



Thanks to Kilowatt Sponsor







Steering the Journey

Energy Efficiency in Higher Education

Ameren Illinois Energy Efficiency Program Overview



- Illinois Mandated: Energy Rate Relief Actin 2008.
- Program Goals:
 - Provide financial incentives to lower the cost of energy-saving equipment upgrades.
 - Save Ameren customers money on future utility bills.
- Must be an Ameren Illinois natural gas or electric customer.





The Ameren Illinois
Energy Efficiency
Program has
helped Illinois
businesses save
over \$1.4 billion in
energy costs since
2008.

Real Savings

- Financial incentives can help businesses:
 - Cut project costs
 - Decrease payback periods
 - Move energy efficiency projects forward!

Business
customers have
received an
average of \$34.4
million in annual
incentives over
the past five
years.







Specialty Equipment





Indoor and Outdoor LED Lighting



Heating, Cooling and Ventilation



New Construction Projects*



Retro Commissioning*



Custom Projects*

*Pre-approval is required

AmerenIllinoisSavings.com/Business





Territory Energy Advisors



Energy Advisors

- For Large Industrial and Small Business customers.
- Free site walk-throughs and project consultations.
- Assistance identifying energy efficiency needs.
- Assistance with application process.

Find an Energy Advisor:

AmerenIllinoisSavings.com/EnergyAdvisor



It's Time to Act!

LED Lighting Incentives

- \$0.50 per watt reduced on interior and exterior LED replacements
- Must be DLC-approved lighting
- Eligible incentives include:
 - LED tube and fixture replacements through an approved distributor
 - Networked Lighting Controls (includes LLLC)
 - Seasonal lighting
 - Grow lighting
 - Cooler/freezer lighting and controls

AmerenIllinoisSavings.com/Lighting







Higher Education Savings











Projects at Southwestern Illinois College

Michael Mance

Manager of Work Control Southwestern Illinois College







SWIC Ongoing Projects

- Replaced seven air handling units (AHUs) and rooftop units (RTUs) with high-efficiency models to improve performance and reduce energy use.
- Installed solar-powered picnic tables to promote renewable energy and provide outdoor learning spaces.
- Upgraded the existing boiler to a high-efficiency unit to enhance energy performance and lower emissions.
- Converted standard electrical outlets to smart outlets in select areas for improved energy monitoring and control.
- Hired a Facilities Data Analyst to track utility usage and support carbon-reduction initiatives.
- Acquired electric and battery-powered lawn care equipment to decrease both carbon emissions and noise pollution across campus.





SWIC Previous Projects

- Converted gymnasium lighting with 56 high-efficiency
 LED fixtures, cutting energy use and maintenance.
- Upgraded lighting in 80+ classrooms, offices and hallways, replacing 1,000+ fixtures with LEDs and occupancy sensors for improved savings and quality.
- Replaced eight AHUs with high-efficiency models tied into a four-pipe HVAC system to support future expansion.
- Renovated former auto collision shop into a state-ofthe-art Computer Numerical Control (CNC) lab, with new RTU and LED lighting.
- Installed eight dual-port EV charging stations districtwide, open for public use.













SWIC Future Projects

- Integrate Luminaire Level Lighting Controls (LLLC)
 across the district, connected to the existing
 Building Automation System (BAS).
- Expand solar field capacity districtwide to increase renewable energy generation.
- Install additional EV charging stations to support growing demand.
- Convert quad-area lighting to LED for improved efficiency and reduced maintenance.
- Implement geothermal heating and cooling systems to lower long-term operating costs and carbon footprint.



SWIC and Ameren Illinois Energy Efficiency Program Partnership

Ameren Energy Efficiency PROGRAM



- 2019 2025
- Completed 26 energy conservation measures with Ameren Illinois incentives.
 - Generating annual savings of 1,050,217
 kWh and 1,600 Therms.
 - Secured over \$150,000 in incentives to date.
- 2025 Established recurring strategic meetings with Ameren Illinois Energy Advisors.
 - Attended Ameren Illinois LLLC University.
 - Strengthening collaboration and building a foundation for future ECM savings while maximizing incentives for SWIC.







Luminaire Level Lighting Controls Workshops

November 6 - Millikin University, Decatur

November 7 - Southern Illinois University, Carbondale

November 12 - Bradley University, Peoria

November 13 - Southern Illinois University, Edwardsville

Register at AmerenIllinoisSavings.com/LLLC-University.



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IGEN and Green Infrastructure at Community Colleges



David Husemoller

Executive Director
Illinois Green Economy Network

Illinois Green Economy Network (IGEN)



- Formed in 2008-09 by community college presidents and boards of trustees to:
 - Foster collaboration among community colleges and partners
 - Accelerate green workforce training
 - Drive the clean energy economy
- 39 Community College districts











Sharing resources among community colleges across Illinois:

- Financial support
 - Energy efficiency projects
 - Renewable energy
 - Curriculum development
- Technical assistance through EnergySense (U of I)
 - Specific building or mechanical systems
 - Whole building comprehensive assessment









Energy Efficiency

Financial assistance – annual Notice of Funding Opportunity (NOFO)

- >\$1 million annual allocation
- ~15 projects at colleges across Illinois
- Energy, utility budget and GHG emissions savings
- Student impacts







Technical assistance – EnergySense

Example:

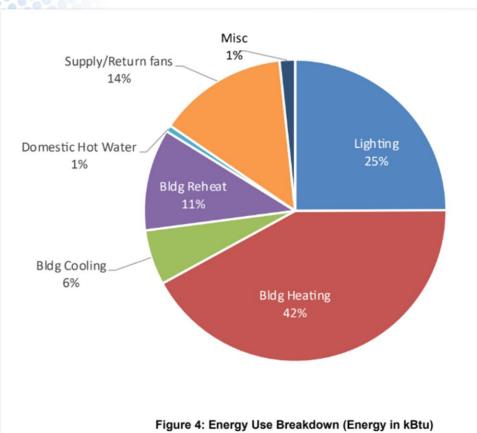
"It is a best practice where feasible to install three boilers, sized for half of the expected load instead of full-sized boilers. This provides for additional redundancy as well as better control and efficiency..."



Image 2: 4 Pass 1960s firetube steam boiler











Whole Building Comprehensive Assessment

Example:

- General Building Conditions
- Site Conditions
- Building Envelope
- HVAC Systems
- Lighting and Internal Loads
- Domestic Hot Water
- Multiple Recommendations







- Bringing together resources for this college
 - Identified over \$350,000 in incentives
 - Grant sub-award for \$110,000 for improvements
- Developing resources for colleges to use more incentives











Energy Benchmarking and Efficiency at Community Colleges (EBECC)

- New program starting this fall for six community colleges
- Benchmark energy usage data
- Submeter buildings
- Make long-range plans for improvements



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Questions?