



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-3561

Mail Stop 3561

May 20, 2009

Mr. Richard Palmer
President and Chief Executive Officer
Global Clean Energy Holdings, Inc.
6033 W. Century Blvd, Suite 895
Los Angeles, California 90045

Re: Global Clean Energy Holdings, Inc.
Form 10-K for Fiscal Year Ended December 31, 2008
Filed April 15, 2009
File No. 000-12627

Dear Mr. Palmer:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for Fiscal Year Ended December 31, 2008

General

1. In future filings consider clarifying the extent to which you are related to Global Clean Energy, Inc., a company with securities registered under Section 12(g) of the Exchange Act.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 22

Liquidity and Capital Resources, page 24

2. We note the reference on page 20 to "the significant amount of outstanding and unpaid obligations [you] owe to a number of creditors." With a view to disclosure in future filings, please advise us of the creditors, amount and nature of the obligations, and how the obligations are expected to affect your liquidity, including your ability to obtain future financing.

Item 9A(T). Controls and Procedures, page 26

3. You indicate on page 27 that the material weaknesses you identified relate to inadequate controls over the accounting and cash management functions in Mexico, and that you have implemented new controls to improve these functions. Please revise to clarify the nature of the deficiencies and management's plan to remediate them. For example, briefly describe the impact the deficiencies have on financial reporting and the control environment, and describe the new controls management is implementing to remediate the weaknesses.

Item 11. Executive Compensation, page 30

Summary Compensation Table, page 30

4. We note the May 2008 release of 4,567,518 shares of common stock from escrow pursuant to the Global Agreement, and your disclosure on page F-15 and elsewhere that you are accounting for the escrow shares "as share-based compensation." To the extent these shares are issued to your named executive officers, in future filings please disclose the release of the shares in the stock awards column of your summary compensation table, or advise. Refer to Regulation S-K Item 402(n)(2)(v).

Employment Agreements, page 32

5. In future filings, please disclose your named executive officer's severance entitlements in your discussions of their employment agreements. Refer to Regulation S-K Item 402(q)(2). In this regard, we note your disclosure on page F-16 that Mr. Palmer is entitled to severance payments including 100% of base salary, 50% target bonus, and the vesting of his incentive stock options. Please provide us with supplemental draft disclosure, or an analysis as to why it is appropriate to omit this disclosure from your future filings.

Financial Statements

Report of Independent registered public accounting firm, page F-2

6. For the period from November 20, 1991 (inception) to December 31, 2003, we note that the current audit report refers to, and indicates reliance on the audit reports issued by your predecessor auditors as follows: (i) audit report dated February 18, 2004 (dual dated November 15, 2004) issued by Eide Bailly LLP and (ii) audit report dated March 20, 2000 issued by Tanner LC. Please revise to include (i) Eide Bailly LLP's audit report dated February 18, 2004 (dual dated November 15, 2004) and (ii) Tanner LC's audit report dated March 20, 2000 for this period as required by Rule 2-05 of Regulation S-X.

Note C- Jatropha Business Venture

Share Exchange Agreement, page F-14

7. We note that 27,405,111 restricted shares of common stock were held in escrow to be released when the certain specified performance (operational) and market related milestones were satisfied. While some of the milestones were achieved in November 2007, April 2008 and May 2008, it appears that the corresponding shares released related to these milestones were all valued at \$ 0.027, based on the closing price of the company's stock on September 7, 2007. Considering the acquisition transaction and the shares were held in escrow subject to satisfying the milestones in the future, tell us the basis for valuing the shares as of the acquisition date of September 7, 2007 instead of recording the fair value of the shares as of the date the performance conditions were met. See paragraph 27 of SFAS 141. In your response, please demonstrate to us how the valuation of the contingent consideration (shares held in escrow) as of the same measurement date of September 7, 2007 is appropriate when in fact the contingency or performance conditions were met at a future date at which date the trading value of the shares far exceeded the fair value of shares at September 7, 2007; disclose how the period over which the expenses are recognized in your financial statements are appropriate or revise your financial statements as appropriate. Discuss why you accounted for these shares under SFAS 123(R) when these shares were issued related to the acquisition of Global Clean Energy Holdings, LLC.

GCE Mexico I, LLC, page F-17

8. We note you own 50% of the issued and outstanding common membership units of GCE Mexico I, LLC and have not and are not required to make capital contributions. Considering apparent lack of your controlling financial interest and you do not have any capital at risk, please demonstrate to us the basis for your consolidation of this entity. Please disclose the specific accounting literature that supports your conclusion and revise to provide the required disclosures as

appropriate. Disclose the salient features of the LLC including the profit (loss) allocation, rights and obligations of the common membership unit holders and the preferred membership unit holders. Please discuss who has control of the entity. Refer to EITF 04-5 and FIN 46(R) for further guidance. In addition, please ensure to file the GCE Mexico I, LLC agreement as an Exhibit.

Exhibits

9. Please file all material agreements in their entirety, including all schedules, exhibits, annexes, appendices, etc. We direct your attention to the loan and security agreement with Mercator, which is filed as Exhibit 10.5 but does not appear to include all of the schedules to the agreement. In addition, we note that the service agreement with the LODEMO Group and the January 12, 2009 note amendment and maturity date extension between the company and Mercator do not appear to be filed. Please explain why these were not filed in their entirety pursuant to Item 601(b)(10) of Regulation S-K, or file the agreements with all attachments.

* * *

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. Please understand that we may have additional comments after reviewing your responses to our comments.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

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

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review

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of your filing or in response to our comments on your filing.

You may contact Raj Rajan at (202) 551-3388 or Nasreen Mohammed at (202) 551-3773 if you have questions regarding comments on the financial statements and related matters. Please contact Louis Rambo at (202) 551-3289 with any other questions.

Sincerely,

John Reynolds
Assistant Director