



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

September 27, 2010

Dr. Zhengrong Shi
Chairman and Chief Executive Officer
Suntech Power Holdings Co., Ltd.
R&D Mansion, 9 Xinhua Road
New District, Wuxi
Jiangsu Province 214028
People's Republic of China

Re: Suntech Power Holdings Co., Ltd.
Form 20-F for the Fiscal Year Ended December 31, 2009
Filed May 11, 2010
File No. 001-32689

Dear Dr. Shi:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 20-F as of December 31, 2009

Item 5. Operating and Financial Review and Prospects, page 48

B. Liquidity and Capital Resources, page 70

Trend of credit terms allowed to customers, page 72

1. We note that you "have not seen increased probability of defaults in accounts receivable and prepayments...with extended credit terms to customers" and that you recognized a negative provision for doubtful accounts of \$0.1 million in 2009. Please tell us how you determined that a decrease to the accounts receivable allowance was warranted for 2009 considering that your accounts receivable increased from \$213.1 million as of December 31, 2008 to \$384.4 million as of December 31, 2009 despite your sales declining from \$1,785.8 million in 2008 to \$1,606.3 million in 2009. In your response please

specifically address the impact of the sales to investee companies of Global Solar Fund and the corresponding increase in accounts receivable related to these entities.

2. As a related matter, we note from your August 19, 2010 Form 6-K that as June 30, 2010 you have not collected any of the outstanding receivables from investee companies of Global Solar Fund. Please tell us how you have determined that these receivables are not impaired, considering that you disclose on page F-13 that your normal credit terms are 90 days or less and these receivables have been outstanding for over one year.

Consolidated Financial Statements, page F-1

Note 7. Accounts Receivable and Other Receivables, page F-26

3. We note from your August 19, 2010 Form 6-K and second quarter 2010 earnings call that you state that you collected Eur 26 million in the third quarter of 2010 from Global Solar Fund (“GSF”) investee companies for recent shipments. Further, you state that you have collected Eur 1.7 million of the outstanding December 31, 2009 accounts receivable subsequent to year end. Please address the following:
 - Explain to us how you are recognizing revenues on sales to GSF investee companies in 2010. Please specifically address how you have evaluated whether new shipments meet the collectability criteria giving consideration to the difficulties in collecting past amounts from GSF investee companies.
 - Please explain to us why the GSF investee companies are paying amounts on the current balances but making only minimal payments on the past due amounts. Provide us with additional details to understand how you determine how to allocate payments between the new receivables and the old receivables. For example, we note that you received total payments from GSF investee companies of Eur 27.7 million and you allocated only Eur 1.7 million to the receivables from sales in 2009.
4. We note from your second quarter 2010 earnings call that you stated that the first project financing is nearly complete for the Global Solar Fund investee companies. In light of the significant amount of time that has passed from the time of the sale until collection, please explain to us in detail how you evaluated whether your sale to Global Solar Fund investees met the collectability criteria for revenue recognition. Describe the specific factors considered that you believe supported your conclusion that collection was reasonably assured.
5. We note the statement in your second quarter 2010 earnings call that the conditions precedent for the first project financing is nearly complete. Please explain to us what “conditions precedent” you are referring to. Also, please clarify what you mean by “nearly complete.” In connection with your initial recognition of revenue for these sales in the second quarter of 2009, discuss how you considered these “conditions precedent”

and the fact that such conditions apparently had not yet been met. Discuss how you concluded that the collectability criteria had been met given these 'conditions' that had not yet been met.

6. We note that there have been significant pricing declines in your products since the original sales to the Global Solar Fund investee companies. Tell us how these pricing declines might impact the ultimate collection of the full receivable. Discuss whether you expect to collect the full amount of the outstanding Global Solar Fund investee company receivables or if you anticipate having to provide these entities with a discount on the outstanding receivable balance.
7. With respect to your sales to Global Solar Fund investee companies in 2009, please tell us the name of each entity that you sell products to and the amount of revenue recognized from each investee company. For any of the investee companies from which you recognized a significant amount of revenue, provide us with a summary of the information obtained in connection with your credit evaluation of that company. Discuss the liquidity of the investee company and its prospects for raising additional funds at the time you recognized revenue.
8. It appears from your disclosures that the sales to the Global Solar Fund investee companies were made in connection with certain projects those entities were developing. We further note that those investee companies had not yet obtained all the necessary financing for the projects. Please address the following:
 - Describe to us the significant contractual terms with the investee companies relating to the shipment of the related modules.
 - Describe which party or parties determined the timing of the shipment and explain the factors that contributed to the modules being shipped in the second quarter of 2009.
 - Tell us where the modules were shipped and who had physical control and risk of loss of the modules after shipment.
 - Describe the status of the development projects at the time of shipments and subsequent considering that financing for the related projects has not yet been completed as of June 30, 2010.
 - Tell us if the modules have been installed and/or placed in service.

Note 12. Investments in Affiliates, page F-29

9. With respect to Global Solar Fund (“GSF”), please address the following:
- Tell us the name of the founder and general partner of the fund (i.e., the Category A manager).
 - Tell us whether the Category A manager is currently or has ever been an employee of Suntech Power Holdings or any of its affiliates (other than GSF).
 - Tell us whether you are aware of any situations in which the Category A manager has held himself out to be an employee or representative of Suntech Power Holdings or any of its affiliates (other than GSF).
 - Describe to us any other relationships that exist or have historically existed between Suntech Power Holdings or any affiliates of Suntech Power Holdings and the Category A manager.
 - To the best of your knowledge, tell us whether the Category A manager has any stock ownership in Suntech Power Holdings or any of its affiliates (other than GSF).

Taking into consideration your responses to the above comments, please provide us information on how you determined that Suntech does not have substantive participating rights in GSF as discussed in paragraph 810-20-25 of the FASB Accounting Standards Codification.

10. We note that as of December 31, 2009 Global Solar Fund had a total of five investee companies. Please revise future filings to clearly disclose each investee company and the percentage ownership held by Global Solar Fund. In this regard, please also disclose any separate interests in the investee companies held by any of the Category A or Category B managers.
11. We note that the initial commitment to acquire the 86.0% share equity of Global Solar Fund required you to contribute total cash consideration of EUR 258 million. Please tell us and revise future filings to disclose what portion, if any, of that commitment has not yet been funded.

Note 17. Convertible Notes, page F-33

12. We note that the equity component or discounted equity for the 2012 Notes and 2013 Notes amounted to \$92.0 million and \$140.7 million, respectively. Please revise future filings to disclose how you determined the value of the equity components of your 2012 and 2013 Notes.

Note 28. Commitments and Contingencies, page F-50

13. We note from page 19 that you may from time to time be required by commercial banks financing certain projects undertaken by your related parties to provide guarantees for some or all of the payments and contractual obligations of your related parties. Additionally, you may be requested to deposit monies in cash collateral accounts as additional security for installment payments of the related party. Please tell us, with a view towards disclosure, whether you have been required to provide any such guarantees or collateral. If so, please tell us the name of the related party for which you provided such guarantee or collateral and whether it is an investee company of Global Solar Fund or Gemini Solar.
14. We note from page 19 that projects undertaken by your PV systems integration business will likely require you to undertake post-sale obligations that may include system output performance guarantees, system maintenance and liquidated damage payments or customer termination rights. Please tell us, with a view towards disclosure, whether you have been required to provide such post-sale obligations. If so, please tell us the material terms of such provisions and explain to us how these provisions impacted your revenue recognition on the related projects.

Note 29. Segment Information, page F-51

15. We note your disclosures that you operate in a single business segment. We also note your disclosures throughout the filing that refer to your new PV systems integration business in addition to your PV modules business. With reference to Topic 280 of the FASB Accounting Standards Codification, please explain to us how you evaluated your segment presentation in 2009 and concluded that it was appropriate to report a single segment. In this regard, we note that the PV systems integration business has increased as a percentage of your total revenues in 2009 compared to prior years.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;

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- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Lynn Dicker, Staff Accountant, at 202-551-3616 or Martin James, Senior Assistant Chief Accountant at 202-551-3671 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact me at (202) 551-3643.

Sincerely,

Kevin L. Vaughn
Accounting Branch Chief