USDA announces $80M for Washington-led research

SHANNON DININNY - Associated Press - Associated Press

The state's two large universities will lead efforts to develop biofuels and regional renewable-energy markets under $80 million grants that are among the largest ever awarded by the U.S. Department of Agriculture, the agency announced Wednesday.

The grants allow Washington State University and the University of Washington to lead research into the conversion of Pacific Northwest wood and forest residues into biofuels.

Researchers say wood biofuels have the potential to help the region recover from the loss of natural resource jobs in recent years and to use existing infrastructure, such as timber and pulp mills, to serve another regional powerhouse: the airline industry.

The University of Washington will lead a consortium of universities and businesses in a $40 million project to research converting poplar trees grown on plantations to aviation, diesel and gasoline fuels. Washington State University will lead another $40 million project to research the potential for using residual wood after logging and forest thinning for aviation fuel.

Partners in the two projects include universities, research entities and corporations, such as timber giant Weyerhaeuser and the largest poplar grower in North American, from Washington and nine other states: Oregon, Colorado, California, Idaho, New Mexico, Wisconsin, Montana, Minnesota and Pennsylvania.

"This is an opportunity to create thousands of new jobs and drive economic development in rural communities across America by building the framework for a competitively-priced, American-made biofuels industry," Vilsack said in a statement. He made the announcement at a Seattle-Tacoma International Airport terminal.

Washington Gov. Chris Gregoire praised the federal government's grant awards.

"These projects are a double win — they create much-needed jobs while encouraging innovation in biofuels and clean energy," she said. "Both are essential to combat climate change and ensure a sustainable future."

For years, much of the focus in the biofuels industry has been on developing ethanol for automobile use, but in recent months, the federal government has increased efforts to develop biofuels for other uses.

Air travel is responsible for about 3 percent of greenhouse gases. Airlines have been

seeking ways to control their fluctuating fuel costs and reduce their carbon footprint by turning to alternative fuel sources that can be interchanged with petroleum-based kerosene.

The Pentagon has pushed forward on a research project to produce algae-based biofuel, while airlines have considered options including cooking oil and a combination of coconut oil and babassu oil, which comes from a palm tree in northern Brazil.

Last month, President Barack Obama announced a partnership to invest up to $510 million over three years to produce advanced aviation and marine biofuels to power military and commercial transportation.

Keys to the success of the UW project include developing tree varieties to best suit refineries — which could include five or more biorefineries similar to a 250,000-gallon-a year demonstration project being built in Boardman, Ore. — and growing them within a reasonable distance of refineries, said Jeff Nuss, president and chief executive officer of GreenWood Resources of Portland, Ore., a key partner on the grant and the largest poplar grower in North America.

The WSU project will evaluate biofuels from planting through growing, harvest and conversion to ensure an economically viable industry, said Norman Lewis, who heads up the Institute of Biological Chemistry at Washington State University.

"We are looking at all the bottlenecks that have prevented these things from being readily converted before," he said. "We think there is potential to replace some of the natural resource jobs lost in the region in recent years."

Researchers said they also will focus on ensuring that any new technologies developed in the projects translate to viable industries, something other biofuels efforts have garnered criticism for by failing to accomplish. That means helping landowners understand if they should grow wood products for the new industry, training workers, and educating school children, college students and communities about the biofuels industry, particularly those likely to be affected by or to benefit from its development.

Production of fuels and chemicals from biomass will be a huge industrial enterprise in the future, said Richard Gustafson, a University of Washington professor of forest resources and a lead on the UW project.

"It is essential that it be sustainable from an economic, environmental and social point of view," he said. "The research lays the foundation for building a sustainable enterprise before large scale commercialization."

Overall, the five-year program announced by the Agriculture Department includes more than $136 million in research and development grants to public- and private-sector partners in 22 states.

In addition to Washington, university partners from Louisiana, Tennessee and Iowa

will lead projects to focus in part on developing aviation biofuels from tall grasses, crop residues and forest resources.

Source URL (retrieved on *07/12/2014 - 1:46am*):
http://www.chem.info/news/2011/09/usda-announces-80m-washington-led-research?qt-recent_content=0