

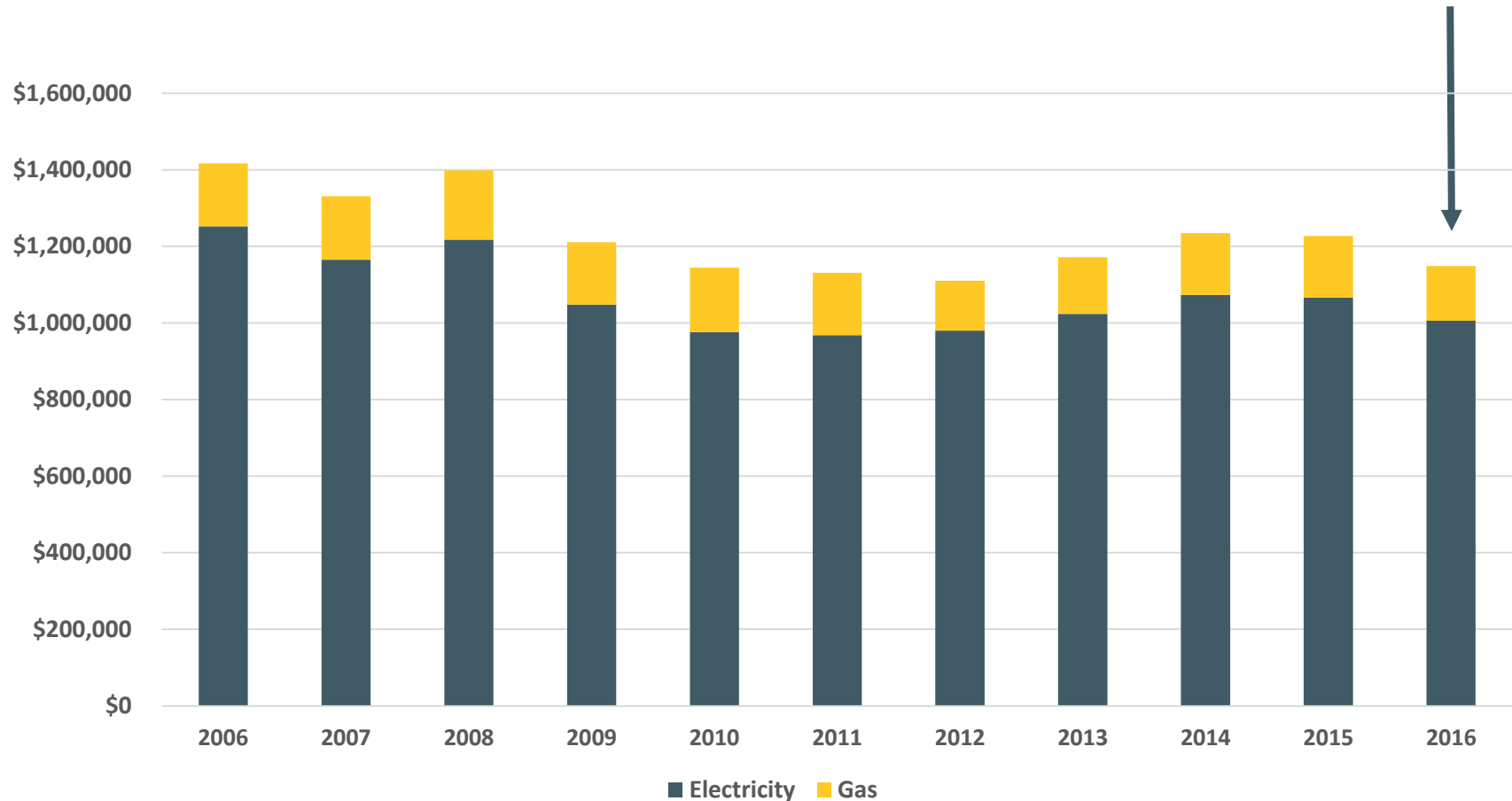
City Energy Update

Peter Nierengarten
Sustainability & Parking Director

City Council Agenda Session Meeting
March 28, 2017

Annual Utility Summary

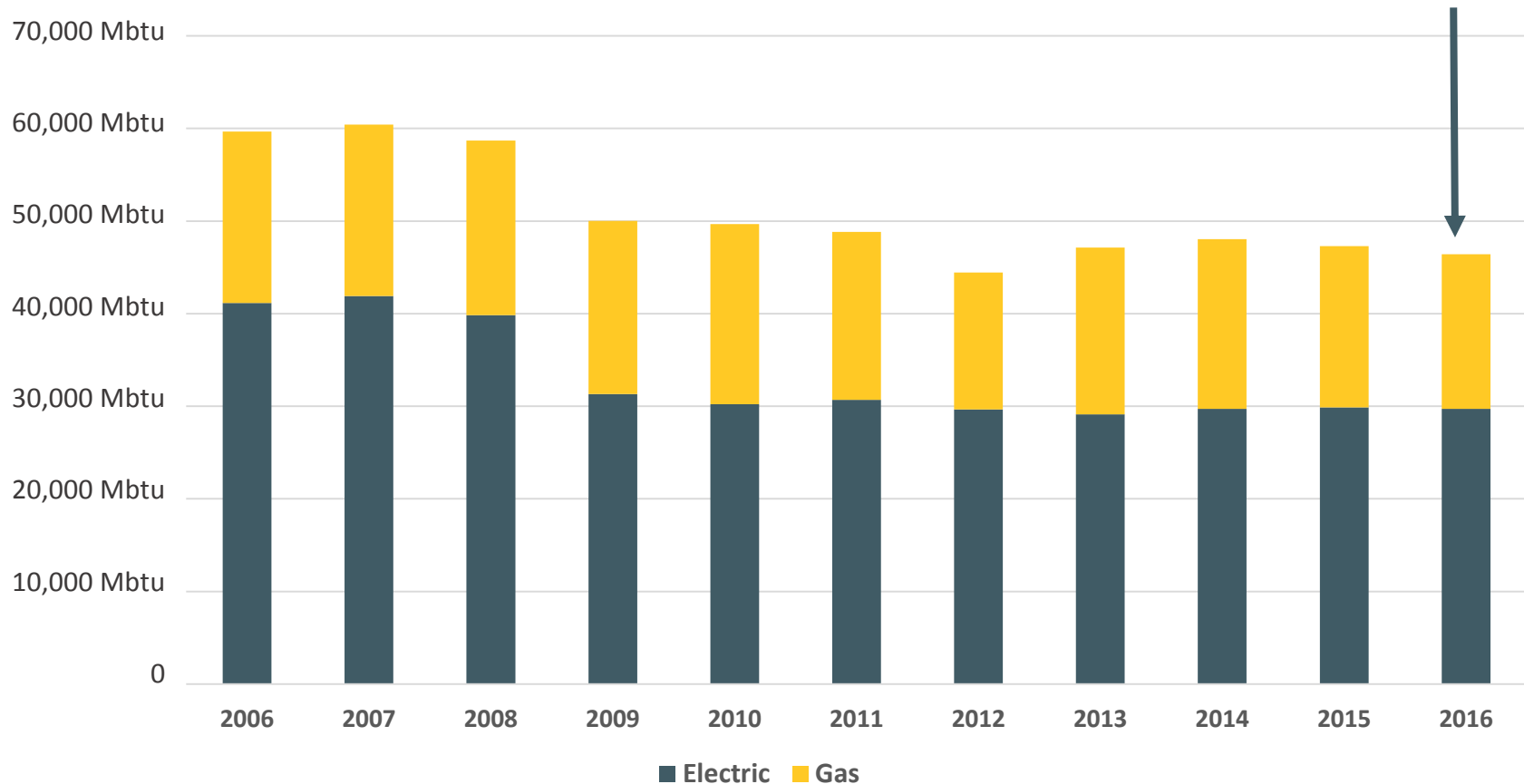
In 2016, The City of Fayetteville spent \$1.14 million on gas and electricity utilities.



Annual Utility Summary

Energy Consumption (Mbtu)

The City of Fayetteville consumed 46,410 Mbtu of energy in 2016



Energy Efficiency Allocations in 2015-2019 CIP

Energy Efficiency Improvements

\$40k/yr (5 years)

Airport Lighting

\$20k/yr (4 years)

Airport Boiler

\$25k/yr (3 years)

Energy Efficiency Projects

In 2016, to help save energy and money, the City implemented the following energy efficiency projects:

LED Lighting

- Trail Lighting retrofit
- Meadow Street Parking Deck retrofit
- City Hall retrofit
- District Court retrofit
- Parking Office
- Sustainability Office
- Water and Sewer Operations Building
- Animal Services Puppy Adoption/Conference Room/Cat Room
- Drake Field rental office upgrade
- Recycling & Trash Facility – LEED Silver

HVAC & Hot Water

- Sustainability Tankless water heater
- Parking High Efficiency 18 seer multi stage Units
- Sustainability High Efficiency 18 Seer multi Stage Unit
- Low flow fixtures Sustainability/Parking
- Fire Marshal Offices HVAC unit replacement
- Efficient Unit heater at Parks
- Fire Station 4 self contained unit

Renewable Energy

- 40 kW Ozarks Natural Energy

Meadow Street Parking Deck

Replaced (16) 453 watt metal halide lights with 140 watt LED fixtures, (9) 288 watt metal halide light fixtures with 64 watt LED light fixtures and (4) 100 watt metal halide canopy lights with 21 watt LED lights.



Cost	\$17,198
Incentive	\$3,239
Annual Savings	\$5,075
Payback	2.8 years

City Hall and District Court

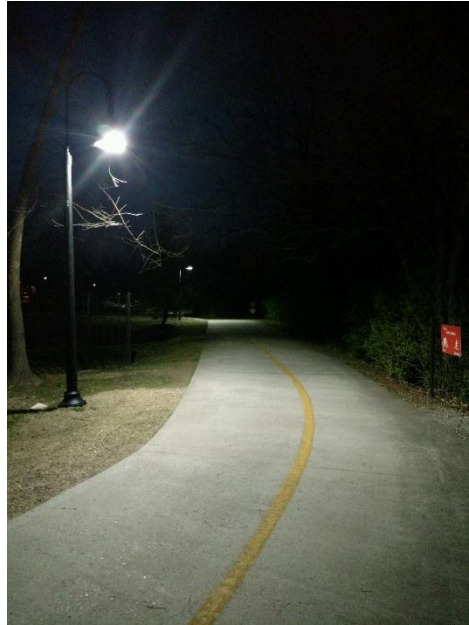
Replacing 133 screw-in lights with LED bulbs.



Cost	\$ 1,586
Incentive	\$ 1,270
Annual Savings	\$ 1,031
Payback	2.5 months

Scull Creek Trail Lighting

Replaced (57) 208 watt lights with 60 watt LED's
between Poplar Street and Appleby Road.



Cost	\$13,167
Incentive	\$4,719
Annual Savings	\$2,697
Payback	3.1 years

Ozarks Natural Energy Solar Array

The City purchased 100 shares (panels) = 40 kW



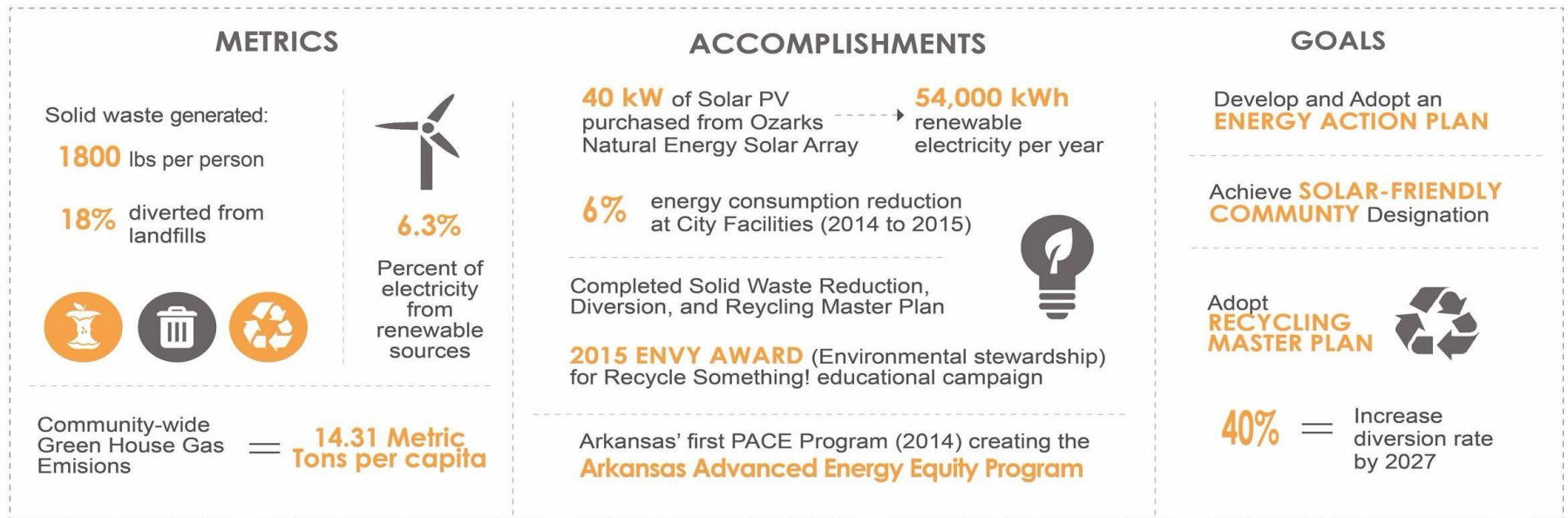
Cost	\$34,000
Annual Savings (projected)	\$2100
Production (8 months)	23,136 kWh
Actual Savings (8 months)	\$1,406

Proposed Projects for 2017 - 18

- **Drake Field Airport** – HVAC & Solar
- **Development Services** - SolaTube Daylighting in Offices
- **HR Offices** - Retrofit
- **City Hall** – Ballasts Lighting Fixtures on the 1st, 2nd, 3rd Floor
- **City Hall** – Window Replacement
- **Compost Building** – Radiant Gas Heater
- **Solar Photovoltaic** – Downtown rooftops
- **LED Street Lights** – Pilot with Ozarks Electric

NEW - Sustainability Report Card

FAYETTEVILLE'S 2016 CLIMATE & ENERGY REPORT CARD



Property Assessed Clean Energy - PACE

The screenshot shows the website for the Fayetteville/Springdale Arkansas Advanced Energy Equity Program. The header includes the program name, a navigation menu (HOME, ABOUT PACE, GETTING STARTED, ELIGIBLE PROJECTS, FIND CONTRACTORS, LATEST NEWS, FAQ), and a link for Contractor Registration. The main banner features an aerial view of the city with the text: "See what PACE financing with A2E2 can do for your property." Below the banner, a paragraph states: "The neighboring cities of Fayetteville and Springdale are proud to join in a single energy improvement district. The A2E2 energy financing program offers property owners the opportunity to save money on energy costs and make their buildings more valuable." A section titled "Low cost financing for energy efficiency/renewable energy upgrades now available to commercial building owners and developers in the cities of Fayetteville and Springdale." lists several benefits: Streamlined qualification process, Low, fixed payments, Over 150,000 eligible products, Positive cash flow through energy savings, Balance transfers to new property owner upon sale, and Interest is tax deductible*. It also includes a link to a 1.5 minute video on the advantages of PACE financing. Portraits of Mayor Lioneld Jordan of Fayetteville and Mayor Doug Sprouse of Springdale are shown. The footer contains the program name, a Facebook link, and a "Powered by" logo.

Arkansas Advanced Energy Equity Program Fayetteville/Springdale
Energy Efficiency Financing for Commercial Property

HOME ABOUT PACE GETTING STARTED ELIGIBLE PROJECTS FIND CONTRACTORS LATEST NEWS FAQ

See what PACE financing with A2E2 can do for your property.

The neighboring cities of Fayetteville and Springdale are proud to join in a single energy improvement district. The A2E2 energy financing program offers property owners the opportunity to save money on energy costs and make their buildings more valuable.

Low cost financing for energy efficiency/renewable energy upgrades now available to commercial building owners and developers in the cities of Fayetteville and Springdale.

- Streamlined qualification process
- Low, fixed payments
- Over 150,000 eligible products
- Positive cash flow through energy savings
- Balance transfers to new property owner upon sale
- Interest is tax deductible*

*Consult your tax attorney or accountant

Watch our 1.5 minute video on the advantages of PACE financing for building owners and contractors

Arkansas Advanced Energy Equity Program

Follow us on Facebook

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- In 2016 Springdale joined Fayetteville's Energy Improvement District
- 2017 PACE Legislative technical corrections

Energy Action Plan



GOAL AREA: Climate & Energy

Reduce climate impacts through adaptation and mitigation efforts and increase resource efficiency

Objective Number	Objective Title and Purpose	Available Points
CE-1	Climate Adaptation: Strengthen the resilience of communities to climate change impacts on built, natural, economic, health, and social systems	15
CE-2	Greenhouse Gas Mitigation: Achieve greenhouse gas emissions reductions throughout the community	15
CE-3	Greening the Energy Supply: Transition the local energy supply for both transportation and non-mobile sources toward the use of renewable, less carbon-intensive, and less toxic alternatives	15
CE-4	Energy Efficiency: Minimize energy use and demand in the residential, commercial, and industrial sectors as a means to increase energy efficiency in the community	15
CE-5	Water Efficiency: Minimize water use and demand as a means to conserve water in the community	10
CE-6	Local Government GHG & Resource Efficiency: Lead by example by reducing local government greenhouse gas emissions and minimizing energy and water use in local government facilities and specified local infrastructure	15
CE-7	Waste Minimization: Reduce and reuse material waste produced in the community	15
Total Points Available:		100



Recycling



Biking



Sustainability
Report Card



Community
Resources



Contact Us

Energy Action Plan

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Energy Action Plan

Fayetteville has exhibited leadership in our deliberate pursuit to reduce community wide energy usage through numerous city and community led plans, programs, and actions. In the past, these activities have often been led by the City government, but are increasingly being implemented by utility companies, building design professionals, local non-profit groups and community organizations.

In an effort to encourage and foster continued improvements in the Climate and Energy sector, the City has undertaken the development of an Energy Action Plan. This process is currently underway.

This page will be updated as portions of the plan are solidified.



Background

In early 2017, the City Council approved [Resolution Number 45-17](#) which expressed the City Council's support for the study and development of an Energy Action Plan in 2017.

City staff enlisted a group of stakeholders with expertise in the fields of energy conservation, energy efficiency/green building design and retrofit, renewable energy design and installation, electric and gas utilities, facilities management, and elected official to develop the framework for this plan.

The stakeholder group utilized the Sustainable Tools for Assessing and Rating Communities (STAR) outline to identify actions, policies, programs and partnerships to create the basis of the plan.

The [STAR rating system](#) defines community scale sustainability and presents a vision for communities to become more healthy, inclusive, and prosperous across seven goal areas. The STAR goals and objectives allow local governments and their communities to more

According to the 2016 Community Perceptions Survey:

78%

of Fayetteville residents would like the City to prioritize renewable energy and energy efficiency

62%

of Fayetteville residents would like the City to prioritize climate change preparedness

Ozarks HELP



- Total HELP Loans – 71
- Fayetteville residents with Loans – 26
- Total Home Energy Loans - \$444,203.60
- Number of Defaults - 0

Questions?

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