

U.S. DEPARTMENT OF
ENERGY

Solar Instructor
Training Network

Southeast Region



This newsletter is produced by the Southeast Solar Training Network (SSTN) for the purpose of supplying solar-related news to our educational and energy office partners. The information presented is from public websites such as the U.S. Department of Energy's (DOE) Energy Efficiency and Renewable Energy (EERE), the Interstate Renewable Energy Council (IREC), the Solar Instructor Training Network (SITN) and general energy related websites.

The goal of SITN is to help facilitate and support the creation of a well-trained and highly-qualified solar energy workforce of sufficient size and diversity to meet the projected workforce needs of the United States. The SSTN is one of nine DOE-funded Regional Training Providers and serves in the capacity of trainer and mentor for solar and photovoltaic-related faculty at southeast educational institutions.

We hope you find this information useful.

Note: An IREC "Clean Energy Training Directory" email has been sent to each SSTN trainer. Please take time to list your institution in this important directory.

Upcoming Training

**Florida Solar Energy Center,
Cocoa, FL**

**Principles of Photovoltaic Systems
Design and Commissioning**
[Sept. 24-26, 2013]

Installing Photovoltaic Systems
[Oct. 7-11, 2013]

**Photovoltaic Technical Sales &
Business Operations**
[Nov. 13-14, 2013]

For more course details, visit
<http://ce.fsec.ucf.edu/>

Contact Us

This e-newsletter is published by the Florida Solar Energy Center – a research institute of the University of Central Florida – while under contract with the U.S. Department of Energy.

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1. PV Code Official Workshop Held in Orlando, FL on September 17, 2013.

The Building Officials Association of Florida (BOAF) in cooperation with SSTN held a PV code Official Workshop at the BOAF Administrative Office & Training Facility in Lake Mary (Orlando), FL on September 17, 2013. The class had 24 attendees and was taught by David Click of FSEC. The backgrounds of the 24 attendees were 13 from cities and 7 from counties. The students felt the course was a success. BOAF is currently in the process of obtaining Construction Industries Licensing Board (CILB) approval of the course for continuing education credits.

See the web site, www.boaf.net.

2. IREC announces America's Power Plan

On September 16, 2013, America's Power Plan launched a response to the rapid changes in the power sector being driven by consumer demand, new technologies and policy. These changes hold the promise of a cleaner, more efficient and more secure power system for America. APP offers solutions to tackle outmoded policies and business models, which are currently hindering this transformation.

Rather than a one-size-fits-all prescription, the diversity of America's energy policy landscape needs a toolkit on how to move forward. America's Power Plan is that toolkit. Over 150 energy sector experts crafted and vetted over 60 policy recommendations to address seven critical topics:

- Utility business models
- Finance

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- Distributed generation
- Distributed energy resources
- Market design
- Transmission
- Siting

America's Power Plan is intended to start an important conversation that will hopefully last for decades. Learn more at www.AmericasPowerPlan.com.

3. Report Ranks U.S. Cities' Efforts to Save Energy

Washington, D.C. (September 17, 2013): The American Council for an Energy-Efficient Economy (ACEEE) today released the 2013 City Energy Efficiency Scorecard, a report that ranks 34 of the most populous U.S. cities on policies to advance energy efficiency. The report includes recommendations and strategies for all cities to lower energy use. ACEEE also launched a new interactive infographic accompanying the report that highlights each city's best practices and scores.

"The good news is that cities across the country are saving money, creating local jobs, and protecting the environment by implementing energy efficiency measures," said Steven Nadel, ACEEE's executive director.

"Our report shows that cities are laboratories of innovation for energy-saving solutions that directly benefit people where they live, work and play," said Eric Mackres, ACEEE's local policy manager and the report's lead author. "Local governments have great influence over energy use in their communities and many have initiatives that result in significant energy and cost savings."

The report is the first to rank cities exclusively on energy efficiency efforts. Cities are evaluated on what actions they are taking to reduce energy use in five key areas: buildings; transportation; energy and water utility efforts; local government operations; and community-wide initiatives.

To read the report and view the infographic, visit: <http://aceee.org/local-policy/city-scorecard>

4. Energy Department Launches App on Hydrogen Use - September 12, 2013.

As part of the Obama Administration's commitment to expand access to data and develop clean, domestic energy sources, the Energy Department today launched a new app to more easily provide best practices and procedures for safely handling and using hydrogen to power fuel cells.

Developed by the Pacific Northwest National Laboratory with support from the Energy Department, the app, Hydrogen Tools, incorporates a variety of resources and web-based content focusing on the safe use and handling of hydrogen for those involved in designing, approving, or using hydrogen fuel cell systems and facilities. Primarily geared towards hydrogen installation developers and permitting officials, the app includes information on the safe ventilation of hydrogen, safe distances and pressures for storing hydrogen, and best practices and lessons learned on handling hydrogen.

Full story at [EERE News](#)

5. Orlando Launches Electric Car Rental to Win Hearts and Minds

Mickey Mouse is on board.

Katherine Tweed: September 6, 2013

Electric cars are a lot of fun to drive. But that's not common knowledge outside of a relatively small circle of industry folks and electric vehicle enthusiasts.

Many people think that electric vehicles are something like glorified golf carts, without the power or pickup of a gasoline-fueled car. The lack of familiarity with the cars, along with their comparatively steep upfront sticker price, are two of the biggest challenges to widespread adoption of cars that run on electrons. Orlando, jam-packed with theme parks and golf courses, is combating the former with a new initiative, Drive Electric Orlando.

The city has brought together more than 30 hotels, car rental companies, travel agencies, the convention center and the three major theme parks (Disney World, SeaWorld, Universal Studios) to build the infrastructure needed to offer electric vehicles to the approximately 57 million visitors that pass through the city annually.

"Once someone gets behind the wheel of the car, they're blown away," said Sam Ori, executive vice president of the Electrification Coalition. "If you could build out infrastructure at key endpoints, you could provide high level of confidence -- especially at hotels."

The program has lofty goals, but only a miniscule fraction of Orlando's visitors will actually get a taste of it, for now. Enterprise Rent-A-Car, the rental partner, is offering fifteen Nissan Leafs from its airport location in Orlando. The cars have already been selling out during the program's soft launch, and Ori said they will add options -- both more inventory and more models -- as time goes on. He said they hope to have more by the end of the year.

"We know that the car rental experience is often an extended test drive," Lee Broughton, head of sustainability for Enterprise Rent-A-Car, said in a statement. "Our partnership with Drive Electric Orlando familiarizes travelers with new vehicle technology that they may not otherwise be able to experience."

Orlando already has nearly 300 ChargePoint EV charging stations as part of the U.S. Department of Energy's Transportation Electrification Initiative. Most of the chargers are 240-volt, level-2 chargers. Nissan also donated 30 DC fast chargers. The project is currently siting charging at additional hotels and at the theme parks.

The electric cars will rent for the same price as other options, about \$30 per day. Charging will be free at most hotels and tourist destinations, and hotels are offering free valet service for those in an electric vehicle. Most hotels have one or two chargers, which would be expanded depending on the popularity of the initiative.

Orlando is an ideal location to pilot such a program. Most destinations for business and pleasure are twelve to eighteen miles apart. While some DC fast charging will be offered, Ori noted that the hotels are key because that is where most charging will happen overnight. Also, most visitors spend half or most of a day at a single location, whether that's Epcot or the convention

center.

“In order to make electric vehicles more mainstream, it will take partnerships on the advocacy level,” said Brendan Jones, director of EV Infrastructure and Strategy at Nissan North America. Nissan Leafs are the first car deployed, but Chevy is also on board, so Chevy Volts could be the next vehicle to join the program.

Watch the Drive Electric Orlando promotional video 2:36 minutes
http://www.youtube.com/watch?feature=player_embedded&v=vD6OIqypz0I

6. America's Military is Making an Unprecedented Commitment to Renewable Energy Sources.

Today, from security and battlefield readiness to cost savings and efficiency, America's military is making an unprecedented commitment to renewable energy sources, and solar is “walking point” on many of these new, innovative efforts.

In Afghanistan, not far from Khyber Pass, a company of U.S. Marines were the first ones to take portable solar panels and solar tent shields into a battle zone. As the New York Times reported at the time, “After a decade of waging wars in remote corners of the globe where fuel is not readily available, senior commanders have come to see overdependence on fossil fuel as a big liability, and renewable technologies – which have become more reliable and less expensive over the past few years – as providing a potential answer.”

Secretary Ray Mabus, for one, is supporting efforts to have 50 percent of the power used by the Navy and Marines come from renewable energy sources by 2020. This marks a seismic shift in Pentagon thinking about energy.

In the past year alone, the DOD spent more than \$20 billion on energy and consumed over five billion gallons of oil.

The military has utilized large, centralized utility-scale solar projects to power bases; smaller, distributed-generation (DG) systems to energize buildings and homes; and portable solar systems to provide crucial energy on the battlefield. Utility, DG and portable solar provide the military with cost-effective energy that improves mission capabilities and mitigates national security issues tied to grid infrastructure and traditional fuel supply.

This report shows solar energy's growing role in powering military installations and military homes across the U.S. As of early 2013, there are more than 130 megawatts (MW) of solar photovoltaic (PV) energy systems powering Navy, Army and Air Force bases in at least 31 states and the District of Columbia. Combined, these installations provide enough clean energy to power 22,000 American homes. These solar totals do not include installations at bases abroad, on the battlefield or at any classified locations.

See:

<http://www.seia.org/research-resources/enlisting-sun-powering-us-military-solar-energy-2013>

7. For Those of You Who Like Numbers -- The Amazing Mileage of Sun-Powered Cars

By Thomas Blakeslee, President of the Clear Light Foundation

The amazing success of the Tesla model S proves that electric cars may have a chance of replacing liquid fueled vehicles in the long run. Skeptics point out that most of our electric power today comes from coal, which is dirty and inefficient. We must change that to clean, renewable energy but is that really practical? To find out, let's look at several possible renewable ways to power our cars to find out which are really workable. The Tesla has proved that we can use photovoltaic solar power to recharge pure electric cars. Let's calculate how much land is needed to renewably fuel a car using several possible electrical and biofuel approaches.

See: <http://www.eworld.com/focus.cfm?cid=170>



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