



The MAREC Minute

Winter 2011: Volume 3, Number 1



The Michigan Alternative & Renewable Energy Center (MAREC) is a program of Grand Valley State University. MAREC is part of the Muskegon Lakeshore SmartZone, a joint venture with the City of Muskegon, Grand Valley State University, and the Michigan Economic Development Corporation.



From The Director

These are exciting and “energizing” times at MAREC. Some highlights:

Working with West Michigan Energy, an important regional coalition of public and private energy interests, the ChargePoint America program has brought the first electric vehicle (EV) charging station to the Muskegon lakeshore region. Installed at MAREC in late December, this first unit will be used to demonstrate and promote EV charging technology as electric vehicles begin to arrive in West Michigan.

In late 2010, MAREC was designated as an official Michigan Energy Demonstration Center. MAREC will become more actively involved in educating Michigan’s citizens about energy issues.

And the pace continues.....

- In January, MAREC was certified by Ohio as qualified to sell its solar energy credits (S-REC’s) as a renewable energy commodity.
- An incubator development grant was awarded by the Michigan Economic Development Corporation.
- Established a partnership agreement with CENER, a Spanish renewable energy research center.
- Hosted first “Made in Michigan” renewable energy technology show in March.
- Planning is underway for a student-focused energy fair in May.

In the meantime, major milestones have been reached making the launch of the Offshore Wind

Partnership with CENER Brings New Opportunities

A new partnership agreement with Spanish renewable energy research center CENER (Centro Nacional De Energias Renovables), will lead to more comprehensive wind energy and other energy related research at MAREC.

CENER, based in Pamplona, Spain, will provide MAREC with a connection to Europe which is more advanced in the areas of wind and many other renewable energy developments. Joint efforts to be worked on include Lake Michigan wind research and advanced energy storage technology. The wind research will lead to developing advanced wind data mapping technology, something never been done on the Great Lakes.

The new efforts at MAREC will be



From left: Steve Bakkal, MEDC; Arn Boezaart, MAREC; Javier Armendariz, CENER; Bruce Thompson, Rockford/Berge'; and Lindsay Eister, MEDC.

closely coordinated with GVSU’s Padnos College of Engineering and Computing where data collected from the studies will be collected and analyzed.

The new partnership was arranged with assistance from the Michigan Economic Development Corporation and West Michigan Energy.

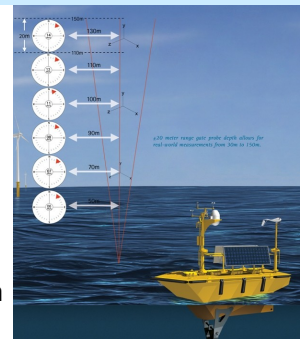
GVSU / MAREC and U of M to Launch Lake Michigan Wind Study

MAREC at Grand Valley State University has received federal approval to proceed with the purchase of an offshore research platform that will support a groundbreaking Great Lakes wind assessment research project.

The university has ordered a floating buoy / research platform manufactured by AXYS Technologies, Inc. of Sidney, British Columbia.

Working in partnership with the University of Michigan Phoenix Energy Institute the project will deploy state-of-the-

art laser wind sensing technology along with other instrumentation mounted on the buoy that is scheduled for deployment on Lake Michigan in September.



The buoy will come equipped with a Vindicator laser wind sensor manufactured by Catch the Wind of Virginia.

(Continued on page 2)

Assessment Project a reality, as our cover story explains.

This issue expands on these and other projects. We continue to work diligently and will share the

results of our accomplishments as we pursue our vision for a sustainable energy future.

Arn Boezaart, Director

Offshore Wind Research

(Continued from page 1)

"This is the first time this advanced technology will be deployed on the Great Lakes," notes Arn Boezaart, director of MAREC. "The WindSentinel will provide extended season, real-time, in-the-water data using the most advanced wind testing equipment. The flexibility of the buoy and the savings compared to constructing an offshore meteorological (met) tower will provide a new level of research capacity able to assess Great Lakes wind potential."

For more, see www.gvsu.edu/marec.



An AXYS WindSentinel research platform buoy will be deployed in Lake Michigan this September.

Electric Vehicles Have Arrived!



In March, the first electric vehicles—Chevrolet Volts—visited MAREC and were "powered up" by the Coulomb Technologies charging station made available through the ChargePoint America program. For more, visit www.gvsu.edu/marec.

Grant to MAREC expands Energy Business Program

With a \$100,000 grant from the Michigan Economic Development Corporation (MEDC), MAREC will increase its capacity to recruit and assist entrepreneurs, business start-ups, and early-stage businesses with an emphasis on energy-related technologies, products, and services.

As part of the state's 21st Century Jobs Fund program, the MEDC grant will fund a part-time incubator manager and support services including legal and technical consultation. The grant also provides limited seed capital for MAREC clients, and will enable MAREC to develop additional incubator work spaces.

"One of the best ways MAREC can help develop Michigan as a leader in technology and alternative energy is to support business start-ups and new ventures, and to emphasize energy innovation," said Arn Boezaart. MAREC is currently home to five businesses: Smart Vision Lights, Logical Lighting Systems, Energy Partners, and McKenzie Bay International, and a field office for Scandia Wind.

New Business Consulting Team for MAREC and Lakeshore Region



Eric Seifert
Finance and Strategy
Specialist
seiferer@gvsu.edu
616-331-6900 or 231-722-

Since last March, Seifert has served as a full-time consultant with the Region 7 MISBTDC office, serving MAREC two days a week with consultation and business development support to incubator tenants, Muskegon area small businesses, new venture companies, and area entrepreneurs.

He will continue to serve Muskegon and lakeshore area businesses as the finance and strategy specialist for Region 7, a position created under the federal Small Business Jobs Act of 2010. Seifert is a long-time area entrepreneur, banking executive, commercial lender and SBA loan specialist.



Doug Huesdash
Incubator Manager/
Business Consultant
h.doug@rightdirection.cc
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With 25 years of experience as a service provider, a manufacturer, and an entrepreneur, Doug Huesdash, CPA, is well-suited to serve clients at MAREC as its new incubator manager and business consultant with MISBTDC.

"As an entrepreneur for 18 years, I started and grew two companies, made acquisitions, managed as many as 50 people, and took out three patents. Before that I worked in public accounting focusing on privately held businesses," Huesdash said. In 2008, he formed Right Direction and Solutions LLC, a business advisory services firm. Doug is also working on his MBA at GVSU, because "learning never ends," he says.

Connect with MAREC!

- Sign up for our **email newsletter**.
- Check out our **website** at www.gvsu.edu/marec
- And check us out on **Facebook!**

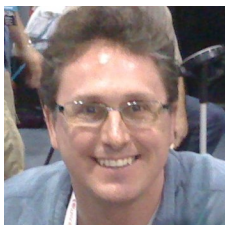
Contact Us

MAREC

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Incubator Profile: Logical Lighting Systems, LLC



Jason Jespersen
CEO of Logical
Lighting

Logical Light-
ing Systems,
LLC became a
MAREC incu-
bator client in
September,
2009. Through
the use of high
efficiency, envi-
ronmentally
friendly lighting

options and sophisticated electronic control and monitoring systems, Logical Lighting Systems plans to move its LED technology beyond residential use into workplaces and public spaces including malls, hos-

pitals, office buildings, and outdoor municipal lighting.

Company CEO Jason Jespersen said that while public attention has fo-
cused on residential conversion from incandescent and fluorescent lighting to more efficient sources, Logical Lighting Systems will address the

enormous potential for energy and cost savings in the country's work places and public spaces by using energy controls systems and monitor-
ing equipment.

For more information, go online to logicallylightingsystems.com/.

Winter Lunch & Learn Series Expands Energy Knowledge

Our free monthly public lecture series continues one Wednesday per month over the lunch hour at MAREC, from 12:00 to 1:00. Bring your lunch and enjoy a beverage and tasty dessert on us!

On April 27, Dr. Paul Isely from Grand Valley State University's Economics Department will speak on "The Cost of Wind." The results presented will be from an integrated assessment funded by Sea Grant and an analysis of wind energy funded by the Seidman College of Business. Please **RSVP** by phone or online.



Mark Clevey

Recent speak-
ers include
Mark Clevey
from the State
of Michigan's
Bureau of En-
ergy Systems
and **Greg
Marczak**,
chemist and
patent holder
from Muske-
gon Commu-
nity College.



Greg Marczak

Made In Michigan Renewable Tech Showcased at MAREC



Businesses and citizens found a cross-section of Michigan's "green" companies showcasing their technology as MAREC hosted its first Made in Michigan Renewable Energy Technology Show from March 21 to 23.

The show sought to bridge the gap between Michi-
gan-based vendors of energy products and custom-
ers; it also helped raise awareness of Michigan's
role in building and supplying the "green" economy.

For more about the show and plans for next year,
visit www.gvsu.edu/marec.



Clockwise from left: Guests discuss technology with vendors. Valley City Sign of Muskegon presented its innovative solar PV panel racking system. Above, MAREC's Kim Walton, program coordinator and show organizer, is interviewed by Jeff Stipes of Muskegon Community College.

Closing the Circuit: A Parting Shot



Marcia Saunders, St. Joseph County EDC (left), and Diane Tracy, University of Michigan, took part in an Alternative Energy roundtable, led by MAREC Director Arn Boezaart (center). The roundtable was part of "The New Economy," a forum held February 17 in Kalamazoo and sponsored by the Business Review West Michigan.

Photo by Sam Zomer.

CALENDAR AT A GLANCE



MAREC and MI-SBTDC:
Business Services for Muskegon and the Lakeshore

MAREC is pleased to collaborate with the Michigan Small Business & Technology Development Center™ (MI-SBTDC™). This agency provides counseling, training, research and advocacy for new business ventures, existing small businesses, and innovative technology firms. Headquartered at GVSU with services offered at MAREC in Muskegon, MI-SBTDC™ provides:

- Individual business counseling
- Small business education workshops
- Market research
- Biz Resource Center
- Link to small business resources

For more information call: 231.722.4371

Upcoming Courses at MAREC

April 26: Fundamentals of Business: Legal Issues

May 24: Fundamentals of Starting a Business

June 28: Fundamentals of Financial Management

Register online at misbtcd.org/training or call 616-331-7370.

LUNCH & LEARN AT MAREC



April 27: The Cost of Wind

Speaker: Paul Isely, Ph.D., Economics Department, Seidman College of Business, GVSU

Attendance is free; program begins at noon at MAREC. Please RSVP prior to each event by calling 616.331.6900. See www.gvsu.edu/marec for details.

FOR TEACHERS:

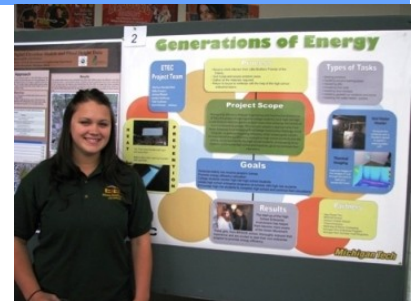
Alternative Energy Professional Development
Kent ISD, GVSU MAREC & GVSU Continuing Education

May 2 & 3: Environmental Policy and the Triple Bottom Line (Grand Rapids)

To register, visit gvsu.edu/pdp "Alternative Energy Program."

The RE-Fair @ MAREC May 21, 2011, 9:00 a.m. - 4:00 p.m.

The Renewable Energy Fair (RE-Fair) will showcase upper high school and community college student projects and the renewable energy or sustainability projects which they have completed throughout the school year.



The projects will be judged by a panel of experts and cash prizes will be awarded. This promises to be a fun and lively event. Watch for details at www.gvsu.edu/marec or contact Kim Walton at waltonk@gvsu.edu or 616-331-6907.

Teen Entrepreneurship Summer Academy

July 18-22, 2011, 9:00 a.m. - 3:00 p.m.

GVSU's Center for Entrepreneurship and Innovation is holding a Teen Entrepreneurship Summer Academy at the Michigan Alternative and Renewable Energy Center.

Designed for high school students entering grades 9-12, the Academy is focused on growing awareness about small business and entrepreneurship opportunities in West Michigan.

During the week-long program, students will:

- have the opportunity to develop an entrepreneurial idea for a sustainable business
- learn about the elements of business and entrepreneurship
- hear guest speakers from businesses and universities

Each team of students will pitch their idea to local business professionals for a chance to win part of the \$1,000 in cash prizes!

Registration fee is \$50.00; some scholarships are available.

Registration is due June 1 and is available online at www.gvsu.edu/cei.

For more information, contact Eric Seifert (seiferer@gvsu.edu) or Kim Walton (waltonk@gvsu.edu) at 616-331-6900.



Questions? Visit www.gvsu.edu/marec/