



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

December 30, 2008

VIA U.S. MAIL and FACSIMILE (248) 844-1214

Mark D. Morelli
President and Chief Executive Officer
Energy Conversion Devices, Inc.
2956 Waterview Drive
Rochester Hills, Michigan 48309

**Re: Energy Conversion Devices, Inc.
Form 10-K for Fiscal Year Ended June 30, 2008
Filed August 28, 2008
Form 10-Q for the Quarterly Period Ended September 30, 2008
Form 8-K filed October 6, 2008
File No. 1-08403**

Dear Mr. Morelli:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your documents in future filings 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 June 30, 2008

Consolidated Financial Statements, page 50

Consolidated Statements of Operations, page 53

1. We note that you reflect other non-operating income of \$1.2 million in fiscal 2008. It appears from your disclosure on page 37 that this amount includes insurance proceeds of \$1,682,000 for business interruptions at one of your facilities. Please tell us the nature of this item and explain why you classified the amount as non-operating and not operating.

Note A. The Company and Summary of Accounting Policies, page

Litigation, page 64

2. In future filings, please also address the expected impact on the company's liquidity.

Product Sales, page 64

3. Please tell us and revise future filings to enhance the discussion of your revenue recognition policy with regard to product sales. Disclose why the majority of sales are recognized when the "buyer is informed that goods are available for shipment" and disclose when sales are recognized for the remainder of your product sales. Your disclosure should also address, where significant, customer acceptance, return policies, post shipment obligations, warranties, credits and discounts, rebates, price protection or similar privileges and how these impact revenue recognition.
4. Please tell us the basis for recognizing revenue for the "majority" of product sales when the buyer is informed that goods are available for shipment. Describe the terms and conditions of your product sales and how you analyzed those terms in determining your accounting policy under U.S. GAAP. Discuss in sufficient detail your consideration of SAB Topics 13.A.1 and 13.A.3.

Basic and Diluted Net Income (Loss) Per Share, page 67

5. Please tell us how you considered paragraph 40 of SFAS 128 in your presentation of earnings per share which requires a reconciliation of the numerators and the denominators of your basic and diluted per-share computations for income from continuing operations including individual income and share amount effects of all securities that affect earnings per share.

Note B. Accounts Receivable, page 72

6. Please revise future filings to disclose the nature of “unbilled” accounts receivable, including what is represented by “other” unbilled receivables. Please also disclose the time period over which you expect to bill the accounts receivable.

Note D. Joint Ventures and Investments, page 73

7. We reference the disclosure on page 31 that you have not reported any earnings or losses from Cobasys because your contributions have been non-cash items, including intellectual property and expertise. We also refer to the disclosure on page 23 of your Form 10-Q for the fiscal quarter ended September 30, 2008 that you account for your investment in Cobasys using the modified equity method. We see that you recorded revenue related to Cobasys during fiscal year 2007 and 2008. Please tell us and revise future filings to explain the modified equity method and why it is appropriate for you to use this method for your investment in Cobasys.
8. We see that you and Chevron Technology Ventures each hold a 50% interest in Cobasys. Please tell us your FIN 46 analysis as to whether the joint venture is a variable interest entity and, if so, whether you are the primary beneficiary and should consolidated Cobasys.

Item 12. Security Ownership of Certain Beneficial Owners and Management, page 98

9. It appears from Schedule 13Gs filed with the SEC and publicly available on EDGAR that you have persons who beneficially own more than 5% of your common stock. Please provide us with an explanation of your basis for not disclosing those beneficial ownership interests in your Form 10-K (or by incorporation by reference to your Proxy Statement on Schedule 14A filed October 17, 2008) in accordance with Item 403(a) of Regulation S-K, and confirm that you will provide such disclosure, as required, in future filings.

Form 10-Q for the Quarterly Period Ended September 30, 2008

Financial Statements, page 1

Note B. Investments, page 9, and Note J. Fair Value, page 17

10. We note your disclosure that the valuation of auction rate securities under SFAS 157 was estimated using your investment advisor's pricing model which is not a market model. Please tell us and revise future filings to discuss the particular methods used to value the auction rate securities. Please also discuss the following:
- The significant inputs and assumptions used to determine these values, such as discount rates, interest rates, illiquidity adjustments, and other significant assumptions;
 - The maximum contractual default rate and the current interest rate on these securities at the end of each period; and
 - The key terms of the auction rate securities such as maturity dates, auction reset provisions and interest rate provisions.

Please refer to paragraphs 33 of SFAS 157 which requires you to disclose information that enables users of your financial statements to assess the inputs used to develop your measurements and also the specific disclosures required by paragraph 33(c) of SFAS 157.

11. As a related matter, please tell us the nature and extent of the third-party's involvement in your decision-making process associated with the referenced valuation. While you (management) may elect to take full responsibility for valuing the ARCs, if you choose to continue to refer to the expert, you may need to revise to name them and include their consent as an exhibit to any registration statement that includes or incorporates this disclosure in compliance with Securities Act Rule 436. Please refer to Question 141.02 of the Compliance and Disclosure Interpretations on Securities Act Sections, which can be found at <http://www.sec.gov/divisions/corpfin/guidance/sasinterp.htm>.

Note G – Commitments and Contingencies, page 13

12. We reference the disclosure that you finalized a joint venture agreement in September 2008 with Tianjin Jinneng Investment Company. Please tell us and include in future filings a discussion of the terms and ownership structure of this joint venture. Please also discuss your accounting for the investment in the joint venture.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 21

Liquidity and Capital Resources, page 27

13. Regarding your disclosures related to the fair value of investments, please refer to the disclosure guidance included in the letters from the Senior Assistant Chief Accountant issued in March 2008 and September 2008, located at <http://www.sec.gov/divisions/corpfin/guidance/fairvalueltr0308.htm> and <http://www.sec.gov/divisions/corpfin/guidance/fairvalueltr0908.htm>. Please consider revising future filings to include those disclosures that could provide clearer and more transparent disclosure regarding your fair value measurements, specifically information about judgments and assumptions underlying your fair value measurements, the sensitivity of your measurements to those assumptions and details about the methodology and inputs you used.

Quantitative and Qualitative Disclosures about Market Risk, page 31

14. We note your disclosure on page 32 that “[t]he Company invests in auction rate certificates. Recent market conditions have resulted in failures of certain auctions; however, the Company’s securities have not experienced such failures.” On page 10 you disclose that “[a]t September 30, 2008, the Company’s investment advisor has valued these securities using their pricing model which is not a market model, but which does reflect some discount due to the current lack of liquidity of the investments as a result of recently failed auctions.” Please reconcile these disclosures.

Exhibits 31.1 and 31.2

15. We note that the identification of the certifying individual at the beginning of the certification required by Exchange Act Rule 13a-14(a) also includes the title of the certifying individual. In future filings, the identification of the certifying individual at the beginning of the certification should be revised so as not to include the individual’s title. Further, we note that you inserted a period at the end of paragraph 4(d) instead of including a semicolon followed by the word ‘and’. Please revise future filings to be consistent with the wording included in Item 601(b)(31)(i) of Regulation S-K.

Form 8-K filed October 6, 2008

16. We note that you list a press release referencing certain strategic initiatives as an exhibit to this filing. Please explain why you have not included the press release. If appropriate, please file an amended 8-K to include the press release.

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter with your response that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. 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 of your filing or in response to our comments on your filing.

Mark D. Morelli
Energy Conversion Devices, Inc.
December 30, 2008
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You may contact Kristin Lochhead, Staff Accountant, at (202) 551-3664 or me at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. You may also contact Brian Cascio, Branch Chief, at (202) 551-3676. Please contact Ruairi Regan, Staff Attorney, at (202) 551-3269 or Tim Buchmiller, Reviewing Attorney, at (202) 551-3635 if you have any other questions.

Sincerely,

Kate Tillan
Assistant Chief Accountant