijing of Yunnan and Yancheng of Jiangsu.
- monocrystalline silicon ingot/wafer capacity 3.6GW.
- photovoltaic cell capacity 400MW.
- photovoltaic module capacity 3.5GW which 2.3GW in Liaoning and 1.2GW in Yancheng, Jiangsu. The module capacity has begun production in 2020.
- Group's marketing centers in Shanghai and Beijing.

Japan, Taiwan, Germany

- Established subsidiaries to enrich our distribution channels of all products and expand customer base.
- A joint venture company DCH Solargiga GmbH with power plant construction company in Germany, which is mainly engaged in photovoltaic systems business

Others

- Developing EPC business in America, Turkey, Pakistan, Southeast Asia and Africa.

Map note:

- Manufacturing base
- Marketing centers
- Subsidiaries

Production Capacity and Product Range

Solargiga Energy

Ingot

- 3.6GW

Wafer

- 3.6GW

Cell

- 400MW

Strategic Alliances

1. Being strategic alliances with the large solar cell-focused manufacturer. Selling wafer products to strategic partners and hence purchase the solar cells from the strategic partners.
2. And thus, it will secure the sales channel of wafer and hence ensure stable supply of solar cells.

Module

- 3.5GW, which 2.3GW in Liaoning and 1.2GW in Yancheng, Jiangsu. The module capacity has begun production in 2020.

System

- Distributed power plants - Apart from the wholly-owned subsidiaries engaged in construction photovoltaic systems to expand the end-user market, the Group also plans to establish joint venture companies with companies from other industries, in order to share the profits and also provide extra distribution channels for the Group's module sales.
- Centralised power plants - the Group will, through investing as minority shareholders, seek construction opportunities as a EPC service provider and help drive the sales of the Group's modules.

Vertical integration Strategy

Product Procedure: 1. Monocrystalline Silicon Ingots

- Solargiga Energy focuses on monocrystalline production. So far, it has 20 years of experience in the production of N-type/P-type monocrystalline silicon ingots. The Group is the only monocrystalline silicon manufacturer who has obtained the national product quality exemption certificate. Currently, it has 38 national utility new model patents.
- In recent years, through the transformation and upgrading of the ingot growing furnace (長晶爐), and participated in the research and design of the CL200T ingot growing furnace (單晶爐), the amount of the material put into production has reached more than 300kg and the entire mono crystalline ingot has been drawn to more than 3000mm. This achieved continuous drawing of multiple output resulted in strengthen the advanced electronic liquid level control system, automatic control process, reducing labour costs and being stable quality of the crystalline ingots. During the research and development process, it obtained 1 invention patent, 14 utility new model patents, and 2 software copyrights.
- Through the continuous upgrading and optimization of the ingot growing process in these years, it has altered the traditional finishing style, increased the yield of crystalline ingots, improved production efficiency, and achieved industry lead.
- Monocrystalline silicon ingots are excellent in terms of technical indicators, and oxygen content is controlled to below 15 ppm, forming a strictly reliable crystalline ingot index detection system.
- According to customer's requirements, the Group provides various specifications and sizes of N-type and P-type monocrystalline products, and also provides the highest quality silicon ingots for downstream components.
- The existing 3.6GW monocrystalline silicon ingot/wafer production capacity and products production capacity are among the top five in PRC.

Product Procedure: 2. Monocrystalline Silicon Wafers

- Solargiga Energy has 13 years of wafer slicing experience and is one of the pioneers of large-size silicon wafers in the industry. According to customer's requirements, the Group provides various specifications and sizes of N-type and P-type monocrystalline products, and also provides the highest quality silicon wafers for downstream modules. Currently, it has 2 national invention patents and 8 national utility new model patents.
- The 180μm thin-slice technology has matured and has been supplying to the market. It has also developed and put thinner silicon wafers into production, effectively increasing the output rate by more than 11%.
- All the technological transformations on diamond saw slicing equipment were completed. The transformation project was the first in the industry to put centralized batch conversion machines into production in China. The performance are comparable to that of a specialized diamond saw machine. The output of wafer increased by more than 26% over the same period that reduced manufacturing costs.
- The research and development of the thin wire technology on the above transformed slicing equipment was completed. The entire production line completed the switch from 70μm electroplated diamond saw wire (金鋼綫) to 65μm electroplated diamond saw wire, and the output increased by more than 10% over the same period of last year.
- The advanced diamond saw cutting fluid recycling technology reduces the cutting fluid cost by 25%.
- The existing 3.6GW monocrystalline silicon ingot/wafer production capacity and products production capacity are among the top five in PRC.

Product Procedure: 3. Solar cells

- 8 standard cell production lines, with an annual capacity of 400MW, focusing on the production of monocrystalline N-type and P-type cell.
- Able to produce large-size monocrystalline cells and anti-PID cells with high conversion rate and consistency, and also produces N-type double-sided cells with a power generation efficiency gain of 20%. It has 2 national invention patents, 23 utility new model patents, and 1 appearance patent.
- It also possess the technology of the Passivated Emitter and Rear Cell (PERC) process of P-type monocrystalline cell and the polysilicon cell black silicon process, which are currently gaining in market share. The "black silicon cell project" has been listed in the National Science and Technology Department's 863 Program.
- Cooperating with world-class perovskite research team of university to jointly develop a perovskite superimposed P-type monocrystalline new generation multi-junction solar cell, which will pave the way for the development of solar cell in the next decade, and also keep abreast of the latest development trend in the photovoltaic industry.
- Long-term cooperation with Sharp in Japan for production of cells. A pioneer in development and production of the comprehensive anti-PID technology, while mastered the stringent cell manufacturing process with control requirements and testing methods equivalent to those on Sharp’s own plants.

Product Procedure: 4. Solar modules

- The first largest OEM module manufacturer in PRC supplied to Sharp Japan for five consecutive years. Developed the anti-PID technology of module and mastered the design and production of high-end module in the Japanese market. Its OEM module accounted for more than 90% of the Sharp shipments of module in Japan.
- The unique quality control standards for Japanese production include a total of 104 inspection items from the auxiliary materials, process control requirements, and 3 to 10 times the finished module products in the environmental testing system requirements of the IEC standard.
- Master core technologies for the design and production of different modules such as lightweight components, ski components, and high-load components. Mastered the design and production technology of two-sided cell (P-PERC, N-PERT.HIT) module, and shipment for double glass components for four consecutive years.
- Developed and mastered half-slice modules, multi-gate cell modules, double-sided cell modules, high-efficiency ribbon (reflective film) modules, MBB modules, N-type double-glazed glass modules, smart photovoltaic modules, half-cell modules, and Other design techniques related to Super Top Runner Program high-end products.
- Master the capabilities of manufacturing IBC cell modules. IBC cell modules have high output performance, open circuit voltage, fill factor and other electrical performance advantages. The same-surface interconnected module process, the perfect appearance of almost black also meets the aesthetic requirements of mass consumers.
- One of the first 17 module certified enterprises of Super Top Runner Program.
- Owned 17 national utility model patents.
- Module capacity 3.5GW, which 2.3GW in Liaoning and 1.2GW in Yancheng, Jiangsu. The module capacity has begun production in 2020.

Products: Module Product Certification

- TUV、VDE、UL Certification
- First batch of Photovoltaic Power Generation Top Runner Program (領跑者) certified enterprises

TUV认证

VDE认证

Major Customers

SHARP
夏 普

国家电投
SPIC

BG北控 北京控股集团有限公司
BEIJING ENTERPRISES GROUP COMPANY LIMITED

信義玻璃
XINYI GLASS
信义玻璃控股有限公司

中广核 CGN

中国华电集团公司
CHINAHUADIANCORPORATION

三信電気株式会社
SANSHIN ELECTRONICS CO., LTD.

Aikosolar
爱旭太阳能

通威太阳能
TW SOLAR

中来股份
JOLYWOOD

MOTECH
茂迪新能源有限公司

Customers Distribution

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Market Overview

Market Overview

China

- 2019 was the first year for the new photovoltaics subsidy bidding mechanism in China's photovoltaics market. It was also the first year of parallel development of grid parity and bidding projects. The industry was gradually shifting from bidding photovoltaics to grid parity. Looking back at 2019, the cumulative installed capacity of photovoltaic power generation in China was 204.3GW, which continues to maintain its number one position in the world.

- According to the latest data from the China Photovoltaic Industry Association (CPIA), the newly installed capacity of China's photovoltaic industry in 2019 was 30.1GW (a decrease of 32% compared to 44.26GW in 2018), of which the newly-installed capacity of centralised photovoltaic was 17.9GW (down 23% year-on-year), and the newly-installed capacity of distributed photovoltaic was 12.2GW (down 42% year-on-year). Polysilicon production was 342,000 tonnes (up 32% year-on-year), wafer production was 134.6GW (up 25.7% year-on-year), which mono-crystalline wafers accounted for about 65%, cell production reached 108.6GW (up 27.8% year-on-year), module production 98.6GW (17% year-on-year increase). In 2019, China's total export of photovoltaic products (wafers, cells, modules) reached USD20.78 billion, the second highest in history.

- In 2019, the energy poverty alleviation work was carried out steadily and effectively. According to the report of the National Energy Administration, 4.07 million poverty-stricken households across the country obtained stable income through photovoltaic poverty alleviation projects, with a cumulative scale of 19.1GW. "The First Batch of Photovoltaic Poverty Alleviation Projects of the "13th Five-Year Plan"" with a total installed capacity of 4.186GW (3.85GW after revision), and "The Second Batch of Photovoltaic Poverty Alleviation Projects of the "13th Five-Year Plan"" with a total of 1.67GW, should be completed and connected to the grid by the end of 2019. The National Energy Administration expected to establish the "14th Five-Year Plan" and subsequent energy development plans as soon as possible in 2020.

- Looking ahead to 2020, the Chinese market is in the transitional stage to the development of unsubsidised solar energy, compounding the impact of the virus epidemic, the CPIA estimates that China's new photovoltaic installations in 2020 will be between 35 and 45GW.

Market Overview

USA

- In the third quarter of 2019, the United States solar market installed 2.6GW of photovoltaic capacity (up 45% year-on-year), the cumulative installed capacity increased to 71.3GW. The U.S. residential solar market reached record high in the third quarter of 2019 with an installation of 712MW, of which California, the largest residential solar market, installed nearly 300MW, breaking its quarterly record. The total installed photovoltaic capacity in the United States in 2019 is expected to reach 13GW, an increase of 23% over 10.6GW in 2018.

- With the declining cost and gradual reduction of the investment tax credit policy ("ITC policy") for residential systems, the total installed capacity of photovoltaics in the United States will more than double in the next five years. By 2021, the installed capacity will reach 20.1GW before the expiration of the ITC policy.

India

- India's new photovoltaic installed capacity in 2019 was 7.3GW (a 12% decrease from 8.3GW in 2018), and the cumulative photovoltaic installed capacity reached 35.7GW. To expedite the completion of the 100GW installation target by 2022, the Indian government has vigorously promoted the development of the solar manufacturing industry by putting on place a more investor-friendly mechanism and also adjusting the bidding prices. In addition, the government has approved a grid-connecting photovoltaic plan proposed by the Ministry of New and Renewable Energy to complete photovoltaic power generation projects of 12GW between 2019 and 2023.

Market Overview

Europe

- 2019 was the strongest year for solar energy growth in the European Union. The newly-installed capacity reached 16.7GW, a 104% increase from 8.2GW in 2018. The main markets include Spain 4.7GW, Germany 4GW, Netherlands 2.5GW, France 1.1GW and Poland 784MW. It is expected that the overall newly-installed capacity in the European Union will continue to grow, reaching 21GW in 2020, 21.9GW in 2021, and 26.8GW in 2023.

Global Market

- Despite the decline in installations in China this year, other international markets such as Netherlands, Spain, Germany, Italy, Turkey or Ukraine are growing faster than expected. It is initially estimated that global solar installations will reach 129GW in 2019 (a 25% increase from 103.3GW in 2018). According to EnergyTrend analysis, with the recovery of the European market, and the rise of emerging photovoltaic markets in Southeast Asia, the global market will become more decentralized, which may help upturn the demand of the entire photovoltaic industry in 2020, driving a significant increase in the export volume of Chinese photovoltaic manufacturing enterprises. It is estimated that the global newly-installed capacity will reach 125GW in 2020. The global photovoltaic market will show a slight growth from 2020 to 2025, with an annual growth rate of about 7%.

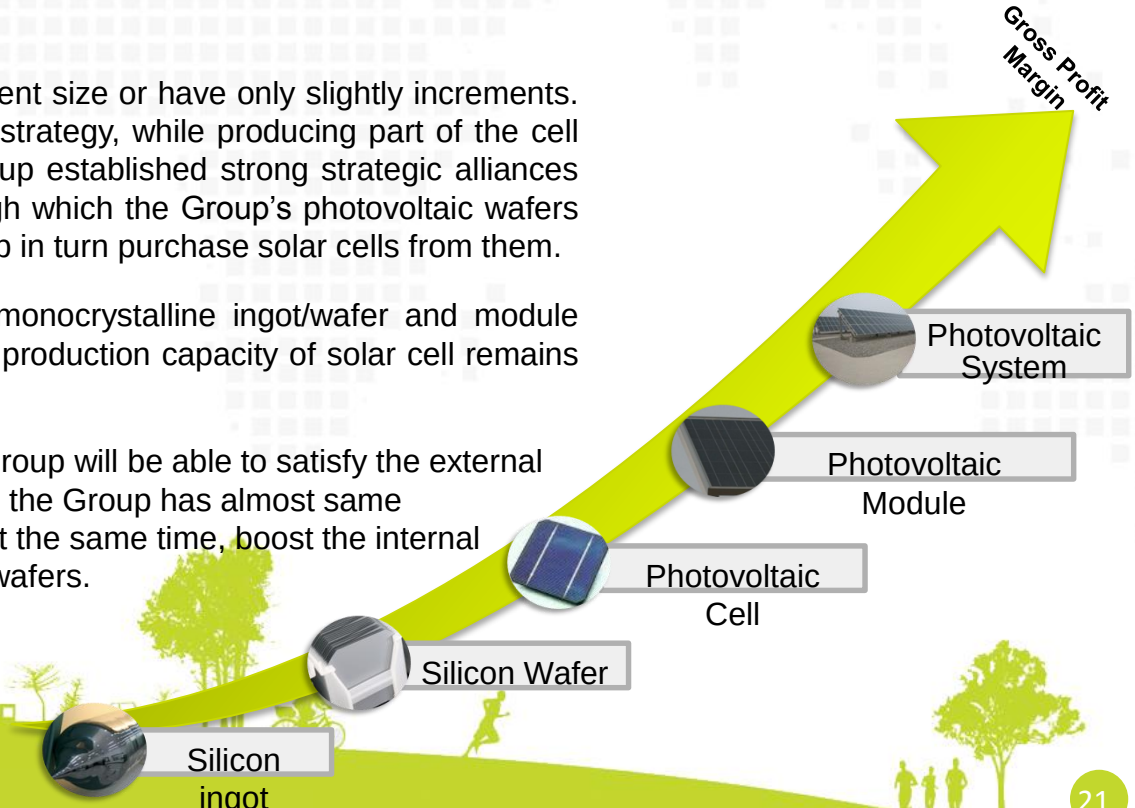
Solargiga Energy

Business Review

Group: Operations Strategy

1. Focus on the vertical integration of monocrystalline products, concentrate internal resources, and strengthen upstream monocrystallie silicon ingot/wafer products and downstream terminal components products sales

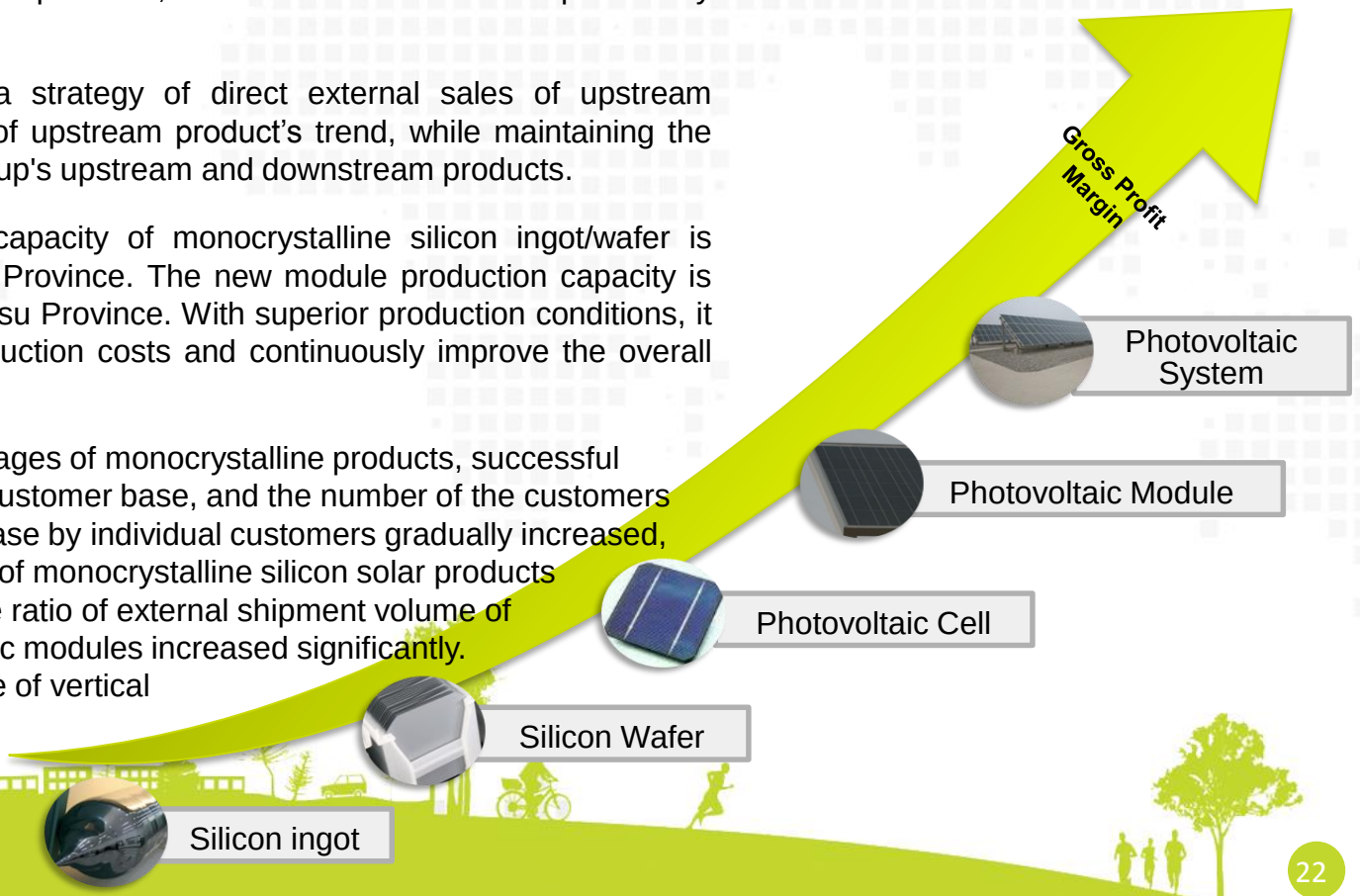
- The Group focuses on the vertical integration of photovoltaic monocrystalline products. Through satisfying external demands for its photovoltaic modules, at the same time, boosting the internal demands for its monocrystalline silicon ingots/wafers.
- A project of the Group located in Qujing City, Yunnan Province, which was in mass production.
- For solar cell segment, it will maintain the current size or have only slightly increments. To strengthen the Group's vertical integration strategy, while producing part of the cell products internally, at the same time, the Group established strong strategic alliances with local and overseas manufacturers, through which the Group's photovoltaic wafers are sold to our strategic partners and the Group in turn purchase solar cells from them.
- After the expansion, production capacity of monocrystalline ingot/wafer and module reached 3.6GW and 3.5GW respectively. And production capacity of solar cell remains at 400MW.
- Through this capacity allocation strategy, the Group will be able to satisfy the external demands for its photovoltaic modules, of which the Group has almost same manufacturing capacity as ingot/wafer, while, at the same time, boost the internal demands for its monocrystalline silicon ingots/wafers.



Group: Operations Strategy (Continued)

2. Improve overall gross profit margin under vertical integration, taking upstream products into account

- The Group is a vertically integrated manufacturer of upstream and downstream monocrystalline products. It is able to effectively utilise the advantages of vertical integration to enhance the Group's gross profit margin of self-manufacturing module products, which drive to increase the profitability of the Group.
- The Group also adopts a strategy of direct external sales of upstream products to keep abreast of upstream product's trend, while maintaining the competitiveness of the Group's upstream and downstream products.
- In addition, the addition capacity of monocrystalline silicon ingot/wafer is located in Qujing, Yunnan Province. The new module production capacity is located in Yancheng, Jiangsu Province. With superior production conditions, it will effectively reduce production costs and continuously improve the overall gross profit of the Group.
- In recent years, the advantages of monocrystalline products, successful customer development of customer base, and the number of the customers and the size of each purchase by individual customers gradually increased, the end-user market share of monocrystalline silicon solar products is rapidly increased and the ratio of external shipment volume of monocrystalline photovoltaic modules increased significantly. This realized the advantage of vertical integrated strategy.

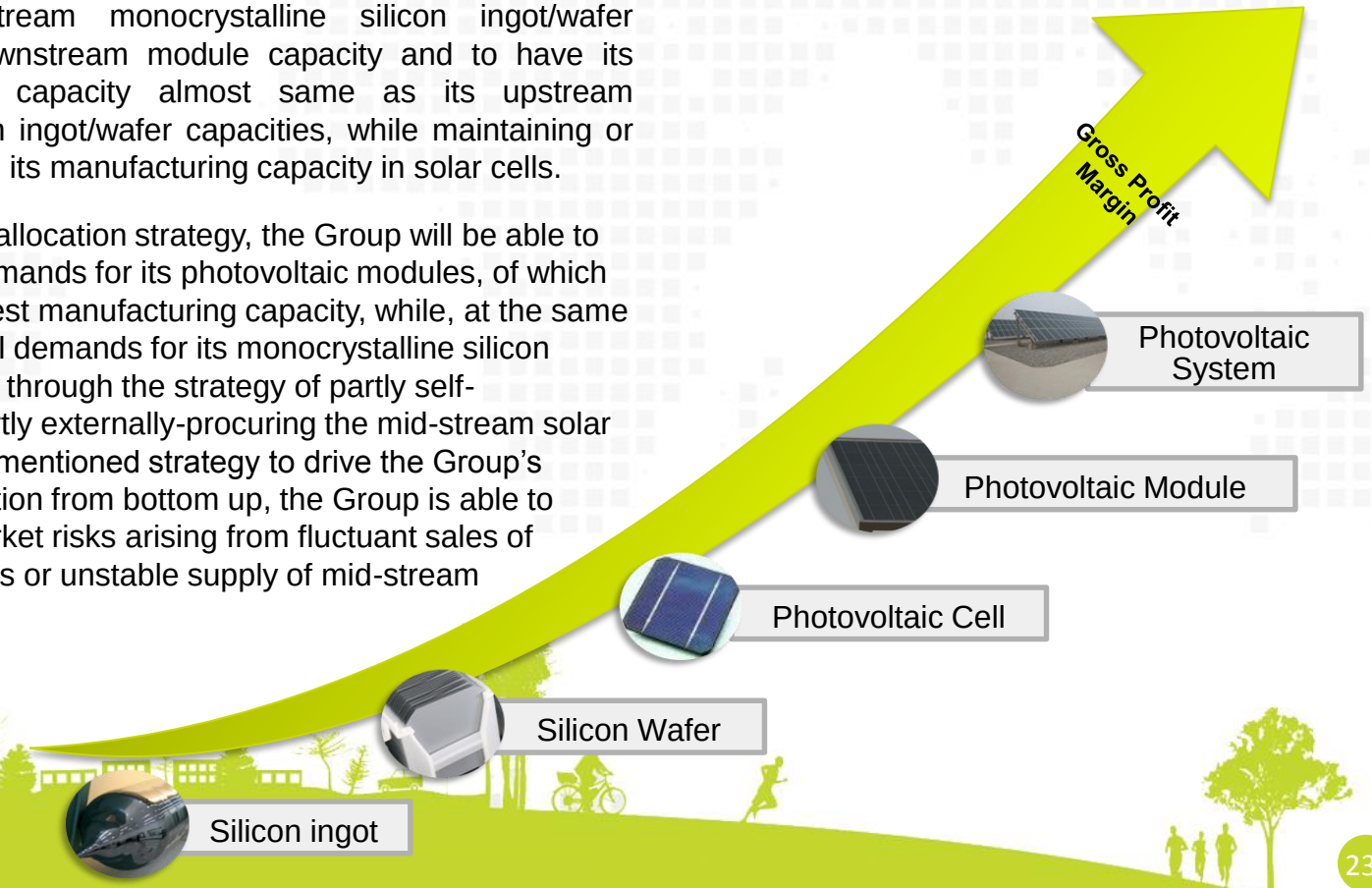


Group: Operations Strategy (Continued)

3. Under capacity allocation strategy, downstream production capacity is slightly larger than upstream production capacity, and through the natural integration mechanism of vertical integration, to reduce the risk of market fluctuations.

- Regarding the capacity allocation strategy, the Group is to focus its investments in upstream monocrystalline silicon ingot/wafer capacities and in downstream module capacity and to have its downstream module capacity almost same as its upstream monocrystalline silicon ingot/wafer capacities, while maintaining or only slightly increasing its manufacturing capacity in solar cells.

- Through this capacity allocation strategy, the Group will be able to satisfy the external demands for its photovoltaic modules, of which the Group has its largest manufacturing capacity, while, at the same time, boost the internal demands for its monocrystalline silicon ingots/wafers. Further, through the strategy of partly self-manufacturing and partly externally-procuring the mid-stream solar cells, under the abovementioned strategy to drive the Group's overall capacity utilisation from bottom up, the Group is able to better mitigate the market risks arising from fluctuant sales of upstream silicon wafers or unstable supply of mid-stream solar cells.



Group: Operations Strategy (Continued)

3. Under capacity allocation strategy and through the natural integration mechanism of vertical integration, to reduce the risk of market fluctuations. (continued)

- Example of our strategy at work is the recent decline in wafer prices. By satisfying orders from downstream module customers with the Group's self-manufactured silicon wafers, we did not have to follow the market trend of slashing wafer prices. We consequently were able to effectively mitigate risks arising from market fluctuation, and protect the interests of all manufacturing segments of the Group.

- *Scenario A: Price of wafers drops*

A. Price of wafers drops	*Group's strategy :* *- Wafer not sold externally, subcontract production into solar cells, and to be used for Group's modules.*	*Benefit:* *- Risk of wafer price drop no longer exists in the natural defense mechanism of vertical integration. profitability can still be maintained from the sales of modules end products.*

- *Scenario B: Price of wafers rises*

B. Price of wafers rises	*Group's strategy :* *- Wafer sold externally, procure solar cells externally*	*Benefit:* *- Rise in wafer prices, under vertical integration, both wafer and module sales will drive overall gross profit and maximise bottom line*

Business Overview: Ingot & Wafer Segment

- With the continued realisation of advantages in better improvement in conversion efficiency, more stable decay rate in its photovoltaic systems, continued reduction in unit costs, etc. of monocrystalline products, it is expected that the advantages of monocrystalline products will become more obvious in the field of photovoltaic power generation, and the market share of monocrystalline silicon products will further increase significantly.
- Through long-term strategic partnerships with well-known solar cell-focused manufacturers, the Group may enjoy priority distribution channels for the sales of its monocrystalline wafers, and ensure long-term stable utilisation of the Group's capacity and shipment volume.
- During the year, since most of the ingot products have been reserved for internal use, the external shipment volume of mono-crystalline silicon ingots has dropped to 204.2MW (413.8MW in 2018). Conversely, external shipment volume of mono-crystalline silicon wafers has rised significantly to 2,014.6MW (850.3MW in 2018).
- In addition, the Group has completed the testing and adjustments of its newly invested low-cost high-efficiency mono-crystalline silicon solar ingot and wafer project, located in Qujing City, Yunnan Province, China. It has not only enabled manufacturing in scale from 2020 onwards. With the lower local electricity costs, being lower than that at previous major production base in Jinzhou, Liaoning, by more than 50%, it will lift the Group's overall gross profit and gross profit margin.
- The Group is currently actively planning the expansion of the mono-crystalline silicon solar ingot and wafer capacities in Yunnan, Qujing, in order to take advantage of the local external production environment, and enable the Group to fully demonstrate its current technological advantages in production.

Business Overview: Cell Segment

- During the year, the annual production capacity of solar cells was maintained 400MW (2018: 400MW). Apart from providing internally to the downstream module manufacturing subsidiaries of the Group, the solar cells are also sold to our selected customers in China and Japan.
- The Group' s solar cell manufacturing capacity is highly flexible. Our products range is hence extensive, which includes mono-crystalline, multi-crystalline, P-type high end, N-type double-sided solar cells, etc. Focusing on the implementation of the vertical integration strategy on monocrystalline products, most of the solar cells are mainly provided to the use of the Group' s downstream solar modules companies.
- The Group has also been collaborating with university teams of the highest levels in the field of global perovskite (鈣鈦礦) research in projects to jointly develop perovskite solar cells in order to pave the way paving the way for the development of upstream and downstream products in the next decade and keep abreast of the latest trends in the photovoltaic industry.

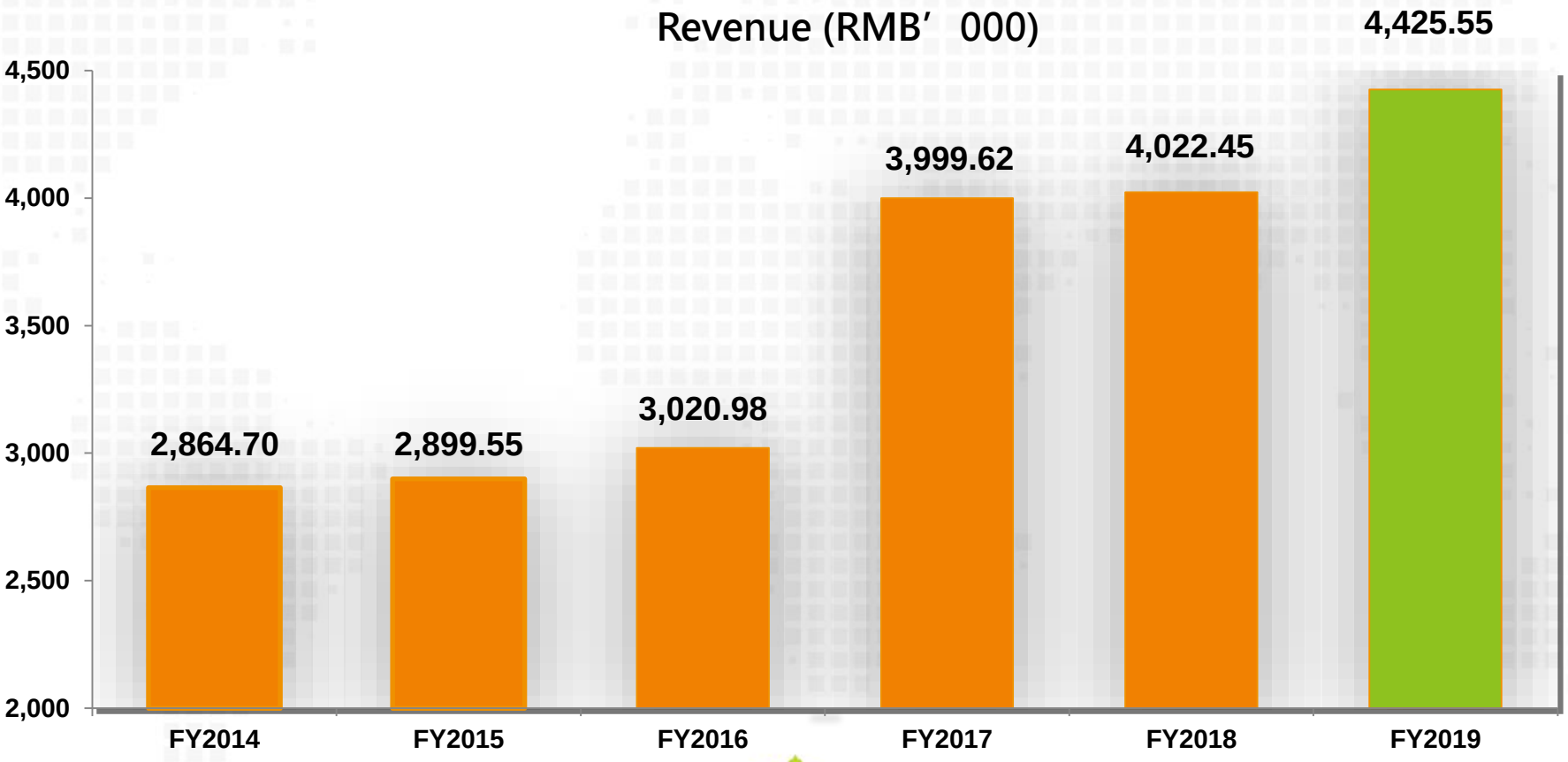
Business Overview: Module Segment

- The Group's external shipment during the year was 1,855.7MW, a 27% increase from the 1,466.2MW in 2018.
- After the completion of the comprehensive technical upgrade, with the excellent product quality and price competitiveness, the Group is expected to continue to record rapid growth in external shipments and total sales, and to make full use of the expected economies of scale.
- External sales was mainly made to huge Chinese state-owned enterprises and Japanese multinational enterprises, such as China Huadian Corporation (中國華電集團公司) ("Huadian"), Beijing Enterprises Holdings Limited (北京控股集團有限公司) ("BEGCL"), SHARP Corporation and SANSHIN ELECTRONICS CO., LTD., etc.
- Following the increasing awareness of the benefits of higher conversion efficiency and more competitive costs offered by the Group's focused monocrystalline photovoltaic modules, and responding to the opportunity offered by grid parity, market share of monocrystalline module products continues to grow quickly. Demand for N-type mono-crystalline and P-type PERC photovoltaic modules have surged.
- In addition to flexibly supporting the manufacturing of mono- and multicrystalline photovoltaic modules, the Group will continue to expand and strengthen the development and sales of monocrystalline silicon high-efficiency module products such as N-type double-sized glass photovoltaic modules, half-cell photovoltaic modules, P-type monocrystalline solar cell Passivate Emitter and Rear Cell (PERC), smart photovoltaic modules, and related high-end products. Among them, installation of the new production lines of our BS modules of N-type monocrystalline IBC solar cell, which produces higher current output, open circuit voltage, fill factor and other electrical performance advantages, have been completed. Product quality and conversion has been stable. External sales has been recorded since the first half of 2019.

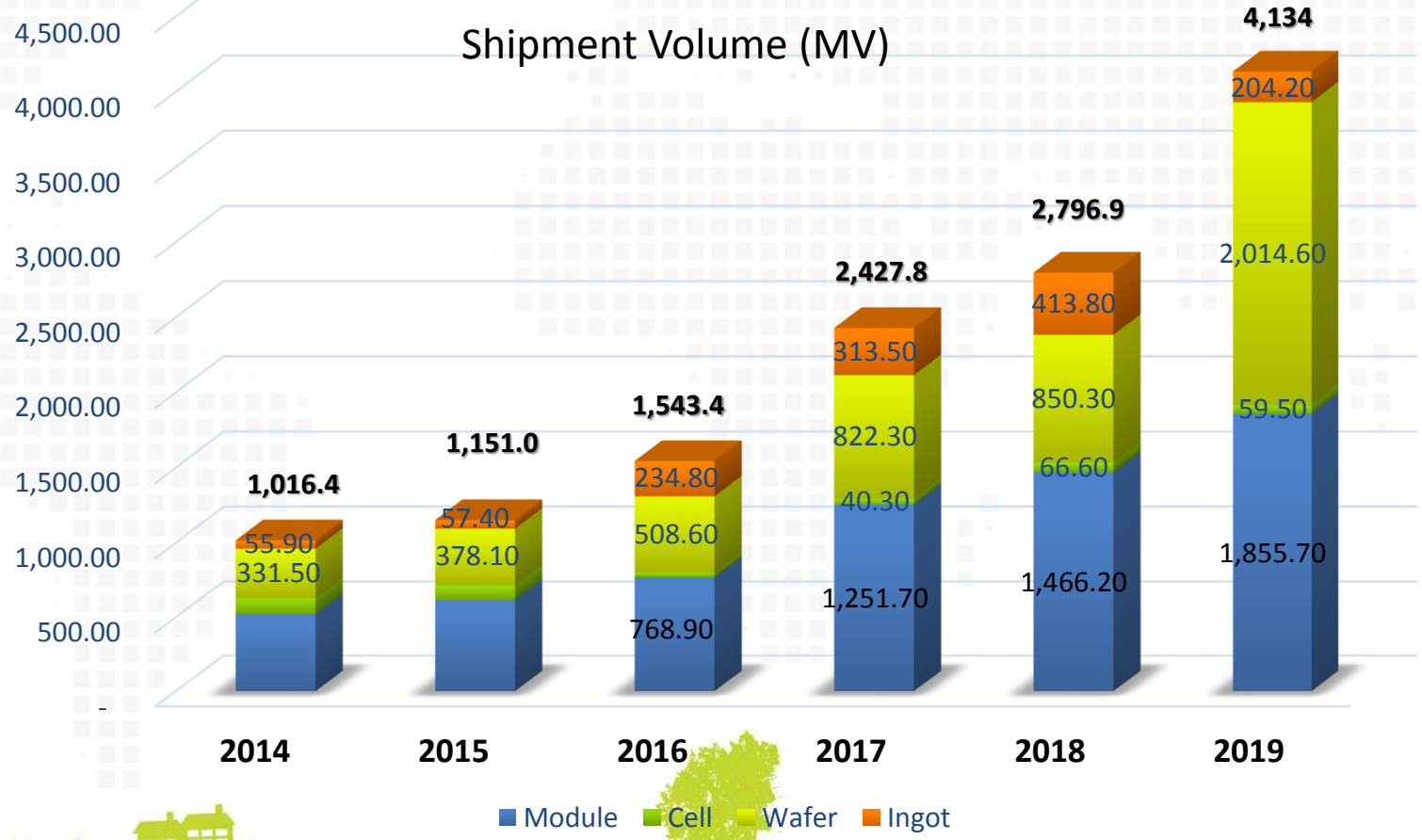
Solargiga Energy

Financial Performance

Yearly Revenue



Yearly Shipment Volume



Gross Profit and Gross Profit Margin

- The Group recorded a gross profit of RMB341.368 million and a gross profit margin of 7.7% in 2019, as compared to a gross profit of RMB397.55 million and a gross profit margin of 9.9% in 2018. Both gross profit and the gross profit margin recorded declines. The main reason was unit selling prices has dropped rapidly during 2019 and China's photovoltaic power subsidy policy was introduced later than expected, industry players generally hold a wait-and-see attitude, resulting in a year-on-year decrease in Chinese domestic photovoltaic installation.

- Further, despite the significant increase in module external shipment, the Group's low-cost and high-efficiency production capacity located in Yunnan Qujing was still in adjustment phase during the year, production capacity was not fully utilised. This forced the Group to continue to rely heavily on the monocrystalline ingot and wafer products from its production base in Liaoning Jinzhou. While the local electricity cost in Liaoning Jinzhou is more than double that of Yunnan Qujing, it has directly and indirectly contributed to higher production cost of monocrystalline silicon ingots and wafers. As such, the Group's overall gross profit was being affected. Further, although the main products of mono-crystalline silicon wafers and photovoltaic modules during the year increased by 137% and 27% respectively compared with last year, the Group was committed to the technological upgrading and transformation of production equipment has affected production efficiency and led to gross profit performance to be below expectation.

Gross Profit (RMB '000)	
2016	329,077
2017	657,873
2018	397,550
2019	**341,368**

Gross Profit Margin (%)	
2016	10.3%
2017	16.4%
2018	9.9%
2019	**7.7%**

Financial Results Highlight

During the year, although the average selling price continued to decline comparing to the last year, the size of the customer base and the purchases by individual customers grew as a result of successful customer development. Shipment of major products for the year amounted to 4,134MW, a growth of 48% comparing to 2,797MW of the last year. The Group' s revenue of RMB4,425.552 million represented an increase of 10% from RMB4,022.452 million of 2018.

(RMB'000)	2019	2018	Change
Revenue	**4,425,552**	**4,022,452**	10%
Gross Profit	**341,368**	**397,550**	(14.1%)
Gross Profit Margin (%)	**7.7%**	**9.9%**	(2.2 pp)
Loss Attributable to Equity Shareholders of the Company	**(355,492)**	**(222,402)**	(59.8%)
Basic loss per share (RMB cents)	**(11.07)**	**(6.92)**	(60%)

Condensed Statement of Cash Flow			
Net cash flows generated from operating activities	**410,143**	**921,479**	(511,336)
Net cash flows used in investing activities	**(181,764)**	**(275,932)**	94,168
Net cash flows used in financing activities	**(80,649)**	**(600,879)**	520,230

Financial Results Highlight

(RMB'000)	**As at 2019.12.31**	As at 2018.12.31	**Change**
Current Assets	**2,822,908**	2,754,947	2.5%
Current Liabilities	**3,578,792**	3,431,772	4.3%
Total Assets	**4,429,180**	4,566,001	(3%)
Total Liabilities	**3,973,614**	4,239,763	(6.3%)
Net Assets	**455,566**	807,991	(43.6%)

Financial Ratios

- In terms of inventory reserve strategy, the Group has been focusing its efforts in raising inventory turnover and lowering the inventory turnover days in order to mitigate the risk of a sudden decline in inventory prices, help reduce committed capital and, at the same time, further strengthen the Group' s operation working capital. As a result, the Group' s inventory turnover days has been lowered to 33 days during the year (31 December 2018: 37 days).
- According to the terms of the industry' s general module sales contract, the recovery of module receivable depends on the construction progress of the photovoltaic power plant. These warranties will generally be recovered in around one year. As a result, the trade receivables turnover days of module business are generally longer. Even so, due to the continuously effective management of accounts receivable, the collection has been improved, resulting in the Group's trade receivables turnover days being reduced to 113 days in 2019 (2018: 141 days).

	2019	2018	Change
Turnover Day Analysis			
Trade Receivables Turnover (Days)	**113**	141	(28)
Trade Payable Turnover (Days)	**130**	124	6
Inventory Turnover (Days)	**33**	37	(4)
Gearing Analysis			
	As at 2019.12.31	As at 2018.12.31	Change
Current Ratio (Times)	**0.79**	0.80	(0.01)
Net Debt to Equity Ratio (%)	**211%**	139%	72 pp

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Future Plans

Action Plans

Plans

- The Group can rely on (1) the new production base having low external electricity costs, which directly and indirectly reduces the production costs; (2) the commencement of mass production by the new equipment and the completion of upgrades to the old equipment; (3) technological integration advantages of its various product lines; and (4) strong client base in China and overseas. It is expected to lead to continuous growth in the Group' s future external shipment volume and revenue, it is also expected that the magnitude of decrease in cost of the Group' s products will be greater than that of the decrease in unit selling price, hence driving the Group' s gross profit ratios to return to a normal level.

- The focus is on the production of upstream mono-crystalline silicon ingots and silicon wafers, and planning the downstream module production capacity, in order to focus on the production of upstream niche products, mono-crystalline silicon ingots and wafers, retaining only a small scale solar cell manufacturing capacity, and through significant module production capacity, the Group not only maintains direct contact with downstream module customers with huge market power, establishes stable supply and demand relations but also keeps a finger on the pulse of the end-user market, and can also bring out the upstream high-end mono-crystalline silicon ingot and wafer products. Through the potential of continuous improvement in production costs of the upstream high-end mono-crystalline ingot and wafer products, the Group' s innate advantage will be demonstrated.

- In addition to the 2.3GW module capacity owned by its wholly-owned subsidiaries, the Group has participated in a newly-established module manufacturing base in Yancheng, Jiangsu. Although it only invested a small amount of cash for a direct equity investment of 15%, but after adding the shares invested by strategic investors and the employees of the Group, the Group could effectively utilise the 1.2GW module capacity of the new production base. This 1.2GW module capacity has already begun production in 2020. The Group' s effective module production capacity has been increased to 3.5GW in 2020, which can greatly increase the economic scale advantage of module products, and also provide a more stable outlet of the Group' s 3.6GW upstream mono-crystalline silicon ingots and wafers production capacity.

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Q & A