

INSTITUTE FOR  
**Electric Efficiency**

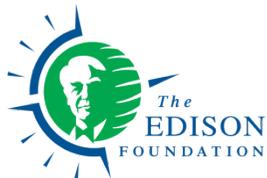
## International Energy Agency's Demand Side Management Programme

### Panel 1: U.S. Experiences with Energy Efficiency Resource Standards

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April 27<sup>th</sup>, 2011

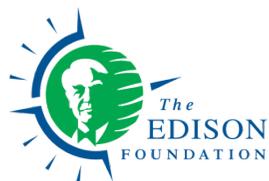
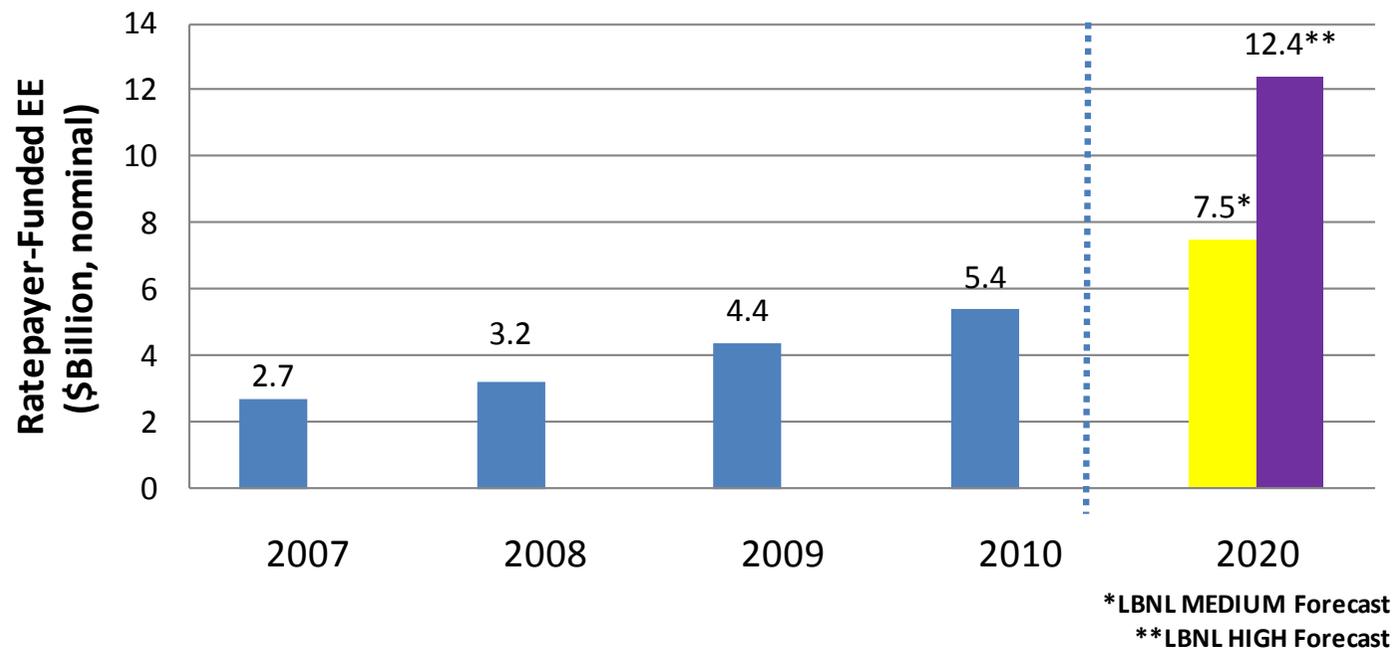
# Energy Efficiency Resource Standards

- Increasingly common in the US
    - (26 states have one; all with their own wrinkle)
  - Can be integrated into a resource standard, e.g. EE credit in RPS
  - Requires a resource (\$) commitment by the utilities
    - Policy stability and supportive regulatory treatment (e.g. decoupling & performance incentives) improve likelihood of success
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# U.S. electric efficiency budgets growing rapidly (2007-2010)

Electric Efficiency Budget, 2007-2010 and 2020 LBNL Forecast



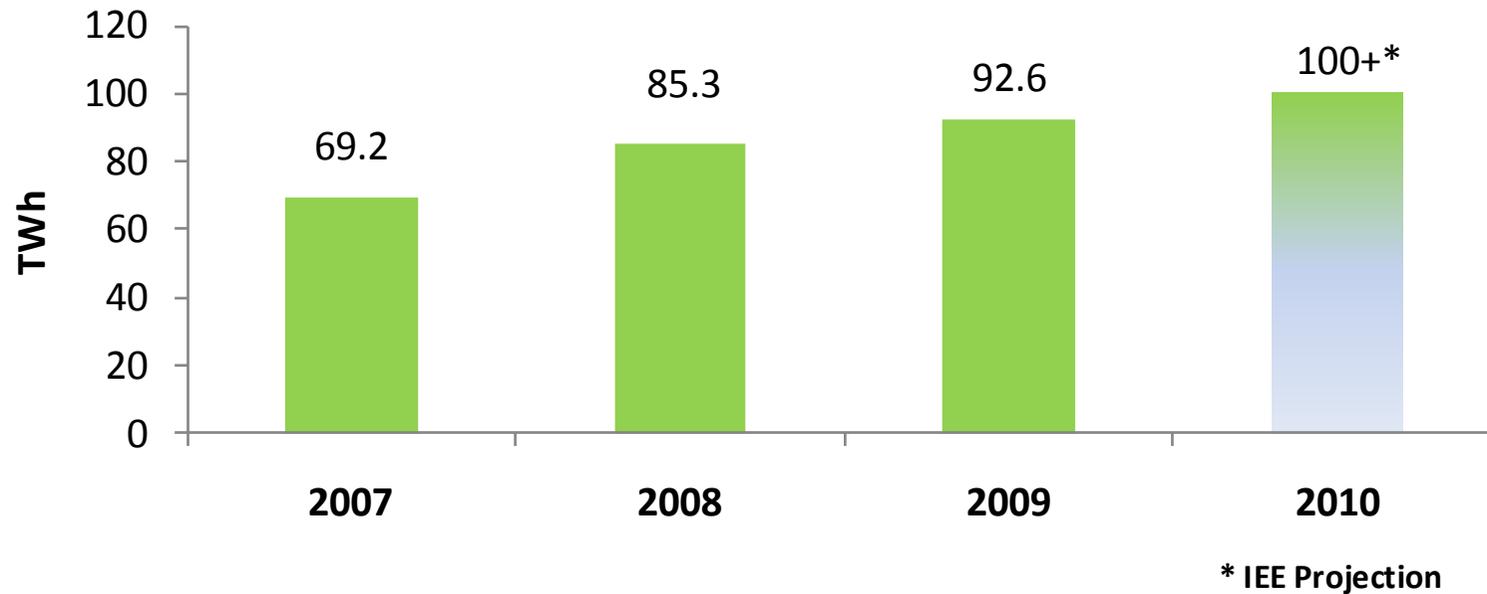
# Utilities play major role in ratepayer-funded electric efficiency budgets in U.S.

Electric Efficiency 2007-2010 U.S. Budgets					
	Total	Utility	Non-Utility	Utility Share of Total	Percent Increase
2007	\$2,722,788,884	\$2,413,639,443	\$309,149,441	89%	
2008	\$3,165,329,920	\$2,704,072,429	\$461,257,491	85%	16%
2009	\$4,370,445,097	\$3,796,110,308	\$574,334,789	87%	38%
2010	\$5,433,087,642	\$4,789,681,107	\$643,406,535	88%	24%



# U.S. electric efficiency savings projected to exceed 100 TWh in 2010

## U.S. Electric Efficiency Impacts (2007-2009 & 2010 Forecast)



# Regulatory frameworks support energy efficiency programs

- States with ratepayer funded EE programs have cost recovery mechanisms in place to recover program expenditure
- Of the top 20 states in terms of EE budgets, 17 have a regulatory framework in place that supports EE
- Overall, 31 states have some form of fixed cost recovery pending or approved
  - Revenue Decoupling: 20 states
  - Lost Revenue Adjustment Mechanism: 15 states
- 28 states have performance incentives for energy efficiency programs



# Numerous benefits of EERS

- Energy and emissions savings
- Relatively easy to start an EE program (if cost recovery pathway is identified ahead of time)
- EE is cost-effective
- Provides a target and stabilizes compact between regulator and utility

# What policy goal(s) is the EERS trying to accomplish?

- Beyond being a legislated mandated, why would a utility incorporate an EERS into their business model?
- Should the focus of an EERS simply be some % reduction of retail electric sales?
- Is there a broader corporate mission that an EERS can support?
- Treat energy efficiency as a resource



# Broad host of issues going forward

- Differences in electric rates, measure life values, etc... impact the cost effectiveness of programs across states
- Early success of modest EERS goals, but how will the cost of achieving the more aggressive reductions be received?
- Difficult to retain customers interest and willingness to participate in EE programs
  - “Didn’t we do this already?”
  - Be it appliance rebates, behavior, etc...

# Success Depends on Many Factors

- Growth of program portfolio
  - Continuous energy education efforts
  - New/emerging energy efficiency technologies
  - Develop methodologies to quantify savings from non-traditional programs
    - Behavioral
    - Codes and Standards
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# Observation

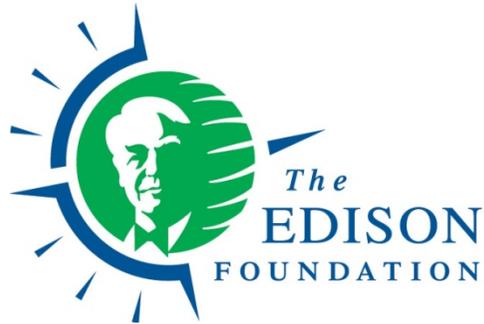
- Aligning utility interests with state EE goals likely requires performance incentives
- Carbon/climate policy is a big wild card with large impacts on the cost-effectiveness of EE
- Connecting an EERS to generation standards, like a CES or RPS, strengthens the use of EE as a resource
- Policy stability from regulators and legislators to utilities enables long term planning

# Fundamentals for EE are strong

- New power plant construction is expensive
- Regulatory risk on new plant cost recovery
- High and volatile energy prices
- Risk of carbon costs
- EE industry jobs
- Policies available for addressing utility financial concerns regarding EE (decoupling, incentives)
- State/national dollar drain from energy imports

# A challenging situation-- Minnesota, Xcel Energy

- Next Generation Act of 2007
- Long term goal to reduce retail electric sales by 1.5% (y-o-y)
- Xcel Energy likely not able to meet goals
  - Potential savings projections falling short of target
- Where has the low hanging fruit gone?
- Would larger rebates and new technologies help?
  - Yes and Yes. But rebates are not a sustainable path



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The screenshot shows the website's header with the Edison Foundation logo and the text 'INSTITUTE FOR Electric Efficiency'. A navigation bar includes links for 'ABOUT IEE', 'ISSUE BRIEFS', 'NEWS & EVENTS', 'REPORTS', 'DATABASES', and 'ONLINE ROUNDTABLE'. The main content area features a 'What's New' section with links to 'Upcoming Events Register Now!' and 'Energy Efficiency Success Stories'. Below this is an 'Ask IEE' section with a large question mark and text: 'Program cost recovery? Lost margins? Decoupling? If the resources on this site have not answered your questions about program design and best practices, please contact us.' To the right is a large image of a city skyline at night. At the bottom, there are three circular images: a smart meter, a compact fluorescent bulb (CFL), and an electrical outlet. The footer contains the text '© 2008 The Institute for Electric Efficiency. All rights reserved. [Contact Us](#). [Privacy Policy](#).' and three columns labeled 'JOIN THE COMMUNITY', 'EXTERNAL LINKS', and 'ASK IEE'.