

SUSTAINABILITY E-NEWSLETTER

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DEPARTMENT OF
CENTRAL SERVICES,
OFFICE OF FACILITIES MANAGEMENT

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Earth Day CFL Exchange Results!

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Green Fingerprint Sustainability Commitment:

"We, the public servants of the state of Oklahoma, are hereby committed to the conservation of resources and the protection of future generations through the promotion and implementation of sustainable business practices."



Thanks to the support & cooperation of many agencies, the Office of Facilities Management's (OFM) Earth Day CFL Exchange was a huge success!

The event, a key initiative to the Green Fingerprint energy awareness campaign, exchanged 268 bulbs in DCS-operated buildings. These bulbs are in addition to over 2,000 already swapped in the Capitol building for a grand total of 2,268 bulbs.

Trading all those bulbs reduced total wattage by 106,954 watts (using each lamp avg. of 4 hrs/day). That translates to **annual savings of 102,675 kWh** which is enough to run a washing machine non-stop for over 13 YEARS!



PHOTO OF BULBS REMOVED FROM: HODGE, SEQUOYAH, CONNORS, WILL ROGERS, JIM THORPE, AGRICULTURE, D.D. COURTS, ODOT, ATTORNEY GENERAL, & THE OFFICE OF STATE FINANCE

For more information about CFL bulbs, please visit the [OFM Sustainability Page](#) or the [Energy Star Website](#).

Did we miss you? If you or someone you know was out of the office when OFM came by and would

like to request a CFL bulb (for use in a state-operated building) please contact:

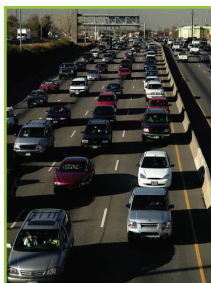
Thomas Bowman, DCS Sustainability Awareness Coordinator, at (405)522-0049 or via [Email](#).

Thank you to everyone who participated! 🌱

Fleet Management: Reducing Emissions & Improving Efficiency

In showing its commitment to reducing the nation's dependence on foreign oil, the Department of Central Services (DCS) Fleet Management Division (FM) has worked with the House and Senate on all alternative fuel initiatives and is taking serious strides through the Alternative Fuels Program.

FM's Alternative



Fuels Program stated mission is "to provide education, training, and awareness in the State of Oklahoma for the expansion of the use of alternative fuels in the transportation sector." The program is aimed at minimizing or displacing completely the use of petroleum fuels like gasoline in state vehicles.

Alternative fuel vehicles can be powered by a variety of sources such as: electricity, ethanol-blends, compressed natural gas (CNG), and liquid propane gas (LPG). Depending ([Continued on pg. 4](#))

Organic Composting at the Governor's Mansion

Organic debris collected from the Governor's Mansion grounds is used to make approximately 1,000 lbs of finished composted humus annually.



Compost is an important ingredient in garden soil for many reasons; according to a [Washington State University website](#), compost "contains a full spectrum of essential plant nutrients, provides good soil

structure, and harbors diverse life in soil that supports healthy plant growth."

Environmental issues can be addressed by using organic compost instead of a synthetic blend. Runoff is a problem that can pollute nearby water by carrying soil, fertilizers and pesticides to nearby streams. The site went on to say that compost increases soil's ability to retain water & decreases



runoff. Only a 5% increase in organic material quadruples soils water holding capacity.

The pile at the mansion must be stirred to ensure the temperature of the compost is kept between 90 and 140 degrees which will keep the microorganisms active. In the fall, the compost will be added to the gardens on the mansion grounds before planting tulips and pansies.

A behind-the-scenes Green Fingerprint left by Bud Dolan, DCS Contract Administrator, through responsible grounds keeping. If you have any questions/concerns please contact us via [Email](#).



FINAL PRODUCT OF COMPOSTING: BEAUTIFUL GARDENS OF TULIPS AND PANSIES

How to Recycle 2,268 Incandescent Light Bulbs



Pen Holder



Vase

The bulbs collected during the [Earth Day CFL Exchange](#) piled up quickly, so OFM began exploring recycling options.

When it comes to light bulbs, most recycling services will only accept bulbs with mercury. The OFM staff was forced to get creative with the collected bulbs; the result: **recycled office supplies including:** a pen holder, a vase, and business card holders.

Reigning arts and crafts champion, Harold Munson, constructed the DCS ship-in-a-bulb. [Ecofriend.org](#) offers some other creative ways to recycle old incandescent bulbs on your own.



Business Card Holders



Computers & Office Lights: Wasting Their Lives Away

[U.S. Department of Energy \(DOE\) studies](#) show that approximately 9% of the energy consumed by commercial buildings come from office equipment. According to the DOE



website, personal computers (PC's) and monitors account for the largest amount of energy used

in offices. Most people can remember to shut down their computers at the end of the day/week; however, many do not realize PC's are often inactive during the day and wasting energy all the while. **When you go to lunch, to a meeting, or for a walk, switch your PC to 'Standby' mode and it will use 85% less energy than if you left it running idle.**

OFM has upgraded many

light switches with timer switches and occupancy sensors. These upgrades are intended to provide a "safety net" that will switch power off when forgetfulness gets the best of us. **Even with a motion sensor installed, if you leave a room with the lights on, they can burn for up to 20 minutes after you leave.**



Careless computer and light

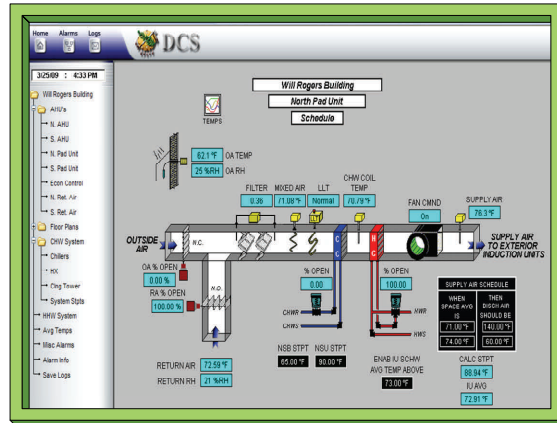
switch habits can waste a significant amount of energy. These numbers can pile up exponentially considering there are thousands of computers and light switches in state-operated buildings.

State employees can "[leave a Green Fingerprint](#)" by simply paying extra attention to their individual office lights and PC's and switching them off when not in use.

Building Automation: How Does It Work?

The building automation system used in DCS-operated buildings has dramatically improved technicians' abilities to monitor and control building equipment. The addition of new sensors allows Facilities Management (OFM) to receive real-time updates and statistics about each building's energy use.

Craig Cherry, energy consultant in OFM said of the system, "The ability to monitor our facility operations and energy usages real-time allows our department to be proactive in our energy efficiency operations."



ACTUAL SCREEN-SHOT OF BUILDING MANAGEMENT SYSTEM (BMS)

Cherry went on to say, "Previously we would see the utility bills and try to figure out what caused an increase in usage 30 to 45 days after the fact."

This cutting-edge technology is web-based so a technician can monitor live feeds and adjust controls of extremely vast and complex equipment instantaneously from anywhere with an internet connection.

The advanced level of supervision provides a window into vital systems of equipment and allows technicians to make adjustments that save time, money, and energy.

Lighting Retrofits Earns State \$34,614 through OG&E Rebate Program

To encourage energy efficiency, OG&E has employed various rebate programs for building improvements. OG&E's lighting program offers a \$2 rebate for each tube light replaced with an energy efficient T-8 or T-5.

Realizing the opportunity, the DCS Office of Facilities Management (OFM) has replaced 17,307 T-12 fluorescent tube lights with energy efficient T-8 tubes resulting in a rebate of \$34,614!

The rebates extend much further than just lighting.

OG&E also offers a rebate option for the installation of high-efficiency motors. In Oklahoma, there is an instant rebate of \$5 per horsepower (hp) when replacing a 10 hp through 100 hp motor with a premium motor approved by the National Electrical Manufacturer's Association (NEMA).

These are important upgrades for state buildings because, as indicated on the [OG&E website](#), industrial motor electricity consumption could be reduced by up to 18% if companies apply proven efficiency technologies and prac-

tices.

A new state-wide motor contract ([SW791](#)) is now in place that simplifies the ordering process. Agencies seeking to purchase a high-efficiency, NEMA-approved motor can do so through three vendors: [Evans Enterprises, Inc.](#), [MSC Industrial Supply](#), or [Brandon & Clark](#).

Just another way that OFM is improving efficiency, reaping long-term savings, and leaving a Green Fingerprint for a sustainable future.



Energy Champion Update!

Thank You to All Energy Champions!

[Michele Gann](#) -

Oklahoma Arts Council

[Kent Tippin](#) - State

Department of Education

[Georgia Godwin](#) -

Office of the State Auditor &

Inspector

[Karla Beatty](#) - Oklahoma Conservation Commission

[Shawn McCarty](#) - Oklahoma Department of Mental Health and Substance Abuse Studies

[Paula Ross](#) - Oklahoma Tax Commission

[Adele Jack](#) - Department of

Human Services

[Kathy Ernst](#) - State Treasurer's Office (N. Central location)

[Amy Sparks](#) - State Treasurer's Office (Capitol)

[Chris Neel](#) - Oklahoma Water Resources Board

[Terri Berry](#) - Office of Personnel Management

[Fenton Rood](#) - Department of Environmental Quality

[Amanda Storck](#) - Office of the Secretary of the Environment.

[Cassie Gilman](#) - Office of the Secretary of Energy.

To learn more about Energy Champions or to volunteer for your agency please contact us by phone [405-522-0049] or [Email](#).

LEAVING A GREEN FINGERPRINT FOR A SUSTAINABLE FUTURE

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Energy Champion Spotlight



Michele has worked for the [Oklahoma Arts Council](#) for 12 years and believes it is very important to leave a Green Fingerprint at work.

In addition to recycling paper, Michele also saves paper by duplex-printing all faxes. The Arts Council traded all their light bulbs for CFLs and their e-Grants Program is in the final stages of a complete conversion to paperless!

Keep up the good work, Michele!

Michele Gann
Energy Champion
Oklahoma Arts Council

Calculate Your Carbon Emissions

Carbonfund.org is a non-profit organization geared toward the educating the public about the negative impacts of greenhouse gas emissions and how to prevent them. According to their website, [Carbonfund.org](#) "is leading the fight against global warming, making it easy and affordable for any individual, business or organization to eliminate their climate impact and hastening the transformation to a clean energy future."

Businesses and individuals are encouraged to "Reduce What You Can, Offset What You Can't™" on the site.



The organization wants visitors to first try to reduce their CO₂ emissions; however, visitors can also offset their emissions by making a tax-deductible donation. The donation supports renewable energy, energy efficiency and reforestation projects. [Click HERE](#) to try calculating your own carbon footprint and reduce as much as possible! 🌱

Fleet Management: Reducing Emissions & Improving Efficiency (continued)

on the particular vehicle, alternative fuels can reduce emissions by as much as 90%.

[According to the FM website](#), the price of a new, compressed natural gas capable Honda CNG Civic costs roughly \$6,830 more than a standard unleaded Civic. However, this incremental cost could be recovered in around 3.3 years (with average cost of unleaded fuel at \$3.50/gallon and CNG at \$1.15/gallon).

In FY08, 166 flex-fuel vehicles were purchased by DCS despite the fact that CNG vehicles were not available on the statewide contract. DCS vehicle replacement target for FY09 is 30 CNG vehicles and as

many flex-fuel vehicles as possible from the state-wide auto contract. The current DCS fleet has 265 vehicles powered by ethanol blend (E85), 7 CNG vehicles, and 2 hybrid electric vehicles.



Compressed Natural Gas Vehicle

Fleet Management has also improved the efficiency of the inventory management software used to ensure the state maintains a viable fleet with minimum downtime and breakdowns. The software, Maximus M5 Fleet Focus, will minimize the chance of overlooked preventive maintenance.

This method of efficient inventory management reduces the number of parts and materials needed around the shop. According to the [Fleet Management website](#), "The program's expansion is expected to create efficiencies in work order management, centralized maintenance and parts operations, and more coherent and cost-effective vehicle replacement policies by state agencies." 🌱