

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

Issue 1 September 2011

DOE Success Stories

Data Centers

Federal government data centers grew at an astounding pace, from 432 in 1998 to over 2,000 as of October 2010. President Obama ordered a consolidation expected to save taxpayers over \$3 billion. DOE is leading by example and taking action with projects projected to save nearly \$5 million.



Recently, DOE initiated the first ESPC focused solely on data center and IT infrastructure that provides a unique contract vehicle for leveraging energy, operations and maintenance savings. More information can be found at <http://digital.turn-page.com/issue/40678>.

During FY 2011, DOE sites conducted assessments to implement metering at primary data centers. To date, 13 DOE sites installed advanced metering in 23 data centers, with 20 additional data centers to be metered in FY 2012. DOE is committed to individually metering all data centers by FY 2015.

Implementing virtualization can reduce data center energy expenses by 10% to 40%¹ by reducing physical servers, floor space, heating/cooling, and manpower. Every DOE site has implemented virtualization, including big wins by NREL (70%), ORNL (80%) and SPR (90%).

DOE sites are also implementing power management (PM) for PCs, laptops and monitors to save energy. DOE is required to implement PM at 100% of DOE sites in FY 2012.

If you have questions on how you can reduce the energy consumption and associated costs of your data center, contact us at sustainability@hq.doe.gov, or Jake Wooley (DOE CIO office) at Jake.Wooley@hq.doe.gov.

Reporting Milestones

Compliance Tracking System — EISA Section 432

Thanks to all of you, DOE reported on EISA Section 432 energy and water evaluations on schedule. DOE reported over 65 million square feet, 69% of square footage of covered facilities, as evaluated. Remaining covered facility square footage is to be evaluated by June 2012. Private party financing mechanisms, such as ESPCs or UESCs, are one idea to fund the remaining evaluations. Please check the Sharepoint site for additional information.

¹ <http://www.42u.com/efficiency/data-center-best-practices.htm>

Sustainability Superstar

Send nominations of your champion to sustainability@hq.doe.gov to be profiled in our newsletter.



Did You Know?

Employee commuting accounted for 50% of DOE's Scope 3 emissions in FY 2010. To reduce your impact carpool, take public transit, walk, bike or see if you are eligible to telework.

Upcoming Events and Milestones

Sept. 2: DOE site metering plans due

Sept. 20: Site Sustainability Plan Guidance webinar, 3pm EST

Sept. 23 - Oct. 2: Solar Decathlon
<http://www.solardecathlon.gov/>

Sept. 30: End of Fiscal Year 2011

Oct. 1: FAST and PPTRS open for data entry

Oct. 31 - Nov. 2:
Green Gov Symposium
<http://www.greengov2011.org/>

Share Your Ideas

Collaboration is key to making DOE a leader in sustainability. You can post your questions, ideas, successes and best practices on the Sustainability Sharepoint site. Browse the site at: <https://spteam1.pnnl.gov/sites/doesustainability/SitePages/Home.aspx>, or contact us for membership.



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