



Energy Efficiency Resource Standards: A Progress Report on State and Utility Experiences and Strategies for Higher Savings

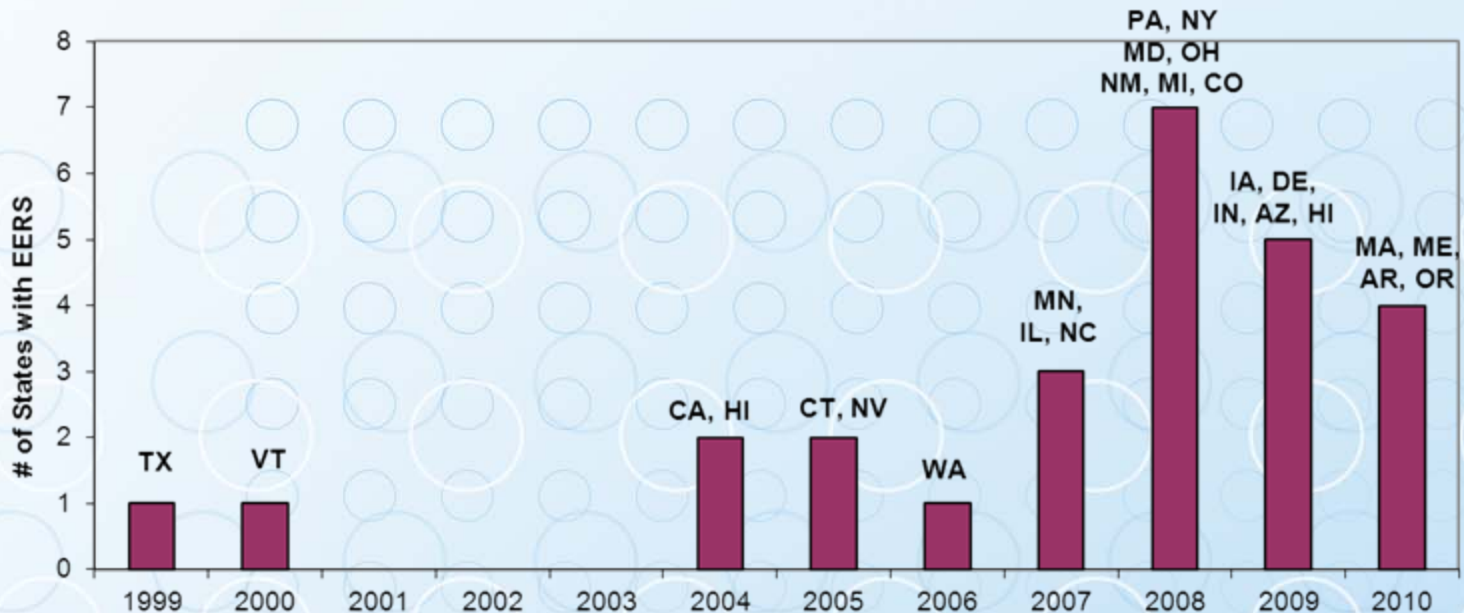
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2011 ACEEE National Conference
on Energy Efficiency as a Resource
Hyatt Regency Tech Center
Denver

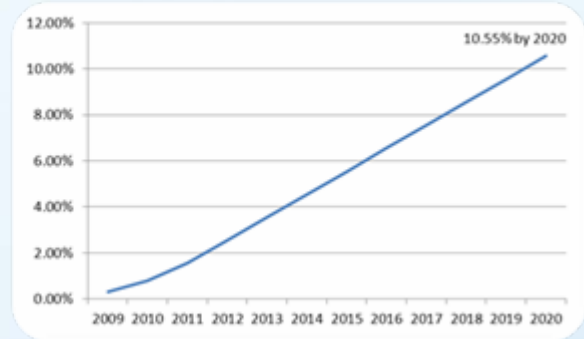
What is an Energy Efficiency Resource Standard?

- An EERS sets multi-year (3+) electric or natural gas efficiency targets (e.g. 2% incremental savings per year or 20% cumulative savings by 2020), measured against a baseline of retail sales.
- EERS policies accelerate and expand the scale of energy savings achieved through utility and related energy efficiency programs.

Twenty-five states currently have an EERS in place (CT's EERS has expired)



EERS in Practice



Michigan Retail Electricity Sales in 2008 = 10,868 GWh

- EERS target = 0.30% of sales in 2009 = 326 GWh

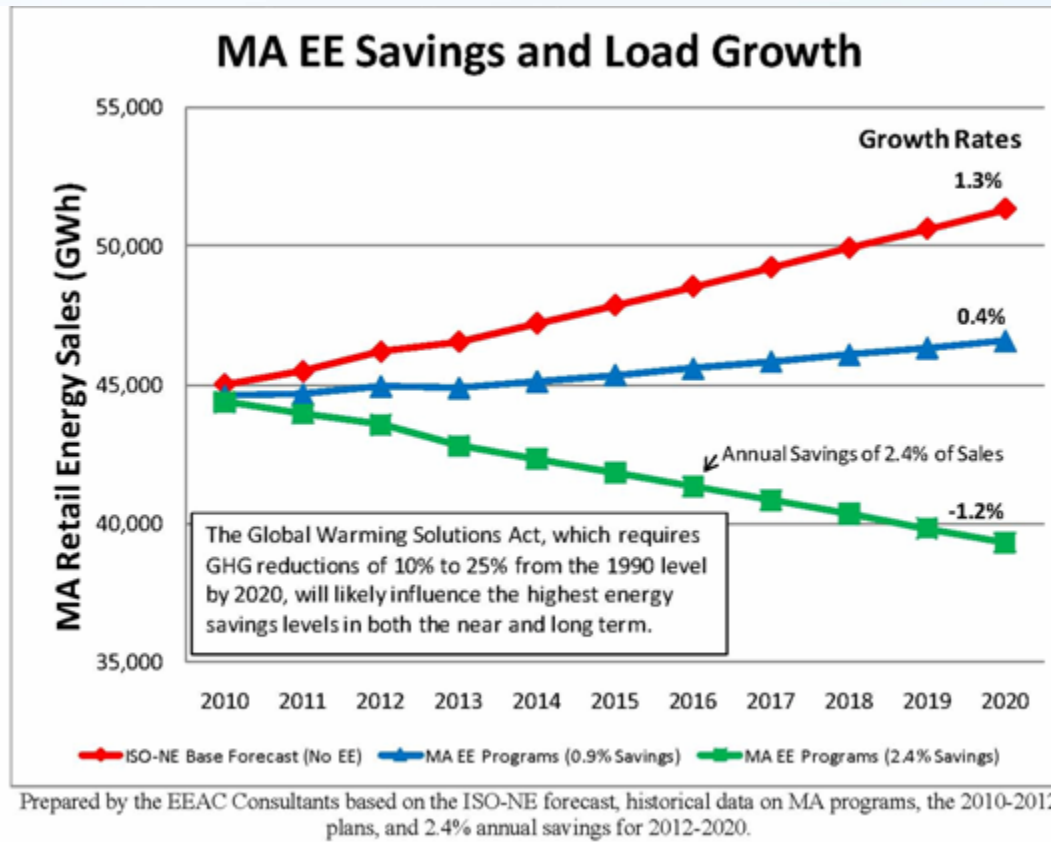
Michigan Energy Efficiency Savings from Utility Programs in 2009 = 376 GWh (0.35% of 2008 sales)

- Programs save energy for commercial, industrial, and residential customers

Michigan EERS Target in 2010 = 0.50%, or 502 GWh savings from new EE measures in 2010

- Cumulative Targets for 2009 and 2010 = 878 GWh, or 0.80% of 2009 sales

Bending the Curve



Source: Horowitz et al. 2010. *Programs and Strategies to Achieve All Available Cost-Effective Energy Efficiency: Early Report on Bending the Curve in Massachusetts*. ACEEE Summer Study in Buildings Proceedings.

Key Distinctions of EERS Policies

Statewide EERS

- Typically set by State Legislatures and codified by utility commissions, the statewide EERS calls for all eligible utilities to achieve a prescribed level of savings.

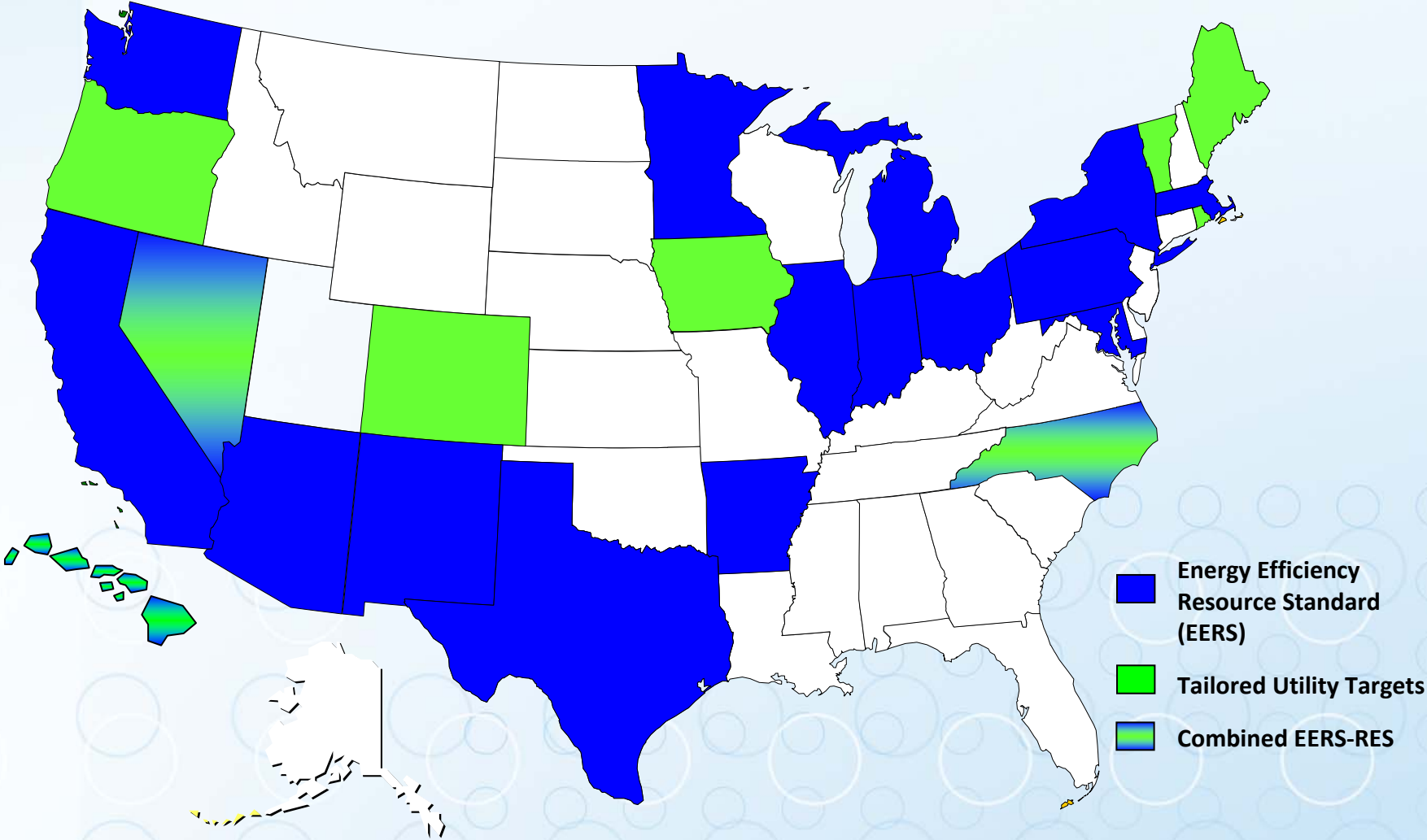
Tailored Utility Targets

- Initiated in a variety of ways, long-term energy efficiency targets in these states are tailored to each specific utility. In each case, law or regulation calls for the establishment of multi-year (3 year+) specific energy savings targets.

Combined EERS – RPS

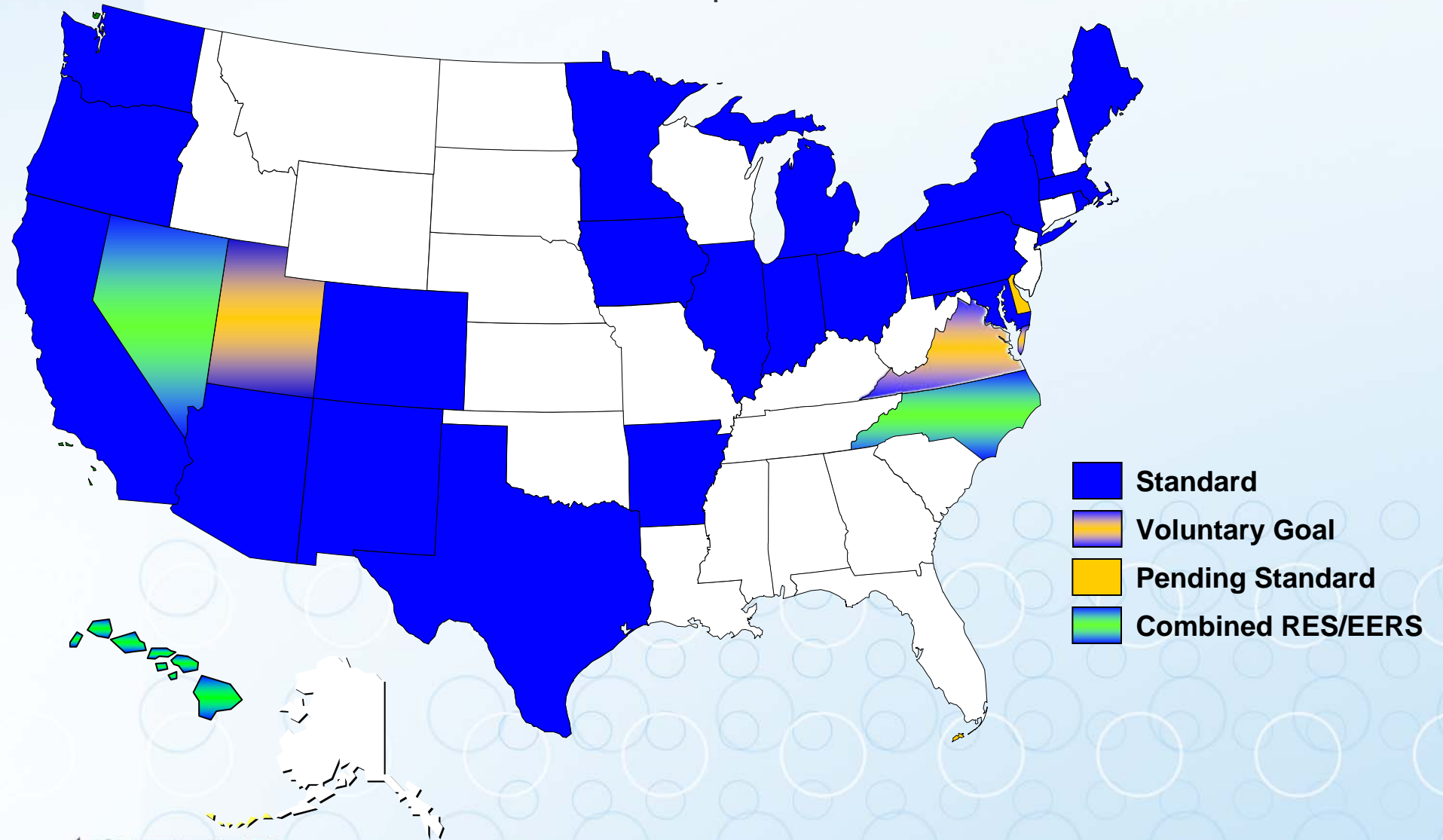
- Energy efficiency may be accepted as an eligible resource in state renewable energy standards (RPS). In these cases, energy efficiency is measured on a cumulative, rather than annual, incremental basis.

EERS Policy Approaches by State



Energy Efficiency Resource Standards

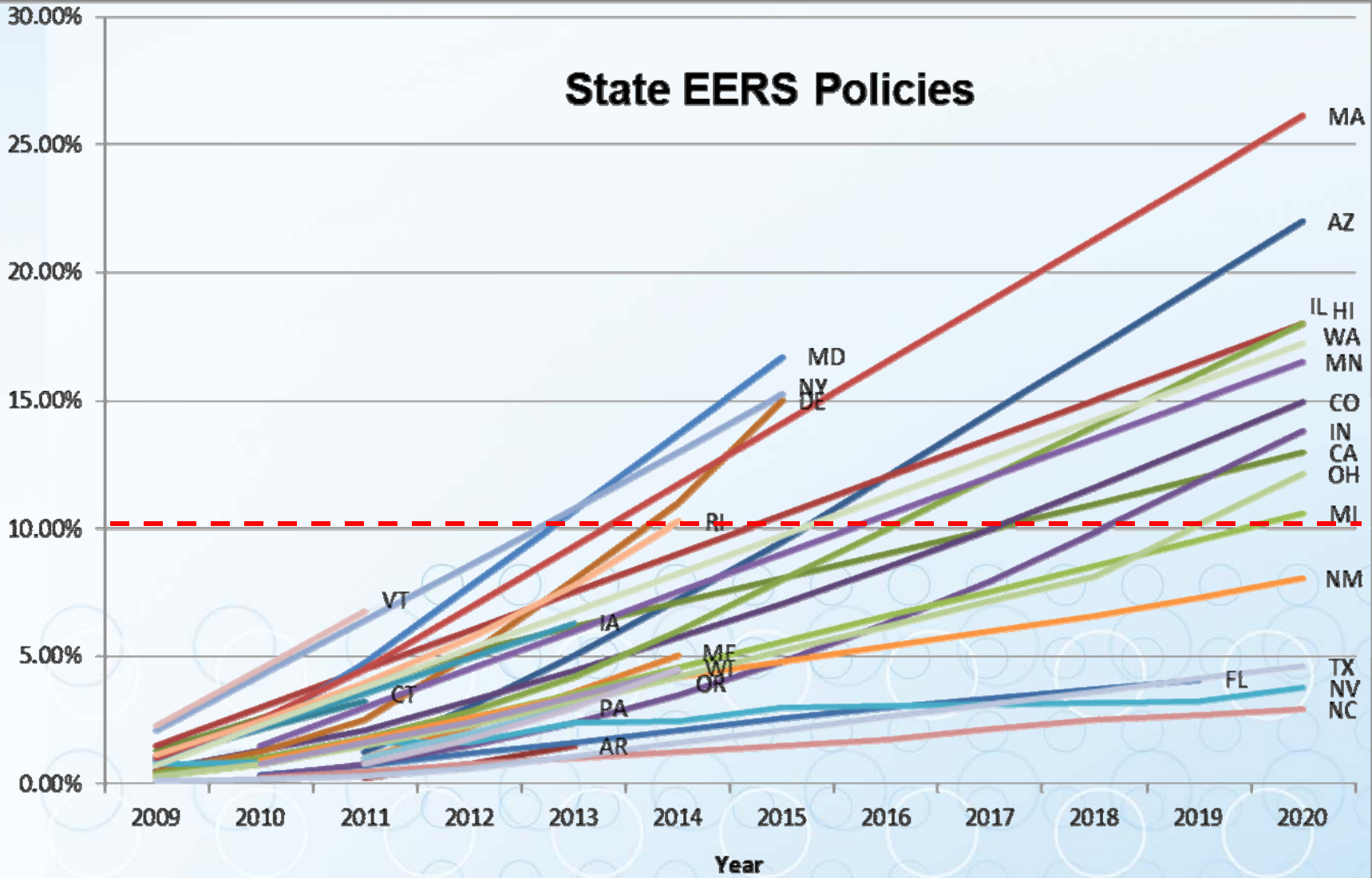
25 States – September 2011



-  Standard
-  Voluntary Goal
-  Pending Standard
-  Combined RES/EERS

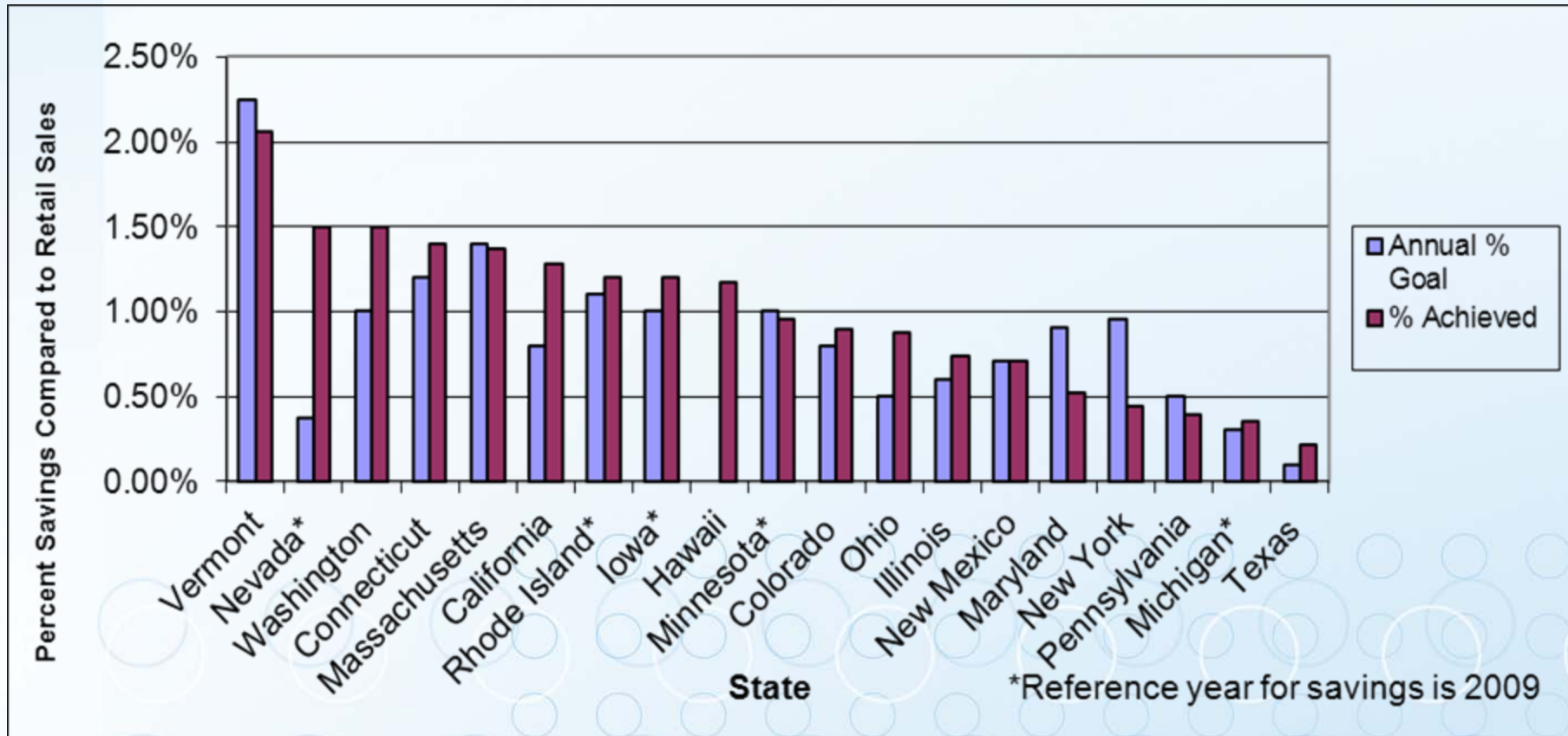
State EERS Policies

Cumulative Savings as % of Retail Sales



Eleven geographically dispersed states have committed to long-term targets to achieve over 10% cumulative annual savings by 2020

Results of ACEEE EERS “Progress Report”



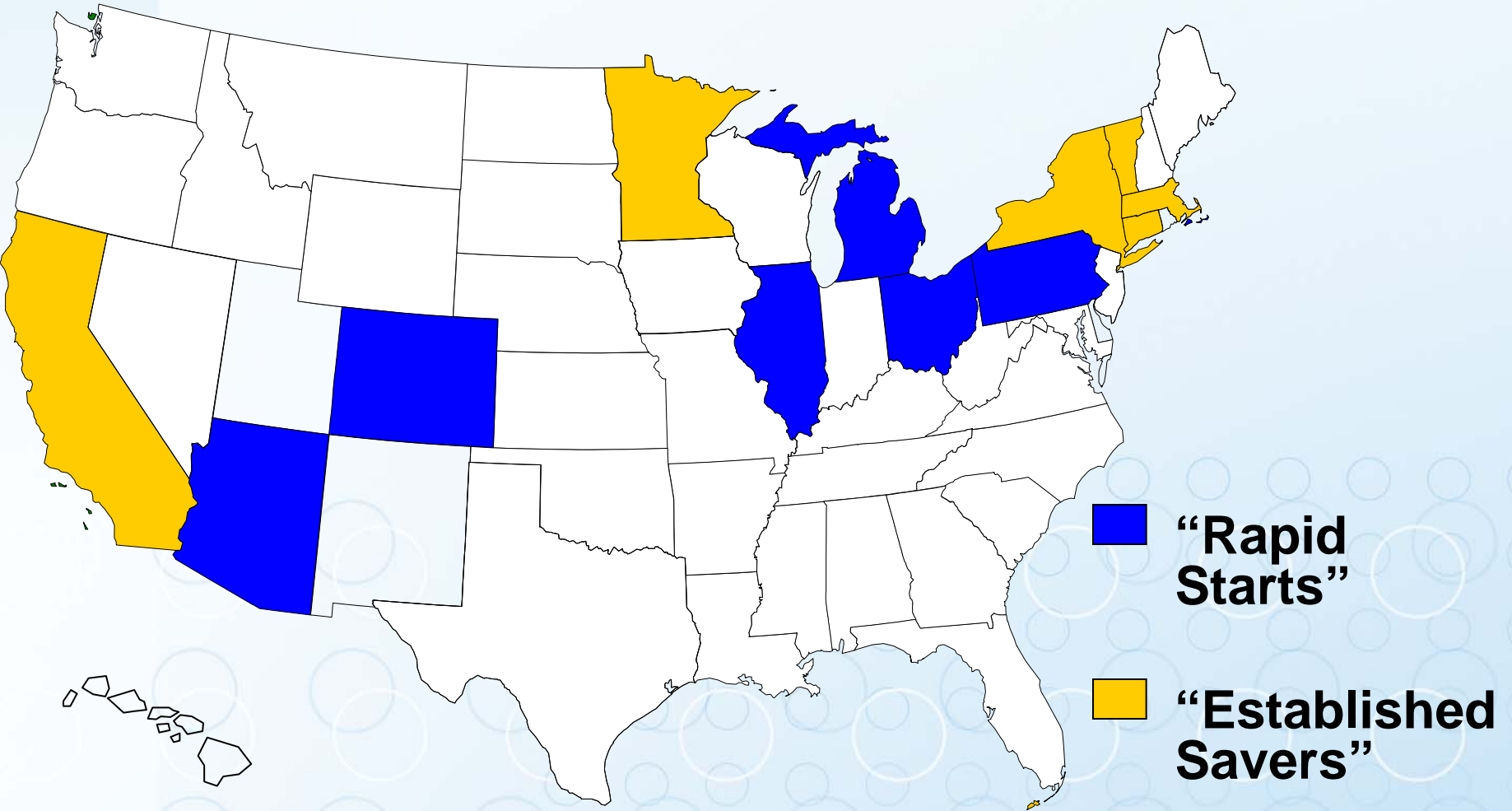
- Thirteen of the twenty states with EERS policies in place for over two years are achieving 100% or more of their goals as of 2010
- Only three states are realizing savings below 80% of their goals but all 3 are still ramping up

Research Objectives:

- Document EERS policies enacted
- Compare approaches in states with long-standing efficiency efforts with those that recently initiated major programs;
- Assess relative progress in meeting initial goals
- Identify key challenges encountered and lessons learned
- Examine trends and prospects for reaching and sustaining maximum savings levels prescribed in EERS
- Discuss complementary and supportive policies
- **Identify key program strategies and designs being pursued by states and program administrators to reach higher savings levels**

**How have states been meeting EERSs?
How will they in the future?**

States Examined in EERS Strategies Report



Strategies for Higher Savings: States' Strategies

- **Regulatory Policies**

All Six Established Saver states have some form of decoupling and shareholder or performance incentives

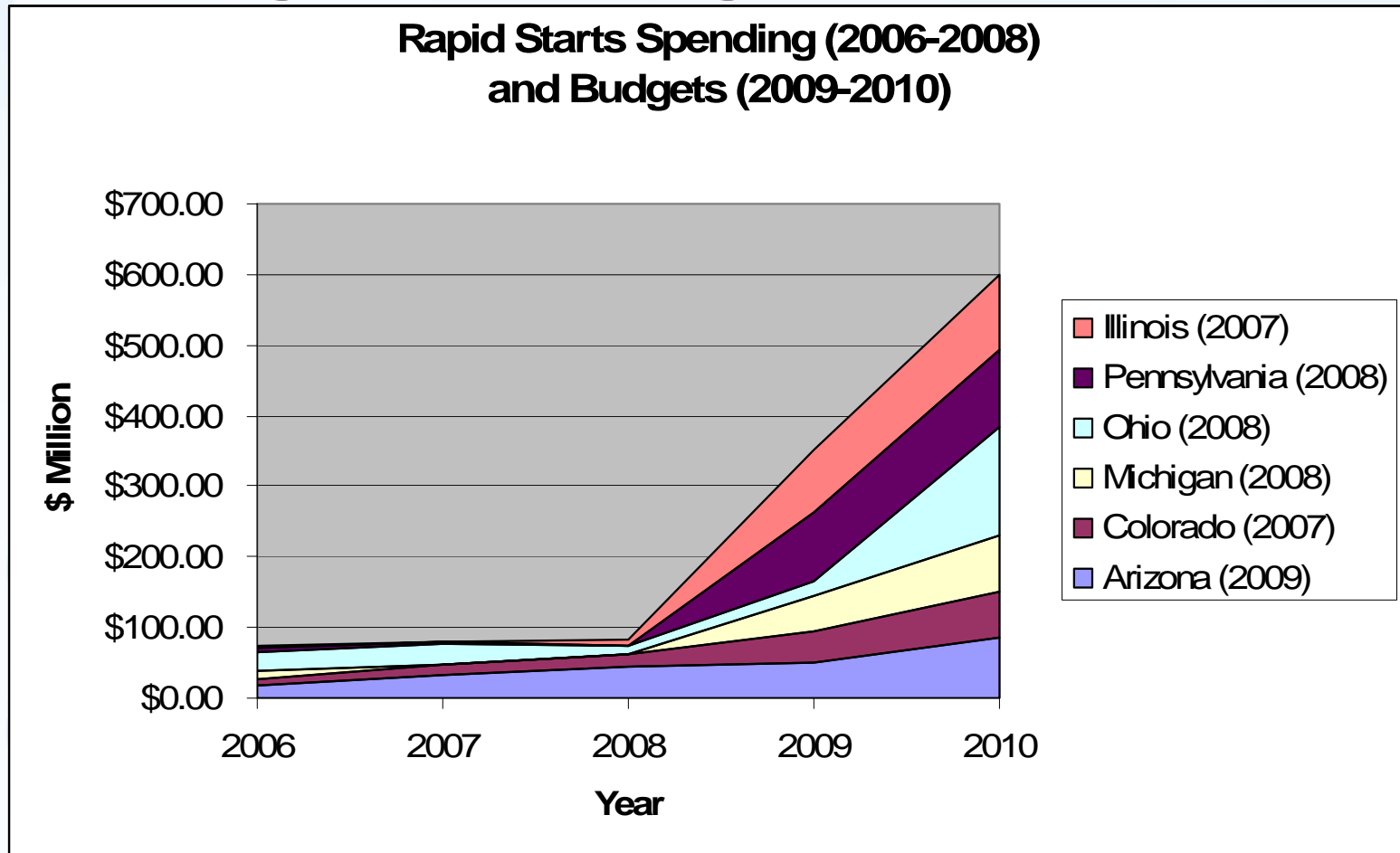
- **Non-Utility Program Energy Savings**

NY and CA count savings from building codes toward EERS

- **Collaboratives and Stakeholder Processes**

- **Increased Funding**

Rapid Start States Increase Efficiency Funding 500% along with EERS



Expert Views – Most Important Policies for EERS Success

- **Funding** *“The goals can’t be met without raising public benefits funding, or else you have to use ‘magical thinking’—as some propose—to meet goals without more money by lowering incentives, finding more private financing, etc.”*
- **Regulatory Policies: Decoupling, Shareholder Incentives** *“Utilities need to have a vested financial stake for meeting and exceeding the goals. Need upside financial incentives for the utilities if they are the administrators.”*
- **Rate Design & Building Labeling**

“You need a culture and ethos of energy efficiency by the state and the utilities. Need a true commitment by all the key players that energy efficiency is important,” and he pointed to the widespread consensus support in California for the “loading order” policy that energy efficiency is the first utility resource.”

Strategies for Higher Savings: Program Administrators' and Utilities' Strategies

Lighting

Capturing lighting savings early and adding new, higher efficiency technologies to efficiency portfolios beyond CFLs

Rapid Starts relying on heavily on lighting and CFLs in particular; Established Savers including greater diversity of technologies

Program Design

Adopting new program design approaches and strategies, including “Deeper, Then Broader”

Strategies for Higher Savings: Program Administrators' and Utilities' Strategies

More programs

For new technologies & new customer market segments

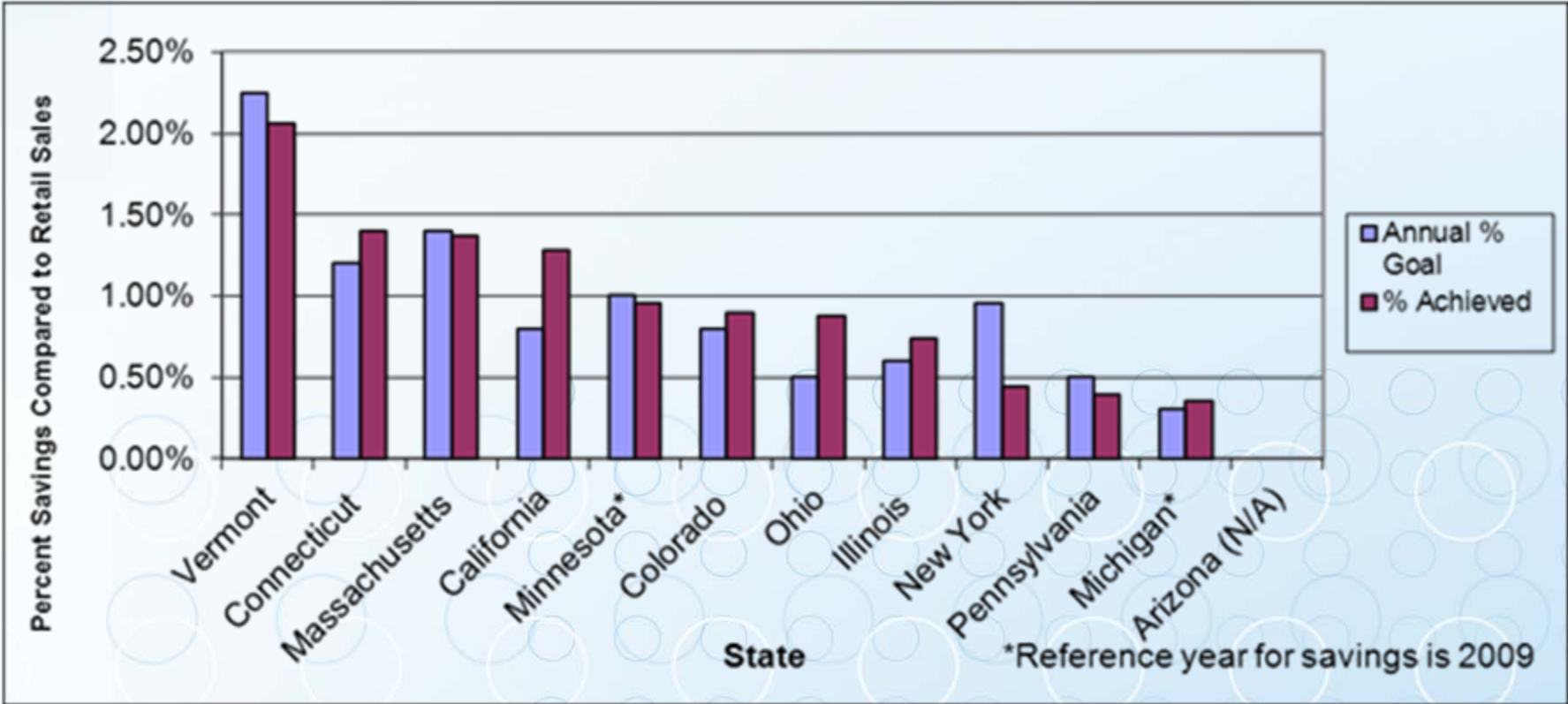
Rapid Starts often start with small number of core programs, then add to the portfolio; Established Savers running hundreds of programs

More participants

Promoting participation through upstream rebates and financial incentives, more rebates, and enhanced advertising

Results to Date

Figure 3: Most Recent Year Electric Savings Compared to Goal



Prognosis

Established Savers expect EERS goals will be met by:

- Expanding and extending proven approaches
- Pursuing innovations in portfolio & program design, funding, delivery

Rapid Starts are confident goals will be met for several years

- Lots of “low hanging fruit”
- Funding caps expected to be a barrier

Expert Opinions

“I’d rate the likelihood of success from a technical standpoint at 90%. The question is on the political side. Will they follow through and invest the necessary dollars to achieve the savings?”

Questions?

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