



Louisiana Solar  
Energy Society

## Summer 2009 Newsletter

### In this issue:

- Solar Tour 2009
- Upcoming Events: Solar 101 Workshop and more
- Louisiana Home travels to Solar Decathlon
- Update on Solar Laws
- New Technology: A Look at Micro-Inverters
- Meet the new LSES Sponsors
- Energy Efficiency: Spray Foam

## Save the Date! National Solar Tour October 3, 2009

Louisiana's 9<sup>th</sup> annual Solar Tour will be Saturday, October 3, 2009 from 11 am to 2 pm. This is a one day event where Louisiana residents all across the state open their homes to the public to show the public their systems. It's a great time to meet real people who use solar power to make their homes more efficient and lower their utility bills, network with other solar enthusiasts, and ask questions! The Louisiana Solar Tour is in conjunction with the American Solar Energy Society Solar Tour.

Would you like to be a Solar Tour home? If you're interested in having your home or business registered with the tour please quickly contact Rebecca at [rebecca@lses.org](mailto:rebecca@lses.org).

**List of Homes: Check out website for updates, new locations added weekly!**

### Alexandria

Kenny Ussery  
252 Donald Circle  
Alexandria, LA 71303

### Baton Rouge

Jeff Shaw  
5741 Menlo Dr.  
Baton Rouge, LA 70808

Jim Miller  
11233 Charington Ave.  
Baton Rouge, LA 70815  
Dorothy Prowell  
2230 Tulip St.  
Baton Rouge, LA 70806  
2.4 kw (14 panels) & battery backup (4 batteries)

Gulf South Solar  
4836 Revere Ave.  
Baton Rouge, LA 70808

**False River**

Brian Pangburn  
1720 False River, LA 70760  
Type of System: 4.6kW Grit Tie Using Micro-inverters

**Haughton**

Jeremie Branton  
30 Hal Sutton Dr.  
Haughton, LA 71037

**Holden**

Richardson  
31736 Tickfaw Acres Rd.  
Holden, LA. 70744  
Type of System: 6-kW Grid-Tie with Thin-Film Laminate Panels on Standing Seam Roof, Solar Hot Water Heater (120 gallon tank)

**Lake Charles**

Judy Reeves/ St Margaret Science Club  
2510 Enterprise Blvd  
Lake Charles, La 70601  
System: 1K Grid feed system  
Hours : 10:00 1:00

**Madisonville**

Bruce Betzer  
242 Stonebridge Cove  
Madisonville , LA 70447  
Grid-Tie 3KW  
Anytime after 9am

**New Orleans**

John and Jill Autin  
312 Olivier St.  
New Orleans, LA 70114

## Upcoming Events

### **Solar 101 Workshop**- Sign up Today!

Saturday, September 26 from 9am to 12pm.

Cost is \$75. Register by sending checks to LSES at 5261 Highland Rd. #217, Baton Rouge, LA 70808.

Please include your email address with your check and I will confirm your spot.

Location: Gulf South Solar: 4836 Revere Ave. Suite F Baton Rouge, LA 70808

Includes sessions on: calculating your needs, actual calculating session, solar system sizing and selection, solar installation and wiring, tax credit overview, Q & A with certified solar installers

**Baton Rouge Green Crawl** on October 1<sup>st</sup> from 5:00-8:00p.m. Travel all around Baton Rouge and get your "passport" stamped by participating green businesses from 5 to 8 pm and get your name entered into the drawing. Then meet at Chelsea's for a celebration and find out the winners



Sponsored by Chelsea's, Gulf South Solar, and Baton Rouge Advocates for Safe Streets, Baton Rouge Green, Forum 35, Mid City Bikes, The Recycling Foundation, Noelie Harmon, The Green Building Shop, STUN Design and Advertising, and the Louisiana Solar Energy Society.

For more information visit the Facebook page:

<http://www.facebook.com/search/?q=Green+Crawl&init=quick#/pages/Baton-Rouge-Green-Crawl/123356198143?ref=search&sid=63500759.2274924868..1> Check the Facebook page for a Green Crawl website page coming soon.

### **Sustainability Conference**

"Sustainability in Public Works: Building a Foundation

Friday, October 30<sup>th</sup> from 9am to 4pm.

Location: LTRC Transportation Training and Education Center. 4009 Gourrier Ave. Baton Rouge, LA 70808

\$25 for APWA members and government employees, \$50 for other attendees

Breakfast, lunch and break will be provided

Registration, directions, and agenda information are all available at the LA APWA Chapter Website at [www.louisiana.apwa.net](http://www.louisiana.apwa.net)

### **The Green Rebuilding of New Orleans Conference:** 4 Years Post Katrina

November 8<sup>th</sup> and 9<sup>th</sup>

Designed to promote an open discussion on the past progress and future continuation of green rebuilding practices since the storm.

\$55 General \$150 Professional \$40 Student Inquire about sponsorship opportunities, early bird specials and scholarships. Contact Jennifer Gross (504)861-4837. [Jennifer.Grosso@sierraclub.org](mailto:Jennifer.Grosso@sierraclub.org)

## BeauSoleil Home Brings LA Solar Work to National Level

**TEAM BeauSoleil** is the UL Lafayette team that was selected as one of only twenty teams from around the world to participate in the international design/build competition called the Solar Decathlon. The Solar Decathlon is a competition for teams of university students that compete to design, build, and operate an attractive, effective and energy-efficient solar powered house.



In late September 2009, college and university teams from around the world will join the competition's organizers and sponsors in Washington, D.C., to assemble a "solar village" on the National Mall. The home features an 8 kW PV system consisting of 39 Sanyo 205 and 195 watt panels and Xantrex inverters. In addition, the BeauSoleil Home has a closed loop solar thermal system for its domestic hot water needs. Finally, the home utilizes passive ventilation through its dogtrot/transitional porch, strategically-placed operable windows and solar orientation. The combination of active and passive systems is intended to render the BeauSoleil Home a marketable and viable hybrid alternative.

You are invited to attend the bon voyage celebration for its journey to DC. The event will be held at the United Way Complex at 215 East Pinhook Rd. on Thursday, September 17<sup>th</sup> from 6:30pm-9pm. Cajun music, jambalaya and drinks will be provided free of charge. For more information on how you can be a partner please visit <http://www.beausoleilhome.org>.

*Information and photograph courtesy of Geoff Gjerston, Team BeauSoleil Faculty Advisor*

## Governor Jindal Signs 3 Solar Bills into Law

Three bills made it through the House and Senate this past legislative session and were sent to Governor Jindal's desk for approval. We supported all three bills and are thankful that the governor signed all of them into law. Below is a breakdown of the updated solar laws for our state.

**House Bill 858** is an extension of our current law. The only thing that changed was the wording from "resident individual" to "taxpayer." This means that now anyone can finance the up front cost of the system, and they don't have to be the resident. i.e. 3rd party financing.

**House Bill 733** is a tax credit for the green jobs industry. How much the tax credit will be depends on how much the project is. For projects between \$100,000 and \$300,000 there is a tax credit of



10%, for projects between \$300,000 and \$1 million there is a 20% tax credit, and for projects greater than \$1 million there is a tax credit of 25%. No more than \$60 million in tax credits shall be granted for state certified green jobs per year.

**Senate Bill 224** is a creation of a sustainable financing district that can receive bonds to pay for the up front cost for improvements to a home or building for energy efficiency and/or adding renewable energy sources to a home or building. The term to repay the loan can't exceed 20 years.

## New Technology: A Look At Micro-Inverters



Technology is always evolving as individuals and companies work to improve current ones. A clear example of this is the creation of micro-inverters for solar installation. In October of 2008 at Solar Power International there was much buzz about this new product as Raghu Belur, co-founder and vice president of marketing at EnPhase, spoke about the new EnPhase Micro-inverters. Earlier this year solar companies like Suntech began to announce that they would offer EnPhase Micro-Inverter for solar installations. This new inverter has some significant differences to the standard large grid-tie inverter. Below is break down of pros and cons on this new product.

### EnPhase Micro-Inverters: Basic Facts

- 1 per solar panel, range from 175-190 Watts, cost \$215

- String them like Christmas lights (limit is 16 for 175 watt, 15 for 190 watt)

- Weatherproof connection

- Installed in one of the Make It Right project houses in New Orleans: Lower 9<sup>th</sup> Ward

- Constitutes a system for the LA tax credit (1 time Fed, repeat State)

- Built by telecommunications company

- Can order in 50/60 hertz

### Advantages:

- You can track individual modules for sun exposure and efficiency

- If shade knocks out one panel, the rest still produce unlike the larger inverter.

- Similarly, if one breaks, the others keep going.

- Communication built in- can monitor individual output by serial number

- Life span of 365 years (large inverter approx. 15 year lifespan)

- 99.8 % efficiency (large inverter has 96.8/97 % efficiency)

### Disadvantages:

- It takes 16-17 Micro-Inverters to do the same work of one large inverter.

- Costs \$3,600 for a 3,000 watt system (\$1,000 more than a single inverter)

- They must be individually grounded to meet code (difficult to check)

- Replacing them can be difficult because if there is one in the middle you have to

- Take the whole row off to get to it because they are under the panels.

- Not compatible with Evergreen (new model is)

### Monitoring System:

- Enlighten System costs \$ 500-600

- Handles 60 modules per box

- Box- 1 time fee

Monitoring service fee- 1,2,4 year subscriptions, a couple bucks per module

## New LSES Sponsors!

We would like you to meet our recent sponsors! Sponsors help keep LSES running so we can educate and promote solar energy statewide. Links to our sponsors are also posted on the LSES website.

LA Solar Pro sponsorship is only for solar installers in the state and requires a \$200 annual membership fee. They must be licensed in the state of Louisiana with a specialty in solar energy equipment, listed with the Louisiana Secretary of State Commercial Division as a business, and proof that they are certified through a national organization.

Professional sponsorship is for solar companies that are in the solar industry, but are involved in other aspects of the industry besides installation. Professional sponsorship is also for solar installation companies that are in the process of being certified, but don't meet the LA Solar Pro requirements yet. Membership costs \$100 annually.

### New LA Solar Pro



Based in Baton Rouge, Louisiana, Sunvolt Technologies is a renewable energy solutions provider, specializing in the design and installation of solar electric systems. For more information, please visit [www.sunvoltla.com](http://www.sunvoltla.com)

### New Professional Sponsor



Freedom Power, LLC has the experience to serve you by designing and installing custom solar electric, solar water heating and solar pool heating systems for all your needs, both residential and commercial, throughout the entire state of Louisiana. Freedom Power is fully licensed, bonded, and insured including general liability and workman's comp insurance. Please visit our website at [www.FreedomPowerLLC.com](http://www.FreedomPowerLLC.com) or give us a call at 318-549-0002 for more information.

## Energy Efficiency: Spray Foam

It's important when considering solar panel installations to also look at other ways your home can improve energy efficiency. Before looking to get solar or adding to your current system make sure that your home is already functioning with efficiency through proper insulation. Whether you are aware of it or not, the type of insulation in your home determines many factors that affect your day

to day life. Some of these factors include utility costs, the quality of the air, accumulation of moisture and the transfer of sound. The use of Polyurethane Spray Foam Insulation gives you control over these factors, bringing the quality of living up and bringing utility costs down. Some other benefits of Spray Foam Insulation are:

### **1. Air Quality & Circulation**

Since Spray Foam Insulation fills in the gaps and holes in the walls, it helps to keep out harmful allergens, fumes and outside moisture. This barrier keeps the air you breathe clean and healthy for the entire lifetime of the building because it does not settle or shrink.

### **2. Reduces Moisture**

Spray Foam Insulation also helps to protect your home from structural damage caused by wall condensation, mold and mildew. It's powerful control over the flow of moisture inhibits the traveling of moisture through the walls from things like bathing and washing. This prevents mold and mildew buildup in the walls, prolonging the life of your home.

### **3. Sound Reduction**

Spray Foam Insulation also provides a quieter, more comfortable home by reducing noise pollution from inside and outside your home. The walls are more solid, and sound does not travel as well, so noise from loud conversation, air conditioning systems and machinery can be reduced.

### **4. Reduced A/C Sizing**

Current methods for calculating a/c tonnage are based on years of experience and scientific trial and error. Since up to 70% of energy transfer is a result of airflow or "natural air exchange" much of what traditional a/c units do is replace and recondition a constant flow of outside air.

A home insulated with loose fill insulation; i.e. cellulose, fiberglass, or rockwool; could have a natural air exchange of 4 to 8 per hour. With foam the same home could have as few as 1 exchange per 8 hours. By eliminating excess airflow you reduce the heat load therefore reducing the size of a/c needed to condition it.

The use of Spray Foam Insulation can reduce the energy consumption in your home by as much as 50% by creating an airtight seal around your home, filling in all the small cracks and holes around electrical wiring and plumbing fixtures. This makes it easier to keep a steady temperature, relieves your heating and cooling equipment, and helps them to last longer.

*Article written by Shelia Harrison at Structure-Green*

**Call today and find out how Spray Foam Insulation can help reduce your current energy usage. Mention this article to receive a 15% discount off our regular prices.**



1-866-411-FOAM

## Monthly Meetings- Baton Rouge and Alexandria

### **The Great Wall** *Chinese Restaurant*



LSES monthly meetings in Baton Rouge are held at the Great Wall Restaurant on the first Monday of every month. These meetings are held for LSES members and non members alike that want to come out and talk solar. Our topics range from tax credits, to solar for hurricane power and much more. Our October meeting will be Monday, October 5<sup>th</sup>.

Considered to be the best Chinese food in BR, The Great Wall is located on College Dr. right off I-10 at the College Dr. exit (head south about a mile). Come enjoy the dinner buffet at 6:30pm and the meeting will be from 7-8pm. The meeting is free, but if you decide to eat, the buffet with drink, tax, and tip is \$12.39.

We now have expanded our meetings, and as of January 2009 will have monthly meetings in Alexandria at the Alexandria Library Offices on the third Wednesday of every month. The Alexandria Library Offices are located at 430 St. James Street and the meetings will be from 6-7pm.

## Got Solar On Your Mind?

If you would like to submit an article to be published in this newsletter, or an article idea, please email Rebecca at [rebecca@lses.org](mailto:rebecca@lses.org).

Join **ASES**

[www.ases.org](http://www.ases.org)

ASES is the U.S. section of the International Solar Energy Society, helping to create a more sustainable energy economy through increasing the use of solar energy, energy efficiency, and other sustainable technologies. Membership donations are \$89 for professional members and \$39 for basic members. Pay your lses membership at the same time now!

Join **LSES**

[www.lses.org](http://www.lses.org)

You can be part of the ever growing Louisiana Solar Energy Society. You will receive newsletters and inside information on solar activities in our state. If you are new or need to renew your membership for 2009 come see how dues are easier to pay now at <http://www.lses.org/membershipform.html>

Join **ASE**

[www.ase.org](http://www.ase.org)

It's free! And you will receive periodic updates from the alliance to save energy.

*Louisiana Solar Energy Society*  
*5261 Highland Rd. #217, Baton Rouge, LA 70808*  
*E-mail: [rebecca@lsec.org](mailto:rebecca@lsec.org) web: [www.lsec.org](http://www.lsec.org)*  
*Newsletter: Rebecca Lunceford*