KPPC
Kentucky's Resource Center for Environmental Sustainability
Sustainable Solutions Post

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New Energy Management Resources Available on kppc.org

Visit KPPC's website for new online tools, and resources to help address energy management plans at your facility. The seven-step Energy Management Process used by KPPC's Environmental Sustainability Program is based on the ENERGY STAR® program. It includes additional information tailored specifically to commercial and industrial facilities, such as sample job descriptions, energy policies and action plans, lighting and plug load inventories, and shut-down checklists that were developed by KPPC engineers.

As part of KPPC's package of free technical assistance tools, this systems approach assists energy managers, facilities personnel and other Energy Team representatives learn the process of energy management and create their own successful program.

Certified Energy Managers Can Help Address Your Facility's Energy Use

As part of the Center's services, KPPC provides technical assistance, conducts energy efficiency assessments and makes recommendations to help clients develop and implement energy management plans. To provide these services, our staff members have a broad base of training and expertise, and they continually improve their technical skills to better serve our wide variety of clients.

Expanding their energy-related expertise, four KPPC engineers recently achieved the Certified Energy Manager (CEM) credential. Andrew Carter, Eric DeLodder, Cheryl Eakle and Edye Raymond join six other KPPC staff members with the CEM certification.

Awarded by the Association of Energy Engineers, the CEM certification recognizes individuals who have demonstrated high levels of experience, competence, proficiency and ethical fitness in the energy management profession.

KPPC engineers (from left) Edye Raymond, Andrew Carter, Cheryl Eakle and Eric DeLodder recently achieved the Certified Energy Manager (CEM) designation.

Manager for America's Counties – July 29, 2:00-3:00 p.m. ET

Benchmarking Water/Wastewater Plants in Portfolio Manager Webinar – July 29, 2:00-3:15 p.m. ET

Food Waste and Organics Reduction and Recycling Webinar – August 19, 1:00-2:30 p.m. ET

Floodplains, Stream and Wetlands Compliance Workshop – August 25, 8:00 a.m. - 4:30 p.m. ET – Frankfort

Richard Meisenhelder, KPPC's Environmental Sustainability Program Manager, says that, "The intensive training required for this certification focuses on all of the energy efficiency areas we deal with regularly, such as boilers, furnaces, lighting, etc. Achieving the CEM designation means that our engineers are well trained to recognize energy management opportunities for our clients."

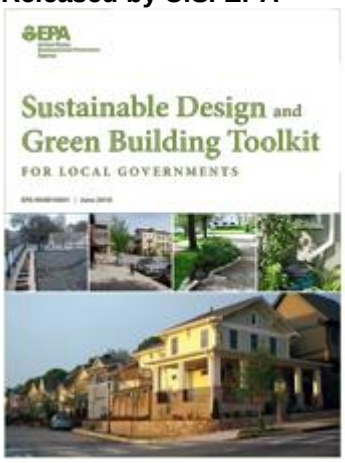
KPPC Student Engineer Project Focuses on Hydroelectricity

On July 19, the Conn Center for Renewable Energy Research showcased research projects developed by students from UofL's J.B. Speed School of Engineering. Six teams demonstrated projects they designed in the "Renewable Energy Challenges" course.

Shawn Crowe (right), a chemical engineering graduate student, examines the rain runoff-powered system that his team built. The project applies hydroelectricity to power five red light-emitting diode (LED) lights. Crowe works with KPPC through UofL's Cooperative Education Program providing data analysis for all of KPPC's technical service offerings, including on-site waste and energy assessments.

Newsbits

- **New Sustainable Design Resource Released by U.S. EPA**



The *Sustainable Design and Green Building Toolkit for Local Governments* is designed to help identify and remove barriers to sustainable design and green building within their permitting process. The toolkit addresses the local codes of ordinances that would affect the design, construction, renovation, operation and maintenance of a building and its immediate site.

The toolkit contains an assessment tool, a resource guide and guide to developing an action plan for implementing changes to the permitting process. It was developed in response to local government requests for assistance in evaluating their codes and ordinances, but can also be used by members of the development community, local government "green teams," and other building professionals.

- **Oregon Pilot Paint Take-Back Program First in Nation**
The Oregon Department of Environmental Quality (DEQ) has approved a plan that sets in motion the first paint product stewardship "take-back" program in the nation. The PaintCare program, which officially began July 1, allows consumers to return

unused paint to participating retailers and other sites for proper disposal. The pilot program is expected to collect as much as 600,000 gallons of leftover paint annually in Oregon and is expected to be rolled out nationally.

The American Coatings Association, a trade organization for paint manufacturers, created the non-profit organization PaintCare to administer the program. Consumers will pay for the program by paying a surcharge on paint and stain containers. PaintCare, in turn, will provide a series of depots statewide where people can drop off unused paint.

Green Tip of the Month

Trim or Replace Impellers on Oversized Pumps

From Industrial Technologies Program Pumping Systems Tip Sheet #7 - As a result of conservative engineering practices, pumps are often substantially larger than they need to be for an industrial plant's process requirements. Centrifugal pumps can often be oversized because of "rounding up," trying to accommodate gradual increases in pipe surface roughness and flow resistance over time, or anticipating future plant capacity expansions. In addition, the plant's pumping requirements might not have been clearly defined during the design phase.

Oversized and throttled pumps that produce excess pressure are excellent candidates for impeller replacement or "trimming," to save energy and reduce costs. Trimming involves machining the impeller to reduce its diameter.

Consider impeller trimming when any of the following apply:

- The head provided by an oversized, throttled pump exceeds process requirements.
- System bypass valves are open, indicating excess flow rate.
- The pump is operating far from its design point.
- The operating head and (or) flow rate are greater than process requirements.

Mark your Calendar for these Upcoming Conferences and Events

Getting to Zero: How Companies Profit from Eliminating Waste Webinar – July 29, 2:00 p.m. ET

The notion of a zero-waste operation or facility isn't merely a noble aspiration. It is an achievable goal, as a growing number of companies have demonstrated. Companies in a wide range of manufacturing businesses have achieved zero-waste status.

Join Waste Management's Jim Hall and Caterpillar's Jim Blass in conversation with Joel Makower, Executive Editor of GreenBiz.com, in an exploration of how companies are achieving zero waste. You'll hear a first-hand account of Caterpillar's pursuit of zero waste at its facility in Aurora, Illinois, and insight into

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the bottom-line impacts of a typical zero-waste program.

Register for this free webinar, sponsored by Waste Management.

Webinar for NACo Members: ENERGY STAR® Portfolio Manager for America's Counties – July 29, 2:00-3:00 p.m. ET

During this free webinar, participants will learn how to use ENERGY STAR's® Portfolio Manager tool (U.S. EPA's building benchmarking tool) for analyzing energy use in county facilities and making improvements. Presenters will demonstrate how to use Portfolio Manager to:

- Track energy performance and improvement
- Prioritize investments, upgrades and retrofits
- Report program results

Benchmarking Water/Wastewater Plants in Portfolio Manager Webinar – July 29, 2:00-3:15 p.m. ET

Join this free webinar to learn how to measure and track energy use and carbon dioxide emission reductions in wastewater treatment plants to establish baseline energy use, prioritize investments, set goals and track improvements over time.

Food Waste and Organics Reduction and Recycling Webinar – August 19, 1:00-2:30 p.m. ET

Learn about key issues, successful projects and a variety of best management practices for creating stellar waste management programs. Hear from experts around the country on what works and what doesn't, and how to make your program more successful. This free session is part of U.S. EPA's Resource Conservation Challenge (RCC) series of webinars.

Floodplains, Stream and Wetlands Compliance Workshop – August 25, 8:00 a.m. - 4:30 p.m. ET – Frankfort

This workshop will educate attendees on the hot topics and key points of the 401 Water Quality Certification, 404 U.S. Army Corps of Engineer Permits and Floodplain Stream Construction Programs.

Participants will leave knowing the basics of the programs, what questions to ask before beginning any project and who to contact at the Department for Environmental Protection. Participants will not become experts in the programs, but will gain a general overview in order to avoid regulatory compliance issues. The workshop will rely on participation by the audience for experiential

learning.

The Kentucky Division of Compliance Assistance is hosting the event at the Department for Environmental Protection's Training Center in Frankfort, and the cost is $35 for KY EXCEL members and $70 for non-members. Register online.

KPPC is Kentucky's primary resource to help businesses, industries and other organizations develop environmentally sustainable, cost-saving solutions for improved efficiency. Based at the University of Louisville J.B. Speed School of Engineering, KPPC provides technical information and assistance that is free, confidential and non-regulatory.

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