

# Ohio Biomass Energy Program

*Promoting the development of renewable energy resources in Ohio, including wood and agricultural residues; ethanol and biodiesel biofuels; landfill gas to energy; and energy crops.*

## Ohio Biomass Task Force to Present Workshop for USDA Renewable Energy and Efficiency Grants

For Ohioans considering the installation of alternative energy projects, applying for grant funding can be a challenging process. To promote Ohio renewable energy and efficiency projects, a workshop about U.S. Department of Agriculture (USDA) grant opportunities will be held March 3 at the Ohio Department of Agriculture, located at 8995 E. Main Street, Reynoldsburg, Ohio.

The State of Ohio Biomass Task Force wants to assist potential applicants in the preparation of applications for funding under the Renewable Energy Systems and Energy Efficiency Improvements Program. This program was created in 2002 as part of the federal Farm Bill to provide assistance to farmers and rural small businesses in renewable energy installations and energy efficiency improvements.

The details of the grant program will be explained by representatives of the USDA Rural Development office and the National Renewable Energy Lab. Experts in technology areas such as solar, wind, biomass, anaerobic digestion, energy efficiency, and grant writing and preparation will participate in the workshop and be available to answer questions.

For those interested in anaerobic digestion technology projects for livestock farms or in food processing, several notable experts will be featured including:

- ◆ Richard Mattocks, Environomics, will provide information about the range of available digester systems and feasibility issues, and he will answer technical questions regarding project proposals.
- ◆ Joe Kramer, Resource Strategies, Inc., is the author of the "Agricultural Biogas Casebook" which details anaerobic digestion projects operating in the Great Lakes region. Kramer will present findings and answer questions.
- ◆ Floyd Schanbacher, Ohio Agricultural Research and Development Center, will discuss anaerobic digestion technology and answer questions.

There is no charge for the workshop, and lunch will be provided. For more information, please see the detailed agenda on page 2.

**Anyone interested in attending the March 3 workshop should RSVP to Jessica Sharp, [jsharp@odod.state.oh.us](mailto:jsharp@odod.state.oh.us), no later than Friday, February 25.**

The official solicitation for grant proposals will likely be offered in March or April 2005, with applications due later in the spring. The Web site containing last year's solicitation can be found at [www.rurdev.usda.gov/rbs/farmbill](http://www.rurdev.usda.gov/rbs/farmbill).

The workshop is being supported by the members of the Ohio Biomass Task Force and the Great Lakes Region of the U.S. Department of Energy's National Biomass State and Regional Partnership. More information can be found on the Ohio Biomass Energy Program Web site in the electricity section of [www.PUCO.ohio.gov](http://www.PUCO.ohio.gov).

### Inside this issue:

- ◆ USDA Workshop Agenda
- ◆ Loan Approved for Harrison Ethanol, LLC
- ◆ PA Adopts Laws Promoting Renewable Energy
- ◆ Agriculture Research Center Receives Third Frontier Grant
- ◆ Technology Management, Inc. Receives Federal Funding
- ◆ Save the Date: Biomass Events and Conferences
- ◆ Connect Online with Biowaste Blog

### The Ohio Biomass Energy Program

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**Governor:** Bob Taft  
**Chairman:** Alan R. Schriber  
**Commissioners:** Ronda Hartman Fergus,  
Judy A. Jones, Donald L. Mason,  
Clarence D. Rogers, Jr.



## USDA Workshop Agenda

Thursday, March 3, 2005

9:30 a.m. – 3:00 p.m.

Ohio Department of Agriculture

8995 East Main Street, Reynoldsburg, Ohio 43068

- 9:30 **Registration**
- 10:00 **Overview of USDA for Renewable Energy Systems & Energy Efficiency Improvements Grants** – Terry Walters, National Renewable Energy Laboratory
- 10:30 **Major Eligibility Requirements and the Application Process** – Jim Cogan and Randy Monhemius, USDA Rural Development
- 11:30 **Other Financial Resources and Support – Panel**  
Mark Shanahan, Ohio Air Quality Development Authority  
Debbie Rausch, USDA Rural Development  
Greg Smith, Ohio EPA  
Bill Manz, Office of Energy Efficiency
- 12:00 **Lunch** (Provided)
- 1:00 – 3:00 **Technology Group Breakout Sessions**
- Wind and Solar* –  
Dale Arnold, Ohio Farm Bureau  
Bill Spratley, Green Energy Ohio
- Anaerobic Digestion* –  
Floyd Schanbacher, Ohio Agricultural R&D Center
- Biomass/Bioenergy* –  
Rick Mazur, EISC/Center for Innovative Food Technology
- Energy Efficiency* –  
Jim Zuber, Office of Energy Efficiency
- Grant Writing and Financial Models* –  
Carolyn Watkins, Ohio EPA  
Mark Shanahan, Ohio Air Quality Development Authority

## Loan and Credits Approved for Harrison Ethanol, LLC

On January 31, 2005, Gov. Bob Taft announced that the Development Financing Advisory Council (DFAC) has approved a \$600,000 Pioneer Rural loan for Harrison Ethanol, LLC to construct and operate an ethanol facility near Cadiz, located in Harrison County. The governor also announced that the project will receive a 50 percent tax credit for seven years, valued at nearly \$480,000. The U.S. Department of Agriculture (USDA) selected Harrison for a \$500,000 Renewable Energy Systems and Efficiency Improvements grant in 2003. Harrison will use a \$70 million Ohio Air Quality Development Authority revenue bond to finance ethanol production equipment.

## Pennsylvania Adopts Laws Promoting Renewable Energy

Late in 2004, Pennsylvania Gov. Edward Rendell signed a new law that will require the state's electric utilities to obtain renewable and alternative energy sources for a percentage of their electrical supply.

The Alternative Energy Portfolio Standards Act (Senate Bill 1030) requires that by late in 2019, 8 percent of utilities' electrical supplies must be derived from "Tier One" sources including solar power, low-impact hydropower, geothermal energy, fuel cells, biomass energy, and methane gas. In addition, 10 percent of their power must come from "Tier Two" sources, defined as demand-side management, distributed generation systems, large-scale hydropower, municipal solid waste, wood manufacturing by-products, waste coal, and clean coal technologies. The bill specifically requires solar photovoltaic power to provide 0.5 percent of the state's power by late in 2019.

Most utilities will begin to phase in the requirements of the bill in two years. The Pennsylvania Public Utilities Commission will also establish a credit-trading system to help utilities meet the requirements, and fees will be set for non-compliance.

Gov. Rendell also signed Senate Bill 255, the Alternative Fuels Incentive Act, which establishes the Alternative Fuels Incentive Fund. The fund will come from a portion of revenues allocated from the utilities gross receipts tax, and will fund grants for school districts, municipal authorities, political subdivisions, nonprofit entities, corporations, LLC's or partnerships for costs associated with the retrofitting and acquisition of vehicles that use alternative fuels.

Citizens may be eligible for grants to offset the cost of home refueling equipment and/or rebates to meet the incremental costs of alternative fuel vehicles. The bill also provides for a one-time transfer of money for the 2004-2005 fiscal year to the Energy Development Fund. Funds will be used for financial assistance in the form of grants and low interest loans for research directly related to alternative energy sources and installation of stationary power facilities that use alternative energy sources to produce electric power.



## Agriculture Research Center Receives Third Frontier Grant

In December 2004, Gov. Bob Taft awarded the Ohio Agricultural Research and Development Center (OARDC) in Wooster a \$1.5 million Third Frontier Wright Project grant to benefit agricultural business. The funds will be used to develop anaerobic digester technology to provide bio-gas derived from renewable mixed biomass. This will optimize electricity generation using solid oxide fuel cells (SOFCs), a high temperature electrochemical device.

In combination, the two processes, anaerobic digestion and SOFCs, essentially turn agricultural waste into electricity with high grade heat as a useable byproduct. Ohio food processors that generate agricultural waste products could use these wastes as a feedstock to an electrical generation system, helping them save in energy costs. The project is geared toward developing a combined system which provides a value proposition to smaller agri-business operations.

In the State of the State address on February 8, 2004, Gov. Taft noted the Third Frontier Grant to OARDC as an example of Ohio's effort to promote technology development in the state.

Gov. Taft, Lt. Governor Bruce Johnson, and Agriculture Director Fred Dailey toured the OARDC facility and heard a presentation by OARDC animal-science researchers and representatives from Frito Lay on the anaerobic digester system.

"From increasing crop yields to finding new uses for agricultural products, technology has always been an important factor in agriculture," Taft said. "I am pleased we are able to offer the OARDC a \$1.5 million Third Frontier Grant to benefit agri-business while developing a revolutionary alternative energy source."

Floyd Schanbacher, OARDC professor and member of the Ohio Biomass Task Force, is principal researcher for the project. The Third Frontier grant was one of nine grants totaling \$10.6 million awarded by the Ohio Department of Development. OARDC and its collaborators, including Technology Management, Inc. (TMI) of Cleveland and New Bio, LLC of Hopkins, Minnesota will be using the grant to aid in the commercialization of biomass technology.

In January, Gov. Taft, along with Senate President Bill Harris (R-Ashland) and Speaker of the House Jon Husted (R-Kettering) announced the introduction of a resolution to provide a stable funding source for the successful Third Frontier Program and invest again in local public works projects. The Ohio House and Senate bills will ask Ohio voters to authorize the use of state bond monies to foster job creation, economic

development and commercialization of science and technology-based research and development in the state.

The Third Frontier project is the state's largest-ever commitment to expanding Ohio's high-tech research capabilities and promoting innovation and company formation to create high-paying jobs for Ohioans now and into the future.



Gov. Bob Taft listens to Dr. Steven Slack, Director of OARDC, explain the anaerobic digester technology.

## Technology Management, Inc. Receives Federal Funding

In 2004, Technology Management, Inc. (TMI) of Cleveland achieved a significant federal funding award. Last year, the Department of Energy (DOE) and USDA announced the selection of 22 projects that will receive more than \$25 million for the Biomass Research and Development Initiative, which funds biomass research, development, and demonstration projects.

Technology Management, Inc. (TMI) of Cleveland was awarded a \$965,161 grant for a project to demonstrate a 1 kilowatt (kW) modular solid oxide fuel cell (SOFC) power generation system regarding fuel cell systems operating on biodiesel and ethanol biofuels. The systems may also be scaled up to 10-20 kW by adding system modules in parallel. The system has the potential to produce power in distributed generation, or on-site and off-grid, rural applications with added benefits of low emissions, energy security, and reduced dependence on fossil fuels.

### Contact the Ohio Biomass Energy Program

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[www.PUCO.ohio.gov](http://www.PUCO.ohio.gov)

Sign up for our electronic listserv to receive other Biomass news and announcements.

# Save the Date: Biomass Events and Conferences

## Ohio Hybrid Cars and Clean Fuels Day

March 1, 2005, 11 a.m.

The Ohio Statehouse, Columbus, Ohio

Sponsored by Senator Mark Mallory (D-Cincinnati)

This special event will focus attention on hybrid electric vehicles and alternative fuel sources including biodiesel, ethanol, propane, and natural gas, as well as other electric vehicles and technologies.

## Renewable Energy Grant Writing Lecture

March 19, 2005, 10 a.m. to noon

Owens Community College

Sponsored by Green Energy Ohio

For more information about the lecture, contact [Jessica@greenenergyohio.org](mailto:Jessica@greenenergyohio.org).



## The Ohio Fuel Cell Coalition 2005 Annual Symposium

May 10-11, 2005

Cleveland State University Convocation Center

[www.fuelcellsOhio.org](http://www.fuelcellsOhio.org)

Register by visiting [www.cesnet.org](http://www.cesnet.org).

## Green Energy Ohio 5th Annual Meeting

May 14, 2005

Bowling Green Wind Farm

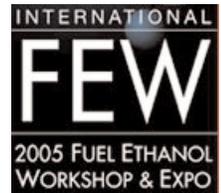
[www.greenenergyohio.org](http://www.greenenergyohio.org)

## 21st Annual International Fuel Ethanol Workshop and Expo

June 28 – July 1, 2005

Kansas City, Missouri

[www.fuelethanolworkshop.com](http://www.fuelethanolworkshop.com)



## 27th Symposium on Biotechnology for Fuels and Chemicals

May 1-4, 2005

Denver, Colorado

Sponsored by the U.S. Department of Energy

[www.eere.energy.gov](http://www.eere.energy.gov)

A great opportunity for biomass experts to collaborate and discuss the latest research findings in the industry.

## Connect Online with Biowaste Blog

A new biowaste blog and online discussion site has been launched by Making Change, an organization promoting economic development in northeast Ohio, in conjunction with the Center for Regional Economic Issues, at the Weatherhead School of Management, Case Western Reserve University. The biowaste blog is available online at [www.makingchange.typepad.com/biowaste](http://www.makingchange.typepad.com/biowaste).

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