

Opportunities to Ramp Up Low-Income Energy Efficiency to Meet Climate Policy Goals

2016 ACEEE Summer Study on Energy Efficiency in Buildings

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Synapse Energy Economics

- Founded in 1996 by CEO Bruce Biewald
- Leader for public interest and government clients in providing rigorous analysis of the electric power sector
- Staff of 30 includes experts in energy and environmental economics and environmental compliance

What is the current landscape of low-income energy efficiency across the country?

- Does the level of funding for low-income energy efficiency differ across 1) groups of states with higher and lower poverty rates?
- Does the cost of saved energy for low-income energy efficiency differ 2) across groups of states with higher and lower poverty rates?

Summary of Findings

- 1. In our dataset, states with a higher proportion of low-income residents spend less on low income energy efficiency
- 2. In our dataset, low income energy efficiency does not cost more in states that are spending more

Policy Context: Why Is This Important?

August 2015: EPA's Clean Power Plan (CPP)

- 30% below 2005 levels by 2030
 - Clean Energy Incentive Program (CEIP) for low income

December 2015: COP21

Similar targets as CPP

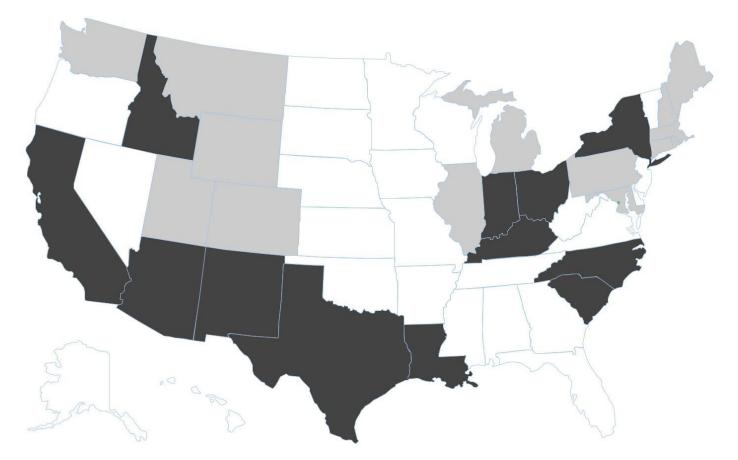
Dataset

	Source
Poverty Rate	U.S. Census Bureau/2014 Annual Social and Economic Supplement of the Current Population Survey
Utility Revenues from Residential Sales	EIA, 2012
Ratepayer-Funded Low-Income Energy Efficiency Programs:	
Costs	Program Administrator (PA) Filings (most recent actuals)
Savings	PA Filings (most recent actuals)

Geographic Coverage of Dataset

74 PAs in 26 states

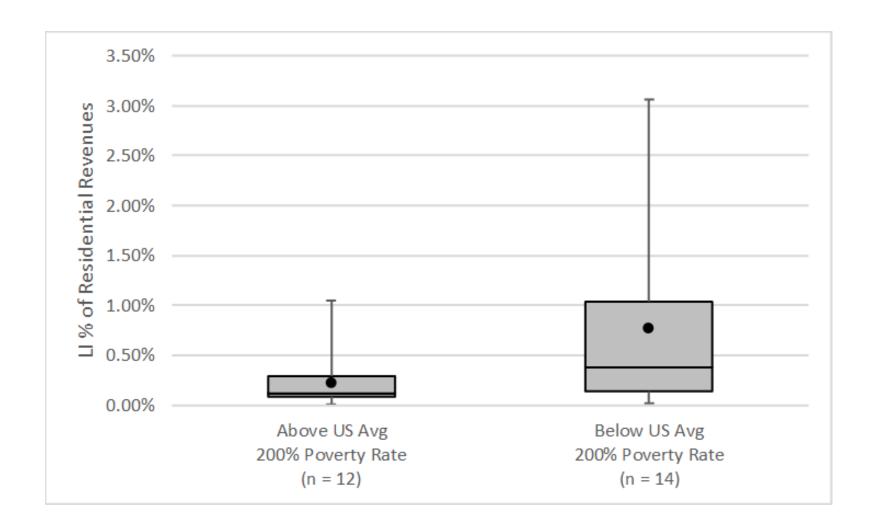
- 12 with higher poverty rates than the U.S. avg (33.9%), in dark grey
- 14 with lower poverty rates, in light grey



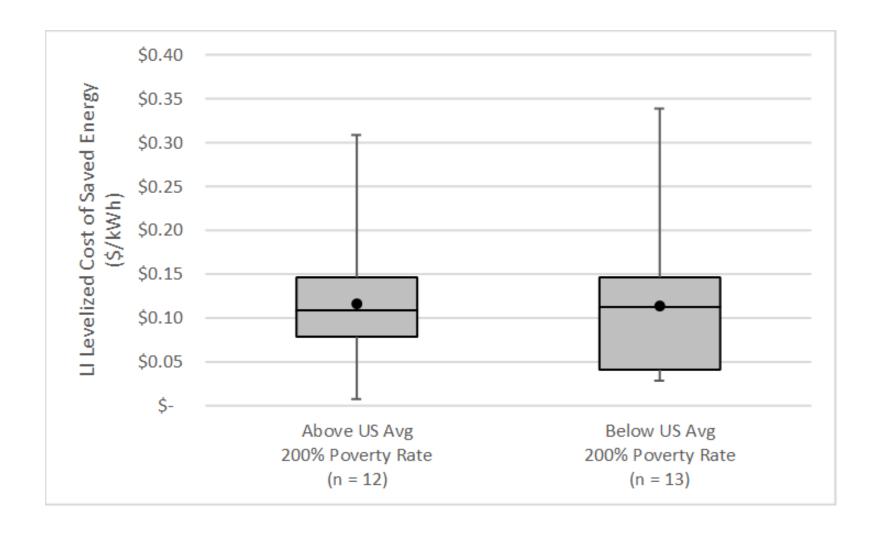
Summary of Findings

	LI EE Investment / Residential Revenues (%)	Cost of Saved Energy (\$/kWh)
States with Higher Poverty Rates	0.12%	\$0.11/kWh
States with Lower Poverty Rates	0.38%	\$0.11/kWh

Findings on Low-Income Energy Efficiency Investment



Findings on Low-Income Energy Efficiency Cost of Saved Energy



Opportunities to Expand Low-Income Energy Efficiency

National	 Establish incentives to promote more equitable energy efficiency Support inclusion of low-income data in the National Energy Efficiency Registry
State	 Develop a framework to help states think about target setting Explore opportunities to establish an ongoing funding stream for low income energy efficiency Implement policies and practices to drive more equitable efficiency implementation
Utility Regulators/ PAs	 Scale up low income energy efficiency/improve program designs Improve cost effectiveness screening practices

Additional Resources

Policies and practices to address equity in energy efficiency:

http://www.synapse-energy.com/sites/default/files/EE-Factsheet.pdf http://www.synapse-energy.com/sites/default/files/EE-Handbook.pdf

Clean Power Plan, webinars and tools:

http://www.synapse-energy.com/webinars

http://www.synapse-energy.com/tools/clean-power-plan-planning-tool-cp3t

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