

## ENERGY TIDBITS – June 2010

Two New Centers of Energy Excellence (COEE) for wind manufacturing have been announced by Governor Granholm. The Michigan Strategic Fund board approved a COEE designation and \$3.5 million in funding for Energetx Composites, the Holland-based spin-off of S2 Yachts, which will collaborate with Oak Ridge National Laboratory and Dow Chemical to manufacture wind turbine blades with advanced materials. The project will receive \$3.5 million in matching funds from DOE. The MSF also approved a COEE designation and \$6 million in funding for Astraeus Wind Energy, a cooperative venture between MAG Industrial Automation Systems and Dowding Machining, also in collaboration with ORNL and Dow Chemical. The center will be focused on the automated manufacturing of wind turbine blade components using advanced materials. The project will receive \$7 million in matching funds from DOE. [www.MichiganAdvantage.org/COEE](http://www.MichiganAdvantage.org/COEE).

Great Lakes Renewable Energy Association (GLREA) has announced that the Rock Financial Showplace in Novi will be the site for the 5th annual Michigan Energy Fair, taking place June 25<sup>th</sup> – 27<sup>th</sup>. The Fair will include 60 or more workshops and over 100 exhibits. If you want to learn about energy efficiency and renewable energy, come to the Fair. [www.glrea.org](http://www.glrea.org)

51st State of the State Survey conducted by the MSU Institute of Public Policy and Social Research shows that 95% of Michigan residents believe the development of renewable energy is "very important" or "somewhat important" to the state's collective economic recovery. The MSU Land Policy Institute is translating the results of the survey conducted in early 2009 through a series of bulletins including "How Important is the Development of Renewable Energy to Michigan's Economy Recovery?"

Merrill Tool & Machine is supplying components to Northern Power Systems for a new utility scale 2.2 MW direct drive, permanent magnet wind generator. In January the company secured \$22 million in federal advanced energy manufacturing tax credits under ARRA which allowed the company to purchase equipment to make the components.

Michigan USDA Rural Development Agency will have approximately \$11.4 million in total funding available through the Renewable Energy for America Program (REAP) for FY2010. \$1 million will be available for grant requests greater than \$20,000 and \$830,000 will be available for grants less than \$20,000. \$9.6 million will be available for guaranteed loans. Grants provide 25% funding for energy efficiency and renewable energy projects. Applications are due June 30, 2010. Contact USDA Rural Development Business Programs at (517) 324-5157. Federal Register notice is at <http://edocket.access.gpo.gov/2010/pdf/2010-9580.pdf>

Michigan State University students majoring in packaging, business, anthropology, or a host of other disciplines will now be able to earn a specialization in sustainability. The program is the first in the country that will use a "competency-based curriculum," which will demand more from its students than just the taking and passing of classes. The

specialization will provide students with practical experience, e.g. service/learning projects, undergraduate research, leadership of a student organization, or producing an educational video. The specialization will require 18 credit hours of study that will appear on students' official transcripts and complement their majors.

[www.reg.msu.edu/AcademicPrograms/ProgramDetail.asp?Program=5333](http://www.reg.msu.edu/AcademicPrograms/ProgramDetail.asp?Program=5333).

Proposed LEED state tax incentives, Senate bills 1111-1114, would create two financial incentives for building green. The first would be a property tax abatement of up to 12 years for new or rehabilitated LEED buildings — 20% for basic LEED certification, 30% for silver, 40% for gold and 50% for platinum. The second incentive is a tax-increment financing program for LEED-certified buildings with eligible sustainability features on eligible brownfield sites.

Dow Chemical Co. has partnered with Cobblestone Homes, a mid-Michigan home builder, to create a home that it contends will eliminate utility bills. The 3,400-sq.ft. "Vision Zero" home in Bay City will produce as much energy as it consumes using Dow products, from Styrofoam to insulate the basement to Powerhouse Solar Shingles to generate power. The house will use 60-70% less energy than a conventional home.

Ventower Industries had groundbreaking for a new wind tower manufacturing facility at the Port of Monroe. Manufacturing is expected to begin in March 2011 with a capacity of 250 towers per year. Shipments to customers are expected to be primarily by barge.

BuildUp Michigan Design Challenge has been won by the Lansing Community College Mac-Zero team who beat out six other teams. The winning design is a 3,075 sq.ft. Victorian-style house, lathered in solar panels according to team member Jeromy Clements. The team is working with competition organizers to get funding to build the "net-zero" home on Mackinac Island in the fall.

<http://www.wilx.com/local/headlines/93203849.html>

Metro Detroit's transformation to a smart grid got a big boost when DOE gave DTE Energy an \$84 million grant to improve Metro Detroit's electric grid. DTE will match the grant, bringing the SmartCurrent's budget to \$170 million. It will take 6-8 years to make the switch to a smart grid. Part of the smart grid switch will include installing 600,000 new smart meters in parts of Wayne, Oakland, Livingston, Lapeer, Ingham, and Tuscola counties. These meters allow for easier access to energy usage information through wireless communications. This and other technologies are expected to improve electrical service reliability and give better control of energy consumption and costs.

Wayne State University is adding a B.S. in Electric Transportation Technology, a M.S. in Electric-Drive Vehicle Engineering and a graduate certificate program in Electric-Drive Vehicle Engineering, a subset of the master's degree. The program is funded by a \$5 million grant from DOE through the American Recovery and Reinvestment Act.

University of Michigan will receive a \$760,550 grant from Bureau of Energy Systems, DELEG to establish the Michigan Industrial Energy Center (MIEC). The three year

project for delivering energy savings to energy intensive industries in Michigan is funded by a DOE grant. The MIEC will offer an intensive energy education and certification program for current and future industrial energy managers, assist industries by conducting 25 Save Energy Now assessments, and help deploy energy-efficient furnace technology at two industrial demonstration sites. For more information contact Dr. Arvind Atreya at 734-647-4790 or [aatreya@umich.edu](mailto:aatreya@umich.edu).

Department of Natural Resources and Energy (DNRE) oil and gas lease auction held in May netted \$178.3 million -- a one-day sale that nearly matched the \$190 million in total combined sales since the auctions began in 1929.

Michigan State University's dairy barn at the Kellogg Biological Station has been silver-level LEED-certified—the first agriculture facility to earn the honor in the US. A few of the environmentally friendly features include a recycled concrete driveway and temperature sensors to take advantage of natural ventilation. The design includes installing showers (to encourage employees to bike or walk to work) and offering preferred parking to visitors with energy-efficient vehicles.

Kalamazoo Valley Community College will be offering for the third time a course where students design a 1-3 kW wind turbine, fabricate its components, assemble the generator, and make certain it produces electricity. Planning is underway to locate and commission the two turbines that were the products of the first classes. The sites will be in the vicinity of the 145-foot turbine in operation on the west end of the KVCC campus. [www.kvcc.edu/schedule](http://www.kvcc.edu/schedule).

University of Michigan will receive \$4.3 million from DOE to pursue new nuclear energy technologies. The university's funding is split into \$1,181,379, \$996,581 and \$406,712 for separate research projects designed to develop next-generation nuclear reactors, \$931,603 to research better ways to store, recycle and dispose of radioactive waste materials, and \$798,943 for "blue sky" projects focusing on futuristic nuclear energy technologies.

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