

SESEM Summer Energy Academy

Fayetteville Strategic Energy Plan

Sarah Marsh – Fayetteville City Council Member (Ward 1)

SESEM Summer Energy Academy

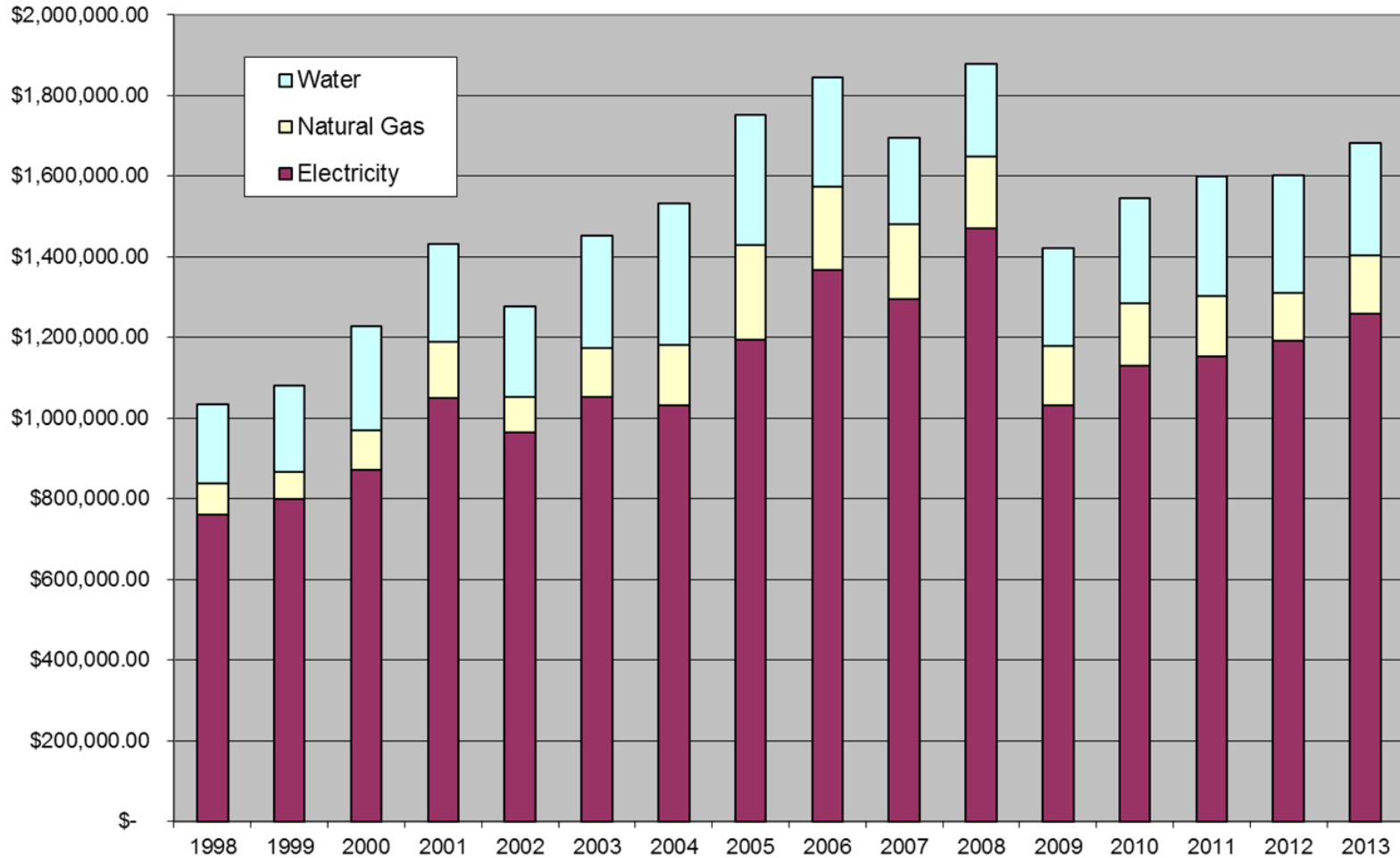
June 5, 2014



Fayetteville Strategic Energy Plan - 2013 SESEM

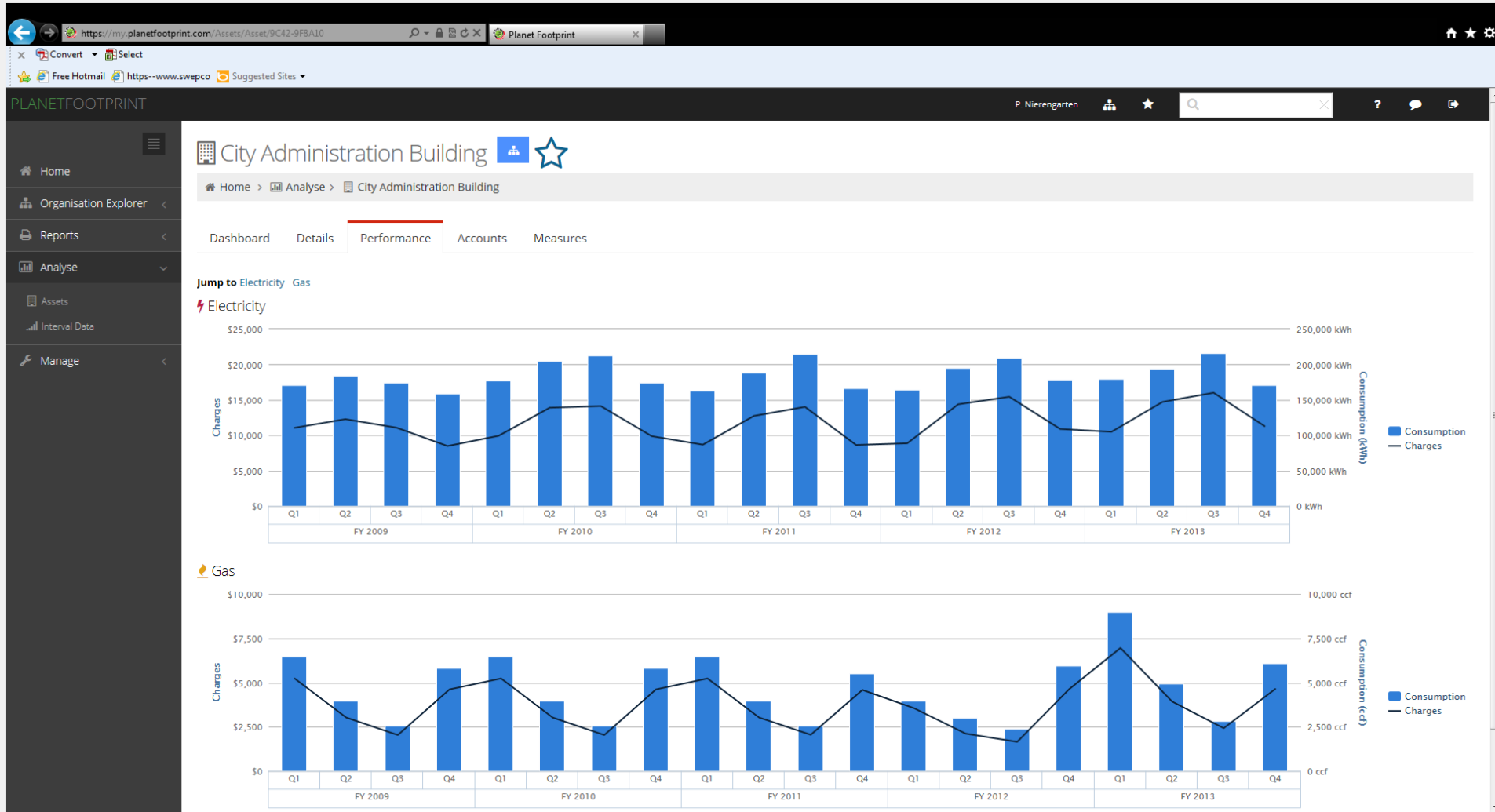
- City Government as a model for Fayetteville Citizens – **In Progress**
- Home Energy Affordability Loan (HEAL) – **In Progress**
- Property Assessed Clean Energy (PACE) – **In Progress**
- Solar on City Buildings – **Some Complete others In Planning**
- Smarter Transportation Development – **In Progress**
- Green Building Incentives – **In Progress**
- Energy Performance Disclosure for Renters & Buyers – **Not Started**

Fayetteville Annual Utility Costs

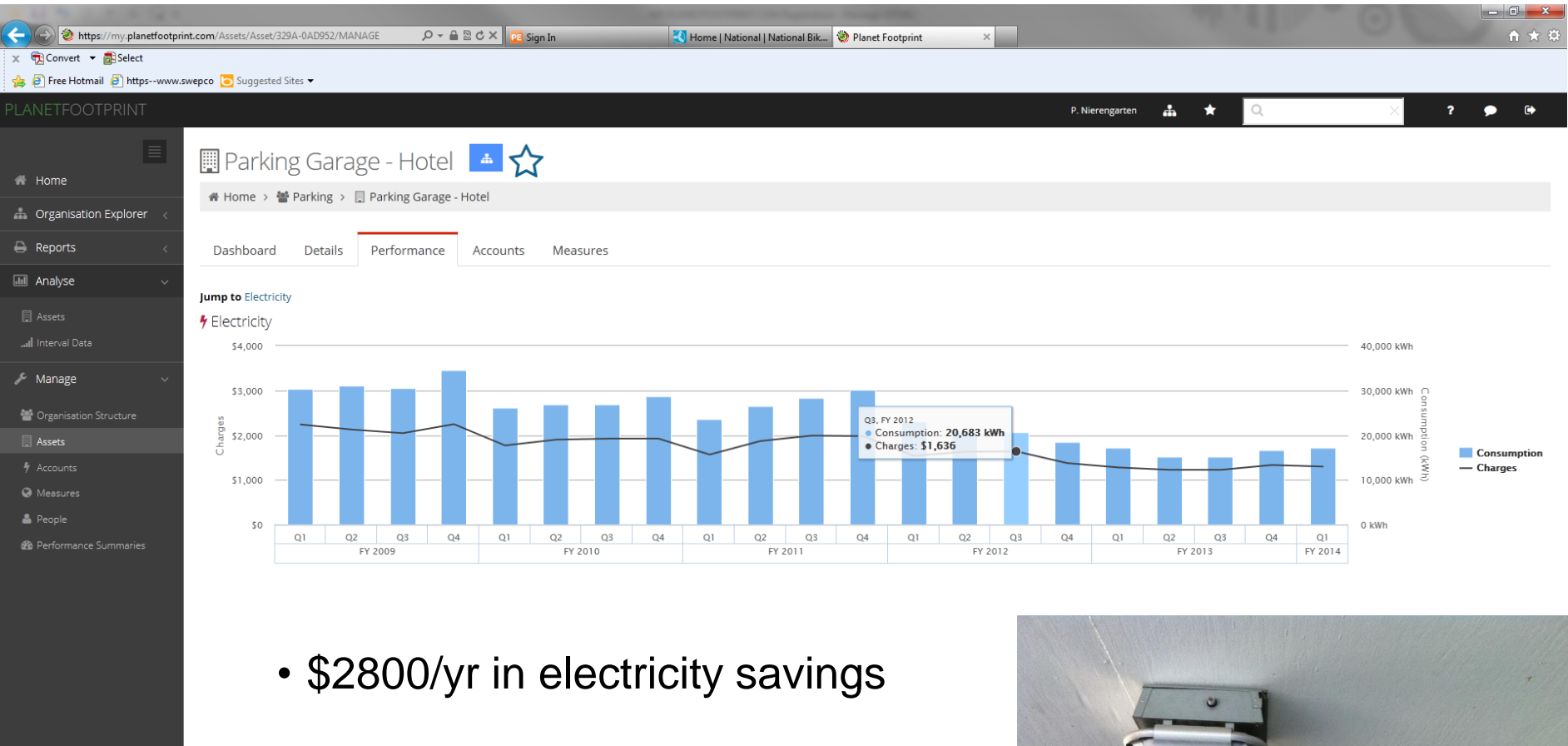


- 2009 – \$300,000 for weatherization, controls and lighting
- 2010/12 – \$250,000 for solar, weatherization, controls and lighting
- 2013 - \$15,000 for HVAC, lighting and timers

Utility Bill Management Software



Parking Garage Savings – Lighting Improvements



- \$2800/yr in electricity savings



2014 ©Planet Footprint.
1.3.3268



COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

The 13 watt Compact Fluorescent Light bulbs last 12,000 hours and save money on energy bills. These bulbs produce as much light as 60 watt incandescent bulbs, but are nearly 4 times more energy efficient.



Seal out drafts, prevent heat loss and improve energy efficiency with this Closed Cell Foam Weatherstrip. Made of 100% PVC sponge foam with pressure-sensitive, peel and stick acrylic adhesive. May be used on doors, windows, attic hatches around air conditioners and more. Easy to install, helps reduce heating and cooling costs. Just clean surface, cut to size, peel and stick.



Triple Seal Door Sweep features include three draft-stopping vinyl sealing fins for three times the sealing power. The 2-1/8" height makes this door sweep ideal for sealing both large and small gaps on new or old doors. Medium duty extruded aluminum carrier with five slotted screw holes for easy adjustment and efficient installation.



The do it yourself Window Kit includes plastics sheets that stretch over windows. Just secure with tape and heat with a blow dryer. This enables the plastic to shrink against the glass, creating a tight seal that prevents costly drafts.



Energy & Water Saving Kit

This Hot Water Gauge card illustrates the temperature of your "hot water heater." If the temperature is 120° or more, then you know your hot water heater is turned up too high.



Use this Refrigerator Thermometer card to check the temperature setting of your refrigerator. 36°F to 39°F is generally recommended. Settings that are too cold waste electricity. Settings that are too warm can ruin food and cause salmonella poisoning.



The Wall Plate Thermometer's Green Zone™ indicates an optimum temperature range for energy efficiency on both heating (68°F) and air conditioning (78°F).



Switch & Outlet Sealer Packs. Insulates and seals out drafts, helps in energy conservation. Use this easy to install, low cost energy saving draft stopper.



The Refrigerator/Freezer Thermometer displays temperature in both °F & °C, and includes both magnetic and adhesive backing for different placement options.



Showerhead Installation



SHOWERS COST YOU \$\$\$'s for both water and the energy you use to heat it. This new, efficient showerhead will help you enjoy a full force shower while you save water and automatically cut your energy and utilities bill.

INSTALLATION OF THE SHOWERHEAD IS EASY. YOU WILL NEED:

- A pair of pliers or pipe wrench
- (possibly a second pair to hold the shower arm).
- A piece of cloth.
- A few minutes of time (some older showers may require adapters).

Check with your hardware store or plumber for these items.

- Step 1: Remove the old showerhead with pliers or a wrench. Use the cloth to protect the showerhead neck from scratching (see illustration).
- Step 2: Wipe the threads clean on the shower arm, then wrap Teflon tape around the arm three or four times, covering the threads. This will insure a tight fit. Cut or break off the tape and save the rest for the next showerhead.
- Step 3: Carefully thread on the new showerhead, tightening by hand. Finish tightening with the pliers, covering the neck to protect the finish.
- Step 4: Turn the water on all the way to test the connection. If it leaks, tighten it more or remove and re-tape.



Standard Faucet Aerator Installation



SLOW THE FLOW IN THE SINK

This kit contains two highly efficient faucet aerators that save water and the energy used to heat hot water. These aerators can improve faucet performance, may be used on most kitchen or bathroom faucets, and cut water flow up to 50%!

INSTALLATION IS EASY. YOU WILL NEED:

- A pair of pliers or pipe wrench
- (possibly a second pair to hold the faucet neck).
- A piece of cloth.
- A few minutes of time (some faucets may require adapters).

- Step 1: Remove the old aerator with pliers or a wrench. Use the cloth to protect the faucet neck from scratching (see illustration).
- Step 2: Clean off the threads on the faucet neck with a cloth or a brush. You may need to use household vinegar to dissolve and remove calcium deposits. The aerator may go inside or outside the faucet neck. It is threaded for both uses. Depending on whether it fits inside or outside the faucet, you will use one or two washers.
- Step 3: Tighten finger tight. If the aerator leaks, use the pliers or wrench GENTLY to tighten.



Swivel Faucet Aerator Installation

SLOW THE FLOW IN THE SINK

The water and energy saving Dual Spray Swivel Aerator offers a 360° swivel and two types of sprays: pull down for a wide full force, energy efficient multiple stream spray and push up for a splash-free bubble stream. Use the convenient fingertip control lever to temporarily reduce the flow of water without disturbing the water temperature setting. The Dual Spray Swivel Aerator has an ultra efficient 1.5 GPM flow and a pressure compensator, which work together to reduce water use and boost water pressure for better rinsing action.

INSTALLATION IS EASY. YOU WILL NEED:

- A pair of pliers or pipe wrench
- (possibly a second pair to hold the faucet neck).
- A piece of cloth.
- A few minutes of time
- (some faucets may require adapters).

- Step 1: Remove the old aerator with pliers or a wrench. Use the cloth to protect the faucet neck from scratching (see illustration).
- Step 2: Clean off faucet threads. For an inside fit, one washer will be needed. For an outside fit, two washers will be needed.
- Step 3: Turn clockwise until aerator is secured. If the aerator leaks, use pliers or a wrench to gently tighten, using a cloth to protect the finish.



Caulk Application

Maintaining a good weathertight seal around windows and doors is key in preventing unwanted air and moisture from seeping into your home. This will also help to conserve energy and reduce your heating and cooling bills. Restoring a good weathertight seal can be performed easily.




APPLICATION OF CAULK IS EASY, YOU WILL NEED:

- Stiff putty knife
- Utility knife
- Small screwdriver
- Clean rags
- Standard caulking gun

- Step 1. To produce a tight, water-resistant seal, old caulk must be completely removed. You should also scrape away any old caulk and clean and dry surface so it is free of dirt and dust.
- Step 2. Unscrew the tip from the caulking tube. Cut the tip of the tube, puncture seal and screw the tip back on. You may trim the tip for desired bead size preference, cutting on a 45° angle.
- Step 3. Cut tip of cartridge at a 45° degree angle, to the size of bead you'll need to fill gap or joint and load cartridge into caulking gun.
- Step 4. Hold gun at a 45° degree angle to the joint or gap and push the caulk ahead of the nozzle. Be sure to apply uniform pressure to get a smooth, even bead around window or door.

2009 International Energy Conservation Code (IECC)



Fayetteville
ARKANSAS

HOME PERFORMANCE LABEL

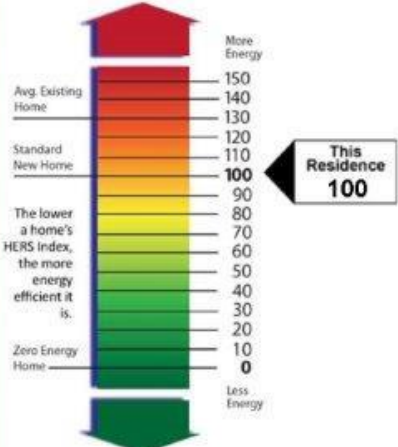
PROPERTY ADDRESS:
1234 Main Street
Fayetteville, AR
72701

Estimated
Monthly
Energy
Cost *

\$50

Estimated 5-Year Energy Savings: \$1234
(compared to average existing home, HERS 130)

RESNET HERS® Index



More Energy

Avg. Existing Home

Standard New Home

The lower a home's HERS Index, the more energy efficient it is.

Zero Energy Home

Less Energy

This Residence 100

New Home - National Certifications

- HERS Rating
- ENERGY STAR® Qualified Homes
- LEED for Homes - Level _____
- NAHB Green Build - Level _____
- 2009 IECC
- Other _____

Existing Home - Comprehensive Upgrade

- HERS Rating: _____ % Improvement
Before _____ After _____
- Home Performance w/ENERGY STAR®

City of Fayetteville, AR

Issued by: First Last

Date of Issuance: xx/xx/xxxx

General Contractor: First Last

HVAC Subcontractor: First Last

*This sticker is intended for comparison purposes only. Actual energy use is dependent upon occupant actions. Estimates are based on HERS (Home Energy Rating System) calculations.

For more information on this structure's construction please contact the City of Fayetteville Building Safety Division

Home Energy Affordable Loan



Status (as of May 29th)

- 77 employees completed audits
- 9 employees had no recommendations
- 23 have completed retrofits (DIY or Contractor)
- 6 have retrofit scheduled
- 21 are undecided

If you are a homeowner, you may SAVE \$\$ ON YOUR MONTHLY UTILITIES through this pilot employee benefit program!

The City of Fayetteville is excited to introduce the HEAL pilot program as a new employee benefit. **HEAL** stands for **Home Energy Affordability Loan**, a program that offers a payroll-deducted, low-interest rate loan to make home energy improvements.



What's in it For Me?

- | | | |
|-----------------|---|---|
| BENEFITS | <ul style="list-style-type: none">• a home energy audit at <i>no cost</i> to you• a personal energy plan• fair & trustworthy bids from area contractors• access to utility company rebates | <ul style="list-style-type: none">• if you choose to have the work done, optional payroll deductions and low interest loans designed to make the cost of the work negligible when compared to \$ saved on utility bills once work is complete |
|-----------------|---|---|

Am I Eligible?

To participate, you must own your own home; you must be an Ozark Electric, AEP-SWEPCO, or Source Gas customer; and you must have been employed with the City of Fayetteville long enough to qualify for health insurance.

How Do I Participate?

*Sign up for one of the following three information and registration meetings.
(Please bring a copy of your gas and electricity bill, or a copy of your account numbers to the meeting.)

- #1- Jan 29, 10:00 a.m. City Hall Rm. 219**
- #2- Jan 29, 2:00 p.m. Transportation Meeting Room**
- #3- Jan 30, 8:30 a.m. City Hall Rm. 219**

To RSVP:

Email: kjones@fayetteville-ar.gov
or call 575-8268 with the following information:

- meeting #1, #2 or #3,
- your name & division/department
- daytime phone.

There will also be a sign-up sheet available at your department office.

*As with all City on site, employee educational meetings: If a person attends during their regularly scheduled work time, then they will remain on the clock so that their paycheck is not reduced just because they chose to attend.

Questions: 575-8268

This is first-come-first-served. SEATS ARE LIMITED TO 50 PEOPLE PER SESSION.

This opportunity is offered through a partnership between the City of Fayetteville, the Clinton Foundation, AEP-SWEPCO, Ozarks Electric & Source Gas.

PACE – Property Assessed Clean Energy

- AR Legislature Passed PACE Enabling Legislation – April 2013
- Fayetteville Energy Improvement District (First in AR) – October 2013
- Advertise PACE RFP – June 2014
- Select Program Administrator – August 2014
- Launch PACE Program – Spring/Summer 2015

Thank you!

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June 5, 2014

