



The **MAREC** Minute

Summer 2009 : Volume 1, Number 1



**GRAND VALLEY
STATE UNIVERSITY**
MICHIGAN ALTERNATIVE AND
RENEWABLE ENERGY CENTER

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.

A message from the Director

We are pleased to share with you this first edition of *The MAREC Minute*, a publication of the Grand Valley State University Michigan Alternative and Renewable Energy Center (MAREC). We have designed this quarterly publication to keep you informed of program developments and activities at MAREC. We continue to advance MAREC's principal goal of advancing economic development in the Muskegon area and contributing to making West Michigan and the State of Michigan recognized leaders in the development and application of renewable and alternative energy related technologies.

The LEED certified (Gold) MAREC facility officially opened in the fall of 2003, following the efforts of a broad-based local and regional partnership led by the City of Muskegon, Michigan Economic Development Corporation and Grand Valley State University. Additional community partners including the Community Foundation for Muskegon County, Muskegon Area Chamber of Commerce, Muskegon Area First and many others also contributed significantly to making the vision of Michigan's first alternative and renewable energy center a reality on the Muskegon lakeshore.

After almost six years of operation and some noteworthy successes, several cornerstone program components have developed. Consistent with the original vision, MAREC provides economic development support to the region in the area of renewable and alternative energy. The advancement of alternative and renewable energy education is a priority that increases the knowledge base of our work force and promotes business development. Consultation and support for entrepreneurial start-ups is an important program element that has recently been strengthened (see following story). In addition, with 4000 sq. ft. of incubation space, MAREC provides development opportunities for select business start-ups and innovative projects. Together these activities and services contribute to a more sustainable and vibrant future for the lakeshore and the region.

~ **Arn Boezaart**, Interim Director (boezaara@gvsu.edu)



T. Arnold (Arn) Boezaart

Inside This Issue

Stakeholders gather to take MAREC to the next level	2
Cook brings new energy to MAREC	2
Small Business, Our Business	3
MAREC host sustainability group	3
GVSU seated on Governor's Wind Council	4
Cutro in the classroom	4

Contact Us

MAREC

200 Viridian Drive
Muskegon, Michigan 49440

Phone: (616) 331-6900
Local Phone: (231) 722-4371
Fax Number: (616) 331-6910



**GRAND VALLEY
STATE UNIVERSITY**
MICHIGAN ALTERNATIVE AND
RENEWABLE ENERGY CENTER

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.

Stakeholders gather to take MAREC to the next level

Since November, stakeholder groups with a vital interest in the future of MAREC have been meeting to exchange ideas and to help sharpen the vision for MAREC's future. As the field of alternative and renewable energy continues to rapidly evolve, grow and mature, new strategies and efforts are needed to help MAREC keep its efforts linked to activities that will help to develop Michigan's skills and talents for the future.

Under the leadership of Jim Bachmeier, GVSU vice president for Finance and Administration, a *MAREC SmartZone Leadership Group* consisting of Muskegon area and regional stakeholders and university leadership has been formed to provide guidance on future program focus and design. In addition, work groups with a special emphasis on *Economic Development, Education, and Funding & Legislation* are also meeting to provide the larger leadership group with specific ideas and recommendations that will help shape and finalize the program planning process underway.

During the next round of meetings scheduled for completion in June, specific recommendations and program direction ideas generated by the stakeholders will be reviewed and discussed. The results of these planning efforts will be documented and used to help guide MAREC to the next level of programming and leadership in advancing opportunities in the areas of alternative and renewable energy. Your voice and vision counts too - please share your ideas and innovations with us and become part of the conversation!

Cook brings new energy to MAREC

In recognition of the exponential growth and interest in alternative and renewable energy technologies and related business opportunities, additional talent has been added to the MAREC work force.

Beginning June 1, Rich Cook, Venture Center Director at the West Michigan Science and Technology Initiative (WMSTI), will spend two days each week at MAREC. "Our goal is to take the MAREC incubator and related entrepreneurial consulting program to the next level. Rich has unique skills and talent that will help us get there," said Arn Boezaart, Interim Director of MAREC.

With his work experience at WMSTI and his professional credentials, Cook comes to MAREC as one of the top business incubator and business consultants in the region. Cook is the former CEO of X-Rite, Inc. He has also worked in diverse markets including software, instrumentation, office furniture, aerospace, display, computer peripherals, business machinery and solid waste disposal. He has also taught at Hope College and GVSU.

The MAREC facility presently houses the Smart Vision Light Company, a successful LED lighting start-up company. Incubator tenants who have recently left following successful completion of their start-up activities include Earthtronics (wind turbine development) and Entec Biogas USA (agricultural biogas plant) in partnership with den Dulk dairy farm, LLC.



Rich Cook



**GRAND VALLEY
STATE UNIVERSITY**
MICHIGAN ALTERNATIVE AND
RENEWABLE ENERGY CENTER

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.

Small Business, Our Business

The Michigan Small Business & Technology Development Center (MI-SBTDC), affiliated with the GVSU Seidman School of Business, recently expanded its presence at the MAREC facility with additional meeting and office space. The MI-SBTDC staff provides a full range of services for small and emerging businesses, technology start-up companies, and new venture innovators. A wide range of services are available including business related counseling, training, and business research. The GVSU based regional office of MI-SBTDC provides services to Kent, Muskegon, and Ottawa counties. The MI-SBTDC state headquarters, also located at GVSU, provides services to small businesses throughout the 83 counties in Michigan. As the MI-SBTDC establishes a more significant presence at MAREC, more effective business development collaborations can be established that will benefit the Muskegon area as well the entire West Michigan region. Discussions underway between MI-SBTDC staff and other economic development resources linked to MAREC will benefit the business incubation and entrepreneurial program. Consistent with the original vision for MAREC, economic development will be at the forefront of planning for the future.

MAREC host Sustainability Coalition

Since 2007, the *Muskegon Area Sustainability Coalition*, a growing and diverse group of citizens and organizations committed to advance the principles of *Sustainability* throughout the Muskegon and lakeshore region, has been meeting monthly at MAREC. Sustainability is commonly defined as the ability to meet the needs of today without compromising the needs and resources of future generations. It is also viewed as an integrated focus on assuring economic prosperity, minimizing the negative impact of human activity on the environment, and promoting the values of social equity – a combination of values often referred to as the “triple bottom line” and recognized pathway to long-term community success.

The efforts of the Coalition have been formally recognized and endorsed by more than 30 for-profit and non-profit organizations, both large and small, throughout the greater Muskegon area. The Coalition is actively linked with similar efforts underway in Grand Rapids, Holland, and in the North Ottawa communities of Grand Haven, Ferrysburg, the Village of Spring Lake, and Spring Lake Township.

The Coalition recently accepted the offer of a permanent “home” at MAREC where it meets monthly at noon on the fourth Monday of each month. Participants gather to share information, explore new resource and program opportunities and to advance common knowledge of Sustainable community practices.

Did you know?

An ENERGY STAR qualified compact fluorescent light bulb (CFL) will save about \$30 over its lifetime and pay for itself in about 6 months. It uses 75 percent less energy and lasts about 10 times longer than an incandescent bulb. Replacing a single incandescent bulb with a CFL will keep a half-ton of CO₂ out of the atmosphere over the life of the bulb. If everyone in the U.S. used energy-efficient lighting, we could retire 90 average size power plants.





GRAND VALLEY STATE UNIVERSITY
MICHIGAN ALTERNATIVE AND RENEWABLE ENERGY CENTER

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.

GVSU seated on Governor’s Wind Council

During April 2009, the GVSU / MAREC program accepted an invitation to join the Great Lakes Wind Council formed earlier this year by Governor Jennifer Granholm. Arnold (Arn) Boezaart, recently appointed Interim Director at MAREC, will represent GVSU and the West Michigan region on the 25 member council. The new Wind Council serves as an advisory body within the Michigan Department of Energy, Labor & Economic Growth to examine issues and make recommendations related to offshore wind development in Michigan. The council consists of key state agency representatives and other stakeholders appointed by the Governor.

The council will look at ways to best engage the people of Michigan in a public dialogue about offshore wind and will identify criteria that can be used to review applications for offshore wind development. Working with staff support from Lansing-based Public Sector Consultants, the council will provide a full report to the governor in September of this year.

Did you know?

Michigan ranks 14th in terms of wind energy potential, but is currently well behind other states in terms of installed wind generating capacity. There are two utility-scale wind turbines currently operating in Michigan – two in Mackinaw City and one in Traverse City, which together account for 2.4 megawatts of installed wind energy. In addition to this, there is a commercial wind farm in Huron County that provided 53 megawatts to the regional grid.

Cutro in the classroom

George Cutro, systems engineer at MAREC since 2003, has recently added the role of classroom teacher to his growing list of professional credentials. This past semester, Cutro taught a 200-level course *Applied Alternative and Renewable Energy*. This course offered through Muskegon Community College and taught at MAREC covers the basic operating principles, benefits and challenges of traditional, alternative and renewable energy. In addition, an overview is provided of the economics and politics related to the various forms of energy generation. Cutro noted “the course presents not only the technical aspects of varied forms of energy generation, but helps students understand the economics and public policy challenges of establishing new forms of energy generation.”

Building on the success of the efforts to date, discussions are underway with Muskegon Community College to explore the possibility of developing additional renewable energy related curriculum and courses. The goal is to make it possible for students to earn state certification and possibly two-year degrees in the field of renewable energy technology.

