



DIVISION OF  
CORPORATION FINANCE

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

Mail Stop 3561

June 23, 2009

Mr. Bruce Nelson  
Chief Financial 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. Nelson:

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

Report of Independent Registered Public Accounting Firm, page F-2

Financial Statements, pages F-3 through F-7

1. Refer to comment six of our letter dated May 20, 2009. Please tell us why your current independent accountant is unable to reaudit the financial information for the period from inception through December 31, 2003. You indicate that this information is irrelevant, outdated and relates solely to discontinued operations. It appears to us that some degree of field work was performed on this information during the audit of the 2007 financial statements and perhaps subsequently. The disclosures in Note M-Discontinued Operations, page F-31, indicate you reclassified the financial statements in 2007 to record historical revenues and

expenses relating to the biopharmaceutical business as discontinued operations and record only general corporate overhead in continuing operations.

#### Note C- Jatropha Business Venture

##### GCE Mexico I, LLC, page F-17

2. We note your response to prior comment eight. However, you have not fully addressed the basis of your consolidation of GCE Mexico I, LLC (“GCE Mexico”). Thus the entire comment is reissued. The usual condition for consolidation is that control rests with the majority owners. Since you own only 50% of the membership units of GCE Mexico and represent only 50% of the board and noting no other substantive rights indicated it is unclear whether you have control of GCE Mexico. We note that you made no equity contributions thus you do not have sufficient equity investment at risk. We understand that you own 50.5% of the equity interest of Asideros Globales Corporativo (Asideros), however, without any capital contributions, allocation of profit or loss and control of board; it is unclear how you can be considered to have controlling financial interest. Please address the following:
  1. Tell us whether the preferred members also own any of the common membership interest of GCE Mexico.
  2. Explain whether GCE Mexico and Asideros meet the definition of a variable interest entity under paragraph 5 of FIN 46(R). If so,
  3. Tell us how you have considered paragraphs 14 and 15 of FIN 46(R) in determining that you are the primary beneficiary of GCE Mexico and provide the basis for your consolidation of GCE Mexico and Asideros;
  4. revise the financial statements and disclosures as appropriate to explain your basis for consolidation.
  5. As requested in the prior comment, please ensure to file the Asideros and GCE Mexico I, LLC agreements as Exhibits.

We may have further comments upon reviewing your response.

#### Exhibits

3. We note your response to comment nine from our letter dated May 20, 2009. Please file the service agreement with the Lodemo Group, or explain why it is not required to be filed pursuant to Regulation S-K Item 601(b)(10)(ii)(B). In this regard, we note disclosure on pages three, six, and seven suggesting that you are substantially dependent on revenues derived from this agreement.

\* \* \*

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.

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