



***In this issue...***

KREC Planning September Quarterly Meeting

Solar Array Installed on Visitors Center Roof in Frankfort

Upcoming Solar Photovoltaic Training Classes in Frankfort

National Alliance for Advanced Technology Batteries to Hold 2011 Annual Meeting and Conference in Louisville

25x'25 Alliance Releases Wood-to-Energy Policy Roadmap

### **KREC Planning September Quarterly Meeting**

KREC's June 29 meeting at Papa John's Cardinal Stadium in Louisville successfully wrapped up its 2009-2011 Competitive Grants program. If you missed viewing photos of the June meeting, they are still available at KPPC's [Flickr page](#). Plans are now underway to host a final quarterly meeting in September that will bring the U.S. Department of Energy funding to a close. Look for details of the September meeting in the August issue of *REnews*.

KPPC believes that continuing KREC's activities is important to help support renewable energy initiatives that are crucial to Kentucky's energy future. KPPC will provide resources for as long as possible to continue KREC's communications and networking activities including *REnews*, [Facebook](#) and the [KREC website](#), while seeking new funding opportunities for future KREC initiatives. We encourage your continued participation and support.

Please [e-mail](#) us with your ideas for how KREC might continue to be a valuable resource, open forum and clearinghouse for information and discussions on renewable energy in Kentucky.

### **Solar Array Installed on Visitors Center Roof in Frankfort**



Visit KREC members and friends on **facebook** to share information,

questions or post items of interest to the renewable energy community and help get the word out about what's happening in renewable energy and energy efficiency in Kentucky.



### **Contribute an Article to RNews!**

KREC would like to publish your thoughts on renewable energy and energy efficiency in Kentucky in the "Members' Forum". Please send your opinions, articles or news about RE happenings in the Commonwealth to [KREC@kppc.org](mailto:KREC@kppc.org). A short piece is preferable (300 or fewer words work best).

Make your voice heard – we want to give KREC members a forum to spread the word about renewable energy efforts and issues.

Frankfort's new Visitors Center now has an array of solar panels on its roof that will supply supplemental green energy to the building. The installation consists of 24 photovoltaic, self-ballasted modules. The light weight modules are designed for a flat roof application and are tilted 10 degrees to better catch sunlight and shed dirt and rain. Each module can generate up to 305 watts of power. The total array can produce up to 8,000 kWh each year.

The installation, which was done by a Kentucky company, Solar Energy Solutions LLC, can be seen from the Governor's office or from a platform built alongside the Center.

### **Upcoming Solar Photovoltaic Training Classes in Frankfort**

[The Kentucky Solar Partnership](#) and [Appalachia – Science in the Public Interest](#), with the support of the [Mountain Association for Community Economic Development](#) (MACED), the Franklin County Cooperative Extension Service, and Kentucky State University, present a series of introductory and advanced training classes on solar photovoltaic system design and installation practices. Financial support covering up to 100 percent of registration fees plus expenses is available to residents of eastern Kentucky, thanks to support from MACED.

#### **Introduction to Solar Photovoltaics**

August 16–17, 2011, 8:30 am–5:00 pm

Fee: \$275

Instructor: Chris LaForge, ISPQ Certified PV Instructor  
NABCEP Certified PV Installer

Location: Franklin County Cooperative Extension Office  
101 Lakeview Court, Frankfort, KY 40601

#### **Solar Site Assessments and PV System Design**

August 18, 2011, 8:30 am–5:00 pm

Fee: \$140

---

Instructor: Chris LaForge, ISPQ Certified PV Instructor  
NABCEP Certified PV Installer  
Prerequisite: Introduction to Photovoltaics or equivalent prior training or experience  
Location: Franklin County Cooperative Extension Office  
101 Lakeview Court, Frankfort, KY 40601

### **Solar Photovoltaics & the National Electric Code**

August 19, 2011, 8:30 am–5:00 pm  
Fee: \$140  
Instructor: Chris LaForge, ISPQ Certified PV Instructor  
NABCEP Certified PV Installer  
Prerequisite: Introduction to Solar Photovoltaics or equivalent prior training or experience (Code officials require no prerequisites)  
For Installers, Code Officials, Inspectors, and Building Professionals  
Location: Franklin County Cooperative Extension Office  
101 Lakeview Court, Frankfort, KY 40601

### **Advanced Solar Photovoltaics Hands-On Installation Training**

October 24–28, 2011, 8:30 am–5:00 pm each day  
Fee: \$825  
Instructor: Chris LaForge, ISPQ Certified PV Instructor  
NABCEP Certified PV Installer  
Prerequisite: Introduction to Solar Photovoltaics or equivalent prior training or experience.

During this workshop an off-grid solar PV system will be installed on an environmental education trailer used by Kentucky State University's Land Grant Program to educate school children throughout Kentucky. Participants will then install the full system, including the PV array, batteries, charge controller and all balance of system equipment. The instructor will provide guidance and instruction throughout the week during all steps of the process.

Attendance is limited to 12 people. Register early to reserve your place. Location: Kentucky State University, Center for Sustainability of Farms and Families, 1525 Mills Lane, Frankfort, KY 40601.

[Registration Information](#) is available at [solar.org](http://solar.org) or by calling 1-888-576-6527.

Financial Support is available to residents of Eastern Kentucky based on need and can cover up to 100 percent of registration fees plus travel expenses (lodging, mileage, and meals). To learn more, contact the Kentucky Solar Partnership at 502-227-4562 or at their [website](#).

KPPC is Kentucky's primary resource to help businesses, industries and other organizations develop environmentally sustainable, cost-saving solutions for improved efficiency. Based at the University of Louisville J.B. Speed School of Engineering, KPPC provides technical information and assistance that is free, confidential and non-regulatory.

Information contained in this newsletter is a service of KPPC and is offered solely as a general reference. The University of Louisville, KPPC, their employees, sponsors and all technical sources referenced in this correspondence do not: (a) make any warranty or representation, expressed or implied, with respect to the accuracy, completeness, or usefulness of the information; and (b) assume any liabilities with respect to the use of or for damages resulting from any information contained in this correspondence. Mention of trade names, commercial products, or services does not constitute endorsement or recommendation of use.

---

**National Alliance for Advanced Technology  
Batteries to Hold 2011 Annual Meeting and  
Conference in Louisville**

---



NAATBatt (National Alliance for Advanced Technology Batteries) will hold its 2011 Annual Meeting and Conference in Louisville, KY, September 7-8, 2011, at the Seelbach Hilton. This year's conference, entitled "New Markets, New Innovation: The Next 5 years in Advanced Batteries," will discuss crucial topics facing the U.S. advanced battery industry. The conference will feature presentations by panelists on the following topics:

**Reuse of EV Batteries**

Experts will examine the economics of EV battery reuse, potential business models for EV battery re-purposing, the conclusions from a DOE/ORNL battery reuse study, and the economics and challenges of Li-Ion battery recycling.

**Economics of Grid-connected, Distributed Energy Storage**

Within the past year, at least three major white papers have purported to analyze the economics of energy storage on the grid. The study authors and industry experts will present, defend and debate their conclusions.

**New Developments in Traction Batteries and Distributed Energy Storage Systems**

Forget about what happens in 20 years. Leading advanced battery manufacturers and customers will report on expected developments in traction and grid-connected storage systems over the next 5 years.

**Export Opportunities for U.S. Advanced Battery Manufacturers**

The U.S. Department of Commerce, battery manufacturers and the World Bank will discuss advanced battery export opportunities for U.S. companies. What are the opportunities and what are the tools?

The National Alliance for Advanced Technology Batteries ("NAATBatt") is a not-for-profit trade association devoted to promoting the development of large scale electrochemical energy storage in the United States.

[Register](#) for the Conference at NAATBatt's website.

---

## 25x'25 Alliance Releases Wood-to-Energy Policy Roadmap



25x'25 released a *Wood-to-Energy Policy Roadmap* on July 18 concluding that the focused use of woody biomass to help meet America's energy needs could increase the nation's forest land base and improve the environmental services that land provides.

The findings are among the principal conclusions developed by a diverse panel of leading forestry, conservation, scientific and energy experts following two years of stakeholder discussion facilitated by 25x'25. The Roadmap offers a series of recommendations for policy makers and stakeholders to enhance the role of our nation's forestlands in meeting U.S. energy needs while sustaining "forests as forests."

The Roadmap shows the means by which woody biomass can be an important feed-stock for renewable energy, including:

- Promoting the sustainable use of biomass with appropriate feedback mechanisms
- Rewarding efficient uses for woody biomass in energy production
- Using market incentives to help private and public forestlands reach their productive potential for wood and other public benefits
- Investing in needed research and technology development

The Roadmap offers a strategy to increase the role of forestlands in the development of bioenergy in a way that will also boost rural community economic development, lower the carbon footprint of America's energy supply; restore the health and vitality of many of the nation's public lands; insure the future of America's private timberland, and provide the raw materials needed by America's forest products industry, all while supplying a growing bio-economy.

The Roadmap says U.S. energy policy, including the Renewable Fuels Standard, and national security concerns demand that the nation create a path towards the sustainable domestic production of our own energy. The Roadmap advises policy makers that "given sufficient time, proper incentives, when coupled with realistic mandates, will send market signals to private landowners and public land managers that increasing supply is an investment that will be rewarded. And they will respond accordingly."

Jimmie Powell, the energy team lead for The Nature Conservancy, said the Roadmap also acknowledges that sustainability must be an overarching principle if wood is to be a key driver in expanding the



supply of bioenergy. "This document shows that a focus on sustainable use of wood to energy, which encourages appropriate scale and efficiency, can enhance the myriad of environmental services forests provide to the nation including, improved biodiversity, wildlife habitat, soil retention, water quality and quantity, carbon storage and recreation."

Calling for a simple scientific biomass definition, the Roadmap states, "We should, as a nation, assure ourselves that our resource use is sustainable, that we are fully accounting scientifically for the carbon footprint of wood energy, and thus allow for a simplified definition of what wood qualifies to be counted in various programs."

A copy of the Roadmap, which is funded in part by the Energy Foundation and the Better World Fund, is available as a pdf at the [25x'25 documents website](#).

To learn more about the Roadmap and the Working Group, contact Bill Carlson at 530-945-8876, or by e-mail at [cspc@shasta.com](mailto:cspc@shasta.com); or Fred Deneke at 928-642-8947, or by e-mail at [FJDeneke@Yahoo.com](mailto:FJDeneke@Yahoo.com).