

# SUSTAINABILITY E-NEWSLETTER

March 2, 2009

DEPARTMENT OF CENTRAL  
SERVICES,  
OFFICE OF FACILITIES MANAGEMENT

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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.”



## What's A Sustainability Project?

Have you ever wondered what transforms a seemingly ordinary project into a 'Sustainability Project?' Well, to get the specifics, you have to ask a couple of questions, such as the following:

1. Will the execution of this project take into account the ability of future generations to meet their needs?
2. Will the execution of this project promote the conservation of resources?

If you can answer 'yes' to both of these questions, the project can probably be called a sustainability project.

Sustainability projects already in progress or com-

pleted include: lighting upgrades, replacement of T-12 fluorescent light tubes with efficient T-8 tubes, installation of new controls and sensors, along with using new programming



DHS/CAP BUILDING AT  
50 N.E. 23RD ST  
OKLAHOMA CITY, OK

strategies with the Building Management System (BMS), and a general de-lamping process which removed unnecessary light bulbs from many fixtures in common areas.

Other energy-saving projects include: the installation of low-flow urinals and toilets which will annually save 1.1 million gallons of water campus-wide and the installation of VendingMisers which cuts vending machine energy consumption by as much as 46%.

The DHS/CAP building is an example of a major sustainability project which will incorporate geothermal heating & cooling, wind & solar power, window & insulation improvements, as well as new lighting controls with light-harvesting capabilities.

DCS is continuing to work with legislators and other state agencies to develop more projects promoting sustainability. 🌱

## The Green Fingerprint Campaign

The Department of Central Services (DCS) Office of Facilities Management (OFM) has developed a Sustainability Plan to ensure State buildings operate with maximum efficiency and minimum environmental impact. To encourage participation of building occupants and other agencies, DCS has established the Green Fingerprint energy awareness

campaign. The campaign, a key element in OFM Sustainability Plan, is designed to further decrease energy use in State buildings through training and educating tenants on energy-related issues.

An important facet of the campaign will be informing building tenants of completed, ongoing, and future sustainability projects executed by DCS.

Another initiative of the campaign is a light bulb exchange where building occupants will be provided with energy-saving Compact Fluorescent Light bulbs to replace high-wattage, incandescent bulbs.

A strong network of State Agency Energy Champions will facilitate the

*(Continued on page 3)*

## Pollution & Electricity

### How do they relate?

Unless you choose to specifically buy energy from a provider that offers wind, solar, hydroelectric, or natural gas, you get your electricity from coal. Coal is solid carbon that is released into the atmosphere as carbon dioxide (CO<sub>2</sub>) when burned. CO<sub>2</sub> is a toxic greenhouse gas that contributes to the pollution of our breathable air.

### What can I do?

There are essentially two options: You can use less electricity or make the decision to purchase alternative energy. There are many efficiency measures that can also be taken at home and at work to minimize the threat of energy-related pollution. Efficiency tips for home and office can be found at:

[Energy Star](#)

### Where can I learn more?

For information on State and Federal tax incentives for using clean, renewable energy please visit the following website:

[Tax breaks](#)

Energy resources and services in Oklahoma can be found at:

[OKsustainability](#) 



**COAL-FIRED POWER PLANTS  
RELEASE OVER 40%  
OF TOTAL U.S.  
CARBON DIOXIDE EMISSIONS**

**(SOURCE: SIERRA CLUB)**

## SUS·TAIN'A·BIL'I·TY N.

**MEETING THE NEEDS OF THE PRESENT WITHOUT  
COMPROMISING THE ABILITY OF FUTURE GENERATIONS TO  
MEET THEIR OWN NEEDS.**

*-U.S. EPA*

## Who's Committed?

We've had a lot of positive feedback about the Green Fingerprint campaign. Take a look at who's already committed to a sustainable future by volunteering as Energy Champions:

**Michele Gann** of the Oklahoma Arts Council

**Kent Tippin** of the State Department of Education

**Georgia Godwin** of the

Office of the State Auditor & Inspector


**Karla Beatty** of the Conservation Commission

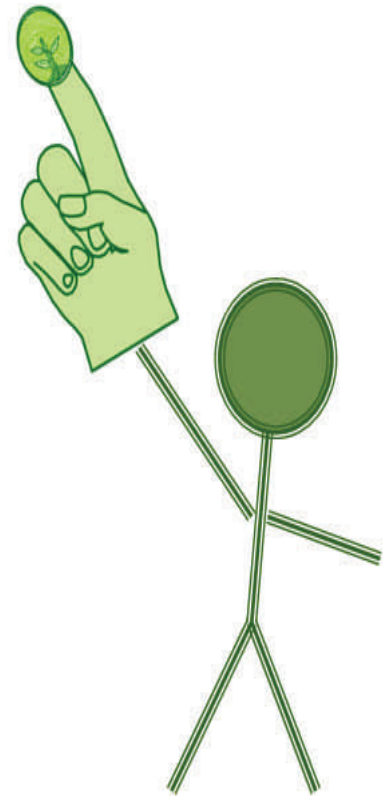
**Shawn McCarty** of the Oklahoma Department of Mental Health and Substance Abuse Studies.

**Paula Ross** of the Oklahoma Tax Commission

**Adele Jack** of the Department of Human Services.

DCS would like to send a very special thanks to each of these individuals and agencies for their support. These Energy Champions recognize the need for energy efficiency and have taken the first step to making their facilities more sustainable. To learn more about Energy Champions or to volunteer for your agency please contact us by phone

[405-522-0049] or [Email](#). 



**ENERGY CHAMPIONS  
CONNECT THEIR STATE  
AGENCIES TO IMPOR-  
TANT INFORMATION &  
MATERIALS ABOUT  
ENERGY EFFICIENCY**

## How Does It Work?

To minimize landfill contributions, DCS recycles expired fluorescent bulbs that have expired or been collected during the de-lamping process. These bulbs are deposited into an Air-cycle Bulb Eater®, a lamp crushing machine that processes spent fluorescent lamps into small fragments.

The crushed glass is compacted into 55-gallon containers, and the

Bulb Eater's® filtration system pulls contaminated air out of the drum. This sifts out the released powder as well as the mercury vapour thereby reducing the threat of contaminating landfills.

The system will greatly reduce bulb storage, minimize handling of the lamps, and create a safer, cleaner work environment. 🌱



**MORE INFORMATION ABOUT THE BULBEATER® CAN BE FOUND AT: [WWW.AIRCYCLE.COM](http://WWW.AIRCYCLE.COM)**

## The Green Fingerprint Campaign

*(Continued from page 1)*

velocity of energy-related messages to each agency/building. For example, Paula Ross, Director of Communications Division, has volunteered to represent the Oklahoma Tax Commission as an Energy Champion. She will act as a channel for Tax Commission employees to provide feedback about sustainability projects or the campaign. She will also assist in the distribution and/or placement of campaign materials, such as questionnaires and posters.

So what exactly is the message behind the cam-

paign? The 'Green Fingerprint' concept represents what we actually do to curtail the problems caused by our ever-growing negative environmental impacts. Most people are aware of the environmental and monetary repercussions of wasteful energy use; however, we don't have to affect the earth exclusively in a negative way. Leaving our Green Fingerprint means we are making appropriate changes and leaving a positive legacy for the preservation of future generations.

When you see the Green Fingerprint logo in a state-operated building,

you'll know that somewhere nearby, DCS has made changes or completed a project to improve energy efficiency, save tax-payer money, reduce the building's environmental impact, or probably all of the above!

If you have questions, would like to participate in the campaign, need to request a CFL trade, or would simply like to show your support of sustainability efforts, please contact Thomas Bowman, DCS Sustainability Awareness Coordinator, at (405)522-0049 or via [Email](mailto:tbowman@dcso.com). 🌱

**“LEAVING OUR GREEN FINGERPRINTS MEANS WE ARE MAKING APPROPRIATE CHANGES AND LEAVING A POSITIVE LEGACY FOR THE PRESERVATION OF FUTURE GENERATIONS.”**

## LEDs: The Little Lights That Could...

**...be found in our homes and offices sooner than we might think!**

LEDs (Light Emitting Diodes) are tiny bulbs that generate light by exciting a chemical compound with electricity; unlike incandescent bulbs that require the heating of a filament to

make light. Hundreds of these mini bulbs make up LED tube lights that can be used to replace energy-greedy fluorescent tubes.

LEDs consume 70% less energy! LED tubes pull around 15 watts whereas most T-series fluorescent tubes with ballast use around 48

watts (36w bulb +12w ballast).

There are numerous benefits to using LEDs instead of fluorescent tubes. LEDs can last up to 25 times longer and contain no mercury. Less replacement means fewer bulbs in landfills and fewer CO<sub>2</sub> emissions in our breathable air. 🌱



**LED LIGHT TUBES**

Department of Central Services,  
Office of Facilities Management

2401 N. Lincoln Blvd.  
Suite 112  
Oklahoma City, OK 73105

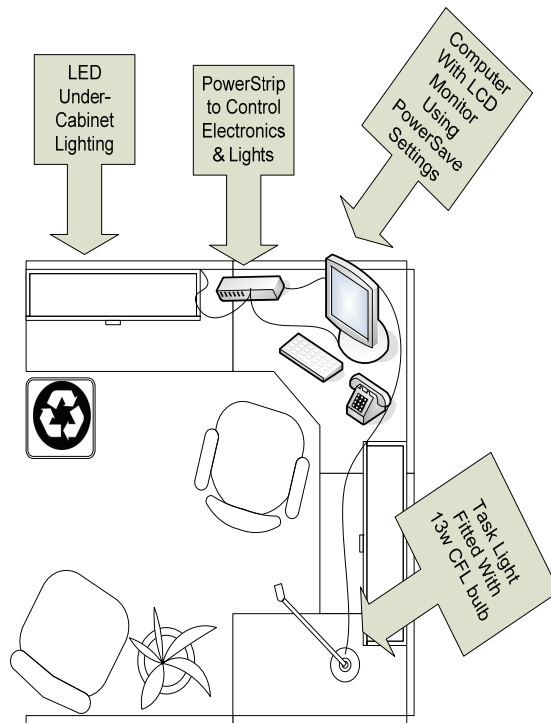
Phone: 405-522-0049  
Fax: 405-522-2230

E-mail:  
thomas\_bowman@dcs.state.ok.us



**Next Issue:**  
**Transportation**  
**& Technology**

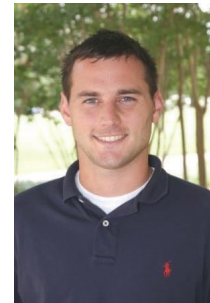
## Easy, Efficiency Upgrades for Your Cube



## Energy Champion Spotlight

Going above and beyond the call of duty, Dan has equipped his cubicle with motion sensor lighting controls and LED under-cabinet lighting. Dan's computer is set to power-save mode and will standby after 30 minutes of inactivity. He has also been spotted emptying busy co-workers recycle bins.

Thanks for your support, Dan!



Dan Ross, OFM  
Energy Champion  
522-6913

## “Twisty Bulb” Q & A

Q: Do CFL bulbs contain mercury?

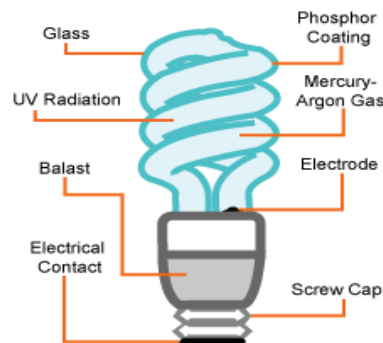
A: Yes, CFL bulbs contain a miniscule level of mercury (if the bulb is recycled as required by the EPA, the actual mercury emissions are much less than those created in the production of incandescent light bulbs in coal-fired power plants).

The amount of the mercury contained in CFLs (4 Mg to be exact) actually **DECREASES** over time. As the bulb produces light, the mercury begins to bond with the interior phosphor lining of the bulb (lack of mercury is why most CFLs stop working).

The EPA lists steps for proper clean-up of a broken bulb containing mercury [HERE](#).

Q: Do CFL bulbs really last that much longer?

A: The average lifespan of most CFL bulbs is up to 10 times longer than that of incandescent bulbs. Filaments



**COMPACT FLUORESCENT LIGHT BULB**

used to produce light in incandescent bulbs can break or burn out, but CFL bulbs can last up to 9 years (when used 3-4 hours a day).

Q: How do I choose a CFL bulb that produces the same amount of light as my old incandescent bulbs?

A: To match an bulb's light output, you'll need to match the lumens generated, (FYI: Watts measure energy used by bulb, not light output). To find the correlating CFL, use the chart below:

LUMENS	Incandescent	CFL
450	40w	8-10w
890	60w	13-18w
1210	75w	18-22w
1750	100w	23-28w