

RCM News for January 2020

A Newsletter for Resource Conservation Managers in the Northwest

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ANNOUNCEMENTS

Save the Date! 16th Annual Energy/Facilities Connections Conference is May 5-7, 2020

The 16th Annual Energy/Facilities Connections Conference will take place May 5-7, 2020 at the Enzian Inn in Leavenworth, WA. This year's theme is *Meeting Challenges with Efficiency & Innovation* which will focus on helping facilities professionals address change and meet future goals by using efficiency measures as well as new and innovative technologies. Registration opens January 28! For updates and registration information, visit [WSU Energy Program Public Facilities Support](#).

Washington State Clean Buildings

Do you work at or manage a non-residential commercial building in Washington State that is greater than 50,000 square feet in conditioned floor area? If yes, that building will be required to comply with an energy performance standard, as part of a law passed in 2019 – The Washington State Energy Performance Standard for Commercial Buildings, HB 1257. The Washington State Department of Commerce administers the law, which aims to reduce carbon and energy use. Comments are now being accepted for the rule's [early draft revisions](#), and will be discussed at workshops January 30, February 26, and at other meetings over the coming months. See events below, and visit the [Clean Buildings website](#) for more information, including workshop dates and locations. Participation is encouraged by RCMs, energy managers, building owners, facility directors, and others.

The new RCM Program at the Washington State Department of Enterprise Services (DES) is available to provide RCM services to your agency, either based on current or past efforts, or building an RCM program from the ground up. This fee for service program is designed to be flexible in both cost and scope, depending on how much help is needed, and what is affordable. The DES RCM program can work with K-12 School Districts, cities & counties, state agencies and higher education, and other public sector clients. For more information visit the [DES RCM website](#) or contact them at 360-407-2226 or RCM@des.wa.gov.

ARTICLES

Daylighting

Daylighting is an important element to reach net-zero goals, and often the feature most recognized by building users. Yet a project's success can be undermined by occupant dissatisfaction and comfort issues such as glare and hotspots. "[Learning from the Past](#)", written by Barbara Horwitz-Bennett, and published in the March 2019 issue of *Net Zero Buildings* (page 30), gleans knowledge about previous projects' problems in order to find the best models and solutions for future success.

Geothermal Systems

"Head of the Class: Geothermal Delivers Savings" is a profile of the Davenport Community School District in Iowa and their efforts to achieve energy efficiency and sustainability in their facilities. The article is featured in the January 2020 issue of *Facility Maintenance Decisions*, and written by Dan Hounsell. After the school board adopted an energy policy, the district undertook multiple energy efficiency projects that included replacing aging HVAC systems with geothermal systems.

Part 1: [Head of the Class: Geothermal Delivers Savings](#)

Part 2: [Head of the Class: Specifying and Installing Geothermal Systems](#)

Part 3: [One K-12 District's Lessons and Benefits from Geothermal Systems](#)

Refrigerant Replacement

Concerns about the use of refrigerants and the effect on global warming are leading to the phase-out of some common refrigerants such as R22 for use in commercial air conditioners, cold storage, chillers and retail food refrigeration. "[Three Low-Impact Options for Replacing R22 Refrigerant](#)", written by Janelle Penny for the 1/9/20 issue of *Buildings Magazine* offers retrofit ideas or alternate equipment choices that have lower global warming potential and prepare for compliance with upcoming government regulations.

Smart Buildings

Smart Buildings are a trending topic in the building management and facilities industry. The smart building concept involves tying multiple smart systems throughout a building together to gather data in a single source for analysis. A series of articles in the January 2020 issue of *Building Operating Management* discusses challenges to smart building adoption such as government regulation, differences in contracting and design processes, as well as a lack of qualified contractors and the need for more smart building roadmaps.

Part 1: [Beyond the Smart Buildings Hype](#)

- Part 2: [Smart Buildings Use Cases Show Many Benefits](#)
Part 3: [Smart Building Use Case: Retail Facilities](#)
Part 4: [Smart Building Use Case: Data Center](#)

Sustainable HVAC

Using high performance HVAC equipment as part of a whole building approach to sustainability is discussed in a three part article in the January 2019 issue of *Building Operating Management*, written by Varun Kohli and John Rozeluk. HVAC systems are an excellent place to start reducing carbon emissions and increase energy efficiency. Including HVAC design and modeling early in project planning can reduce capital costs and allow designs that plan for loads and reduce oversizing, while still meeting occupant needs.

- Part 1: [Sustainable HVAC: Plan Early and Often](#)
Part 2: [Assemble an All-Star Project Team to Achieve Sustainable HVAC](#)
Part 3: [FM's Role in Sustainable HVAC Planning](#)

UPCOMING EVENTS & TRAINING OPPORTUNITIES

Clean Buildings Workshops

These workshops will review draft revisions to ANSI/ASHRAE/IES standard 100-2018, Energy Efficiency in Existing Buildings for a new Washington State law (more information under Announcements above).

Workshops

- January 30 in Seattle (ASHRAE Standard 100, sections 1, 2, and 3)
- February 26 in Seattle (ASHRAE Standard 100, sections 5 and 6)
- March 18 location TBD
- April 14 in Spokane

Other Important Dates

- February 14 – Comments due on proposed rules for sections 1, 2, and 3
- February 14 – Release of modifications for sections 5 and 6
- March 11 – Comments due on proposed rules for sections 5 and 6

[Click here for more information](#)

Washington State Department of Commerce

Lighting Research Center (LRC) at Rensselaer Polytechnic Institute

A new interactive webinar series on the latest research in lighting.

- Light and Health: Cutting through the Noise – Feb 4, 2020
- Outdoor Lighting: Making Uniformity a Priority for Security Lighting – March 10

[Click here for more information](#)

Lighting Research Center, RPI

ENERGY STAR® and Portfolio Manager® Trainings

All are online webinars.

- Portfolio Manager 101 – Feb 4
- Portfolio Manager 201 – Feb 11
- ENERGY STAR and Green Building Rating Systems – Feb 12
- Portfolio Manager 301 – Feb 26
- Ask the Expert – Most Wednesday at 9:00 AM Pacific time

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

US EPA

Better Buildings Webinars

- Save Money and Build Resilience with Distributed Energy Technologies – Feb 4 webinar
- Interior Lighting Campaign 2015-2019 Results: Integrated Lighting – Feb 6
- Improving Cooling Tower System Efficiency with Alternative Water Treatment – Feb 14
- Addressing the Envelope: Recognizing Building Enclosure Improvements – Feb 19
- Building Values: Energy Efficiency's Impact on Financial Performance – March 3

[Click here for more information](#)

US DOE Better Buildings

Go Green Conference

A regional conference offering educational opportunities on sustainability for business and public sector leaders.

- April 9 in Seattle, WA

[Click here for more information](#)

Washington Business Alliance

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
 - Runs April 21 through Oct 13, 2020 in Bothell
 - Runs May 6 through Oct 15, 2020 in Olympia
 - Begins Sept 2020 in Spokane
 - Begins Oct 2020 in Seattle
 - Level II classes
 - Begins Nov 2020 in Seattle
- Oregon
 - Level I classes
 - Runs Jan 22 to April 24, 2020 in Vancouver, WA (**registering now**)
 - Begins June 25, 2020 in Salem-Keizer
 - TBD in NE Oregon (Pendleton/La Grande)

[Click here for BOC Washington State information](#)

- Level II classes
 - TBD 2020 in Portland

[Click here for BOC Oregon information](#)

Building Operators Certification

Energy/Facilities Connections Conference

- May 5-7 in Leavenworth, WA

[Click here for more information](#)

Washington State University Energy Program

Efficiency Exchange

A networking and learning conference for energy efficiency professionals from across the Northwest.

- May 12-13 in Portland, OR

[Click here for more information](#)

Bonneville Power Administration, NEEA

Powerful Facility Energy Conference

A bi-annual conference offering practical energy solutions and opportunities to help create successful energy efficiency projects.

- May 20 in Lynnwood, WA

[Click here for more information](#)

Electric League of the Pacific Northwest

RESOURCES

Getting to Zero Buildings Database

The New Buildings Institute (NBI) [Getting to Zero Buildings Database](#) is a comprehensive list of net zero commercial and multifamily buildings in North America. Buildings can be viewed by map or list, and include square footage, energy use index (EUI), and net emissions, most of which are zero or close to zero.

Energy Efficiency Impact Report

Energy efficiency investments, policies, and innovation in the U.S. since 1980 have significantly contributed to increased energy savings, reduced carbon emissions, productivity savings, and more. The [Energy Efficiency Impact Report](#), recently published by the American Council for an Energy-Efficiency Economy (ACEEE), Alliance to Save Energy, and the Business Council for Sustainable Energy quantifies these impacts and examines efficiency progress from many sectors. The report makes the case that the U.S. could further reduce energy use and greenhouse gas emissions by 50% by 2050, however the current energy climate in the country is an impediment to further progress.

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

