

Global Clean Energy Holdings, Inc.  
Form 10-K/A  
December 31, 2009

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

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FORM 10-K/A  
Amendment No. 2

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- ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2008
- TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: 0-12627

GLOBAL CLEAN ENERGY HOLDINGS, INC.  
(Exact name of Small Business Issuer as specified in its charter)

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Utah  
(State or other jurisdiction of  
incorporation or organization)

87-0407858  
(I.R.S. Employer  
Identification Number)

6033 W. Century Blvd, Suite 895,  
Los Angeles, California 90045  
(Address of principal executive offices)

(310) 641-4234  
Issuer's telephone number:

Securities registered under Section 12(b) of the Act: None.

Securities registered under Section 12(g) of the Act: Common Stock, no par value.

Indicate by check mark if the registrant is a well known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and, (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein and, will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form

10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company   
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes  No

The aggregate market value of the common stock held by non-affiliates of the registrant as of June 30, 2008 (the last business day of the registrant's most recently completed second fiscal quarter) was approximately \$8,865,000.

The outstanding number of shares of common stock as of April 8, 2009 was 229,381,338, which includes 4,567,519 shares of common stock currently held in escrow.

Documents incorporated by reference: None

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EXPLANATORY NOTE

We are filing this amendment (this “Amendment No. 2”) to our Annual Report on Form 10-K for the year ended December 31, 2008 (our “Annual Report”) for the sole purpose of re-filing the following two agreements: (i) Limited Liability Company Agreement of GCE Mexico I, LLC, and (ii) Service Agreement between this company and Corporativo LODEMO S.A DE CV. The foregoing two agreements were previously filed as exhibits to Amendment No. 1 to the Annual Report, but as previously filed, the agreements did not contain all of the exhibits and schedules to those agreements. The two attached agreements contain all exhibits and schedules thereto.

This Amendment No. 2 does not update or amend the disclosures contained in the Annual Report, as amended by Amendment No. 1.

PART II

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

Exhibit Number	Description
10.17	Limited Liability Company Agreement of GCE Mexico I, LLC, a Delaware Limited Liability Company, dated April 23, 2008
10.18	Service Agreement, dated October 15, 2007, between the Company and Corporativo LODEMO S.A DE CV, a Mexican corporation
31.1	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.
31.2	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.

SIGNATURES

In accordance with Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

GLOBAL CLEAN ENERGY HOLDINGS, INC.

December 30, 2009

By:

/s/ RICHARD PALMER

Richard Palmer

President and Chief Executive Officer