

State-Level Energy Efficiency Policy Analysis

Maggie Molina Research Associate, Policy Program American Council for an Energy-Efficient Economy December 8, 2010

Why Do State-Level Energy Efficiency Analysis?

- a) Because it's fun to crunch numbers
- b) Because my boss told me to
- c) Because the state really wants one
- d) Because a <u>strategic goal</u> is in place that requires further guidance on objectives and opportunities



Different levels of EE studies

- Need to match level of analysis to the needs of the stakeholders, e.g. :
 - Detailed utility program analysis
 - Statewide achievable potential for goal-setting
 - Making the case for efficiency policies and programs
 – policy measures, consumer benefits, and jobs
- Engage stakeholders upfront to understand study goals



ACEEE shift from "achievable" analysis to "policy" analysis

- Link potential to set of tangible policy options;
- Bound by cost-effective efficiency resource assessment (economic potential)
- Audience is broad group of policymakers, advocates, utility sector, etc.
- Stakeholders want info on costs, economic benefits, and jobs
- Based on program experience elsewhere, e.g. time it takes to ramp up programs



ACEEE shift from "achievable" analysis to "policy" analysis

- •Realistic achievable potential
- •Maximum achievable potential
- Achievable potential

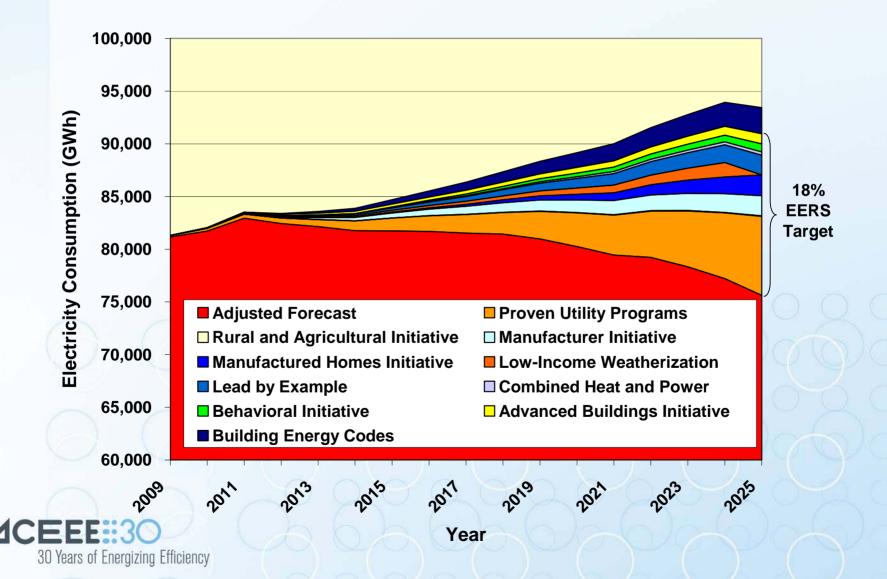
✓ Energy efficiency resource standards ✓ Building energy codes and enforcement ✓ State and local facility performance contracting ✓ State-led financing programs ✓ Combined heat and power ✓ Rural and agriculture program ✓Water efficiency standards Enabling policies: pricing; education



Where we've been...



Example: South Carolina policy analysis



Outcomes

- Florida informed Governor executive orders on energy efficiency
- Maryland informed passage of Governor's legislation for energy efficiency savings targets
- South Carolina leadership from electric cooperatives; Leg. Energy advisory committee is key audience
- North Carolina Energy Policy Council key audience for our results
- Ohio study helped to guide rules for recently-passed EERS goals



Lessons learned

- Reference case forecast and avoided costs are some of most contentious issues
- "Every state is unique" regional studies often don't carry political weight
- Study fatigue/ dueling of studies
- Studies have short shelf-life

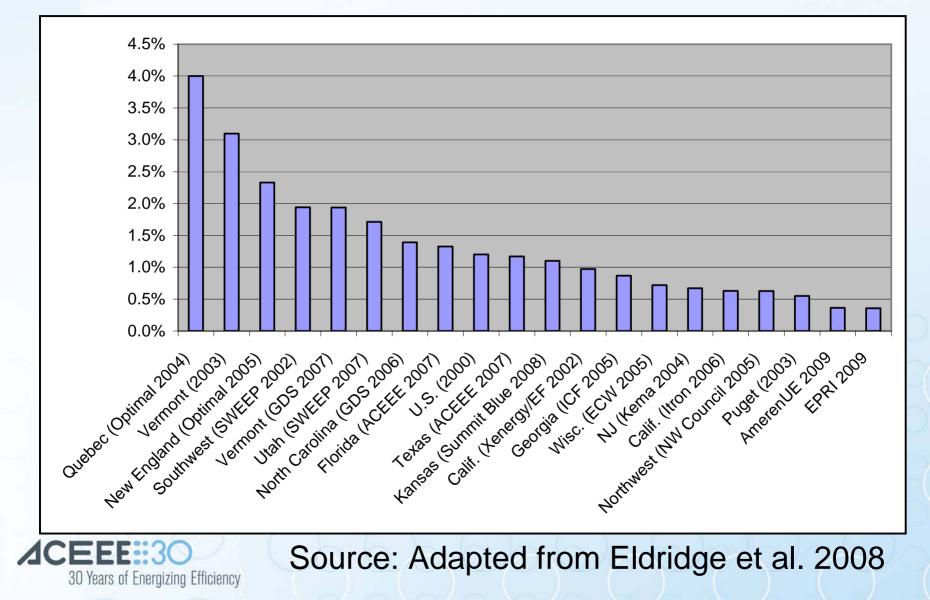


Lessons Learned, cont.

- Communicate with stakeholders throughout the process; conduct follow-up policy implementation support
- Data confusion. Focus can easily get shifted to data confusion rather than key issues. Need a few key, understandable messages that convey the findings;
- Use media outreach to disseminate the results



Meta-review: achievable potential studies

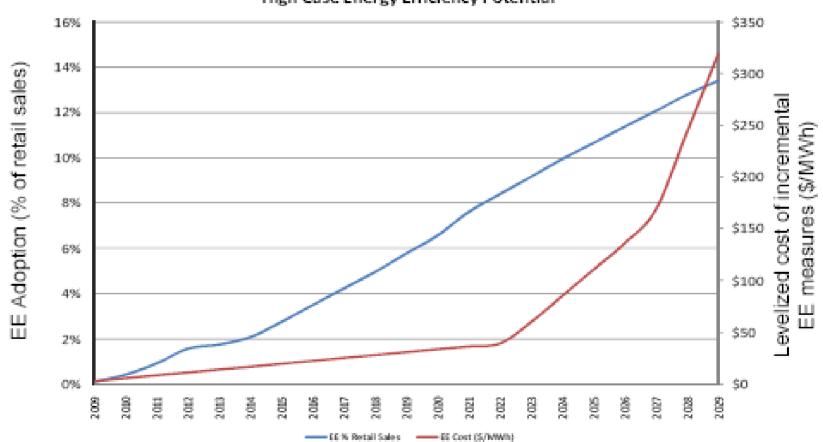


Transparency

- Terminology of studies is confusing
- EE studies are based on large data sets and require numerous assumptions
 - EE resource penetration over time --"flat lining"
 - Rising costs per kWh
 - Customer participation rates are a sig. variable
- Gross savings or net savings?
- Range analysis is best approach given uncertainty around EE levels; but policymakers want concrete numbers



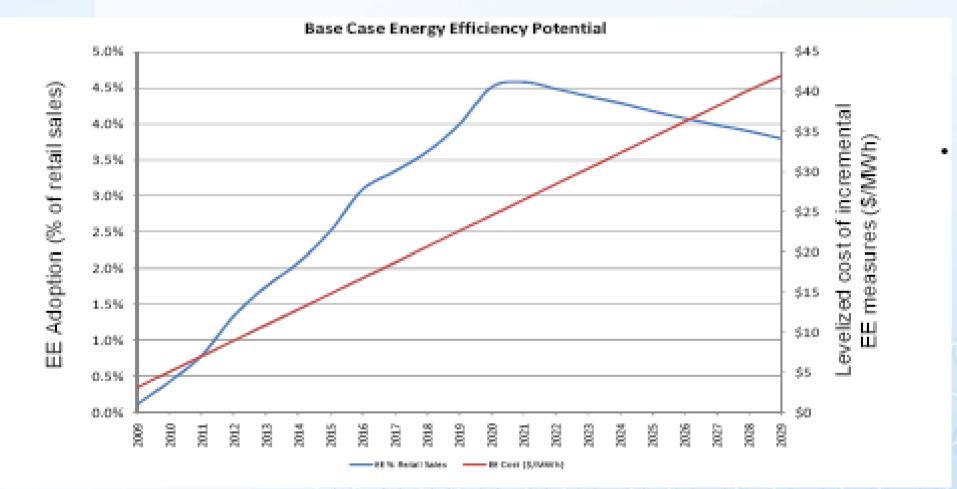
Example of rising EE cost assumptions



High Case Energy Efficiency Potential



Example of "flat lining" EE Resource Assumptions



ACEEE::30 30 Years of Energizing Efficiency

Where to go from here?

- Narrow focus to more specific analysis needs; comprehensive studies are very time and resource-intensive
- Recent focus on emerging states; also need to work in states to prevent "backsliding" and to sustain EE commitment in recent state efforts
- Better job of educating the educators; e.g. link results to customer-perspective program offerings



Conclusions

- Identify target audiences first and understand their specific goals;
- Potential studies let the numbers drive the policy decision; should the policy goals drive the analysis?
- Studies should not be conflated with the philosophy of goal setting; aggressive, but reasonable goals can be determined in absence of highly-detailed studies
- Goals can be revised later as needed
- Range analysis: need to convey the uncertainty of policy measures
- More emphasis on educating stakeholders in understandable terms





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