

AVENTINE RENEWABLE ENERGY HOLDINGS INC  
Form 424B3  
November 30, 2006

Filed pursuant to Rule 424(b)(3)  
Registration Statement No. 333-132881

**PROSPECTUS SUPPLEMENT NO. 6**

**TO PROSPECTUS DECLARED**

**EFFECTIVE ON JULY 25, 2006**

**Aventine Renewable Energy Holdings, Inc.**

**20,881,025 Shares of Common Stock**

This prospectus supplement no. 6 supplements our prospectus dated July 27, 2006, prospectus supplement no. 1 dated August 21, 2006, prospectus supplement no. 2 dated August 30, 2006, prospectus supplement no. 3 dated September 21, 2006, prospectus supplement no. 4 dated November 1, 2006, and prospectus supplement no. 5 dated November 14, 2006. This prospectus supplement no. 6 relates to the resale by the selling stockholders listed below of certain shares of common stock of Aventine Renewable Energy Holdings, Inc. You should read this prospectus supplement no. 6 with the prospectus and the above mentioned prospectus supplements, which are to be delivered with this prospectus supplement no. 6.

On pages 82-100 of the prospectus, there is a table (the Selling Stockholder table) that lists: (i) each person selling the common stock in connection with the prospectus (the Selling Stockholders); (ii) the number of shares of common stock owned and (iii) the percentage of common stock outstanding.

This prospectus supplement no. 6 amends the Selling Stockholder table by revising the number of shares owned by each of the below selling stockholders as follows:

Name of Selling Stockholder	Number of Shares of Common Stock Owned	Percentage of Common Stock Outstanding
Alexandra Global Master Fund Ltd. (5)	96,000	*
J. Steven Emerson IRA R/O II	55,000	*
J. Steven Emerson/Roth IRA	25,000	*
Other selling shareholders	74,286	*

The prospectus, together with the prospectus supplements, constitute the prospectus required to be delivered by Section 5(b) of the Securities Act of 1933, as amended, with respect to offers and sales of the common stock. All references in the prospectus to this prospectus are hereby amended to read this prospectus (as supplemented and amended).

The date of this prospectus supplement is November 30, 2006.