

1. "[Harnessing Climate](#)," by Bruce Kuwabara (Partner, KPMB Architects, Toronto) *et al.*, describes Manitoba Hydro Place, the new headquarters for Manitoba Hydro in Winnipeg. In an area where temperatures range from 31 degrees (Fahrenheit) below zero to 95 above, building designers took advantage of what Winnipeg also has: sunshine and strong winds that convert to solar and wind energy.
2. "[Lasting Performance](#)" was authored by Mike Kamen, Technical Writer, RMH Group. It addresses why a 1983 office complex is highly efficient by today's standards. Designed to use little energy because the nation had just experienced the oil crisis of the 1970s, it was built with energy-efficiency design assistance from SERI (the U.S. Department of Energy's Solar Energy Research Institute, the forerunner to DOE's NREL).

Energy Management

"BAS/EMS" is a three-part article by Rita Tatum, Contributing Editor for Building Operating Management, published in the October 2011 issue of *Building Operating Management*:

Part 1 is [Facility Managers Can Boost BAS/EMS Performance with New Tools, Capabilities](#). The author explains the general advantages of building automation and energy management systems (BAS/EMS) which include tenant comfort and the control of utility and labor costs. Newer systems, he notes, have improved diagnostic capabilities; they are able to locate potential problems before they have the opportunity to become calamities.

Part 2 is [Real-time Information is Big Advantage of Modern BAS/EMS Systems](#). The value here is that computer dashboards offer information to all parts of a company ("enterprise-wide") in ways that can be adjusted for usability. Part 2 includes a sidebar, "Four Big Changes Are Reshaping BAS/EMS."

Part 3 is [Advanced BAS/EMS Operations Still Need Staff Oversight](#). While BAS/EMS can help avoid some labor costs, other highly technical workers are needed to keep these systems running optimally.

Green Schools

"Green Building Report: LEED-EBOM, ISO 50001, Green Schools," was authored by Kristin Simmons, Higher Ed Associates, Center for Green Schools, USGBC, and appeared in the October 2011 issue of *Building Operating Management*. The article is in three parts:

Part 1 is [Using LEED-EBOM on Campus Requires Managing Data, Defining Scope](#). An academic campus is likely to face three major challenges in attempting to gain LEED certification in the EBOM (Existing Buildings Operations and Management) category. The challenges are described and suggestions are offered for strategies to overcome them.

Part 2 is [What ISO 50001 Can Offer is a Framework for Continuous Energy Improvement](#). This new energy management standard is from the International Organization for Standardization. Strategies to continue to improve energy management are embedded in the standard, rather than requirements to meet some static level of energy management,.

Part 3 is [Five Steps to Green Campuses](#). The sidebar "U.S. Green Building Council Perspective: Five Schools, Five Steps to Green Campuses" describes each of the steps. The article includes information about product life-cycle considerations in the Materials & Resources category of LEED 2012; the LEED Gold achievement of the Empire State Building renovation; and a new U.S. Green Building Council report, "Advancing Green Building Policy in the States: Victories From Alabama to Wyoming."

HVAC/R (Heating, Ventilation, Air Conditioning, and Refrigeration)

The following two articles were published in the October 2011 issue of *Buildings*; they were both written by Janelle Penny, Associate Editor of that journal:

1. "[HVAC System Too Big for Your Building?](#)" focuses on what to do short of system replacement. The author presents strategies to reduce the *over* part of *oversized*.
2. "[Skylight Performance and Productivity](#)" draws the connection between skylight performance and worker productivity, and suggests ways to balance the maximizing of natural light with other, equally important, concerns.

Sustainability

"[U-M President Announces Ambitious Goals for Sustainability](#)," by Jim Erickson, is a September 27, 2011, press release and video from the News Service of the University of Michigan. The press release shows the extent of the commitment, financial and otherwise, of U-M to incorporate sustainability in the teaching and learning and in the theory and practice of campus life. Five goals to be achieved by 2025 show the far-reaching expectations of the commitment, including the economics of Michigan's farming industry. The video explains the student involvement in first and second phases of the long-term project.

Water and Energy

"Water Efficiency," by Bill Hoffman, is a four-part article published in the September 2011 issue of *Building Operating Management*.

In Part 1, [Water Efficiency: Increasing Priority](#), the author computes financial savings under various water efficiency scenarios.

Part 2 is [New Codes, Green Building Rating Systems Influence Restroom Equipment Selection](#). The author discusses new codes, standards, rating systems, and regulations related to water use which are driving the manufacturing and off-the-shelf availability of more efficient parts and products.

Part 3, [How to Make Landscaping and Irrigation Water Efficient](#), discusses several crucial actions to take *before* settling on an efficient irrigation system.

Part 4 is [Measuring Water Use and Establishing a Water-use Baseline](#). It gives a few tips to get started on a water audit, the first step to water management that results in water savings.

"[For Water and Energy, It's Complicated](#)" is an opinion piece by Elizabeth Cutright, Editor, *Water Efficiency*, and published in the September-October issue of that magazine. The author emphasizes the inseparability of energy and water use. Real efficiencies and conservation can only proceed from efforts to understand that inseparability. The article includes links to an important white paper that is a plan for action and to a U.S. Senate bill, inspired, in part, by the white paper.

Upcoming Events & Training Opportunities

District Energy and Combined Heat & Power Workshop

Do you have a central heating system that supplies heat to more than one building or to multiple building units? WSU Energy Program will be offering a district energy/combined heat and power workshop in the Spring of 2012. If the you answered yes to the above question, send your contact information to Caryl Gold at goldc@energy.wsu.edu. She will keep you posted on the details of the workshop.

Lighting Design for Energy Efficiency

Hybrid online 4 credit college class starts January 9, 2012 at the Georgetown campus of South Seattle Community College. Class held evenings and some Saturdays. Funding available for tuition, books, and fees.

<http://georgetown.seattlecolleges.edu/documents/LightingDesign2012.pdf>

AEE (Association of Energy Engineers) Realtime Online Seminars

Live interactive courses you can take from your computer. Programs are generally two to three hours long, over a period of days. Dates following course names below are start dates.

Below is a sampling of courses – refer to website for complete list.

- Electrical Engineering Fundamentals for Non-electrical Engineers – Jan. 17, 2012
- Life Cycle Costing for Energy Professionals – Jan. 18, 2012
- High Bay Lighting Advances – Jan. 26, 2012
- Choosing and using Lighting Controls – Feb. 9, 2012
- Thermodynamics Principles & Practices – Feb. 13, 2012
- Advanced Lighting Retrofit Options – Feb. 13, 2012
- Energy Auditing Fundamentals – Feb. 15, 2012

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

Energy Star (and Energy Star Portfolio Manager) Training

Free online training to help you improve energy performance. Live web conference schedule:

- Computer Power Management with Energy Star – Jan. 17, 2012
- Responding to the Climate Change Imperative – Using Energy Star Target Finder – Jan. 18, 2012
- Financing Energy Efficient Upgrades with Energy Star – Jan. 19, 2012
- Benchmarking in Portfolio Manager for State and Local Governments, and EECBG grantees – Jan. 24, 2012
- Office Buildings: Benchmarking with Portfolio Manager – Jan. 31, 2012
- K-12 Benchmarking 101 – Feb. 7, 2012

<https://energystar.webex.com/mw0306ld/mywebex/default.do?siteurl=energystar>

Portland General Electric Seminars and Webinars

Portland General Electric offers educational seminars and webinars free of charge to its commercial, industrial, and institutional customers. Similar customers of other utilities are welcome to attend for a small fee. Topics include energy management, lighting, commercial and industrial systems, as well as special topics such as water, smart grid, and leased space issues.

- Introduction to Energy Systems & Managing Costs – Jan. 11, 2012 webinar
- Fundamentals of Energy & Managing Costs – Jan. 25 in Portland, Jan. 26 in Salem

See website for more events.

Portland General Electric, Energy Trust of Oregon, NEEA, Better Bricks

http://portlandgeneral.com/business/news_classes/classes/docs/class_schedule.pdf

2012 Energy/Facilities Connections Conference

- May 9-11, 2012 in Leavenworth, WA

Mark your calendars now for this invaluable annual conference that brings together experts and colleagues for workshops, hands-on training, networking, and useful information related to facilities and energy.

<http://www.energy.wsu.edu/PublicFacilitiesSupport/PlantOperations.aspx>

West Coast Energy Management Congress

- May 23-24, 2012 in Seattle, WA

Energy conference and technology expo.

<http://www.energyevent.com/>

Building Operator's Certification

Register now for BOC Level I certification courses. Classes include 74 hours of training and project work in building systems maintenance. They typically run one full day per month.

- April 19, 2012 start date (Oct. 11, 2012 last class) – Everett, WA
- May 1, 2012 start date (Oct. 30, 2012 last class) – Lacey, WA

BOC Level II class tentatively scheduled for fall 2012 in Renton.

Northwest Energy Efficiency Council

<http://www.theboc.info/wa/wa-schedule.html>

Resources for You

Sustainability "How-To Guide" Series

The International Facility Management Association (IFMA) produced the "No Cost/Low Cost Energy Savings Guide", derived from a BetterBricks article, to target the four top savings opportunities in commercial buildings. The guide contains information, data, and templates in order to help identify problems and implement solutions. IFMA provides resources and educational opportunities to facility management professionals. Other guides in the series include EPA's Energy Star Portfolio Manager, Food Service, Global Green Cleaning, and Commissioning Existing Buildings, to name a few.

<http://www.ifmafoundation.org/documents/public/NoCostLowCostGuide.pdf>

Onset Webinars and Videos

The maker of HOBOT data loggers, Onset, offers a variety of learning opportunities such as webinars, videos, podcasts, and white papers. They feature valuable tips and information, from key considerations in choosing the best data logger for a project to hands-on deployment techniques. In addition, another course teaches how to use Microsoft Excel to manipulate time-series data from loggers, building automation systems, or utility interval data.

<http://www.onsetcomp.com/resources/webinars>.

American Society of Healthcare Engineers (ASHE) – Peer Technical Forum

Past ASHE-sponsored technical forums are available for viewing. In these forums, ASHE members and technical experts impart first-hand operational improvements and best practices that have significantly improved energy efficiency in their hospital facilities. Topics include goal setting and energy tracking, energy efficiency in small hospitals, and reporting and relationships for success.

<http://asheregion10e2c.betterbricks.com/calendar>

Energy Education

The U.S. Department of Energy's Energy Efficiency & Renewable Energy (EERE) program maintains a website with lists of educational and professional development opportunities in energy efficiency and renewable energy. The website lists opportunities nationwide and of a greater scope than the RCM newsletter, although many of their regional offerings are listed in RCM News.

http://www1.eere.energy.gov/education/educational_professional.html .

Give Your Building a Holiday Too

One of the easiest ways to save energy is to turn off equipment when it's not needed. Make sure that your building takes a vacation at the same time as your agency, school, or company. Most systems let you

designate holidays for the entire year, saving staff time and ensuring holiday weekdays are in unoccupied mode. Remember to check your lighting system too, since it may have separate controls.

Find out more about building scheduling at

<http://betterbricks.com/DetailPage.aspx?ID=492#EquipmentScheduling>

Energy Events Calendar

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

Washington RCM Support

Washington State University Energy Program RCM Support

Check out the "RCMx". 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.

<http://www.energy.wsu.edu/PublicFacilitiesSupport/ResourceConservation/RCMx.aspx>

Oregon RCM Support

Oregon Department of Energy RCM Support

<http://oregon.gov/ENERGY/CONS/RCM/rcmh.shtml>

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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