



# The HVAC&R Industry

A weekly eNewsletter from ASHRAE



May 27, 2010: Vol. 9, No. 21

Advancing HVAC&R To Serve Humanity  
And Promote a Sustainable World

*The HVAC&R Industry*, ASHRAE's free weekly eNewsletter for HVAC&R professionals, provides relevant, timely information about industry and technology for people who create healthy, comfortable indoor environments.

## Industry News

### U.S. Capitol To Save \$700K a Year With Data Center Consolidation

WASHINGTON—The IT department of the U.S. House of Representatives has met a 10-year goal of reducing power consumption in the Capitol by 50% in only one year, primarily by consolidating and "right-sizing" data center operations. The energy use reduction equates to a savings of \$2,000 per day in power and cooling, more than \$700,000 per year in taxpayer money, according to the Enterprise Operations Office. Virtualization of some servers and consolidation of others caused daily power consumption to decrease from 500 kW to 125 kW. This has saved \$1,000 per day. The reduction in equipment also resulted in the power used for cooling to decrease from 750 kW to 350 kW, saving another \$1,000 per day.

### Renewable Energy to Help Meet 49% Increase in World Demand

WASHINGTON—Renewable energy will be the fastest-growing source of energy in the world over the next 25 years, helping to meet a projected 49% increase in world energy use, according to the U.S. Department of Energy (DOE). DOE's Energy Information Administration forecasts continued rapid growth in energy use in developing countries through 2035, particularly in China and India. While renewable power generation is expected to increase the fastest, at 3% per year, coal-fired power will also continue to increase, at a rate of 2.3% per year.

### Cow Manure Could Power Data Centers

PHOENIX—Manure from cows could provide the power for large server farms that need too much land and electricity to be located near large cities or industries. Dairy farmers could rent out land and power to technology companies and recoup an investment in waste-to-fuel systems within two years, according to a research paper by Hewlett-Packard (HP). The paper was presented this week at the American Society of Mechanical Engineers International Conference on Energy Sustainability. Cow waste can be used to create methane that can be used to replace natural gas or diesel fuel. According to HP's calculations, 10,000 cows could fuel a typical 1 MW data center and still support other needs of the farm.

### Bank of America Tower Receives LEED Platinum

NEW YORK—New York's second-tallest building is now the city's first high-rise commercial building to receive LEED Platinum certification. The 54-story, 2.1 million ft<sup>2</sup> (195 000 m<sup>2</sup>) tower features an air filtration system that removes 95% of particulates and treated floor-to-ceiling windows that maximize natural daylight and minimize unwanted heat. Also, an underfloor ventilation system allows workers to control the temperature in their own immediate 100 ft<sup>2</sup> (9.3 m<sup>2</sup>) space. The building also has a cogeneration plant on the seventh floor that uses captured wasted heat energy to help reduce the building's energy demands by nearly two-thirds. Large chillers in the basement make ice during the evening that is used to cool the building



**APPLY FOR  
Energy-  
Efficient  
Housing  
Research  
Request for  
Proposals**

**LEARN MORE  
about this  
exciting  
opportunity at  
[http://www.nrel.gov/business\\_opportunities/solicitations\\_rfps.html](http://www.nrel.gov/business_opportunities/solicitations_rfps.html)**

**Building  
AMERICA**  
U.S. Department of Energy  
Research Toward Zero Energy Homes

**AHR EXPO**  
Jan. 31 - Feb. 2  
2011  
**LAS VEGAS**  
[ahrexpo.com](http://ahrexpo.com)

during the day.

## ASHRAE News

### Assessment Finds Advanced Energy Design Guides Advance Energy Savings

The *Advanced Energy Design Guides* are positively impacting the building industry, according to a new assessment commissioned by ASHRAE. The assessment, conducted by the Energy Center of Wisconsin, found that the guidance provided by publications in the series is in line with their objective of achieving 30% energy savings over the minimum code requirements of Standard 90.1-1999. Almost all participants in the assessment said they would use the guides on future projects. Most ASHRAE members who have used the guides said that the climate zone recommendations and how-to tips are particularly helpful.

### Advance Registration Deadline for Annual Conference May 31

The deadline to register in advance for the 2010 ASHRAE Annual Conference is May 31. The Conference will be held in Albuquerque, N.M., on June 26–30. The technical program will focus on energy efficiency system design for high elevations and dry climates. A variety of ASHRAE Learning Institute courses and a plenary speaker focusing on the need for a more sustainable culture will be other highlights of the Conference.

## Feature of the Week

### Getting to Net Zero

By **Drury Crawley, Ph.D.**, Member ASHRAE; **Shanti Pless**, Associate Member ASHRAE; and **Paul Torcellini, Ph.D., P.E.**, Member ASHRAE

This article provides an overview of some approaches to realizing cost-effective net zero energy buildings. It covers considerations such as choosing among available technologies and accounting for energy use. The article includes a sidebar on "What is a Net Zero Energy Building?"

## Product News

### Energy Management Platform From Site Controls

AUSTIN, Texas—Site Controls announces AnyConnect, designed to extend the functional life and enhance the return on investment of legacy Energy Management Systems (EMS). The product enables chain operators to update their systems with monitoring dashboards, key performance indicators and analytics. The platform provides connectivity over public and private networks to most devices, sensors and controllers, allowing building owner/operators to monitor and control real-time energy consumption and operational metrics from lighting, HVAC&R, signage and other devices.

### Water-Source Heat Pumps From McQuay

MINNEAPOLIS—McQuay International introduces the Vertical Stack water-source heat pumps for multiple-floor, single-zone applications. They are designed to be easy to install and service, and take up minimal floor space. The units feature the company's MicroTech III unit controller with OpenChoices technology, which simplifies integration with building automation systems using BACnet® and LonWorks communication modules.

### BIM Software From AEC Design Group

GAITHERSBURG, Md.—ArtrA O&M (Operations & Maintenance) BIM software from AEC Design Group allows users to attach operations and maintenance documentation and data such as photos, specs and 2-D drawings to 3-D models. Embedded data such as part numbers, room numbers and attributes can be searched within 3-D

The Only Specialty  
Jobs Board for  
HVACR Engineers



designs.

---

## **Subscription Management**

---

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) is an international membership organization founded to advance the arts and sciences of heating, ventilation, air conditioning, refrigeration and related issues.

[Privacy Policy and Terms of Use](#) • [Disclaimer](#)

All contents copyright © 2010

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.  
1791 Tullie Circle, NE, Atlanta, GA 30329-2305.

