

arkansas advanced energy foundation

Stakeholder Meeting On Economic Impacts to Arkansas Associated with EPA's Proposed Clean Power Plan Presentation By: Ken Smith, Policy Director, AAEF Jim Metzger, President, HISTECON Associates

> "Economic Impact of Energy Efficiency" August 28, 2014

ACEEE Assessment of role of EE in meeting 111(d)

- ACEEE undertook an analysis of how much energy efficiency could contribute toward GHG reductions nationally and toward all 50 states.
- Estimated what the cost and benefits would be to implement energy efficiency.
- ACEEE estimated EE potential in all 50 states from:
 - Energy savings target of 1.5% annually
 - Residential & commercial building codes
 - Combined heat & power
 - State appliance standards for 5 products
- ACEEE estimates conservative—some states already doing more.



Annual Energy Savings from Energy Efficiency in Arkansas

	12,000,000						
	10,000,000						
	8,000,000						
hWM	6,000,000						
	4,000,000						
	2,000,000	6					
	2016	2018	2020	2022 2024 Year	2026	2028	2030
		Annual e	nergy savings target CH	Building energy codes	Appliance standards		
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Arkansas Annual Energy Savings by Policy (MWh's)

Policy	2020	2030
Utility EE Targets	1,860,000	8,459,000
СНР	85,000	262,000
Building Codes	317,000	1,301,000
State Appliance & Equipment Standards	63,000	88,000
State Total	2,325,000	10,100,000



Source: Hayes, S. et al. 2014. Change Is in the Air: How States Can Harness Energy Efficiency to Strengthen the Economy and Reduce Pollution. Washington, D.C.: American Council for an Energy-Efficient Economy. http://aceee.org/research-report/e1401

Energy Efficiency Can Meet More than 40% of State Target

- EPA state target is 47% reduction
- ACEEE modeled energy efficiency measures achieve 19% reduction
- Even more efficiency opportunities are available in the state—opportunities to build on existing EE programs & look at CHP



Resources

ACEEE's state Opportunity Report: http://aceee.org/research-report/e104

ACEEE's CPP report: <u>http://aceee.org/research-report/e1401</u>

Template for crediting EE: <u>http://aceee.org/files/pdf/sip-template-0314.pdf</u>

Harvard Law article on legal basis of CPP: <u>http://blogs.law.harvard.edu/environmentallawprogram/files/2013/03/The-</u> <u>Role-of-Energy-Efficiency-in-the-111d-Rule.pdf</u>

EPA Avert tool: http://epa.gov/avert/

"3N" Principles: http://www.naseo.org/Data/Sites/1/principles_3n_2014.pdf

"3N" Preamble: <u>http://naseo.org/Data/Sites/1/media/suggested-emv-preamble-language_4-22-14.pdf</u>



What Does this Mean for Arkansas?

- Including as much energy efficiency as possible results in lowest compliance cost
- Energy efficiency can contribute to economic growth in the state by keeping energy dollars local
- Energy efficiency can maintain or create more jobs than continuing to rely on supply solutions
- Energy efficiency can increase the competitiveness of Arkansas businesses



Economic Impact of Arkansas Utility Energy Efficiency Programs

Prepared by HISTECON Associates, Inc. Little Rock, AR

Location of Energy Efficiency Contractors Arkansas Counties 2014



Arkansas = 529 with zip codes



Survey Respondents Total = 113 with zip codes Arkansas = 98 with zip codes

Source(s): HISTECON Associates, Inc.; Pitney Bowes Software, Inc.

EE Activity by Group



Map 2. Annual E.E. Sales of Survey Respondents Arkansas Counties 2014



Source(s): HISTECON Associates, Inc.; Pitney Bowes Software, Inc.



How Energy Efficiency Creates Jobs





Footprint of EE Employment-Arkansas



Economic Growth from the EERS Program

- It is fair to ask how much of the \$1 billion in EE activity is generated from utility programs promoted by the state PSC.
- After the three-year period of the EERS program, \$318 million in additional EE spending was logged annually by the contractors.

Viewed a different way, we can see that annual EE sales are now 44 percent higher overall than they were prior to the advent of the program. This figure is much higher (86%) for the smaller firms.



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Questions and Answers