U.S. Department of Energy Sustainability Performance Office

DOE Sustainability SPOtlight

Issue 18 February 2013

Sustainability News

NNSA Awards Wind ESPC at Pantex

NNSA recently awarded a contract to Siemens to construct five 2.3 MW wind turbines on 1,500 acres of government land east of the Pantex site. The $55 million Energy Savings Performance Contract (ESPC)-funded project will be the Federal government's largest wind farm, is expected to save nearly $3 million annually, and will supply 60 percent of the site's electricity needs.

The project is DOE's first awarded ESPC in support of the President's Performance Contracting Challenge.

For more info on the project, visit http://nnsa.energy.gov/mediaroom/pressreleases/windfarm011513.

Year of Renewables and Alternative Financing

2012 proved to be a banner year for new on-site renewable energy projects across DOE. Many projects were financed by ESPCs that guarantee energy savings, proving that projects are both environmentally friendly and economically sound. The projects include:

- The Savannah River Site started full operations of a 20 MW biomass cogeneration facility in March 2012, which was constructed through an ESPC. The facility replaced a 50 year old on-site coal plant, and will save $944 million over the life of the plant and 100,000 $MTCO_2e$ of GHG emissions per year.
- The 32 MW Long Island Solar Farm began operations in November 2011 on the campus of the Brookhaven National Laboratory. Owned by BP Solar & MetLife, the array is one of the largest solar farms in the U.S., powering roughly 4,500 nearby homes.
- A 370 kW solar array at the Germantown facility began operations in July 2012, and is expected to generate savings of $55,000 and avoid 349 $MTCO_2e$ each year.
- Oak Ridge National Laboratory began operations of a new biomass steam plant in July 2012, replacing an aging natural gas steam plant. This ESPC-funded project uses wood chips to reduce GHG emissions by 23,000 $MTCO_2e$ and generate nearly $3 million in savings annually.
- The 3 MW Abiquiu Dam Low Flow Turbine near Los Alamos National Laboratory began operations in April 2011, and completed its first full year of operation in 2012.

These projects contribute toward a wide range of DOE sustainability goals, including reducing GHG emissions, increasing on-site renewable energy use, and decreasing energy intensity.

Stay tuned to future SPOtlight editions for other 2012 success stories.

Sustainability Superstar

The Sustainability Performance Office would like to extend a special thanks to Na'ilah Kituku for her support during a recent Future Leaders Program rotational assignment. We wish her the best of luck as she finishes the program!

Send us your champion!

Happy Trails! Best wishes to Caryle Miller (Science) and Mack Burton (Office of Management) as they transition to post-DOE life. The SPO appreciates all of their support and enjoyed working together to further sustainability at DOE. Good luck in your future endeavors!

Upcoming Events and Milestones

(Click to view SPO Calendar)

Courses and Webinars

Feb 7: Getting those BIG office Buildings to Recycle

Feb. 13: Climate Change and the Water Sector

Feb 19: A Decision Theory Approach to Sustainability-Based Decision Making

Feb. 27: Climate Resilience Evaluation and Awareness Tool (CREAT) 101

On-Demand Training

Certifications

GSA LEED Certification for Federal Employees

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

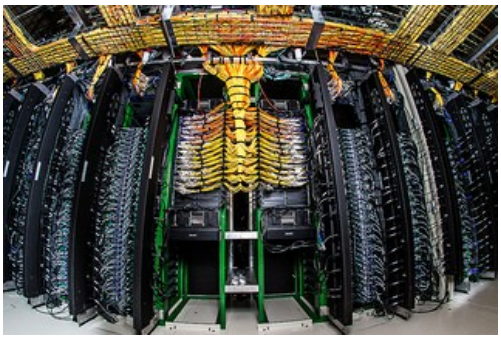
Federal GHG Accounting and Reporting

Sustainable Acquisition

Energy-Efficient Product Procurement

Success Stories

NETL Unveils Efficient Supercomputer



DOE continues to lead the way for efficient supercomputers, as the National Energy Technology Laboratory (NETL) recently began operation of its High-Performance Computer for Energy and the Environment (HPCEE). Ranked 55th on the TOP500 list for most powerful supercomputers in the world, NETL's computer also registered one of the lowest power utilization efficiencies (PUE) ever recorded. This highly efficient unit uses as little as one percent of total electricity consumption to cool the equipment, translating to $450,000 in savings per year in avoided electricity costs.

The computer will be used to perform modeling scenarios to develop and utilize fossil energy resources as cleanly as possible.

For more info, visit: http://www.netl.doe.gov/publications/press/2013/130115_netl_new_supercomputer.html.

Golden Federal Green Challenge

EERE's Golden Field Office (GFO) is off to a strong start in EPA's Federal Green Challenge. In 2012, GFO reduced electricity consumption by 14 percent compared to 2011 by purchasing efficient electronics, turning off unused lights, and using task lighting in place of overhead lighting. The site also reduced commuting miles by 39 percent by increasing vanpooling, promoting Bike to Work Month, and improving telecommuting opportunities. Participation in the Challenge raises the stature of sustainability on the campus and helps promote employee engagement in sustainable practices.

SRS MOX Construction Avoids Landfill, Donates to Schools

Leftover construction materials from the Mixed Oxide (MOX) Fuel Fabrication Facility at the Savannah River Site (SRS) are being repurposed rather than sent to a landfill. The leftover lumber used during construction is being donated to local high schools for use in carpentry training courses. The transfers are expected to save $50,000 per year in disposal costs and avoid 136,000 cubic feet of landfill waste.

To read the feature story in The Augusta Chronicle, visit: http://chronicle.augusta.com/news/metro/2013-01-09/mox-facility-lumber-donation-helps-schools-cuts-disposal-costs.

BPA Receives Gold Rating from City of Portland for Sustainability

Bonneville Power Administration (BPA) recently received a Gold certification from Portland's Sustainability at Work organization, which promotes sustainable practices in local workplaces. BPA received the certification for their efforts to reduce energy and water consumption, encourage alternative transportation, and minimize landfill waste.

To read the full story and a more detailed list of BPA's accomplishments, visit: http://energy.gov/articles/bpa-headquarters-now-gold-certified-sustainability.

The greengov Leader — *Check out CEQ's latest GreenGov Leader newsletter: http://go.usa.gov/g8yT*

2013 Federal Energy and Water Awards – Nominations for the 2013 Federal Energy and Water Awards are now being accepted. The deadline for submissions is May 1, 2013. For more information, visit: https://www.fempcentral.com/beta/Awards/welcome.aspx.

U.S. DEPARTMENT OF ENERGY

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