

RCM NEWS

RCM News for April 2015

A newsletter for Resource Conservation Managers in the Northwest

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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.

Energy Retrofits

The April 2015 issue of Building Operating Management features a three-part article on deep energy retrofits, written by Greg Zimmerman, Executive Editor. Deep retrofits can save up to 50% of a building's energy use. Because deep energy retrofits are disruptive to regular operations, careful planning of the timing and scope of the project is important. Triggers include poor energy performance, the cost to replace a piece of equipment, as well as when code-required upgrades are necessary and re-marketing a building. When planning a disruptive project, assess if a deep retrofit might also be scoped. The article includes seven deep energy retrofit triggers.

Part 1: [Timing, Scope Are Critical In Considering Deep Energy Retrofits](#)

Part 2: [Deep Energy Retrofit a Chance to 'Re-Market,' Re-Think a Building](#)

Part 3: [Project Size, Non-Energy Components Are Important in Deep Energy Retrofits](#)

Green Purchasing

["Managers Discuss their Challenges When Buying Sustainable Products"](#) is a Green Purchasing Roundtable featured in the April 2015 issue of Facility Maintenance Decisions, and written by Dave Lubach, Associate Editor. Three managers responsible discuss green purchasing within their agencies, including changes over the years in practices and priorities, changes in products, and the building systems most affected by green purchasing.

Lighting

["LED vs. Induction Lighting"](#) is written by Janelle Penny, senior editor, and published in the April 2015 online issue of *Buildings*. There are pros and cons to retrofitting with induction or LED fixtures. Both offer low maintenance needs, energy savings, and are compatible with different applications. The cost of LEDs has gone down while induction costs stay steady because it's been around a long time. When deciding which to use, consider the cost of the fixtures, and include incentives and project bundling in estimates. A one-to-one fixture retrofit may not be necessary to have great quality lighting. Look at warranties and consider which ones are certified under DesignLights Consortium and elsewhere.

[“Lights Out: Smart Practices for Recycling Lighting”](#) appears in the April 2015 issue of *Buildings*, written by Jenna Aker. To prevent environmental damage, it is necessary to recycle all lamps containing mercury, such as HID lamps, CFLs, and neon/argon lamps. LEDs do not contain mercury but must also be recycled to recover other materials such as aluminum. Different states have different policies on how to recycle, and while recycling properly may be complicated, owners of the lamps are liable for where the lamps end up, in perpetuity. Best practices for recycling, and dealing with broken bulbs, can help guide facility managers to make the task manageable.

Measuring Energy Efficiency and Occupant Satisfaction

The Green Building Report in the April 2015 online issue of Building Operating Management is a five-part article on measuring the relationship between energy efficiency and occupant satisfaction. The first four parts, written by Davor Novosel and James E. Woods, looks at Acceptability Index Values (AIVs) which can measure energy-use effectiveness to the percentage of occupants who say that their overall work environment, or elements within such as temperature, are acceptable. AIVs can help assure that occupants' satisfaction goes hand in hand with overall energy performance. The LEED Dynamic Plaque is the focus of the last part of the article, written by Christopher Gray. It generates current LEED performance scores to be displayed in a public area of a LEED building, and uses data from human experience scores also.

Part 1: [Building's Energy Efficiency, Occupant Comfort Are Related](#)

Part 2: [Occupant Response Measures Must Figure in Building Evaluation](#)

Part 3: [Buildings' Data Helps Reveal Effectiveness of Energy Use](#)

Part 4: [AIV Metric Can Build Accountability into Building Performance](#)

Part 5: [LEED Dynamic Plaque Is a Paradigm Shift in the Making](#)

Water

The Grounds Management column in the April 2015 issue of Facility Maintenance Decisions, written by Brent Mecham, discusses strategies for effective irrigation management. Creating a water budget, and then monitoring and tracking water use, is an important step to using water efficiently. This water budget influences plant selection and the agency's landscape irrigation plan. Other best practices help to maintain facilities' landscapes, providing numerous benefit to users and viewers alike.

Part 1: [Strategies for Effective Irrigation Management](#)

Part 2: [Best Management Practices for Irrigation Issues](#)

Upcoming Events & Training Opportunities

Energy/Facilities Connections Conference

Staying Smarter than Your Buildings is the theme of this year's outstanding conference run by the WSU Energy Program Plant Operations Support Consortium.

Note: RCMs have been spotted attending this conference, as well as presenting at workshops.

- May 5-7, 2015 in Leavenworth, WA

[For more information and registration](#)

WSU Energy Program Plant Operations Support Consortium

Portland General Electric Seminars and Webinars

Portland General Electric offers online webinars and paid workshops open to everyone, and seminars and workshops free of charge to its commercial and industrial customers. All classes in Oregon or online.

- Strategic Energy Management Workshop – May 6 in Portland

[PGE Energy Education Classes](#)

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

Certified Energy Manager Seminar & Exam

- May 11-15 at Edmonds Community College, Edmonds, WA

[Click here for more information](#)

Association of Energy Engineers Pacific Northwest Chapter

ENERGY STAR® and Portfolio Manager® Trainings

All are online webinars.

- Benchmarking Water/Wastewater Treatment Facilities in Portfolio Manager – May 14
- What You Should Know about Financing Energy Efficiency Upgrades – May 19
- Energy Savings Plus Health: IAQ Guidelines for School Building Upgrades – May 20
- Ask the Expert: Office Hours on Campuses – May 21
- Portfolio Manager 101 – May 26
- Portfolio Manager 201 – May 28

[Click here for more webinars and information](#)

US EPA

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 usually meet one or two full days a month over a period of four to six months.

All dates below are for the first class.

- Washington State
 - Level I – May 18 in Everett
 - Level I – Sept. 23 in Renton
 - Level II – Oct. 21 in Renton
- Oregon
 - Level I – Sept 24, 2015 in Portland
 - Level I – February 2016 in Hermiston, Pendleton, La Grande area

[Click for BOC Washington State information](#)

[Click for BOC Oregon information](#)

Building Operators Certification

BOC Live Technical Webinar Series

- Communicating to Building Occupants – May 20 online

[Click here for more information](#)

Building Operators Certification

An Exciting Glimpse Into the Future of Energy Efficiency

Oregon APEM 2015 Summer Forum features Emerging Technologies

- May 22, 2015 in Portland, OR

[Click here for more information](#)

Oregon APEM

Energy Management Certificate

It's not too early to register for the annual "energy bootcamp" at the Northwest Water & Energy Education Institute. This is an advanced certificate program covering a wide array of energy management topics, and requires the student to implement and measure results from an energy-efficiency project.

- July 13-24, 2015 in Eugene, OR (*please note date change since the previous newsletter*)

[For more information](#)

NWEEI

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/>.

Resources for You

Better Buildings

The Better Buildings Alliance is an effort by U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy (EERE) to promote energy efficiency in commercial buildings. Their most recent [bi-monthly bulletin](#) features information and links to workforce training and certification programs, updates on the Better Buildings Challenge, and news about their commercial building partners.

Reducing Water Use

Even though it's still the rainy season in western Washington, the effects of drought will be felt, and perhaps trigger regulations, in certain areas of Washington State and elsewhere. The [Saving Water Partnership](#) based in Seattle lists incentives and rebates for cutting water use for certain water utility customers. But they also offer suggestions and helpful advice on issues from toilet and urinal fixtures to cooling tower improvements to laundry equipment.

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.

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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

WASHINGTON STATE UNIVERSITY
 EXTENSION ENERGY PROGRAM

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