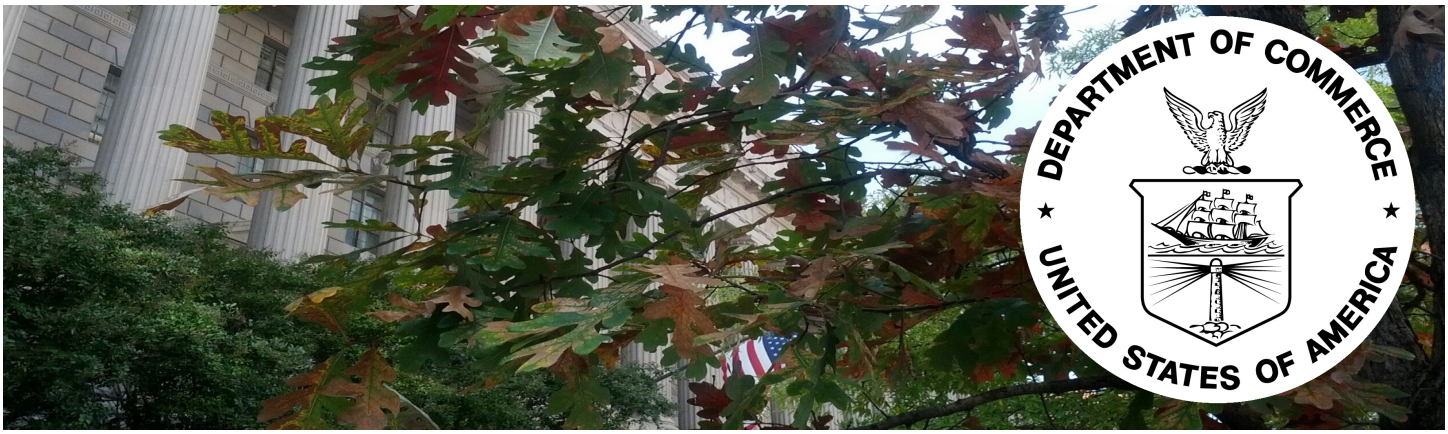

Energy and Environmental Quarterly

U.S. Department of Commerce; Office of Facilities and Environmental Quality; Office of Sustainable Energy and Environmental Programs
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OSEEP Announces New Technical Guidance Publications: The EMS Manual and the SSPP Handbook

The recently published Strategic Sustainability and Performance Plan Handbook is best described as a very user-friendly guide to each of the Sustainability areas and offers ideas for projects that can influence each of our Sustainability goals.

We timed the publication to align with and facilitate the Green Grants process in the hope that this will help all bureaus generate and submit projects. Hard copies are available by request at gogreen@doc.gov and electronic versions are available through our office website: http://www.osec.doc.gov/ofeq/OSEEP/Docs_Newsltrs.html.

The Environmental Management System Operations and Implementation Manual describes the procedures for implementing the Department of Commerce's organizational Environmental Management System (EMS), including the structure, functions, and chain of command for environmental performance reporting. Executive Order (EO) 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, signed in January 2007, requires federal agencies to utilize EMS as the primary management approach for addressing the environmental aspects of internal agency operations.

The EMS Operations Manual can be found at http://www.osec.doc.gov/ofeq/OSEEP/Docs_Newsltrs.html. We hope both technical manuals assist employees with green initiatives throughout Commerce's bureaus and Department wide.

Eager Patrons Line Up Outside The Green Store for the Special of the Week!

Green Store Cost Savings Exceeds $100,000

Since the opening of Office of Sustainable Energy and Environmental Programs (OSEEP)'s Green Store on Earth Day, April 24th, 2013, cost savings have rapidly accumulated. OSEEP has very fortunately received the support of the HCHB Green Team volunteers and unpaid student interns to continue operating the store at no cost to the Department. Thanks to all of you for your help to reach this $100,000 milestone. Stop by the Green Store! To read more about the Green Store, visit http://www.osec.doc.gov/ofeq/OSEEP/green_store.html.

CONTRIBUTIONS TO THE GREEN STORE ARE ACCEPTED AT ROOM #H2064

In This Edition

Meet A DOC Sustainability Community Member: Stephen Boutwell

We would like to introduce Mr. Stephen Boutwell, who has been working as a procurement analyst in the Office of Acquisition Management (OAM) for the last year and a half. OAM serves the Department through its mission to establish policies for the acquisition community and provide access to tools and training. OAM also evaluates acquisition risk and manages major acquisitions.

Boutwell reviews and drafts policies, analyzes procurement data, and provides planning advice to senior management on acquisition matters.

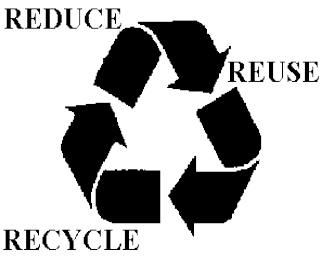
Currently, he serves as the acting Green Acquisition Team (GAT) Chairperson. The DOC GAT is comprised of members from the NOAA, NIST, PTO, CENSUS, and OS offices. The team was established to assist the Department in implementing Executive Orders 13514 and 13423 by promoting agency goals in energy efficiency, acquisition of bio-based and other environmentally preferable products, renewable energy, reducing the use of toxic and hazardous chemicals, recycling, electronics stewardship, and water conservation.

Prior to his work at the Office of Acquisition Management, Boutwell received a Master of Science degree in Environmental Law and Policy at Vermont Law School to learn the tools necessary to work for the public good. Most recently, he worked to develop strong communication skills as an associate at the Ruder Finn, a public relations agency.

With his education and experience, Boutwell is able to access policy and analyze procurement patterns in the furtherance of the Department's green acquisition goals.

The acquisition community plays a significant role in the implementation of the aforementioned executive orders. The DOC GAT establishes a mechanism for the coordination, development, use, sharing, and dissemination of sustainable acquisition ideas and best practices throughout the Department.

Boutwell states that "promoting environmental stewardship through federal acquisitions has the potential to protect scarce resources, both financial and environmental." To achieve this goal, OAM has taken key steps to ensure the Department is leveraging its significant buying power and procuring sustainable goods and services.



OAS becomes OFEQ

To enhance the Department's focus on infrastructure management, the Office of Administrative Services (OAS) has been realigned and renamed to the Office of Facilities and Environmental Quality (OFEQ). The functions and the personnel in the personal property, travel, and transportation divisions were realigned within the Office of Financial Management (OFM) under the Office of Administrative Programs. OFEQ now consists of the Office of Building Renovation (OBR), the Office of Sustainable Energy and Environmental Programs (OSEEP), the Office of Real Property (ORPP), and the Office of Space and Building Management (OBSM).

An Update on Our Energy Services Contracts

The National Oceanic and Atmospheric Administration (NOAA), the National Institute of Standards and Technology (NIST), and the Census Bureau continue to make progress in establishing performance-based energy savings contracts. Investment-grade audits are underway at both NIST campuses and should begin within the next month at several NOAA facilities. The Census Bureau has issued a Notice of Opportunity.

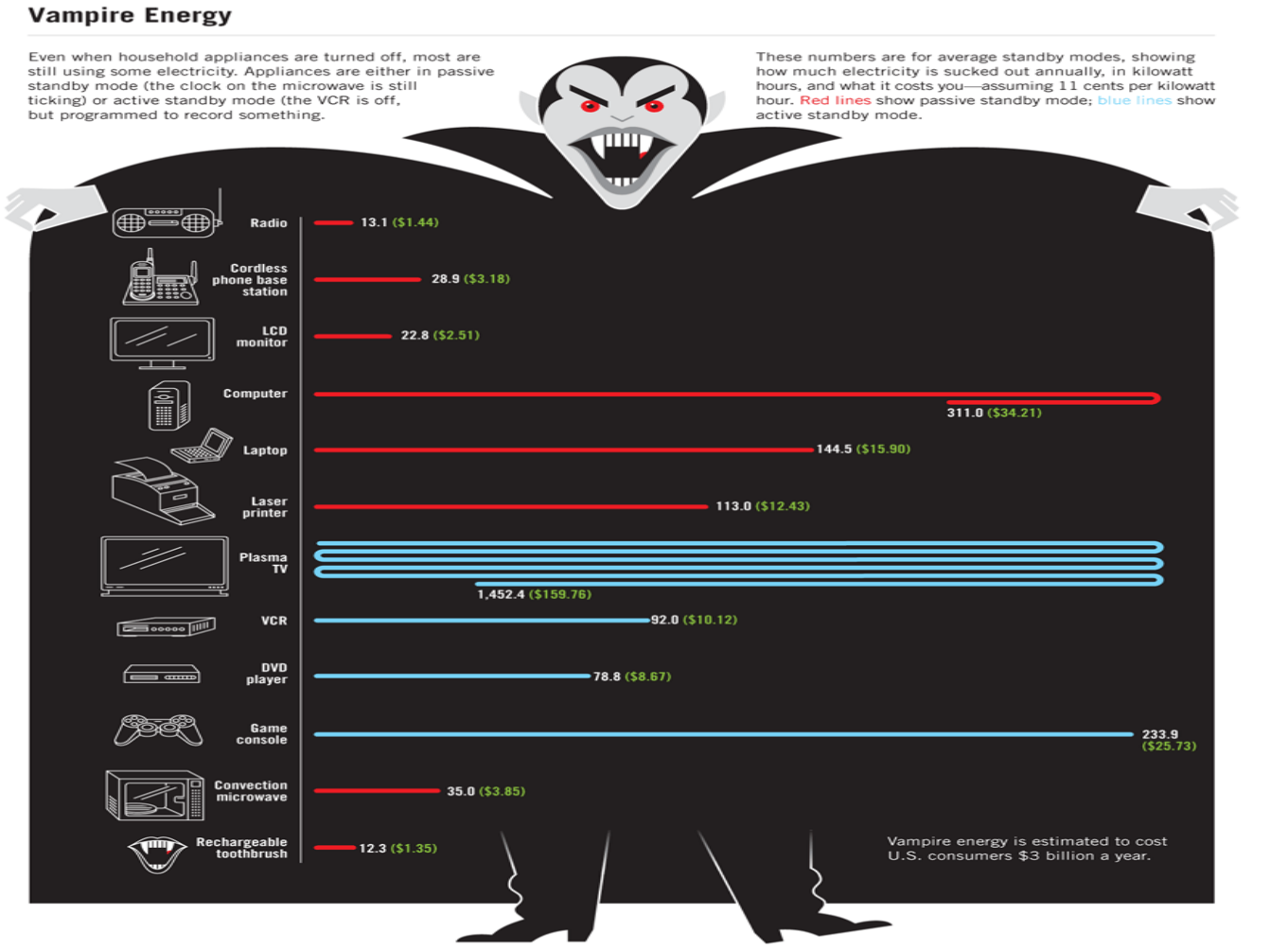
Energy Vampires

What has two long teeth and sucks electricity all night long? The answer is external power supplies – those little black boxes with two prongs that plug into your electrical outlet. These black boxes contain transformers that are wasting small amounts of energy 24 hours a day, 365 days a year when plugged in – regardless of whether they are attached to the device they are intended to power or whether that device is turned on. The transformers contain two sets of coils that step the voltage down from 120 volts to the much smaller voltage that small electronic devices require. Even when the electronic device is not attached, electricity, circulates through the coil.

Look around the room. How many transformers do you see? Laptops, TVs, radios, cell phone chargers, and many other electronics require transformers. Even those tiny smart phone chargers contain transformers.

How big of a problem is vampire energy use? The Lawrence Berkeley National Laboratory (LBL) estimates that the typical American home has forty energy vampires and standby devices – such as blinking lights on your modem or TV - constantly drawing power. LBL further estimates that vampire and standby electricity use together account for 10 percent of residential electricity use – an estimated $100 a year per home. On a national basis, standby power accounts for more than 100 billion kilowatt hours of annual U.S. electricity consumption and more than $10 billion in annual energy costs.

Fortunately the solution to energy vampires is simple. Unplug cell phone chargers and other devices containing transformers when not in use. An easy way to do this is to plug multiple energy vampires into a power strip, then switch the whole power strip off when not in use.



Commerce Participates in Demand Response Program

Demand response or load shed programs are designed to provide a method by which end-use customers may be compensated for reducing electricity load during an emergency event. If called upon, customers agree to reduce a specific amount of electricity and in return are paid a set amount per megawatt hour reduced. This funding can then be used to implement new efficiency projects at their facility.

This type of program has become an important component of utility system planning. Utilities and regulatory commissions are setting goals to obtain a higher percentage of energy supply from renewable resources and take polluting plants off the grid. Meanwhile, demand for electricity continues to increase with no signs of letting up.

On the flip side, efforts to meet increased demand by pushing more electricity through transmission equipment can cause problems like voltage fluctuations. Machinery may stop working at low voltage levels, and resulting effects can be short term brownouts in isolated areas to widespread blackouts with burnt transistors and power lines.

Demand response allows electricity suppliers and grid operators to cut stress by reducing demand for electricity. Grids are thus stabilized and electricity can be provided reliably.

Demand response programs pay the electricity consumer to stand ready as a last line of defense to these rare but dangerous electric reliability crisis situations. Not only does demand response have a lower cost and shorter ramp up period than building new plants, it's environmentally friendly with virtually no emissions and no out-of-pocket expense.

HCHB and the NIST Gaithersburg campus have both recently entered into demand response agreements through curtailment service providers. These agreements are expected to result in hundreds of thousands of dollars that can be re-invested in energy efficiency projects to further reduce energy use. Several other Commerce bureaus are now looking into these types of agreements in an effort to take advantage of this no-cost opportunity.

The Department is Enhancing Its Environmental Compliance Program

In a continuing effort to build a comprehensive environmental compliance program across the Department of Commerce, OSEEP is partnering with environmental professionals at the National Oceanic and Atmospheric Administration (NOAA) and the National Institute of Standards and Technology (NIST) to develop an environmental compliance training program. The training program is open to all Commerce employees and contractors but intended for environmental staff, facility managers, and building liaisons.

The intent is to augment traditional approaches to environmental compliance by:

- Proactively expanding our collective knowledge;
- Conducting informed self-assessments at all facilities;
- Keeping up-to-date with new environmental laws and regulations; and
- Implementing environmental best practices.

By properly implementing a proactive environmental self-assessment program, facility managers can ensure that they identify and correct deficiencies before they create problems for the environment. If fully embraced, facility managers can rest assured that their facility will withstand the scrutiny of a regulatory inspection. The intent of the training program is to gradually raise the level of awareness and understanding of the multitude of environmental laws and regulations across the Department's community of facility managers and building liaisons. The training sessions will be offered on the third Thursday of each month and will cover a different environmental statute or regulation at each session. Training is offered concurrent to a Department-wide roll out and implementation of IEHS, an environmental compliance software that allows facility managers to very quickly assess their facility against current criteria, then document and track any deficiencies identified. The Department has recently invested in iEHS as our corporate solution for use by all twelve bureaus.

As our facility managers continue to assess priorities against budget constraints, this free and voluntary training makes use of the environmental expertise that we already have available, within the Department.

For more information on this environmental compliance training program, contact Greg Falzetta at gfalzetta@doc.gov or Rosaline Hill at rhill9@doc.gov.

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