



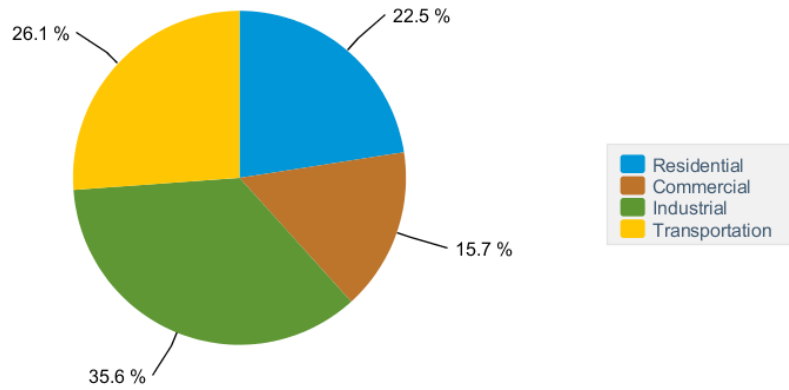
Arkansas Industrial Energy Clearinghouse

University of Arkansas
Mechanical Engineering Department

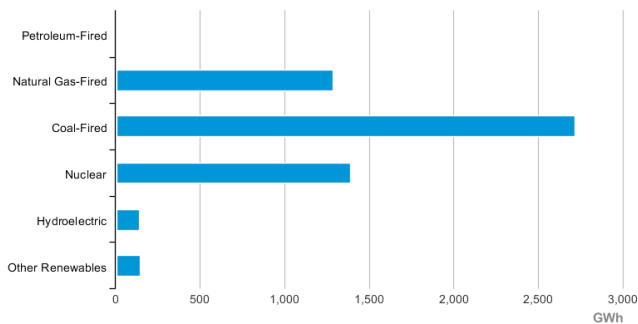
Chase Harding, PE, CEM
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Arkansas Energy Consumption

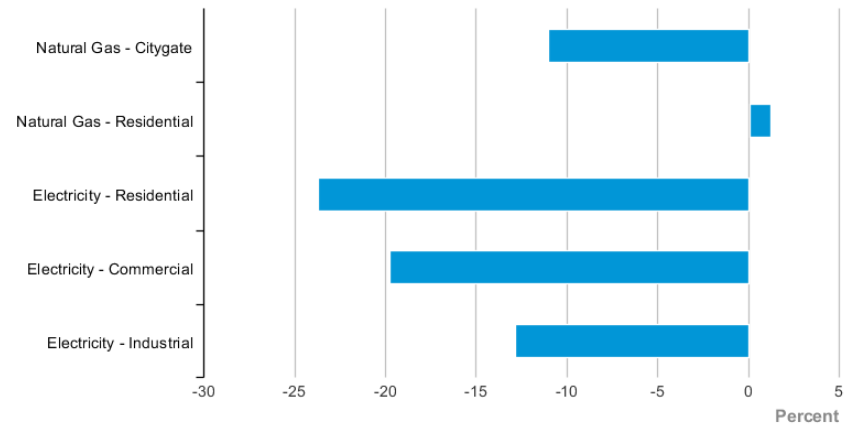
Arkansas Energy Consumption by End-Use Sector, 2010



Arkansas Net Electricity Generation by Source, Jan. 2013



Arkansas Price Differences from U.S. Average, Most Recent Monthly



Source: Energy Information Administration, Petroleum Marketing Monthly ; Natural Gas Monthly ; Electric Power Monthly

Arkansas industrial sector

- 4000+ manufacturing companies
- 36% of state's energy use
- Ranked 17th in US end-use energy consumption per capita
- Ranked 37th in US by ACEEE's 2013 state scorecard on energy efficiency, same as 2012



Arkansas Industrial Energy Clearinghouse

- **OVERARCHING GOAL** – to help Arkansas’s manufacturing sector become more competitive through utility cost reduction from energy efficiency
- **Attractive to Companies:**
 - All services are provided at no cost, unbiased, and independent
 - Access to energy experts from the UA-Fayetteville
- Preparing engineering students
- Loan equipment and instruments
- **2013 Statistics:**
 - Served 58 manufacturers across all of Arkansas
 - Energy efficiency recommendations of \$1.2 million/yr in energy savings
 - Over 11,000 hits on the website
 - 129 instrument loans
 - Participated in the National Governor’s Association Arkansas Policy Academy



Pratt and Whitney PSD Springdale, AR

- 2014 Arkansas Environmental Stewardship “ENVY” Award
- Reduced CO₂ emissions 11%
- Saved 515,000 kWh
- Reduced utility costs by \$34,000
- Reduced energy usage by 25% since 2009, even as production has increased 8%
- Adding significant production capacity this year



Rhein Chemie

Little Rock, AR



- Knew about significant steam system opportunities – thought they couldn't afford them
- System assessment showed costs, savings, and paybacks – including incentives from CenterPoint
- Major savings projects cost nearly covered by incentives – only about \$5,000 out of pocket cost to company
- Implemented measures will save \$70,000 annually
- Saves ~12,000 MMBtu/yr

Alliance Rubber Hot Springs, AR



- Complete facility energy assessment through DOE IAC program.
- Recommended projects that will save \$36,700 and 668,900 kWh annually
- Process heating recommendation is low cost and saves 253,000 kWh annually with 1/2 year payback.
- Pumping project saves over 223,000 kWh annually with 0.2 year payback.