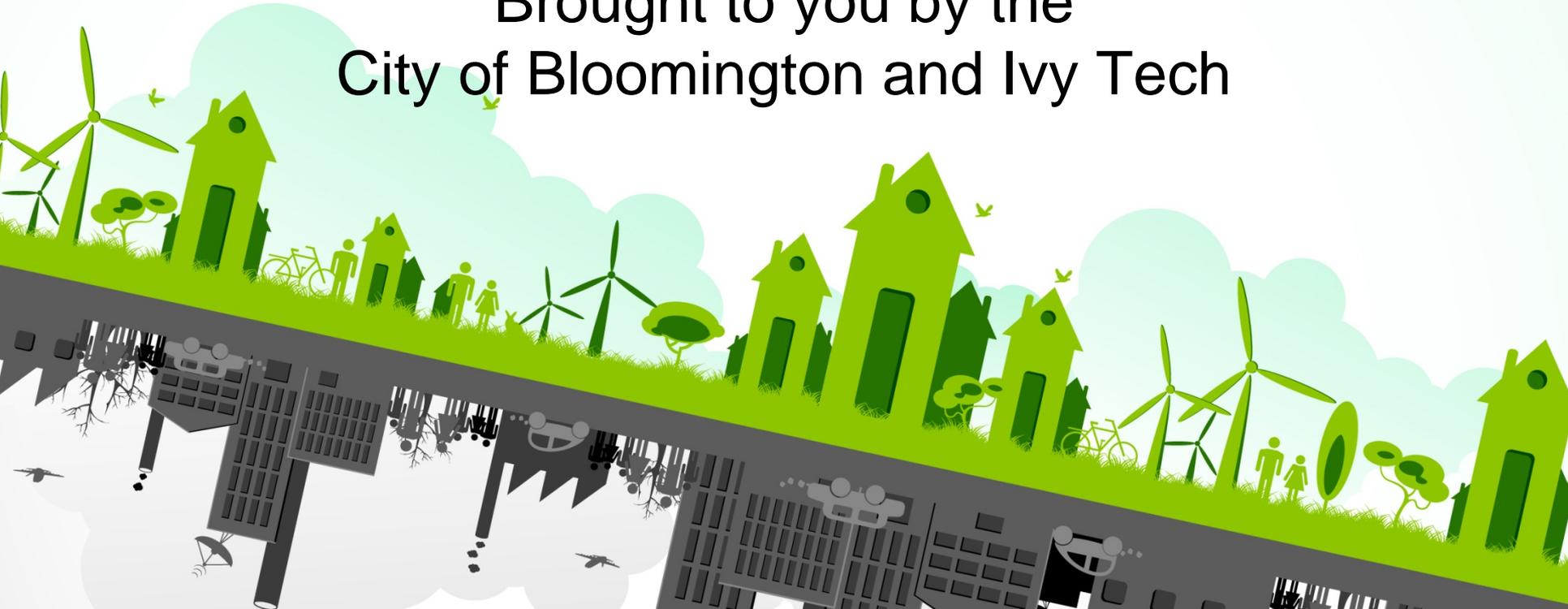


Welcome to the Efficient Facilities Roundtable!

June 5, 2013

Brought to you by the
City of Bloomington and Ivy Tech





EFFECTIVE FACILITIES MANAGEMENT FORUM

- What are the skills and knowledge gaps within organizations that prevent fully implementing sustainability efficiencies?
- What are the perceived benefits of closing those gaps? Improve employee morale & retention. Improved organizational efficiencies. Savings in energy consumption, reduced use of outside contractors.
- What are the different avenues available to address those gaps?
- Would investing in skills enhancement and/or certification training be a priority for your organization? How would the ROI on that investment be measured?
- Would student internships be of interest to your organization?
- Would you be willing to serve on an Advisory Board for this forum?



KNOWLEDGE SHARING & TRAINING OPTIONS

- Panel discussions
- Presentations of new technologies
- Ask the Experts (Lighting, HVAC, Safety, Environmental, Water Usage, Waste Reduction)
- Workshops or specialized topic meetings led by local subject matter experts
- Training classes - skill based and/or for certifications
- Involvement with the local chapter of US Green Building Council
- MEEA (Midwest Energy Efficiency Alliance) Certifications & Training
- BOMI International Certifications & Training



KNOWLEDGE SHARING & TRAINING OPTIONS (CONT.)

Possible session topics:

- Decision-making in Operations
 - Using consultants and validating recommendations
 - Upgrading lighting & window options
 - Basic troubleshooting
- Economic decisions – tools for calculating benefits of replacement vs. repair, ROI calculations, making the business case for facility needs
- Educated communication – facility staff to management
- Waste reduction, ADA compliance, other common facility concerns



MIDWEST ENERGY EFFICIENCY ALLIANCE

- MEEA is a collaborative network advancing energy efficiency in the Midwest to support sustainable economic development and environmental preservation.
- MEEA's suite of Training & Education programs includes:
 - *Building Operator Certification*, training commercial building operators to run their buildings efficiently;
 - *Lights for Learning*, a fundraising opportunity for K-12 students;
 - *Home Performance with Energy Star*, a statewide effort led by MEEA including building science trainings for residential contractors, homeowner education, and utility coordination;
 - *Toolkit for Rural Energy Efficiency (TREE)*, an outreach effort aimed at helping rural energy cooperatives advance energy efficiency;
 - *Midwest Building Solutions*, a beyond-code training program for building contractors;
 - *PEEC Network*; a web-based listing of contractors trained to properly install and maintain high-efficiency equipment offered through utility energy efficiency programs; and
 - *HVAC System Adjustment & Verified Efficiency*, (HVAC SAVE) a regional HVAC contractor training and certification initiative based on National Comfort Institute (NCI) principles.



Organization Name

- ❖ BOMI (Building Owners and Managers Institute International)
- ❖ MEEA (Midwest Energy Efficiency Alliance)
- ❖ Ivy Tech Corporate College
- ❖ Purdue TAP/MEP (Technical Assistance Program/Manufacturing Extensions Partnership)
- ❖ AEE = Association of Energy Engineers Online Seminars
- ❖ EnergySTAR
- ❖ EPA (Environmental Protection Agency)
- ❖ DOE (Department of Energy)



PROPERTY MAINTENANCE PROFESSIONAL TRAINING

Course:	Description:
Electrical Wiring Fundamentals (32 Hours)	Design and install electrical circuits, select wiring materials and devices, and choose wiring methods. Includes electrical safety, terminology, interpretation of electrical symbols used in construction blueprints, branch circuit layout, over current protection, conductor sizing, grounding, GFCI & AFCI protection, tool usage, and material/device selection.
General Maintenance (28 Hours)	Covers required record keeping, plumbing basics (fixture repair and replacement, piping, basic plumbing code, etc.), major appliance installation and repair, chemical usage and storage, MSDS files, ADA compliance and safety and liability topics.
Heating Fundamentals (32 Hours)	Introduces fundamentals applicable to the heating phase of air conditioning. Includes types of units, parts, basic controls, functions, and applications. Emphasizes practices, tool and meter use, temperature measurement, heat flow, the combustion process and piping installation practices. Covers the basic sequence of operation for gas, oil and electric furnaces.
Refrigeration (44 Hours)	<p>Covers compression systems used in mechanical refrigeration including the refrigeration cycle and system components.</p> <ul style="list-style-type: none">✓Compressors✓Equipment installation✓Metering devices✓Refrigerant charging and recovery✓System evacuation✓Tools used to install and service refrigeration equipment✓Troubleshooting procedures [electrical, mechanical and refrigeration].✓Using a refrigerant temperature/pressure chart <p>Includes clean-up procedures following compressor burnout and analysis of how a single problem affects the rest of the system. Introduces electrical control systems and electrical motor basics as they apply to air conditioning and refrigeration including motor types, starting components, and motor troubleshooting basics.</p>
Basic Carpentry and Building Maintenance (20 Hours)	Includes carpentry basics, power tool and hand tool safety and use, framing, hanging doors and windows, trim basics, drywall basics, and painting basics.



DISCUSSION POINTS

- What are the challenges you face at your facility that prevent you from fully implementing energy efficiency practices?
- How can we help?
- What do you want to get out of this program?
- Please complete the survey.

