

RCM NEWS

RCM News for May 2013

A newsletter for Resource Conservation Managers in the Northwest

In this issue:

Buildings
Energy Management
Lighting
Pumps
Thermal Imaging
Upcoming Events & Training Opportunities
Resources for You

While every URL in RCM News is checked for accuracy prior to distribution, URLs may change, and servers may temporarily fail to connect to working URLs.

Buildings

"[Linking Performance & Experience: An Analysis of Green Schools](#)" is a 10-page document by Stephanie Barr et al., with the Institute for the Built Environment at Colorado State University. Among the 10 school districts participating in the study, two are in Washington State (Federal Way Public Schools and the Steilacoom Historical School District) and one is in Oregon (Scappoose School District).

"[Small but Mighty: Berkeley Public Library's Net-Zero Gem](#)" was written by David Barista, Editor-in-Chief, Building Design + Construction, and published in the April 2013 issue. This is a case study of a public library whose designers hope to achieve net-positive-energy performance.

"[Green Roof Retrofits and Your Success](#)," by Christopher Curtland, was published in the April 2013 issue of *Buildings*. It explains how to proceed when greening a roof is under consideration. Structural capacity and related concerns must be investigated. If greening the roof is deemed an option, then decisions have to be made about what kind of green roof to install, depending upon what functions it is expected to serve. Also, the facilities manager needs to be aware of all incentives available to reduce costs. The author includes four case studies of different kinds of green roof retrofits on a Chicago hospital, an office building in Washington D.C., a convention center in New York City, and a group of townhomes in Milwaukee.

Energy Management

The following three articles were published in the April 2013 issue of *Building Operating Management*:

1. "Big Data Offers Route to Energy Savings" is a three part article written by Michael Bendewald, Consultant with the Rocky Mountain Institute. It offers information about data sets ("big data") and how useful they can be to the facilities manager who is aiming for large energy savings:

[Part 1: How Energy Managers Can Leverage Big Data Right Now](#)

[Part 2: Planned Capital Upgrades Present Opportunities for Deeper Energy Savings](#)

[Part 3: Energy Managers Often Underestimate the Value of Energy Retrofits.](#)

2. "Outsourcing," by David Lewellen, is a three-part article showing how outsourcing, intelligently done, saved energy at the KeyBank in Brooklyn, Ohio, and at the Los Angeles Convention Center; Part 2 includes a sidebar: "Understanding Needs":

[Part 1: Facility Managers Use Outsourcing Providers for Core Competency in Energy Efficiency](#)

[Part 2: Outsourcing Helps KeyBank Gain LEED-EBOM Platinum Certification](#)

[Part 3: Los Angeles Convention Center Uses Outsourcing to Save Energy. Earn LEED Certification.](#)

3. "5 Steps Help FMs Reduce Energy Use" is a three-part article jointly written by Jake Hiller and Chris Riso, both of Environmental Defense Fund (EDF); it is based on "[The Virtuous Cycle of Organizational Energy Efficiency: A Fresh Approach to Dismantling Barriers.](#)" an ACEEE, 15-page paper from the *2012 ACEEE Summer Study on Energy Efficiency in Buildings* (**free with, possibly, required registration**). Links to each of the three parts of the shorter article follows:

[Part 1: Reducing Energy Use: Five Steps Help Overcome Barriers](#)

[Part 2: Shorenstein Properties Works Toward Comprehensive Energy Management Practices](#)

[Part 3: Shorenstein Energy Plan Shows Value of Focusing on How Business Decisions Are Made.](#)

Lighting

"[LED T8 Update](#)," by Eric Strandberg, LC, is the front-page article in the Spring 2013 issue of the Lighting Design Lab Newsletter. The author covers some important issues that the facilities and/or resources manager may want to know about concerning whether or not to upgrade to LED T8s.

"Outdoor Lighting," by Maryellen Lo Bosco, Contributing Editor for *Building Operating Management*, is a five-part article published in the April 2013 issue, meant to help the facilities manager approach an outdoor lighting project in ways that will lead to an excellent outcome:

[Part 1: How to Avoid Pitfalls with Outdoor Safety and Security Lighting](#)

[Part 2: With Outdoor Safety and Security Lighting, Cost Should Not Be First Priority](#)

[Part 3: Evaluate LEDs for Possible Use in Outdoor Safety and Security Lighting](#)

[Part 4: Tips for Maintenance, Inspection of Outdoor Safety and Security Lighting](#)

[Part 5: Showcase Products: Outdoor Safety and Security Lighting.](#)

"[Energy Codes and Lighting Design](#)," by Mark A. Gelfo, PE, TLC Engineering for Architecture, was published in the April 2013 issue of Consulting-Specifying Engineer. The author's premise is that lighting quality need not be compromised when meeting energy efficiency goals that are required by code. A table is included that lists relevant codes and their requirements and how they apply to each of three commercial sector building types: hospitals, offices, and schools/universities.

"[Lighting and HVAC Systems](#)," by Justin Schultz and Brian Johnson, both of Metro CD Engineering, discusses how light and cooling loads interact with one another, depending upon the type of lighting used

and the amount of heat it releases. It also shows how modeling can track changes in heating and cooling loads given the efficiency level of the lighting.

Pumps

The following three articles were published in the April 2013 issue of Pumps & Systems:

1. "[Optimize Pump System Maintenance Budgets](#)" is two-Web-page article by Dan Kernan, ITT Industrial Process. It is based on the author's October 2012 webinar presentation. The article demonstrates how an appropriate maintenance strategy will result in a smoother and less expensive maintenance experience, as well as reduce frequent emergency repairs.
2. "[Precision Lubrication Enhances Pump Reliability](#)" is a two-Web-page article by Jarrod Potteiger of Des-Case Corporation. The author defines "precision lubrication," cautions against lubrication precision maintenance programs that are not designed properly, and explains, in good detail, how to proceed to ensure pump reliability.
3. "[Renewable Power with Rotary Lobe Pumps](#)," was written by Marino Curati of Vogelsang and Sandra Walker of Zeropex U.S. This is a discussion of how replacing pressure reducing valves at municipal water utilities with rotary lobe pumps can in effect produce power. As added benefits, this power may be considered renewable and its production may reduce the plant's carbon footprint.

Thermal Imaging

"[3 Reasons You Need a Thermal Imager](#)," by Jennie Morton, Associate Editor of Buildings, was published in the April 2013 issue of that journal. It explains what thermal imaging is and what it can do, cautions about what it cannot do, and describes the problems that it can identify in three important areas: electrical, heating, and roofing.

Upcoming Events & Training Opportunities

Portland Lights Trade Show & Educational Classes

Learn about the latest in efficient lighting and controls, and attend various sessions about energy efficient lighting.

- June 5 in Portland, OR

[Click for registration information](#)

Illuminating Engineering Society, PGE

Adaptive Street Lighting Controls Webinar

A two-part webinar discussing smart street lighting systems.

- June 11 – Part I: Experiences and Benefits (of early adopters)
- June 12 – Part II: Reviewing the MSSLC's Model Specification

[Click for registration information](#)

U.S. Dept of Energy

ENERGY STAR® Training

ENERGY STAR® offers online trainings on a variety of topics including financing energy efficient upgrades, computer power management, and data center energy efficiency opportunities for managers.

- Data Center Energy Efficiency Opportunities – June 13 online
- Computer Power Management with Energy Star – June 18 online

[Click here for more information](#)

US EPA

Portland General Electric Seminars and Webinars

Portland General Electric offers online webinars and paid courses open to everyone, and seminars and workshops free of charge to its commercial and industrial customers.

- Energy Monitoring Basics – June 13 online
- Energy Champions Workshop – June 18 in Portland
- Energy & Water Trends – July 10 in Portland

[PGE Energy Education Center webpage](#)

Portland General Electric, Energy Trust of Oregon, NEEA, BetterBricks

Showcase for Emerging Technologies Webinar

Hour-long noon webinars featuring emerging technologies topics

- Residential Window Treatments – June 19

[Click here for more information](#)

WSU Energy Program, BPA, WAPA

31st Energy Management Congress West

Hear from and interact with top experts from the commercial, industrial and institutional energy management and engineering profession on topics such as energy management, climate change in action, high performance strategies and low cost/no cost solutions.

- June 19-20 in Las Vegas

[Click for registration information](#)

Association of Energy Engineers

CALiPER: Troffers, Kits, and Tubes Webcast

Live webcast hosted by the U.S. Dept. of Energy discussing documented performance of conventional fluorescent troffers with LEDs, including what to look for when selecting LEDs.

- June 20 online

[Click for registration information](#)

U.S. Dept of Energy

Energy Management Certification

Also known as the EMC Boot Camp, this is an advanced certification program which goes beyond fundamentals and teaches a broad spectrum of energy management principles and techniques. It requires the student to implement an energy-savings project and measure the results.

- July 8 - 19, 2013 in Eugene, OR

[Click for information and registration](#)

Northwest Water & Energy Education Institute (NWEI)

AEE (Association of Energy Engineers) Real-time Online Seminars

Webinars and live interactive courses you can take from your computer. Programs are generally two to three hours long, over a period of days. Topics include energy auditing, lighting controls, HVAC systems and much more. Visit their website for a complete list:

<http://www.aeeprograms.com/realtime/> .

Building Operators Certification

BOC Level I certification is 74 hours of training and project work in building systems maintenance. Level II certification is 61 hours of training and elective coursework in equipment troubleshooting and maintenance. Classes are usually one or two full days a month.

- **Washington State**
 - Level I – Sept. 10, 2013 through Mar. 12, 2014 in Renton
 - Level I – Sept. 17, 2013 through Mar. 5, 2014 in Tri-Cities
 - Level I – Sept. 25, 2013 through Mar. 11, 2014 in Olympia
 - Level II – Oct. 2, 2013 through Feb. 12, 2014 in Lacey
 - Level II – Oct. 3, 2013 through Feb. 13, 2014 in Everett
- **Oregon**
 - Level I – Sept. 11 through Dec. 11, 2013 in Portland
 - Level I – Oct. 1, 2013 through Mar. 4, 2014 on the Oregon Coast (TBA)
 - Level I – Dec. 4, 2013 through Jun 4, 2014 in Clackamas

<http://www.theboc.info/wa/wa-schedule.html>
[Click for BOC Oregon information](#)

Building Operators Certification

Resources for You

Energy/Facilities Connections Conference Presentations

Presentations from the 9th annual Energy/Facilities Connections Conference that took place in May are now available online. There were three presentations by RCMs: 1) Energy Integration at the Olympia School District by Bonnie Meyer, RCM, with Greg Deer, 2) Shared RCM Insights into Solid Waste Management by Jay Donnaway, RCM at Sumner SD with Debbie Campbell, and 3) Rapid Energy Saving\$, a Case Study by David Cone at the Evergreen SD. [Click here](#) for access to those and other presentations of interest to RCMs and facilities managers.

Jefferson County Shared RCM website

The Shared RCM for five agencies in and including Jefferson County maintains a website that includes status reports, presentations, resource links and conservation tips. [Click here](#) to view the site by Brian Goldstein, RCM for Chimacum and Port Townsend School Districts, City of Port Townsend, Fort Worden State Park and Jefferson County.

Do you have newsletters, websites and links to share? Do you have RCM questions?

RCM News is always looking for interesting information, tips and resources to share with other resource conservation managers. Our goal is to increase your success by sharing what you and your colleagues are doing – with energy efficiency measures, problem-solving, communication, data tracking, presentations, and more. In addition, WSU Energy Program can help find solutions to your RCM program's technical and programmatic questions. [Email Karen J](#) to share and ask!

Energy Events Calendar

<http://www.energyexperts.org/TrainingEducationandEmployment/EventsCalendar.aspx>

Washington RCM Support

The Washington State University Energy Program provides RCM support.

Check out the "RCMx" website:

<http://www.energy.wsu.edu/PublicFacilitiesSupport/ResourceConservation/RCMx.aspx>. We appreciate any feedback on this site and would also appreciate items to add to our resources, such as tools, examples of policies and job descriptions.

RCM News is prepared by the Washington State University Energy Program

This activity is funded by the U.S. Department of Energy State Energy Program. Funds provided through the Washington Department of Commerce Energy Division.

Previous issues of RCM News may be viewed at <http://www.energy.wsu.edu/PublicationsandTools.aspx> (click on Resource Conservation in the right hand column).

We welcome comments or ideas for articles. Please send to Karen Janowitz - janowitzk@energy.wsu.edu

