

Policies for Advancing Building Efficiency:

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RD&D



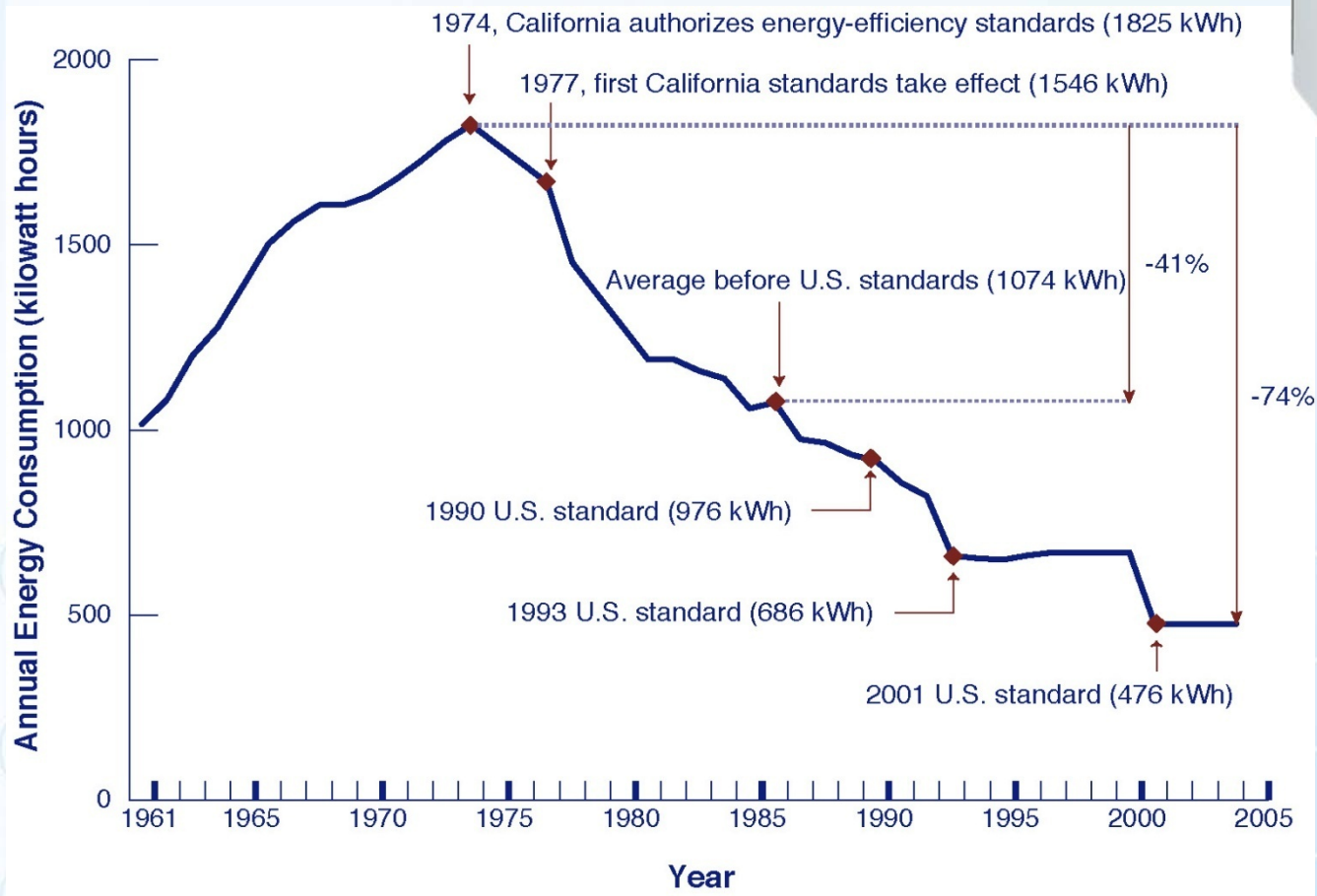
- Important foundation for other policies
- Develops the new technologies and practices that policies and programs can promote in the future.
- Particular role for government
 - Early, high-risk research
 - Assisting promising products across “valley of death”
- Both federal and state roles

Equipment

- Appliance and equipment standards
- Energy Star
 - Could do more for commercial
- Tax incentives
- Utility and state rebate programs

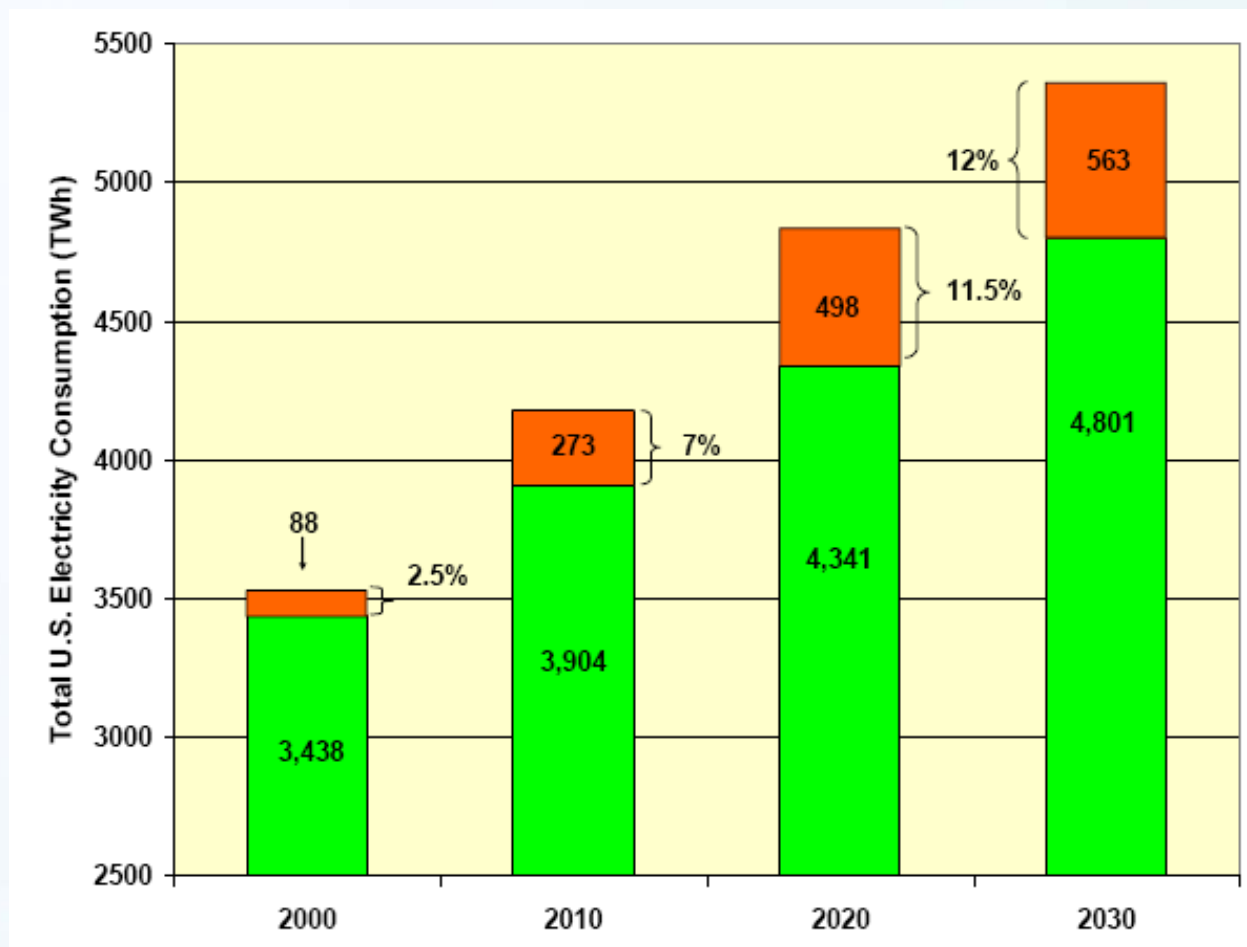


Impact of U.S. Refrigerator Efficiency Standards



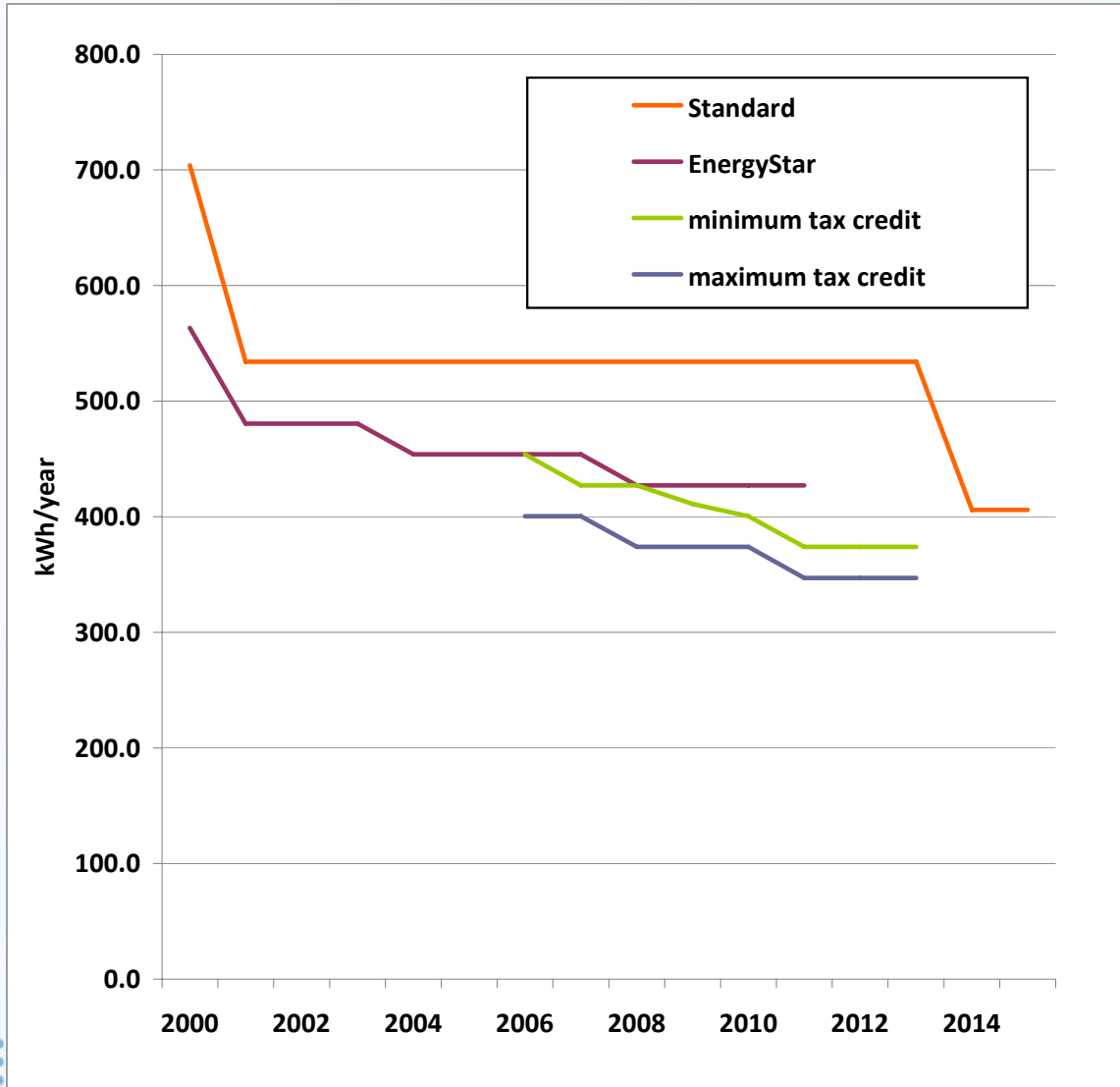
25% savings pending for next revision

Savings from Existing Appliance Standards Relative to U.S. Electricity Use



Market Transformation for Refrigerators

Interaction of Standards, Energy Star & Tax Incentives



New Construction

- Building codes
- Tax incentives
 - 50% savings
 - 9% residential market share in 2009
- Incentive and TA programs
- LEED and other rating programs



A Brief History of Residential Codes



Source: DOE.

A Brief History of Commercial Codes



Source: DOE.

Next Steps

- Getting to 50
- 75% savings?
- Zero energy buildings
- Increased attention to code implementation and enforcement
- Improvements to LEED and other ratings
- Outcome-based codes?



Sufficiency



Building Retrofits

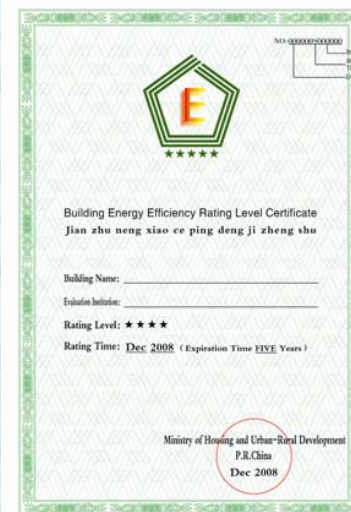


- WAP
- Home Performance with Energy Star
- Building Performance with Energy Star
- Quite a few state, utility & local programs
- Need more attention on comprehensive retrofits
 - Proposed new federal tax credits
 - Incentives for 20% savings or more “25E”
 - Expand 179D



Cross-Cutting Building Policies

- Building labeling and disclosure
- Zero energy building policies



Broader Energy Policies

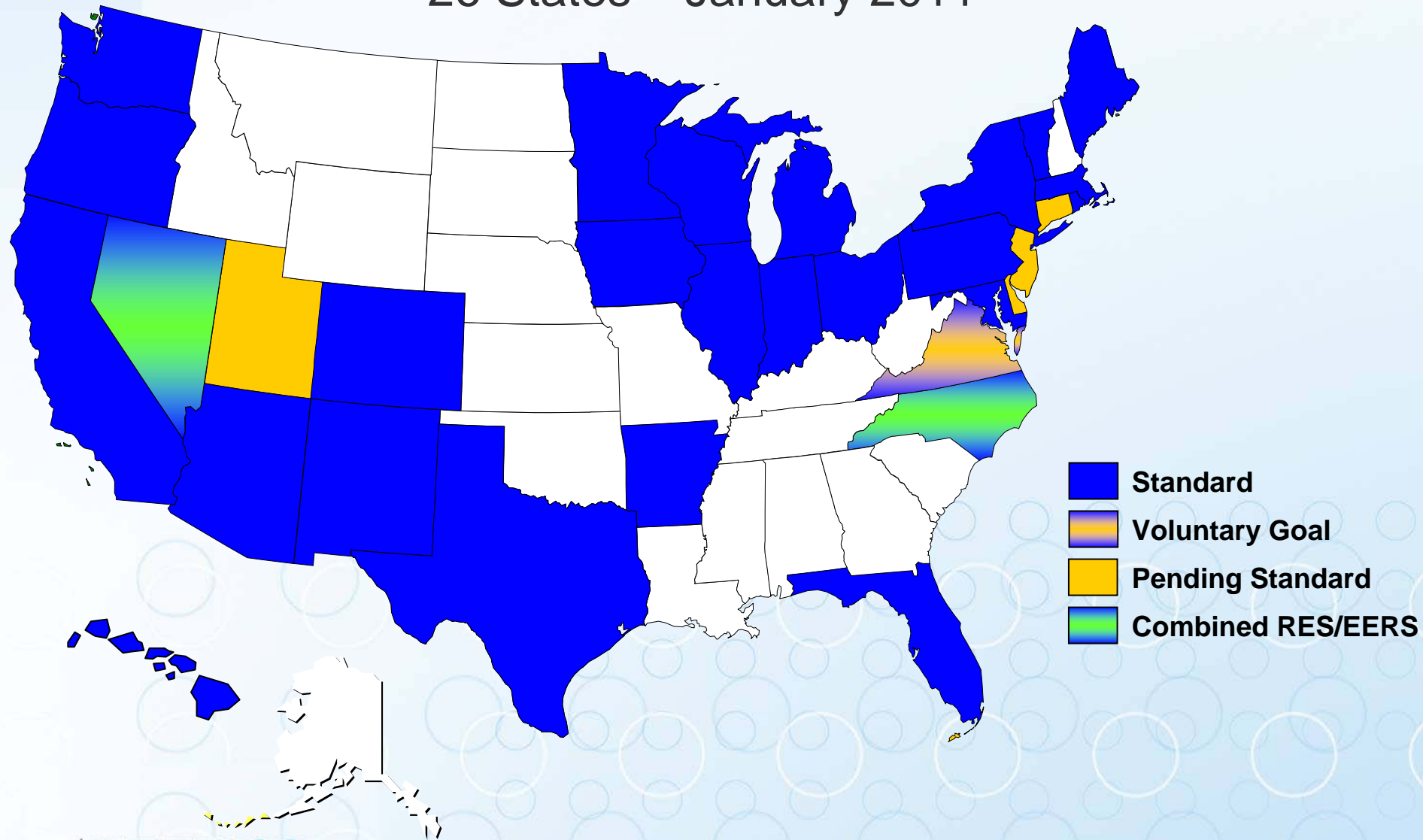


- Energy efficiency resource standards
 - Also Clean Energy Standard
- Business case for utility investments
 - Decoupling
 - Shareholder incentives
- Financing – leveraging private capital
 - Loan guarantees
 - Revolving loan funds
 - Securitization

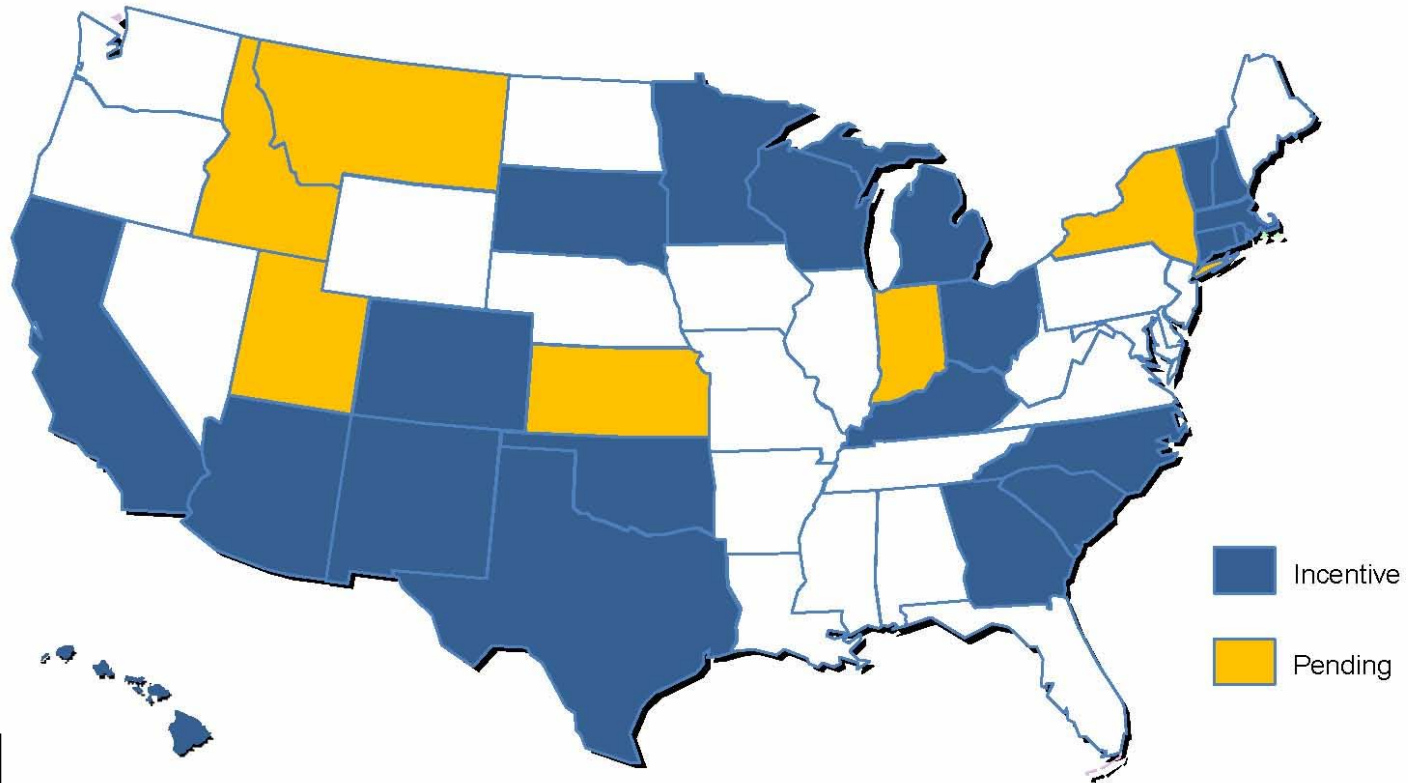


Energy Efficiency Resource Standards

26 States – January 2011



Performance Incentives for Electric Efficiency by State



21
States

Source: Institute for Electric Efficiency. State Electric Efficiency Regulatory Frameworks. July 2010.

Broader Policies

- Influencing behavior
 - Feedback
 - Etc.
- Community planning
 - Density
 - Transportation



Energy Efficiency Can and Should be Bipartisan

