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The Local Energy Outlook

In this issue, Applied Solution's Chief Economist Dr. James Barrett takes a closer look at how states in the US have utilized various approaches to energy investments. He also explores the
analysis of three key steps to stimulating demand, seeding innovation, and capturing economic benefits.

The full article is available at the Applied Solutions website [Clean Economy Blog page].

Call for Participants in Sustainable Energy Utility Pilot Program

Applied Solutions is developing a funding proposal to support implementation of Sustainable Energy Utilities in ten local governments. In partnership with the Foundation for Renewable Energy and Environment, the founder of the Delaware Sustainable Energy Utility, Applied Solutions is offering the opportunity for Applied Solutions local government affiliates to participate. The Sustainable Energy Utility model aggregates energy and water efficiency projects at schools and public buildings for joint financing through municipal bonding as one example though design and inclusion vary by place and project. If you are interested in participating or would like to learn more please contact Amy Bolten at amy.bolten@sowa.ca.gov.

Find and Follow Applied Solutions on Facebook and LinkedIn

For up-to-date posts on building a clean economy through engagement by cities and counties, students, individuals, organizations, and businesses "like" our Facebook page at this link and click here to find us on LinkedIn. Both destinations provide information on topics ranging from what a clean economy really means, to deal with peak electricity demand while we transition to a clean economy.

WEBINARS

Upcoming Webinar: 3 Successful PACE Models Collaborate To Provide Best Practices for an Emerging PACE Program

Thursday January 31st, 2013 10am-12pm PST/ 1pm-3pm EST

Rich in content, this collaborative webinar will be structured as direct support to Charlotte County, Florida and some of their adjoining counties who are working to develop a PACE program of their own. Charlotte County will be providing a specific set of questions to three successful PACE programs, Efficiency Maine, Western Riverside Council of Governments and Sonoma County, to help guide their own program design.

Speaking on behalf of their programs are Liz Yager- Energy and Sustainability Manager for
Sonoma County (CA), Barbara Spoonhour- Director of Energy and Environmental Programs for the Western Riverside Council of Governments (CA), Dana Fischer- Residential Program Manager for Efficiency Maine (ME), and Jason Stoltzfus- Program Liaison for Charlotte County (FL).

Space is limited. Reserve your Webinar seat now.

PROJECT PROFILE

Knoxville Receives Smarter Cities Challenge Grant

Knoxville, Tennessee is selected as of this November 2012 to receive an IBM Smarter Cities Challenge grant. The grant provides Knoxville with access in 2013 to some of IBM’s top experts to analyze and recommend ways to connect residential emergency utility bills to weatherization and energy education services. After the competitive grant application process, the city is assigned a team of 6 top IBM experts to each winning city to study a key issue identified by the city’s leadership. The team works with the city officials to analyze data, and solicit the input of local agencies and advocacy groups, then provides detailed recommendations for how the city might efficiently and effectively address the issue.

Knoxville’s application asks for advice on the most effective was to connect weatherization and energy education services to residents who receive energy utility bill assistance. This will help reduce the demand each year for emergency assistance with utility bills for low-income ratepayers, particularly in older, inefficient buildings.

See this story in full here.

First Net Zero School Saves Budget in Kentucky

Richardsville Elementary in Kentucky became the first net zero school in fall of 2010, and through efficiency and reduction modifications has been able to earn approximately $2,000 a month selling excess energy to the local power company. They are reaching this net zero mark by a various approaches to sustainable building amenities. For electric light the school uses solar tube piping which brings sunlight directly to the classrooms and lessens the need for electric light with a combination of geothermal and solar power to decrease the remainder of the electricity bill. The use of “green screens” is able to visibly display to the kids the impact of turning off a light in real time. These changes along with others have allowed the school to contribute to the district’s new energy policy to cut energy use by 10% in the first year and 40% over the next 5 years.

Read more about Richardsville Elementary here.

CURRENT NEWS AND RESOURCES
The Water Energy Nexus Explained

The Global Water Forum (GWF) of the UN Educational, Scientific and Cultural Organization (UNESCO) has recently published a piece which examines the use of energy in the water sector. The discussion paper is titled "Quantifying the Energy Embedded in the US Water System," and looks at the data gaps related to the energy related water use in the US with emphasis on direct water services, direct steam use, and indirect steam use. The GWF manages to explain just how closely coupled the water-energy nexus truly is, and why the water sector is a place for energy-efficiency policy to be implemented.

Download the publication.

New NACo Publication Available on County Wind Ordinance Best Practices

NACo and the Distributed Wind Energy Association (DWEA) recently published "County Strategies for Successfully Managing and Promoting Wind Power," which shares criteria to consider when planning for wind installation of various scales and model ordinances to guide development. Find out how county leaders are working with the wind industry to responsibly develop wind energy in their communities—protecting public safety while respecting individual property rights and promoting development.

Download the Publication.

Sewage Heat Recovery System Saves City Money

Cities are realizing the hot water leaving our homes and offices has potential to be used as a powerful source of energy and that there is now a way to harness this power. Americans flush approximately 350 billion kilowatt-hours of energy, about enough to power 30 million homes across the United States, into the sewers each year. Through the installation of a sewage heat recovery system, a heat pump captures the warmth of the wastewater and transfers it to the clean water stream which enters homes and other buildings. The recovery system operates as a closed-loop system, so the "dirty" water never touches the clean water. The warmth of the water is able to help heat the water that is then used for showers, washing machines, dishwashers, and radiators. The main notion of the system is that it takes a lot less energy to heat 60 degree water than to heat cold water. This system is not only good for the winter, but in the summer the system can be reversed and the heat pumps can be used to reduce excess building heat and lower air-conditioning costs.

One of the larger wastewater heat recovery systems is located in Vancouver, BC, which provides 70 percent of the energy needs for the Olympic Village community. There are also sewage heat recovery systems in operation in Tokyo, Oslo of Norway, and the Beijing Railway Station. In Chicago the Metropolitan Water Reclamation District has been using a heat recovery system since May that captures its energy from treated wastewater rather than raw sewage, which has cut energy costs for heating and cooling at the plant by 50 percent.
Lake Worth Links Energy and Water

Lake Worth, Florida, is committing to energy and water sustainability through their various program options they now offer. Through their city website Lake Worth explains why energy and water conservation is a win-win situation for the entire City and its residents. In addition to education Lake Worth offers complimentary energy and water audits for residential utility customers with various incentives. Through the conservation program free energy starter kits are available for everyone.

Learn more about the **Energy and Water Conservation Program**.

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