

## ENERGY TIDBITS – January 2010

Five Small Manufacturers in Michigan have been awarded \$15.5 million in American Recovery and Reinvestment Act funds to help them diversify into manufacturing of renewable energy systems and components. The federal stimulus funds will enable the companies to create and retain 713 jobs over the next two years. The five companies were among nearly 80 companies who submitted applications to Bureau of Energy Systems requesting nearly \$198 million. The grantees are: Astraeus Wind Energy (Eaton Rapids) \$7 million to manufacture advanced-composite wind turbine blades and hub-related components; Energetx Composites (Holland) \$3.5 million to manufacture advanced-composite wind turbine blades; Loc Performance Products (Plymouth) \$1.5 million to manufacture planetary gears and gearboxes; Luma Resources (Rochester Hills) \$.5 million to manufacture products for the residential photovoltaic solar market; and Merrill Technologies Group (Saginaw) \$3 million to manufacture advanced-composite wind turbine blades and system components.

Green Venues Michigan, a statewide “green” certification program for entertainment venues, convention centers, and similar facilities, has been launched by the Bureau of Energy Systems to encourage and assist facilities to adopt cost saving, green practices. The Green Venues Michigan program was modeled after DELEG’s successful Green Lodging Michigan program. Four venues have received the Green Venues Michigan certification as part of a pilot project: Michigan International Speedway, Detroit Institute of Arts, Pierce Cedar Creek Institute, and Grand Valley State University's L.V. Eberhard Center. The four received their certificates at an award ceremony at the Detroit Institute of Arts on Dec. 15. Go to [www.michigan.gov/eobnp](http://www.michigan.gov/eobnp) and look under Programs.

Urban Options is now Michigan Energy Options! Check out their new website at [www.MichiganEnergyOptions.org](http://www.MichiganEnergyOptions.org). There are many new features including an Optimization Incentives Map to help home owners, business owners and low income families get tuned into incentives in their area.

American Process Inc. has been awarded a \$16 million stimulus grant from the U.S. Dept. of Energy to build a refinery in Alpena that will produce biofuels. The biorefinery will convert processed wood from Decorate Panels International to cellulosic ethanol and potassium acetate. The project will go online in 2011 and bring 160 jobs to the Alpena area.

Greg White has been appointed to the Michigan Public Service Commission by Governor Granholm. White, of Grand Rapids, most recently served as the MPSC legislative liaison and has been with the agency for 22 years. White, an independent, is appointed to the Commission for a term expiring July 2, 2015.

Clean Energy Coalition has announced the launch of the area's first community supported energy project. With the help of community donations, a publicly accessible solar panel array will be installed in the Ann Arbor area in mid-2010. Proceeds from financial incentives and donations will be recycled back into a "Solar Bank" to fund ongoing solar

installations. The CEC intends to use the visibility and community support of the project to catalyze widespread adoption of solar energy technology. [www.cec-mi.org/PROGRAMSSERVICES/XSeedEnergy/tabid/118/Default.aspx](http://www.cec-mi.org/PROGRAMSSERVICES/XSeedEnergy/tabid/118/Default.aspx)

Great Lakes Renewable Energy Association (GLREA), representing 2,500 members, met on Dec. 12th to elect GLREA Board Members and honor individual and industry contributions. MPSC Commissioner Monica Martinez received the Leader of the Year Award. Additional Award recipients were the GLREA Appreciation Award: Jane Vogel; Business Leadership Award: A3C; Exemplary Project Award: Consumers Energy's Experimental Advanced Renewable Program; and Individual Commitment Award: Tom Stanton, Michigan Renewable Program Coordinator, MPSC.

Decker Homes has completed their 5th PV installation, a 4 kW solar array on their new horse stable in Temperance. There are twenty 198 watt Sharp panels on the roof of the stable that will generate an average of 420 kWh's a month. The power generated from the system is being purchased by Consumers Energy through the new experimental feed in tariff program at 65 cents a kWh for 12 years.

Detroit Metropolitan Airport will further reduce its use of fossil fuels by producing its own wind energy at two locations on opposite ends of the facility. The Wayne County Airport Authority Board approved a contract with Michigan-based Southern Exposure Renewable Energy Co. to install five Windspire vertical-axis wind turbines at the airport. The turbines are manufactured by MasTech in Manistee.

Green Building Policy has been approved by the City of East Lansing. The policy makes East Lansing the first community in Michigan to condition economic development incentives on LEED certification. The new Green Building Policy also encourages other green building practices such as ENERGY STAR and low impact design.

First Contract for beaming solar energy from space has been approved by the California Public Utilities Commission. PG&E will receive solar energy generated by Solaren Corp's orbiting satellites through a long term power purchase agreement. Solaren says it can provide 1700 GW-hours of energy a year for the 15-year contract, which starts in 2016. Once the 200 MW solar plant is hoisted into space it has the advantage of 24-hour sunlight. Solar cells in space would capture about five times more energy as that on earth. A mylar mirror, about a kilometer in diameter, would be inflated and float freely once it reach its orbit. Sunlight would be concentrated onto smaller mirrors, which would focus the light on PV modules. The resulting electricity will be converted into radio frequency energy that's transmitted to a receiver station on the ground.

Ann Arborites Matt and Kelly Grocoff launched Greenovation.TV- the world's first Internet TV channel dedicated to green home improvements – last Earth Day. Greenovation aims to be a one-stop shop site with original programming, how-to videos, and viewer-created videos where viewers can share their own "Green It Yourself" projects. <http://greenovation.tv/>

Bioeconomy Workshop will be held at Saginaw Valley State University on January 14, 8:30-4:15. The workshop will help manufacturers better understand their opportunities in the emerging bioeconomy supply chain, and enable them to make connections with bioeconomy product and project developers. For more information, contact Linda Haas at 989.964.7015 or [lhaas@svsu.edu](mailto:lhaas@svsu.edu).

Expert Panel established by the American Wind Energy Assoc. & Canadian Wind Energy Assoc. has concluded that the sounds generated by wind turbines are not harmful to human health. Composed of medical doctors, audiologists, and acoustical professionals from the U.S., Canada, Denmark, and United Kingdom, the panel engaged in an extensive review, analysis, and discussion of the large body of peer-reviewed literature on sound produced by wind turbines. Robert J. McCunney, one of the study authors and an occupational/environmental medicine physician and research scientist at MIT indicated "There is no evidence that the sounds, nor the sub-audible vibrations, emitted by wind turbines have any direct adverse physiological effects on humans." In one section, the report put the sound issue in perspective stating that if sound levels from wind turbines were harmful, it would be impossible to live in a city given the sound levels normally present in urban environments. The report also found that sub-audible, low-frequency sound and infrasound from wind turbines do not present a risk to human health.

GE Energy Financial Services (GEFS) and three other venture capital firms are making a combined \$13.2 million investment in Danotek Motion Technologies to bring to market a next generation, permanent-magnet generator for wind turbines. The investment enables Danotek to expand research and development, install utility-scale load testing equipment, hire and train workers, and launch production of 4,000 permanent-magnet generators annually. The company expects that it will begin production and shipping of utility-scale generators (up to 3 MW) in the third quarter of 2010. In June Danotek celebrated the opening of its Canton, facility that will produce generators for wind turbines. The 40,000 sq.ft. facility will be home to 150 professional and skilled jobs.

Energy Tidbits is free and is prepared by John Sarver, Michigan Dept. of Energy, Labor, & Economic Growth. To subscribe, contact [sarverj@michigan.gov](mailto:sarverj@michigan.gov). Previous copies can be found at [www.michigan.gov/energyoffice](http://www.michigan.gov/energyoffice) under Publications.