

Michigan Wind Energy Manufacturing Working Group Member Update – December 2008



NextEnergy is the lead organizer of the Michigan Wind Energy Manufacturing Working Group with the support of the Michigan Economic Development Corporation, Michigan Public Service Commission, Michigan State Energy Office, Michigan Manufacturing Technology Center and Western Michigan University. The mission of this group is to advance the capacity and capabilities in the state of Michigan for designing, engineering, and manufacturing wind systems. This group allows wind turbine companies and the skilled Michigan manufacturing supply chain to establish mutually beneficial relationships to help improve the efficiency of wind energy systems and the state's manufacturing infrastructure to support growth in the North America. Contact Dan Radomski at NextEnergy to get involved at 313-833-0100 ext. 150 or danr@nextenergy.org

SPONSOR MESSAGE:

The Michigan Wind Energy Manufacturing Working Group is sponsored by Charter One: Managing a successful company in today's global marketplace requires connections, vast resources and experience. Backed by the strength of our corporate parent RBS (The Royal Bank of Scotland Group plc), one of the world's leading financial services providers in over 50 countries, Charter One delivers a full range of solutions that help you stay competitive. www.charterone.com Contact Susan Leithauser, Vice President, Commercial Middle Market Banking at (248) 226-7822 susan.leithauser@charteronebank.com

BUSINESS/PARTNERSHIP OPPORTUNITIES

1. NextEnergy, Michigan Economic Development Corporation and the Michigan Manufacturing Technology Center are partnering with the purchasing staff at Vestas, the global market share leader for large utility scale wind turbines, www.vestas.com, in an effort to connect them to skilled Michigan manufacturing suppliers. Vestas has announced a nacelle assembly production facility in Colorado and is in immediate need of critical suppliers for the nacelle, hub, structural and power generation components. We are lining up private meetings for the Vestas Power Generation sourcing leads, on January 14, 2009. Meetings will be 30 minutes in length and held at the NextEnergy Center located at 461 Burroughs, Detroit, MI 48202

If you are interested and meet the broad specs below, please contact me danr@nextenergy.org by end of day Monday, January 5 to set up a time to meet with Vestas.

Vestas Power Generation Sourcing Needs:

Vestas is currently looking for suppliers who can provide components and services for their power generation components. Volume is expected to be 1,000+ for most components by 2010:

- Generators:
This is the main generator. 2MW and 3MW generators. One per machine, volume is 58 in 2009 and 1,000 in 2010 with 25% growth expected annually. Waiting on additional specs.
- Transformers:
Vestas uses Dry-type Cast-resin Transformers in their wind turbines (can't be oil due to vibration of turbine). The power rating is either 2 or 3Mw, and the supplier must be able to supply all voltage classes 12, 24 & 36, 50-60 cycle. The transformers need to

be C2, E2 and F1 certified. One transformer per machine. Volume is 58 in 2009 and 1,000 by 2010 with 25% annual growth.

- Controls Systems and Converters:
- Motors:
Vestas is sourcing smaller electrical motors that control pitch and blades and nacelle. About 8 motors per machine. Volume is 450+ in 2009 and 8,000 by 2010 with 25% annual growth.
- Sensors:
Mostly baluff sensors. Waiting for more detailed specs.
- Aviation Lighting:
Internal and external lighting for operations and maintenance. Waiting for more specs.

2. Innovative Wind Turbine Company Looking for Manufacturing Partner

We seek a technically &/or financially qualified company (preferably manufacturer) desiring to JV under license to commercialize our WARP wind energy system or enter a new/improved existing product with integrated WARP system to his established market or new markets. If interested, please contact:

Alfred L. Weisbrich, PE
President & CEO
ENECO Texas, LLC
enecowind@aol.com
Tel/fax/vm: 1 860 651 0061
Cell: 860 930-5567
<http://www.warp-eneco.com>

3. Large Wind Turbines Available for Sale

Would you kindly let your colleagues know that BlueSkyWind has the ability to offer a small amount of new Vestas 3 MW V-90 winterized turbines for immediate sale? These units may be sold on an individual basis to large industrial, public or commercial uses. They are Class I machines designed for swift wind found along coastal areas of Michigan and will generate in the area of 7 to 9+ million kWh's annually depending on siting characteristics. The towers are 80 meters in height. If interested they may contact:

Joseph J. Graham
President
BlueSkyWind, LLC
10 New King Street
White Plains, New York 10604
(914) 949-2292
graham@blueskywind.com
www.blueskywind.com

4. DOE Extends Deadline for Clean Energy Loan Guarantees

DOE announced last week that it is extending the application due date for loan guarantees related to energy efficiency, renewable energy, and advanced transmission and distribution technologies. Interest in the loan guarantees has been so extensive that DOE has decided to move the application due date back two months for stand-alone and manufacturing projects, as well as the due date for Part I applications for large-scale integration projects, from December 31, 2008, to February 26, 2009.

<http://www.lgprogram.energy.gov/>

NEXTENERGY EVENTS

Michigan Wind Energy Symposium

Produced by partner, GLREA
March 3 & 4, 2009
Detroit, MI
www.glrea.org

WIND ENERGY AND OTHER RELATED EVENTS

AWEA Wind Power Asset Management Workshop

San Diego, CA
January 12 - 13, 2009
<http://www.awea.org/events/>

Wind Power Finance & Investment Summit

February 11-13, 2009
Paradise Point Resort and Spa, San Diego, CA
<http://www.infocastinc.com/index.php/conference/136>

WindEnergy Business 2009: US-German Opportunities for Cooperation in Wind Energy

Chicago, IL
February 24, 2009
For more information, please email Hans Royal at royal@gaccomm.org, or Mark Tomkins, Director of Consulting Services, at tomkins@gaccomm.org

AWEA Wind Power Project Siting Workshop

Seattle, WA
February 24 - 25, 2009
<http://www.awea.org/events/>

Renewable Energy World Conf & Expo

March 10-12, 2009
Rio Hotel, Las Vegas
<http://rewna09.events.pennnet.com/fl/content.cfm?NavId=7857&Language=Engl>

European Wind Energy Conference & Exhibition

March 16-19, 2009
Parc Chanot, Marseille, France
www.ewec2009.info

AWEA Wind & Transmission Workshop

March 17 - 18, 2009 Overland Park, KS
<http://www.awea.org/events/transmission09/registration.html>

Wind Energy German/US Match Making Event Planned in Germany

March 30-April 2, 2009
Berlin, Germany
Information on the German Chamber of Commerce Midwest wind match making event is being planned for the week of March 9, 2009 in Hamburg or Berlin and will focus on opportunities for partnering in the supply chain. If interested, please contact...
Mark Tomkins
Director, Consulting Services
Direct phone: +1-312-494-2172

Email: tomkins@gaccomm.org

German American Chamber of Commerce of the Midwest, Inc. - GACCoM
DEinternational / AHK Chicago
401 N Michigan Ave, Suite 3330, Chicago, IL 60611
Phone: +1-312-644-2662, Fax: +1-312-644-0738
www.gaccomm.org, www.ahk-usa.com, www.ahk.de

WIND POWER EXPO 2009

March 29-April 1, 2009

Shanghai, China

<http://www.windpower-expo.cn>

<http://www.windpower-expo.com>

WINDPOWER 2009 - AWEA Wind Conference and Exhibition

May 4 – 7, 2009

Chicago, IL (new date and location)

www.awea.org

National Summit - Technology, Manufacturing, Energy & the Environment

June 15-17, 2009

Ford Field, Detroit, MI

www.nationalsummit.org

WINDPOWER 2010 Conference & Exhibition

May 16 – 19, 2010

Salt Lake City, UT

<http://www.awea.org/events/>

HUSUM WindEnergy 2010

September 21-25, 2010

Husum, Germany

www.husumwindenergy.com

INTERNATIONAL BUSINESS OPPORTUNITIES

WindEnergy Business 2009: US-German Opportunities for Cooperation in Wind Energy

Chicago, IL

February 24, 2009

On Tuesday, February 24th, 2009 the German American Chamber of Commerce of the Midwest (GACCoM) will be hosting a conference in Chicago, Illinois, WindEnergy Business 2009. The primary objective of the conference is to open a dialogue for partnership between companies from two of the world's leading countries in wind energy technologies. The WindEnergy Business 2007, which took place in Des Moines, Iowa in November 2007, brought together over 160 companies and leaders in wind energy from both sides of the Atlantic. Many of the participants were able to find business partners and expanded their operations. We look forward to another very successful event in 2009 in Chicago. This conference is sponsored by the German Ministry for Economics and Technology (BMWI) and organized in coordination with the German Energy Agency (DENA). For more information, please email Hans Royal at royal@gaccomm.org, or Mark Tomkins, Director of Consulting Services, at tomkins@gaccomm.org

Wind Energy German/US Match Making Event Planned in Germany

March 30-April 2, 2009

Berlin, Germany

Information on the German Chamber of Commerce Midwest wind match making event is being planned for the week of March 9, 2009 in Berlin and will focus on opportunities for partnering in the supply chain. If interested, please contact...

Mark Tomkins
Director, Consulting Services
Direct phone: +1-312-494-2172
Email: tomkins@gaccomm.org
German American Chamber of Commerce of the Midwest, Inc. - GACCoM
DEInternational / AHK Chicago
401 N Michigan Ave, Suite 3330, Chicago, IL 60611
Phone: +1-312-644-2662, Fax: +1-312-644-0738
www.gaccomm.org, www.ahk-usa.com, www.ahk.de

Opportunity for Alternative Energy Companies – Hannover Fair

Hannover Fair to be held April 20-24, 2009. The Alternative Energy sector throughout Europe (and around the World) is burgeoning as evidenced by the more than 100,000 attendees at the 2008 Hannover Fair... and that's just for the Energy section of the program alone! Opportunities for US companies abound.

Special arrangements are being negotiated for Michigan companies to attend the 2009 Hannover Fair, some of which include:

- Special rates for exhibitors.
- Special travel packages (air, ground transportation & hotel).
- Advanced marketing and matchmaking services with attendees representing global companies.
- Special forum to Feature Michigan's presence.
- Special guided tours customized to individual companies' interests.
- Targeted meetings with other interested parties
- Interpreter services

If you are interested in attending or have questions about this event, please contact: Mike Shapiro: 313-596-0438 mshapiro@detroitchamber.com or, Dean Johnson: 313

NEWS

Renewable Energy: Follow the Supply Chain

You do not need to be in a wind-producing state to attract renewable energy companies. You do not need to be in a state with tremendous amounts of sunlight each year to attract sub-suppliers in the solar energy industry.

<http://www.econdevmarketing.com/blog/index.cfm/2008/11/20/Renewable-Energy--Following-the-Supply-Chain#more>

NextEnergy gets new CEO

Keith Cooley, most recently director of Michigan's Department of Labor and Economic Growth, sees unmatched opportunities for state's work force in alternative and renewable energy technology development. The NextEnergy Center board Monday named Keith W. Cooley as the second president and CEO of the state's renewable energy industry accelerator. Also, Gov. Jennifer Granholm will also issue an Executive Order adding a new energy department to the Michigan Department of Labor and Economic Growth.

<http://www.wwj.com/NextEnergy-Gets-New-CEO/3210234>

The Michigan Centers of Energy Excellence commitments to date:

- Sakti3—This Ann Arbor-based company will receive \$3 million to establish a center focused on next-generation lithium battery technologies and processes. The proprietary technologies enable the manufacture of battery cells in Michigan instead of overseas. The University of Michigan will contribute research on battery lifecycles.
- Swedish Biogas International—SBI will utilize \$4 million to launch a waste-to-energy/biomethane center at the city of Flint's waste water treatment facility. The project will draw upon Swedish Biogas' 15 years of experience in operating three waste-to-energy facilities. Flint's Kettering University is a partner in the project and will collaborate with Linköping University in Sweden in adapting municipal vehicles so that they can utilize the biomethane as fuel. The

Kettering incubator will also serve as the initial headquarters for SBI's North American operations, providing a launching point for expanding the use of this technology throughout Michigan and North America. The C.S. Mott Foundation and Swedish agencies are also partnering on the project.

- Mascoma Corporation—The Cambridge, Mass. based company will use \$20 million to establish a cellulosic ethanol center in Kinross. The center will utilize the abundant timber resources in the area, producing fuel from nonfood, cellulosic crops (wood). Michigan State University and Michigan Technological University will focus on improving the supply chain for woody biomass feedstock. Legislation enacted in July authorized the MSF to allocate up to \$45 million administer the COEE program which will match companies with universities, national labs, and training centers to accelerate next generation research, workforce development, and commercialization.

- A123Systems, Inc. – This Boston-based company with an office in Ann Arbor will receive \$10 million from the COEE program to establish a center focused on the manufacture of rechargeable lithium batteries for the transportation and alternative energy sectors. The project leverages the state's automotive assets. The University of Michigan will contribute research on manufacturing system design, performance and processes; and Michigan State University will contribute research on battery materials and electrode designs.

- Working Bugs LLC – This company with operations in East Lansing, Webberville and Sweden will receive \$2 million from the COEE program to establish a biorefinery that will produce high-value specialty and fine biochemicals and biofuels from natural feedstocks. Technology developed at this center can be applied to existing biomaterial processing facilities across the state such as corn ethanol plants, beet sugar refineries, and pulp mills to produce new, higher margin products. Michigan Technological University will contribute research toward the supply chain for biomass feedstock that will be delivered to the biorefinery.

- American Process Inc. – The Atlanta-based company, in partnership with San Antonio's Valero Energy Corporation, will receive \$4 million from the COEE program to establish a pilot scale biorefinery at the Decorative Panels International hardwood plant in Alpena. The biorefinery will convert the process waste effluent from the plant into cellulosic ethanol, sodium acetate and clean, warm water. The project has potential for replication across the state in other biorefineries, pulp and paper mills, and food and agricultural processing plants. Michigan Technological University will contribute research to improve fermentation processes and also on the use of sodium acetate for novel anti-icing applications.

The COEE designees were subject to a formal review process that included an oral interview and a written review of their application. To be considered for COEE program funding, candidates submitted a letter detailing the project and amount of funding requested, a business plan or proposal, and a letter of support from the university involved with the project. For complete details on the application process, visit www.michiganadvantage.org/21CJF

Michigan Legislature OKs Energy Plan

The Michigan legislature passed Senate Bill 213 yesterday permitting, among other things, a Renewable Portfolio Standard of 10% by 2015 for Michigan. Once the Governor signs this bill, which is not as aggressive as her desire for a 25% by 2025 RPS (NextEnergy supports a more aggressive RPS as well) Michigan will become the 28th state in the U.S. (including D.C.) to put these economy-driving laws into place. The RPS aids a state's economy by creating a market into which renewable energy developers can sell their products and services. The more aggressive the RPS, the stronger the new market. Several states have started with modest RPS goals (like Michigan's) but have made them more aggressive as they see the economic forces working to their benefit. RPS- Overview: Requires 10% by 2015, 1% will be set aside for energy efficiency programs. While includes renewable resources (solar, wind, biomass, geothermal, tidal) also leaves room for carbon sequestration plants and reduction of carbon by 70% of Coal plants to count towards the 10%. There will be competitive bidding for 50% of the projects needed to meet a utility's 10% goal. SB 213 includes a renewable portfolio standard, utility energy optimization plans, state government energy efficiency, wind energy resource zones, and net metering. The renewable portfolio standard will be 10% by 2015. Energy optimization credits and advanced cleaner energy credits can be used to partially meet the RPS requirement. Detroit

Edison is required to have at least 300 MW by 2013 and 600 MW by 2015 and Consumers Energy is required to have 200 MW by 2013 and 500 MW by 2015.

<http://www.legislature.mi.gov/documents/2007-2008/billenrolled/Senate/pdf/2007-SNB-0213.pdf>

Net Metering Also Tackled by Legislature

The bill states that customers that install renewable energy systems that are 20 kW and under will receive "true net metering" This means that you can be credited at the full retail rate for putting electricity back on the grid. Interconnection fee is capped at \$100. Cost of additional meters or tests on renewable energy systems born by utilities. Renewable Energy Credits generated by customers stay with the customers and can be sold. SB 213 does provide for net metering for all systems with a modified program up to 150 kW. SB 213 does provide for net metering for biomass systems up to 550 kW in size, but there are additional costs and it is also a modified program. The enrolled version of Senate Bill 213 is now available on the Legislature's website at this link:

<http://www.legislature.mi.gov/documents/2007-2008/billenrolled/Senate/pdf/2007-SNB-0213.pdf>

Department of Labor and Economic Growth adds "Energy" to its Title

Governor Granholm announced on Oct. 27 a reorganization of state government that aligns all activities related to renewable energy and energy efficiency in one department. By executive order, all activities related to the energy sector will be consolidated into the Department of Labor and Economic Growth which will be renamed the Department of Energy, Labor and Economic Growth (DELEG). Granholm announced the appointment of her special advisor on renewable energy, Stanley "Skip" Pruss, to serve as the CEO and director of DELEG. Pruss will be responsible for promoting the use of renewable energy, the development of advanced energy technologies, and the implementation of energy efficiency measures in the state. He replaces Keith Cooley who has accepted a position as CEO of NextEnergy in Detroit.

Federal Support of Renewable Installations

Federal Energy Tax Credits have been extended as part of the financial rescue legislation that was recently passed by Congress. The new law contains a 1-year extension of the production tax credit for wind energy, a 2-year extension of the production tax credit for other renewables, an 8-year extension of the tax credits for investment in commercial and residential solar projects, including the removal of the \$2,000 cap on residential solar electric installations, the addition of small wind energy and geothermal heat pump projects as qualifying for tax credits, a 5-year extension of the tax deduction for energy-efficient commercial buildings, a 1-year extension of the tax credit for the construction of new energy-efficient homes, and tax credits for qualified energy-efficiency upgrades to existing homes are reinstated for 2009.

<http://www.energytaxincentives.org/> & <http://www.dsireusa.org/>

Vestas Seeks To Build New North American Headquarters

Danish wind turbine supplier Vestas is seeking to consolidate its presence in Portland, Ore., by building a new headquarters for Vestas Americas, the company's business unit responsible for wind turbine sales, installation, and service and maintenance in North America. Vestas Americas has been headquartered in Portland since 2002. In addition to the headquarters, Portland is home to one of Vestas' regional IT centers, a tools warehouse and the Vestas Business Academy training facility. The proposed new headquarters, which is expected to be over 500,000 square feet in size and LEED Platinum certified, will consolidate Vestas' presence in Portland, as well as allow for future growth. As negotiations are in process, Vestas cannot, at this point, confirm the sites it is considering for development.

http://www.nawindpower.com/e107_plugins/content/content_lt.php?content.3205

Global Wind Systems Inc. to Assemble Wind Turbines in Novi, MI

The start-up wind turbine generation system manufacturer will invest \$32.3 million to locate its first plant in Novi. The project is expected to create 807 new Michigan jobs, including 356 directly by the company. Based on the MEDC's recommendation, the MEGA board today approved a state tax credit valued at about \$7.3 million over nine years to help convince the company to

expand in Michigan over competing sites in Ohio, Iowa and Nebraska. Oakland County Michigan Works will provide employee-training assistance to support the project, and the city of Novi will partner with the Oakland County Road Commission on future upgrade and widening of Twelve Mile Road to support Global Wind Systems operations.

GreenSmith Launches Intelligent Distributed Energy Storage System

GreenSmith Energy Management Systems Inc., a provider of distributed energy storage systems (DESS), has unveiled its proprietary battery unit, which shifts electricity load from peak to off-peak. The storage system allows utilities to realize measurable reliability and cost benefits by recognizing immediate advantages of the peak versus off-peak arbitrage, ancillary services, efficient distributed energy generation capture such as solar or wind, and the reduction of electrical grid congestion during peak demand periods. The GreenSmith DESS also actively manages the green footprint of energy sources corresponding to the load shape throughout the day.

http://www.nawindpower.com/e107_plugins/content/content_lt.php?content.3203

Carlton Creek Castings (Kurdziel) Creates Green Jobs with New Wind Castings Business

Carlton Creek Ironwoods LLC, formerly Kurdziel Industries, won approval Monday from the Michigan Economic Growth Authority for a Rural Employment Tax Credit valued at \$1.63 million over seven years. The new equipment will enable the foundry to make the higher-grade ductile iron needed for windmill parts, according to Ken Zach, Carlton Creek's chief executive officer. "We already have some wind projects under way," Zach said. "This will get us into a little bit more complex parts." Those parts include gear cases, the drive between those cases and the windmill blades, and torque arms, which absorb the shock when windmill blades start and slow down, Zach said. Customers for the new parts include Winergy, a division of Siemens AG, he said.

<http://www.mlive.com/news/chronicle/index.ssf?base/news-15/1227698113109230.xml&coll=8>

Lightweight residential wind turbine nears production, brings 68 jobs to Muskegon

The WindTronics 760 residential wind turbine goes into production in January, bringing 68 jobs to Muskegon. The turbine, marketed and produced by Muskegon-based EarthTronics, could revolutionize residential and business alternative energy options because of its small size — just five feet in diameter and weighing only 80 pounds. Created by Imad Mahawili, executive director of Grand Valley State University's Michigan Alternative and Renewable Energy Center, the turbine will produce 15 percent of a typical home's electricity needs. "The turbine goes on the market in May," says Reg Adams, EarthTronics president and founder. "Our first retailer across the nation is Ace Hardware. We're excited and they're excited."

Green Technology Production To Foster Manufacturing, Technical Employment.

The Kankakee (IL) Daily Journal (12/1, Szremski) reports, "Producing parts for carbon-reducing technologies is the wave of the future, according to" a recent study. "The study identified five key green technologies: LED lighting, high-performance windows, auxiliary power units, solar power and super soil systems, or managing hog waste, and how manufacturing jobs could be created to support them." The Daily Journal notes that a "33,000-acre K4 Wind Farm proposed for" area counties "will need 300 construction workers...and eventually will hire 30 to 40 full-time, highly trained technical employees." This "project is creating excitement at the Career Center and the local workforce board, which has been working closely with the Sustainability Center to come up with training programs for future employees." The agency is hoping to take advantage of the Green Jobs Act, which "authorized the disbursement of about \$125 million to train about 30,000 people in 'green-collar' jobs."

<http://www.daily-journal.com/archives/dj/display.php?id=431801>

Zero-Max Introduces Disc Couplings For Wind Industry

Plymouth, Minn.-based Zero-Max Inc., a manufacturer of power transmission components, has introduced composite disc couplings for the wind turbine industry. The couplings are designed with composite disc packs at both ends of a center spacer. These patented designed disc packs provide the true strength and calculable flexibility of the coupling. The composite disc packs (flex

elements) allow a surplus of parallel and axial misalignment, while remaining torsionally stiff through all harmonic ranges of the wind turbine's oscillating load. Depending on application, the Zero-Max's center spacers can be machined out of steel, composite glass fiber or 6061-T6 aluminum. Through the use of finite element analysis, these center spacers can be engineered to withstand in excess of 70,000 Newton meters of torque, depending on the material selected. For more information, visit zero-max.com

Shermco Industries Increases Support To Wind Industry

Dallas-based Shermco Industries, a provider of rotating apparatus and electrical power system testing, is now making a vast inventory of generator parts available to the wind industry. Shermco stocks replacements for all major wind generators from makers including ABB, VEM, Gamesa and Leroy-Somer. "Finding a replacement for wind generator parts isn't always easy and can take time to locate," says Scott Meador, vice president of Shermco Industries. "We now stock hundreds of spare parts from the industry's top quality brands to ensure that technicians can repair equipment quickly and effectively." For more information, visit shermco.com.

MPSC moves forward on renewable energy

The Michigan Public Service Commission last week created the Wind Energy Resource Zone Board and appointed 11 members to serve on it. The move was required under Public Act 295 of 2008, which mandates that anyone selling electricity in Michigan generate 10 percent of their power from renewable sources by 2015. Under the law, the MPSC also directed utilities to file renewable energy and energy optimization plans.

<http://www.wwj.com/MPSC-Moves-Forward-On-Green-Power/3447898>

Midwest ISO Approves Regional Expansion Plan

The board of directors of the Midwest Independent Transmission System Operator Inc. (Midwest ISO) has approved the 2008 Midwest ISO Transmission Expansion Plan (MTEP08), a long-term plan that includes recommendations for transmission infrastructure additions and electric grid improvements in the Midwest. MTEP08 is the fifth regional expansion plan issued by the Midwest ISO and recommends 332 new projects totaling \$2.4 billion in investment in the electric grid. The projects, to be in service by 2015, include more than 1,900 miles of new transmission line construction.

http://www.nawindpower.com/e107_plugins/content/content.php?content.3225

European Union Sets Goal of 20% Renewables by 2020

As the U.S. continues to lag behind on finding consensus for a national renewable electricity standard, 27 European nations reached agreement on regional renewable goals. On Tuesday European Union lawmakers approved a plan for 20% of the region's energy needs to be met with renewables by 2020. Under the plan, each of the 27 nations will be required to increase its renewable energy capacity, with wealthier nations taking on a larger share of the increase. In terms of the agreement's impact on the electricity sector, the plan is expected to increase renewables' share in electricity generation from 16% in 2006 to over a third in 2020. The European Wind Energy Association expects about 35% of the new renewable electricity capacity to come from wind, representing about 477 terawatt-hours of wind generation in 2020. In 2007, Europe got 3.78% of its electricity from wind.

FEDERAL AND OTHER FUNDING OPPORTUNITIES

Notice of Upcoming Funding Opportunity Announcement and Program Announcement: 20% Wind by 2030: Overcoming the Challenges

This is a Notice of an Upcoming Funding Opportunity Announcement and Program Announcement- NO APPLICATIONS WILL BE ACCEPTED AT THIS TIME. This Notice of Intent is to inform the public of an upcoming Funding Opportunity Announcement (FOA) and Program Announcement (PA). The Department of Energy (DOE), Office of Energy Efficiency and Renewable Energy (EERE), Wind and

Hydropower Technologies Program (WHTP) intends to issue a parallel FOA directed at industry partners and a PA directed at Department of Energy Laboratories to address wind development technical challenges as well as market acceptance barriers. The proposed Title for the Announcements is "20% Wind by 2030: Overcoming the Challenges". The parallel Announcements target support for the following five topic areas: Turbine research, development and testing; Market acceptance efforts; Environmental research and siting strategies; Transmission analysis, planning and assessments; and Workforce development. These funding efforts support the 20% Wind Energy by 2030 report which outlines the feasibility of using wind energy to generate 20% of the nation's electricity demand by 2030. The report can be found at <http://www1.eere.energy.gov/windandhydro>.

Request for Proposal (RFP) for Wind-Powered Energy Generation Project for Nebraska

The Nebraska Public Power District (District) intends to expand its power supply by adding additional wind-powered resources to its generation resource portfolio and the District is soliciting proposals for from Community-Based Energy Development (C-BED) or other privately owned Wind-Powered Energy Generation Project(s). We are hereby requesting that if your firm is interested, to submit a proposal to perform the work scope described in the attached RFP. Any Respondent questions pertaining to this RFP must be submitted electronically to the District by Wednesday, February 13, 2009, in accordance with Section 5.0 of the RFP. Electronic proposals must be received no later than 5:00 p.m. CDT, on Tuesday, April 15, 2009, and should be delivered in accordance with Section 6.2 of the RFP. If interested, please contact:

Brent L. Hofferber
Procurement Specialist
Nebraska Public Power District
1414 15th St.
Columbus, NE 68601
Ph: (402) 563-5896
Fax: (402) 563-5034
blhoffe@nppd.com



RFP 08017
Wind-Powered Energy

The Municipal Energy Agency of Nebraska (MEAN) is requesting proposals for a long term wind energy purchase power agreement (PPA).

The joint action agency seeks proposals for up to 30 MW of nameplate capacity that MEAN can purchase by the end of 2009, but will also consider projects available in 2010. The wind project must interconnect on the Public Service Co. of Colorado transmission system or the Rocky Mountain Region transmission system of the Western Area Power Administration that serves areas of Wyoming, Colorado, and western Nebraska. Bidders must submit proposals by February 6. The request for proposals can be found on the MEAN home page: www.nmppenergy.org/mean

Northern Indiana Public Service Co. RFP

Northern Indiana Public Service Co. (NIPSCO) has issued two requests for proposals (RFPs) seeking bids on power resources. The first request seeks capacity and energy proposals for up to 300 MW of electricity to address the company's projected electricity supply needs during the 2011-2016 time period. The second request seeks up to 300,000 MWh of electricity, generated from renewable sources or demand side management technologies, to address the company's projected electricity supply needs beginning in 2011. Deadline: Jan. 15. For more information: nipsco2008RFP.com

DOE Loan Guarantee Program

Now allows for loans for manufacturing of renewable

The U.S. Department of Energy (DOE) has announced three solicitations for a total of up to \$30.5 billion in federal loan guarantees for projects that employ advanced energy technologies that avoid, reduce or sequester air pollutants or greenhouse gas emissions. The three solicitations are in the areas of energy efficiency, renewable energy and advanced transmission and distribution technologies; nuclear power facilities; and advanced nuclear facilities for the front end of the nuclear fuel cycle. This marks the second round of solicitations for DOE's loan-guarantee program, which encourages the commercial use of new or significantly improved energy technologies. Up to \$10 billion is designated for energy efficiency, renewable energy and advanced transmission and distribution projects. "Loan guarantees from the department will enable project developers to bridge the financing gap between pilot and demonstration projects to full, commercially viable projects that employ new or significantly improved energy technologies," says Jeffrey F. Kupfer, acting deputy secretary of energy. All project sponsors who have already filed an application with DOE may append, supplement, or revise their application before February 26, 2009.

<http://www.lgprogram.energy.gov/>

<http://www.science.doe.gov/sbir/>

Clean Renewable Energy Bonds

The federal Energy Tax Incentive Act of 2005, under Title XIII of the federal Energy Policy Act of 2005 (EPAct 2005), established Clean Energy Renewable Bonds (CREBs) as a financing mechanism for public sector renewable energy projects. This legislation originally allocated \$800 million of tax credit bonds to be issued between January 1, 2006, and December 31, 2007.

Eligible Renewable Technologies:

Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Small Irrigation Power

Eligible Applicants:

Local Government, State Government, Tribal Government, Municipal Utility, Rural Electric Cooperative

http://www.irs.gov/irb/2007-14_IRB/ar17.html

<http://elpc.org/category/clean-energy>

American Trust Launches Alternative Energy Funds

Lebanon, N.H.-based American Trust Investment Advisors LLC has launched the no-load American Trust Energy Alternatives Fund. The new fund will seek to identify domestic and international publicly traded companies that will play a role in meeting increased worldwide energy demand. The American Trust Energy Alternatives Fund's investment objective is long-term capital appreciation. The fund will seek companies that are either directly involved in some capacity in alternative energy production or that are likely to benefit from the development of these technologies. The fund will screen almost 300 energy-related companies worldwide to evaluate the economic viability and scientific soundness of their products and services. The alternative energy companies included will cover a broad range of technologies, including solar, wind, geothermal, hydro, tidal, biofuel and other energy-generation or -storage technologies. The minimum initial investment in the Fund is \$5,000 for regular accounts and \$2,500 for individual retirement accounts. The minimum subsequent investment is \$100.

NSF National Science Foundation

Small Business Innovation Research Program Phase I Solicitation FY-2009 Modification 2

<http://www.grants.gov/search/search.do?&mode=VIEW&flag2006=true&oppld=16956>

Oklahoma City-based OGE Energy Corp Wind Energy RFP

Oklahoma City-based OGE Energy Corp.'s electric utility subsidiary, OG&E, has issued a request for proposals (RFP) from wind power developers for the

construction of up to 300 MW of new capacity. OG&E intends to add the new capacity to its power-generation portfolio by late 2010. The company is issuing this RFP for delivery of energy from wind energy resources that will be operational no later than Dec 31, 2010, with preference given to proposals that will be operational no later than June 1, 2010. OG&E seeks power from either an individual facility or in the aggregate from facilities that have a minimum a nameplate capacity of 50 MW. Deadline: Feb. 2.
For more information: oge.com.

Tennessee Valley Authority (TVA) 200MW RFP

The Tennessee Valley Authority (TVA) has issued a request for proposals (RFP) to supply up to 2,000 MW of power generation from renewable energy sources by June 1, 2011. Up to 1,000 MW of generation would be delivered to TVA by June 1, 2009. The amount would increase to a maximum of 1,500 MW a year later and to 2,000 MW by June 1, 2011. TVA is targeting individual companies capable of producing at least 1 MW of electricity from renewable energy resources and is interested in proposals that would provide the power supply from one to 20 years. Deadline: Jan. 16. For more information: tva.com.

STATE FUNDING OPPORTUNITIES

NextEnergy Tax Authority Incentives

Alternative Energy companies in Michigan may be eligible for tax breaks. To be eligible, a company must first be certified as "Alternative Energy." See the criteria or contact Eric Shreffler at 734-953-1531 or shrefflere@michigan.org.

<http://www.michiganadvantage.org/Targeted-Initiatives/Alternative-Energy/Default.aspx>
<http://ref.michiganadvantage.org/cm/attach/75d7a008-450d-4973-a7cc-22cb2f5ee05f/MichiganNextEnergyAuth.pdf>

Michigan Gov. Granholm Announces Invest Michigan!

Governor Jennifer M. Granholm today officially announced the Invest Michigan! program and introduced members of the Business Leadership Council that will support the initiative. Granholm proposed Invest Michigan! in her 2008 State of the State address. "This program is designed to grow the state's pension fund by investing in Michigan-based companies," Granholm said. "Invest Michigan! will help diversify Michigan's economy by retaining, attracting, and building successful small and medium-sized businesses and, in turn, creating jobs for Michigan workers." Through Invest Michigan!, the State of Michigan Retirement Systems has committed \$300 million divided equally between a Growth Capital Fund, which will make direct investments targeting venture capital and expansion-stage companies, and a Michigan Opportunities Fund, which will target potential acquisitions and buyouts. The Growth Capital Fund will be managed by co-general partners Beringea and Credit Suisse. The Michigan Opportunities Fund will be managed by Glencoe Capital. Each of the general partners has offices in Michigan and a successful track record in the industry.

<http://www.michigan.gov/gov/0,1607,7-168--197405--,00.html>

Michigan Enacts \$45M Centers of Energy Excellence Program

Gov. Jennifer Granholm today signed legislation creating Centers of Energy Excellence, a program designed to bring companies, academic institutions, and the state together to create jobs in alternative and advanced energy. The initiative, passed with overwhelming bipartisan support, is part of an overall job creation and economic stimulus package proposed by the governor in her State of the State address earlier this year (see the [Jan. 30, 2008](#) issue of the *Digest*). To be administered through the Michigan Economic Development Corp., the Centers of Energy Excellence will support the development, growth and sustainability of alternative energy industry clusters in Michigan by identifying and/or locating a base company in a geographic region with the necessary business and supply-chain infrastructure. These centers will match the base company with universities, national labs and training centers to accelerate next-generation

research, workforce development and commercialization. Under the new law, which is effective immediately, the Michigan Strategic Fund (MSF) is authorized to allocate up to \$45 million from the 21st Century Jobs Trust Fund to establish and operate the program. Grants will be made available to for-profit companies that meet the following criteria:

- Match a federal, foundation or international investment;
- Accelerate the commercialization of an innovative energy technology or process; or,
- Assist in activities of the center, including workforce development and technology demonstration.

The centers will be located in areas where the MSF determines that the state has competitive advantages in workforce, intellectual property and natural resources, but where technical and supply-chain hurdles could prevent the commercialization process. More information will be available in the near future at: <http://www.michiganadvantage.org>

Michigan Pre-Seed Fund

The Michigan Pre-Seed Capital Fund supports high-tech start-up companies as they near commercial viability by providing access to early-stage capital to accelerate company development. Supported by a consortium of Michigan SmartZones and administered by Ann Arbor Spark and Automation Alley, these funds will extend the personal investment of entrepreneurs during the critical stage when they are developing their businesses to the point of readiness for outside investment. These needs might include hiring key management executives or specialized consultants, regulatory review, contract manufacturing agreements, marketing strategies and sales plans, etc. At this stage, the Pre-Seed Fund will be able to fund \$50,000 to \$250,000 per company alongside their investment partner who will provide a minimum dollar for dollar match. The goal of the Pre-Seed Fund is to position these companies for follow-on investment.

<http://www.annarborspark.org/business-resources/business-growth-expansion/pre-seed-fund/pre-seed-faqs/>

For more information contact: Skip Simms at 734-646-3173 or email skip@annarborspark.org

Michigan Renaissance Zones

Renaissance zones are virtually free of all state and local taxes for businesses located within their boundaries. There are over 150 geographic areas in Michigan that are designated as renaissance zones.

http://ref.michigan.org/medc/services/sitedevelopment/renzzone/index.asp?WT.svl=Home_Feat_Links_4

Michigan Emerging Technology Fund

Effective January 30, 2008, the Emerging Technology Fund (ETF) will be monitored by the MI-SBTDC, not the MEDC. This program provides state matching dollars to federal SBIR/STTR awards to help companies bring their projects to commercialization. More information can be found in the attached guidelines document or on the web at

www.mietf.org.

DTE Energy, UM create cleantech entrepreneurship contest

To help move clean energy technologies from the laboratory to commercial production, DTE Energy has joined with the University of Michigan to conduct an annual entrepreneurship competition that will challenge teams from Michigan colleges and universities to develop the best plan for bringing new clean-energy technologies to market. The prize pool for the 2009 competition will be \$100,000, which will be divided among the winning teams. For subsequent years, it is expected that the prize pool will be \$200,000.

<http://www.wwj.com/DTE-Energy--UM-Create-Cleantech-Business-Contest/2196588>
www.dtecleanenergyprize.com

Automation Alley Seed Fund

Automation Alley is a 501(c)6 non-profit and accomplishes this through a collaborative culture that focuses on workforce and business development initiatives. Automation Alley attracts the creators and consumers of diverse technologies from a variety of industries around the world. The Automation Alley region encompasses Genesee County, Livingston County, Macomb County, Monroe County, Oakland County, St. Clair County, Washtenaw County, Wayne County and the City of Detroit. Automation Alley provides seed funding for unique technology companies with intentions to create jobs in SE Michigan.

Thomas E. Anderson, PhD, MBA
Senior Director, Automation Alley
2675 Bellingham (click for map)
Troy, MI 48083
Ph - 248.457.3302
FAX - 248.457.3210
<http://www.automationalley.com>

Great Lakes Angels

GLA is a membership of a number of individual investors (approx 40) including associate members. The typical investment from GLA is \$50-300K per company. Investments normally are structured as equity, sometimes convertible debt. GLA will also syndicate deals with other angel networks when appropriate.

Requirements for Venture to Apply:

- Your company can be a pre-revenue, but should have a proof of concept
- You must have a national or global business opportunity with at least a niche need
- Revenue potential should be \$25-50 million over next 5 years (5-10x return)
- You need a good management team (or are addressing holes in management team)

Rick Galdi, President
Great Lakes Angels
Golf View Lane
Rochester, MI 48309
www.glangels.org
248.648.4747
rick@windfallprojectz.com

Bridge Loan Option

\$1,800,00 Bridge Loan is available from a local investment firm. If interested contact:

Joseph Alam or Michael Alam
Mid-States Capital, LLC
Wayne State University Research and Technology park
440 Burroughs, Suite #517
Detroit, MI 48202
313-263-4037, fax: 313-228-4506
jpa@midstatescapital.com

Grand Angels

Ms. Jody Vanderwel
10720 Adams Street
Holland MI, 49423
T: (616) 546-4559
F: (616) 396-2424
info@grandangels.org
vanderwelj@grandangels.org
<http://www.grandangels.org/>

Michigan Venture Capital Firms

http://www.michiganvca.org/membership_info/members.html

Michigan Growth Capital Association

<http://www.michiganvca.org/>

STATE WIND ENERGY RESOURCES

List your company in our new *Michigan Directory of Alternative Energy Technology Suppliers*.

The purpose of the *Directory* is to catalog Michigan companies with interest in and ability to supply developers of Alternative Energy Technologies (AET). We are expanding our supplier match making work in the wind industry to other growing energy markets. The range of equipment and product types in these markets – as well as its growth potential – is huge. The AET sector encompasses wind turbines, biofuels refineries, hybrid electric vehicles, advanced batteries and energy storage devices, photovoltaics, and passive solar heating systems. Clearly, many Michigan companies – whether or not they have prior experience in AET markets—have the know-how and competencies to contribute to the AET value chain. In order to be listed in the *Michigan Directory of Alternative Energy Suppliers* – and to receive RFQs and invitations to future supplier events – you must fill out this form completely. Note that you may skip sections that do not apply to your company. Especially critical is an e-mail address, as RFQ alerts and invitations will be distributed via e-mail. If you would prefer to complete this questionnaire online, go to <http://www.nextenergy.org/whoareyou/manufacturers.aspx> and click Supplier Survey on right hand side or...

http://www.surveymonkey.com/s.aspx?sm=lcNPF9OGRXtUB1WHtHdjg_3d_3d

Michigan Economic Development Wind Energy Business Development Manager

MEDC is working hard to provide incentives and support for companies interested in developing projects, manufacturing operations and new technology to drive a strong wind energy industry in Michigan. Please contact Eric for more information.

Eric Shreffler – MEDC

Sector Development Manager

Renewable Energy

shrefflere@michigan.org

734-953-1531

Wind Energy Manufacturing Research:

Consortium for Advanced Manufacturing of Alternative and Renewable Energy Technologies (CAMARET) held a meeting at the NextEnergy Center on December 14, 2007, which included the five universities, MEDC, NextEnergy and several Michigan based manufacturers. The focus of the discussion was on research ideas for wind turbine manufacturing. Wind turbine manufacturing was targeted as the initial activity as the state has much activity and critical mass in manufacturing of wind turbines, through the efforts of WMU, NextEnergy, MEDC, and others. Potential Manufacturing Research projects/ideas discussed include the following...

To learn more or join the group, please contact John Patten, Western Michigan University at john.patten@wmich.edu

New MSU Land Policy Institute Tool for identifying best locations for wind energy projects in Michigan

The Wind Prospecting Tool (WPT) will be divided into two segments, first an analysis and interactive map tool to find and highlight the best areas in Michigan for utility scale wind farm development. This will showcase from the perspective of large scale development, the largest and most commercially viable areas in the state. Second, a separate tool will be developed targeted at community wind development potential, and produce a community wind profile for each community with wind resources in Michigan. This tool is an initial step in informing the wind development process, and bringing stakeholders accurate reliable, and timely information. A third tool, which is a future project, will closely examine off-shore targets for wind deployment

<http://www.landpolicy.msu.edu/wpt/>

MSU Land Policy Institute, John Warbach, PhD

310 Manly Miles Building, 1405 South Harrison Road
East Lansing, MI 48823
517-432-8800 Ext. 107
warbach@msu.edu
www.landpolicy.msu.edu

Michigan State University Extension Program

MSU Extension is working with landowners in Michigan to explore their options for wind energy. The State Energy Office of Michigan and the U.S. Department of Energy are sponsoring this effort to encourage more on-farm wind energy in the state. MSU Extension also manages the Michigan Anemometer Loan Program that donates testing towers to qualifying applicants across the state.

<http://web1.msue.msu.edu/wind/>. Contact Steve Harsh at 517-353-4518 or harsh@msu.edu

MSU Land Policy Institute Releases Report on Offshore Wind Potential in Michigan

http://www.landpolicy.msu.edu/modules.php?name=News&op=viewlive&sp_id=71

MSU Land Policy Institute Releases Report on Economic Impact of Wind Industry Development

http://www.landpolicy.msu.edu/modules.php?name=News&op=viewlive&sp_id=60

MSU Land Policy Institute Releases Report on Offshore Wind Potential in Michigan

http://www.landpolicy.msu.edu/modules.php?name=News&op=viewlive&sp_id=71

Great Lakes Wind Speed and Power Density maps.

Upon clicking on the link, the file will start downloading.

http://ftp.awstruewind.com/files/NREL/NREL_GreatLakes_Final_PDFMaps.zip

http://ftp.awstruewind.com/files/NREL/NREL_GreatLakes_Final_PDFMaps_20May08.zip

Great lakes wind resources/facts

http://greatlakeswiki.org/index.php/Great_Lakes_Wind

http://greatlakeswiki.org/index.php/Wind_energy

Michigan Energy Overview

<http://www.dleg.state.mi.us/mpsc/reports/energy/energyoverview/>

MMTC Market Diversification - Deliverables

Using a proven process built on best practices and solid research, MMTC Market Diversification delivers a series of solutions customized to your company's needs:

- Creation or improvement of lead qualification and sales process, including methods to increase quotation hit rate
- Delivery of custom prospect and contact lists for company profile types you identify
- Development of Value Statements that form the core of measurably more effective marketing messages and sales materials
- A market research report to guide prioritization of new market entry
- Creation of an email template to initiate a marketing campaign, and instruction to modify content for future use
- Training on how Internet search engines work and why competitors come up higher in search rankings
- A technical report by MMTC Web Developer with recommendations on how to improve the performance of your website in search engine rankings
- Interpretation of website analytics and importance as a sales conversion tool
- Integration of an actionable sales and marketing strategy with 6 week, 60-day, 90-day and 1 year goals, measurables and expectations

<http://www.mmtc.org/Diversification/diversification.aspx>

OTHER WIND ENERGY RESOURCES:

AWEA New Wind Agenda:

If you missed the recent AWEA Dec. 4 webinar on the New Wind Agenda, fortunately, AWEA can offer you several tools that can be of use in learning about the New Wind Agenda:

The PowerPoint slides that was presented on Dec 4 are available here:

www.newwindagenda.org/documents/Dec_4_New_Wind_Agenda_Webcast.pdf

A recording of the webcast, including the audio and visual components, is available here:

http://www.newwindagenda.org/video/New_Wind_Agenda_Webcast_05Dec08.wmv

The full Wind Agenda report is available here:

http://www.newwindagenda.org/documents/Wind_Agenda_Report.pdf

Additional resources are available at www.NewWindAgenda.org.

Wind Energy Basics

<http://www.sandia.gov/wind/links.htm#BASICS>

How much does a wind system cost?

The cost of individual components varies greatly by size and type of turbine design. Approximate costs should be obtained through the company you are trying to license from I would suspect. A small turbine can cost anywhere from \$6,000 to \$22,000 installed, depending upon size, application and service agreements with the manufacturer.

<http://www.windpower.org/en/tour/econ/index.htm>

http://en.wikipedia.org/wiki/Wind_turbine

Great Website on Wind Manufacturing including photos and tours of wind component manufacturing plants:

<http://www.windpower.org/en/tour/wtrb/comp/index.htm>

National Renewable Energy Lab (NREL) Wind Research Center

The National Renewable Energy Laboratory's (NREL's) National Wind Technology Center (NWTC), located at the base of the foothills just south of Boulder, Colorado, is the nation's premier wind energy technology research facility. Built in 1993, the center provides an ideal environment for the development of advanced wind energy technologies. The goal of the research conducted at the center is to help industry reduce the cost of energy so that wind can compete with traditional energy sources, providing a clean, renewable alternative for our nation's energy needs. Projects include development of Low Wind Speed Technology, Utility Grid Integration, Environmental Issues and more...

<http://www.nrel.gov/wind/nwtc.html?>

AWS Wind Resource Maps

Albany, N.Y.-based AWS Truewind LLC has completed the first high-resolution wind resource map of the contiguous U.S. Covering a land area of over 9 million square kilometers.

<http://www.awstruewind.com/>

Emerging Energy Research – Market and Supply Chain Studies

<http://www.emerging-energy.com/>

<http://www.emerging-energy.com/user/marketstudies.aspx?catid=1&cattype=MarketStudies>

BTM Consult ApS - Market and Supply Chain Studies

<http://www.btm.dk/>

<http://www.btm.dk/special-index.htm>

Sandia Reports on New Blade Designs

<http://sandia.gov/wind/topical.htm#ADAPTIVE>

Sandia Wind Blade Design Tool

<http://sandia.gov/wind/NuMAD.htm>

Small Roof Mounted Wind Turbine Performance Study

http://www.awea.org/windletter/042908_AWEA_WL.pdf

<http://www.warwickwindtrials.org.uk/8.html>

AWEA 2008 Small Wind Global Market Study and Other Small Wind Resources

http://www.awea.org/smallwind/pdf/2008_AWEA_Small_Wind_Turbine_Global_Market_Study.pdf

<http://www.awea.org/smallwind/>

New members-only online community for small wind

A new online tool is now available to those members of AWEA interested in the small wind industry. The "e-community" resource is open to all levels of AWEA membership and enables users with similar interests to share information and ideas, collaborate on projects, and communicate securely online. AWEA offers other e-communities pertaining to turbine siting, utilities, industry statistics, human resources, and AWEA's leadership council.

To access the e-community, log in to the Members Only site at

<http://www.awea.org/membercenter/login.html> and select "e-communities" from the left navigation

box. For more information on features and how to use the site, see the e-communities reference guide at http://www.awea.org/reference-guides/AWEA_ecommunities_Reference_Guide.pdf.

DOE/AWEA 20% by 2030 Report

<http://20percentwind.org/>

U.S. Department of Energy released its "Annual Report on U.S. Wind Power Installation, Cost, and Performance Trends: 2007."

The report can be downloaded at:

<http://eetd.lbl.gov/ea/ems/reports/lbnl-275e.pdf>

A PowerPoint presentation based on the report can be found at:

<http://eetd.lbl.gov/ea/ems/reports/lbnl-275e-ppt.pdf>

In Pictures: America's Best Places For Alternative Energy

http://www.forbes.com/2008/07/09/energy-solar-green-biz-energy-cx_bp_0709atlas_slide.html?thisSpeed=30000

Job Opportunities/Talent Recruiting

Program Manager, Market Diversification

Michigan Manufacturing Technology Center (MMTC) seeks an experienced consulting professional to assist its small and medium-sized manufacturing clients to identify, prioritize, and pursue new opportunities to sell beyond their traditional customers and traditional customer industries. This individual should be able to identify company needs and opportunities in the sales and marketing area, as well as recommend actionable solutions that lead to positive measurable results and ROI improvements. In addition, they must facilitate structured brainstorming sessions, perform and manage outside providers performing customized database searches and interview-based studies, and undertake customized brief research projects for individual clients and small groups of such clients.

Katrina Glowzinski, HR director

734-451-4200

kglowz@mmtc.org

www.mmtc.org

Business Development Manager Position - wind energy fuel cells and energy recovery technologies

We are looking for an individual for our business development department. I have attached the requirement for the position. If interested, please contact...

L-3 Communications
Combat Propulsion Systems
Tony Trautner
Recruiting Specialist
Ph: (231) 724-2805
Mobile:(231) 578-9503
Tony.Trautner@L-3Com.com



Business
DevelopmentL.doc

Lipten Company Hiring

Please find attached 3 job openings for experienced engineering and construction-related positions at Lipten Company, located in Wixom, Michigan. Qualified candidates may respond to this email with a resume and cover letter.

Fran Dorland
HR Director
Lipten Company
Hands on EPC Solutions
28054 Center Oaks Court, Wixom, MI 48393
Tel: (248) 374-8910 Fax: (248) 374-8906
e-mail: fdorland@lipten.com Web: www.LIPTEN.com.



Site Supervisor -
Construction ManageControls Technician.p



Instrumentation and
Director of



Engineering.pdf

Environmental Health Grassroots & Online Organizer

The Ecology Center, located in Ann Arbor, is seeking a talented person to direct grassroots and online campaigns in environmental health, lead citizen engagement efforts to prevent toxic chemical pollution, promote green chemistry and safer alternatives, and reform the state and federal chemical regulatory system. Application deadline is December 5, 2008

<http://www.ecocenter.org/>

http://www.landpolicy.msu.edu/modules.php?name=Pages&sp_id=334#eceg&oo

Wind Program Coordinator

The Great Lakes Renewable Energy Association (GLREA) is hiring a Wind Program Coordinator. The Program Coordinator will be responsible for planning and executing GLREA's Michigan Wind Energy Plan. Responsibilities include maintaining the GLREA Wind Plan, conducting wind zoning presentations to local townships and county decision makers, monitoring wind energy zoning language, working on the 2009 Michigan Wind Conference, and maintaining and developing relationships in the wind industry. This is a grant-funded and limited term full-time position; an extension beyond one year is contingent on future funding status. Applications should be submitted to Jennifer Alvarado, Executive Director – GLREA urges interested candidates to submit resumes ASAP. Applications should include a current resume and a letter of interest. You may apply by email: info@glrea.org or mail: GLREA, Attention: Jennifer Alvarado, PO Box 346, 257 S. Bridge St., Dimondale MI 48821. No phone calls please.

Wind Regional Policy Manager

The position is with Wind on the Wires, AWEA's regional partner for the Midwest. The Policy Manager—East would be responsible for all legislative, regulatory and related work for WOW for the eastern footprint of the Midwest (Illinois, Indiana, Michigan, and Ohio, possibly also to include Missouri). Applicants should apply to lbrewster@windonthewires.org



**WOW Regional Policy
Manager - East.pdf**

Lawrence Tech and SAE seeking companies with hiring needs:

As our state and region struggle in these difficult economic times, Lawrence Tech is striving to bring together displaced workers and companies with hiring needs. We have partnered with Ann Arbor SPARK, Automation Alley, BAE Systems, Detroit Regional Chamber, Detroit Renaissance, Engineering Society of Detroit, Michigan Chamber of Commerce, Michigan Economic Development Corporation, NextEnergy, Oakland County, Oakland County Michigan Works!, Society of Automotive Engineers, City of Southfield, and Wayne County to offer your company and displaced workers, "The Recovery Starts Here" Career Receptions on January 22, 2009 from 5:00 p.m. – 9:00 p.m. We are seeking companies with hiring needs. Your participation in this Career Networking Reception will give your company an opportunity to meet professionals with the skills, experience, and passion to advance and lead your organization. Sign-up today. Call Lawrence Tech at 248.204.4100 or email recovery@ltu.edu. There are no fees to participate. The "Recovery Starts Here" Career Receptions are open to any displaced worker with a college degree. The Receptions are being marketed to any displaced worker with a college degree. They do not need to be a student or graduate of Lawrence Tech. We anticipate a large turnout. Lawrence Tech's Recovery Starts Here stimulus package also offers Recovery Grants for Tuition Assistance to displaced workers. Spread the word!

AWEA Wind Energy Jobs Website

www.careersinwind.com

Career Opportunities in the Wind Energy Industry:

Positions in Project Development, Turbine Design, Manufacturing, Construction, Operations, Customer Service, and more...

http://web.zackin.com/rd/cm_rdTracker.phtml?catid=919&pub=naw

Cleantech Jobs:

<http://cleantech.jobthread.com/>

<http://cleantech.com/jobs/submit.cfm>

Carbon Finance Jobs is promoted to a carefully selected list of more than 30,000 environmental finance and carbon finance specialists around the world

<http://www.carbon-financeonline.com/index.cfm?section=jobs>

Other Energy Jobs:

www.EnergyCentralJobs.com

Michigan Land Use Job Opportunities

http://www.landpolicy.msu.edu/modules.php?name=Pages&sp_id=334

Ann Arbor SPARK Career Services

<http://www.annarborspark.org/career-services/>

Posting a position? Looking for talent? Searching for a new career? You can submit job postings, and we will include them on our website and in our weekly talent newsletter that goes out to our job seeker database.

Amy Cell

Director, Talent Enhancement

Ann Arbor SPARK
734-821-0075
amy@AnnArborSPARK.org

FORTUNE Personnel Consultants (FPC) of Troy is a well-respected executive search firm specializing in the placement of Professionals at all levels. We are capable of covering the full spectrum of manufacturing operations, engineering, supply chain, sales, marketing and finance professionals for companies in all different industries (Alternative Energy, Consumer Goods, Automotive, i.e.). Additional expertise in technical and consulting firms exists to identify senior management in multiple disciplines. We work on both contingency and retained searches.

Walt Cempura
Executive Recruiter
F-O-R-T-U-N-E Personnel Consultants, Inc.
560 Kirts Blvd., Suite 102, Troy, MI 48084
800-536-0348, 248-244-9646 (direct), Fax 248-244-8568
wcampura@fpctroy.com
www.fpctroy.com

Aerotek, Inc. is a energy recruiting and staffing resources firm with more than 150 offices across the US and Canada provides talented professionals to an array of large national organizations and smaller local companies.

Martina Gatti
7301 Parkway Drive
Hanover, MD 21076
410-694-5100
800-237-6835
www.aerotek.com
mgatti@aerotek.com

RSMR Global Resources is the leader in retained executive search to the renewable energy industry. Since 1997, we have been working with "Green" clients, helping them find executives with the right mix of talent, vision and values to positively impact their organizations. Our knowledge of successful leaders in renewable energy, sustainability and green build is second to none.

Christopher Swan, CEO
RSMR Global Resources, Inc.
D 312.447.3011
M 312.399.5700
swan@rsmr.com
www.rsmr.com

Velocity Talent is an affiliate of the largest recruiting and placement organization in the world with over 1,000 offices worldwide,

Julie Dodds - President
Rod Carlson – Wind Energy Specialist
VELOCITY TALENT
(503) 534-0240 ext. 200
julie@velocityt.com
rod@velocityt.com

Malace & Associates assists companies requiring a flexible workforce in accessing the technical, administrative, manufacturing and industrial expertise required to meet their changing HR requirements while maintaining cost certainty in an otherwise uncertain business world.

Gary Gozdor, VP of Business Development
Malace & Associates, Inc.
2180 Livernois Avenue

Suite 200
Troy, MI 48083
248-720-2500 x113
877-625-2234 (toll free)
586-914-6917 (cell)
248-720-2501 (fax)
ggozdor@malacehr.com
www.malacehr.com

Dan Trudeau, CPC
Senior Staffing Manager
PRA Professional Resource Associates – Detroit Office
Electrical, Electronic, and Embedded Staffing Experts
810-765-1181 ext 117
dtrudeau@prausa.com <http://www.prausa.com>

Need Skilled Tradesman?

Tradesman International is a non-union national skilled labor support company. They are already working with some of the largest manufactures and installers for wind turbines and want to get more involved in Michigan. As a partner of Tradesmen, you can tap into our 7000 employees national and over 500 employees in Michigan. Talent includes tradesmen with technical skills in electrical, fabrication, HVAC, etc. If interested, please contact...

Charlie Baird, Industrial Representative Tradesmen International
4665 44th Street, S.E. Suite 160
Kentwood, MI 49512
C-616-822-0572
O-616-942-8933
Fax 616-942-8934
charlie.baird@tradesmeninternational.com

WMSA Green Jobs Skills Alliance

The West Michigan Strategic Alliance (WMSA) is launching a new initiative to create the West Michigan Green jobs regional Skills Alliance(RSA) focused on preparing and/or transitioning workers for jobs in the alternative energy sector. These are jobs related to manufacturing and installation of components used in alternative energy, such as solar panels, or the production of alternative energy, such as technicians at the wind-power generating site. Please read the attached letter for more information and contact the West Michigan Strategic Alliance at 616-356-6060 to learn more about the Green Jobs RSA.

Natalia Powers
Events Manager
The Right Place, Inc
616-771-0327
PowersN@rightplace.org



**Green Jobs RSA
recruiting letter.pdf**

I hope this information was helpful

Best Regards,

Dan Radomski
VP, Industry Services
NEXTENERGY

461 Burroughs
Detroit, MI 48202
P: 313-833-0100 ext. 150
F: 313-833-0101
danr@nextenergy.org

[Subscribe free to receive NextEnergy's monthly e-newsletter...the Michigan Energy Report](#)

<http://www.wwj.com/pages/9363.php>