

# RCM NEWS

## RCM News for September 2015

A newsletter for Resource Conservation Managers in the Northwest

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### Energy Efficient Buildings

“Greening Existing Buildings” is a three-part article written by Lawrence Melton, Charles Dilley, and Linda Osgood, and appearing in the September 2015 issue of *Building Operating Management*. Maintaining the energy efficiency of a high performance smart building is not just about the building’s technology. Occupants and facility operators need to manage and use the building in a manner that can achieve the expected results of energy efficiency and savings. Enlisting occupants, motivating the facilities team, and engaging decision makers in new building management strategies are key to a properly functioning high performing building.

Part 1: [Training Staff, Occupants to Reach Sustainability Goals](#)

Part 2: [Creating a Facilities Environment Inviting to Technology](#)

Part 3: [Knowing and Designing For Your Occupants](#)

### Energy Information

In the three-part article on “Energy Information” in the September 2015 issue of *Building Operating Management*, Greg Zimmerman, the author and Executive Editor of the magazine, points out that measuring energy isn’t enough – one needs to be able to read and interpret what is measured, and then implement plans accordingly. The data from energy-monitoring software programs need to actually be used by staff. Real-time energy monitoring allows for continuous commissioning, continued optimizing of the building’s systems, and quick identification of costly problems. But maintaining or improving optimal energy efficiency only occurs if the monitoring data is used, and used properly.

Part 1: [Using and Managing Energy Monitoring Data](#)

Part 2: [Quick Response to Energy Waste, Quick ROI Among Benefits](#)

Part 3: [Bringing Energy Understanding to Occupants, Tenants](#)

## Green Schools

A September 2, 2015 article on the Energy.Gov website, "[Washington School District Makes the Grade in Energy Efficiency](#)", highlights the success of the Camas School District in winning the Better Buildings Challenge that it undertook in 2009. Camas is the first school district to meet its challenge, and they did it five years early, and at a greater annual energy performance than projected - 28 percent, surpassing the 20 percent goal. Contributing to their success are a resource conservation management program, improved operating schedules for HVAC, and making necessary energy upgrades.

## HVAC

A three-part article on "HVAC" in the September 2015 issue of *Facility Maintenance Decisions*, written by Scott Lance, discusses ways to prevent energy waste from HVAC systems. Sensors that perform control functions require regular maintenance. For example, temperature, humidity, and airflow sensors that are out of calibration can cause increased waste of energy. Because inadequate training of facility operators can also cause energy waste, proper training is essential.

Part 1: [Finding and Fixing Energy Problems in HVAC Systems](#)

Part 2: [Humidity Control Vital to Keeping HVAC Costs Low](#)

Part 3: [Poor Training Leads to Increased HVAC System Waste](#)

## Rooftop Units (RTUs)

The Department of Energy Better Buildings has published a two-page case study on [Smart Monitoring and Diagnostic System \(SMDS\) for RTUs](#). SMDS technology, whether installed as hardware or through the Cloud, detects and quantifies degradation of RTUs which can cause increased energy use and damage to the equipment. The study is part of the Advanced RTU Campaign (ARC) which encourages replacing old RTUs or retrofitting with advanced controls. The SMDS is not yet commercially available as it continues to be tested.

## Upcoming Events & Training Opportunities

### ENERGY STAR® and Portfolio Manager® Trainings

All are online webinars.

- Data Quality Enhancements – Oct 1
- ENERGY STAR and Green Building Rating Systems – Oct 13
- Portfolio Manager 101 – Oct 27
- Portfolio Manager 201 – Oct 28
- Portfolio Manager 301 – Oct 29

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

US EPA

### Seize the Day – Using Building Milestones as Energy Efficiency Opportunities

- Oct 6 online webinar

[Click here for information](#)

*Better Buildings, US DOE*

### 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.

- Energy Expert Workshop – Oct 6 in Wilsonville
- Employee Engagement in Energy Efficiency Workshop – Oct 7 in Gresham
- Intro to Efficient Lighting & Controls – Oct 8 online webinar

- Energy & Water – Oct 20 in Hillsboro
- Understanding LEDs – Oct 28 online webinar

### [PGE Energy Education Classes](#)

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

### Lighting Design Lab Fall Classes

Take the morning class, the afternoon class, or both. These classes are intermediate level, and are offered through the fall in different locations.

- Classes:
  - CFL and HID Fixtures. LED Retrofit or Replace – morning
  - Design Strategies for Existing Buildings – afternoon
- Dates and locations
  - Oct 7 in Bellevue, WA
  - Oct 12 in Tacoma, WA
  - Oct 16 in Boise, ID
  - Oct 30 in Portland, OR
  - Nov 13 in Seattle, WA

[Click here for information](#)

*Lighting Design Lab*

### 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 II – Oct. 21 in Renton (register now!)  
[Click for BOC Washington State information](#)
- Oregon
  - Level II – Feb 24, 2016 in Portland  
[Click for BOC Oregon information](#)

*Building Operators Certification*

### E3T Showcase Webinars

- Easily Commissioned Lighting Controls – Oct 22 online

[Click here for information](#)

*WSU Energy Program*

### BOC Diagnostic Tools Series

- Diagnostic Tools 2: What's Your Favorite Diagnostic Tool? – Oct 22 online

[Click here for information](#)

*BOC*

### Smart Building Center Grand Opening

A celebration of the new Smart Buildings Center in Seattle, a space designed to spur collaboration and innovation throughout the energy efficiency sector. No cost, but please RSVP.

- Oct 27 in Seattle

[Click here for information](#)

*Northwest Energy Efficiency Council (NEEC)*

### Energy Efficiency and Data Centers

- Oct 28 in Helena, MT

[Click here for information](#)

*BOC*

### Smart Building Best Practices

Free webinar about integrating building automation with energy management systems.

- Oct 29 online

[Click here for information](#)

*Forester University*

### Realizing the Potential of Underutilized ECMs in ESPCs

A five-module on-demand training focusing on four energy conservation measures that are underutilized in energy savings performance contracts. Federal Energy Management Program (FEMP) training courses are free and open to all, although courses are designed for federal agency energy and facility managers.

- On-demand

[Click here for information](#)

*FEMP, US DOE EERE*

### 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

#### Green Ribbon Schools

Do you know a school or school district in Washington state that deserves an award for being “green”? The Office of Superintendent of Public Instruction (OSPI) recognizes PreK-12 schools and districts that work toward reducing environmental impacts, improving the health of schools and students, and providing sustainability education. Applications are now available at the [OSPI website](#) for the 2015-2016 Green Ribbon Education Award. Deadline for submission in January 8, 2016, but don't delay!

#### Certified Energy Manager Certification

The [Department of Energy has announced](#) that the Certified Energy Manager® (CEM®) offered by the Association of Energy Engineers (AEE) is the first certification program recognized under the Better Buildings Workforce Guidelines (see next item below).

#### Better Buildings Workforce Guidelines (BBWG)

In order to achieve a more consistent and comparable high-quality workforce for four commercial building energy-related jobs (Building Energy Auditor, Building Commissioning Professional, Energy Manager, and Building Operations Professional), the National Institute of Building Sciences Commercial Workforce Credentialing Council (CWCC) developed voluntary national guidelines for each position. The guidelines identify job tasks, required and optional knowledge and skills, as well as examination outlines for potential credentials. A two-page [fact sheet](#) describes the reasoning and the process for the endeavor. To view the detailed guidelines, called [Job Task Analyses](#), you must register with the CWCC.

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](mailto:janowitzk@energy.wsu.edu) to share and ask!

### 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](mailto:janowitzk@energy.wsu.edu)

