

SunTalk

June 2020

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On May 9th, a delegation led by Huang Qin, Secretary of the Wuxi Municipal Party Committee, Jiang Min, Deputy Mayor of Wuxi City and Secretary of the Xinwu District Party Committee, and Zhou Changqing, Deputy Mayor of Wuxi City, visited Wuxi Suntech Power Co., Ltd. for a field survey on Suntech's current operation and development, and asked for the necessary resources for business's growth. The main leaders from the Municipal Development and Reform Commission, the Municipal Commerce Bureau, the downtown branch of the PBC, Wuxi Customs, and the Municipal Taxation Bureau participated. Mr. Zhang Fubo, Chairman of Suntech New Energy Holdings, Mr. Tang Jun, the President, and the management team of Suntech accompanied and shared their ideas.

At the forum, Huang Qin listened intently to the report on Suntech's production capacity, performance, investment and financing, and fully approved of the great result achieved in new energy areas. Suntech has maintained a good development momentum lately, expanded its export volume year by year, and recorded new highs repeatedly through its positive global brand influence. By April 2020, Suntech had delivered modules of 22GW in total, serving 100 countries worldwide, which made it one of the top ten in terms of overseas shipments. Huang Qin highly appreciated Suntech's performance in recent years. "Suntech, as a key enterprise in Wuxi and has drawn extensive attention from all over the city". He encouraged Suntech to focus on industrial production, adapt to market changes, invest more in technical innovation, accelerate the pace of transformation and upgrading, and improve capabilities in product innovation, to raise the brand popularity in the PV industry and gain more brilliancy. Huang Qin also urged the relevant municipal departments to strengthen service support, thereby helping the enterprises to make the best of orders, relieve productivity, and develop in a faster way.

Suntech's management teams express their gratitude for the concern and assistance from the municipal party committee and the government. Affected by the epidemic this year, the world PV markets changed rapidly. With the support from relevant departments of the municipal party committee and the government, Suntech has managed to recover its production capacity in a short time, and earned foreign exchanges of nearly 70 million US dollars in March. Facing the complex macro conditions, Suntech insists on adapting to changes, actively promotes management reform, and implements full cost control and refined management, in order to enhance core competitiveness. Suntech has also been vigorously upgrading production lines by making module production fully automated to enhance productivity and reduce costs while increasing efficiency, and boosting "grid parity". In the future, Suntech will make continuous efforts to create new competitive advantages in technology, brand, quality, standard, service and other aspects, and push the economic development in Wuxi with the municipal Party committee and the municipal government.



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THE BIRTH OF A PV MODULE IN SUNTECH

Visit Suntech
Module Factory

Suntech, with a history of nearly 2 decades, has a total module shipment of more than 22GW. Maybe you are wondering how a module is produced in Suntech?

Please scan the QR code below, and begin the "cloud tour" around the Suntech module factory to explore the mysterious module-making process in Suntech!



Suntech awarded Top Brand PV seal by EuPD Research for five consecutive years



Recently, Suntech was awarded the certificate of "Top Brand PV" seal by EuPD Research; an authoritative research institute recognized worldwide, marking that Suntech has been honored a leading solar brand in Europe for five consecutive years.

The "Top Brand PV" award is rated by EuPD Research in accordance with the Global PV Installer Monitor survey that covers over 100 global installers, and eventually goes to the most excellent one among all upstream and downstream players of the photovoltaic industry, after a rigorous and just assessment focusing on product performance and services. This competition is beneficial for the entire industry to constantly deliver better products and services and enhance the quality of photovoltaic energy, thus pushing enterprises forward for higher effectiveness. Furthermore, Suntech has also been rated as a "Top Brand PV" seal in Germany, Switzerland, and the Netherlands in 2020. Outside Europe, on account of its brand strength and long-lasting attractiveness, Suntech also won the endorsement of EuPD Research in the Australian market for three consecutive years, and meanwhile the "Top Brand PV Australia" seal by EuPD Research.

Relying on its brand influence built on years of consistent efforts in the European market, where a robust pre-sales and after-sales service system has been created, Suntech has successfully brought in numbers of new customers while maintaining a stable cooperative relationship with established ones. In recent years, the scale of Suntech's business has steadily increased, and module shipments have increased by more than 20% for three consecutive years. As of the end of 2019, Suntech has supplied over 21GW photovoltaic modules to more than 90 countries. According to updated customs data, Suntech ranks 6th in the European market in terms of shipment volume, performs spectacularly well in Germany, the Netherlands, Switzerland, etc.

Suntech awarded "Solar Champion" Seal by Joint Forces for Solar



Recently, Suntech was awarded the "Solar Champion" seal by Joint Forces for Solar, which marks a high recognition of Suntech's consistent efforts in delivering better PV products and services and shaping a well-reputed brand over the past 20 years.

Co-established in 2009 by EuPD Research and Intersolar, two sustainability research enterprises that lead in Europe, Joint Forces for Solar (hereinafter referred to as "JF4S") seeks to coordinate the development space for expanding solar energy technologies worldwide and create an energetic clean energy industry. The "Solar Champion" seal, in accordance with the review by the JF4S alliance, is designed to praise an enterprise that has been consistently taking an active part in advancing the solar industry and has achieved major progress in the fields of energy conversion and solar energy for sustainable development.



Suntech Supplies PV Modules to Sudan, Reaching a Milestone of Global Shipments to 100 Countries

Recently, Suntech supplied 206kW highly efficient polycrystalline PV modules to Sudan, and shipments to global destinations now total 100 countries.

Sudan is close to the equator with a geographical location advantage. The area receives long-term solar radiation, due to its direct exposure to the sun, which is conducive to the development of photovoltaic. Suntech enters Sudan's market via a global distribution mechanism, accessing opportunities for developing surrounding markets as well. Suntech sees "Global & Local" as key strategy of overseas development planning, achieving remarkable results in recent years.

20 Years, 100 Countries

Suntech sees steady growth in the past several years. Since 2014, Suntech's global average annual shipment growth remains stable at around 30%. Suntech has been ranked seventh in the world in the "2019 PV Module Bankability Report", published by Bloomberg New Energy Finance (BNEF), as one of the world's most bankable PV module brands. In the BloombergNEF history of cumulative financing projects database, Suntech ranks sixth in the world. By the end of March 2020, Suntech's global cumulative shipments have exceeded 22GW.

In 2002, Suntech shipped its first product to Europe. At present, Suntech has been providing modules to 100 countries and regions around the world. Suntech has been improving its supply system and after-sales service, and established a complete global sales and service network.

Suntech Quality, Stand the Test of Time

Since its foundation, Suntech has always stressed the importance of product quality. Reliable materials and mature manufacturing processes are adopted to produce high-quality solar modules, with stringent control of incoming materials, the production process, inspections, and third-party testing. Suntech is ranked as a Top Performer for the third year in a row in the 2019 PV Module Reliability Scorecard, published by PVEL in partnership with DNV-GL. Since 2016, Suntech has been awarded the certificate of "Top Brand PV" seal for five consecutive years by EuPD Research—an authoritative research institute recognized worldwide. Keeping the commitment to quality, Suntech follows uniform and rigorous product quality standards worldwide.

Suntech's product quality is tested in some long-term projects. In 2003, the German GBC Factory PV rooftop project was completed. After 18 years, Suntech's PV modules are still generating power efficiently. In Japan, Kanazawa bus station's rooftop project shows excellent reliability even after 15 years of outdoor operation. Masdar solar power project in the Middle East was completed 10 years ago. According to the on-the-spot survey, Suntech's PV modules are performing better than others installed during the same period. Lots of cases like these provide valuable references for us to deploy in global emerging markets.

Global Market, 20 Years Together

Suntech started directly from European and American markets and led the market share in multiple areas, unlike conventional Chinese manufacturing companies who start overseas business from underdeveloped areas to developed areas. With more than 1.2GW installed, Suntech is ranked Top 6 in Europe. It is ranked Top 10 successively in the past years in China, India, and Japan. Meanwhile, Suntech is upgrading support in localization services when its global business is expanding. So far, Suntech has established local service centres in many countries and regions including Europe, Japan, Australia, and South Africa.

Suntech plans ahead for the development of emerging markets overseas. It supplies to the world's largest half-cell modules project in India as well as one of the largest PV power plant projects in South Africa, takes up the largest market share in Egypt, and participates in the world's largest solar project in Spain. The strategy for development priorities of emerging markets has enabled Suntech to take the lead in the fierce competition in overseas emerging markets in recent years.

From "manufacturing" to "quality manufacturing", Suntech specializes in the research and production of crystalline silicon solar cells and modules, and is always dedicated to the improvement of production technology to ensure the most reliable and highest quality to customers. Shipment to Sudan market marks Suntech's global shipment to 100 countries. In the future, Suntech will spare no effort to light up every corner of the world with the cleanest and richest solar energy resources in nature.



SUNTECH SUPPLIES TO CENTRAL BANK OF BAHRAIN ROOFTOP PROJECT

In March 2020, the Central Bank of Bahrain Rooftop Project has been successfully connected to the grid as the first distributed project for Suntech to access the market of Bahrain.

A total of 119 pieces of Suntech's modules were put into the rooftop project. As Suntech's mainstream and conventional products, which feature excellent performance both in circuit optimization and internal loss, these modules with reliable quality can adapt to the local tropical desert climate characterized by scorching heat and high moisture for highly efficient and stable power output. In addition, Suntech also provides relevant technical solutions and installation instructions during the construction.

In 2019, Suntech signed a strategic cooperation agreement with Bahrain Commercial Facilities Company (BCFC), and began to constantly supply products to this market. The new business model in the Bahrain market acts as a powerful driver for its steady development of the Middle East market. By means of the localized cooperation with BCFC, Suntech has signed orders reaching MW levels and delivered modules to project sites one after another. Relying on its vigorous financial strength, BCFC has assisted in the national energy transformation by leveraging the trusted endorsement.

In the future, Suntech will continue to explore the market, promote the "Global & Local" strategy, and consistently provide customers with products that excel in both quality and reliability.

Suntech Supplies Anti-glaring Modules to Oberwesterwaldbahn PV Power Plant in Germany

Recently, Suntech supplied 4.7MW high-efficiency anti-glaring PV modules to German Oberwesterwaldbahn PV power plant proximity to motorway connecting Elbtal and Dornburg. In April 2020, the power plant was fully on-grid and put into use with a total capacity of 10 MW.

The Oberwesterwaldbahn project is only 110m away from the motorway connecting East and Western Europe. For the safety of the vehicles, the light reflection of the plant's solar modules must be minimized under extremely rigorous standards.



Suntech supplied high-efficiency anti-glaring PV modules to this project. These modules adopt high-quality and anti-reflective glass to ensure that the reflection of the direct light is less than 3%, compared to 10% by conventional PV module glass. Suntech's anti-glaring modules significantly reduce optical reflection and pollution, making the glass an ideal option for installations near airports, railways and motorways where glaring needs stringent control for the sake of safety. In addition to the distinguished anti-glaring performance, the Suntech products also feature high stability and reliability.

The Oberwesterwaldbahn project was installed for supplying power to Elbtal and Dornburg. Since September 2019, a total of 17196 pieces of Suntech PV modules have been continuously shipped to the project site. Estimated to generate up to 9.97 million kWh electricity per year, the project can satisfy the daily power demand of 1500 households in these two cities.

In the future, Suntech will keep continuously innovating to provide more high-quality products and services to our global clients.

Since last quarter of 2019, Suntech has supplied 10MW high-power a PV modules to Yemen for the construction of PV pumping and irrigation system. In March 2020, the first group of the systems has been built and put into use.



Suntech Supplies for the Solar Pumping and Irrigation System Construction in Yemen



Yemen is a country which agricultural population takes up about 71% of the country's population while the water for domestic use and farm irrigation has to rely entirely on groundwater. In the past, diesel pumps were the most commonly used irrigation system to draw groundwater. In recent years, many farmers could not afford the diesel pumping due to the shortage of diesel fuel and the climbing oil price, which negatively impacts the production and operation of the farms. To this end, Yemen began using solar power to alleviate the local irrigation water problem and to secure the produce yields.

At the end of 2019, Suntech signed a supply agreement of 10MW PV modules with local distributors in Yemen. The projects use Suntech mono PERC half-cell modules which are equipped with 158.75mm large size and 78-cell large format designs, so that the power output can reach up to 410W. The products greatly saved installation space and reduced the system's BOS cost due to the unique design of the modules.

After connecting to the power supply, the pumps pull up continuous groundwater for local use. Spring water moisturizes the dry land and brings back vitality. According to a on-the-spot survey, each group of solar pumping and irrigation systems that uses Suntech modules to generate electricity moves 800 tons of water per day, 30 tons for domestic use and 770 tons for the irrigation of about 65 hectares of orchards respectively.

In recent years, Suntech has put more efforts in the Middle East market. In response to the stringent requirements of the Middle East market on PV module power, efficiency, and reliability, Suntech has deployed high-power PV modules in advance. In future, Suntech will also continue to improve its sales and after-sales service system and will be dedicated to using the cleanest and richest solar energy resources in nature to light up every corner of the world.

Suntecher

the total height of the curtain wall is 37m, which is powered by advanced energy-saving technologies and can provide consistent electric output that accounts for 80% of the total power consumption of the entire building. As its annual generating capacity is up to 730,000 Kw/h, except for itself, the building can also supply power to the electrical grid, which plays an excellent role in relieving power supply pressure during peaks. It is estimated that within 25 years, the carbon footprint of Suntech headquarters will decline by 29,000 tons of carbon dioxide, equivalent to a reduction of 9,180 tons of emissions of standard coal.

To harmonize with the architectural design features, the PV curtain wall system is designed with a 70° installation angle, which not only satisfies the PV cell panel's requirement for beam angle, but also shapes the entire building as two flying wings in sunlight, symbolizing Suntechers opening their arms and embracing the sun. As China's first large-scale BIPV project, to some extent, the Suntech Green Energy HQ Building still represents the highest level of BIPV after ten years, and has witnessed the evolution and changes of this technology. It is also a new trend of green buildings initiated by Suntech, a pioneer of innovative solar applications, in the field of BIPV.

The building, putting forward concepts like "zero energy consumption", "functional type" and "ecological building" in China's construction field for the first time, only uses BIPV materials, such as the PV glass curtain wall, providing green and environmentally friendly solar power directly. This coincides with Suntech's initial pursuit that it shall spare no effort to turn the gift from the sun into an endless stream of green electricity and to create a cleaner and sustainable future.

Entering the building, the first thing you see is the Suntech Low Carbon Concept Museum. From making fire by drilling wood to roaring steam engines, from oil fields to atomic fission, the progress of human society is a history of discovering and using energy. The museum, with an exhibition area of 2,000 m², focusing on the past, the present and the future of the development and utilization of energy in the history of human civilization, indicates a profound reflection on the horrible consequences the damage to the environment causes due to uncontrolled exploitation and squandering of fossil energy, and demonstrates a bright future of new energy, carbon neutrality and a low-carbon economy, so as to encourage people to cherish our earth and live a low-carbon and energy saving life.

Taking the sightseeing lift through the office area on the second floor to the fifth floor, you can experience distinctive designs from floor to floor. The various numbers printed on the glass walls around the office, just like the Da Vinci code, are chromatographic figures of silicon, which stand for "finding energy beyond silicon", and are also a design expression of the essence of sustainable development.

Overlooking the exhibition hall of the Suntech Green Energy HQ Building from the roof level, an upward curve can be seen, on which the y-coordinate of solar conversion efficiency goes up as the x-coordinate of years advances. The curve also means that as solar conversion efficiency continues to rise, the cost of solar power generation becomes lower and lower.

In addition, the building uses a geothermal pump type air-conditioning system, which utilizes the significant heat storage and cold storage capability of near-surface by drilling down to 100 meters underground, so that thermo cycling can be achieved when heat and cold from underground are transferred into the building in winter and summer, respectively. There are many other details, for example, the vent at the top of the building, which fits best with the principle of air circulation; the transparent PV panel used, which lets in natural light during the day; and the automatic sensitivity control of lighting at night.

Architectural Art, one of the seven major arts in the world, is perfectly achieved by the Suntech Green Energy HQ Building. The construction of these building tallies with the design aesthetics of office buildings that exist in people's imagination, and the sunlight scattered through the curtain wall creates an impressive sense of stereoscopic space, where the liberty of internal space utilization reduces stress and maximizes the comfort and well-being in the office.



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Building a comprehensive solar energy system is the trend of green buildings. Suntech Green Energy HQ Building is a good example, as it demonstrates how solar power can be seamlessly integrated into a modern and attractive building, and presents the perfect green building concept of future sustainable buildings. It fully incarnates the philosophy of Suntecher's practice: practicing the scientific outlook on development, creating a green future, and benefitting human society.

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Exploring Suntech Green Energy HQ Building with Suntechers

The first beam of sun leapt over the horizon of the east 8th time zone, along the Yangtze River in the continent of Asia, and hit the PV curtain wall of the Suntech Green Energy HQ Building. Suntechers' memoir began their first chapter.

As a representative of BIPV in China, the building completed in late 2008 has been there for ten years. This stylish and avant-garde BIPV building with a curtain wall made from PV modules serving as the power generation unit, reaching 6900 m² with a total capacity of 1.01MW, which was the largest single-building PV curtain wall system in the world at that time. Consuming around 200 million yuan in total, the building has 7 floors covering a total area of 18,000 m². Wherein,



Growing up with Suntech

Module Technology & Process Department
Shao Mingsheng



In 2011, Shao Mingsheng, fresh out of university, went into Suntech with an expectation for the clean-energy industry. Experiencing arduous training and hard work, he has gradually grown into a chief PV practitioner. How may Shao Mingsheng think about his "independent thirty"?

A 30-year-old young man's deliberation

The first time I meet with Shao Mingsheng, one with a smile on a child-like face, is on the morning of the vernal equinox. He looks like a typical man of science and engineering and even a college student not graduated yet. For someone with such an inherent youthful spirit, "like a spring breeze" perhaps is the most appropriate description. Through the subsequent interview, I learn that he was born in the 1980s, which makes me wonder how he can still look so young.

As a member of the Module Technology & Process Department, Shao Mingsheng has been in charge of the production line process since he joined taking the post. "Identifying exceptions in time, efficiently communicating with various departments, and quickly finding solutions constitute the three elements of my daily work," Shao Mingsheng concludes immediately and decisively, when introducing his work.

"I define the responsibility of my department as a connecting link, which means we have to identify issues concerning the production line in time and organize power output, product yield and exceptions in a data-centric manner. After gaining quantized data, we'll negotiate with different departments for Technical R&D, Quality Control and Raw Material Purchasing on each of these issues to work out solutions.

"I'm short tempered."

What is in sharp contrast with his harmless appearance is his stringent personality, which can be felt from his wing-footed speech rate. "I'm short tempered," Shao Mingsheng says, a little embarrassed. "I'm a man, with a quirk. If any problem is not solved today, I won't eat or sleep well. But if a problem is solved, I can eat a ton." In accordance with his job duties, his short temper plays a fully positive role.

He, who is given the nickname "vanguard", takes every part of his jobs as a mission. In 2019, Suntech and GRIDSERVE, a British electrical grid service company, signed a module supply agreement, requesting the former to provide a total of 34.7MW bifacial modules for a solar power station, which was located in Warrington, United Kingdom. The project was using only Suntech P-type mono PERC bifacial modules, whose process engineer was Shao Mingsheng.

When it came to this project, Shao Mingsheng burst out into a long story about what the case was at that time. "As for the British project, the window for delivery was very short, and it was a new technology that needed to be used, 72 pieces of bifacial modules powered by a large-format overlaid half-cell multi-Busbar technology. We launched the latest production line equipment, and it took only 2 days to eventually realize mass production from a small batch production."

What he didn't mention was that he almost "lived" in the production line in these 2 days. Colleagues that were there with him told us that from welding to packaging testing, Shao Mingsheng inspected all procedures one by one, and once a problem was found, he'd immediately gather relevant personnel and discuss solutions until the output module met the quality standard for delivery. With everyone's full cooperation, the project was completed and connected to the grid as scheduled, becoming the first power station powered by bifacial modules in the UK.

"I can also be very patient."

Contrary to dealing with work, Shao Mingsheng is very patient in life, especially with his family. "I come from Shandong, but have been working in Wuxi these years since I left my hometown. Actually, I feel a bit guilty because my parents are there. So, I call them often, and make video calls on weekends to talk about our daily life. Due to the pandemic this year, even though I was not able to go back for the Spring Festival, my parents were still quite considerate. That's why I'd like to work harder, and so that I can spend more time with them when there is spare time!"

During precious spare time, his greatest pleasure is singing. He meets a group of like-minded friends to sing a few songs online, but their tacit agreement is to compete for the worst singer, instead of the best one. "We all like to sing several songs, for self-entertainment. It's actually a way to relax, by competing for the worst singer, and sometimes, bad singing can be really funny."

"What Suntech has taught me during work is worth bragging for a lifetime."

"In the past few years in Suntech, I indeed have learned a lot, especially the working methods, which is my glory for life. Before Suntech, I was just an ordinary technician who did whatever the leader asked. But in Suntech, I've found the leader only gives you a problem, and I should think independently about how to solve it, and then put the plan into practice step by step to get it done."

As Shao Mingsheng said, Suntech prepares a large platform for every employee. Sometimes, to let you grow fast, the leader will only describe the task in a sentence, and all you need to reply is "problem solved, rest assured!"

Suntech has many young employees like Shao Mingsheng, obscured in their own jobs but shining through hard work. Founded 20 years ago, Suntech has also accompanied a string of youngsters, and committed to its original intention to contribute to the clean energy industry.



PV SHINING AS BRIGHT AS DIAMONDS: MY JOURNAL ABOUT MY TRIP TO THE POWER STATION IN SOUTH AFRICA

"After 14 hours of flight, I finally landed in South Africa."



Global Customer Service Center
Zhu Haibo

Suntecher

Affected by the rapidly soaring electricity price of South Africa's National Electric Company (Eskom), renewable energy, such as PV and wind energy, has become a new option for electricity consumption in South Africa. In early 2019, Suntech and the world leading EPC Juwi signed a supply contract on providing PV modules of 250MW for several projects in South Africa, including Droogfontein2 solar power station (86MW), Bokamoso solar power station (78MW) and Waterloo solar power station (86MW). Affected by the rapidly soaring electricity price of South Africa's National Electric Company (Eskom), renewable energy, such as PV and wind energy, has become a new option for electricity consumption in South Africa. In early 2019, Suntech and the world leading EPC Juwi signed a supply contract on providing PV modules of 250MW for several projects in South Africa, including Droogfontein2 solar power station (86MW), Bokamoso solar power station (78MW) and Waterloo solar power station (86MW).

August 3, 2019 PV road in "Rainbow Nation"

In August, the supply of modules for Droogfontein2 and Bokamoso power stations was close to completion and entered the acceptance stage. As a senior employee of Suntech Global Customer Service Department, Zhu Haibo and his colleagues were dispatched to the project site, where they needed to assist customers in acceptance and provide relevant installation guidance. Hearing about the trip to South Africa, excitement took control over him for a few days, wondering "What's the "Rainbow Nation" at the southernmost tip of the African continent like? Will there be diamonds everywhere like the legends say?"

Apart from the excitement, Zhu Haibo also collected lots of basic data about the project, including the impact of local climate conditions on modules, as a way to fully equip himself with knowledge for the coming trip to South Africa. As a mature PV market, South Africa has an advantageous PV environment endowed by nature, where the average annual intensity of solar radiation exceeds 2,500kWh/m²/h. South Africa implements relatively stable strategies for PV development. The government plans to make the installed capacity reach 10GW by 2030 and 74GW by 2050.

August 6, 2019 Completion of installation and acceptance

After arriving in Cape Town, the capital of South Africa, the first place for Zhu Haibo to visit was Droogfontein2 in Kimberly, a solar power station using only Suntech's efficient polycrystalline solar modules amounting to 86MW. When they arrived at the project site, modules were being installed in full swing, already 80% done. Zhu Haibo immediately checked if there was any impropriety while modules were being transported or installed, and didn't settle down until he confirmed all modules were intact.

In the following days, Zhu Haibo went through the installation procedure of modules, communicated with the power station operation and maintenance team in depth, and proposed suggestions for subsequent maintenance with regard to the power station. "The wide temperature difference of around 15°C between day and night at the project site and the arid local climate are both climatic conditions challenging module quality. But Suntech modules are highly reliable. In addition, Juwi's project construction team follows every installation standard strictly, thus the installation is propitious and successful." Furthermore, the head of the power station also invited a third-party inspection agency to conduct an all-round testing on all modules on the spot, and Suntech modules passed the inspection successfully.

August 14, 2019 Stand the test of time

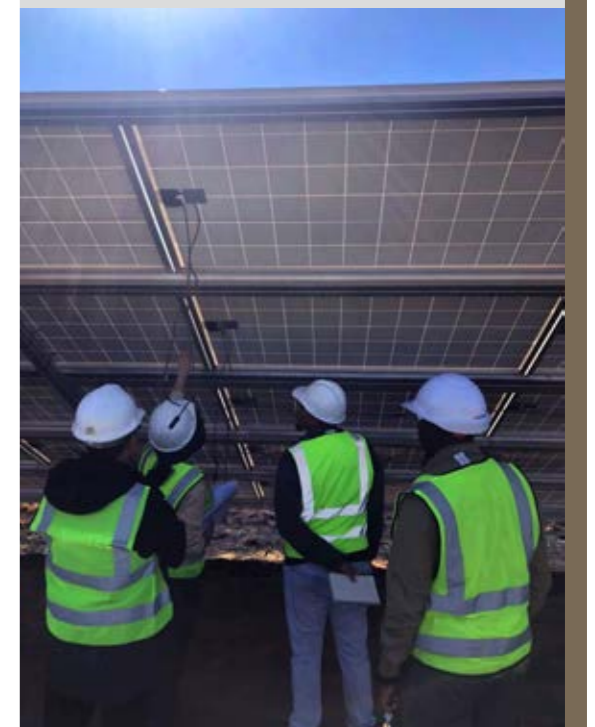
No sooner had Zhu Haibo successfully completed the acceptance of Droogfontein2 than he headed for the nearby Globeleq PV power station. The power station, completed in 2012, purchased only Suntech modules of 100MW in total. "Following up previous projects is one of the tasks that Suntech global customer service center has been committed to. Since 2014, we've been sending our customer service team to provide site instructions every year."

Zhu Haibo and his colleagues discussed a lot about the technical points of on-site inspection with the operation and maintenance team of Globeleq, including infrared testing, voltage measurement, and insulation problem detection, and assisted the team in performing module power detection. It turned out that all of Suntech's modules, serving already for 7 years, are all within the attenuation range as promised, which proves the extraordinary reliability of Suntech modules.

August 26, 2019
"Our goal is consistent with our customers', which is to ensure that each piece delivers satisfactory performance."

As the short 20-day trip was to end, Zhu Haibo said that he had benefited a lot. "I've learned a lot on this trip, especially about installation. As I noticed on site, many installation processes are designed to be unique and detail-focused. For example, they label each wire to accurately distinguish each of them, and the maintenance team of the power station thoughtfully prepares rain cloth in case the package gets moist because of occasional rain, despite the years of droughts and scarcity of rain in South Africa. Their regulated and rigorous working attitude is worth learning from. I'll work hard to absorb valuable experience and use it for subsequent on-site supervisions as soon as possible, thereby making customer service more professional and delicate."

Meanwhile, He also expressed that the return-visit work would continue, and he was to return to the South Africa project in September this year. "We have begun to formulate the follow-up plan, as customers recently consulted us about lightning protection. At that time, a special team will be organized to implement lightning protection measures on site, thus providing customers with more effective solutions. Because of our common goal with customers, it is to ensure that every module from Suntech can perform satisfactory performance."



Master of All Trades in Module Production Department

On January 22, 2020, two days before Chinese New Year, Qian Jin, the shift leader of Production Division II of Suntech Module Factory, together with his 15 colleagues, was instructed to stay on duty and support Divine III for 28 days.

Module Production Department
Qian Jin



From the first step to the last, being a "newcomer" that keeps learning

In 2012, Qian Jin started to be an ordinary operator along the welding process for junction boxes. Not after long, he familiarized himself with his work. Later, Qian Jin was transferred to each process to learn, from back-end production, such as frame installation, labeling and packing, to the front-end, such as string welding, typesetting and laminating, which he always studied hard and improved through practice. "One who wants to make progress must keep learning." With this belief, Qian Jin spent 2 years mastering every process of the entire assembly production line.

Enriching practical project experience while running about the great Northwest

In 2015, Qian Jin, who was proficient in the entire line of operations, received the first business mission and went to Ningxia with colleagues from Suntech Global Customer Service Department to provide module power detection services for local power station projects. Qian Jin was deeply impressed by the high-altitude desert and fertile land in the northwest of China. In the following years, Qian Jin spent half of his time on business trips. Gansu, Shaanxi, Qinghai, Ningxia... He almost ran around the entire great Northwest of China.

"Project sites are completely different from production workshops. In case of an issue happening in a workshop, I can discuss it with many people, but at the project site, I have to solve it on my own, which means that knowledge reserve for problem handling is very important." Qian Jin has always been grateful for his being dispatched to various project sites, and felt that it's these opportunities that allow him to accumulate practical project experience and improve his ability to solve problems independently.

Fire Captain Always on Duty

2020 is destined to be an extraordinary year. On the eve of Spring Festival, Qian Jin was assigned an important task by his supervisor, to stay on duty with his 15 teammates during the festival and ensure the normal operation of Division III's production lines. Without a word he and his fellows went to the production line for work. No one had expected that the sudden outbreak of COVID-19 would disrupt all plans. The company followed the instructions and had to postpone resuming work, which inevitably caused panic around those who had been staying on production lines. So, Qian Jin assumed the important role as a psychological counselor, learned about pandemic prevention with them, and actively chatted with them to relieve their anxiety in his break time.

On February 18, Division II resumed production. After his transition, he with those who had supported Division III returned to their production posts and began the intensified resumption work. On the one hand, he was tied up with the resumption of production lines, while managing the return of employees on leave and assisting in optimizing and upgrading production lines... he's like a fire captain, quickly appears wherever an exception occurs to quickly solve it. "Since I've accepted the task, I must strive to complete it, so as not to disappoint others' trust!" Qian Jin said earnestly.



Unique teaching model of the "senior" master

In March, after the factory work was fully resumed, with a lot of new employees joining in the production line, Qian Jin's focus was shifted to training. To make newcomers adapt to work as soon as possible, he has developed a set of his own teaching methods. For those with weak learning abilities, he starts with simpler procedures, and teaches them hand by hand. "Training newcomers requires more patience. I'd like them to learn by doing, starting with the simplest and then to the harder tasks, thus gradually improving their operation level."

As to new employees on the Production Line IV of Divine II undertaken by Qian Jin, it only took 3 days to reach the designed capacity with the compliance rate of each indicator exceeding 99.70%, the micro-cracks rate as low as 0.06%, and the total breakage rate as low as 0.25%. He has been earnestly completing urgent and tough tasks one after another, shining uniquely at an ordinary post.

He has been busy for 78 days since the Spring Festival. Qian Jin has demonstrated the pragmatic and efficient spiritual outlook as a Suntecher with his earnest and down-to-earth attitude. Each post is a platform and each role takes responsibility. Suntechers who go all lengths and are conscientious, will tell their glories in their undistinguished stories.





GLOBAL SUNTECH

Suntech attended Word Future Energy Summit

Suntech attended Genera2020 in Madrid

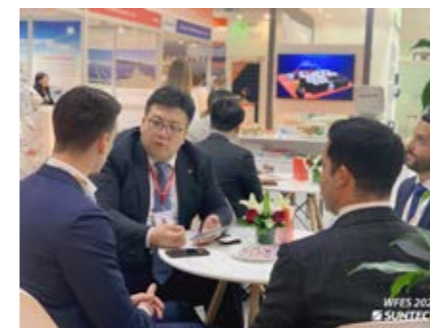
Suntech attended Solaire Expo Maroc 2020

Suntech attended "GO FOR THE GREEN Conference" in the U.S.

Suntech attended the German Solar & Storage Market Briefing



Suntech attended Word Future Energy Summit



On Jan 13, 2020, the Word Future Energy Summit 2020 took place at Abu Dhabi National Exhibitions Centre. Suntech has participated in this international summit for many years and exhibited main products this time.

With a combination of half-cell and PERC technology, Suntech's 440W mono PERC half-cell module is integrated with a higher output power and a lower temperature coefficient; by using P-type mono high-efficiency double-sided cell and white coating floor technology, the power output of mono PERC bifacial half-cell module can be increased by up to 25%. Suntech offers a 12 years quality warranty and 25 years performance warranty for the full series of modules, and a 30 years performance warranty for double glass modules including bifacial modules.

In 2019, Suntech set a good sales performance in the Middle East market and successively developed many new markets in Jordan, Oman, Yemen, Qatar, Kuwait, and Bahrain, which established a stable distributor network in the Middle East. On project side, Suntech has also been making in-depth cooperation with some large IPP companies, which has laid a solid foundation for Suntech's development in the Middle East market.



Suntech attended Genera2020 In Madrid



On Feb 5th, 2020, (local time) the Genera2020 was held at Madrid Exhibition Center, where Suntech showed up with various differentiated products.

With the long-term brand affection in the European market, Suntech absorbed many new customers based on good cooperation with old customers and has established a sound pre-sales and after-sales service system in the Spanish market. Suntech has exhibited 3 core products in this exhibition, including a 440W mono PERC half-cell module integrated with a higher output power and a lower temperature coefficient; by using a P-type mono high-efficiency double-sided cell and white coating floor technology, the power output of the mono PERC bifacial half-cell module can be increased by up to 25%. Suntech offers a 12 years quality warranty and 25 years performance warranty for the full series of modules, and a 30 years performance warranty for double glass modules including bifacial modules.

In 2019, Suntech performed fairly good in the Spanish market, finished the supply of several large power station projects, including La Isla 180MW, Nuñez de Balboa 500MW, Torrijo 35MW, Bonal 80MW and so on. As we know, The Nuñez de Balboa project is the largest solar power station in Europe. The project occupies an area of 1,000ha, and requires the installation of almost 1.5million PV modules upon completion. After being put into operation, the power generation of Nuñez de Balboa project can meet the daily electricity demands of 250,000 people in Spain and offset the CO2 emissions of 215,000 tons. This project had good effect on the Spanish and EU energy system innovation and new energy development. Suntech provided a total of 100MW poly modules for this project, as the mainstream conventional products, the power output of modules are efficient and stable.

With the termination of the European MIP policy and the exemption of anti-dumping duties, the Spanish PV market has developed rapidly in the past 2 years. In 2019, Spain has become the sixth largest PV market in the world, with the PV demand reaching 4% of the world, and continuously pulling the photovoltaic demand market in southern Europe and its surrounding areas. In addition, Spain has abundant solar resources in the Iberian Peninsula, with an annual exposure rate of 1600-1700 kWh / kWp. According to the statistics of relevant institutions, the new added installed PV capacity in Spain has exceeded 4GW by the end of 2019, and the total installed PV capacity will reach 77GW by 2030.

Suntech attended Solaire Expo Maroc 2020



On February 25, 2020, Solaire Expo Maroc 2020 was held at Casablanca Exhibition Center in Morocco, where Suntech showed up with various differentiated products.

In recent years, Suntech has attached great importance to the North African market and put into service a sound pre-sale and after-sale service system in Morocco and surrounding countries. Relying on differentiated market strategies and product layout, Suntech has garnered increasingly expanding brand influence. At this exhibition, Suntech exhibited three hot-sale products, including a 440W mono PERC half-cell module, a 410W mono PERC half-cell module and a poly half-cell module. All these products are featured with higher output power but lower power cost. Particularly, aiming at the dryness of the tropical desert climate and sand storms in North Africa, Suntech has developed a kind of efficient mono anti-soiling and drainage intelligent module. This module uses a kind of special dustproof glass that can reduce dirt retention in the dry environment to maintain the best optical performance long term. Besides, based on its drainage structure, this module can facilitate rapid discharge of sewage in a humid environment, effectively minimizing accumulation of sewage on the surface of the module and yielding more benefits for clients by reducing the cleaning interval and performance loss.

Suntech has always regarded the North African market as a key to Suntech's global market layout. In June 2019, as the 2nd NARES was held in Casablanca, Morocco, Suntech discussed the development trend of renewable energy in North Africa together with experts and scholars, speeding up the overall brand deployment of Suntech in North Africa as a result. Besides, Suntech has been an active player in the project market of Morocco as a number of projects are under construction. Suntech has also supplied modules to rooftop projects for agricultural, fishery and medical areas in North Africa. For example, demonstration projects including Coca Cola Bottle Factory Roof Project and National Bank of Egypt have been completed.

As a region with abundant solar energy resources, North Africa is speeding up the development of renewable energy to meet the ever-increasing energy demand and to respond to climate change. Relying on the strong support from the government and ongoing and upcoming renewable energy projects, the industry of solar energy in North Africa has grown comparatively fast. Morocco ranks No.3 in the photovoltaic installed capacity in Africa. Thanks to the government's proactive support policy and orientation advantages, its solar energy industry has developed rapidly. Further, as a large power with a population of nearly 30 million in North Africa, Morocco has kept strengthening investment in infrastructure and garnered rapid economic development. As the first Middle Eastern and North African country entering the alliance initiative of the International Energy Agency, Morocco acts as a model for emerging economies to develop the energy industry in the future.



Suntech attended “GO FOR THE GREEN Conference” In the U.S.



On 28th February, the “GO FOR THE GREEN 2020 conference” sponsored by Fortune Energy was held at Hilton San Gabriel Hotel, Los Angeles. Suntech was invited to give a speech.

Focusing on the entire PV industry chain, the seminar invited industry experts, who specialize in PV manufacturing, power plant installation, investment & financing, to discuss the latest PV technologies and share the current solar trends concerning the industry. A number of customers from the US markets participated in this conference.

At the conference, Suntech shared a speech on new technologies for high-power modules and its global strategy, and exchanged ideas with customer representatives. Suntech has always valued the US market. Since 2001, Suntech has joined in numbers of PV projects constructed in the US, including the project for the San Francisco International Airport, the Alamosa power station project in Colorado, and the Nellis Air Force Base military project in the Nevada Desert which are all powered by Suntech products and operating perfectly.

The US, nestling in the center of the American PV market, is able to influence the neighboring Middle- and Latin-America markets. As estimated by the EIA (Energy Information Administration), it can be expected that the US PV market is to embrace a growth of installed PV capacity of up to 17.7GW in 2020. Fortune Energy has become a key distribution partner of Suntech in the US market, because of close cooperation in recent years. In the future, Suntech will consistently work within the American market and deliver PV products that excel in both quality and reliability to all customers.



Suntech attended the German Solar & Storage Market Briefing

On March 5, the German Solar & Storage Market Briefing hosted by EuPD Research was held in Bonn, Germany. Experts from PV and energy storage industries were invited to the forum. They discussed the “further development towards intelligent energy structure” proposed by the German energy sector and prospected the coupling development of the industries. Thilo Kinkel from Suntech, presented a speech on the long-term power purchase agreement (PPAs). PPA is a concept widely discussed in the market of large-scale photovoltaic systems. Suntech supplied to some power plants implementing PPA in 2019. Among which, the project Nuñez De Balboa, which is constructed by Iberdrola, a global energy leader, with a total installed capacity of 500MW, is the largest ground power station project in Europe. Suntech supplied 100MW modules for this project.

EuPD Research, focused on the exploration of the energy industry, and research of major PV energy markets, deeply understands the development of renewable energy technology and analyzes the renewable energy policies and its far-reaching impact on consumers' choice of energy types. On the site of the Market Briefing, EuPD Research professional analysts made prospects and forecasts for the European PV market. According to a large number of studies, PV is playing a core and long-term role in the context of energy transformation in Germany as one of the cleanest renewable energy sources. According to the report of Bundesnetzagentur, the installed capacity of newly added PV in Germany reached 3.94GW in 2019, which shows the huge potential of the solar energy industry in Germany.

As the first batch of PV brands to enter the German market, Suntech now has a robust pre and after-sales service system in Europe, equipped with a local professional technical service team, and has been awarded Top Brand PV seal by EuPD research for five consecutive years. Suntech performs spectacularly well in Germany, Spain, the Netherlands, etc., and ranks 6th in the European market in terms of shipment volume. In addition, the largest floating PV power station in Germany has been finished and put into use in Q2 last year. Suntech supplied 750KW high-efficiency polycrystalline modules with IP68 waterproof capability to this project, which fully qualified the requirements of sustained power generation on water, and its completion means that a plan of developing clean energy via an enhanced utilization of new surface area embarks on a new journey.

LIVE Interview | Suntech was interviewed by Natec, the largest PV distributor in the Netherlands



The Dutch PV market is currently one of the fastest growing markets in Europe. The rapid expansion of the market scale implies good market opportunities for Suntech and Natec, companies who are committed to technological innovation, making it imperative for the two to jointly develop the Dutch market. In March 2020, Suntech received an online interview from Natec, one of the largest PV distributors in the Netherlands. A lively discussion was launched focusing on Suntech's stable supply of modules and its marketing strategies for new products under COVID-19.

As one of the largest PV distributors in the Netherlands, Natec holds business interviews every year on the strategic cooperation with Suntech and the new plans for development. Talking about the distribution planning of Suntech products in the Dutch market in 2020, Suntech sales representative of the Netherlands stated: “Suntech has always been committed to improving conversion efficiency of products, constantly strengthening the research and development of new technologies and the improvement of production processes. Suntech MBB technology gets mature, the increasing of bus bar density can effectively lower the power loss rate, and increase the power of the module. The power of Mono PERC 9BB half-cell modules can be increased by nearly 10W compared with the conventional 5-bus bar module. This year, Suntech will put more effort into the promotion of MBB half-cell modules in the Dutch market.”

The interview also referred to the supply position of Suntech under the influence of COVID-19. Though the Suntech European office is now working from home, the communication between European colleagues and customers, and the China office can never be interrupted. The domestic production base of Suntech still works fine with a considerably high production capacity. Suntech insists on providing products of best quality to ensure the stability of supply to European customers like Natec.

Cooperation between Suntech and Natec started in 2004, when Natec was just established, when the first PV module was purchased from Suntech. In September 2019, Mr. Bas, general manager of Natec visited Suntech Wuxi headquarter. He mentioned the story of the first module: “16 years ago, I purchased the first solar module from Suntech. It marked that Natec had officially entered the PV industry. For 16 years, Natec and Suntech have experienced the rapid development of the PV industry. Natec cannot achieve today's success without the high quality and reliability of Suntech modules.”

Being one of earliest PV brands that entered the Dutch market, Suntech has earned a good reputation for the high quality of products. Suntech has been awarded the Netherlands' “Top PV Brand” Seal by EuPD Research for 5 consecutive years. Relying on years of solid cooperation with Natec, Suntech developed steadily in the Dutch market. According to customs export data from PVInfoLink, Suntech had cumulative shipments of 562.1MW of PV modules to the Netherlands in 2019, ranking sixth in terms of shipments.

“Natec is our good partner. We trust each other and share the same goal to develop the Dutch market. Suntech will continue to uphold the concept of quality and customer service. In the current situation, Suntech's team will cooperate with domestic and overseas teams to ensure that the product supply will not be affected”, said Mr. Vincent Cao, Vice President of Suntech.

TAKING CARE OF EACH OTHER DURING A PANDEMIC



Early 2020 is destined to be hard. Since the outbreak of the pandemic, all Suntech departments have worked together in rigorous pandemic prevention and control, organizing a pandemic prevention and control team, and drafting a detailed emergency response proposal. During the pandemic, in order to make life more convenient for all employees, Suntech's party committee and labor union specially invited hair stylists to offer haircut services for employees for free.

A NEW BEGINNING STARTING FROM THE HEAD

Suntechers are expected to be "fully equipped" before setting out again!



LISTEN TO ME

With product quality in mind

It is often said that "quality is the foundation on which an enterprise lives", but credibility is the key to shaping an enterprise's image. Guided by the corporate spirit of "teamwork and self-challenge", our predecessors have led Suntech through two decades full of both hardships and glories. Today, being a new generation of production-line worker for final inspection, I feel a strong sense of mission and responsibility.



Quality Department: Wu Gang

As an entrepreneur once said, "Just like there is no such thing as an unsinkable ship, there is no company that is save from ever closing down, it all depends on people's efforts." For Suntech, an established brand in the PV industry, to set the market trend forever, we must strengthen quality control. Even the tiniest quality defect can hurt the credibility of the enterprise.

"Making every simple thing perfect is in fact not simple at all." Quality is closely relevant to each operation and each procedure. As long as we are serious about quality control and strictly follow operation procedures, accidents can be prevented from happening.

Certainly, for product quality control, individual strength of a worker in the final inspection position is far from enough, and it also requires the joint efforts of us all. For quality, we not only "think", but more importantly "act", where we must promote a working style focusing on solidarity, cooperation and dedication, and strive to strengthen internal cohesion. I believe that if all of our employees master unparalleled skills, products from Suntech can be impeccable.

My dear fellow workers: Quality depends on us, so let us fight for the future glory of Suntech!

Quality journey begins with Suntech



Quality Department: Yu Yafei

Quality is the DNA of Suntech and the foundation of its long-term development. The quality month this year is themed "doing ordinary things well while creating good quality", including knowledge competitions around quality control points, SOP "Quick Spot" activities and so on, in order to enhance employees' awareness of quality-related knowledge, and to improve module quality to meet customers' requirements, thereby making our products more competitive.

Suntech is a company with extensive brand influence, with products available in more than 100 countries and regions worldwide. Product quality is the basis of Suntech's value, constantly promoting production and operation management, reducing costs by improving quality and production efficiency, and elevating FPY with better products in quality. Improving module quality requires the efforts of the entire factory, especially of our production-line employees, from the control of each process for raw materials, until warehousing and

logistics, during which each link is embodied by the sweat of every employee. The comprehensive quality management training courses organized by the company informs us of methods for quality management, including how to plan, implement, inspect and analyze quality management when putting people in the first place, so as to cultivate our quality awareness and improve our quality level.

Performance excellence management unfolds the PDCA cycle from seven aspects, i.e. leadership, strategy, customer & market, resource, process management, business results, measurement analysis and improvement, which particularly emphasizes the quality view, care for people, social responsibility, the importance of strategy, and evaluation and improvement of results. This model will integrate enterprise development with social progress more closely, for truly sustainable development, and is the true outlook of scientific development.

As the society keeps advancing and people's living environment changes, people's demand for life quality and enterprise products will certainly change constantly, so that any system won't be limited to a fixed framework, or remain unchanged, or be absolutely perfect. We must update the management system on and on to meet the needs of society and humanity. Therefore, the soul of performance excellence management model is "improvement and innovation", stressing on the realization of win-win.

The quality-based performance excellence management training has raised the quality awareness of our

production-line employees to a much higher level by (a) knowing how to get things done independently, (b) following standards, and (c) achieving better results via good suggestions. Here is a list of the principles of ensuring refined quality by saying three nos. Say no to (1) producing, (2) shipping, or (3) accepting defective products. It's required to formulate a stringent control plan for each process, covering key parameters in each process, monitoring frequency, and tools to be used, in which case each of our employees must know not only how to operate, but also why this is the case. In this way, everyone can really get involved, pay attention to quality, and respect standards. Only the strict implementation of standards is the key to good quality.

The quality of our products has always been recognized by customers, but as customers put forward increasingly higher requirements, our quality control needs to be further improved, and each of our employees has to keep in mind that quality is the life of the company. Only by carrying out and executing quality standards in every post can our modules remain competitive in the industry. All staff participation, customer centered philosophy, and continued innovation and improvement will truly grow Suntech into a bigger, stronger brand with further elevated quality.

A glimpse of cells



**P2 Technology Department:
Sha Zhongyu**

Time flies

In 2007, shortly after I settled down in Wuxi from the northeast of China, I joined Suntech as a technician reserve in the cell R&D department of a newly established Suntech factory, and was engaged in the PV industry. In the blink of an eye, 12 years have passed, during which I had worked in the cell technology department, the product development & management department, and the module technology department before I returned to the cell technology department in 2013. At the moment, I'm mainly responsible for optimizing and improving the conventional silicon crystal cell technology, determining and

implementing process technology schemes, formulating and implementing process technology schemes, formulating and performing technical standards for raw and auxiliary materials, importing and applying new materials and new processes, analyzing and enhancing exceptional issues, and providing technical support. Having become familiar with this profession and its application after being confused about PV technology when I was first admitted, I have also witnessed the changes of the PV industry over the years.

Deeply studying the technologies and finding more potential

As a veteran in cell technology, I know well about the arduous responsibilities on my shoulders. Over the years, our team has been actively looking for, developing, and integrating the company's technical resources, from inside and outside. Based on the current status of cell equipment, after weighing the technical application difficulty and prospects, we have determined a phased efficiency-raising plan for crystalline silicon cells. Driven by our team, the efficiency of polycrystalline cells has been raised by a rate of 0.15% per year. With the improvement of the refined management and control capabilities on cells, problems that keep emerging and must be solved urgently are becoming increasingly prominent. Our team frequently studies together, from which we put forward the idea of upgrading the paste and the screen printing plate to

increase the printability of the screen before the idea of further improving the cell conversion efficiency was raised. In addition, we also promoted the independent development and optimization of the diffusion process to make cell surface concentration; junction depth and positive silver paste match perfectly, so that the open circuit voltage of cells can be steadily increased. It's impossible for me to realize technological innovation in a highly competitive market environment all by myself. That's why we often exchange opinions with internal and external technicians via brainstorming, so that collective intelligence and concerted cooperation can lead to improvement plans more strictly in line with LID and PID technical requirements, thus making it possible for modules to gain a higher power output from the R&D side of cell products.

The rate of price reduction of silicon crystal cell PV modules is faster than the expectation made ten years ago, meaning the era of affordable PV power generation is well ahead of schedule. In the case of technology iteration, how to exert greater benefits via the existing production capacity is now a challenge. But I always believe that all problems can be solved by sufficient efforts!

Diary from the production line



**Manufacturing Department:
Zhang Zhiyong**

March 10 2020, the start date of automated production line of Manufacturing Sector 5. My name is Zhang Zhiyong, I'm a foreman from Manufacturing Sector 5. The brand new automatic production lines from our sector have been officially put into production recently, and I felt excited and nervous about that. Over the years, I have witnessed the development of equipment in our factory, from semi-automated to fully-automated. Though colleagues in my working team became fewer, the output from the line increased a lot. I still remember a few years ago, the

single-line production capacity was 680-800PCS/shift. Now, by using fully automated production equipment, the production capacity has reached 1200-1300PCS/shift.

In addition to the improvement of equipment, our colleagues have also made a lot of efforts to achieve the current goal of production capacity. Putting fully-automated production line into full-scale production means the requirement for more advanced operation skills of personnel. Shortly after the new production line started, we came across a problem that the newcomers in our team are not proficient enough to operate the equipment. Since it might pose a risk to the production capacity, I was so worried about that situation. As a foreman, I spent extra hours on summarizing the operation skills and tips on key steps such as welding, cascading, framing, and EL testing, and led the team members to do more practice. On April 2, Manufacturing Sector 5 accomplished the V serial goals of production capacity for fully-automated production line: from former 300PCS/shift to current 1100PCS/shift. I finally felt reassured.

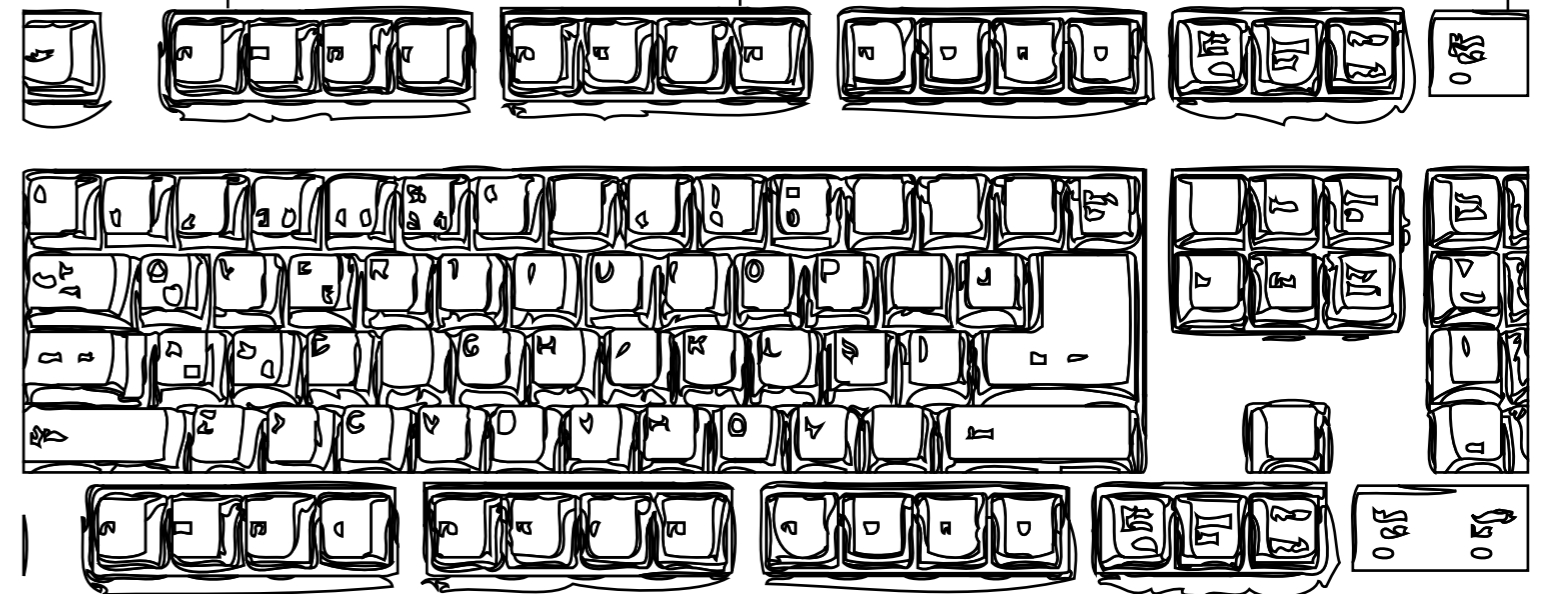
In my opinion, if there's a problem, we should carefully analyze it, try to find the root of the problem, and then solve it. For the past years, I insisted that if there is anything wrong on the production line, problems must be

solved within 15 minutes. Not only did I discipline my members to do so, I discipline myself too. I believe that only if we keep alert all the time can we bring out the potential in us and do better at work.

I believe, no matter what kind of difficulties we will be facing, as long as we work as one, we can conquer everything!

M ARKETING

STORY



SEE THE WORLD AND THE WORLD SEES YOU

A 12 Watt Life Story

This is my second time in Africa, which is during the dry season, making my nose bleed.

The dry season leaves me with memories of nosebleed, but what it brings to Africa is way far beyond that. The tradition of praying for rain, which has lasted for several centuries, is being changed by solar power.

From this I thought of a movie that has recently hit cinemas- The Boy Who Harnessed the Wind.

It tells a true life-changing story. In the Republic of Malawi in southern Africa, 13-year-old William built a wind turbine with small metal pieces, old bicycle parts and wood, which then saved his village by generating electricity. William, who was expelled from the school for the inability to afford tuition of \$80 a year, would sneak into the school library for his love of learning. Thirsty for knowledge, he went through almost every book on energy dynamics there. The library became the first window for him to see the world. After reading these books, he found a way to save villages from famine, by building a shabby but functional windmill using the mainframe of his father's bicycle, which provided much-needed electricity to western regions and was not affected by the government's power outage.

William won the funds from a professor in Malawi and school scholarships for this invention, so that he could complete his studies in Malawi and school scholarships for this invention, so that he could complete his studies in Malawi, went to the African Leadership Academy in South Africa, and then obtained a degree in environmental science from Dartmouth College in the US. In a TED talk, William told the host that the power of the windmill was only 12 Watt, but it was exactly the 12 Watt of power that changed the fate of his village and his. Nowadays, as the film becomes popular, William's story will be known by more people. He used to see the world in the village library, and now he is being seen by the world, where his story is like a bud, growing in people's heart.

God is fair, to everyone, and gives us the same life and shared sunshine.

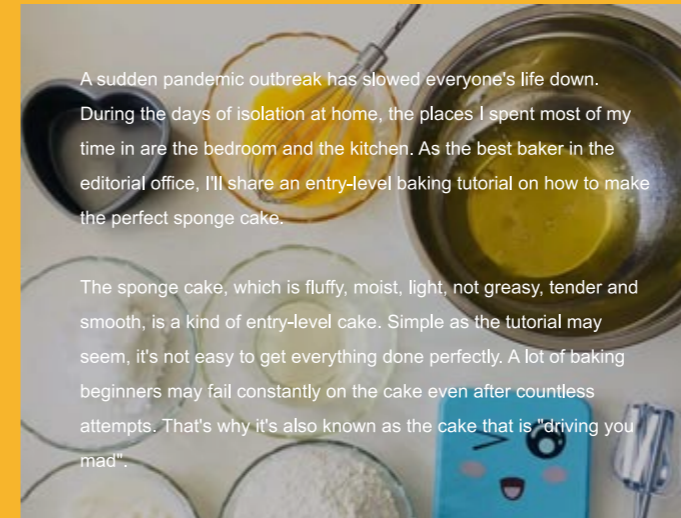
Back to our PV industry, power shortages are also a common state in dry and arid areas, such as the Middle East and North Africa, even in developed African cities like Casablanca, Morocco, where measures cutting off power in the afternoon have been taken to ease power consumption pressure. However, solar radiation in the Middle East and North Africa is particularly intense, making it possible to change the electricity consumption in many villages via PV power generation. In the projects I've come into contact with, there are many cases of utilizing PV power generation in this way, and even though I was never at those project sites, the smiling faces in the photo after powering up are unforgettable...

What we're doing may seem like such an ordinary work, but it does bring hope to others. Whether it is 12W, 12MW, or 12GW, we'll strive to light up every village in the world with photovoltaic, and perhaps at that time, every PV practitioner who has devoted efforts can call himself a boy that harnesses the light.

Global Marketing: Truman Chen



LUNA'S SMALL BAKERY CLASS: HOW TO BAKE THE PERFECT SPONGE CAKE?



A sudden pandemic outbreak has slowed everyone's life down. During the days of isolation at home, the places I spent most of my time in are the bedroom and the kitchen. As the best baker in the editorial office, I'll share an entry-level baking tutorial on how to make the perfect sponge cake.

The sponge cake, which is fluffy, moist, light, not greasy, tender and smooth, is a kind of entry-level cake. Simple as the tutorial may seem, it's not easy to get everything done perfectly. A lot of baking beginners may fail constantly on the cake even after countless attempts. That's why it's also known as the cake that is "driving you mad".

Ingredients:

- Egg: 4
- Granulated sugar: 70 g
- Milk: 75 g
- Corn oil: 45 g
- Low-gluten flour: 100 g
- Lemon juice 2-3 drops



Baking is a process in which you're fully immersed, physically and mentally, whether for weighing, dough making, stirring, whipping, mixing, kneading, exhausting, relaxing... in every step, you seem to be in a state of ecstasy. It can be said that nothing else can be so attractive. The result of baking is an expectation of the unknown. You ferment the dough, then put it into the oven, and wait for it to become what you expect. Because of such an expectation, baking itself becomes gorgeous. Of course, you may fail, like the occasional bumps in life, about which we should be optimistic and think of better ways or avoid repeating the same mistakes.

In fact, I've got many inspirations from baking itself. Unlike a main meal, baking is the pleasure after a meal, and an embellishment in life. Enjoy the peace of mind brought by slow life, and make some small cakes and cookies to share with your family and friends. I found that during the sharing process, the interpersonal atmosphere became warmer. Right, food sharing is love with temperature. Stay tuned!

Global Marketing: Luna Luo

Procedure:

1. Weigh all ingredients, and sieve the flour twice
2. Separate the egg white from the yolk at room temperature and put them in containers without oil or water, place the white in the quick-freezing chamber in the freezer, and take it out when the edge begins to ice up.
3. Use a whisk to manually whip room-temperature milk and corn oil until oil and water are not separated, sift in the low-gluten flour, mix them up by drawing W with the whisk, and rotate the bowl with the other hand until there's no dry powder. Don't stir too much in case the batter becomes stringy.
4. Add the egg yolk; continue to mix by drawing W with the whisk to get fine and smooth batter. Don't stir too much or apply too much force in case the batter becomes stringy or gross blowholes appear. At the moment, preheat the oven, 120 degrees, both upper and lower fire.
5. Take the white out, add 4 drops of lemon juice, use the medium-speed gear of the electric whisk to get big bubbles, put in 1/3 of granulated sugar, continue to whisk until fine veins begin to appear, and then add in another 1/3 of granulated sugar. Turn to the slowest gear, whisk, and add all the sugar left and salt when the veins become clearer. If you lift the whisk up, a hook of egg white can stick to it, and the white becomes delicate and shiny, meaning it's done.
6. Pour 1/3 of the egg white frost into the yolk batter, mix them up with a knife in cutting and chopping manners, pour the mixture back to the egg white frost left, and mix them up in the same way.
7. Pour the mixed batter into the mold from a height of 30 cm. Lift the mold to about 8 cm high and slam it twice to rid bubbles.
8. Put it into the pre-heated oven for 60 minutes, 120 degrees, both upper and lower fire.
9. Time's up, get it out immediately, lay it on a cooling net upside down, and demold when it's cool completely.
10. The perfect sponge cake is done. On this basis, you can whip cream to make it cream cake, or add whatever you like.





From Wuxi to Taiwan

In September 2012, I boarded a flight to Taipei. After five years, a journey ended.

"Why Taiwan?" "Why haven't I heard you could study in Taiwan?" During the five years of study, I was already accustomed to these questions. Few people cared about either what I had learned, or my curriculum. It seemed that the choice to study in Taiwan was the biggest problem. I'm ordinary, but I choose the different.

It turned out that my choice was right and I didn't regret it. Even over the two years after graduation, when I recalled this experience, I still missed it and was grateful. When speaking of Taiwan, China's largest island, it's more of a land associated with entertainment, snacks, scenery, or ceaseless political disputes. As a student, my learning experience being ignored by others was hard. During the senior year, when the master's program was initiated, I had to cope with the compulsory courses for the graduating class, while facing challenges of doing presentations and seminars more often than twice a week; after reading two to three classics before the class... it was often 2 or 3 a.m. in the morning. After repeating the process many times, the final research result turned out to be just an upgraded version of these small projects—a large one, to which you already knew the process of specific research methods, and literature review.

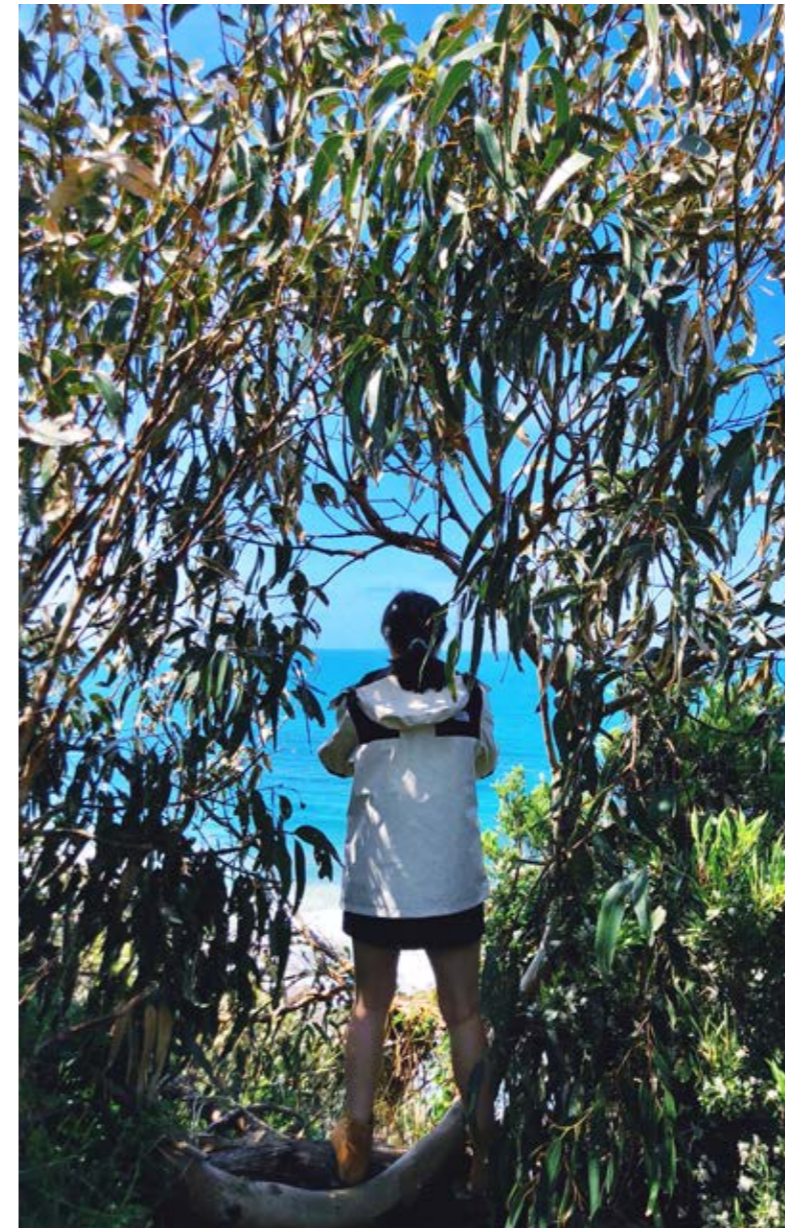
A teacher once said, "What matters are not your achievements, but a continuous exercise of your ability to raise questions and solve problems. This is a necessary ability no matter what you do, and makes you keener." I never believed in "skipping a grade" smoothly, but I achieved the goal within one year. This test led me to study carefully for every task and attentively treat even the most trivial matter, in my future work and life. There is no impossible task, only a lack of confidence in oneself.

From luxuries to photovoltaic

With the marketing background as a student to my first job, all my research was about luxury. Wandering in the same seemingly interesting and magnificent field for four years resulted in the idea of "jumping out of the comfort zone" to improve my skills and think about who I can be. Last September, I joined Suntech Marketing Team and officially started my "cross-border" career.

With the curiosity and inquiry into an unfamiliar industry, I entered the production line, saw the production of modules, undertook an exhibition, and studied an industry report, all for the first time. I felt so much worth learning, and even studying a piece of module was not boring at all. Following the rhythm of work, I gradually deepened my insight into the entire industry chain, and became interested. Information and news on the development of the PV industry in the global market has allowed me to understand the dynamic policies and customs of the world. The repeated breakthroughs in newly installed capacity mean that the clean energy industry is thriving and the awareness of environmental protection for all has been significantly enhanced. I choose this industry in order to follow the sun, chase the hope, and challenge myself.

Global Marketing: Sue Wang



Back in 2015, I was just a fresh graduate, young and inexperienced, and entered the solar energy industry by chance.

Perhaps I have been favored and loved by this artistic building, so that I could always do what I like the most.

Five years ago, when I graduated from a finance major, I became an accountant, a job stable, and suitable for a girl at that time, thus being envied by my classmates for finding a post suited to my study.

Then, after 6 months of internship, I felt that I couldn't be a person accustomed to ease. Therefore, in the next 2 years, I shifted to be an assistant, following the boss, growing from a low-profile stenographer to a qualified assistant that can manage time properly. At the same time, a blueprint of the future solar industry was being shaped in my mind, and I was nurturing my ability to grasp the big picture and my vision.

Life is actually a backbone supporting many unknowns. Changes always happen so fast that every opportunity that is fleeting must be seized tightly. In this way, an unreachable opportunity came to me. In the third year after I became an assistant, I turned to marketing, and traveled to more than 10 countries in 2 years, planned and supported more than 10 exhibitions. Surprisingly, transforming from being introverted, I'm now a little expert in conversations with foreigners.

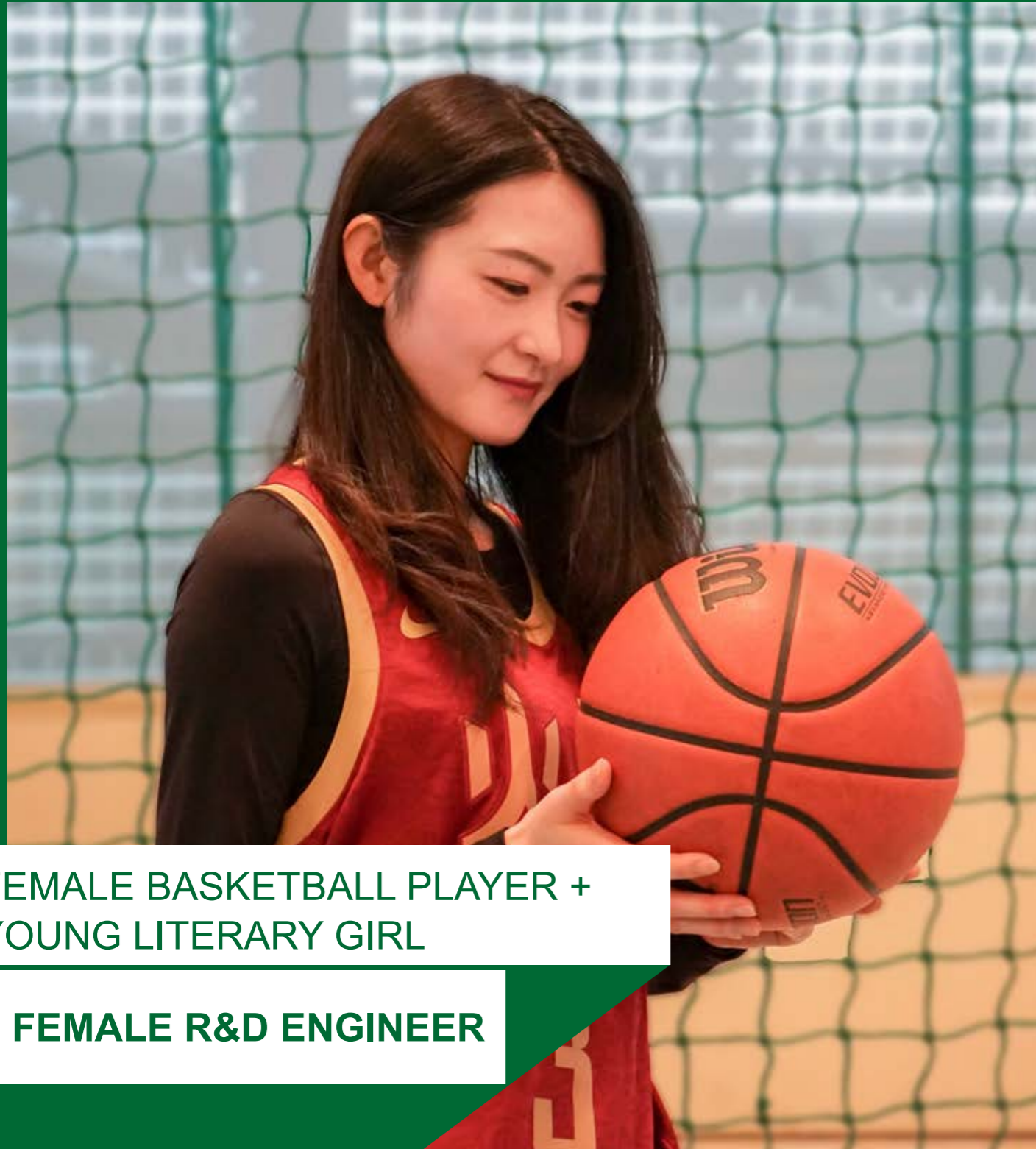
Taking opportunities like this and leveraging constant exchange and studies with senior peers, I have gained a deeper understanding of the solar energy industry. None of us is as smart as all of us. Compared with gurus in the industry, I know little, and cannot be myopic. So, in my spare time, I'd like to try something new and get closer to the kind of work relating to the industry. Consequently, after sitting down to understand, analyze, and grasp the market, and through continuous accumulation and learning, I can organize a complete market analysis, but in terms of depth, five years is just a first glance. To be better, you have to dig deeper.

In the past 5 years of my career, I've found a new self and tapped into my unknown capabilities. I prefer to use "unknown" as the spiritual pillar of life, and "known" as material food. The exploration of unknowns has urged me to find another self, allowed me to acquire more abilities and labels, and opened up a wider path for future development and life.

There is a long way to go, and I'll seek up and down. I wish that everyone can walk out of the comfort zone of life, embrace change, face challenges, and head for the future.

Global Marketing: Anne Wu

EXPLORING THE UNKNOWN



FEMALE BASKETBALL PLAYER +
YOUNG LITERARY GIRL

= FEMALE R&D ENGINEER

SHOW



Module Technology Department Lu Wenxiu

Finishing the game from the basketball court, she was greeting us with a smile while wiping sweat. "Hello, I'm Lu Wenxiu from the Module Technology Department." The girl with bent eyebrows soon engaged in small talks, far from the stereotyped image of R&D personnel.

R&D newbie

Lu Wenxiu, specializing in chemical materials in college and admitted as one of Suntech's 2019 management trainees with an excellent grade after graduation, focuses on the development and application of polymer materials on the module side. "My primary task is to test, evaluate and import the performance of new materials for modules," Lu Wenxiu described and explained with her testing report just completed today. "Look, this is a conductive adhesive used for shingled modules, for which there is no relevant international standard. We've been conducting performance evaluation tests recently to determine standard parameters via various test data, thereby importing technical requirements for the preparation of this new material in later days."

Apart from the development of new materials, Lu Wenxiu's team is also responsible for reducing costs and raising efficiency on the module material side. "We are currently working on an EVA with a higher curing efficiency. Its molecular structure can effectively reduce the failure rate of cells, so that the performance of module products can be greatly enhanced." When speaking of professional knowledge, Lu Wenxiu unconsciously put on her glasses, and gushed over her experimental process.

Flourishing Literature & Sports

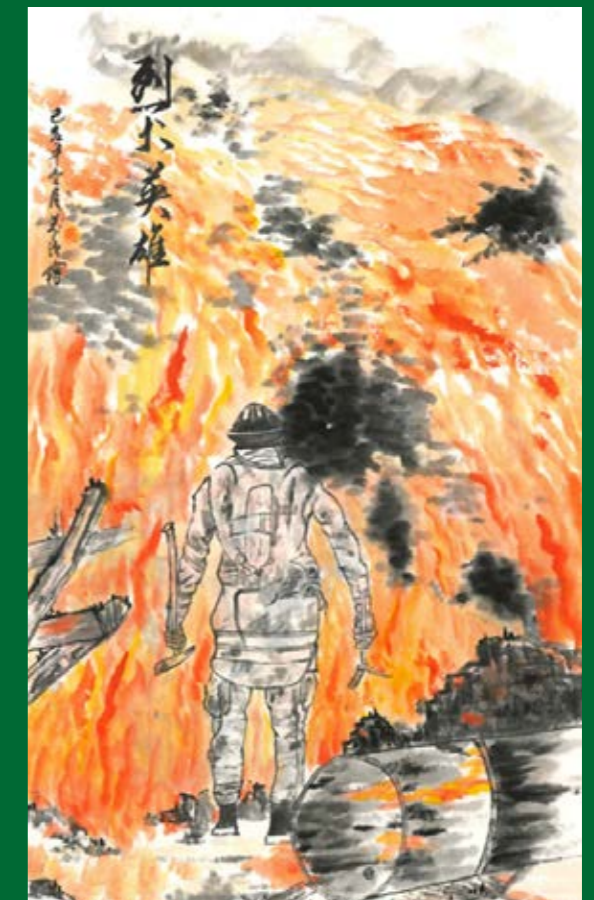
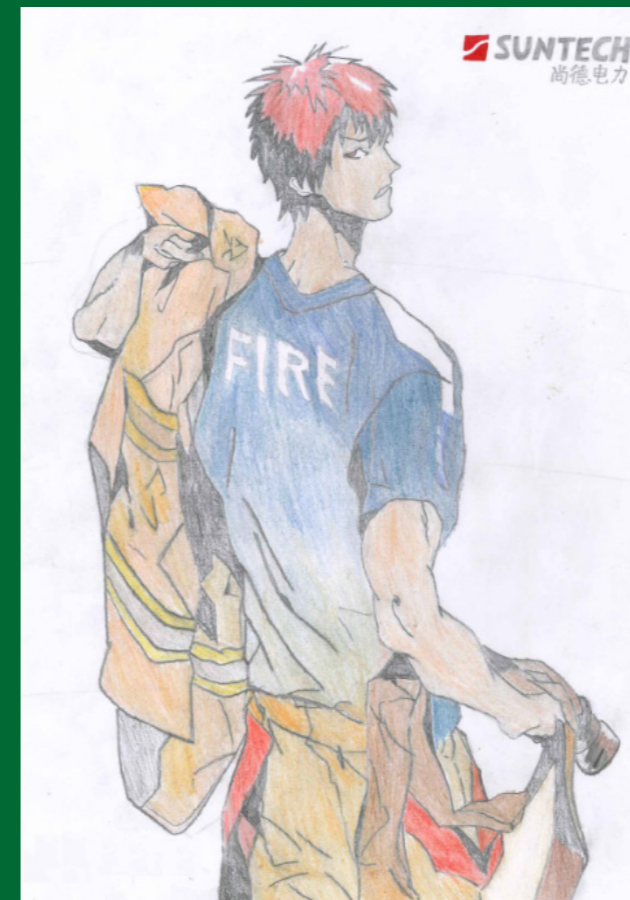
You can't imagine how many hobbies this precious girl has, but the most surprising thing is her love for basketball. "I used to play Center for the women's basketball team at university." In her spare time, she often shoots balls with partners in the court, and it won't be a problem to compete with the boys. Sweating not only exercises her body, but also relieves her working pressure.

In addition to amazing sports skills, Lu Wenxiu also dabbles in literary skills, such as singing, dancing, drawing, playing chess, and musical instruments, which makes her an accomplished lady that knows everything. In 2019, Lu Wenxiu, as a freshman representative, presided over Suntech Annual Party, getting more people to know this versatile girl.

After a brief chat, Lu Wenxiu went back to the laboratory to work. "After a basketball game, I'll be more efficient in studying molecular formulas in the lab!" She smiled and shared her experience with us, "I've joined the industry less than a year ago. In spite of my incompetence, the good part is that everyone here is so professional and helpful. In Suntech, I learned a lot of professional knowledge and communication skills. I believe that greater gains will wait ahead, so long as I continue to work hard."



To vigorously promote the fire safety culture, implant fire safety into everyone's heart, and effectively prevent fire accidents, Suntech EHS Department has organized a Fire Safety Monthly Event with the theme of "Fire Protection for All, Life Matters Most". The event has gathered many excellent paintings. Let's have a look at these works of our soul-touching painters in Suntech.





SOLICIT CONTRIBUTIONS

I'M HERE

To enjoy the gorgeous
four seasons with you

- Calligraphy
- Painting
- Photography
- Literature



Requirements

1. Style is not limited. Write at least 200 words (except for poetry) with positive contents.
2. The article shall be original and will be rewarded according to content and word count, once adopted.
3. The article shall be submitted in a digital format with department and name indicated.

E-mail : Marketing@suntech-power.com