



In this issue...

Become a Partner in the 10-10-10 Challenge and Help Change the Future of Kentucky

Manufacturers' Demand for Recycled Materials Fuels Economy in Southeast

KPPC's Materials Exchange and Recycling Services Directory Moved In-House

Newsbits

Colleges and Universities encouraged to participate in the RecycleMania 2011 competition

Recent study offers critical insights on how organizations can bolster recycling programs

Green Tip

Use Low-Grade Waste Steam to Power Absorption Chillers

Mark Your Calendar

Energy Efficiency Program Sponsors:

Become a Partner in the 10-10-10 Challenge and Help Change the Future of Kentucky

Governor Beshear and the Kentucky Department for Environmental Protection have challenged all citizens and industries across the Commonwealth to reduce their waste disposal, water use and energy consumption by 10 percent. To accept this challenge and show your support for this effort, visit www.101010challenge.com.



The Department is also seeking partners that share this commitment and wish to help encourage others to accept the challenge as well. Becoming a partner is a great opportunity for your organization to showcase its environmental stewardship as well as build relationships with other Challenge participants. To become a partner, contact the agency by calling 800-926-8111 or emailing livinggreener@ky.gov.

Whether you accept the 10-10-10 Challenge or not, be sure to take advantage of 10-10-10 Challenge [resources available](#) to help you in your efforts to reduce the amount of water and energy you use and the amount of waste you produce. This site also includes ideas for partners interested in promoting the program. You can also "Like" the [10-10-10 Challenge Facebook page](#) and begin to receive routine tips and ideas that will help you save money while becoming more sustainable.

Manufacturers' Demand for Recycled Materials Fuels Economy in Southeast

The Southeast Recycling Development Council (SERDC) recently unveiled the conclusion of a two-year study documenting the heavy regional presence of manufacturers that depend on postconsumer recycled glass, plastic, paper, aluminum and steel to make consumer and industrial products. The study finds that more than 206 key industrial facilities across the Southeast depend on recycled feedstocks that flow from community and commercial recycling efforts. These companies collectively employ more than 47,525 persons and see a sales volume exceeding \$29.4 billion per year.



Scoring Energy Performance with U.S. EPA's Portfolio Manager— Webinar— December 2, 2:00 - 3:30 p.m. ET

Kentucky Energy Alliance Facility Tour and Roundtable— December 3, 10:00 a.m. - 3:00 p.m. ET— Sherwin-Williams, Richmond

Product Stewardship Institute Networking Calls—December

The motivation behind this project lies in connecting recycling's impact to the Southeast's strong manufacturing base. "Some of the nation's and world's largest recycling end users call our region home. Unfortunately, many have to look beyond the Southeast to find materials, while these same commodities are disposed in landfills across the Southeast," said SERDC Chairman Steve Carreras.

By collaborating across state lines, SERDC works to build effective recycling collection systems that deliver local supplies of valuable materials to manufacturers who employ tens of thousands of people in the region.



This map highlights key manufacturers who look to recycled materials to make their products.

The study determined that Kentucky is home to more than 17 manufacturers who rely on recycled content feedstock. These companies make more than \$3.8 billion in yearly sales, and employ more than 4,300 Kentucky citizens directly in the manufacture of recycled content products. Research findings, regional economic reports and [fact cards on Kentucky](#) and the other states included in the study are available on [SERDC's website](#).

During its Recycling Summit earlier this month, SERDC also rolled out an online [interactive map of manufacturers](#) who rely on recycled glass, plastic, metal and paper to make new consumer goods.

KPPC's Materials Exchange and Recycling Services Directory Moved In-House

This month, the services provided through KIME — Kentucky Industrial Materials Exchange, including the Recycling Services Directory, will move in-house. The Center is no longer utilizing the third-party vendor that had provided these services online. However, KPPC will continue to help Kentucky companies search for other facilities that want to buy, sell, trade or recycle their waste materials.

Materials exchanges are explored as part of the assessment process that KPPC conducts for its clients, and can be researched for Kentucky companies that contact the Center for assistance. Also, all providers are invited to request that their recycling products or services be listed in our free Recycling Services Directory. We are currently developing a web-based directory that will be

accessible online. Updates will be included in future editions of this newsletter.

Companies interested in exchanging materials with other facilities or being added to our list of recycling service providers can [contact KPPC online](#) or call 502-852-0965.

Newsbits

- **Colleges and Universities encouraged to participate in the RecycleMania 2011 competition**

The U.S. Environmental Protection Agency (EPA), Region 4 is making a special effort to recruit colleges and universities to participate in the RecycleMania 2011 competition. Registration for RecycleMania is open and runs through January 23, 2011. The competition will run from January 23 to April 2, 2011. Last year over 600 colleges and universities world wide participated in the competition, including 91 schools in EPA Region 4.



RecycleMania is a friendly competition among college and university recycling programs throughout North America that provides students with a fun, proactive activity in waste reduction and increases awareness of campus recycling and waste minimization. Colleges and universities compete in different contests 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.

For more information about the competition, rules and instructions on how to sign up, please visit the [RecycleMania website](#) or contact Thornell Cheeks, EPA Region 4, at 404-562-8479, or email: cheeks.thornell@epa.gov.

- **Recent study offers critical insights on how organizations can bolster recycling programs**

[From Call2Recycle®](#) - Recent research by Call2Recycle®, North America's only free battery and cell phone collection program, showed that in many cases, take-back programs designed to collect multiple items need to be re-thought in order to be effective. The company's findings indicated that many take-back programs underperform due to serious design flaws.

"Organizations are moving very quickly to meet the recycling requirements being set by the government and the sustainability desires of consumers and employees, but in many cases, the fast pace and lack of knowledge hinders businesses from creating effective collection programs," said Carl Smith, president and CEO of Call2Recycle. "A well-designed recycling program can enhance a brand, generate loyalty and make a major impact on environmental preservation, but businesses are making big mistakes that inhibit true progress."

The top five study findings include ways that organizations and businesses can enjoy greater recycling results:

- Signage should be based on pictures rather than relying on words.
- Avoid designing kiosks that resemble trash cans, or you can expect to find trash – move away from bins and toward a kiosk design.
- The collection kiosk must be shaped to fit the materials that will be disposed.
- Collection kiosks should be visible and near the entrance without interfering with operations.
- Employees must be properly trained to effectively implement the recycling program.

Green Tip

Use Low-Grade Waste Steam to Power Absorption Chillers

Industrial Technologies Program

[From Industrial Technologies Program Steam Tip Sheet #14](#) - Absorption chillers use heat, instead of mechanical energy, to provide cooling. The mechanical vapor compressor is replaced by a thermal compressor that consists of an absorber, a generator, a pump and a throttling device. The refrigerant vapor from the evaporator is absorbed by a solution mixture in the absorber. This solution is then pumped to the generator where the refrigerant is revaporized using a waste-steam heat source. The refrigerant-depleted solution is then returned to the absorber via a throttling device.

Compared to mechanical chillers, absorption chillers have a low coefficient of performance (COP = chiller load/heat input). Nonetheless, they can substantially reduce operating costs because they are energized by low-grade waste heat, while vapor compression chillers must be motor- or engine-driven.

Determine the cost-effectiveness of displacing a portion of your cooling load with a waste-steam absorption chiller by taking the following steps:

- Conduct a plant survey to identify sources and availability of waste-steam.
- Determine cooling load requirements and the cost of meeting those requirements with existing mechanical chillers or new installations.
- Obtain installed cost quotes for a waste-steam absorption chiller.
- Conduct a life cycle cost analysis to determine if the waste-steam absorption chiller meets your company's cost effectiveness criteria.

Mark your Calendar for these Upcoming Conferences and Events

Energy Efficiency Program Sponsors: Scoring Energy Performance with U.S. EPA's Portfolio Manager—Webinar—December 2, 2:00 - 3:30 p.m. ET

This training is meant for energy efficiency program sponsors—regulated utilities, publicly owned utilities, energy delivery



companies, national, regional, state, or local government entities, or organizations that administer energy efficiency programs promoting ENERGY STAR®—interested in using U.S. EPA's Portfolio Manager. The training will provide an online demonstration of the benchmarking process, including creating a user account, identifying data requirements, managing and sharing information, and establishing an energy performance score. It will also provide an introduction to additional ENERGY STAR® tools and resources that support program implementation in the C&I market. [Register online](#) for this free webinar.

Kentucky Energy Alliance Facility Tour and Roundtable— December 3, 10:00 a.m. - 3:00 p.m. ET—Sherwin-Williams, Richmond

Energy Managers, Facility Engineers, Operators, Plant Managers and Maintenance Staff – Join KPPC for a tour of the Sherwin-Williams facility in Richmond to see energy savings at work, get an update on the ISO 50001 Energy Management Standard, and share experiences and expertise with other Kentucky companies working toward better energy management as we launch the Kentucky Energy Alliance.

Program:

- U.S. Department of Energy's Superior Energy Performance Program
- Kentucky Save Energy Now (KY SEN) Initiative Introduction
- Sherwin-Williams Case Study
- Facility Tour
- First Roundtable Meeting of the Kentucky Energy Alliance

Seating is Limited: [Register online](#) or call 502-852-0965 by November 29.

Presented as part of KPPC's environmental sustainability training series. There is no fee to attend this event. Lunch will be provided by our host, Sherwin-Williams.

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.

Product Stewardship Institute Networking Calls—December

Interested in receiving in-depth information on cutting-edge issues in the product stewardship field? [PSI networking conference calls](#) offer a carbon-free alternative to in-person workshops and meetings. PSI

networking call participants can listen to expert presentations and ask questions on timely product stewardship issues from the comfort of the home or office.

- **Procurement: What role can it play in driving greater product stewardship? December 8, 2:00 - 3:30 p.m. ET**

Government procurement policies have shown their potential to support environmentally preferable products, as the development of post-consumer recycled paper has shown. This call will examine how these



efforts can be carried further to encourage cradle-to-cradle product stewardship.

- **EPR for Packaging: What can we learn from successes of European Directive and Canada? December 15, 1:00 - 2:30 p.m. ET**

Nearly one-third of all municipal solid waste in the U.S. is packaging waste, and it is on the forefront of the sustainability agenda for both the public and private sector. Comprehensive producer responsibility laws are in place in Europe, and in several western European countries these programs have led to a decoupling of economic growth and packaging waste. Canada has also adopted EPR as a tool to address this growing problem. This call will focus on reviewing the lessons that can be learned from their experience, with an eye to how these lessons could be incorporated into an American system.

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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