

WELCOME!

TO THE COMMUNITY CONVERSATION ON ENERGY CONSERVATION

October 20, 2015



INSTITUTE FOR SUSTAINABILITY, ENERGY, AND ENVIRONMENT



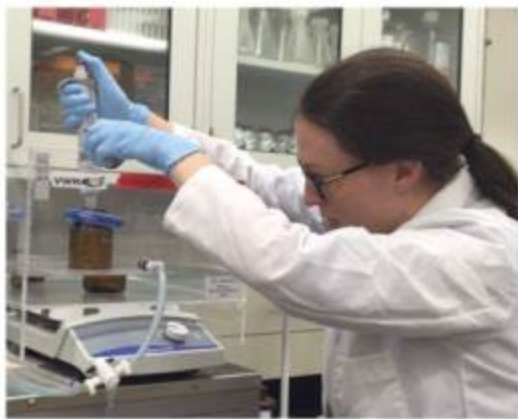
MADHU KHANNA, ASSOCIATE DIRECTOR FOR EDUCATION AND OUTREACH



EVAN DELUCIA, ISEE DIRECTOR



ABOUT ISEE[®]



ACTIONABLE RESEARCH



CAMPUS SUSTAINABILITY



EDUCATION & OUTREACH





ILLINOIS SUSTAINABLE
TECHNOLOGY CENTER
PRAIRIE RESEARCH INSTITUTE



ILLINOIS
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Teaming to Use Sustainability to Drive Economic Growth



PRAIRIE RESEARCH INSTITUTE

Mark Ryan
Executive Director

Geoff Levin
Natural History Survey

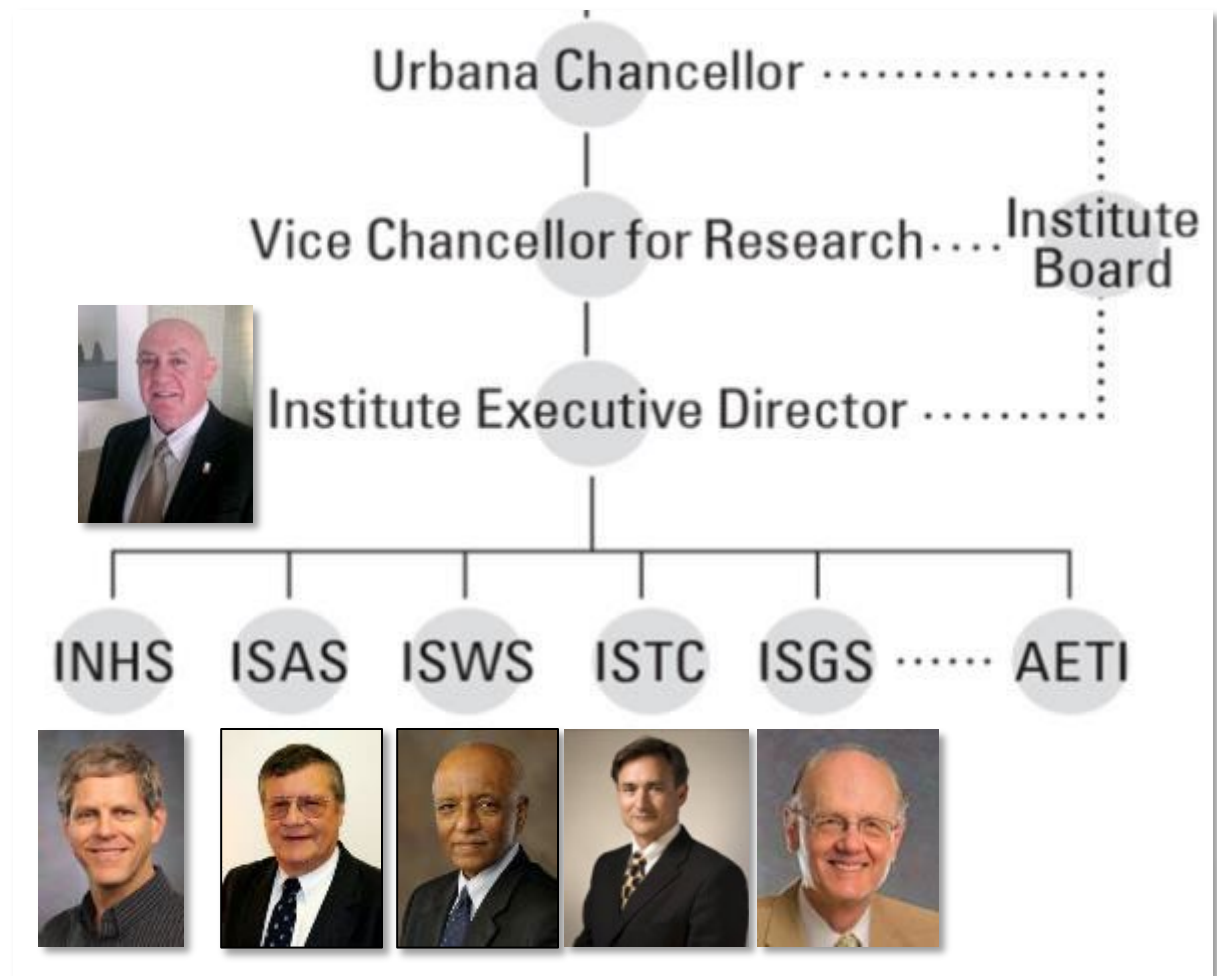
Tom Emerson
State Archaeological Survey

Mike Demissie
State Water Survey

Kevin O'Brien
Sustainable Technology Center

Dick Berg
State Geological Survey

Steve Whittaker
Advanced Energy Technology Initiative



Prairie Research Institute: Illinois-focused Research and Service

Addressing societal challenges that impact Illinois and the global community



PRAIRIE
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**ILLINOIS NATURAL
HISTORY SURVEY**
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**ILLINOIS SUSTAINABLE
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**ILLINOIS STATE
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WATER SURVEY**
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**ILLINOIS SUSTAINABLE
TECHNOLOGY CENTER**
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Illinois Sustainable Technology Center

Interface between Illinois natural resources and Illinois industry

Illinois Natural and Cultural Resources



Needs of Illinois Industry

Sustainability and The Triple Bottom Line

Actions must account for impact on planet and people as well as profit



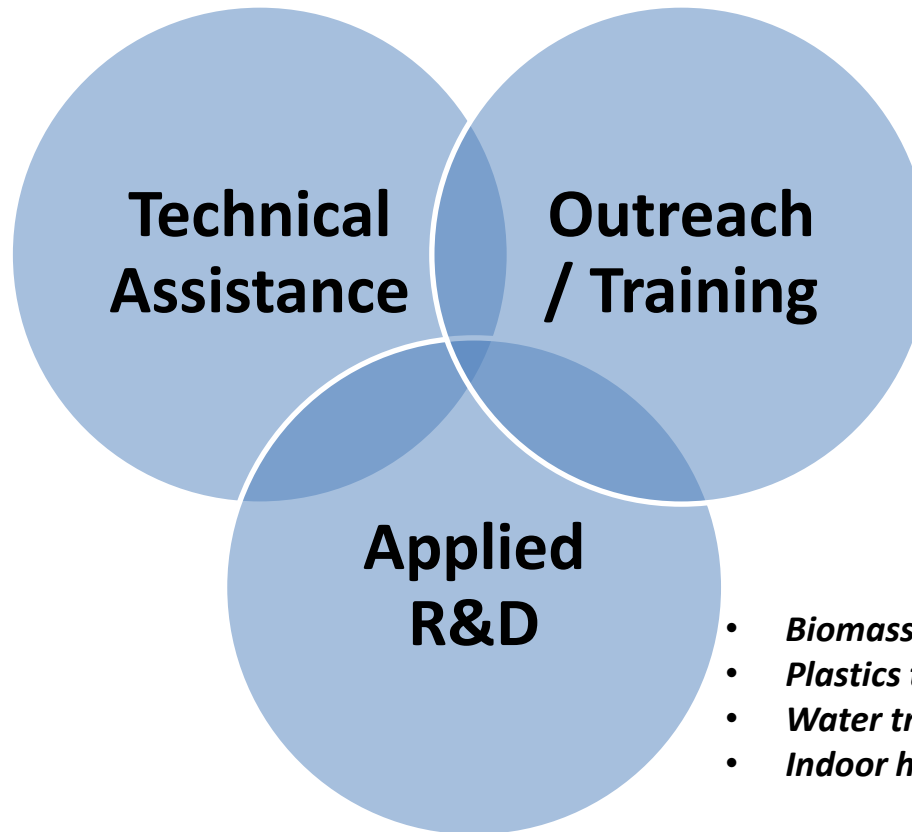
ILLINOIS SUSTAINABLE
TECHNOLOGY CENTER
PRAIRIE RESEARCH INSTITUTE



ISTC : Driving Economic Growth Through Sustainability

Catalyze job growth, improve quality of life, while preserving natural resources

- *Reduced operational & maintenance costs*
- *Pollution prevention*
- *Industrial “best practices” in sustainability*



- *Energy efficiency training*
- *Sustainable electronics programs*
- *Great Lakes Pollution Prevention program*

- *Biomass to electricity*
- *Plastics to fuel*
- *Water treatment*
- *Indoor health and safety*

ISTC Product

Service we provide to Illinois

- Curator's of Illinois' sustainability knowledge base and skill in using information to drive economic growth.
- Services include:
 - Identify major themes that impact people, planet, and profit
 - Bring together relevant stakeholders for projects built around these themes and manage the subsequent projects
 - Resolve issues at the local, regional, state, and national level that act as barriers to the successful implementation of these issues
 - Barriers we address include one of more of the following needs:
 - Technology
 - Funding
 - Education / outreach
 - Training

Sustainability Can Drive Economic Growth

PROJECT PORTFOLIO

Checklist for Potential Projects

Tool for engaging PRI / ISTC in economic development activities

Regional Aspects / Needs	Model Project	Potential Impact
Manufacturers / Municipalities / Transportation Facilities	Zero Waste	Reduce costs; enable expansion; facilitate Green Enterprise Zone
Former industrial / mining site and /or waterway / lake	Mud to Parks	Aids in re-development of site; Restore aquatic habitat; enable commerce; reduce costs
Large industrial users / municipalities	One Billion Gallon Challenge	Reduce water costs through demand reduction and T&D loss reduction
Financial Institutes / Manufacturers / Education	Green Office Challenge	Reduce overhead costs; step in qualifying thru Illinois Green Business Association
Manufacturers	E3 Assessments	Reduce costs & improve revenue through process analysis
Agricultural industry / Saline sources	Marine Aquaculture	Promotes local sourcing of foods; creates rural Jobs
Waste water treatment facilities / local biomass	Distributed Generation	Combined heat and power to reduce operating costs; uses local biomass
Residential contractors / low income residents	Energy Savings / Indoor Air Quality	Enhance quality of life for residents

Enhancing Indoor Health and Energy Efficiency

Providing service to low income residents

National weatherization evaluation project – energy savings and indoor air quality



*One of only 15 centers
accredited in the US for
this service*

Profile of Residents

- Low incomes families (e.g. < \$4,000 / mo. Gross Income Annually for four person family)
- Includes unemployed and retirees
- Issues with no furnace, poor furnace, poor ventilation

Solution

- Train 60 people annually to inspect and perform work
- Provide nearly 7,000 hours of training annually

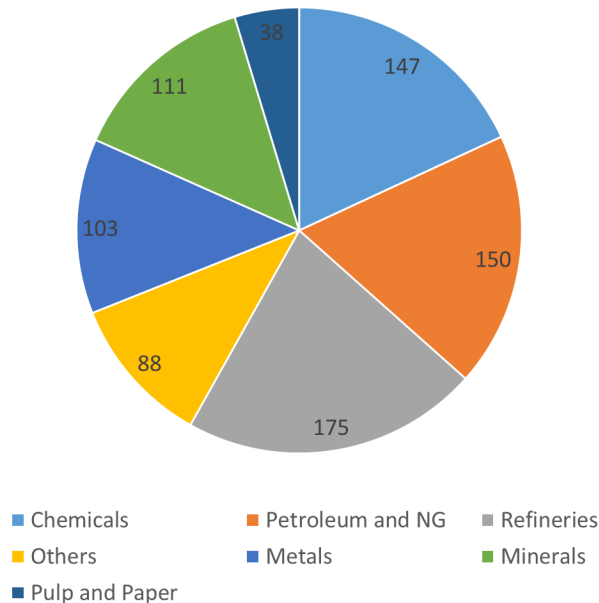
Impact

- Service 300 homes per year
- On average provide \$5,500 in labor and materials per home
- On average 18% savings in fuel charges
- Improved comfort, health, and safety
- Savings contributes to healthier life style

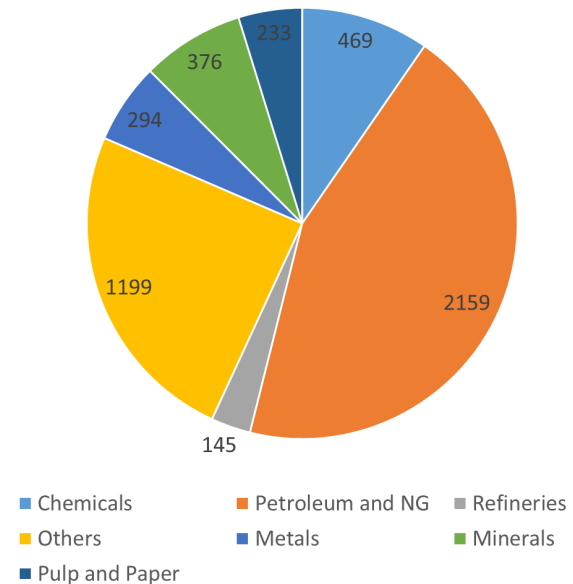
Reducing Emissions from Manufacturing Facilities

Need for energy efficiency and improved process control systems

Annual emissions: MMT CO₂e



Facilities



4,875 facilities account for 812 MMT CO₂e in the USA in 2013.

From: EPA 2013 Greenhouse Gas Emissions from Large Facilities <http://ghgdata.epa.gov/ghgp/main.do>

Illinois Governor's Sustainability Award

Recognizing sustainability related achievements of organizations and communities





- » Certified Products
- » Certified Single Family Residences
- » Certified Commercial Buildings



Three Parts

- » New
- » Existing



ENERGY STAR Buildings

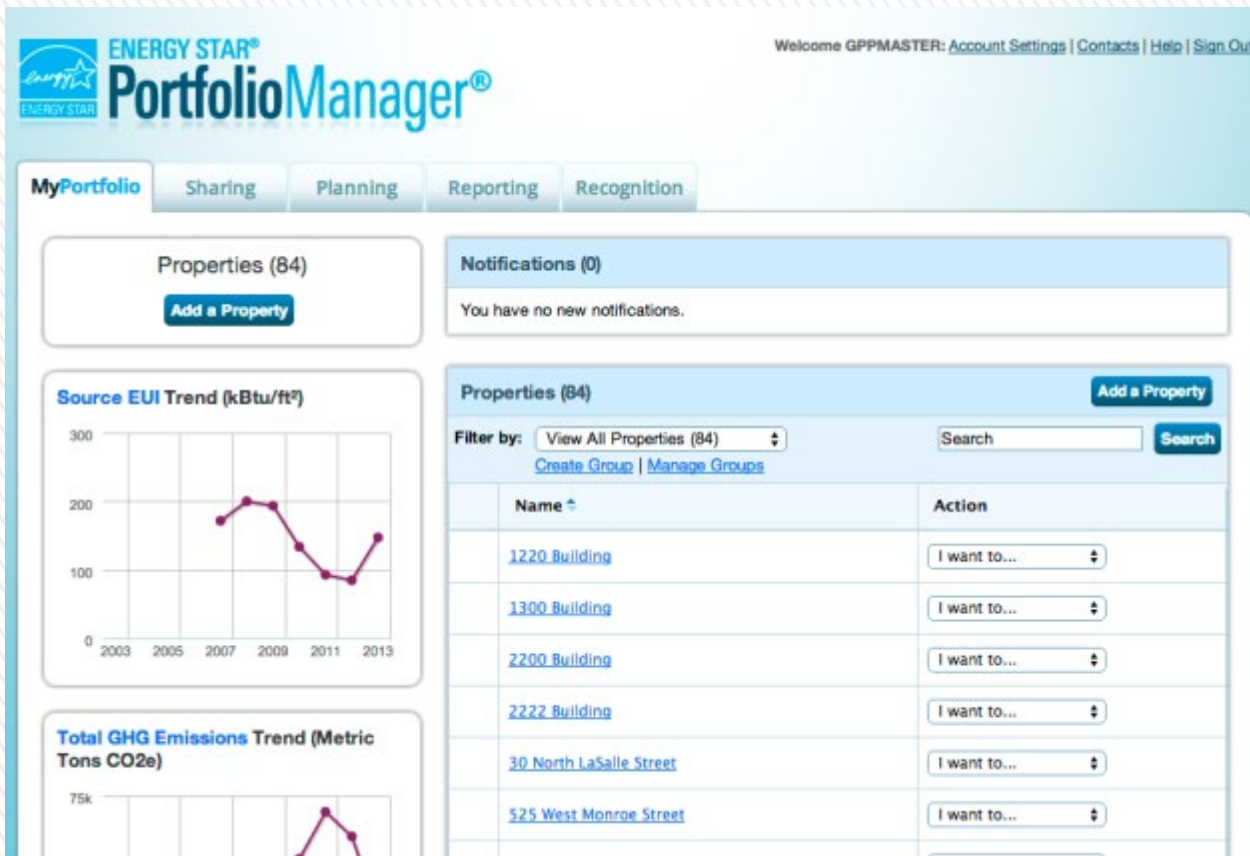


DESIGNED
TO EARN THE
ENERGY STAR

The estimated energy use for this design meets strict U.S. EPA ENERGY STAR® criteria. Post-construction verification is required to earn ENERGY STAR certification.


www.energystar.gov

ENERGY STAR New Buildings



ENERGY STAR

Existing Buildings



ENERGY STAR® Statement of Energy Performance

LEARN MORE AT
energy.gov

77

ENERGY STAR®
Score¹


Sample Property
 Primary Property Function: Office
 Gross Floor Area (ft²): 50,419
 Built: 1951
 For Year Ending: July 31, 2014
 Date Generated: October 01, 2014

¹ The ENERGY STAR score is a 1-100 assessment of a building's energy efficiency as compared with similar buildings nationwide, adjusted for climate and business activity.

Property & Contact Information		
Property Address Sample Property 123 Main St. Boston, Massachusetts 02134	Property Owner Property Inc. 123 Early Bird St. Washington, DC 20460 202-999-9978	Primary Contact Jane Doe 123 Early Bird St. Washington, DC 20460 555-123-4567 jane_doe@propertyinc.com
Property ID: 2681005		

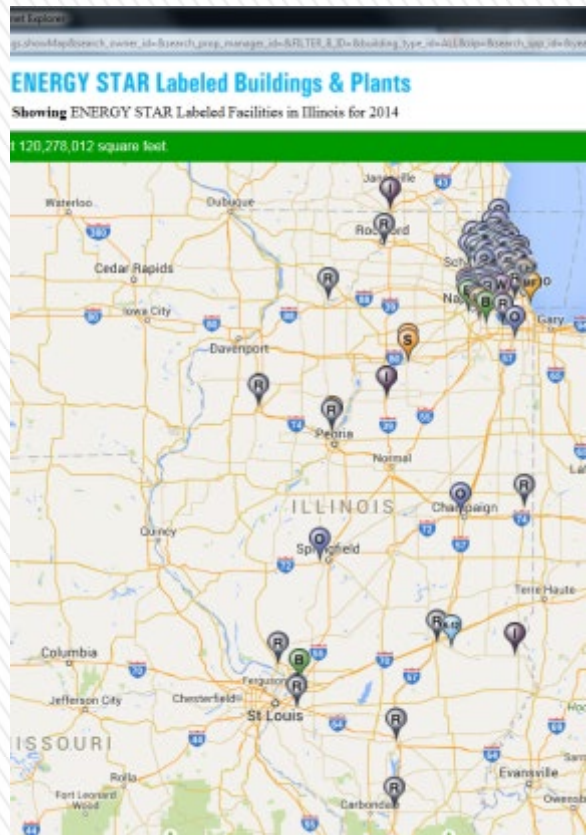
Energy Consumption and Energy Use Intensity (EUI)			
Site EUI 75.7 kBtu/ft²	Annual Energy by Fuel		National Median Comparison
	Electricity - kWh (kWh)	2,453,824 (64%)	National Median Site EUI (kBtu/ft²)
	Natural Gas (kBtu)	1,273,766 (33%)	National Median Source EUI (kBtu/ft²)
	Propane (kBtu)	91,000 (2%)	% Diff from National Median Source EUI
Source EUI 181.2 kBtu/ft²			Annual Emissions Greenhouse Gas Emissions (Metric Tons CO₂e/year)
			311

Signature & Stamp of Verifying Professional
 I, _____ (Name) verify that the above information is true and correct to the best of my knowledge.
 Signature: _____ Date: _____
Licensed Professional
 John Smith
 4 Privat Dr
 Arlington, VA 22201
 703-111-1234
 john_smith@energyinspectors.com


 Professional Engineer Stamp
 (if applicable)

ENERGY STAR

Portfolio Manager



ENERGY STAR Buildings

Scott R. Tess, Environmental Sustainability Manager, City of Urbana, IL

» Friendly Competition

- > Benchmark
- > Track
- > Improve
- > Certify

» Utilizes EPA's free ENERGY STAR Portfolio Manager used by 267,000 commercial buildings nationwide

U-C ENERGY STAR Challenge

URBANA - CHAMPAIGN ENERGY STAR CHALLENGE

Home About **Leaderboard** Join Technical Support Incentives and Rebates FAQs Contact

URBANA-CHAMPAIGN ENERGY STAR CHALLENGE » 2015 Round Leaderboard

2015 Round Leaderboard

Facility	Benchmarks				Submitted 2014 Energy Use (SEP)	Submitted 2015 Energy Use (SEP)
	Submitted 2014 Energy Use (SEP)	Submitted 2015 Energy Use (SEP)	Energy Star Certified	ES Challenge Award		
Champaign City Building	Completed	Waiting...	Not yet	TBD		
Champaign Fire Station 1	Completed	Waiting...	Not yet	TBD		
Champaign Fire Station 2	Completed	Waiting...	Not yet	TBD		
Champaign Fire Station 3	Completed	Waiting...	Not yet	TBD		
Champaign Fire Station 4	Completed	Waiting...	Not yet	TBD		
Champaign Fire Station 5	Completed	Waiting...	Not yet	TBD		
Champaign Fire Station 6	Completed	Waiting...	Not yet	TBD		
Champaign Parking Programs Office	Completed	Waiting...	Not yet	TBD		
Champaign Police Station	Completed	Waiting...	Not yet	TBD		
Champaign Public Works	Completed	Waiting...	Not yet	TBD		
Champaign-Urbana Public Health District	Waiting...	Waiting...	Not yet	TBD		
CUMTD - Administrative Building	Completed	Waiting...	Not yet	TBD		
CUMTD - Illinois Terminal	Completed	Waiting...	Not yet	TBD		
CUMTD - Maintenance Facility	Completed	Waiting...	Not yet	TBD		

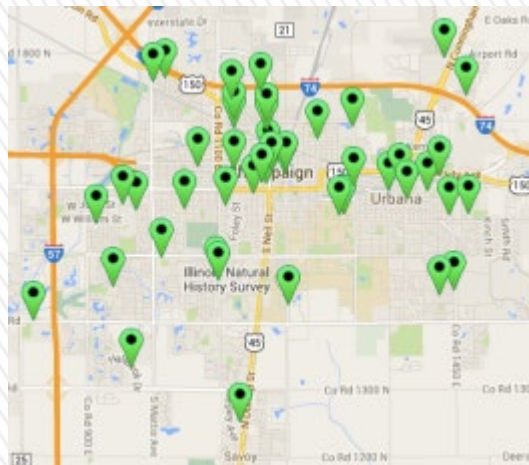
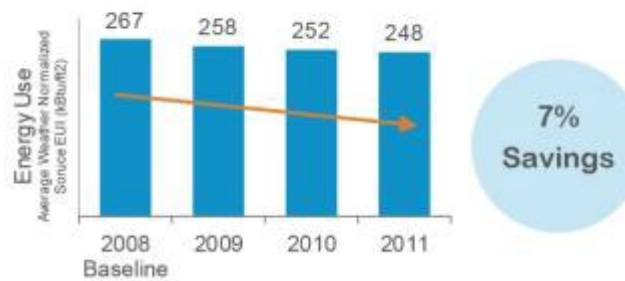
U-C ENERGY STAR Challenge



Sponsors

Scott R. Tess, Environmental Sustainability Manager, City of Urbana, IL

Energy Savings in Portfolio Manager



Why



ucenergychallenge.com



Coming Soon...

Ameren Illinois Energy Efficiency Programs

Tuesday, October 20, 2015

John Beintema, LEED® Green Associate
Market Segment Coordinator
Leidos Engineering, LLC



Ameren Illinois Energy Efficiency Programs

Provide cash incentives to help cover a portion of the cost of energy efficiency projects – which in turn helps save money on future utility bills.

- Program started in June 2008
 - State mandated program –
Rate Relief Act (SB 1592 passed in 2007) by Illinois Legislature
 - Program Year 8
(June 1, 2015 to May 31, 2016)



Who Qualifies for Ameren Illinois Energy Efficiency Programs?



- Ameren Illinois Electric and/or Gas Business Customers (those paying into the program)
 - Funded by Ameren Illinois Business Customers
 - Rider charge on monthly gas and/or electric bills
- Commercial Businesses, Non-Profits, and Private Schools



Ameren Illinois
Service Territory



Ameren Illinois Energy Efficiency Achievements

Since 2008, Ameren Illinois Energy Efficiency programs have helped thousands of businesses:

> Offset Project Costs

Over \$70 million dollars
in cash incentives for
Illinois businesses



> Reduce Energy Costs

Over \$265 million dollars
in energy savings for
Illinois businesses





Incentives From Ameren Illinois

Incentives



- **Two Types of Incentives**

- Standard or Prescriptive – pre-determined incentive
- Custom – anything not Standard (1 – 10 year payback)

- **Pre-Approval**

- Under \$10,000 incentive – NO
- Over \$10,000 incentive – YES

AND

- All Custom, Retro-Commissioning and New Construction Projects require pre-approval





Instant Incentives

Instant Incentives



GET INSTANT DISCOUNTS ON ENERGY-EFFICIENT LIGHTING AND START SAVING EVEN FASTER.

Instant Incentives through the Standard Lighting program provide a simple and quick way for Ameren Illinois business customers* to purchase energy-efficient lighting and receive an instant discount at the point of purchase online or via participating distributors. This offering provides incentives for CFL and LED bulbs, LED recessed lighting, and occupancy sensors.

PRIMARY BENEFITS OF THE PROGRAM:

- No application or paperwork
- Lighting incentives not available anywhere else
- Get your incentive right away
- Up to 80% off retail pricing

DISCOUNTS THROUGH DISTRIBUTORS*

We have a growing number of distributors that can offer you instant discounts on a wide variety of lighting products. Simply find a participating distributor through our website and ask them about Ameren Illinois Instant Incentives. They will be able to provide you with a list of eligible lighting products and assist you with your purchase.

PRODUCT INCENTIVES			
Product Type	Incentive	Product Type	Incentive
Omnidirectional LEDs (standard A-lamp)	\$5.00 off per lamp	LED T8 tube lights (using electronic ballast or external LED driver)	\$8.00 off per tube
Decorative LEDs (candle, globe lamp)	\$8.00 off per lamp	Standard CFLs (omni-directional, exposed spiral)	\$1.00 off per lamp
Directional LEDs (PAR, MR, BR, R lamps)	\$8.00 off per lamp	Specialty CFLs (dimenable, directional, globe, candle)	\$2.00 off per lamp
LED Trim Kits (downtight can fixtures)	\$10.00 off per fixture	Occupancy Sensors (wall switch type)	\$25.00 off per sensor

DISCOUNTS THROUGH OUR ONLINE STORE*

You can purchase a wide variety of energy-saving CFLs, occupancy sensors, LED lighting and exit signs at a significant discount—online or by phone. We offer FREE SHIPPING on all orders through the online store.



QUESTIONS? Call us at 1.888.800.0747.

* Private, non-residential Ameren Illinois electric account required to receive instant incentives.

† There are product purchase limits through our online store. There are no product purchase limits when going through a participating distributor.

- No lengthy participant application
- Instant discount at point of purchase – Participating Distributors
- Includes CFLs, LEDs, Linear Tube (T8), & some occupancy sensors
- Customer eligibility remains the same
- Product eligibility remains the same
- No purchase limits, though only available until funds run out
- Up to 80% off retail pricing
- ActOnEnergy.com, click on **Instant Incentives** or check out our **On-line Store**

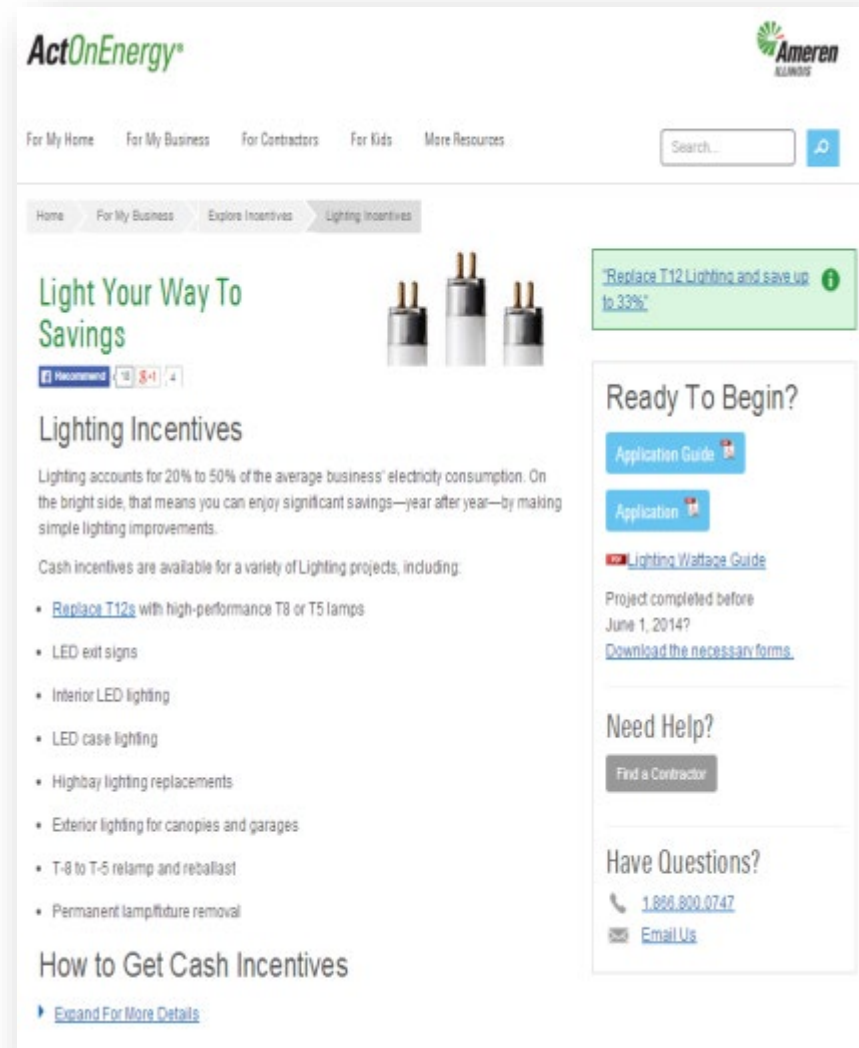




Energy Efficiency Resources

ActOnEnergy.com

- Website always has the most up-to-date information
- Find applications, application guides, and other necessary forms
- On-line Store
- Review how-to videos, case studies, and other educational content



Program Allies Are Here To Help



Recommend 14 1

Find a Contractor who is an ActOnEnergy® Program Ally

Searching for a contractor to help with your energy efficiency improvements?

Our ActOnEnergy® Program Ally database makes it easy to find a qualified contractor in your area. This database allows you to search for Program Allies by geographic region or type of service. Program Allies are contractors who have registered with ActOnEnergy and receive training and updates on our programs. These Program Allies will help you find the best solution for your energy efficiency needs.

Businesses participating in ActOnEnergy programs can also choose to install upgrades themselves or use other local contractors not registered with the ActOnEnergy business programs. However, because of their familiarity with the programs, Program Allies are well equipped to make your energy efficiency projects a success.

Search for Product or Program Ally

Program Ally Name:

Specialties:

Area Served:

Customer Types:

Program Allies

- Contractors who have registered and receive training from ActOnEnergy.
- Familiar with application forms and processes.
- Help customers complete energy efficiency projects.
- Look for a Program Ally by visiting ActOnEnergy.com and click on “Find a Contractor”

Energy Advisors



Territory 3

Rod Rhoads

Rod.Rhoads@gdsassociates.com

217.649.8897



Champaign's Sustainability Initiative – Champaign Growing Greener



HOME EFFICIENCY PROGRAM

Carter Finds Comfort in Energy Efficiency

After a hard day's work at the Champaign County Clerk's office, empty-nester Terry Carter looks forward to sinking into the sofa to catch up on some of her favorite television shows. But not so long ago, cold winter nights made her want to linger at the office.

"I used to not want to go home because it was warmer at work," recalls Terry, who lives in an older home that had virtually no insulation when she moved there in 2001.

More than a few cold winter nights motivated her to pick up the phone after reading about a special program where the city of Champaign would cover the \$60 cost of an Ameren Illinois home energy audit.

Step 1: Information

Before long, an Ameren Illinois Energy Advisor was at Terry's door to perform a home energy audit. The process includes a visual inspection and thermal imaging scan to pinpoint problem areas.

"Our Energy Advisors conduct a non-invasive audit to assess the current condition of the house. We focus on the 'shell' of the house – the foundation, walls and attic – to improve performance," says Program Manager Shawn Sims. "It's a very whole-house approach."

Audits get to the root of common household problems – such as drafts, inconsistent temperatures and heating and cooling issues – and identifies practical solutions to help homeowners save energy and money.

In Terry's case, "the audit recommended everything from light bulbs to insulation in the attic and around the house, underneath the siding," she says.

Fortunately, the Energy Advisor also identified a potential safety issue – a clothes dryer that vented to the attic rather than outside – that was promptly corrected.

"When you tighten the home with energy efficiency measures, you're changing the dynamics of the home and you have to pay attention to air quality," says Sims. "Our Energy Advisors and Program Allies are trained to pay attention to health and safety and bring building science into the equation."

(continued on next page)

— \$306 —
The amount saved every year, on average, by customers who take advantage of the Ameren Illinois Home Efficiency Program.

PROGRAM BENEFITS

- Typical savings of 20 percent or more on utility bills
- Incentives typically cover more than 50 percent of project costs
- On-bill financing
- Greater comfort in home
- Better indoor air quality
- Lighter impact on environment
- Work performed by specially trained contractors (Program Allies)
- Increased long-term value of home

HOME EFFICIENCY PROGRAM INCENTIVES

Project Type/Measure	Incentive Up To
Air/Exhaust Sealing	\$1,000
Attic Insulation	\$500
Rim Joint Insulation	\$400
Crawl Space Insulation	\$500
Wall Insulation	\$1,200

Ameren ILLINOIS

- City of Champaign set aside \$100,000 to make homes for energy efficient.
- City of Champaign will cover cost of Home Energy Audit
 - \$50 value
 - 20% bonus incentive to add attic and wall insulation & seal air and duct leaks
 - www.GreenChampaign.com
 - Must be a city of Champaign Resident

Real Results

- Terry, Champaign Resident
 - Home Audit by Ameren Illinois Energy Efficiency Program
 - Installed EE lighting and insulation attic and walls
 - Paid 20% project cost
 - Saving \$679 each year in energy costs



ILLINOIS ENERGY NOW



**Illinois
Department of Commerce
& Economic Opportunity**

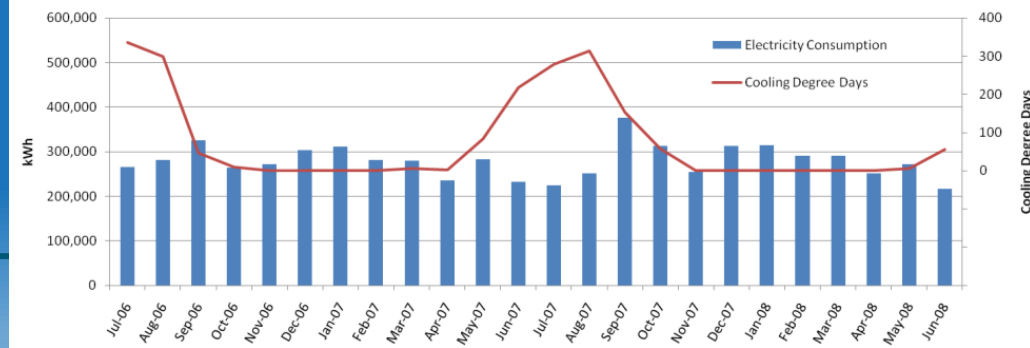


WHAT WE DO

SEDAC Free Services

- Outreach and Training
- Energy Assistance and Assessments
- New Construction Design Assistance
- DCEO Program Support
- Retro-Commissioning (Public Sector)
- Pilot Projects—Dashboards, Mini-RCx

High School - Electricity Consumption



MORE ILLINOIS ENERGY NOW SPECIAL PROGRAMS

- Energy Efficiency Aggregation Program
- Application Assistance
- Savings Through Efficient Products (STEP)
- Natural Gas Boiler System Program
- Combined Heat and Power
- Energy Performance Contracting
- Low Income Incentive Programs/PHA
- Lights for Learning
- Waste Water Treatment Facilities
- Trade Ally Program
- And more!



OTHER FUNDING OPPORTUNITIES

- **Non-EEPs Incentives** – IMEA for municipalities and coops
- **Illinois Clean Energy Community Foundation (ICECF)** – programs for gov't buildings, non-profit community centers, and non-EEPs. Lighting, innovative energy, green buildings, design and commissioning, and more!
- **Illinois State Board of Education (ISBE)** – Illinois School Board Association Energy Efficiency Grants. DCEO may provide matching grant up to \$250,000
- **Illinois Association of County Board Members (IACBM)** – free application assistance to Public Sector
- **Metropolitan Mayors Caucus (MMC)** – direct incentives and help with purchasing for local governments in the Chicago-area and collar counties
- **Performance Contracting** – assistance with RFPs and contracting
- **DSIREUSA.org** – website listing all known energy programs by state



TOP TEN ENERGY STRATEGIES

Loads

1. Lighting
2. Plug Loads (computers, heaters)

Heating, Ventilating, & Air Conditioning

3. Ventilation (reduction, heat recovery)
4. Heating, Cooling (condensing boilers)
5. Motors & Pumps (VFDs, turn off)
6. Building Automation
7. Commissioning

Building Envelope

8. Air Sealing
9. Insulation (roof deck, walls unlikely)
10. Windows (likely very expensive)

EXTRA CREDIT:

After implementing all of these, consider renewables such as solar and wind.



ELEMENTARY SCHOOL

What they did...

- Replaced existing boiler and chiller
- New windows
- Retrofit lighting
- Occupancy sensors
- Air sealing



Elementary School	
Building Type	K-5 School
Energy Measures	HVAC, lighting, windows, occ sensors, controls
Annual Energy Savings	\$16,933
Total DCEO Incentives	\$29,800
Total Project Cost	\$138,801
Payback	6.4 years



ELEMENTARY SCHOOL



Why high payback was acceptable.

- Previously heated with boiler and unit ventilators
- Boiler needed to be replaced
- They wanted air conditioning
- Windows at end of life

What they did...

- New Geothermal
- New windows
- Retrofit lighting
- Occupancy sensors
- Air sealing (not completed yet)

Elementary School

Building Type	K-5 School
Energy Measures	HVAC, lighting, windows, occ sensors, controls
Total Project Cost	\$618,501
Total DCEO Incentives	\$35,393
Final Project Cost	\$583,108
Annual Energy Savings	\$19,587
Payback	29 years



WALL TO ROOF JUNCTION AIR SEALING

PRE-RETROFIT



From SEDAC report

POST AIR SEALING



Current condition



CASE STUDY

NEW CONSTRUCTION: RECREATION CENTER

Park District	
Building Type	Recreation Center
Energy Measures	Lighting, HVAC, envelope, DHW
Annual Energy Savings	\$10,643
Incremental Cost	\$57,152
Total DCEO Incentives	\$77,467
Simple Payback	5.3 years

What they did...

New 39,100 sf recreation center

- Increased roof and wall R-values
- Reduce lighting power density by almost 0.3 W/sf
- High Efficiency GSHP

What they got...

- Prescriptive Incentive for individual measures.
- They did not model the building due to costs constraints



THANK YOU



Illinois Energy Now | 1-800-214-7954
www.ILenergynow.org

<http://smartenergy.illinois.edu/index.html>



MADHU KHANNA, ASSOCIATE DIRECTOR FOR EDUCATION AND OUTREACH



Champaign-Urbana Mass Transit District



Renewable Energy



Solar Array



Bus Shelter Solar Lighting



A close-up photograph of a red drilling rig. The rig has a large red beam with the words "GEOHERMAL DRILLING" in white, bold, sans-serif capital letters. Below the beam, there are various items including a green plastic bottle, a brown plastic bottle, and a white bag. The rig is mounted on a red frame. In the background, there are bare tree branches and a building.

GEOHERMAL DRILLING

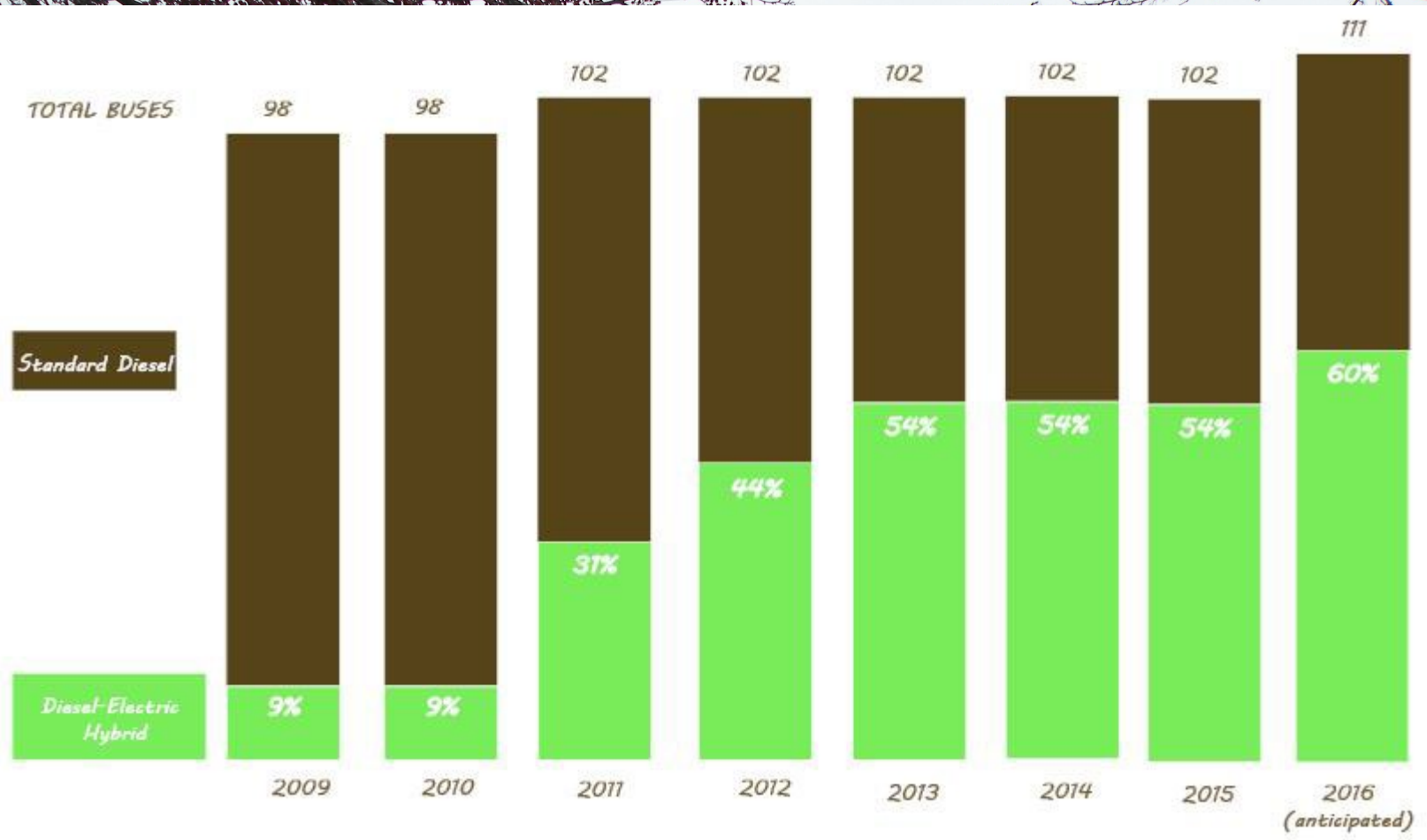
T300M ROTADRILL

Geothermal Energy

MTD

Energy Conservation





Hybrid Buses



White Roof



MTD

Rapid Roll Doors



MTD

LED Lighting Retrofit



MTD



Waste Oil Heaters

MTD

Participation & Recognition





Jane Sullivan
Grant Manager/Sustainability Planner
jsullivan@cumtd.com



Energy Efficiency: the Business Case

Why Invest in Energy Efficiency?

- Regulatory environment
- Legal issues
- Moralization of sustainability
- Meet customer/stakeholder demands
- Build customer/stakeholder value
- Improve profitability/reduce cost

What we are doing:

- U of I is funding an number of energy conservation initiatives:
 - Retro-Commissioning
 - Energy Performance Contracting
 - Energy Efficiency
 - Retrofitting lighting fixtures to higher eff.
 - Wind/Solar

The Business Case

- System cost Vs. Life Cycle cost
- Example:
 - Incandescent 60 W Light Bulb \$1.15 each
 - LED 60 W Equiv Light Bulb \$4.00 each
 - Electricity rate of \$0.08 per kilowatt-hour



The Business Case

- But then...
- Don't LED's last longer than regular bulbs?



LED Lightbulbs

- LED Lightbulb – Cost \$4.00/Bulb
- Lifespan - 18.3 Years
- Cost/Year 22 cents/year
- Annual Operating Costs \$1.03/Year
- Lifecycle cost (Bulb + 18.3 years operating cost)
- = \$22.85/bulb/Lifecycle + t

t = Cost to replace bulb

Incandescent Bulbs

- Incandescent – Cost per bulb \$1.15 ea
- Lifespan 1,000 hours (6 months) (2 bulbs per year)
- Cost per year \$2.30
- Annual Operating Costs (120Kwh @\$0.08/Kwh) = \$9.60/year
- Over the equivalent 18.3 years, lifecycle cost = [Bulb Cost+ Operating)]=\$218 +2*18.3t
- Almost 10x the cost of LED's for the same fixture



» Greatest Improvement of ENERGY STAR Score

**University of Illinois Employees Credit Union –
First Street Branch – From 6 to 14**



Awards





I will help a local
business reduce their
carbon footprint.

