

A Look at Arkansas's Advanced Energy Landscape

Katie L. Niebaum, AAEA Executive Director

Joint Energy Committee

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AAEA's Mission: As the business voice for advanced energy in Arkansas, the Arkansas Advanced Energy Association is dedicated to growing Arkansas's economy by expanding our energy workforce and manufacturing base through the increased development, manufacture and utilization of advanced energy technologies.

ArkansasAdvancedEnergy.com

What is Advanced Energy?

Any service or technology that makes America's energy supply more secure, clean and affordable, including (but not limited to):

- Biofuels and BioProducts
- Compressed Natural Gas & other clean burning fuels
- Energy Efficient Buildings
- Smart Grid Technologies
- Geothermal
- Hydropower
- Nuclear
- Solar
- Wind
- Energy Storage























































Johnson

Controls



























ENERGY









































Benefits of Advanced Energy to AR

- Creates Direct Jobs, Indirect Jobs, Induced Jobs
- > Saves money, better use of tax payer dollars
- > Reduces risk
- Extends grid capacity
- > Avoids or delays investment in new infrastructure
- > Stabilizes energy prices



Arkansas Advanced Energy Jobs Study

October 2014

Commissioned by



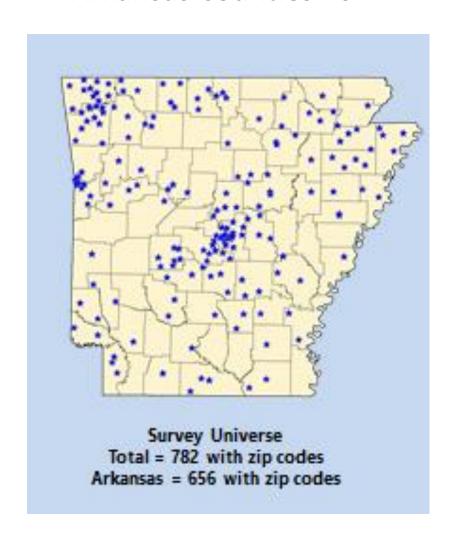
Performed by James Metzger, HISTECON Associates

With Statistical Analysis by Arkansas Economic Development Institute, UALR



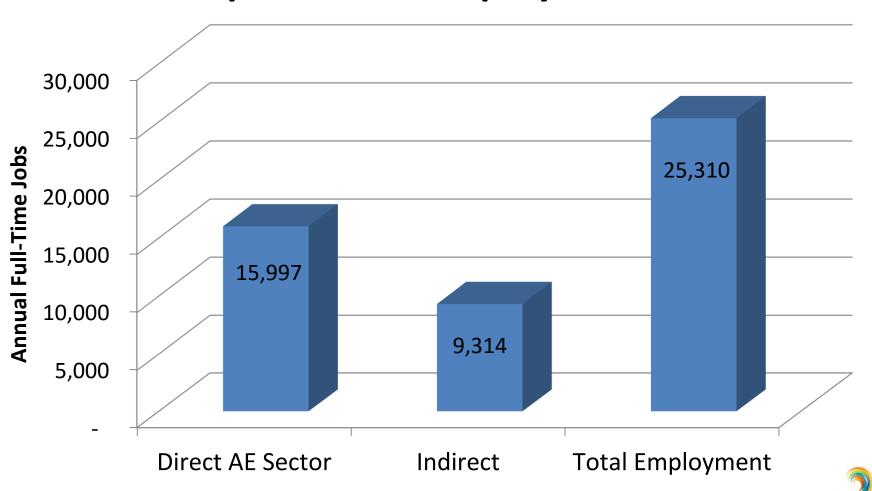
Location of Advanced Energy Firms

Arkansas Counties 2014

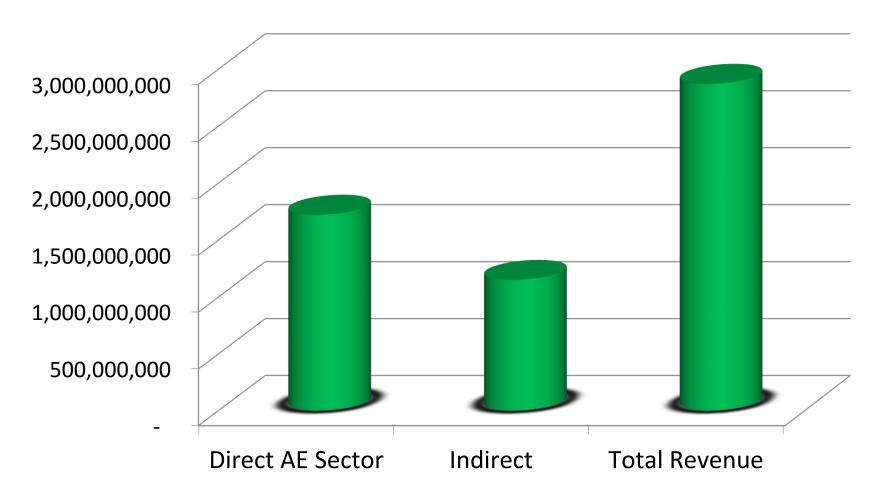




Footprint of AE Employment-Arkansas

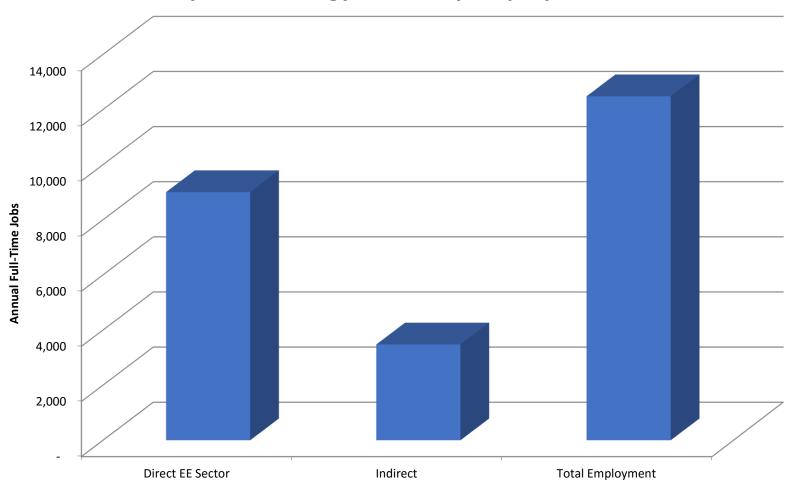


Estimated Company Revenue, Arkansas, 2014





Footprint of Energy-Efficiency Employment in Arkansas





According to the Department of Energy's U.S. Energy and Employment Report, the "clean energy" sector supported more than 3 million U.S. jobs in 2016, including:

- Nearly 2 million workers making buildings, appliances and other products more energy efficient, saving money for families and businesses.
- More than 600,000 workers involved with clean power generation, including biomass, biogas, fuel cells, geothermal, hydropower, nuclear, natural gas, solar, waste-to-energy, and wind.
- > 100,000 workers in advanced grid technologies, including energy storage, and another 100,000 workers in biofuels.
- In addition, advanced transportation, including hybrid, electric, and fuel cell vehicles, support **200,000** more jobs.



Advanced Energy = \$200 Billion Industry in the U.S.

- ➤ U.S. advanced energy revenue for 2016 is nearly double beer sales, equal to domestic pharmaceutical manufacturing, and approaching wholesale consumer electronics.
- ➤ Over the past six years, the U.S. advanced energy market has grown 28 percent.
 - -- Advanced Energy Now 2017 Market Report

Arkansas Energy Survey:

Released 2015

Commissioned by Arkansas Advanced Energy Foundation

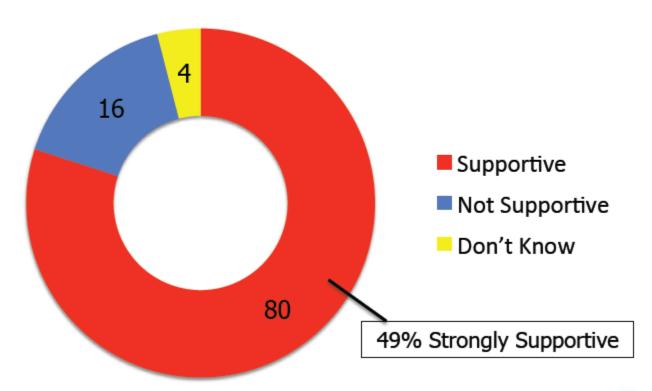
Performed by Impact Management Group, Little Rock, AR

600 Arkansas Voters/Margin of Error: +/- 4%



Supportive of "Renewable Energy"

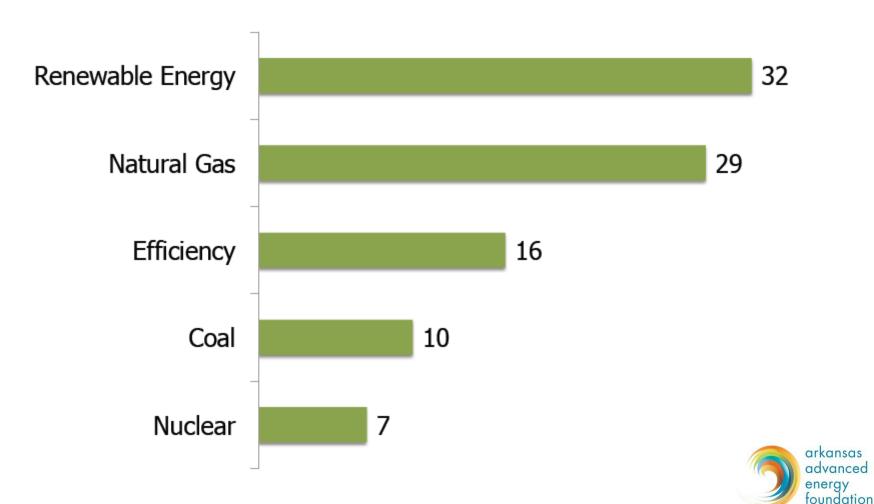
In general, how supportive are you of increasing the use of renewable energy like wind and solar power in Arkansas?





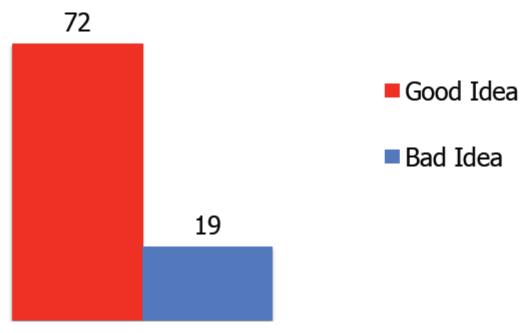
Future Energy Needs?

Over the next 10 years how do you think Arkansas' energy needs would be best met?



Retirement of Coal Power Plants?

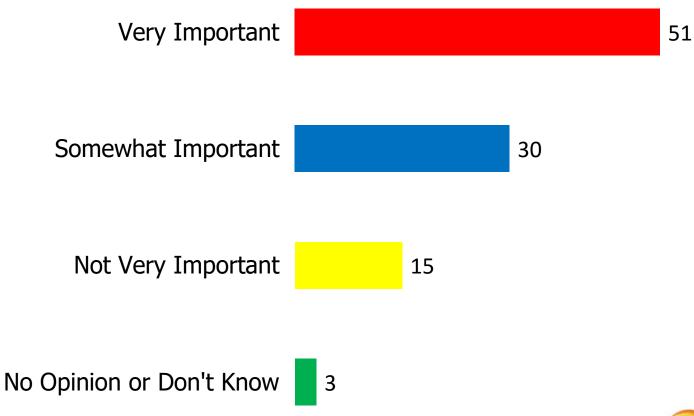
Arkansas power companies are considering retirement of one or more coal-fired power plants and replacing them with natural gas power plants as well as generating more energy from renewable sources and increased energy efficiency? Good Idea or Bad Idea?





Importance of Political Leaders to Develop Policies?

How important should it be for Arkansas' political leaders to develop polices that encourage energy efficiency and expand access to renewable energy, like wind and solar power?





Key Policies Fostering Advanced Energy Job Growth in Arkansas:

- >Arkansas Energy Performance Contracting
- Utility Energy Efficiency Programs
- > PACE financing
- ➤ Net metering PSC proceeding



Thank you!

Katie L. Niebaum

katie@arkansasadvancedenergy.com

(501) 537-0190