

# U.S. Department of Energy Sustainability Performance Office DOE Sustainability SPOTlight

Issue 15 November 2012

## SUSTAINABILITY NEWS

### EISA 432 Guidance Finalized

The Federal Energy Management Program (FEMP) recently finalized *Guidance for the Implementation and Follow-up of Identified Energy and Water Efficiency Measures in Covered Facilities*. The document is intended to guide energy managers through EISA 2007 Section 432 requirements regarding water efficiency and energy conservation measures (ECMs), including measurement and verification of ECM savings and benchmarking.

To download the guidance, visit: <http://go.usa.gov/YyFA> (PDF)

### EPA Opens FY 2013 Federal Green Challenge

EPA opened enrollment for its *Federal Green Challenge*, challenging federal agencies throughout the country to lead by example in reducing their environmental impact. To qualify, a site must commit to a 5% improvement in at least two of six categories: waste, electronics, purchasing, energy, water, and transportation. EPA will host a series of informational webinars on the process through December 11th. Enrollment for the FY 2013 challenge closes December 31st.

For more information, visit: <http://go.usa.gov/YyFJ>.

### Two DOE Sites Win Federal Energy and Water Management Awards

Argonne National Lab (ANL) and the Y-12 National Security Complex (Y-12) were each honored at FEMP's 31st annual Federal Energy and Water Management Awards, which recognize federal agencies for advancing energy efficiency and sustainability.



George Doktorczyk, Marvin Kirshenbaum and George Norek led Argonne Building 438's energy and water conservation upgrade program.

ANL won the Federal Better Buildings Award for its Building 438, which competed against other federal buildings to reduce energy use the most during 2011. The 23,700 square foot building, built in 1996, reduced energy use 24% by installing light-emitting diode (LED) lighting fixtures with occupancy sensors, high efficiency sinks and urinals, and incorporating a waste heat recovery system from a nearby building. The savings reduce GHG emissions by 22 tons annually.

Y-12 received a project award for replacing a 1950s era coal plant with natural gas fired boilers. The replacement is 30 percent more efficient, and will produce savings of \$27 million in deferred maintenance costs, more than \$3.4 million per year in fuel and operating costs, and \$700,000 per year in eliminated wastewater treatment costs. In addition to eliminating coal ash waste, the new plant will also avoid 50,000 tons of GHG emissions per year. For a complete list of federal award winners, visit: <http://go.usa.gov/YyMY>.

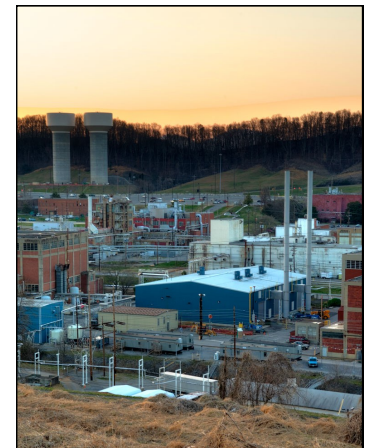
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## SUSTAINABILITY SUPERSTAR



*Chad Bourgoignie enthusiastically promotes sustainability throughout Fossil Energy (FE). Most recently, Chad visited the Strategic Petroleum Reserve to help them meet High Performance Sustainable Buildings requirements. Despite sustainability being only one of his responsibilities, Chad continues to keep FE's sustainability efforts a priority. Keep up the good work!*

**Send us your champion!**



Y-12's new steam plant



**DID YOU KNOW?** The White House Council on Environmental Quality is looking to recognize Federal entities within the same region that are working together to meet the energy and sustainability goals and targets in Executive Order 13514. Applications are being accepted through November 16, 2012. For more information, visit <http://go.usa.gov/YyMB>.

## UPCOMING EVENTS AND MILESTONES

### Events

Nov. 14: [SPO Sponsored ESPC Training Webinar](#)

Nov. 14-16: [2012 Greenbuild International Conference & Expo](#)

Dec. 7: SSP and CEDR due to SPO

Every Wednesday through Nov 21: SPO open Q&A call-in for SSP & CEDR

### Courses

Nov. 14 & Dec. 11: [EPA Federal Green Challenge Overview](#)

## ON-DEMAND TRAINING

### Financing

[ESPCs for Small Sites](#)

[UESCs and Energy Project Funds](#)

### Buildings

[Commissioning for Federal Facilities](#)

[Operations, Maintenance, and Commissioning](#)

[Implementing Deep Retrofits](#)

### Water

[Water Efficiency Planning and Implementation](#)

### Data Centers

[Data Center Efficiency to ASHRAE Thermal Guidelines](#)

[Labs, Data Centers and High-Tech Facilities](#)

### Greenhouse Gas Reporting

[Federal GHG Accounting and Reporting](#)

## SUCCESS STORIES

### Y-12 Building Meets Guiding Principles for Existing Buildings

Y-12's Jack Case Center recently met all guiding principles existing building requirements to become the site's first High Performance Sustainable Building! The renovation project installed occupancy sensors and smart plug strips, implemented building setbacks, and reduced potable water. As a result of these improvements, energy consumption at the building has been reduced 30 percent from the 2007 baseline within the first six months. The total implementation cost for the building upgrade was \$185,000 and has already saved \$250,000 within the first six months of operation.



Y-12's Jack Case Center

DOE project manager Christy Holt and B&W project manager Jane Nations guided the project with strong senior management support, which proved instrumental in ensuring success.

### NSO Building Achieves LEED Gold Certification

The Nevada Site Office's Nevada Support Facility was recently awarded LEED Gold certification for existing buildings. Built in 1997, the 170,068 square foot building is NSO's fourth LEED certified building. The building utilizes efficient windows, maximizes daylighting, employs occupancy sensors to minimize energy consumption, and uses efficient water fixtures to minimize water consumption. The building's comprehensive recycling program also factored in to the certification. For more information on the award, visit: <http://go.usa.gov/YmAh>.

### ORNL Completes Steam Trap Sensor Pilot

ORNL successfully tested a wireless system for detecting steam trap performance along 12 miles of steam lines on the site. The non-invasive sensors check temperature and acoustics and deliver a (good/bad) status signal of performance and loss associated with faulty traps. Data is relayed through a wireless network of repeaters and gateways that alleviate costs normally associated with hardwired data delivery devices. ORNL Facilities and Operations personnel use this data to monitor the system.

Four sensors have been installed to date, proving the concept, and 70 more installations are planned for FY 2013. By installing wireless sensors and repairing or replacing faulty traps, ORNL expects to save as much as \$675,000 per year with a full system deployment, giving the investment a short payback period.

For more information, please contact Joe Lake or Teja Kuruganti at ORNL.

### SPO Installs Announcement Board

The Sustainability Performance Office recently installed a bulletin board to announce major sustainability news, events and share YOUR sustainability successes. Send us your sustainability posters, newsletters and photos for display at Headquarters. Stop by Forrestal 6B-162 to check out the board. Suggest content and send ideas to [sustainability@hq.doe.gov](mailto:sustainability@hq.doe.gov).



The SPO's Announcement Board

## Thanks!

Thanks to all our sustainability colleagues who participated in our recent survey. We are currently analyzing the results and will use your thoughts and ideas to help better serve your needs. Please continue to share any thoughts or ideas by emailing [sustainability@hq.doe.gov](mailto:sustainability@hq.doe.gov).



**CALENDAR** – SPO recently launched a new and improved online calendar for key sustainability-related events and trainings. Contact the SPO if you wish to add any relevant events and training. [http://www1.eere.energy.gov/sustainability/events\\_calendar.html](http://www1.eere.energy.gov/sustainability/events_calendar.html)



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