



## **Stimulating Statewide Energy Savings through Savings Targets and Ratepayer Funded Programs**

Annie Downs, American Council for an Energy-Efficient Economy

Dub Taylor, State of Texas

Sara Telano, State of Arkansas

Dan Saucier, State of Mississippi

Jenah Zweig, Southeast Energy Efficiency Alliance



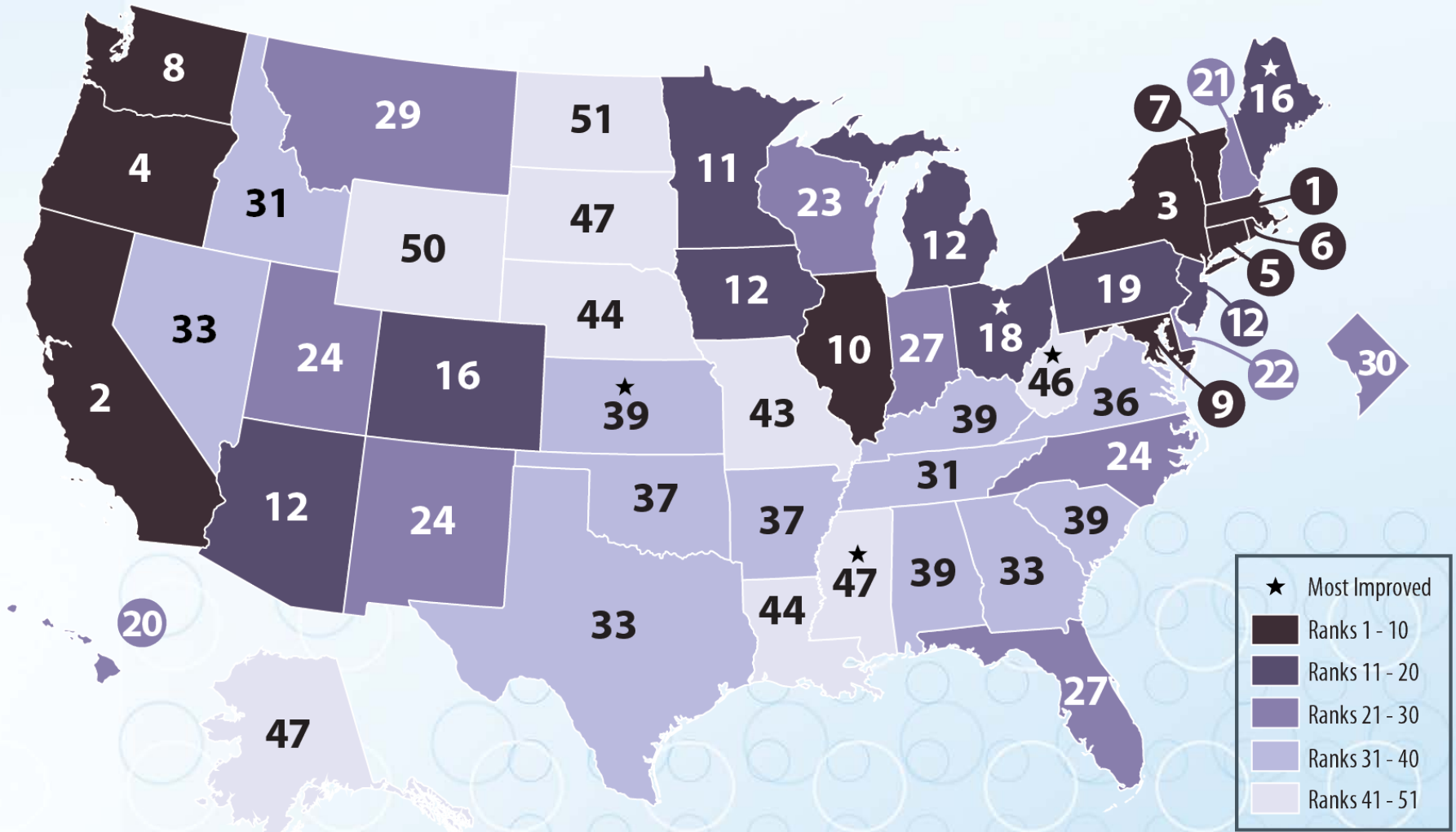
# National Trends in Energy Efficiency: Spending, Savings, and Targets

Better Buildings Summit

Annie Downs

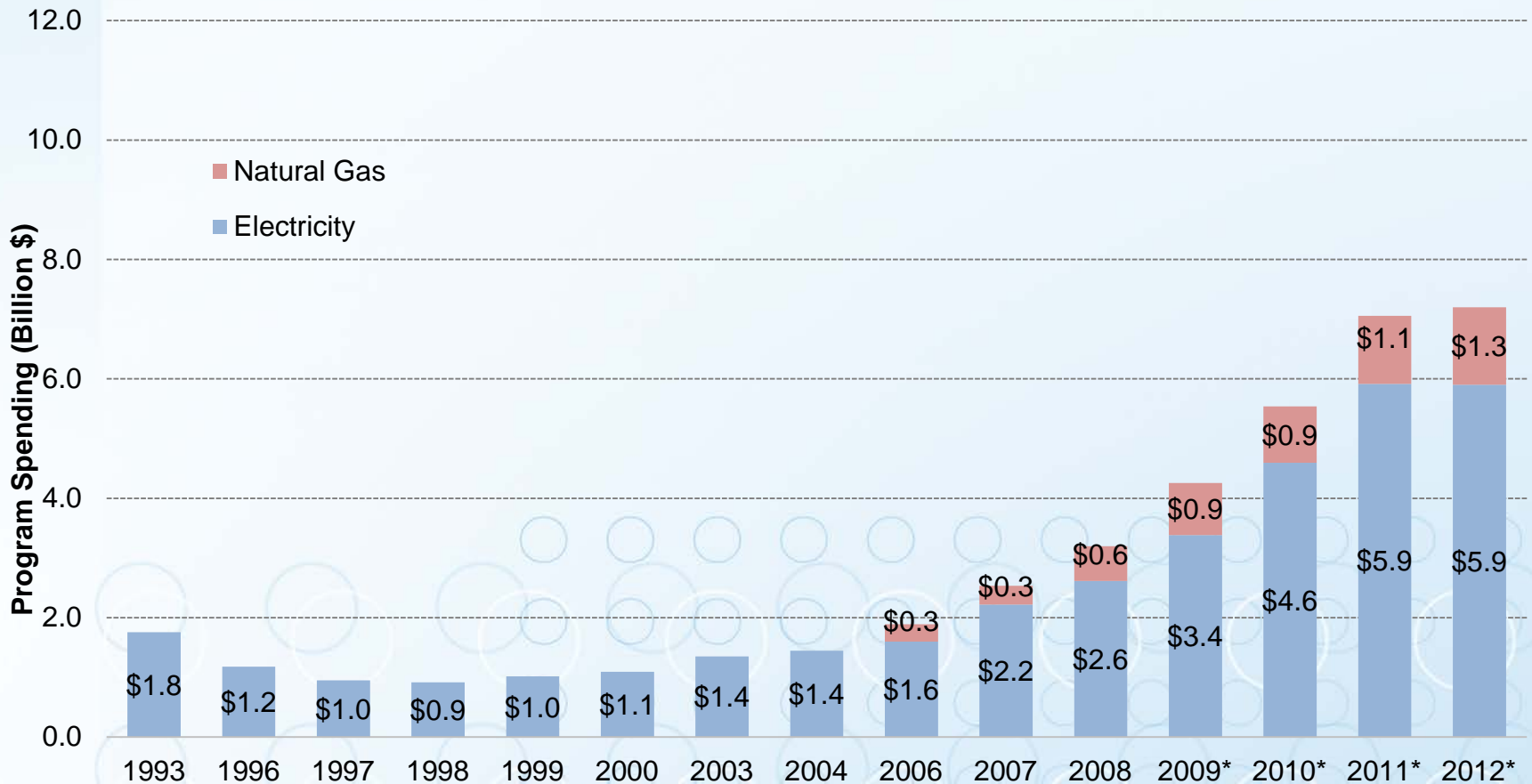
May 9, 2014

# 2013 State Scorecard Results



# Key Findings: Utility Spending

## Customer-funded Energy Efficiency Program Spending

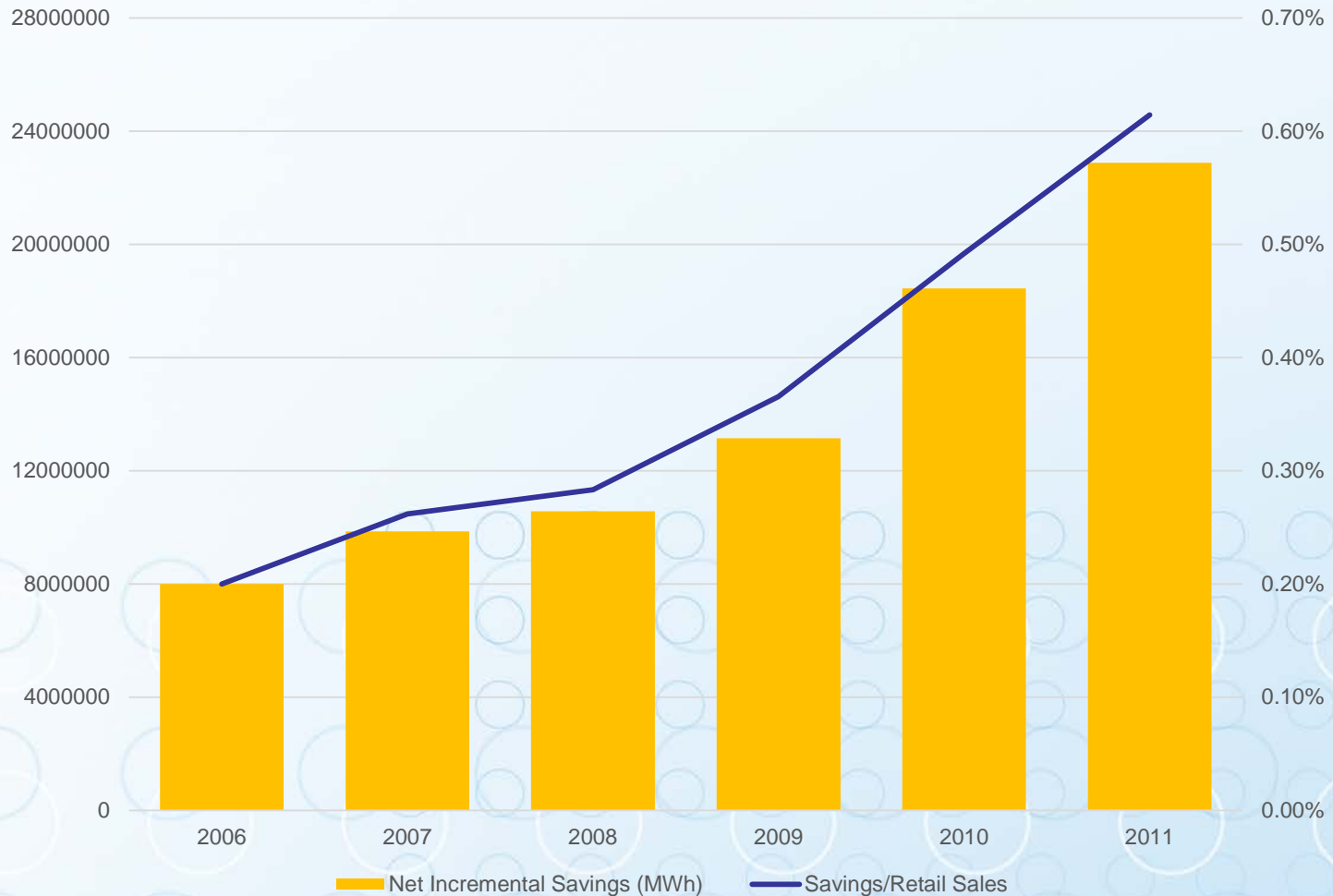


Sources: ACEEE (1993-2011); CEE (2012)

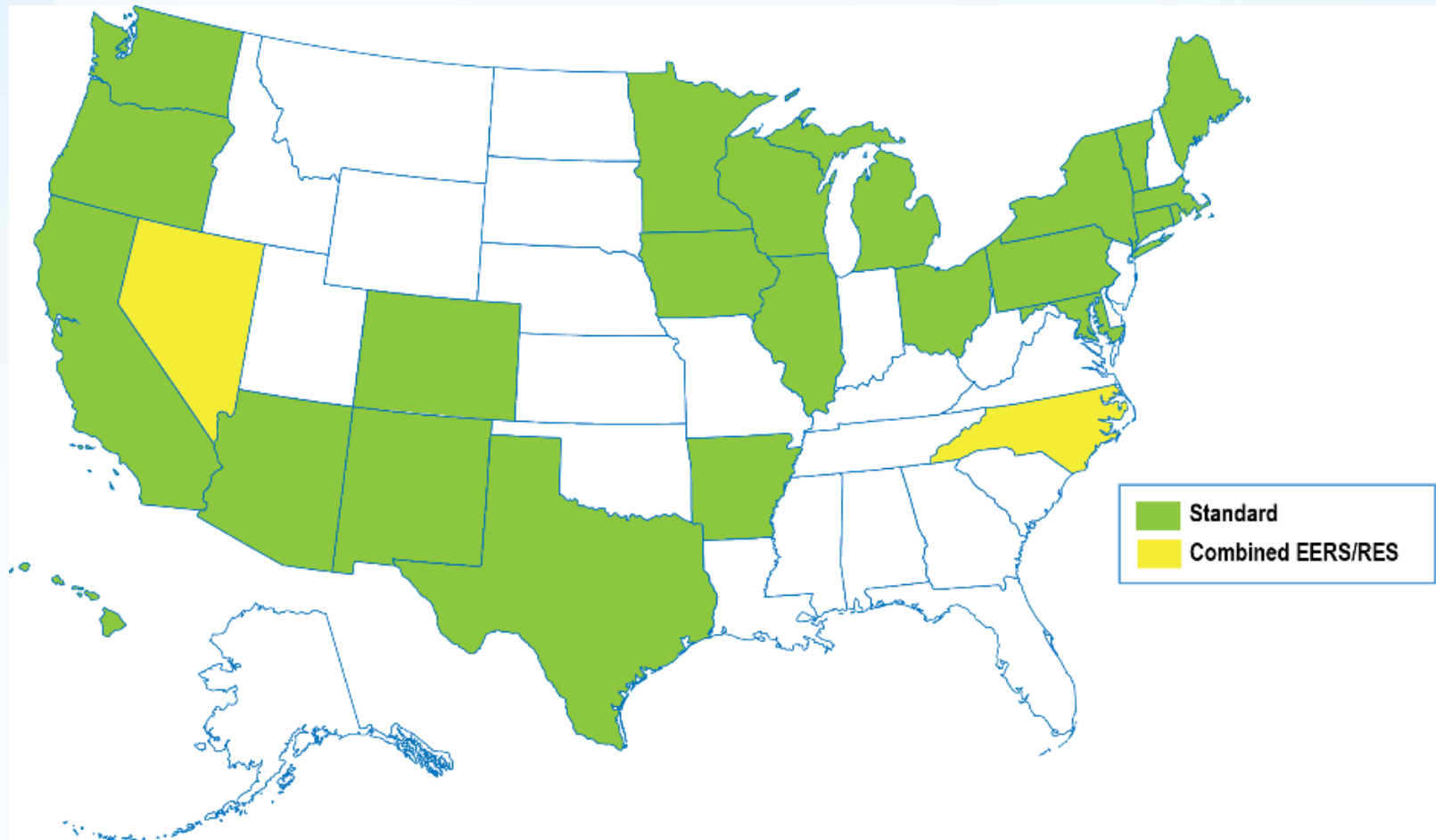
\*2009-2012 are budgets, 1993-2008 actual spending

# Key Findings: Electricity Savings

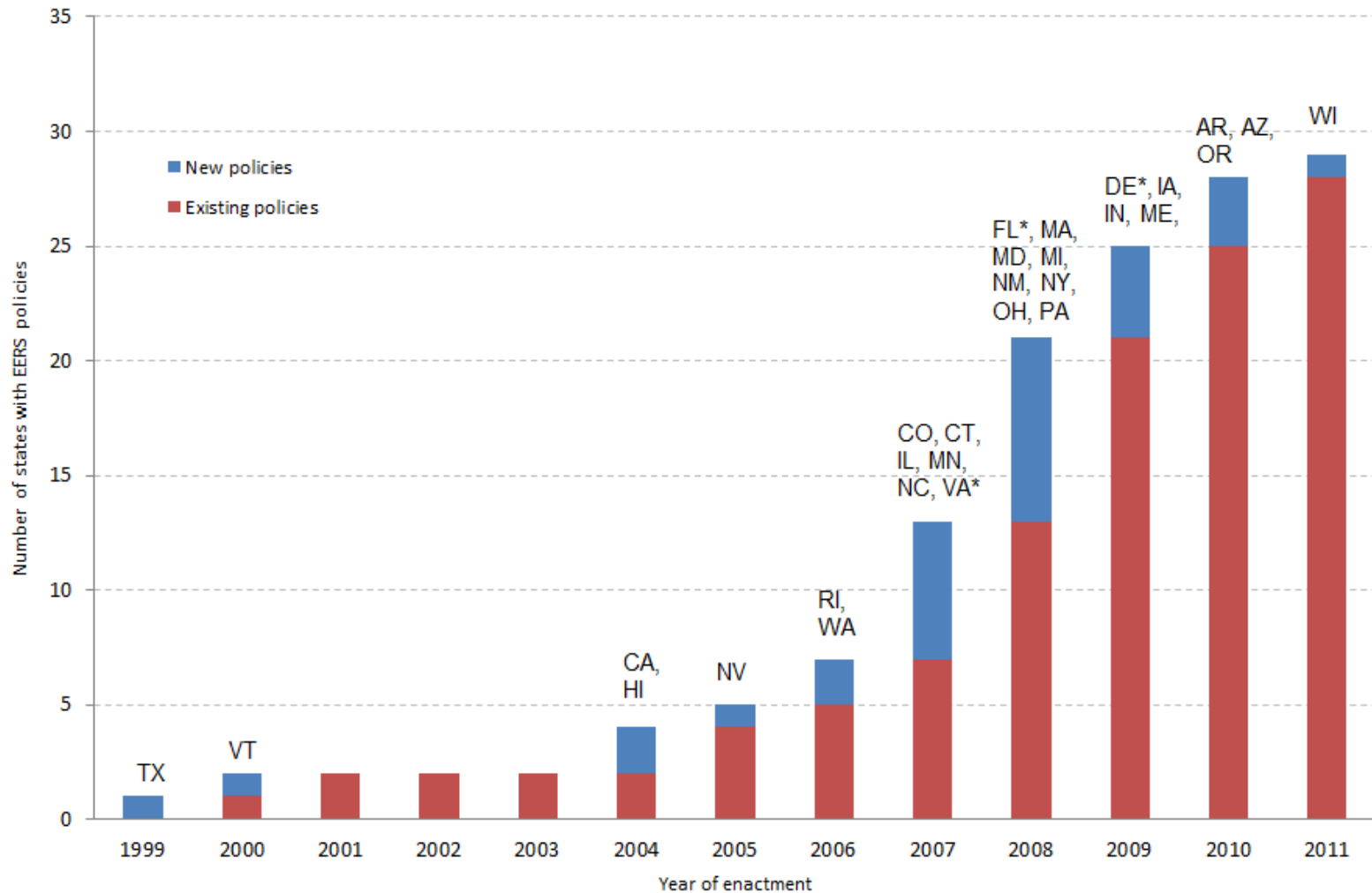
Net incremental savings (2011) = 22 million MWh (+20%)



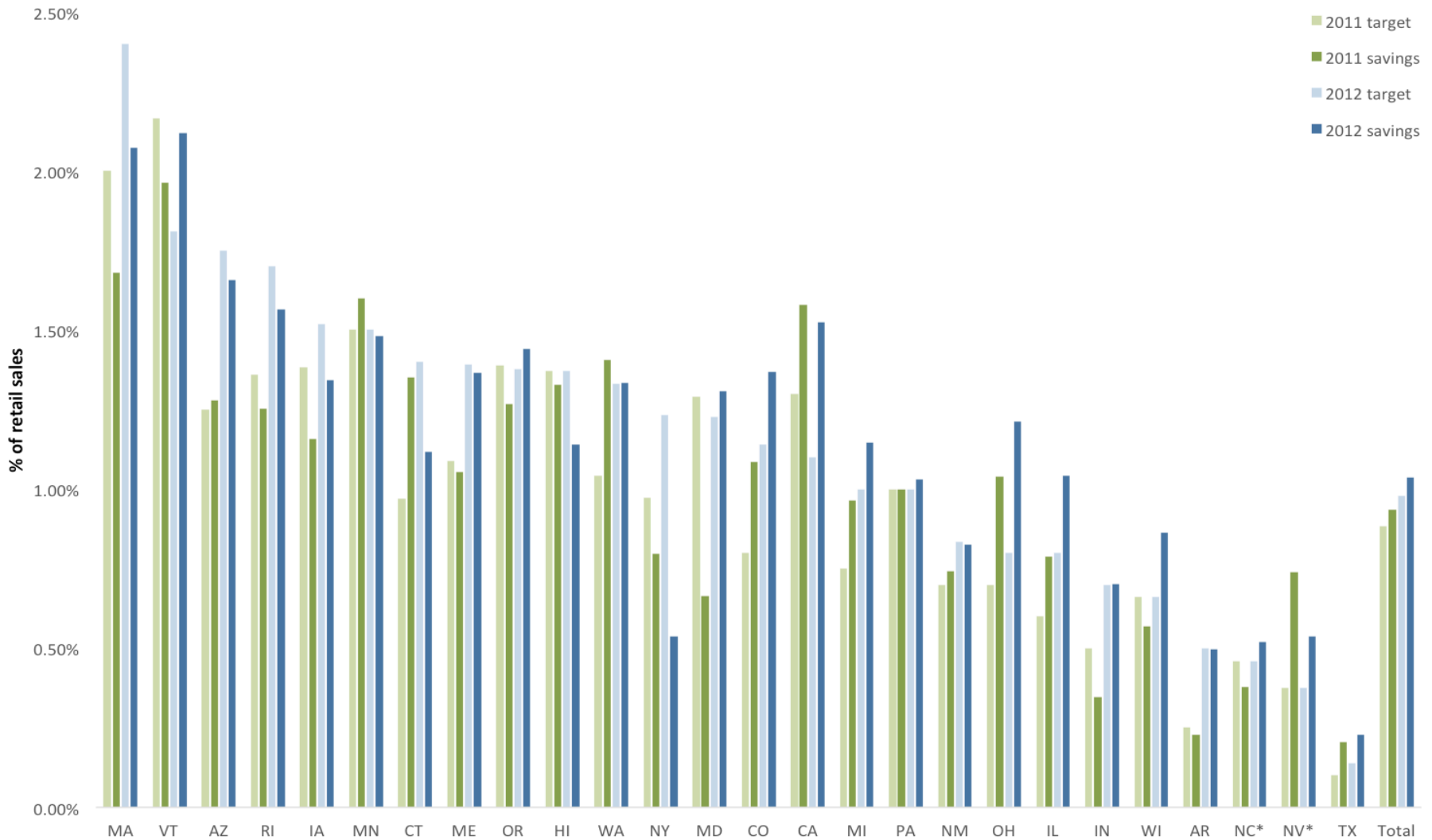
# Current EERS Policy Status



# Year of EERS Adoption

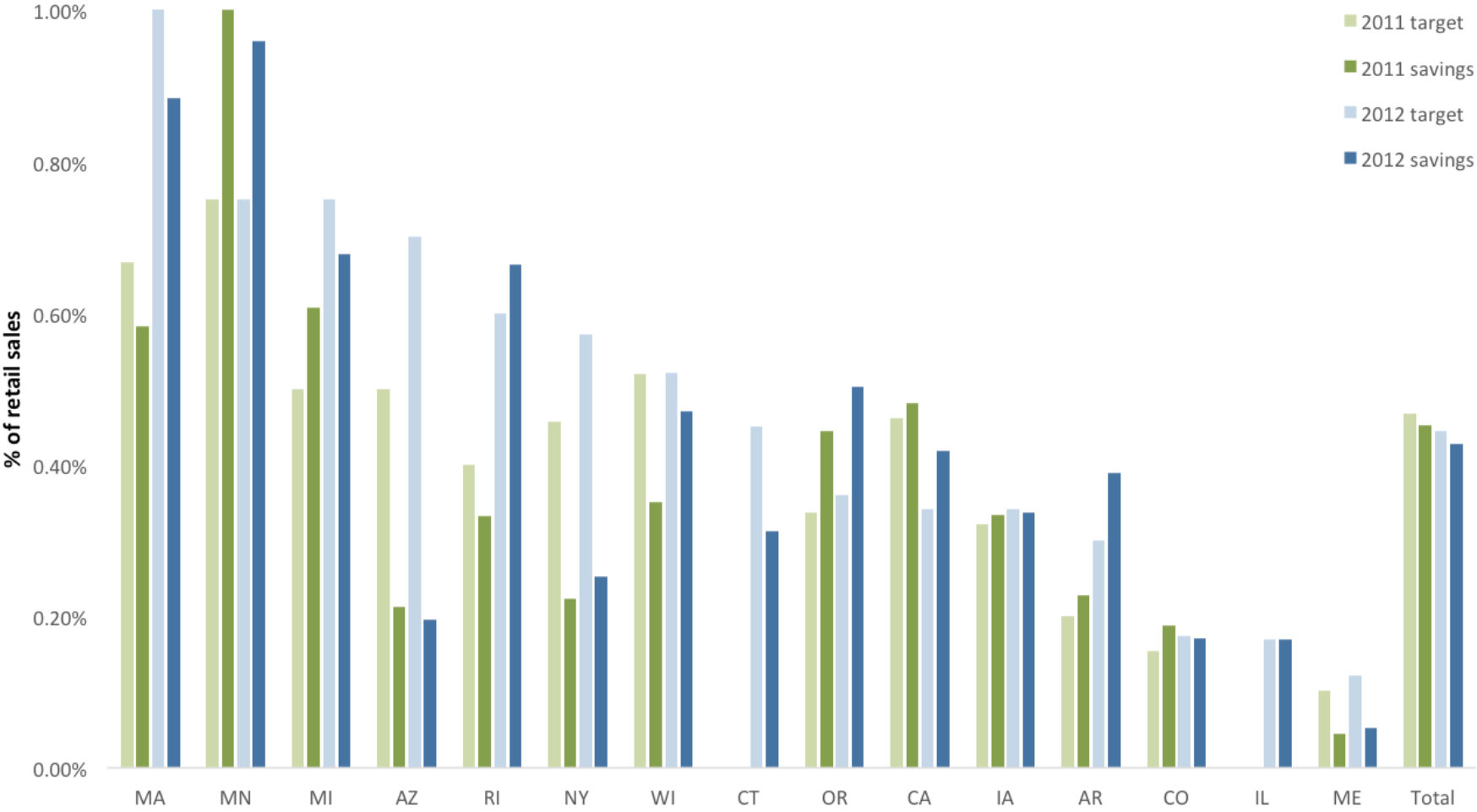


# Electric Savings & Targets, 2011-2012





# Natural Gas Savings & Targets, 2011-2012



# Resources

<http://aceee.org/state-policy/scorecard>

NEW! “Score Sheets” for each state!

<http://aceee.org/sector/state-policy/toolkit>

Technical Assistance Toolkit for Policymakers

[aceee.org/local-policy/scoring-tool](http://aceee.org/local-policy/scoring-tool)

Tool for scoring any local gov’t on *City Scorecard* metrics

# Thank you!

Annie Downs

State Policy Research Analyst

[adowns@aceee.org](mailto:adowns@aceee.org)

202-507-4002



# Strategies to Build Consensus MOU/Electric Co-op EE Programs

Dub Taylor  
Director, SECO

# About SECO

- Mission: to increase the efficient use of energy and water while protecting the environment
- One of 56 state/territory “energy offices”
- Focus is technology deployment – no R&D
- U.S. Department of Energy state level program conduit
  - State Energy Program (SEP)
  - Pantex/Waste Isolation Pilot Plant (WIPP)

# Electricity Policy in Texas

- 1995 – wholesale competition
  - Integrated Resource Planning
    - Deliberative polling – EE/RE preferred by customers
- 1999 – retail competition
  - Renewable portfolio standard
  - Energy efficiency portfolio standard (IOUs)
  - MOU’s and Co-ops “opt in” provisions
    - Self regulated – boards/commissions/councils
- 2007 – MOU/Co-op EE reporting

# DOE SEP Competitive - Proposal

## **“Accelerating Energy Efficiency Program Deployment in Locally-Governed Electric Service Areas”**

- Goal: review, evaluate and incorporate successful EE best practices into a guide that will simplify the development and/or enhancement of EE program initiatives for residential and commercial customers

# Why MOUs and Co-ops?

- Relationship with Texas Public Power Association
  - 72 municipal systems, 15% of customers in Texas
  - Self-regulated, local decisions
- Large MOUs setting the standard already
  - Austin Energy
  - City Public Service (San Antonio)
- Mid-sized MOUs with scattered EE programs
- Small MOUs/Co-ops not well positioned to develop and deliver EE programs
- Target = mid-sized MOUs/Co-ops



# Key Subcontractor

- Professional services solicitation
- Nexant selected
  - Long history working with utilities on strategy and program design/implementation
  - Team included Cadmus Group
- Project elements
  - Survey of 400 EE programs in 7 categories
  - Identify local constraints, barriers, priorities
  - Provide support for planning and implementation
    - Budgets, EM&V, cost-effectiveness analysis, rate impact analysis, market considerations

# Project Deliverables

- Energy Efficiency Best Practices Guide
  - Survey of utility EE programs nationwide
  - 308 page “compendium” published 10/31/2011
  - Transferable
- “Calculator” for selecting appropriate EE program structures
  - Transferable
- Individual consulting with select MOUs to design and initiate EE programs

# Where are we?

## Successes

- Increased and diversified EE program offerings over the last three years
- Enhanced visibility for EE program business case – not just a cost/rate increase

## Challenges

- Smaller systems lack deep customer service team – limited bandwidth to even test EE
- Treatment of EE programs as marketing – no expectation of return and no impact tracking

# Opportunities



Wednesday  
March 9, 2011 5:15 PM  
ERCOT Load: 31,262 MW  
Temperature in Dallas: 64°



3/9/2011 IE 17:15



8/3/2011 IE 17:00

Wednesday  
August 3, 2011 5:00 PM  
ERCOT Load: 68,416 MW  
Temperature in Dallas: 109°

# Questions?

Dub Taylor, Director  
State Energy Conservation Office  
[dub.taylor@cpa.texas.gov](mailto:dub.taylor@cpa.texas.gov)

[www.seco.cpa.state.tx.us](http://www.seco.cpa.state.tx.us)

# Stimulating Energy Savings:

## The Arkansas Initiative

**Sara Telano**

Arkansas Energy Office (AEO)

Department of Energy

Better Buildings Summit 2014



 **ARKANSAS**  
*A natural for business*

# Background

**Arkansas Energy Office:** Resource for Technical Assistance and Support.

**Arkansas Public Service Commission (APSC):** The APSC regulates jurisdictional public utilities (electric and natural gas investor-owned utilities and rural electric cooperatives) within AR.

**Energy Conservation Endorsement Act (ECEA) of 1977:** Authorizes the APSC to propose, require, approve, implement, and monitor energy conservation programs and measures and adjust utility rates accordingly.



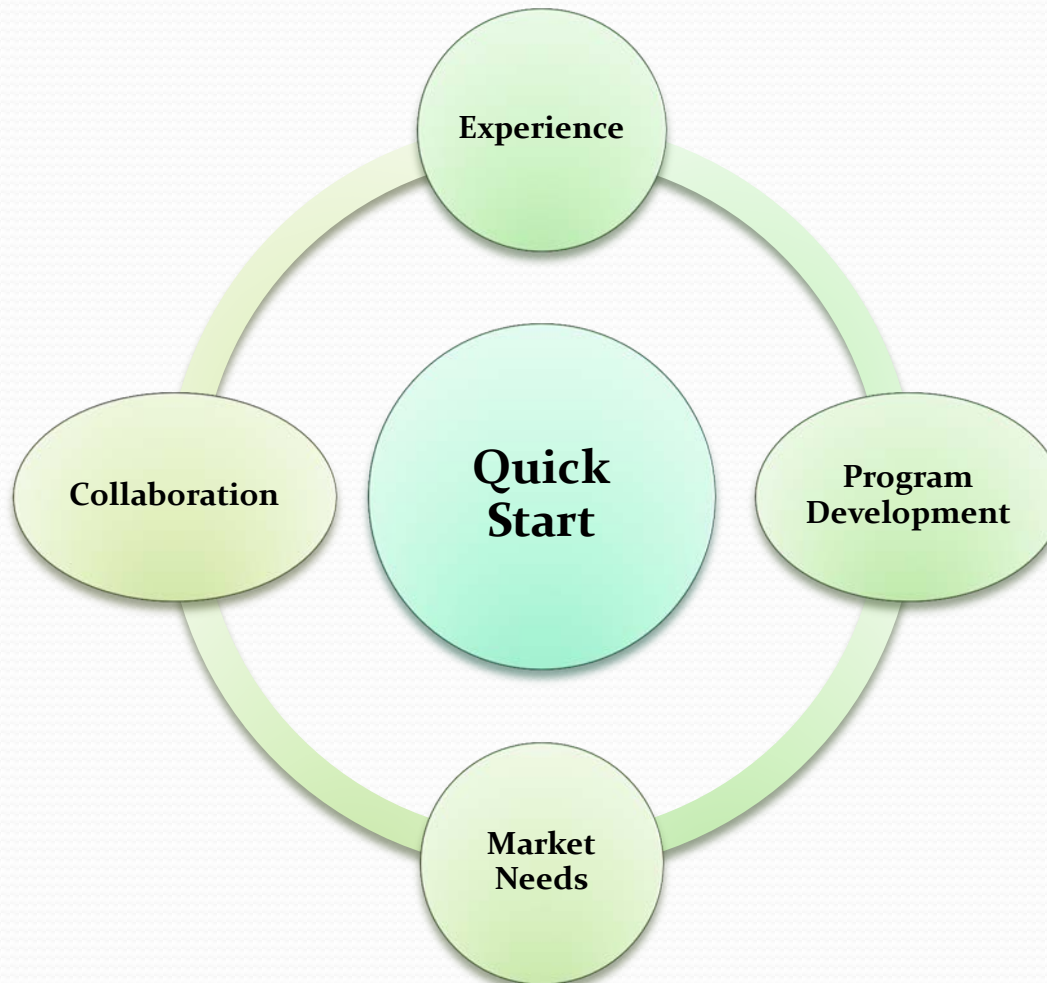
# Early Start 2006

- A very gentle start, but...
- In 2006, the APSC initiated a collaborative that led to a rulemaking. The collaborative was facilitated by the Regulatory Assistance Project (RAP).
- In 2007, the APSC adopted the Rules for Conservation and Energy Efficiency Programs.
- The rules required utilities to implement EE Plans and implement “Quick Start” EE programs beginning in the Fall of 2007.





# Quick Start: Lessons



# Quick Start: Challenges & Opportunities

- **Fostering Communication:**
  - Workshops
  - Outside facilitation
  - Technical assistance provided by the Regulatory Assistance Project (RAP)
  - Commissioners, APSC Staff, utilities and other stakeholders
- **Topics included:**
  - EE effects on utility revenues and profits
  - Presentation by each IOU on demand side management
  - Programs for different sectors



# Comprehensive EE Framework

- In 2010, the APSC required electric and gas IOUs to submit “*comprehensive*” plans to achieve new, rising energy savings goals over the next three years (2011-2013).
- EM&V with independent oversight by an Independent Evaluation Monitor (IEM)- an “evaluator of the evaluators.”
- Performance incentives structure:
  - Allowed utilities to collect “Lost Contribution to Fixed Cost” (LCFC).
  - Established a “shared savings” incentive structure to reward utilities for meeting and exceeding energy savings targets.

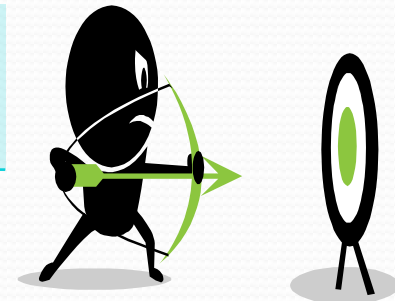


# Energy Savings Target

- Energy savings target % of retail kWh or therm sales volume:

	2011	2012	2013	2014	2015
Electric	.25	.50	.75	.75	.90*
Gas	.20	.30	.40	.40	.50

\*The baseline for targets starting in 2015 is total 2013 kWh sales. Baseline for prior years are total 2010 kWh sales.



# Energy Savings Success

<b>Utility</b>	<b>2011 Reported Savings</b>	<b>2012 Reported Savings</b>	<b>2013 Reported Savings</b>
Entergy Arkansas	41,958	107,627	188,557
SWEPCO	10,955	17,767	25,387
Oklahoma Gas & Electric	4,985	125,552	13,411
Empire	3	158	177
Total savings (all IOUs)	63,340	126,681	227,532
% of target achieved	91%	99%	100+%

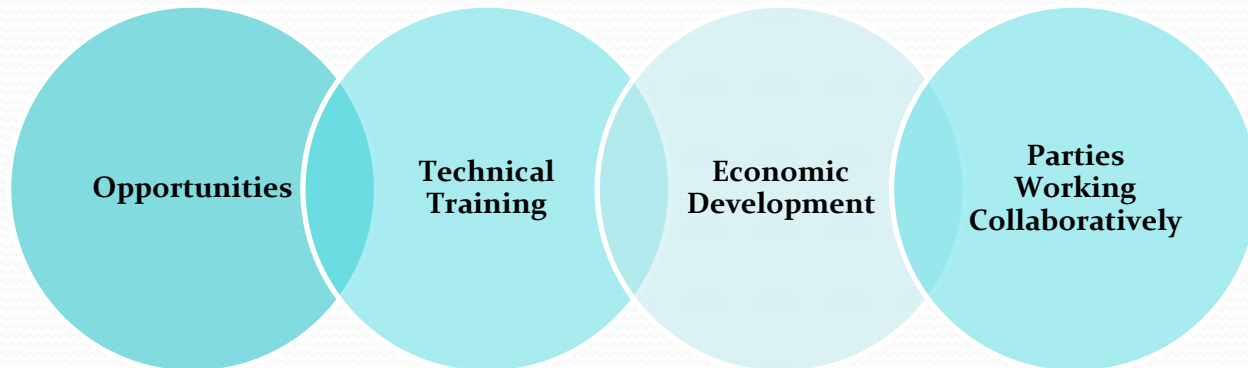
Source: Utility Annual Reports. Energy savings are net savings as reported by utilities (kWh).  
<http://www.apscservices.info/>



# Comprehensive EE Framework

## Success in 2013

- EM&V indicates that the benefit of the 2013 program year is about \$109 million, net of program costs (gas and electric).
- The State's largest electric IOU has submitted an IRP that plans to avoid 700 MW of capacity over the next 10 years—basically avoiding a power plant.
- 2013- Some evidence that cost-effectiveness is improving as start-up costs recede.



# Where We are Today

- Recent orders approved joint motions by utilities and intervening parties to extend the same 2013 targets to 2014.
- In September 2013, the APSC issued Order No. 15 in Docket No. 13-002-U setting an electricity target of 0.9% and a natural gas target of 0.5% in 2015.
- 2016-2017 targets pending completion of the Arkansas Energy Efficiency Potential Study.



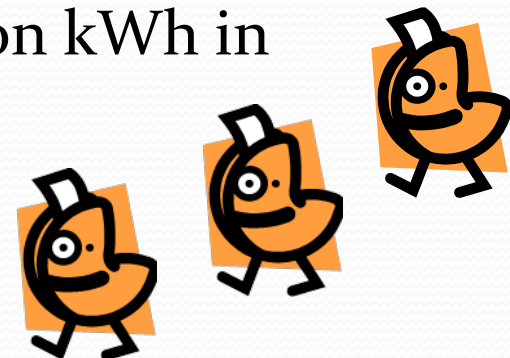
# Arkansas EE Potential Study

- Collaboratively-designed RFP calls for the Study to lay the groundwork to help “maximize the achievement of cost-effective EE potential.”
- The Study will provide Arkansas-specific information that will assist the APSC in setting EE goals and targets.
- Reflect market conditions and other factors specific to Arkansas.
  - Such conditions include residential and commercial building codes, federal equipment codes and standards (e.g., lighting, appliances, and HVAC), availability of savings, and avoided costs.



# Position and Perception

- February 2014, AEO was awarded DOE State Energy Program 2013 Competitive Award, Area of Interest #2
- Stimulating EE Action in Arkansas
  - Establish at least a one percent annual energy savings goal through EE programs.
  - Create and identify strategic mechanisms to expand EE scope and impact.
  - Broadening stakeholder support and engagement for EE in AR.
  - Develop market strategies that foster job creation and reduce energy demands.
- AR has already begun to “move the ball forward.”
- SEEA’s analysis indicates AR has the opportunity to save 1.76 trillion Btu in natural gas & 481.94 million kWh in electricity annually (based on 2010 baseline).



# EERS Targets, but...

- Challenges and Opportunities

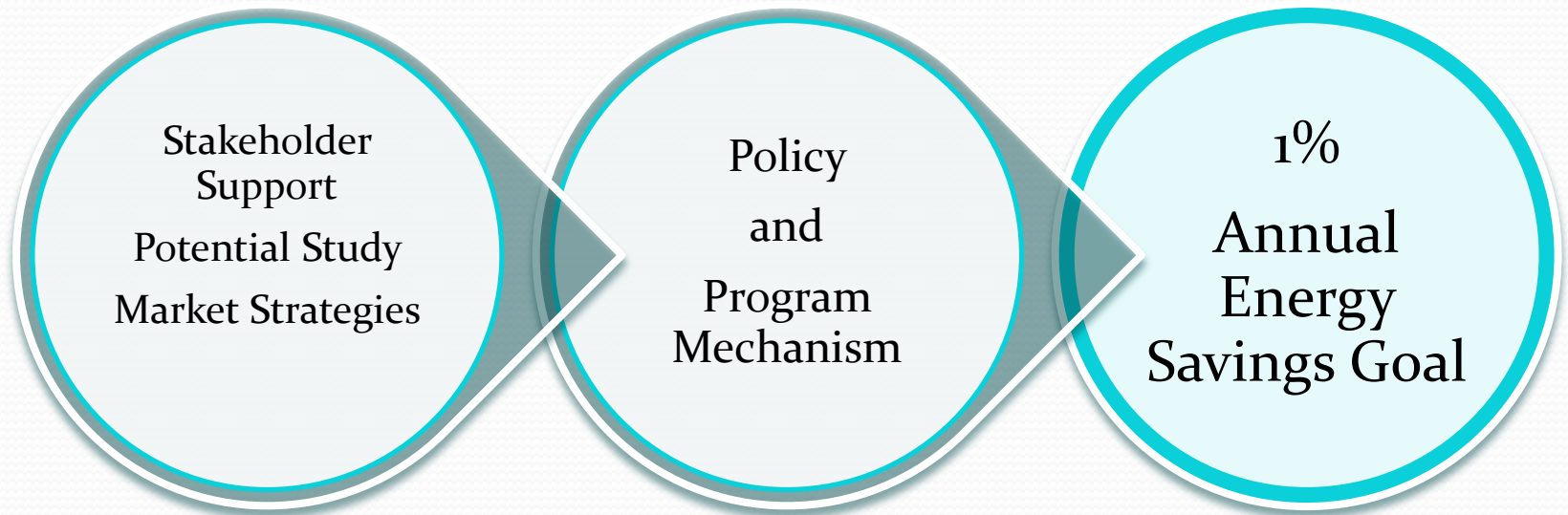
- EERS do not apply to:

- Rural electric cooperatives (granted waiver from full compliance with EE rules).
    - Municipalities (outside the jurisdiction of the APSC).

- Large Customer Opt-Out Options, through Self-Directed EE Programs:

- Commission implemented stakeholder proposal for Self-Direct option for large customers.
    - 2012-2013 the General Assembly amended the self-direct program so that large manufacturers may opt out with minimal requirements and no subsequent reporting.
    - Reduces utility EE program funding and knowledge about large customer savings.

# Moving Forward: Strategies



# Stakeholder Collaboration

- Governor Mike Beebe, the Arkansas Department of Workforce Services, the Arkansas Energy Office, the Arkansas Technical Colleges.
- IOUs: Entergy Arkansas, Inc., SWEPCO, OG&E, Empire District, CenterPoint, Arkansas Oklahoma Gas, SourceGas.
- The Attorney General.
- General Staff, who often convenes the Parties Working Collaboratively (PWC).
- Contractors: CLEAResult, ICF, Frontier and Associates. HVAC contractors, engineering firms, and the Clinton Climate Initiative.
- Technical Assistance from Regulatory Assistance Project and US DOE.
- Intervenors, such as: Audubon, Sierra Club, Arkansas Association of Community Action Agencies, Wal-Mart, Ark. Electric Energy Consumers.

# Sound Progress

- First state in the Southeast to implement an EERS.
- ACEEE publishes an annual ranking of states for EE overall.
- Arkansas moved from 45<sup>th</sup> overall in 2006 to 37<sup>th</sup> in 2013.
- Utility-related policy alone, in 2006 Arkansas was tied for last, now we are 25<sup>th</sup>.



# Contact Us

Sara Telano

AEDC-Energy Office

Contracts and Grants Manager

[Stelano@arkansasedc.com](mailto:Stelano@arkansasedc.com)

(501) 682-7690

Eddy Moore, Managing Attorney

Wally Nixon, Commissioner's Legal Advisor

Arkansas Public Service Commission (APSC)

1000 Center Street

Little Rock, AR 72201

APSC Website: [www.arkansas.gov/psc](http://www.arkansas.gov/psc)

Commissioners' Offices (501) 682-5806

Secretary of the Commission (501) 682-5782

# Resources and Additional Materials

- The programs described in this presentation have been developed and implemented under the authority of the Arkansas Public Service Commission, which is comprised of three gubernatorial appointees: Chairman Colette D. Honorable, Commissioner Olan W. Reeves, and Commissioner Elana C. Wills. The data presented on this presentation is based on a presentation prepared by Eddy Moore of the Commission's advisory staff. More information may be found at the Commission's webpage: <http://www.apscservices.info/>
- Energy Efficiency Resource Standards: A New Progress Report on State Experience. Annie Downs and Celia Ciu. April 2014. Report Number U1403. American Council for an Energy-Efficient Economy. <http://aceee.org/sites/default/files/publications/researchreports/u1403.pdf>
- Setting Energy Savings Targets for Utilities. Ratepayer-Funded Efficiency through Regulatory Policies. Eddy Moore, Arkansas Public Service Commission. March 03/27/2014 via Webinar. SEEACTION State and Local Energy Efficiency Action Network <http://www1.eere.energy.gov/seeaction/events.html>
- State Workshop on Innovations in Energy Efficiency Policy: East and South. Colette D. Honorable, Chairman, Arkansas Public Service Commission. The National Governors Association Center for Best Practices (NGA). February 18-20, 2014 in Chapel Hill, North Carolina. <http://www.nga.org/files/live/sites/NGA/files/pdf/2014/1402EEWorkshop-Honorable.pdf>



MISSISSIPPI DEVELOPMENT AUTHORITY - ENERGY AND NATURAL RESOURCES DIVISION

# MISSISSIPPI: STIMULATING ENERGY EFFICIENCY ACTION

2014 BETTER BUILDINGS SUMMIT

FRIDAY MAY 9, 2014



# MISSISSIPPI DEVELOPMENT AUTHORITY

## ENERGY AND NATURAL RESOURCES DIVISION

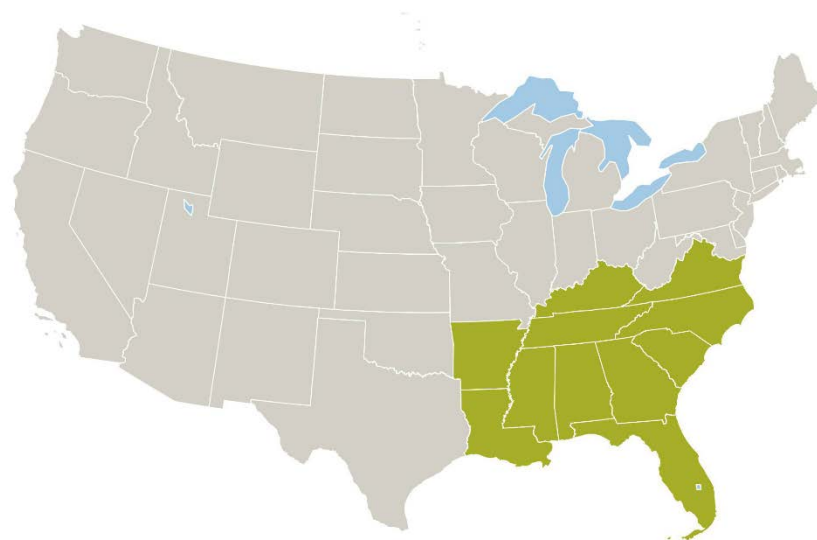
Work with state policymakers and other partners to develop and advance a comprehensive energy policy and ensure energy sector growth in Mississippi.

### RESPONSIBILITIES:

- Oversee energy management programs
- Provide technical assistance to businesses and units of government
- Promote Mississippi as a prime location for energy-related business.

# SOUTHEAST ENERGY EFFICIENCY ALLIANCE

The Southeast Energy Efficiency Alliance (SEEA) promotes energy efficiency as a catalyst for economic growth, workforce development and energy security. We do this through collaborative public policy, thought leadership, outreach programs, and technical advisory activities.





# COOPERATIVE AGREEMENT

## STIMULATING ENERGY EFFICIENCY ACTION

**2010-2013**

# STIMULATING ENERGY EFFICIENCY ACTION

## 2010 COOPERATIVE AGREEMENT OVERVIEW

- **Objective:** Establish policies and programs that support utility investment in energy efficiency.
- **Timeline:** Fall 2010 through September 2013.
- **Cooperative Agreement Allowed MDA and SEEA to:**
  - Provide technical expertise to the stakeholder engagement process
  - Build relationships with state policymakers, industry and utility officials, and PSC staff
  - Deliver informational materials and engage on issues surrounding the Energy Efficiency Docket

# BARRIERS TO IMPLEMENTATION

- **Low stakeholder engagement and support**
- **Lack of buy-in from policymakers**
- **Absence of policy infrastructure**

# **SOLUTION FOR SUCCESS #1:**

## **STAKEHOLDER ENGAGEMENT**

### **Public Service Commission Collaborative**

- Identify leadership, expertise and interest levels among key stakeholders
- Include interested parties who had not previously been at the table

### **One-on-one meetings have created value**

- Establish long-term relationships with a broad range of stakeholders

# SOLUTION FOR SUCCESS #2: EXECUTIVE BUY-IN

Governor Phil Bryant

*Energy Works:*

*Mississippi's Energy Roadmap*

Released October 2012



**Energy Works:**  
**Mississippi's Energy Roadmap**

Governor Phil Bryant



**Key Tenet:**

Expanding Capacity through Energy Efficiency



# SOLUTION FOR SUCCESS #3:

## LEGISLATIVE SUPPORT

The Mississippi State Legislature adopted landmark legislation strengthening the state's investment in energy efficiency infrastructure.

They included:

- **HB 1296:** Mississippi Energy Sustainability and Development Act
- **SB 2654:** Repurposing an existing fund as an MDA-administered revolving loan fund (RLF) to assist with financing energy infrastructure projects
- **HB 1281:** Updating commercial building code to ASHRAE 90.1-2010
- **HB 1266:** Establishing ASHRAE 90.1-2010 as the statewide standard for public facilities

# SOLUTION FOR SUCCESS #4: COMMISSION COLLABORATION

- Worked with commission to:
  - Address issues and answer questions
  - Facilitate conversation and share information
  - Identify best practices
- Initiated an energy efficiency policy/program analysis with ACEEE and SEEA

# RESULTS AND IMPACT

- After 3 year collaborative process, on July 11, 2013, the MS PSC unanimously adopted **Rule 29: Conservation and Energy Efficiency Programs**
- In 2013 ACEEE State Energy Efficiency Scorecard Mississippi name **“Most Improved”**, ranked 47<sup>th</sup>
- **Momentum** from stakeholders to support energy efficiency policies and programs

# RULE 29:

## CONSERVATION AND ENERGY EFFICIENCY PROGRAMS

- Rule builds on best practices from other regional energy efficiency utility regulatory models



- **Implementation Includes:**

- **Three-year Quick Start phase**

- All gas and electric utilities with **25,000 or more meters** were required to submit Quick Start plans by January 11, 2014

- **Comprehensive Portfolio phase**

- All utilities in Mississippi subject to Comprehensive Phase

# CONTINUING THE MOMENTUM

# **COOPERATIVE AGREEMENT**

## **STIMULATING ENERGY EFFICIENCY ACTION**

**2014-2017**

# STIMULATING ENERGY EFFICIENCY ACTION

## 2014 COOPERATIVE AGREEMENT

### Objectives:

- Advancement of energy efficiency in Mississippi through **energy efficiency programs implemented by utilities** or other program administrators;
- Evaluation of recently adopted **energy efficiency rules and newly established programs** developed to provide significant energy savings;
- Identification of **new energy efficiency policies and programs** that will provide significant energy savings and encourage long-term, sustainable energy efficiency investment; and
- Expansion of the base of **stakeholder support and engagement** for energy efficiency.

# IMPLEMENTATION NEXT STEPS

**Adoption**

**July 11, 2013**

**Quick Start  
Programs Filed**

**January 11, 2014**

**Quick Start  
Program  
Approval**

**Quick Start  
Program  
Implementation**

**3 years  
(2014-2017)**

**Comprehensive  
Portfolios**

**2018+**



# POTENTIAL BARRIERS AND SOLUTIONS

## MATCHING RESOURCES TO SUPPORT IMPLEMENTATION

- Identify stakeholder needs
- Connect resources to support the development and implementation of energy efficiency programs

## SUSTAINED STAKEHOLDER ENGAGEMENT AND AWARENESS

- Disseminate targeted informational materials
- Conduct workshops
- Connect stakeholders to technical resources and experts

## LACK OF UTILITY CUSTOMER AWARENESS

- Provide educational, “value-add” opportunities for customers to learn more about the benefits available to them through energy efficiency

## ENSURING PROGRAM SUSTAINABILITY

- Identify policy mechanisms to sustain activities into the future

# THANK YOU!

## Dan Saucier

Bureau Manager

MDA

[dsaucier@mississippi.org](mailto:dsaucier@mississippi.org)

[www.mississippi.org/energy](http://www.mississippi.org/energy)

## Jenah Zweig

Policy Director

SEEA

[jzweig@seealliance.org](mailto:jzweig@seealliance.org)

[www.seealliance.org](http://www.seealliance.org)