



NEWSLETTER - POTOMAC REGION SOLAR ENERGY ASSOCIATION

April 28, 2007

P.O. Box 3315, Annapolis, MD 21403
<http://www.prsea.org>

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General Membership Meeting Announcement

Time: Saturday, May 26, 2007, from 10:00 AM until Noon

Location: The Enviro Center
7761 Waterloo Road
Jessup, MD 20794
<http://www.enviro-center.com/contact/php>
(443)733-1212

Speaker: Tom Whipple

The Enviro Center is a full service executive office environment that was designed and occupied by builders and architects who desired green office space for their own companies. The Center incorporates many energy saving and sustainable design features including a "green" roof, passive solar cooling, hydronic solar heating, and extensive use of sustainable and recycled building materials. We will have a tour of the Center following the meeting.

Tom Whipple is a leading local authority on Peak Oil and writes a regular column on the subject for the Falls Church News Press. Peak Oil is the principle that, with time, the rate of oil production from a single field, a country, or the entire world reaches a peak and then inexorably declines as the supply is depleted.

Directions to the Enviro Center:

From the DC beltway take Interstate 95 North towards Baltimore. Exit south on Rt 175 (Waterloo Road) at Exit 41 A-B, toward Jessup. Travel about 1.4 miles, past the Maryland Wholesale Food Center. The Enviro Center is at 7761 Waterloo Road, on the left side of the road just past the intersection with Oceano Avenue. There is a parking lot next to the building. For a map to the Enviro Center see the link shown above.

Meeting Agenda

Introduction and welcome
PRSEA business and future planning
Presentation
Tour of the Enviro Center

PRSEA Chairman
General membership
Tom Whipple
General membership



The MIT-AZTEC solar race car, currently being restored by EVADC, was on display at the Fall PRSEA meeting in Mclean, Virginia. Many kids were seen dragging parents over to see this fascinating car, and a lot of bigger “kids” also were attracted. Thanks to John Clinton and Charlie Garlow for transporting and showing the car. More information can be found at: <http://www.EVADC.org>.

Notices:

All PRSEA members are requested to confirm/update their email addresses by sending a message to input@prsea.org. Please include the subject line: “PRSEA update”, so that your message is not accidentally treated as spam. We would like to ensure that email communications reach everyone, so that important notices and event announcements do not have to rely on physical mailings.

In order to make the PRSEA website more interesting and informative, members are requested to help provide new web content. For example, do you have a solar energy system? Would you be willing to describe your system and include a few photos to help illustrate solar equipment and principles? Maybe there is some aspect of the equipment/design that you especially like (or don't like)? Other ideas for website content are also welcome. Send information to Jim Crowley at input@prsea.org.

Energy Explorations

by Jim Crowley

I admit to being somewhat obsessed with saving energy, which probably explains why I have used my handy Kill-A-Watt™ meter to measure the energy usage of every single electric appliance and gadget in our (fortunately small) house. There have been some surprises along the way, one of which is discussed here.

Like many homeowners we have a dehumidifier in the basement. It runs automatically and is largely out-of-sight and

out-of-mind. You can imagine my shock when the dehumidifier (measured over a period of one week to account for on-off cycling) turned out to be my second highest household electricity consumer, exceeded only by the electric hot water heater!

Now, I should mention that we use air conditioning rather sparingly compared to most people and that much of our heat is supplied by a woodstove. (It helps that the

house is superinsulated, but that is another story). The dehumidifier is similar in energy usage to a window air conditioner, except that the dehumidifier operates for a much longer time period—essentially the entire year except for a few months during the dead of winter. The bottom line is that our dehumidifier was consuming about 6 KWH per day for about 250 days per year.

A bit of research on the Energy Star website revealed that there are considerable differences in dehumidifier efficiency, denoted by their "energy factor", which is a measure of the number of liters of water condensed per KWH of energy

consumption. Armed with this information I purchased a new dehumidifier with an energy factor of 2.5, which should be about 60 percent more efficient than my old unit. In theory, this should save about 2 KWH per day in operation, or roughly \$55 per year (assuming \$0.11 per KWH cost of electricity).

This savings certainly will help to pay for another new dehumidifier when the time comes in 10 years or so. More importantly, it helps to reduce unnecessary energy consumption and environmental degradation. A good deal by any measure!

Upcoming Events:

May 5 and May 7-11, 2007: **Baltimore Green Week**, Baltimore, MD. Starts with an Ecofestival on May 5, 2007, in Druid Hill Park. <http://baltimoregreenweek.org/page.php?id=1>.

June 2, 2007: **Piedmont Alternative Energy Expo**, Warrenton, VA. 9 a.m. to 4:30 p.m. at the Fauquier County Fairgrounds, 6209 Old Auburn Rd, Warrenton, Virginia. Admission is \$5 per adult, children and students admitted free. http://www.rlep.org/programs/expo2007/expo_home.htm.

July 7-12, 2007: **Solar 2007, the ASES National Solar Energy Conference**. Will be held at the Cleveland Convention Center, 500 Lakeside Avenue, Cleveland, Ohio 44114. <http://www.ases.org>.

October 6-7, 2007: **17th Annual Tour of Solar Homes and Buildings**. <http://www.solartour.org>.

October 12-20, 2007: **Solar Decathlon**, on the National Mall, Washington, DC. http://www.eere.energy.gov/solar_decathlon/.

To join, mail this form with your annual dues to:
Potomac Region Solar Energy Association (PRSEA)
attn: PRSEA Membership
P.O. Box 3315
Annapolis, MD 21403

**I would like to join the
Potomac Region Solar Energy Association.**

Enclosed is my check for one year annual dues:
(please check appropriate member category below)
____ Student (\$10.00); ____ Educator (\$15.00);
____ Individual (\$25.00);

Please send correspondence to my ____Home ____Business address *(please check one)*.

Name: _____ Title: _____

Occupation: _____

Business Name (if applicable) _____

Work Address

Street: _____

City: _____ State: _____ Zip/Postal Code: _____

Home Address:

Street: _____

City: _____ State: _____ Zip/Postal Code: _____

Phone: (____) _____ Fax: (____) _____ E-mail: _____

Primary areas of interest (include additional sheet if necessary): _____

Member of American Solar Energy Society (ASES) ____Yes ____No.

I am also a member of the following groups:

