Help Shape the Kentucky Association of Manufacturers (KAM)
2011 Energy Conference

Energy is a major component of manufacturing in Kentucky, and KAM recognizes the uniqueness of Kentucky's energy supply and the opportunity for Kentucky manufacturers to become leaders in creating our country's energy policy. In April, KAM will host the 2011 Energy Conference - ENERGY TODAY... AND TOMORROW - for Kentucky's manufacturing industry.

In preparation for this conference, KAM is gathering specific information regarding energy efficiency and sustainability initiatives and preparing to benchmark the state's current readiness position. Please take a few minutes to help KAM by completing their Energy Survey, by Tuesday, March 4.

Results of this survey will help conference organizers present attendees with current, accurate and relevant information regarding energy in Kentucky. Make plans to attend the Energy Conference to learn:

- Strategies to capitalize on short-term opportunities with long-term thinking
- Challenges and opportunities of the changing energy marketplace
- Transition strategies to make your facilities and operations more energy efficient
- Critical insight regarding the future of energy in Kentucky and globally

The Energy Conference will be held April 20, from 8:00 a.m. to 5:00 p.m. in Louisville. Visit KAM's website or contact Stephanie Nelson at 502-352-2485 for details.

Conference sponsors include: KAM, KPPC, Department for Energy Development and Independence, Harshaw Trane and Ingersoll Rand.
Businesses Explore Green Chemistry Alternatives

On February 10, Environment America released *Safer by Design: Businesses Can Replace Toxic Ingredients through Green Chemistry*, a new report that highlights 14 businesses across the country that are working to cut toxic chemicals from their products, while creating green jobs and boosting the economy.

The report shows that businesses across the country are creating new technology to reduce their use of toxic chemicals, a process called green chemistry. SC Johnson, one of the companies highlighted, used a tool called Greenlist to screen product ingredients for environmental attributes, to eliminate nearly 48 million pounds of toxic chemicals from its products since 2001. Specifically, Greenlist helped the company invent a less toxic formula for Windex that cleans 30 percent better, growing and capturing more of the market share for green cleaning products.

Other companies highlighted in the report that are exploring the potential of green chemistry include:

- **True Textiles** manufactures a fabric product made from 100 percent post-consumer recycled polyester and corn. The fabric, called Terratex, is naturally stain resistant and durable without the use of substances that pose health risks, such as toxic stain repellents. In 2006, the company estimated that the Terratex manufacturing process saves on the order of $300,000 per year compared to conventional fabric manufacturing methods.
- **The pharmaceutical company Pfizer** worked with startup Codexis to simplify the process of manufacturing the cholesterol management drug Lipitor. Smarter approaches like this can reduce waste generation in drug manufacturing by as much as 50 to 90 percent, reducing the use of toxic ingredients and potentially saving the pharmaceutical industry billions of dollars on energy, raw materials and waste disposal.
- **BASF and Procter & Gamble** each invented technology to reduce the contribution of paint to smog and unhealthy air quality in America’s cities, positioning the companies to capture a greater share of the paint market while helping their customers comply with air quality regulations.

**Newsbits**

- **Twelve Kentucky Colleges and Universities Accept the RecycleMania Challenge**
  Between February 6 and April 2, a total of 630 colleges and universities nationwide are competing against each other to see which one can recycle the most. [Twelve Kentucky colleges and universities](#) are among those participating in RecycleMania 2011, competing to see which
institution can collect the largest amount of recyclables per capita, the largest amount of total recyclables, the least amount of trash per capita or have the highest recycling rate.

- **New National Coalition on Sustainability Formed**
  The newly-formed **Stewardship Action Council (SAC)** is a multi-stakeholder organization dedicated to promoting and improving sustainable and socially responsible business practices, providing a space where cross-functional collaboration can take place and developing a performance-based sustainability index.

  SAC is a coalition of industry, academia, the investment community and governmental and non-governmental organizations, facilitating collaboration among different groups to generate solutions to the sustainability challenges that each group faces. Membership in SAC is open to industrial facilities, academic institutions, governmental and non-governmental organizations, the investment community and trade associations.

- **Louisville-based FetterGroup Wins 2010 WasteWise Award**
  Congratulations to FetterGroup, a printing company in Louisville, for winning the 2010 WasteWise Small Business Partner of the Year award. The company has implemented several waste prevention ideas, such as switching to reusable plastic shipping boxes, decreasing trim waste during its label printing process, and no longer using "proof approval stickers," eliminating the production of more than 10,000 proof stickers per year. In 2009, FetterGroup achieved a 93 percent diversion rate, reducing or reusing 955 tons of materials, and adding $250,000 to its bottom line.

  FetterGroup is one of 24 award winners representing business, government and educational sectors across the country to be recognized by U.S. EPA in February.

**Green Tip**

**Minimize Boiler Short Cycling Losses**

*From Industrial Technologies Program Steam Tip Sheet #16 -* Boiler "short cycling" occurs when an oversized boiler quickly satisfies process or space heating demands, and then shuts down until heat is again required. Process heating demands can change over time. Boilers may have been oversized for additions or expansions that never occurred. Installing energy conservation or heat recovery measures may also reduce the heat demand. As a result, a facility may have multiple boilers, each rated at several times the maximum expected load.

Boilers used for space heating loads are often oversized, with their capacity chosen to meet total building heat losses plus heating of ventilation and infiltration air under extreme or design-basis temperature conditions. No credit is taken for thermal contributions from lights, equipment, or people. Excess capacity is also added to bring a facility to required settings quickly after a night setback.
Suggested Actions:

- Determine the efficiency and operating cost of each of your boilers and adopt a control strategy for maximizing overall efficiency of multiple boiler operations.
- Avoid short cycling by purchasing a burner with a high turndown ratio, or by adding a small boiler to your boilerhouse to provide better flexibility and high efficiency at all loads.

Mark your Calendar for these Upcoming Conferences and Events

Hosted by the University of Louisville’s Conn Center for Renewable Energy Research and Environmental Stewardship, this workshop is an ideal opportunity to meet and interact with researchers, energy professionals, state policymakers and regional organizations addressing renewable energy and energy efficiency. The workshop promotes collaborations between universities and industries by highlighting energy storage, biomass, biofuels, advanced energy materials, efficiency and conservation and solar.

Between 250 and 400 people are expected to attend, including industry, government, and academic researchers from all over the state, with distinguished speakers giving keynote speeches on the various themes. See the workshop website for details and to register. For information, contact Rodica McCoy at (502) 852-6348.

Advanced Management of Compressed Air Systems Workshop —March 22-23, 8:00 a.m.-5:00 p.m. ET—Louisville

Technical training for: energy managers, facility engineers, operators, plant managers, maintenance staff and consulting engineers. This intensive two-day training will provide in-depth technical information on troubleshooting and making improvements to industrial compressed air systems.

Topics include:

- Benefits of improving compressed air system performance
- How the compressed air system works
- Computing the current cost of compressed air
- Measuring and creating a baseline
- The basic approach for cutting costs
- The impact of different compressor control types
- Steps for proper system operation, maintenance and point-of-use accountability
Tailoring a compressed air system management action plan

Presented as part of KPPC’s environmental sustainability training series, this workshop is offered in conjunction with the Industrial Technologies Program (ITP) as part of its national efforts to improve industrial energy efficiency and environmental performance.

Seating is limited and registration is required by March 15. Cost: $449 per person.

This workshop is funded in part by the American Recovery and Reinvestment Act through the combined efforts of the following organizations: Kentucky Department for Energy Development and Independence, the U.S. Department of Energy and KPPC.

2011 Midwest Regional ENERGY STAR® Conference—March 24-25—Lexington

The Midwest Regional ENERGY STAR® Conference is an opportunity to meet with the entire spectrum of individuals, trade associations and industry professionals that have any role in the production, sale and maintenance of homes, for the purpose of educating Kentuckians and surrounding state neighbors about energy efficiency, ENERGY STAR homes, energy efficient home products and services, financing and marketing of energy efficient homes.

Who Should Attend?
Home builders, remodelers, architects, government officials, codes officials, financial and mortgage institutions, realtors, appraisers, all energy efficient systems, equipment, products and services vendors and installers, HERS raters, building analysts, home performance auditors and inspectors, and industry trade association representatives.

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.

Information contained in this newsletter is a service of KPPC and is offered solely as a general reference. The University of Louisville, KPPC, their employees, sponsors and all technical sources referred in this correspondence do not: (a) make any warranty or representation, expressed or implied, with respect to the accuracy, completeness, or usefulness of the information; and (b) assume any liabilities with respect to the use of or for damages resulting from any information contained in the correspondence. Mention of trade names, commercial products, or services does not constitute an endorsement or recommendation of use.