



## Ohio Biomass Energy Program

*Newsletter – Fall 2001*

**\$ Funding Issue \$**

The Ohio Biomass Energy Program is pleased to bring you this edition of our newsletter in which we explore available funding assistance for biomass projects in Ohio.

The 2001 start of retail electric competition in Ohio has created new opportunities for diversifying the energy supply mix. Energy from renewable resources including biomass can provide numerous environmental and socio-economic benefits. The environmental benefits include reduction of greenhouse gases, air pollutants, landfill wastes, as well as efficient use of municipal, industrial and farm wastes. The development of biomass

resources can also stimulate economic growth in rural/farm areas, increase domestic energy resources, and provide "green power" options in the competitive electric market.

For more information on Ohio Electric Choice, please visit:

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

Please check the Biomass Energy website periodically for a current listing of funding opportunities:

[www.puc.state.oh.us/OHIOUTIL/BiomMass/biomass.html](http://www.puc.state.oh.us/OHIOUTIL/BiomMass/biomass.html)

### Great Lakes Regional Biomass Energy Program Solicitation

The Great Lakes Regional Biomass Energy Program issues an annual Request for Proposals (RFP) for funding of biomass development projects in the region. The RFP, contingent upon the availability of federal appropriations, targets projects in the area of liquid biofuels and biomass power. The solicitation is usually made in the spring, and the requirements of the RFP may be viewed on our website. The Ohio Biomass Energy Program encourages potential proposers to begin thinking now about projects for the 2002 solicitation, and to contact us to discuss potential projects.

For this year's RFP, we are happy to report that Ohio submitted the highest number of proposals in the region. The maximum award for 2001 was \$40,000, with a minimum 1:1 match. KB Compost Services, Inc. of Independence, Ohio was one of the four grant recipients selected this year. This



company will use an anaerobic digesting system for garden center waste materials to produce power and other useful products such as compost and liquid fertilizers.

Please check the Great Lakes' website:

[www.cglg.org/projects/biomass/index.html](http://www.cglg.org/projects/biomass/index.html)

## State Tax Exemptions for Solid Waste and Energy Conversion Facilities or Thermal Efficiency Improvements

Tax incentives for energy conversion, thermal efficiency improvement, and solid waste energy conversion facilities were made available in 1978 through state legislation. (See sections 5709.45 to 5709.52 of the Ohio Revised Code. This information may be obtained electronically: [www.legislature.state.oh.us/laws.cfm](http://www.legislature.state.oh.us/laws.cfm))

Facilities for which a tax certificate is issued are exempt from 1) the real property taxation for improvements on the land on which the facility is located, 2) personal property taxation, and 3) the franchise tax as an asset of any corporation in determining the

value of its issued and outstanding shares for the value of the property owned and used by it in the state.

Applications for energy conversion, solid waste energy conversion, or thermal efficiency improvement certificates for such facilities are made to the State of Ohio Department of Taxation and require the recommendation of the Director of the Ohio Department of Development.

**Contact:** Mr. John Greenway, ODO  
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e-mail: [jgreenway@odod.state.oh.us](mailto:jgreenway@odod.state.oh.us)

To determine eligibility, the law includes the following definitions:

- (A) "Energy conversion" means
  - (1) The conversion of fuel or power usage and consumption from natural gas to an alternate fuel or power source, other than propane, butane, naphtha, or fuel oil;
  - (2) The conversion of fuel or power usage and consumption from fuel oil to an alternate fuel or power source, other than natural gas, propane, butane, or naphtha.
- (B) "Energy conversion facility" means any additional property or equipment designed, constructed, or installed in a commercial building or site or in an industrial plant or site necessary for the primary purpose of energy conversion.
- (C) "Thermal efficiency improvement" means the recovery and use of waste heat or waste steam produced incidental to electric power generation, industrial process heat generation, lighting, refrigeration, or space heating.
- (D) "Thermal efficiency improvement facility" means any property or equipment designed, constructed, or installed in a commercial building or site or in an industrial plant or site for the primary purpose of thermal efficiency improvement.
- (E) "Solid waste" means such unwanted residual solid or semi-solid material as results from industrial operations, including those of public utility companies, and commercial, distribution, research, agricultural, and community operations, including garbage, combustible or noncombustible, street dirt, and debris.
- (F) "Solid waste energy conversion" means the conversion of solid waste into energy and the utilization of such energy for some useful purpose.
- (G) "Solid waste energy conversion facility" means any property or equipment designed, constructed, or installed in or on a commercial building or site, an industrial plant or site, or an electric light, gas, or natural gas company plant or site for the primary purpose of solid waste energy conversion.



### Ohio Air Quality Development Authority

The Ohio Air Quality Development Authority (OAQDA), a state agency, and its related program, The Clean Air Resource Center (CARC), provide financing options for projects involving air pollution control or air



### Clean Air Resource Center

pollution prevention, as well as projects that will improve a company's energy efficiency and energy conservation efforts. Projects financed through OAQDA and the CARC are exempt from Ohio's real property tax

assessment for the life of the loan, Ohio's tangible property tax, and the sales and use tax for purchase of equipment to reduce air pollution. The Clean Air Resource Center (CARC) is the small business program of the Ohio Air Quality Development Authority, and provides Ohio's small businesses with technical assistance in meeting EPA air quality regulations. In addition to the loans, the CARC provides small business grants to cover the closing costs of financing pollution control projects.

The OAQDA is actively exploring a number of biomass projects and has recently approved a landfill gas to energy project, a landfill-based methanol and liquid carbon dioxide plant, and a landfill-based ethanol plant.

For more information, please visit their website: [www.ohioairquality.org/](http://www.ohioairquality.org/)

**Contact:** Mark R. Shanahan or Mike Suver, (614) 224-3383

## The Ohio Energy Efficiency Revolving Loan Fund

The Energy Efficiency Revolving Loan Fund was established by the General Assembly under the electric restructuring legislation in Sections 4928.61-4928.63 of the Ohio Revised Code. The loan fund is financed through a rider on the electric bills of the customers of the five investor owned electric utilities in the State. Collections began on January 1, 2001. The utilities will remit the funds to the Ohio Department of Development on a quarterly basis. The Loan Fund totals approximately \$15 million per year. The participating utilities are First Energy, American Electric Power, Dayton Power and Light, Cinergy (Cincinnati Gas and Electric), and Monongahela Power (Allegheny Power). Individuals or businesses within the territories of these companies are eligible to apply for loans under this Fund.

The first program under the Loan Fund, the Rental Housing Linked Deposit Program,

was launched in January as part of the Ohio Housing Finance Agency "Housing Credit Allocation Plan". Applications were received in March and OHFA announced the Housing Credit Allocations the last week of June. Twenty-six of the successful projects have chosen to meet the energy standards and use the Loan Fund linked deposit program. The projects will create 1,106 affordable units that are generally 30 percent more energy efficient than required by the current State Energy Code, using just over \$5 million from the Loan Fund.

The Department of Development's Office of Energy Efficiency is developing the guidelines, procedures and documentation for implementation of three additional targeted programs for the Loan Fund. Low interest loans will be provided in partnership with local banks through linked deposits and loan participation.

Preliminary plans are to facilitate low interest loans for energy efficiency and renewable energy projects serving the following:

- **Business/Institutional facilities** **September 2001**  
(energy efficiency and renewable energy for buildings and equipment)
- **Energy Home Improvements** **October 2001**  
(focusing on Energy Star products and standards and residential renewable energy)
- **Renewable Energy Projects** **September 2001**  
(such as solar, wind, geothermal, biomass including landfill methane, micro hydropower, etc.)

**Loan Fund Administrator:** Judy Jones, (614) 466-8139, [jsjones@odod.state.oh.us](mailto:jsjones@odod.state.oh.us)

## DOE Awards Funds for Bioenergy Development

The Department of Energy (DOE) recently announced that it will invest \$30 million over the next three to five years in 11 projects intended to develop process technology to create various products using plant matter and other natural waste materials. Funds will also be used to establish university education and training programs in the area of bioproducts.

"Producing marketable industrial products out of plants saves energy, saves nonrenewable resources and creates jobs," said DOE secretary Spencer Abraham. "The bioenergy and bioproducts fields hold tremendous potential for environmentally desirable manufacturing and the creation of new jobs in the farm belt."

DOE said it will provide \$5 million for a project to develop the collection, commercial processing and utilization of corn stover. Partners in the project include Biomass Agri-Products, Iowa State University, Midwest

Labs and Cargill Dow. Private funding for the project will be \$5 million.

The agency noted that three education grants were awarded to establish multi-disciplinary education and training for graduate students in the area of bioproducts technologies. The grants will help fund the establishment of "cross-cutting multi-disciplinary academic and research programs and provide stipends for deserving graduate students."

DOE will also provide \$7.3 million for a project focused on biomass biorefinery for production of polymers and fuel. Partners in the project include Metabolix, Inc., the University of Tennessee, the University of Central Florida and the University of Massachusetts.

**Contact:**

Chris Kielich, DOE. Phone: (202) 586-5806

## Taft Announces Support for Ethanol Production in Ohio Announcement Made at 39th Annual Farm Science Review

On September 18, Governor Bob Taft announced that he would support legislation and economic development incentives to help farmers build an ethanol plant in Ohio. The announcement was made at the Farm Science Review in London, Ohio. "Ohio is one of the country's top-consumers of ethanol, yet, none of our ethanol is produced here. This needs to change," Taft said. "I want to help farmers build an ethanol plant here in Ohio, where our farmers can benefit from our increased ethanol use."

Speaking to a group of approximately 600 farmers and agriculture advocates, Taft outlined the following steps his administration would take to help Ohio Farmers build an ethanol plant including:

- Seeking legislation to make changes to allow the Air Quality Development Authority to provide special funding and tax reductions;

- Providing incentives such as low-interest and tax-free bonds, site improvement assistance, machinery/equipment tax credits, and water development assistance; and
- Exploring providing tax credits to farmers to encourage their investment and allow them to have an equity position in an ethanol plant.

In addition to the economic, environmental and agricultural benefits of ethanol production, Taft noted the by-products created in producing ethanol in Ohio will provide even more opportunities for Ohio's corn growers. The resulting dried distilled grain would be an affordable form of feed for our state's livestock and poultry producers, and the carbon dioxide resulting from the production process could be sold to Ohio's many soft drink bottling and dry ice companies.

Taft's support for ethanol builds on his support for other value-added agricultural initiatives. By the end of this year, the Ohio Department of Transportation will have used 313,000 gallons of soy diesel in their fleet of heavy trucks and vehicles, and the department expects to spend more than \$500,000 on soy diesel per year.

The Molly Caren Agricultural Center is home to the three-day Farm Science Review,

featuring 600 commercial and educational exhibits for farm and related professions, including The Ohio Biomass Energy Program's display. The annual Review is organized by The Ohio State University's College of Food, Agricultural and Environmental Sciences.

Web: [www.ag.ohio-state.edu/~ofsr](http://www.ag.ohio-state.edu/~ofsr)

## Ethanol Grant to Putnam County Group



Photo: A commercial ethanol (E-85) pump in Hilliard.

Congratulations go to The Ohio Ethanol Steering Team of Putnam County that will receive a \$5,000 grant from the U.S. Department of Energy to support the cost of developing a business plan for an ethanol production plant in Ohio. The proposal was submitted at the behest of the Ohio Biomass Energy program.

Corn producer interest in developing Ohio ethanol production was kindled by participation in an ethanol workshop held in Columbus, Ohio on May 10, 2000 sponsored by The U.S. Department of Energy Regional Biomass Energy program. Ohio is a major corn producing state and one of the largest consumers of ethanol, yet it has no ethanol plants. The Ohio Corn Growers Association and the Ohio Corn Marketing Program are working hard to encourage the development of ethanol production in Ohio.

**Contact:** Dwayne Siekman, (740) 382-0483 or visit [www.ohiocorn.org](http://www.ohiocorn.org)

## State Renewable Fuel Legislation

House Bill 284 was introduced on 6/5/01 and sponsored by Representative Faber. Senate Bill 144 was introduced on 7/10/01 and sponsored by Senator Mumper. H.B. 284 would allow nonrefundable credits against the corporate franchise and personal income tax for the production of renewable liquid fuels such as ethanol and biodiesel. S.B. 144 would create the Ethanol Production Grant Program and create a tax

credit against corporation franchise or income tax liability for investments in ethanol. For copies of the legislation, go to:

[www.legislature.state.oh.us/bills.cfm?ID=124](http://www.legislature.state.oh.us/bills.cfm?ID=124) SB 144 and

[www.legislature.state.oh.us/bills.cfm?ID=124](http://www.legislature.state.oh.us/bills.cfm?ID=124) HB 284

## Funding Opportunities under Climate Change Programs



*"...to protect human health and to safeguard the natural environment..."*

U.S. EPA's State and Local Climate Change Program recently announced the addition of funding information to its Global Warming Web site. The new pages describe various funding sources for projects that involve the reduction of greenhouse gas emissions. The site is geared toward programs that provide assistance to individuals, community groups, small businesses, nonprofits, state and local government, and tribes. The pages list funding available from EPA, the U.S. Department of Energy, U.S. Department of Agriculture, U.S. Department of Transportation, various state agencies, and private foundations. Each entry includes the program title, sponsoring agency, program description, amount of funding available, eligibility requirements, application deadline, online information, and contact information. The funding section also includes references for additional sources of funding, information about the federal grant process, tips for

writing applications, and other related topics. The new page is available at:  
[www.epa.gov/globalwarming/funding/](http://www.epa.gov/globalwarming/funding/)

It is also available as a sidebar button from the EPA Global Warming site homepage,  
[www.epa.gov/globalwarming/](http://www.epa.gov/globalwarming/)

For information about climate change for public officials visit the EPA's global warming site:

[www.epa.gov/globalwarming/visitorcenter/publicofficials/](http://www.epa.gov/globalwarming/visitorcenter/publicofficials/)

EPA's site covers a wealth of topics including the climate system, state greenhouse gas emissions, impacts of climate change on our states and cities, and innovative voluntary actions that can be taken at the state and local levels to curb global warming while reducing pollution and saving money.



### Green-e in Ohio

In August, the non-profit Center for Resource Solutions adopted new Green-e certification standards for green electricity offerings sold in Ohio. The Green-e logo will now appear next to certified renewable power offerings that meet strict environmental and consumer protection standards.

To be eligible for Green-e certification, at least half of an electricity product's energy supply must come from renewable resources such as wind, solar, geothermal, biomass or small hydro. The product must also contain an increasing percentage of new renewable resources each year. Any non-renewable portion of the product must be as clean or cleaner than the traditional

power mix and none of the electricity for the product can be purchased directly from a nuclear facility. The Center for Resource Solutions verifies that companies are meeting their requirements through an annual verification process by an independent auditor. In addition, Green-e staff conduct a semi-annual review of product marketing materials to ensure companies are adhering to Green-e's Code of Conduct.

For more information, please visit the following sites:

[www.resource-solutions.org](http://www.resource-solutions.org) and  
[www.green-e.org](http://www.green-e.org)

## Siting of Waste Facilities

Questions about the siting of potential biomass waste-to-energy facilities should be addressed to The Ohio Power Siting Board (OPSB). The Board certifies electric generation plants with a capacity of 50 MW or greater. Solid waste facilities as defined in

section 6123.01 of the Ohio Revised Code may not be subject to Ohio Power Siting Board rules. For additional information, see the OPSB website:

[www.puc.state.oh.us/pubrel/opsb/index.html](http://www.puc.state.oh.us/pubrel/opsb/index.html)

## Department of Energy's SBIR/STTR

The U.S. Department of Energy announces its intent to request applications for the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs. RFP expected to open on or about 10/15/01 and close 1/15/02. Small businesses (500 employees or less) are invited to apply.

Areas of interest include (but not limited to): Bioproducts and Bioenergy Research, Oil and Gas Technologies, Novel Approaches to Thin-Film Solar Cells, Battery Technology

for Electric and Hybrid Vehicles, Integrated Systems for Energy-Efficient Space Conditioning, Improved Blades, Towers, and Power Electronics Technology for Wind Turbines, Advanced, and Carbon Cycle Measurements of the Atmosphere and the Biosphere. Approximately 200 SBIR and 15 STTR agreements expected, up to \$100K available per award for Phase I.

**Contact:** Julie Scott, DOE, at 301-903-0569  
Visit: <http://sbir.er.doe.gov/sbir>  
Refer to Sol# DOE SC/0039. (CBD 9/18/01)

## Please Visit Our Website

[www.puc.state.oh.us/OHIOUTIL/BioMass/biomass.html](http://www.puc.state.oh.us/OHIOUTIL/BioMass/biomass.html)

The Ohio Biomass Energy program maintains a website with a wealth of program and state biomass resource information. The site features the latest in biomass energy projects and applications in Ohio, in addition to information about the program, funding opportunities, Ohio's electric restructuring law, and links to other related sites.

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