



**SMART
ENERGY
DESIGN**
Assistance Center

Smart Energy Design Assistance Center

Newsletter Vol. 5, No. 9, September 2009

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)

EVENT

2009 Environmental Leadership Conference

Bringing Green Down to Earth

The Hyatt Lodge at McDonald's Campus
Oak Brook

September 30, 2009

Several SEDAC staff members are presenters. SEDAC will have a booth.

EDUCATION

Missed a SEDAC presentation?

Look for it in the archives at sedac.org

ENERGY CENTER OF WISCONSIN

Online course available anytime:

Beyond Code: Designing Energy Efficient Commercial Buildings by Donald Fournier

CHICAGO CENTER FOR GREEN TECHNOLOGY

USGBC CHICAGO CHAPTER

TRAINING OPPORTUNITIES

SEDAC Lunch and Learn

October 9, 2009

11:45 AM - 1:00 PM

[REGISTER ONLINE](#)

OUR ENERGY FUTURE

Presented by Donald Fournier
SEDAC Program Manager

Location: Illinois Sustainable Technology Center
1 Hazelwood Drive, Champaign, IL 61820

DIRECTIONS

Sandwiches Provided

Free Workshops about Energy Efficiency in Public Sector Facilities, Hoffman Estates and Belleville



SEDAC will host two Electric Efficiency Workshops in October 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, Andrea Reiff from the Department of Commerce and Economic Opportunity.

Thursday, October 15th: REGISTER by Oct 12. Limit 90
NIU Hoffman Estates. Directions.

Thursday, October 22nd: REGISTER by Oct 19. Limit 50
Southwestern Illinois College in Belleville. Directions.

| | |
|---------------------|--|
| 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 | Learn about new opportunities for energy efficiency: <ol style="list-style-type: none"> 1. Educational Facilities 2. Municipal Buildings, Park Districts, Water and Waste Treatment Facilities |
| 11:30 am - 12:00 pm | Learn about available Grants and Incentives |

Register online at <http://go.illinois.edu/sedacworkshops>

DCEO CONTACTS

DCEO Public Sector Electric
Efficiency Program
www.illinoisenergy.org

HOW TO APPLY

DCEO Program Contacts

Custom Incentive Program
Retro-Commissioning Pilot
New Construction Program
contact:
Tom Coe, 217-785-2433
tom.coe@illinois.gov

Standard Incentive Program
contact:
Andrea Reiff, 217-785-0164
andrea.reiff@illinois.gov

DCEO Outreach
contact:
Carol Kulek, 217-785-3412
carol.kulek@illinois.gov

SMART ENERGY TIPS

SEDAC has prepared energy **Fact Sheets**. New sheets are available for

- **Hotels**
- **Water Treatment Facilities**
- **2009 Recovery Act**



**Search for a
SEDAC pre-
qualified Energy
Service Provider**

**APPLY FOR SEDAC
SERVICES ONLINE**

NEWS

Illinois Recovery Act Funds Deadlines Approaching

Applications are due October 1 for many programs designed to invest in the development of Illinois renewable energy sources, energy efficiency, green buildings, biofuels, and more. Go to **DCEO site for more information**.

All Building Types Can Achieve Energy Savings

Results from over four years of SEDAC energy audits show that on average, businesses and public organizations have the potential to reduce building energy use and cost by 31%. The following table shows the average potential savings identified for some of the most common types of buildings analyzed by SEDAC. On average, most building types can realize potential energy and cost savings of 25% to 35%. Mixed-use buildings show the greatest potential on average, with potential energy savings of 40% and cost savings of 38%. Savings potential for individual buildings varies depending on building characteristics, use patterns, age of equipment, and prior energy cost reduction measures.

| Building Use | Potential mBtu Savings | Potential \$ Savings | Internal Rate of Return | # of Buildings Analyzed |
|-----------------------------------|------------------------------|----------------------------|-------------------------------|-------------------------------|
| Apartments | 36% | 36% | 37% | 19 |
| Lodging | 32% | 30% | 39% | 12 |
| Manufacturing | 33% | 32% | 33% | 62 |
| Mixed use | 40% | 38% | 27% | 29 |
| Office | 34% | 33% | 33% | 30 |
| Public--General | 31% | 30% | 26% | 18 |
| Public--Park Districts/Recreation | 33% | 26% | 31% | 13 |
| Public--Schools | 28% | 26% | 31% | 18 |
| Restaurants | 19% | 23% | 98% | 16 |
| Retail | 28% | 29% | 33% | 16 |
| Waste/Water Treatment | 31% | 22% | 14% | 7 |
| Total | 31% | 31% | 39% | 331 |

Note: Total includes only projects where whole-building baseline data is available.

The chart also shows that energy cost reduction measures have average internal rates of return (IRR) ranging from 16% to 98%, depending on the building type. The internal rate of return compares the cost of implementing the recommended energy cost reduction measures to the annual savings (over 15 years) in order to compare its return to that of other investments. Typical "threshold" internal rates of return indicating a good investment may be 10% for a for-profit business and 5% for public entities, so energy cost reduction measures with higher IRRs should be favorable investments. A simple way to look at it is to view IRR as a measure of the "bang for your buck." Higher IRRs signal that a relatively small investment will yield relatively high annual savings. SEDAC results show that buildings of all types have, on average, potential energy cost reduction measures that can pay off compared to other investments.

In next month's newsletter, we will summarize the most common measures identified as achieving potential savings for each of these sectors.

To participate in the *Smart Energy Design Assistance program*, contact us at: (800) 214-7954 or info@SEDAC.org
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