



# Smart Energy Design Assistance Center

Newsletter Vol. 5, No. 4, April 2009

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

## SEDAC

The Smart Energy Design Assistance Center (SEDAC) provides advice and analyses enabling private and public facilities in the State of Illinois to increase their economic viability through the efficient use of energy resources. SEDAC is sponsored by the Illinois Department of Commerce and Economic Opportunity in partnership with ComEd and Ameren Illinois Utilities and provides valuable services at no cost to for-profit businesses and public facilities. SEDAC is managed by the University of Illinois at Urbana-Champaign and supported by the 360 Energy Group.

*(Hyperlinks are shown in green)*

## EDUCATION

### **Missed a SEDAC presentation?**

Look for it in the archives at [sedac.org](http://sedac.org)

### CHICAGO CENTER FOR GREEN TECHNOLOGY

April 21, 2009: **Water Conservation Basics** by Robert Nemeth

### USGBC CHICAGO CHAPTER

April 22, 2009: **Understanding LEED Project Costs & Returns**  
April 28, 2009: **Green Building Basics & LEED Workshop**

### ENERGY CENTER OF WISCONSIN

Online course available anytime:  
**Beyond Code: Designing Energy Efficient Commercial Buildings** by Donald Fournier

### BUILDING INDUSTRY TRAINING and EDUCATION (BITE)

Training Dates and Locations  
[http://www.illinoisbiz.biz/dceo/Bureaus/Energy\\_Recycling/BITE\\_training.htm](http://www.illinoisbiz.biz/dceo/Bureaus/Energy_Recycling/BITE_training.htm)

## WORKSHOPS for the PUBLIC SECTOR



photo: Robert Nemeth

SEDAC will host two Electric Efficiency Workshops in May for public sector officials in K-12 schools, community colleges, public universities and colleges, local, state, and federal government.

Presenters are Don Fournier, Ben Sliwinski, and Kristine Chalifoux from SEDAC and Andrea Reiff and Carol Kulek from the Department of Commerce and Economic Opportunity.

**Wednesday, May 13th: Illinois BIS center in Naperville. Directions.**

**Friday, May 22nd: Richland Community College in Decatur. Directions.**

### Schedule:

- 8:30 am – 9:00 am Registration
- 9:00 am – 10:00 am General Session – Energy Efficiency, Green Building, and Renewable Energy for the Public Sector
- 10:15 am – 11:20 am Breakout Sessions:
  1. Educational Facilities
  2. Municipal Buildings, Park Districts, Water Treatment and Waste Treatment Facilities
- 11:30 am - 12:15 pm General Session – Grants and Incentives

Limit: 90 participants. Register online at [illinois.edu/goto/sedacworkshops](http://illinois.edu/goto/sedacworkshops)

## DCEO NEWS

**The Building Industry Training and Education Program** provides funds to organizations to train professionals from all aspects of the building industry in energy efficient practices and about energy efficient products. Guidelines are now posted and applications are due by May 1, 2009. **Application.**

**The Illinois Sustainable Education Project (ISTEP)** provides educational resources about energy efficiency, renewable energy, waste reduction, and recycling. ISTEP was created to increase the awareness of the link between economic development and environmental protection, the environmental consequences of our actions and values, and how informed decisions can move Illinois toward a more sustainable future. ISTEP resources include hands-on sustainable education demonstration cases (recycling and vermicomposting), a variety of educational bookmarks, and educational DVDs highlighting best practices of urban renewal in Illinois. These items are free of charge to Illinois educators. **Application.**

DCEO contact: Brett Ivers, 217-524-5859, [brett.ivers@illinois.gov](mailto:brett.ivers@illinois.gov)  
For detailed program information visit: [www.illinoisenergy.org](http://www.illinoisenergy.org)



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## SPRING TIPS

### TIME FOR A SPRING CHECK-UP FOR YOUR AIR CONDITIONING. ENERGY STAR® RECOMMENDS:

Source: [http://www.energystar.gov/index.cfm?c=heat\\_cool.pr\\_maintenance](http://www.energystar.gov/index.cfm?c=heat_cool.pr_maintenance)

#### Cooling Specific

- **Clean evaporator and condenser air conditioning coils.** Dirty coils reduce the system's ability to cool and cause the system to run longer, increasing energy costs and reducing the life of the equipment.
- **Have your central air conditioner's refrigerant level checked** and adjust if necessary. Too much or too little refrigerant will make your system less efficient increasing energy costs and reducing the life of the equipment.
- **Clean and adjust blower components** to provide proper system airflow for greater comfort levels. Airflow problems can reduce your system's efficiency by up to 15 percent.

#### Other Maintenance

- **Check thermostat settings**
- **Tighten all electrical connections**
- **Lubricate all moving parts**
- **Check and inspect the condensate drain in the central air conditioner, furnace and/or heat pump**
- **Check controls of the system to ensure proper and safe operation.**

## EEPS LINKS

DCEO Public Sector Electric Efficiency program

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

Standard Incentive Program contact:

Andrea Reiff, 217-785-0164

[andrea.reiff@illinois.gov](mailto:andrea.reiff@illinois.gov)

Custom Incentive Program contact:

Tom Coe, 217-785-2433

[tom.coe@illinois.gov](mailto:tom.coe@illinois.gov)

#### ComEd

[www.comed.com/businesssavings/programs/incentives/](http://www.comed.com/businesssavings/programs/incentives/)

#### AMEREN ILLINOIS

[www.actonenergy.com/business.asp](http://www.actonenergy.com/business.asp)

## PUBLIC SECTOR UPDATES

### Financing Energy Improvements in Public Buildings Post "Stimulus."



There has never been a better time for local and state government entities (including public schools) to start their energy efficiency and renewable energy projects. The American Recovery and Reinvestment Tax Act of 2009 (ARRTA), passed by Congress in February, significantly expands the financing options available to state and local

government agencies, including public schools. With the expanded authority granted by ARRTA and previously by The Energy Improvement and Extension Act of 2008 (EIEA), a public agency or institution can theoretically get **0% interest** financing. For qualified projects, in lieu of interest on a bond, the Federal government would provide the bondholder tax credits for the interest normally paid. The local or state government or public school would only have to pay back the principal.

Financing is best tailored to the project and the project owner, however, there are several options available - from standard tax exempt lease purchase to power/comfort purchasing agreements - that provide the public entity the opportunity to leverage energy tax credits. Following are some of the options that may be applicable:

- Clean Renewable Energy Bonds (CREBs) [Read more...](#)
- Qualified Energy Conservation Bonds (QECBs) [Read more...](#)
- Qualified School Construction Bonds (QSCBs) [Read more...](#)
- Qualified Zone Academy Bonds (QZABs) [Read more...](#)

There are several other options that have been enhanced by ARRTA available depending on the specific project such as Build America Bonds, Recovery Zone Economic Development Bonds, and US Department of Energy Loan Guarantee Program.

ARRTA also extends the business tax credits available for certain renewable technologies such as geothermal heat pumps (10%) and solar (30%). While public entities do not directly benefit from tax credits, alternative financing options such as Power of Comfort Purchase Agreements offer the ability to leverage such incentives. Under such agreements the renewable energy asset will be owned by a private for-profit entity as part of a design, build, own, operate and maintain agreement. The municipal or school entity would not pay any upfront cost, instead will enter into a service agreement (for solar electricity of conditioned space for example) with the private for-profit entity to use the asset for a monthly fee. The for-profit entity will take advantage of the tax credits and reflect that in the monthly service fee.

In summary, while some provisions such as tax credits are good for several years, many of the ARRTA enhancements are valid for 2009 and 2010 only. As such this is the best time to start your energy efficiency or renewable energy upgrades.

To participate in the *Smart Energy Design Assistance program*, contact us at: (800) 214-7954 or [info@SEDAC.org](mailto:info@SEDAC.org)  
Smart Energy Design Assistance Center, 1 East St. Mary's Road, Champaign, IL 61820

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