

Mail Stop 3561

August 12, 2009

Mr. Bruce Nelson  
Chief Financial Officer  
Global Clean Energy Holdings, Inc  
6033 W. Century Blvd, Suite 895  
Los Angeles, CA 90045

**Re: Global Clean Energy Holdings, Inc  
Form 10-K for the Fiscal Year Ended December 31, 2008  
Filed April 15, 2009 and  
Supplemental response filed July 8, 2009  
File No. 000-12627**

Dear Mr. Nelson:

We have reviewed your filings and supplemental response 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 comment is 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 the Fiscal Year Ended December 31, 2008

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

1. We note your response to comment one of our letter dated June 23, 2009. We are unable to agree that the cumulative information can be marked "audited" when you are unable to provide audit reports for approximately 13 years of the aggregate 18-year period. We note that in 2007 you decided to sell your pharmaceutical assets and you began developing the Jatropha Business. Tell us how you analyzed footnote 7 of SFAS 7 in determining the inception date of your

development stage. Please also revisit the existing date establishing the beginning of your development stage as presented in your financial statements. Tell us why you believe you entered the development stage in 2004.

Note C- Jatropha Business Venture

GCE Mexico I, LLC, page F-17

2. FIN 46(R) provides guidance to address situations where the voting interest approach is not effective in identifying a party that has a controlling financial interest. We note your response to prior comment two. However, you have not fully addressed our comments. Thus the entire comment is reissued. Please address the following relating to GCE Mexico I, LLC (GCE Mexico):
  - a. Tell us what percentage of the common membership interest of GCE Mexico is owned by the preferred members,
  - b. Explain whether GCE Mexico meet the definition of a variable interest entity (VIE) under paragraph 5 of FIN 46(R). If so,
  - c. Tell us how you have considered paragraphs 14 and 15 of FIN 46(R) in determining the primary beneficiary of GCE Mexico
  - d. Discuss why you have not consolidated GCE Mexico and
  - e. Explain how you have accounted for your interests in GCE Mexico.
  
3. In your prior response, you have not addressed how you evaluated the applicability of FIN 46(R) to Asideros Globales Corporativo (Asideros). We note that ARB 51, as amended by FAS 94 would apply only after concluding that Asideros is not a VIE subject to the scope of FIN 46(R). Please address the following:
  - a. Please discuss in detail the salient features of Asideros, its capital structure including debt, equity and preferred stock investment, profit (loss) allocation, rights and obligations of the equity holders and other members.
  - b. We understand that Asideros is considered a business using the definition of FAS 141. Please explain whether Asideros meets any of the four conditions in paragraphs 4.h. of FIN 46(R). If so,
  - c. Explain your assessment of Asideros as a variable interest entity under paragraph 5 of FIN 46(R). We note that Asideros does not have adequate equity investment at risk sufficient to finance its activities and relies on the two preferred investors of GCE Mexico to fund ongoing operations.
  - d. Please explain the rights and obligations of the preferred investors of GCE Mexico as they relate to Asideros.
  - e. Discuss who absorbs a majority of the expected losses, receives a majority of the expected residual returns and who is the primary beneficiary of Asideros.

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4. We note your response that the operating agreement of GCE Mexico gives you control over Asideros as the “Manager”. However, you have not fully addressed how you achieved control of Asideros and the basis of your consolidation of Asideros. It is unclear how you can be considered to have controlling financial interest through contractual management arrangement. Please address the following:
  - a. Disclose the contractual term as the Manager based on the operating agreement.
  - b. Explain whether the contract is terminable by GCE Mexico and discuss the terms and conditions.
  - c. Discuss whether the Manager has the unilateral right to sell the assets of Asideros (e.g. Land, Farm etc..) and transfer assets without limitation.
  - d. Compare your rights as a manager to the rights of LODEMO Group which you state is responsible for the establishment, development, and day-to-day operations of the Jatropha business in Mexico.

Exhibits

5. As previously requested, please file the operating agreements of GCE Mexico and Asideros as Exhibits. Upon reviewing the agreements, we may have further comments.

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. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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.

Sincerely,

Tia Jenkins  
Senior Assistant Chief Accountant  
Office of Beverages, Apparel and  
Health Care Services