

NASEO National
Association

of State Energy Officials



State Energy Efficiency Landscape



Overview of State Energy Offices (SEOs):

- 56 Governor-designated State and Territory Energy Offices (SEOs) nationwide.
- States spur energy-related economic development, minimize the environmental impact of growth, crafting energy solutions that address their citizens' needs and increase our national energy security.
- Funding form for programs under the direction of the governors or legislatures, as well as federal appropriations for the cost-shared U.S. State Energy Program.
- SEOs invest \$4 billion of their own funds derived from appropriations, bonding, and system benefit charges each year.
- NASEO represents all 56 SEOs, and is organized around seven regions with coordinators that aid State and Local governments in sharing lessons learned.



Presentation Overview

- What Worked from ARRA?
- Key Market Transforming Elements (e.g., codes, retrofits)?
- EE Innovative Programs
- Financing (Back to the Future)
- Historic State Energy Planning and Policy Opportunity



+ What Worked?

- ARRA was first and foremost an energy-related jobs program designed to implement projects and programs with practical, near-term results. SEP provided \$3.1B and leveraged \$4.7B
- Following are the results from some of the SEP funding:
 - *Energy efficiency retrofits of 75,000 buildings*
 - *Installation of nearly 99,000 kW of renewable energy systems*
 - *Installation of 4,500 energy efficient streetlights*
 - *Energy audits and education of 200,000 people/businesses*
 - *Installation of 21,000 energy efficient traffic signals*
 - *Self-sustaining financing programs totaling \$759M that leveraged that amount multiple times with private capital*

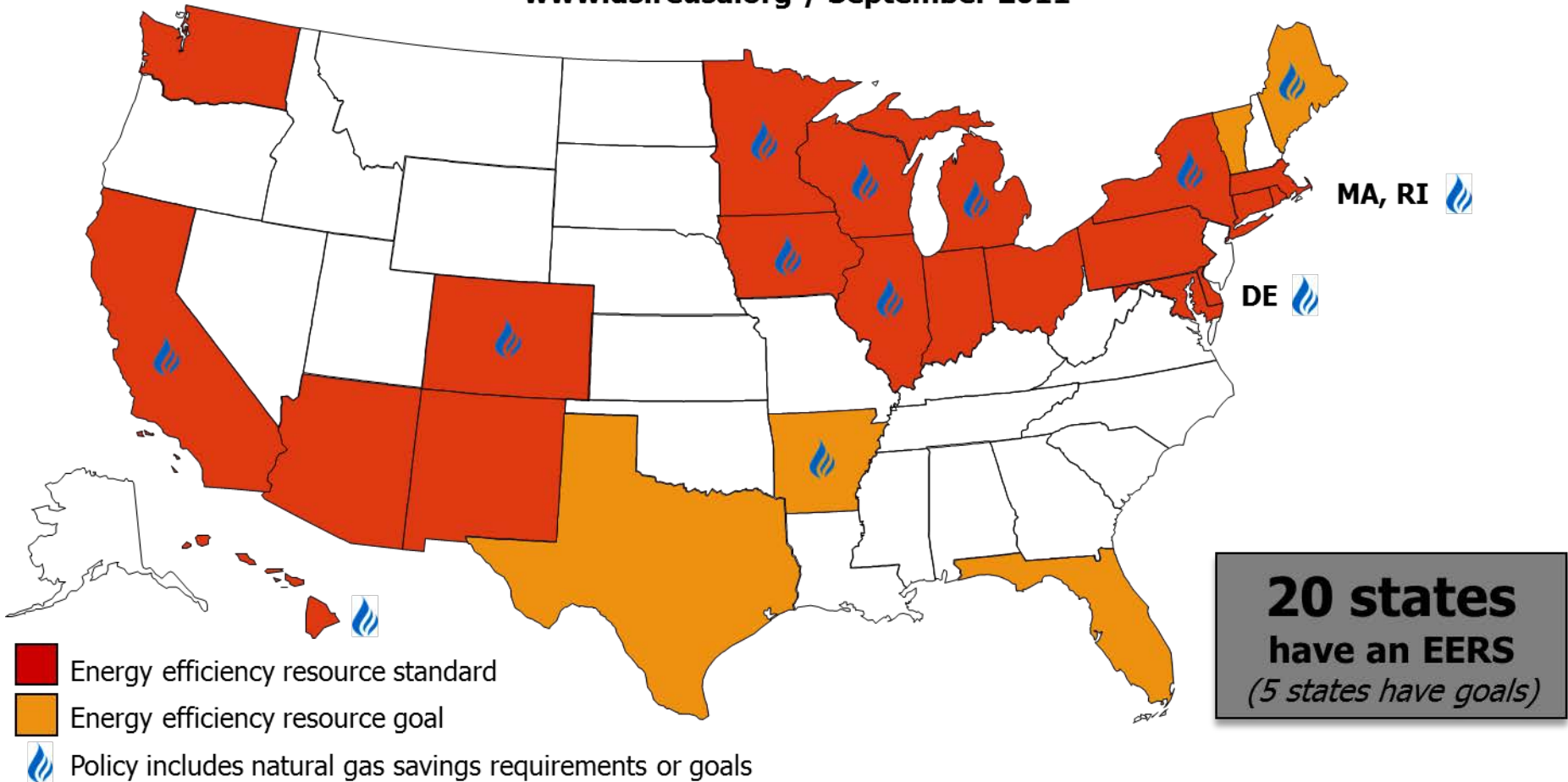
+ Existing Policies and Programs Remain Efficiency Drivers



- Energy Efficiency Resource Standards and Codes
- State Energy Efficiency Program Innovation
- Financing and Investment
- Comprehensive Statewide Energy Planning and Policy Development

+ State Energy Efficiency Resource Standards

www.dsireusa.org / September 2011





Building Energy Code Environment

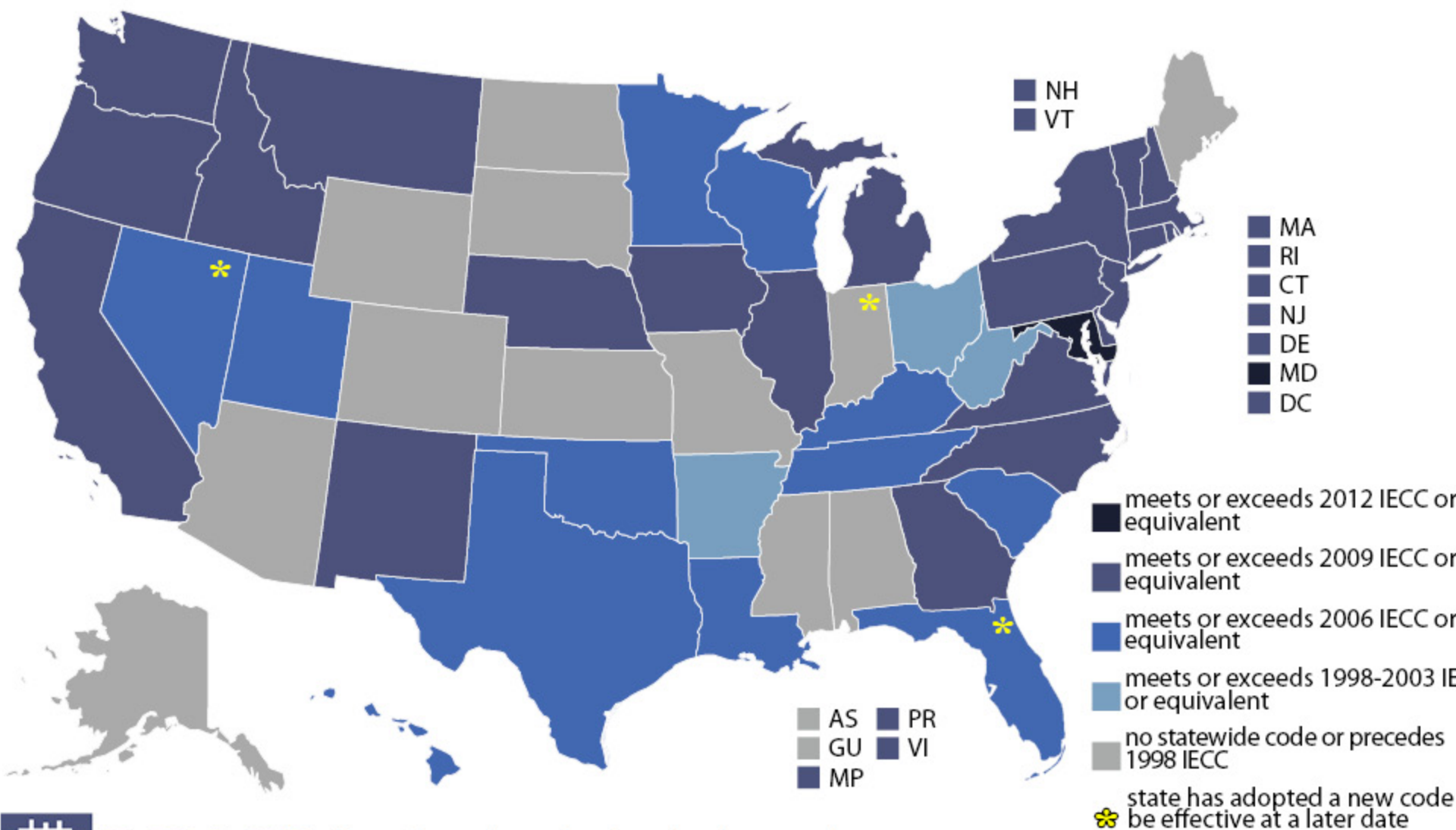
“I have written our public utility commission and requested they consider additional actions to promote **energy** efficiency, consistent with the federal statutory language contained in H.R. 1 . . .

I have also written the Legislature and requested they consider actions to improve building energy codes to consider the statutory language contained in ARRA.”

- Code provisions in the American Recovery and Reinvestment Act made advances in leveling the playing field.
 - Residential: IECC – 2009
 - Commercial: ASHRAE 90.1 – 2007
- States committed to 90% compliance by 2017
- Rapidly evolving model codes are making great leaps in stringency
- Constraints on public budgets for code officials in implementation and compliance

Residential State Energy Code Status

AS OF MARCH 1, 2012



 **BCAP** Dedicated to the adoption, implementation, and advancement of building energy codes

Get all the most up-to-date code status maps and other valuable resources at www.bcap-ocean.org

NOTE: These maps reflect only mandatory statewide codes currently in effect.



CBC Report Recommendations

- Zero Energy Commercial Buildings Consortium (CBC) reports found standards needed for:
 - Protocols to improve systems integration, network communication, and use of sensors and controls
 - Adequate light levels in net-zero energy or high-performing buildings
 - Performance and electrical compatibility of solid state lighting
 - National interoperability standards for grid-building communication
 - Process standard for integrated design
- For more specific recommendations, see report online at www.zeroenergycbc.org

+ Select State Building Initiatives

■ **Multi-State Collaboration on Residential Retrofits**

- 4 state collaborative: AL, MA, VA, WA
- SEP funded
- Implementing a residential retrofit program in pilot communities
 - Featuring a “miles per gallon” type of asset rating for the home

■ **State and Local Public Building ESPC Programs**

- Largest retrofit market in the country (\$5 billion/year)
- 20% of commercial floor space
- Can be self-funded and self-sustaining (e.g., KS, WA, MN)
- Can serve as demonstration sites for emerging technologies
- Current State Energy Program funding focus area

+ Industrial Energy – States and ISO 50001/SEP

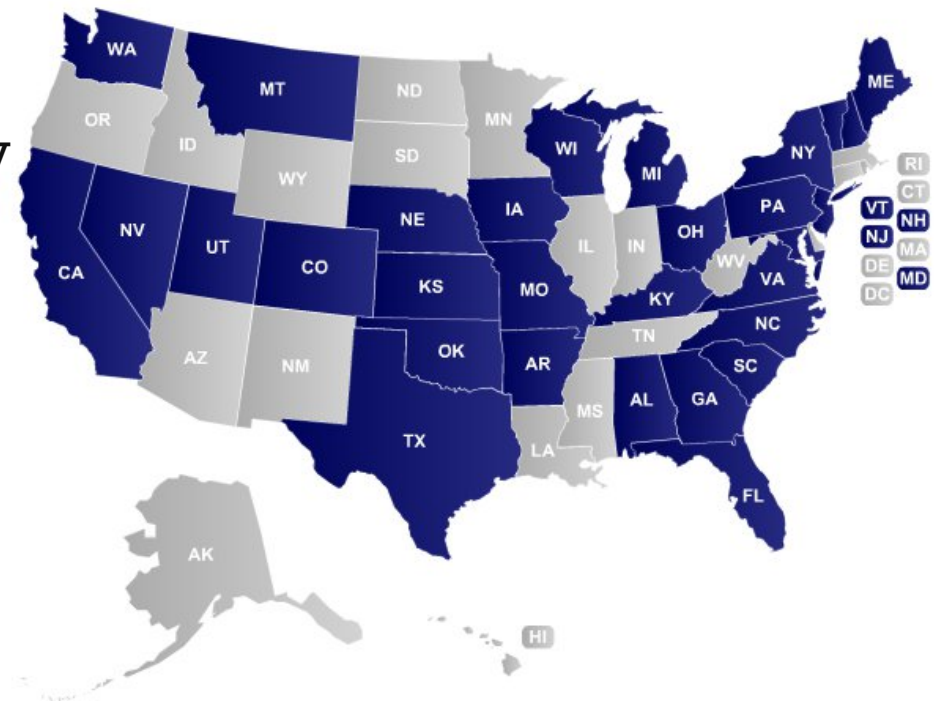


- Texas pilots *Superior Energy Performance* in 4 plants (2008-2010)
 - Plants saw verified energy performance improvements from 6.5% to over 15% over a two to three year period
- Now expanded to 35 more facility demonstrations in 19 additional states
- Program coordinators include State Energy Offices, utilities, universities, and non-profit groups
- Good examples of public-private partnerships

NASEO Initiatives:

State Energy Loan Fund (SELF) Database

- 34 states
- 66 funds
- Over \$1 billion in state energy revolving loan and credit enhancement funds
- Contains Information on:
 - Funding sources
 - Fund size and focus
 - Web links
 - Contact information



<http://www.naseo.org/resources/selfs>

+ NASEO Initiatives: Planning and Policy

■ Comprehensive Energy Planning

- Compiled existing plans or governors' energy policy statements from 41 States
- Will consider the role of EE in these plans
- Going forward:
 - Identify existing patterns and trends in treatment of EE
 - Identify best practices
 - Developing guidelines to write Statewide Energy Plans

■ Energy Assurance Plans

- NASEO Energy Assurance Guidelines (www.naseo.org/energyassurance)
- ~25 states with updated and expanded EA Plans, rest to follow
- ***Resiliency including EE and RE essential element***
- Going forward:
 - Identifying best practices within existing plans
 - The role of EE in Energy Assurance?



Questions?
Thank you!

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