Ticker: 688599 Stock Name: Trinasolar

Abstract of the 2020 Annual Report of Trinasolar Co., Ltd.

I. Important Notes

1. The abstract of this annual report comes from the full text of the annual report. To fully understand the Company's operating results, financial situation and future development plan, investors should read the full text of the annual report carefully on the website of Shanghai Stock Exchange designated by the China Securities Regulatory Commission (CSRC).

2. Major Risk Warning

1. Risks of technological progress
2. Risks of fierce competition in the photovoltaic industry
3. Overseas business risks
4. Uncertain risks of COVID-19 to the Company's future development

3. The Board of Directors (or the "Board"), the Supervisory Committee as well as the directors, supervisors and senior management of the Company hereby guarantee the factuality, accuracy and completeness of the contents of this report and its abstract, and shall be jointly and severally liable for any misrepresentations, misleading statements or material omissions therein.

4. All directors of the company attended the board meeting

5. RSM China (Special General Partnership) issued a standard unqualified audit report for the Company.

6. The preplan for profit distribution during the reporting period or the preplan for converting capital reserve into share capital deliberated by the board of directors.

A cash dividend of RMB1.8 (tax inclusive) per 10 shares is to be distributed to all the shareholders. As of the disclosure date of this report, the total share capital of the Company is 2,068,026,375 shares based on which the total proposed cash dividend is RMB 372,244,747.50 (tax inclusive). This year the Company's total cash dividends accounted for 30.28% of the net profit attributable to the parent company's shareholders in the consolidated statement. The Company plans not to distribute bonus shares, or to convert capital reserve into share capital.

If the total share capital of the Company changes between the adoption date of the resolution of the Board of Directors on the profit distribution preplan and the registration date of the implementation of the distribution, the Company intends not to change the total amount of distribution but adjust the amount of distribution per share accordingly. The profit distribution plan above has been reviewed and

approved at the fourth meeting of the second board of directors of the Company, but still subject to the review and approval of the Company's annual general meeting of shareholders of 2020.

7. Whether there are special arrangements for corporate governance and other important matters

□ Applicable√Not applicable

II. Basic Information of the Company

1. Company profile

Stock Profile

√Applicable □ Not applicable

Stock Profile				
Stock type	Stock exchange and board of the listing	Stock name	Ticker	Stock name before adjustment
A shares	Shanghai Stock Exchange	Trinasolar	688599	-

Depository Receipt Profile

□ Applicable √Not applicable

Contact Person and Contact Information

Contact Person and Contact Information	Secretary of the Board of Directors ((Domestic Representative of Information Disclosure))	Securities affairs representative
Name	Qun Wu	Zhiyong Li
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2. Brief introduction to the main business during the reporting period

2.1 Major business, products or services

As a global leading provider for photovoltaic module and smart energy solution, the Company’s main business includes photovoltaic products, photovoltaic system solutions and smart energy. Photovoltaic product business generally covers the R&D, manufacturing and sales of mono-crystalline and polycrystalline silicon-based photovoltaic cells and modules; photovoltaic

system business includes system products and photovoltaic power station; and smart energy business involves photovoltaic power generation, operation and maintenance services, the development and sales of intelligent micro grid and multi-energy systems, as well as the operation of energy cloud platform.

2.1.1 Photovoltaic product business

The Company has been deeply engaged in solar photovoltaic industry for more than 20 years. Bloomberg New Energy Finance (BNEF), a world-renowned research institution, has ranked the Company as one of the best global photovoltaic module manufacturers for a long time, as well as the world's most valuable module brand with financing value. Photovoltaic modules, as one of the main products, are exported to more than 100 countries and regions in the world. Trinasolar adopts two different business models - direct selling and distribution - for different types of module businesses, and has been actively engaged in the R&D of innovative technology and mass production of cells and modules according to market demands. Relying on the State key Laboratory of photovoltaic Science and Technology and the National Enterprise Technology Center, Trinasolar, equipped with high-quality equipment, mature process experience and industrial advantages, deeply integrates the core technology of PERC, N type, MBB, double-glass, bifacial and half-cut modules and other cells and modules, proactively advocates the establishment of " Innovative and Open Eco-alliance for 600W+ Products" to improve the supply chain of the photovoltaic industry based on the industrial development needs, and comprehensively coordinates with the whole industry to usher in the new era of 210 Ultra-High-Power modules that run on 500W, 550W, 605W, 670W, etc.

2.1.2 Photovoltaic system business

The photovoltaic system business mainly includes system products and photovoltaic power stations.

1) System products

According to the construction requirements of large-scale power stations, Trinasolar has developed intelligent photovoltaic solutions, covering two application scenarios of ground tracking and floating on water surface, by optimizing and integrating photovoltaic products such as efficient modules and intelligent tracker. In this way, customers and clients can be provided with one-stop system product solutions for large-scale power stations.

The Company's intelligent tracker solution has become the main approach to reduce kilowatt-hour cost in photovoltaic industry as the continuous reduction of global kilowatt-hour cost is required. The independently developed intelligent tracking algorithm combined with 210 Ultra-High-Power double-face modules can make up for the defects of traditional astronomical algorithm, and greatly improve the power generation.

Focusing on the needs of customers and development requirements of the industry, Trinasolar continues to carry out business innovation to provide customers with one-stop system product solutions for homes as well as industrial and commercial small distributed photovoltaic power

stations. The Company has over 500 high-quality distributors. It has built the Energy IoT for both home and commercial use using the Internet, big data and artificial intelligence technology, and provided distributed users with full-life-cycle after-sale services and remote operation & maintenance to create worry-free consumption experience.

2) Power station business

With the rapid decline of cost per kilowatt hour in the photovoltaic industry, large global energy groups and photovoltaic enterprises have accelerated the speed of project development and construction, and therefore the market for large above-ground power stations has been growing rapidly. Trinasolar is mainly engaged in the development, construction, operation and sales of solar photovoltaic power stations through subsidiary project companies by adopting the "rolling development and rolling sales" business model. Through global market channels, Trinasolar's business is now booming around the world. The number of power station development projects that the Company has accumulated so far can guarantee the sustainable development of its photovoltaic products business and system product business in the future.

2.1.3 Smart Energy Business

Smart energy business mainly consists of photovoltaic power generation, operation and maintenance, energy storage intelligent solutions, energy IoT and other businesses.

Photovoltaic power generation forms a source of revenue. The operation and maintenance services are primarily used for the proper functioning of systems. The intelligent operation and maintenance of photovoltaic power stations, including station management, daily operations and maintenance, troubleshooting and the recording and analyzing of operations & maintenance, is achieved through energy IoT on the basis of advanced detection and supervision equipment and professional technical teams.

Intelligent energy storage solutions can realize the transfer and storage of electric energy and promote the efficient utilization of the institutional demand of electric energy; enhance the stability of power system operation by adjusting peak and frequency. In the global wind and solar energy storage market and household energy storage market, we strive to take the lead in products by strengthening independent research and development, to constantly improve the delivery capacity, and to win a higher market share.

The energy IoT and other new businesses are constantly accumulating clients and customers. While continuously building core capabilities to control costs, we also aim to realize the implementation and sales of projects and try new development and business models.

2.2 Industry overview

2.2.1 Development stage, basic characteristics and main technical threshold of the industry

Trinasolar is a contributing member of solar photovoltaic industry. The upstream of photovoltaic industry comprises mono-crystalline/polycrystalline smelting, ingot casting, rod drawing, slicing, etc.; the midstream industry includes solar cell production, photovoltaic module packaging, testing, etc.; and the downstream industry consists of the installation of photovoltaic application system,

services, etc. After years of development, China's photovoltaic industry has formed a complete industrial chain, and has ranked the first in the world in terms of manufacturing capacity and market share. The core business of Trinasolar is photovoltaic modules, which is in the middle of the industrial chain, though other part of the Company’s business can be found in the upstream and downstream.

China's photovoltaic industry has been through the periods of fixed price and bidding price on national grid. This year, it is expected that all photovoltaic power generation projects, except for household photovoltaic, will be at or below grid parity. The KWH subsidy policy has significantly boosted China's photovoltaic installation demand, with China leading the world in the number of newly installed equipment for eight consecutive years and cumulative installed equipment for six consecutive years. At the same time, driven by policy support, technological progress and capacity expansion, the industry scale has been expanded rapidly, and the cost advantage has become more obvious in all aspects, making China rather competitive in the global.

In recent years, the government has developed a series of relevant policies to support and guide the healthy development of photovoltaic industry. The photovoltaic "gird parity" plan is also accelerated. In most areas in China, the electricity generated by photovoltaic modules is eligible to be at the same price as fixed-price cola-fired electricity or even lower, as a result, the market share of photovoltaic industry will gravitate toward enterprises with core advantages in technology, scale, supply chain management, etc. During the reporting period, the photovoltaic industry also launched a large volume of new production capacity, centered on large-size silicon wafers, cells and modules, to eliminate old production capacity of low efficiency and high cost and accelerate industry consolidation. With the continuous growth of photovoltaic market demands, enterprises with continuous innovation ability, brand advantage and global sales network in the industry will benefit more, and the concentration of photovoltaic industry will be further enhanced.

During the reporting period, the Company's photovoltaic module shipments are among the top of the industry. With the improvement of industry concentration, the Company's module output and market share will grow robustly in the future.

2.2.2 The Company’s position in the industry and the changing trend

During the reporting period, the COVID-19 pandemic has brought severe challenges to photovoltaic industry. Trinasolar has been deeply engaged in the photovoltaic industry for more than 20 years, and has established a global brand effect and global market channels. During the pandemic period, it not only managed to overcome the impact of production and logistics, but also further increased its market share in some market regions.

The Company has always put customer’s demands at the center and upheld the business philosophy of creating value for customers. Dedicated to the R&D and mass production of

innovative technologies, accelerating KWH cost reduction, further responding to the country's "14th Five Year Plan", peaking carbon dioxide emissions and achieving "carbon neutrality" , Trinasolar is able to contribute to the clean and low-carbon energy transformation and green development. According to the phased demand of industry development, The Company, in cooperation with partners making silicon wafers and cells, launched 210 mm large-size silicon wafers, cells, and modules and initiated the founding of "Innovative and Open Eco-alliance for 600W+ Products", which has improved the supply pattern for all stakeholders of the photovoltaic industry chain and contributed to the decline of investment cost per watt for downstream power stations again. In doing so, LCOE (Levelized Cost of Energy) was decrease once again, which expedited the coming of "gird parity".

With the arrival of "grid parity" era, every part of the industrial chain will be involved in a transformation. Trinasolar, through the capacity expansion, will further strengthen the supply ability of solar cells and modules to meet the growing demand of downstream market for efficient solar energy modules, and continuously consolidate and promote its leading position in the global solar industry; on the other hand, the core technologies and achievements in the field of solar cell can also be used for industrial application in a larger scale to further improve product quality, increase the conversion efficiency of mass production of cells to more than 23%, and reduce production cost. Through quality and efficiency improvement, transformation and upgrading, technologies and products can be upgraded to effectively cope with the opportunities and challenges brought by changes in the new era.

2.3 The development of new technologies, new industries, new forms of business and new models and their future development trends during the reporting period

2.3.1 The development of scientific and technological innovation

The photovoltaic industry chain includes polysilicon material smelting and refining, polycrystalline ingot casting, mono-crystallion rod drawing, squaring, slicing, solar cell preparation, module preparation, combined with inverter, tracker, combiner box and controller to form a system. However, there are also silver paste, EVA, backboard, glass, aluminum frame and other auxiliary materials that are needed to finally form an industry chain.

In the twenty years since entering the 21st century, a series of new achievements and breakthroughs have been made in the research, development and industrialization of crystalline silicon solar cells.
Technological progress has become an important factor to reduce the cost of solar photovoltaic power generation and promote the development of crystalline silicon solar cell industry and market.

In recent years, the development speed of global photovoltaic technology has been significantly accelerated. The improved Siemens method and granular silicon have largely reduced the production cost of silicon materials; high efficiency mono-crystallion rod drawing technology, mono-crystallion ingot casting technology and high efficiency polycrystalline technology have

greatly improved the minority carrier life of silicon wafers. Besides, mono-crystalline market share has grown rapidly especially in recent years and has gradually replaced the polycrystalline technology. The rapid application of diamond line slicing technology has significantly reduced the slicing cost and the thickness of silicon wafer. In regards to cells, the newly developed PERC (Passivated Emitter and Rear Cell) has gradually taken the place of the conventional aluminum back surface field cell and becomes the mainstream of the market; bifacial PERC has gradually opened the market. When it comes to modules, bifacial double-glass, half-cutting, multi-main gird technologies and other technologies began to see large-scale applications. These technologies can strongly enhance the competitiveness of crystalline silicon cell market in a sustainable manner. In the aspect of system, tracking system and other technologies have been more widely used in the construction of photovoltaic power stations. Intelligent robots, unmanned aerial vehicles, remote monitoring software and advanced communication systems are used in quantity in the operation of power stations.

Photovoltaic modules are the key components in photovoltaic systems because they need to convert sunlight into electric power while functioning stably in 25 years of the life cycle. Solar cells are the core components of power generation. In recent years, the cell efficiency repeatedly hit records. We see the efficiency of PERC has already reached over 23% as the laboratory efficiency continues to advance. The development of heterojunction (HJT), TOPCON, IBC and other technologies is also accelerating.

2.3.2 Future development trend

1) The increased use of mono-crystalline silicon and the dominant position of PERC

Solar cells can be divided into crystalline silicon solar cells and thin-film solar cells by different substrate materials, in which the crystalline silicon cell is the first to be researched and applied, and it is still the mainstream technology in the current market. In terms of different material forms, solar cells can also be divided into mono-crystalline silicon cells and polycrystalline silicon cells, in which the mono-crystalline silicon cell can be further classified into P type and N type by different types of chemical elements doped in silicon wafers.

The majority of mono-crystalline PERCs, the cell most commonly seen now, use P-type silicon wafers, while the new-generation TOPCON, heterojunction, IBC and other new solar cell technologies mostly adopt N-type silicon wafers. At present, P-type mono-crystalline PERCs are the mainstream of the market with the mass production efficiency exceeding 23%. The target is to approach 24%

Now most cell production lines around the world use PERC technology, in which some old production lines for BSF cells are technically upgraded to produce PERCs. Currently, PERC technology has become the mainstream of the market, and its market share goes beyond 80%. The development of heterojunction (HJT), IBC, N-type double-side cells and other technologies are also accelerating. After the continuous verification of N-type technology in the industry from 2018 to 2020, N-type cells are in the introduction stage of large-scale production. At present, in the overall industrial layout, most production capacity of N-type cells is concentrated on pilot lines.

2) Iteration of large-size silicon wafers to seek efficiency breakthroughs

In recent years, high power modules based on large silicon wafers have become an innovative trend in the photovoltaic industry. The demand for larger silicon wafers and cells is growing rapidly in the context of grid parity. Large-size silicon wafers can effectively reduce the cost of the whole industry chain, as well as non-silicon costs and system BOS (Balance of System) costs of photovoltaic power generation.

3) The reduced cost and increased efficiency of photovoltaic modules and the intelligent development of photovoltaic systems

A photovoltaic module is a cell-based integrated device with packaging and internal connections. As a core component of a solar power generation system, it can independently provide direct current output.

As the end product of photovoltaic industry, a module's production is closely connected with the market. Modules are updated very quickly, which requires a responsive mechanism for market changes and a very strong capability in design and development. In the past 10 years, the global photovoltaic demand has been growing. Domestic enterprises have been increasing the investment and technological innovation in modules in recent years. The production cost has continued to drop, whereas the degree of automation and digitization has been continuously improved. At the same time, the high-power modules are gradually accepted by the market. The market share of half and bifacial modules is increasing with the production cost continuing to decline.

In terms of system, intelligent technologies such as tracking systems have been widely used in the construction of photovoltaic power stations. Intelligent robots, unmanned aerial vehicles, remote monitoring software and advanced communication systems have been used a lot in the operation of power stations. In the future, photovoltaic intelligence will penetrate into all aspects of the industrial chain, such as the adaptation with virtual power plants and the combination with buildings, agriculture and aquaculture, etc., to solve the problems and challenges of power consumption, land, efficiency, cost, etc.

3. Major accounting data and financial indicators

3.1 Major accounting data and financial indicators in the last three years

1) Major accounting data

Unit：Yuan Currency：RMB

Major Accounting Data	Year 2020	Year 2019		Year-on year increase/ decrease (%)	Year 2018	
		Post-adjustment	Pre-adjustment		Post-adjustment	Pre-adjustment

Operating revenue	29,417,973,429.28	23,321,695,860.30	23,321,695,860.30	26.14	25,054,037,825.05	25,054,037,825.05
Net profit attributable to the listed company's shareholders	1,229,276,756.49	640,595,151.46	640,595,151.46	91.90	557,908,906.61	557,908,906.61
Net profits attributable to listed company shareholders after deducting non-recurring profits and losses	1,112,156,153.17	611,181,055.36	611,181,055.36	81.97	561,646,192.18	561,646,192.18
Net cash generated from in operating activities	2,997,545,320.08	5,241,303,610.38	5,241,303,610.38	-42.81	4,079,092,805.33	4,079,092,805.33

	End of Year 2020	End of Year 2019		Year-on year increase/ decrease (%)	End of Year 2018	
		Post-adjustment	Pre-adjustment		Post-adjustment	Pre-adjustment
Net profit attributable to the listed company's shareholders	15,081,182,547.72	11,956,299,390.66	11,956,299,390.66	26.14	11,352,819,631.90	11,352,819,631.90
Total assets	45,592,461,350.87	36,283,015,447.44	36,491,234,670.63	25.66	29,450,384,894.82	29,607,611,439.29

2)Major financial indicators

Unit：Yuan Currency：RMB

Major financial indicators	Year 2020	Year 2019		Year-on year increase/ decrease (%)	Year 2018	
		Post-adjustment	Pre-adjustment		Post-adjustment	Pre-adjustment
Basic earning per share (RMB /share)	0.64	0.36	0.36	77.78	0.32	0.32

Diluted earning per share (RMB /share)	0.64	0.36	0.36	77.78	0.32	0.32
Basic earning per share before non-recurring gains and losses (RMB /share)	0.58	0.35	0.35	65.71	0.32	0.32
Weighted average rate of return on equity (%)	8.94	5.53	5.53	Increase 3.41%	5.05	5.05
Weighted average rate of return on equity before non-recurring gains and losses(%)	8.08	5.27	5.27	Increase 2.81%	5.09	5.09
Percent of operating revenue on research and development(%)	5.54	5.71	5.71	Decrease 0.17%	3.86	3.86

3.2 Major accounting data by quarter during the reporting period

Unit：Yuan Currency：RMB

	Q1 (Jan.- Mar.)	Q2 (Apr.-Jun.)	Q3 (Jul.-Sep.)	Q4 (Oct.-Dec.)
Operating revenue	5,503,238,236.81	7,042,700,654.23	7,380,501,326.36	9,491,533,211.88
Net profit attributable to the listed company's shareholders	152,970,795.42	339,997,048.02	338,641,978.83	397,666,934.22
Net profits attributable to listed company shareholders after deducting non-recurring profits and losses	118,066,657.34	326,537,843.54	312,242,419.92	355,309,232.37
Net cash generated from in operating activities	460,330,897.02	200,207,755.48	(271,861,151.01)	2,608,867,818.59

Description of differences between quarterly data and disclosed data in periodic reports

☐ Applicable √ Not applicable

4. Share capital and shareholder information

4.1 The number of shareholders and the shareholding situation

Unit: share

Total number of common shareholders at the end of the period	37,039
Total number of common shareholders at the month-end prior to the disclosure of this report	37,793
Total number of preferred shareholders with voting rights restored at the end of the reporting period	0
Total number of preferred shareholders with voting rights restored at the month-end prior to the disclosure of this report	0

Shareholding situation of the top 10 shareholders

Name of shareholders (full name)	Increase/decrease during the reporting period	Total shares held at the period-end	Shareholding ratio	Number of shares holding restricted sales conditions	Number of restricted shares held including refinance securities	Shares pledged or frozen		Nature of shareholders
						Status	Quantity	
Jifan Gao	0	351,565,275	17.00	351,565,275	351,565,275	none	0	Domestic natural person
Jiangsu Panji Investment Co., Ltd.	0	316,408,747	15.30	316,408,747	316,408,747	none	0	Domestic natural person
Xingyin Growth Capital Management Co., Ltd.	0	310,959,486	15.04	310,959,486	310,959,486	none	0	State-own legal person
Hangzhou Hongyu Investment Management Co., Ltd.	0	105,469,583	5.10	105,469,583	105,469,583	none	0	Domestic non-state-own legal person
Xinyu Rongqi Investment Management Co., Ltd.	0	89,649,145	4.34	89,649,145	89,649,145	none	0	Domestic non-state-own legal person
Lu'an Xinshi Asset Management Co., Ltd. -Dangtu Xinshi Emerging Industrial Fund (Limited Partnership)	0	87,891,319	4.25	87,891,319	87,891,319	none	0	Domestic non-state-own legal person

Ningbo Meishan Bonded Port Area Jingmin Investment Co., Ltd.	0	84,199,883	4.07	84,199,883	84,199,883	none	0	Domestic non-state-own legal person
Zhuhai Qisheng Investment Management Co., Ltd.	0	59,766,097	2.89	59,766,097	59,766,097	Pledge	50,000,000	Domestic non-state-own legal person
Trinagroup Investment Co.,Ltd.	0	45,340,012	2.19	45,340,012	45,340,012	none	0	Domestic non-state-own legal person
Shanghai Xingjing Investment Management Co., Ltd.	0	40,430,007	1.96	40,430,007	40,430,007	none	0	State-own legal person

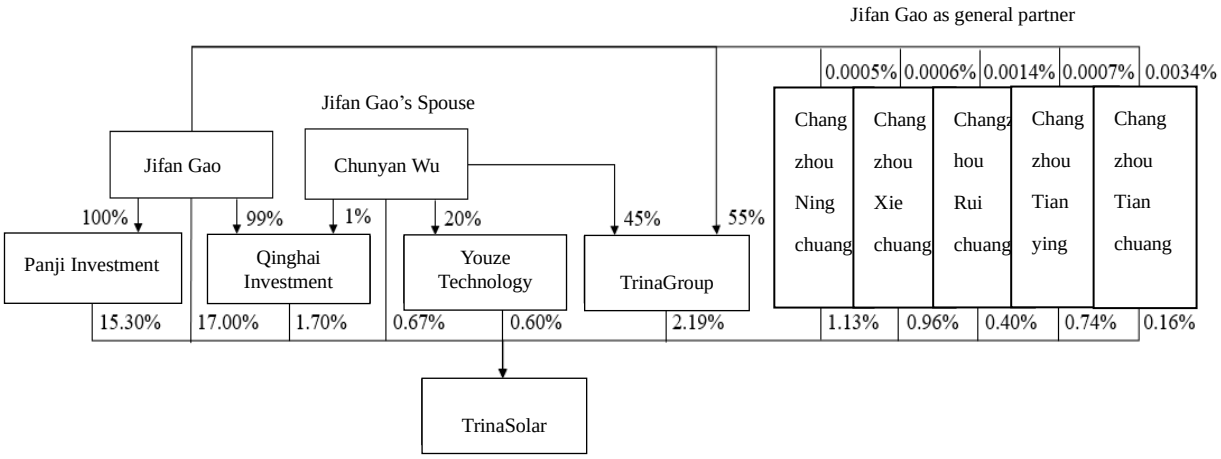
Explanation of the above-mentioned shareholder-related relationship or concerted action	Among the top ten shareholders of the company, Jiangsu Panji Investment Co., Ltd. and Tianhe Xingyuan Investment and Development Co., Ltd. are the co-actors of Mr. Gao Jifan, the controlling shareholder and the actual controller of the company.
Note on preferred shareholders with voting rights restored and the total shares held	none

Depository Receipt Holder Information

□ Applicable √Not applicable

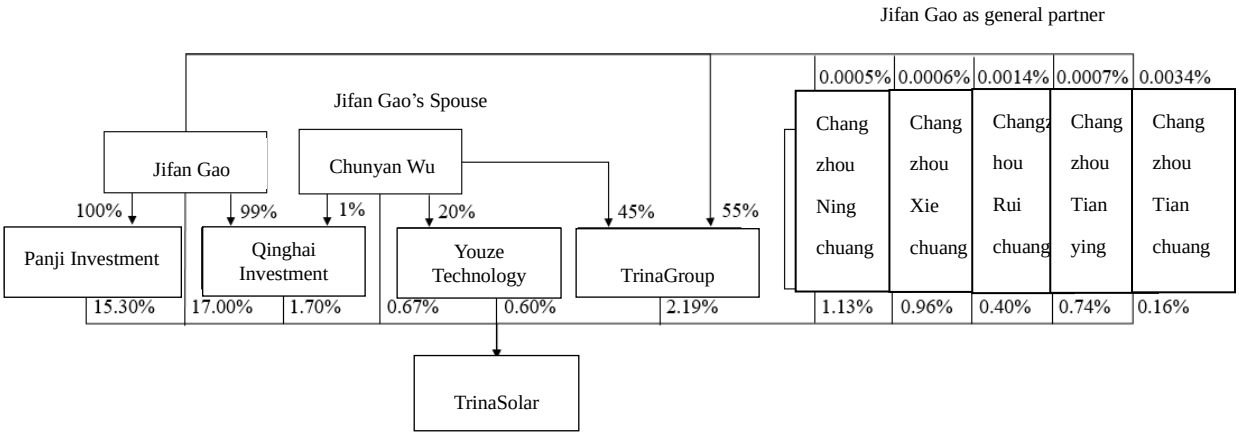
4.2 Ownership and Control Relations between the shareholders and the Company

☑ Applicable ☐ Not applicable



4.3 Ownership and Control Relations between the Actual Controller and the Company

√ Applicable ☐ Not applicable



4.4 **The total number of preferred shareholders and the top 10 shareholders of the Company at the end of the reporting period**

□ Applicable √ Not applicable

5. Security profile

□ Applicable √ Not applicable

III. Discussion and Analysis of Operation

Part one：Report on the company's overall business performance in 2020

At the beginning of 2020, the COVID-19 broke out in China. The whole country went into a state of

emergency and epidemic control. Subsequently, the pandemic broke out around the world and continued to spread, which affected the global economy, including the photovoltaic industry.

Trinasolar quickly responded to the pandemic and set up an emergency response team as well as a global risk observation task force. Relying on years of accumulated advantages in global layout management, intelligent work-from-home system and mature production, operation and logistics management system, the Company has ensured the normal development of production and operation, achieved substantial growth in performance against the adverse trend and was successfully listed on the science and technology innovation board of SSE on June 10, entering a new stage of rapid development.

During the reporting period, Trinasolar has achieved the operating revenue of 29.418 billion yuan, up 26.14% year-on-year, and net profit attributable to the parent company reached 1.229 billion yuan, up 91.90% year-on-year. In 2020, Trinasolar shipped 15.915GW of modules in total, launched the first 210mm ultra-high-power "Vertex" module series in the industry, and initiated the establishment of "Innovative and Open Eco-alliance for 600W+ Products" that includes the upstream and downstream enterprises and institutions of the industrial chain. Trinalsoar, in collaboration with the whole industry, ushered in the new era of 210 ultra-high-power modules. In the same year, the combined shipment of trackers exceeded 2GW, representing a rapid growth; the photovoltaic system business for power stations at home and abroad made steady progress, with the project performance and profit increased significantly, and the distributed smart energy business that combined online and offline sales outperformed the business target by taking advantage of the new financial model; the energy storage business, through sustaining independent research and development, built core capabilities; and new businesses such as the energy IoT continue to make forward-looking layout to build comprehensive competitiveness of energy services.

Part two：Report on the company's operation in 2020

1. Business development and sales operation

The three segments of business continue to develop and innovate, helping to achieve substantial growth in business performance:

1.1 Continuously leading the manufacturing and sales of photovoltaic module products

1) During the reporting period, the Company set up major construction projects for production capacity, built headquarters and actively laid out manufacturing bases in Suqian, Yancheng, Yiwu, Changzhou, etc. With all these projects successfully kicked off and put into production, the Company's production capacity of 210 "Vertex" ultra-high-power modules was greatly expanded, which not only led the industry, but laid a solid foundation for new products to quickly seize more market shares at an early stage.

2) As the supply chain was affected by the pandemic and external policies, the industry experienced a shortage of raw materials such as silicon, glass and a price rise. In addition to constantly optimizing the

technology and process of materials and improving the product performance, the Company was also committed to maintaining the long-term stable material supply, matching new products and meeting development needs while effectively reducing the cost and improving the overall profitability through in-depth joint-venture partnership with upstream suppliers and strategic procurement plan to lock down long-term orders.

3) In terms of the sales of photovoltaic module, the Company released the 500W "Vertex" series of ultra-high-power modules to the world in February, and then in just 5 months, the power of "Vertex" series was upgraded to 600W+. Through continuous technological R&D and product innovation, the Company provided a series of high efficiency, high power and high reliability products to the market. Up to now, the company's order quantity of 210mm "Vertex" modules has reached 10GW, and the new product has been widely recognized by the market.

1.2 The world's leading solution package for photovoltaic system

During the reporting period, the Company's tracker business reached a shipment of 2GW, which was a huge progress from the previous year. Following the acquisition of 51% of the equity of European tracker provider-Nclave Renewable S.L. (hereinafter referred to as "Nclave") in 2018, the Company acquired the remaining 49% of the equity in September 2020, making Nclave a wholly-owned subsidiary of Trinasolar. In doing so, the Company’s technology, business and management were effectively integrated, which further enhanced its comprehensive competitiveness and technology accumulation in the market of tracker. Combined with Trinasolar’s ultra-high-power modules, the tackers can significantly increase the amount of power generated by power stations and reduce the overall cost of power generation.

The domestic power station business exceeded expectations and reached the business target, obtaining nearly 1GW from power station projects at both guided price and bidding price, an increase of more than 25% compared with last year. The overseas system business has achieved a breakthrough from zero to one in many countries and regions. In the first half of the year, we signed a project contract with The Rise Fund, a subsidiary of TPG Group, one of the world's largest alternative asset management companies, with a total transaction amount of about 700 million US dollars, including 35 overseas photovoltaic power station projects distributed in Europe and Latin America, with a total scale of nearly 1 GW.

After the two brands "Trinahome" and “Trinablue” of distributed system business first put forward the concept of original photovoltaic systems that led the industry, they once again pioneered the introduction of financial supporting business model by utilizing the back-end support of "Trinayuan digital operations platform " to strengthen operational and maintenance service management. Smart photovoltaic carport (SPVC) and other ecological products were also launched by the two brands, which promoted the sales significantly.

1.3 The continuous expansion of smart energy business around the world

During the reporting period, the company continued to make efforts in the business of energy storage intelligent solutions. At present, the company has joint venture with Great Power Co., Ltd. in Guangzhou to set up the phase project of LFP cell production line, PACK production line, and other production capacity projects such as the assembly line of energy storage container system. The joint venture has planned to lay out the overall production capacity of more than 10GWh, at the same time has integrated with BMS, PCS, EMS system, etc., committed to providing customers with safe and reliable new energy solutions, power grid solution, user-oriented customized solutions and micro-grid energy storage solutions by modular, scalable, efficient integration of container storage systems. The Company continued to build product competitiveness to provide customers with full-life-cycle system solutions and efficient service and reliable energy storage systems integration products. The energy IoT business has steadily promoted the EMS efficiency management system, MOTA energy management system, TrinaPro management platform and other solution application businesses, and has built the capacity for the intelligent adaptation of the power system with new energy as the core under the guidance of the national carbon neutrality goal and the 14th Five-Year Plan.

2. Research and development of technology and scientific research

Trinasolar insists on taking innovation as an important source to further enhance the core competitiveness. In 2020, the company's R&D investment reached 1,628,464,900 yuan, up 22.29% year on year, of which the R&D expenditure reached 363,486,800 yuan, up 23.73% year on year. In 2020, the Company was recognized as "National Demonstration Enterprise of Technology Innovation" by Ministry of Industry and Information Technology of the People's Republic of China, which is another national qualification after "State key Laboratory of photovoltaic Science and Technology", "National Enterprise Technology Center" and "National Demonstration Enterprise of Intellectual Property ". Approved by Jiangsu Provincial Development and Reform Commission, the Company has built a new engineering research center of new-energy power energy storage in Jiangsu province, which is a new breakthrough in the construction of energy storage technology platform.

With remarkable innovation strength and fruitful achievements, the Company was ranked the fifth in "Top 100 Innovative Enterprises in Jiangsu Province", the second in "Top 100 Innovative Private Enterprises in Jiangsu Province". After successfully passing the review of Ministry of Industry and Information Technology of the People's Republic of China, the Company was awarded the champion of manufacturing in photovoltaic industry. It was also included in the top 20 enterprises with strongest scientific and technological innovation capacity and top 10 high-end equipment enterprises with strongest scientific and technological innovation capacity on SSE STAR board, making it the only photovoltaic enterprise on the list. The Company is also the only photovoltaic enterprise that has its stock listed on STAR50.

Through the R&D and industrialization of large-size silicon wafers, high-efficiency photovoltaic cells, high-volume power density modules and intelligent trackers, the Company has innovated the whole industry chain from equipment, materials, products to systems, further reduced the cost of photovoltaic power generation technology, and promoted the photovoltaic power generation toward

grid parity. It continuously improves the digital and intelligent level of low-carbon smart energy, and strengthens the deep integration of photovoltaic with other industries in order to develop a new mode of photovoltaic storage integration and promote the collaboration between photovoltaic systems and technologies such as the Internet of Things and big data. Through scientific and technological innovation, new technologies and applications in photovoltaic power generation, energy storage, hydrogen energy, intelligent power transmission and distribution, and intelligent energy use are combined to build an intelligent low-carbon new energy system.

3. The constant improvement of organizational culture

3.1 The construction of striving culture as an important guarantee mechanism

With the rapid agglomeration of leading players in the photovoltaic industry, the Company promoted the culture of striving spirit at the end of 2019 to better cope with the fierce market competition. The culture was then further deepened, strengthen and ultimately became a system in 2020.

By putting the striving spirit at the core, the Company has energized the organization, cultivated and motivated teams of strivers. Guided by the strong culture and the core value of " customer first, opening and innovation, persistent hard work, pursuit of excellence, shared responsibility, shared creation and shared benefits," The company will be able to maintain long-term sustainable growth.

3.2. A restricted stock incentive plan

A restricted stock incentive plan was developed to further improve the corporate governance structure, establish and improve the Company's long-term incentive constraint mechanism, attract and retain core management, technical and business talents by fully mobilizing their enthusiasm and creativity, and enhance the cohesion of the core team and the competitiveness of the Company. The plan can also effectively combine the interests of shareholders, the Company and the core team as a whole, making the Company's long-term development as a goal of their shared concern, to ensure the realization of development strategies and management goals.