



News Release

University of Tennessee Communications
(865-974-2225)

FOR IMMEDIATE USE
Wednesday September 19, 2007

UT BOARD APPROVES BIOFUELS BUSINESS PARTNERSHIP

KNOXVILLE - The executive committee of the University of Tennessee Board of Trustees today approved a business partnership between the university and cellulosic biofuels pioneer Mascoma Corporation to establish Tennessee as a biofuels industry leader.

The University of Tennessee and Mascoma plan to jointly build and operate a 5 million gallon per year cellulosic ethanol biorefinery in Monroe County.

The business partnership and plans for the facility are a result of the UT Biofuels Initiative, a research and business model designed to reduce dependence on foreign oil and provide significant economic and environmental benefits for Tennessee's farmers and communities.

"This partnership is a critical element in the Tennessee Biofuels Initiative, which has the potential to establish Tennessee as a national leader in ethanol production from cellulosic biomass," said UT Executive Vice President David Millhorn. "This, in turn, should lead to new business and economic development opportunities for our farmers throughout the state."

The principal product of the facility will be cellulosic ethanol – ethanol fuel derived from plant material. Unlike traditional corn ethanol, cellulosic ethanol is made from grasses such as switchgrass, wood chips and other non-food plant material.

Because it does not compete with food or feed uses, using dedicated energy crops like switchgrass to produce cellulosic biofuels on marginal crop land is widely seen as the answer to producing affordable, domestic, renewable fuel without raising food or feed costs.



News Release

When operating at full capacity, the facility will require 170 tons per day of switchgrass and other agricultural and forest biomass. An \$8 million farmer incentive program is under development to encourage local production of this new energy crop, switchgrass.

The comprehensive switchgrass program includes direct payments to farmers in advance of an established market for switchgrass. Participating farmers will receive high quality switchgrass seed for planting, as well as research and technical support related to switchgrass production.

The planned facility will be located 35 miles south of Knoxville in the Niles Ferry Industrial Park in Vonore. Pending a successful permitting process, construction is expected to begin by the end of 2007 and the facility will be operational in 2009.

"This partnership consolidates the University of Tennessee's leadership role in the development of cellulosic biofuels," said Colin South, Mascoma's president. "We look forward to our collaboration with the university as the institution possesses some of the finest scientists and research experts in the field of bioenergy. The university shares our vision that cellulosic ethanol will reduce our nation's reliance on foreign oil."

A key in the selection of the Monroe County site was the economic and agricultural development potential in the area, reflecting the agriculture-based Biofuels Initiative's goal of using ethanol production as an economic driver throughout the state, especially in rural communities.

"The site sits in the heart of a productive farming region where the agricultural community has shown interest in the biofuels effort," said Dr. Kelly Tiller, director of external operations for the UT Office of Bioenergy Programs. An economist with the UT Institute of Agriculture, Tiller is also one of the authors of the business model for the Biofuels Initiative.

"The Niles Ferry site also has all needed infrastructure to support the facility, and is close enough to Knoxville and Oak Ridge to allow easy movement by researchers and students to and from the site," Tiller explained.

The plant will be about one-tenth the size of a commercial production facility. This will allow researchers to fine-tune the operations and process used in order to create a system that can be expanded to larger plants across the state in coming years.

"Tennessee is an ideal partner for Mascoma as the first state committed to producing switchgrass as an energy crop," said Bruce A. Jamerson, Mascoma's chief executive officer. "In addition, the



News Release

leadership of the University of Tennessee and its trustees have demonstrated tremendous dedication and zeal towards the advancement of biofuel technology. We look forward to working with our new colleagues as we progress through the stages that will ultimately lead to the production and distribution of a commercial product in Tennessee."

The demonstration scale research facility is also a complement to research efforts at the Oak Ridge National Laboratory, another key partner in the state's biofuels strategy. In June, the Oak Ridge National Laboratory was awarded \$125 million from the U.S. Department of Energy to fund the Bioenergy Science Center, a research collaborative to address fundamental science and technology challenges to commercially producing cellulosic ethanol.

"The Tennessee Biofuels Initiative, through the management operations of the demonstration biorefinery, will work with investigators at Oak Ridge National Laboratory to test and validate discoveries that could lead to enhanced efficiency in the conversion of cellulose to ethanol," Millhorn said. "We view the biorefinery as a laboratory for large-scale chemistry experiments in cellulosic conversion to ethanol."

It is expected that eventually Tennessee could produce over 1 billion gallons of cellulosic ethanol a year, which could offset up to one-third of the state's petroleum usage.

A video story about the biorefinery is available online at <http://agriculture.tennessee.edu/news/>. For more information about the UT Biofuels Initiative see <http://www.UTBioenergy.org>. More information on Mascoma Corp. can be found at <http://www.mascoma.com>.

###

About Mascoma Corporation

Mascoma Corporation is a low-carbon cellulosic biomass-to-ethanol company headquartered in Cambridge, Massachusetts, with a research and development laboratory in Lebanon, New Hampshire. Mascoma is developing advanced technologies in its own laboratory, with Professor Lee Lynd at Dartmouth College's Thayer School of Engineering, by licensing "best in class" microorganisms and enzymes, and with other sponsored research around the world. It is also developing demonstration and commercial scale production facilities in several locations. For more information, visit <http://www.mascoma.com>.



MASCOMA

News Release

###

Press Contacts:

Patricia C. McDaniels, UT Institute of Agriculture
(865-974-7375, pclark@utk.edu)

Jay Mayfield, UT Media Relations
(865-974-9409, jay.mayfield@tennessee.edu)