

Virdia gets \$100 million to start cellulose ethanol plant

March 9 2012, by Bob Yirka



Wood to sugar hydrolysis units in Virdia's pilot plant in Danville, VA.

(PhysOrg.com) -- Despite calls for finding alternatives to using corn to make biofuel, the United States currently has no such commercial biomass-to-sugar processing plants able to do so. That may soon change as Virdia has announced that it has received \$100 million in public and private financing to build a plant in Mississippi that will convert wood chips into cellulosic sugar which it will sell to companies that make



biofuels and other chemical products.

Virdia, which has just changed its name from HCL CleanTech Inc., says that in addition to a \$75 million dollar loan and \$155 million in tax incentives from the state of Mississippi, it has also received venture capital from three companies, Tamar Ventures Khosla Ventures and Burril & Company, totaling \$20 million. The plant to be built in an as yet unknown location in Mississippi is expected to cost close to \$350 million, though estimates vary, depending on how close it can be tied to another existing facility.

Virdia, originally from Israel, has been refining a chemical process in a pilot plant near Virginia Tech (partly funded by \$9 million in federal grant money) that it says is unique in the industry. It uses virtually the same process to break down the cellulose in <u>biomass</u>, namely acid hydrolysis, as other endeavors, but instead of producing a salt based waste byproduct, the acid is recycled which brings down costs and makes a new plant far less harmful to the environment. In addition to sugar, the process also results in the production of lignin, pellets that can be sold as burning material for woodstoves or used in other chemical processes. The company says its proprietary process (CASE) is 95 to 97 percent efficient, roughly ten percent better than other processes currently in use.

Though the first plant would be relatively small, Virdia says if successful, the company plans to build another as soon as possible. Also as part of the announcement, the company said that it is also looking into ways other <u>plants</u> such as switch grass might be integrated into the process.

Using <u>wood chips</u> to make biofuels, if ramped up to produce sufficient quantities, could eventually replace <u>corn</u> as the mainstream biofuel component; a move the world would surely welcome as food prices have



risen steadily due to the increased use of corn to make fuel instead of food.

More information: Press release

© 2011 PhysOrg.com

Citation: Virdia gets \$100 million to start cellulose ethanol plant (2012, March 9) retrieved 27 April 2024 from <u>https://phys.org/news/2012-03-virdia-million-cellulose-ethanol.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.