

# RCM NEWS

## RCM News for August 2018

### A newsletter for Resource Conservation Managers in the Northwest

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## ANNOUNCEMENTS

### **Pay for Performance for Your Agency**

Puget Sound Energy (PSE) has spots for four projects/agencies for their Pay for Performance pilot. Incentives will reward a total building approach to managing resources, including capital measures. If you are interested, and a PSE business customer, contact [beth.robinweiler@pse.com](mailto:beth.robinweiler@pse.com) or 425-424-6476.

### **Take your career to the next level, starting this September**

Enroll in the Bachelor of Applied Science in Sustainable Building Science Technology at South Seattle College. Designed for the working adult, this program builds on your Associate Degree or trade credentials to complete a Bachelor's Degree in six quarters! The program content is 80% online with four Saturdays a quarter onsite. Tuition costs are very modest compared to other university options (state waiver students are accepted on a space available basis).

Classes start Sept. 24th. Enroll now and you will soon be able to apply expertise and systems knowledge to support smart building operations and management for the 21st century.

Check out the website for more information: <http://www.southseattle.edu/programs/bas/sustainable-building-science-technology/>. Contact Anneke Hercules, Program Manager, 206-934-6783

or [Anneke.Hercules@seattlecolleges.edu](mailto:Anneke.Hercules@seattlecolleges.edu). This program was developed with the support of the National Science Foundation (grant no. 1406320) and is nationally recognized by the Association for the Advancement of Sustainability in Higher Education (AASHE).

## **ARTICLES**

### **Building Envelopes**

Thermal Massing, a two-part article in the August 2018 issue of *Building Operating Management*, written by Miles Martschink, considers the effectiveness of walls, roofs, and windows from weather on an HVAC system at most times of the year, not just at extreme temperature conditions. Energy modeling of how each different building envelope component contributes to the HVAC system's energy usage is an important step to understand and design the most synergistic system.

Part 1 – [How the Building Exterior Affects HVAC Energy Efficiency](#)

Part 2 – [Understanding Thermal Mass and HVAC Efficiency](#)

### **Building Modeling**

[“Data Makes Building Operations More Efficient”](#), written by Connell McGill, 7/11/18 for the August 2018 issue of *Buildings Magazine* looks at the operation of an oversized commercial air conditioner and a right-sized one in order to illustrate the importance of using data to make equipment decisions.

### **Data Centers**

[Eight Ways to Optimize Data Center Equipment and Operations](#), written by Janelle Perry, published 7/12/18 online and in the August 2018 issue of *Buildings Magazine*, stresses that reducing energy use at data centers does not need to mean purchasing new equipment. Optimizing a equipment and operations at data centers by increasing supply air temperatures, separating hot and cold air streams, and verifying the load are just a few methods for reducing energy use.

### **Dedicated Outside Air Systems**

The lead article in the summer/fall 2018 *BOC Bulletin* is [“Dividing to Conquer: DOAS Saves Energy, Increases IAQ”](#), written by Carol Lewellen. A Dedicated Outside Air System (DOAS) ventilates a building without requiring the HVAC system to be running. DOAS systems may be different depending on the climate. This is especially the case when including a heat recovery system (HRV) or an enthalpy recovery ventilator (ERV).

### **HVAC Optimization**

A two-page article, [“How to Optimize an HVAC System”](#) in the 8/20/18 issue of *Consulting-Specifying Engineer*, written by Eric Toback, explains how to attain peak performance of an HVAC system through holistic optimization. While optimization is often the purview of a commissioning engineer, RCMs will be more effective when they understand the objectives and goal of the process.

### **Plug Loads**

[Eight Plug Loads that Consume the Most Energy](#), written by Janelle Perry, appears in the 7/13/18 issue of *Buildings Magazine*, as well as the August print issue. While the information in the article is well-

known to RCMs and energy managers, the onset of the fall season is a good time to remind staff and occupants about the use of personal comfort devices. Other tips to reduce energy use include using fewer printers by consolidating them.

## UPCOMING EVENTS & TRAINING OPPORTUNITIES

### ENERGY STAR® and Portfolio Manager® Trainings

All are online webinars.

- Portfolio Manager 101 – Sept 4
- What Changed in Portfolio Manager and Why? – Sept 5
- Portfolio Manager 201 – Sept 11
- Energy Treasure Hunts – Sept 11
- Portfolio Manager 301 – Sept 13
- Saving Water in Restrooms with WaterSense – Sept 19
- Ask the Expert – Most Wednesday at 9:00 AM Pacific time

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

*US EPA*

### Portland General Electric Education

Classes and workshops are free to PGE business customers; others may attend for a fee.

- Building Tune-ups for Efficiency – Sept 12 class in Wilsonville
- Air Handling Systems – Sept 13 class in Wilsonville

[Click here for more information](#)

*Portland General Electric*

### Built Green Conference

- September 13, 2018 in Lynnwood, WA

[Click here for more information](#)

*Built Green*

### Ventilation for High Performance Buildings

This training helps familiarize attendees with prescriptive dedicated outside air system code requirements.

- Sept 17, 2018 in Seattle

[Click here for more information](#)

*BetterBricks, Smart Buildings Center*

### Building Operator Certification Technical Webinar Series

- Occupant Engagement – Getting Buy-in from Building Occupants to Save Energy – Sept 20

[Click here for more information](#)

*Building Operators Certification*

## 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 classes
    - Sept 25, 2018 in Renton

[Click here for BOC Washington State information](#)
- Oregon
  - Level I classes
    - Sept 26, 2018 in the Portland area
  - Level II classes
    - TBA 2018 in Portland area

[Click here for BOC Oregon information](#)

*Building Operators Certification*

## Best Lighting Retrofits Now and Future Impacts

Ten fast-paced talks about high-performance and innovative green building projects by ten green builders.

- October 4, 2018 in Spokane

[Click here for more information](#)

*NEEA, Avista*

## Oregon APEM Fall Forum

Airside HVAC – What a Difference Air Balancing Makes!

- Oct 12 in Vancouver, WA

[Click here for more information](#)

*Oregon Association of Professional Energy Managers*

## Green Building Slam

Ten fast-paced talks about high-performance and innovative green building projects by ten green builders.

- October 12, 2018 in Portland

[Click here for more information](#)

*Northwest EcoBuilding Guild*

## RESOURCES

### Outdoor Lighting Decision Tree

Do you have an outdoor lighting system that needs to be upgraded to energy-efficient LEDs? The [Outdoor Lighting Decision Tree Tool](#), created by Better Buildings at the US Department of Energy, is an

interactive, visual representation of the decisions and possible approaches that a public entity may come across throughout the retrofit process. Click on each box or circle in the decision tree to access more information, resources, and links.

### Green Ribbon Schools

Is your school reducing environmental impacts and costs, providing sustainability education, and improving the health and wellness of students and staff? If yes, nominate your school for a U.S. Department of Education [Green Ribbon Schools award](#). Apply to the Washington State Office of Superintendent of Public Instruction, who will select finalists to be forwarded to the U.S. Department of Education for possible national award selection. Applications are due in December 2018.

### BOC Bulletin

Featuring a lead article on DOAS systems (see articles above), the summer/fall 2018 issue of the [BOC Bulletin](#) also includes a piece about a luminaire level lighting control installation at the Pacific Tower Building in Seattle. Read this latest newsletter for Building Operator Certification graduates, enrollees, and their employers, find out what other BOC programs across the country are doing.

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### 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](#) 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.

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

