



Minnesota Renewable Energy Society

connecting minnesotans with renewable energy resources

The Solar Flare

e-Bulletin from the Minnesota Renewable Energy Society

May 2009

May 2009 Highlights - (See details in following pages)

- May 2009 Member & Board Meeting – May 14
- Solar Boat Regatta – May 16
- Solar Thermal Technology Workshop – May 18
- Green by design – June 10-11
- Small Footprint Living Fair – June 12-13
- Introduction to Renewable Energy Options & Opportunities – July 18

Upcoming Events

May 2009 Member & Board Meeting

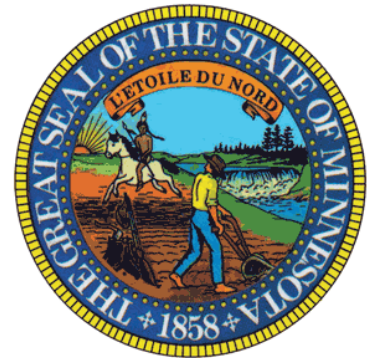
Thursday, May 14, 2009

6:00 PM – Guest Speaker

7:00 PM – Board Meeting

Location: Flannery Construction

[1375 St. Anthony Avenue, St. Paul, MN](#)



At the meeting, we'll hear from three members of the MRES family who'll discuss current solar-related bills brought forward during the current MN legislative session, and ponder the local implications of the federal stimulus package. Lynn Hinkle will look at some significant impacts of the American Reinvestment and Recovery Act (ARRA) on both demands for solar and manufacturing of solar-related products; he'll also explore some of the ways federal stimulus dollars are being channeled by the state, and the positive impact of some other state-generated legislative actions. Christopher Childs and Ralph Jacobson will talk about several specific MN bills with direct and indirect application to solar, and give an overview of the legislative session to date and its work -- or the absence thereof -- on key energy and climate-related policy matters. More information about the speakers is available on the [MRES website](#).

Solar Boat Regatta

Saturday, May 16, 2009

10:00 a.m.—4:00 p.m.

Beach at Phalen Park, Wheelock Parkway and Phalen Drive, St. Paul

The Minnesota Renewable Energy Society (MRES) and Great River Energy are pleased to announce the 17th Annual Solar Boat Regatta!

MRES' Solar Boat Regatta provides an opportunity for middle and high school students (as well as individual boat builders) to build a boat that runs on solar power. They compete in a number of races, culminating with a one-hour endurance race. This event has given hundreds of junior and senior high school students valuable and unique experience with solar electricity, wiring, motors, fluid dynamics, boat design, construction, and teamwork. By racing the solar powered boat that they have put together, students experience the thrill of competition and the pride of accomplishment that comes with creating something useful and fun.



Javier Monesterio - 2008
Winner of Experimental Class

MRES partners with teachers and teacher organizations to enhance the competitive nature of the event, expanding the number of schools participating, and extending solar education throughout the school year.

For 2009, the race will take place at Phalen Lake in St. Paul, MN. There is another event (Waterfest 2009) happening on the same day on this lake and we hope to increase attendance and interest in our event by sharing the lake. Waterfest is happening down the shoreline, so it will not affect the Regatta. The event is free and open to the public; however, there is a fee to enter a boat in the races.


Volunteers are needed. For questions about the Solar Boat Regatta, visit www.SolarBoatRace.net or contact the Minnesota Renewable Energy Society at regatta@mnRenewables.org or (612) 308-4757

Solar Thermal Technology and Installation Workshop

Monday, May 18, 2009

8:30 AM to 4:30 PM

Melva Lind Interpretive Center
Gustavus Adolphus College
St. Peter, MN

GUSTAVUS 

GUSTAVUS ADOLPHUS COLLEGE
Johnson Center for Environmental Innovation
800 West College Avenue
St. Peter, MN 56082

The Johnson Center for Environmental Innovation has been awarded a grant to install a solar thermal system at the Melva Lind Interpretive Center on the Gustavus Adolphus Campus. As a part of the project James Dontje, PhD, committed to lead the workshop and help potential installers understand the technology and applications. The fee for the workshop is \$25 and scholarships are available to unemployed related trades people. For questions or to register, you may also contact James Dontje (jdontje@gustavus.edu, (507) 933-7206) or Shirley Mellema (shirley@gustavus.edu, (507) 933-6181) Johnson Center for Environmental Innovation Gustavus Adolphus College, 800 West College Avenue, St. Peter, MN 56082

Green by design

Fourth annual statewide conference

June 10 and 11, 2009

The Depot · Minneapolis

Presented by:

Minnesota Green Communities

Keynote Speaker: Hunter Lovins



The 4th annual statewide Green by Design conference and training is aimed at providing housing developers, builders, contractors, architects, city planners, environmentalists, funders, and other professionals the tools needed to build energy efficient, healthy, and sustainable housing. Multiple tracks will be offered, including sessions by local and national experts that focus on various elements of the Green Communities criteria (a set of nationally recognized green affordable housing standards) and other related topics. Examples of successful green building projects, including both multifamily and single-family developments, new construction and rehabilitation, will be highlighted throughout the conference.

Topics of interest include: Residential Green Building • Minnesota Housing Green Funding Requirements • Green Rehabilitation • Ensuring Healthy Homes and Communities • Green Opportunities and Issues Surrounding the Foreclosure Crisis • Sustainable Land Use Planning • Equitable Green Economic Development • Green Building Materials • Energy Conservation and Climate Protection Strategies • Rural and Urban Greening Strategies • and other great topics on green building, design, and public policy.

Click here for more information and to register online at: www.mngreencommunities.org/gbd

Introduction to Renewable Energy Options & Opportunities

Saturday, July 18, 2009, 8:30 AM to 5:00 PM (8:00 a.m. check-in)

Location: Flannery Construction, 1375 St. Anthony Avenue, St. Paul, MN

MRES offers Introduction to Renewable Energy (RE) Options & Opportunities: the course includes technology alternatives and options, including Solar PV (solar electric), Solar Hot Water & Space Heating, Passive Solar Hot Air Heating, Wind Energy, Energy Efficiency, RE environmental issues, RE costs, rebates & incentives, finance options, and RE career opportunities.



- Learn about energy efficiency and why it is important.
- Learn how RE impacts the environment.
- Learn basics about RE technologies and options, including solar PV (electric), solar hot water and space heating, passive solar and active solar hot air heating, and wind energy systems.
- Learn about RE costs; environmental issues; rebates, incentives, and financing options; and RE resources.
- Learn about RE installations in Minnesota: lessons learned and success stories.

This MRES class is intended for homeowners, community leaders, business owners, green and RE career seekers, people interested in RE, and the general public (intended for age 18 and over). Don't wait too long to register; this class has been very popular and has filled well before it begins.

[Course registration](#) and details are on the MRES website.

\$55 MRES members; \$75 non-members

The Small Footprint Living Fair

Fri. June 12 & Sat. June 13, 2009

10:00 a.m. to 4:30 p.m.

Cook County Community Center Arena

Grand Marais, Minnesota



The Small Footprint Living Fair is two full days of affordable workshops, demonstrations and vendors to help connect people with ideas for green living, energy, gardening, business and more. It features a collection of experts from Cook County as well as around Minnesota and Ontario to share their experiences and offer practical suggestions and ideas in four main areas: Green Building, Green Business, Alternative Energy and Sustainable Food.

The Small Footprint Living Fair also offers a variety of free events, including a film festival with refreshments provided from 7:00 - 9:00 p.m. Friday, hands-on projects and tours, a book fair offering great sustainable book titles at cost, and an exhibitor and craft fair, open daily from 10:00 a.m. to 4:30 p.m. daily. All of the demonstrations and workshops are either free or offered at a small fee.

More information, a full list of events, workshops and speakers, as well as registration information, is available at <http://co.cook.mn.us>, through Diane Booth, Cook County Extension director at 218-387-3015, or committee members: Tristan Beaster, Joan Farnam, Cindy Gentz, Max Linehan, Bonnie MacLean, Melinda Spinler, Melanie Steele, Rebecca Wiinanen and Kathi Whittet.

Minnesota Legislature Passes Energy Bill; Other Energy Bills Eminent

SAINT PAUL, Minn. - May 12, 2009 - Three pieces of state legislation, among others, are in process and important to Minnesota solar energy development:

[HF 2123](#) (Environment and Natural Resources Finance) passed legislature and is being reviewed by governor's staff (includes \$400,000 for year 1 for solar rebates).

[SF 550](#) (Omnibus Energy Bill) energy policy bill is in joint Senate and House conference in this week.

[SF0657](#) (Federal stimulus energy programs funding direction) and HF0680 (companion) contains provisions for solar from federal energy stimulus bill - in conference now.



Living Green Expo May Have Set Another Attendance Record

At the award-winning [Living Green Expo](#), May 2 and 3 at the State Fair Grandstand, people learned everything from how to compost and reduce toxicity in your home, to how to find the latest energy-saving technology, to how to cook with organic, and locally grown food.

In addition to 270 exhibitors and 62 workshops, kids' activities, music, cooking demonstrations, alternative vehicles, and renewable energy demonstrations, the 2009 Living Green Expo featured:



The event set an attendance record in 2008, and it's believed that another attendance record was set in 2009. The aisles between the exhibits were packed with attendees, especially on Saturday.



People crowded around the MRES exhibit at Living Green Expo

MRES Members Speak-out on Earth Day



David Boyce speaking at Edina Highlands elementary school on Earth Day



Ralph Jacobson speaking to School of Environmental Studies (SES) students in Apple Valley on Earth Day



Pat Dreese giving Earth Day talk at St. Paul College



St. Paul College students contemplating Pat's talk



Doug Shoemaker at Lockheed Martin on Earth Day



Earth Day at Lockheed Martin had over 300 professionals attending



MRES member Laura Cina at Elk River Expo - 350 attending

Rent Solar Cart



Rent portable solar power

Rent Solar PathFinder



Solar PathFinder - No cost loan to MRES members!

Rent Solar Trailer

[IPS Solar](#) and MRES have joined efforts to build the most versatile power supply in the state. The Solar Power Trailer is both an educational tool and a fully functioning power source that can provide quiet, clean, renewable solar power to any site. Use it for remote power at family reunions, picnics, church, or school events. [Minnesota MPCA](#) donated the PV panels to upgrade the Solar Trailer to 1.664 Kw, and [Mario Monesterio of Westwood Renewables](#) donated the labor to install the recent upgrade with the new PV panels.

Examples of What the Trailer Can Power:

- A concert for 5,000 people
- A small carnival
- Up to 25 trade show booths
- Temporary telecom sites
- About 5 concession stands
- About 200 laptop computers

Trailer Specifications:

- PV array rating 1664 watts (newly upgraded)
- 2 Trace SW4024 inverters (4 Kw at 48 volts)
- Battery bank rating 440 amp-hours = 21,120 Kwh
- 40 amp max at 110 vAC capacity
- Usable total battery capacity: 16,896 Kwh
- 10-volt 30-amp circuit breaker for larger concert equipment
- Approximate trailer weight: 3,000 pounds



MRES Solar Trailer

To [rent the solar trailer](#), solar cart, or solar pathfinder - contact David Boyce at (651) 324-1642 or DavidB@mnRenewables.org

Copyright © 2009
All Rights Reserved.
For material use permission, please contact us:
Minnesota Renewable Energy Society
2928 5th Avenue South, Minneapolis, MN 55408
(612) 308-4757



www.mnRenewables.org

MRES Solar Flare
Editor: Jan Hubbard
Associate Editor: Doug Shoemaker
For comments, suggestions, or
story submissions, contact:
JanH@mnRenewables.org or
DougS@mnRenewables.org