

Shaping the Future: Next-Generation Energy Efficiency Targets

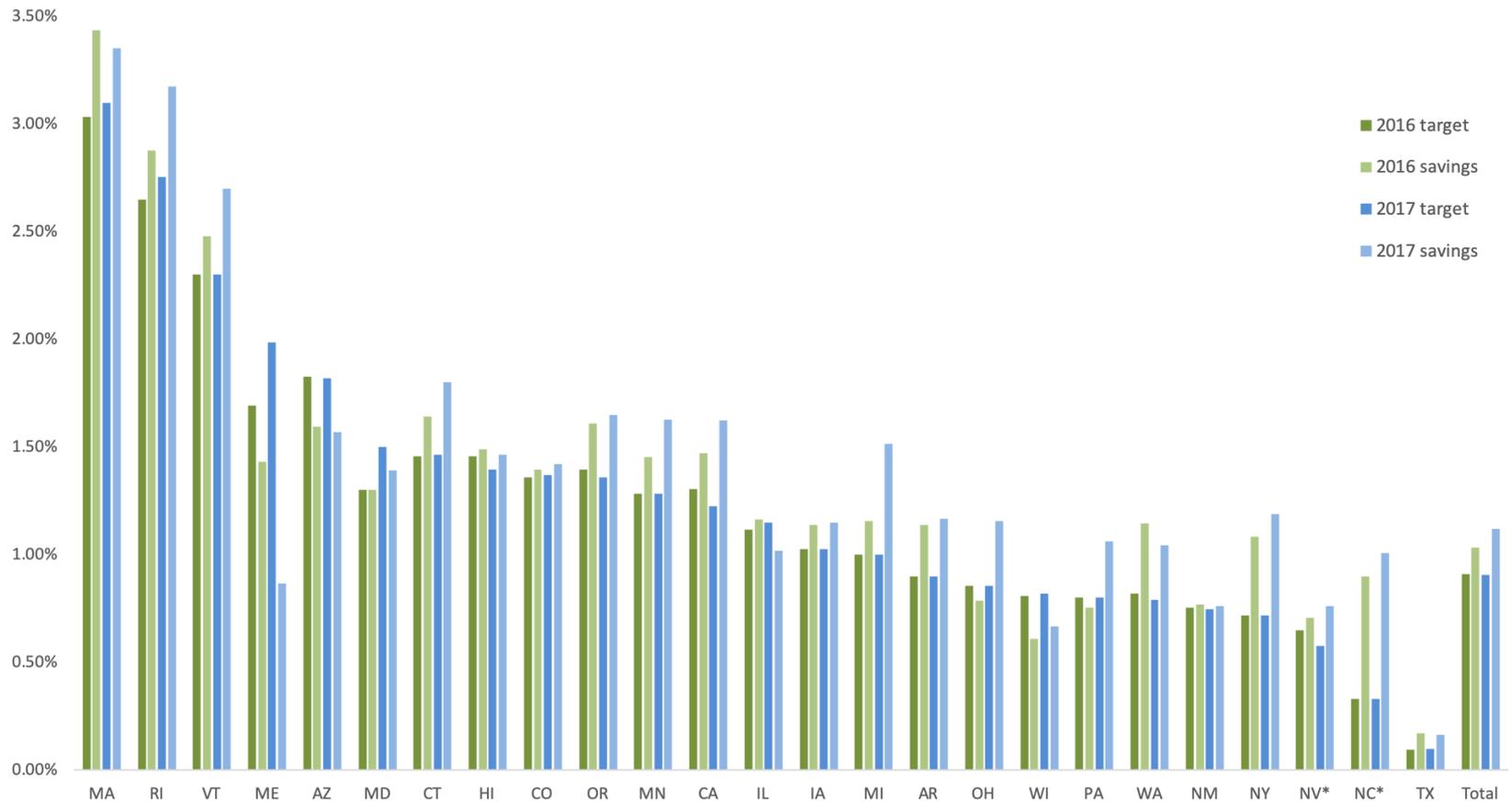
Presented at the 2019 ACEEE National Conference on
Energy Efficiency as a Resource

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October 16, 2019

Examining EERS policies

- How have EERS policies performed to date?
- What is driving change?
- What do new models look like?
- What can we learn from states leading the way?

States are meeting their savings goals



What is driving change?

- Market conditions
 - Reduced savings from lighting
 - Increasing Availability of Controls and Flexibility
 - Decreasing Avoided Costs
 - Electrification
- Policy priorities
 - Decarbonization
 - Cost
 - Equity
 - Grid value



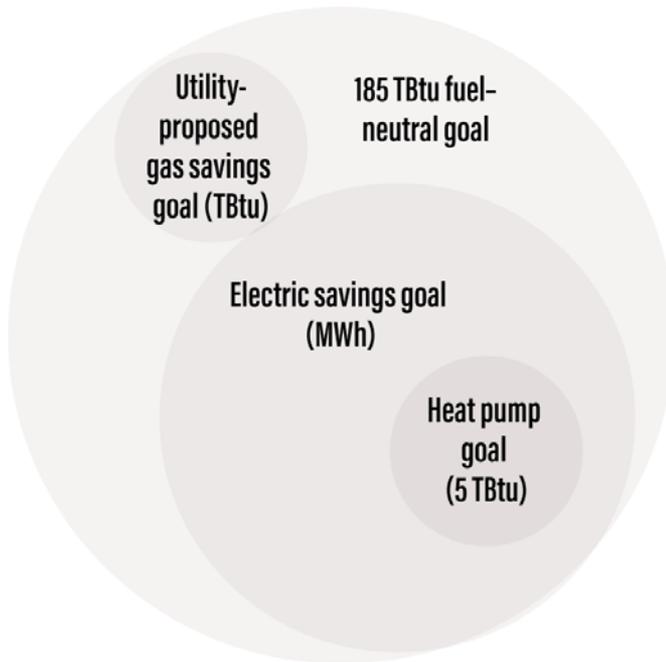
Three main approaches...

- Resource-specific goals
- Fuel-neutral goal
- Multiple goals

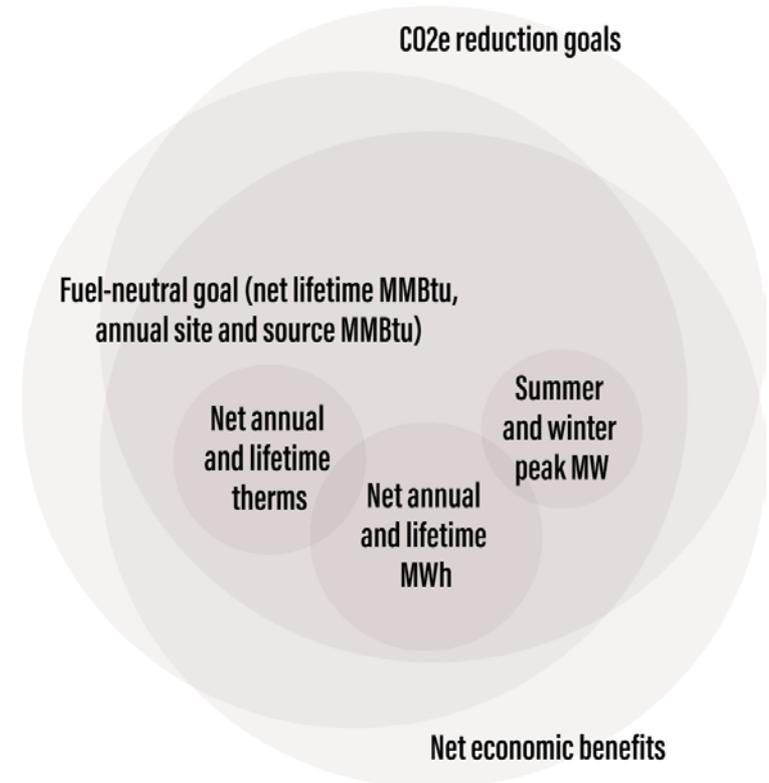
... but it's complicated!

New models are not one-size fits all

New York



Massachusetts



| State | Resource-specific goals | Fuel-neutral goal | Multiple goals |
|---------------|-------------------------|-------------------|---|
| California | Yes | | |
| Hawaii | Yes | | Under discussion: cumulative persisting electricity + peak demand, CO2e and fossil fuel reductions |
| Massachusetts | Yes | Yes, Btu | Yes: lifetime all fuels MMBTUs, CO2e reductions, Electric/natural gas savings, Summer and winter peak demand savings, Air source heat pump installation target (not a savings goal) |
| Minnesota* | Yes | | * |
| New York | Yes | Yes, Btu | Yes: All fuels MMBtus, Electric savings, Heat pump savings, Natural gas savings (in utility filings) |

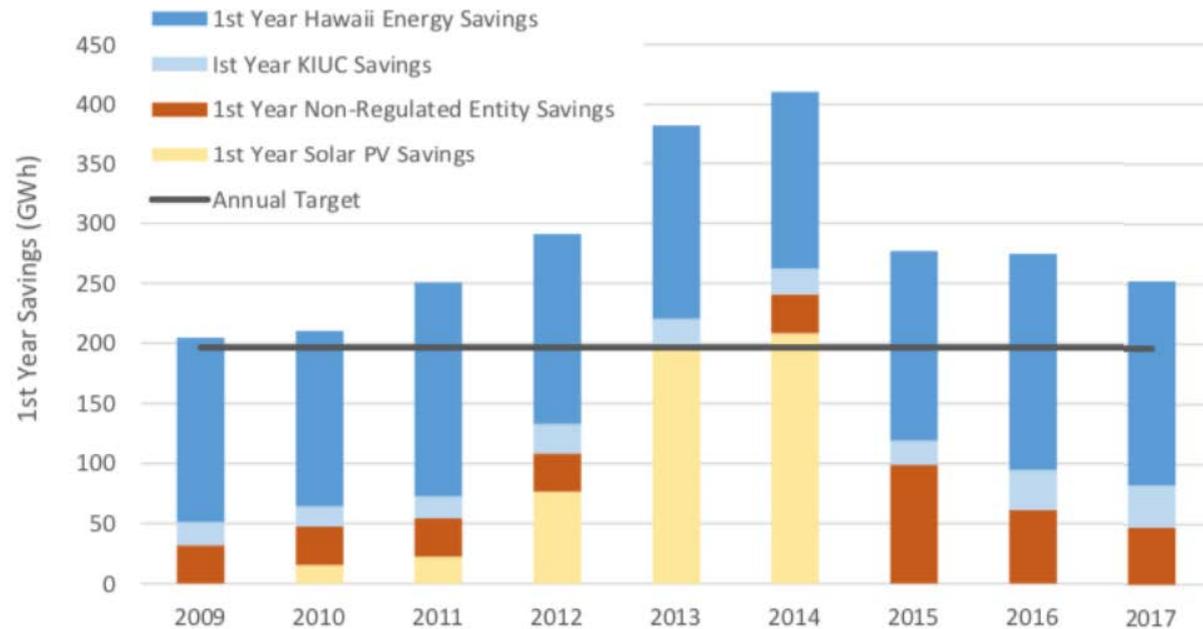
States are also using many other tools

- Carve-outs
- Tracking
- Performance incentives
- Cost-effectiveness rules
- Program design
- Spending
- Separate portfolios

Hawaii

- Existing EERS
 - 4,300 GWh electric savings by 2030
 - 3-year program cycles

- Drivers of change
 - Equity
 - Time & locational grid value



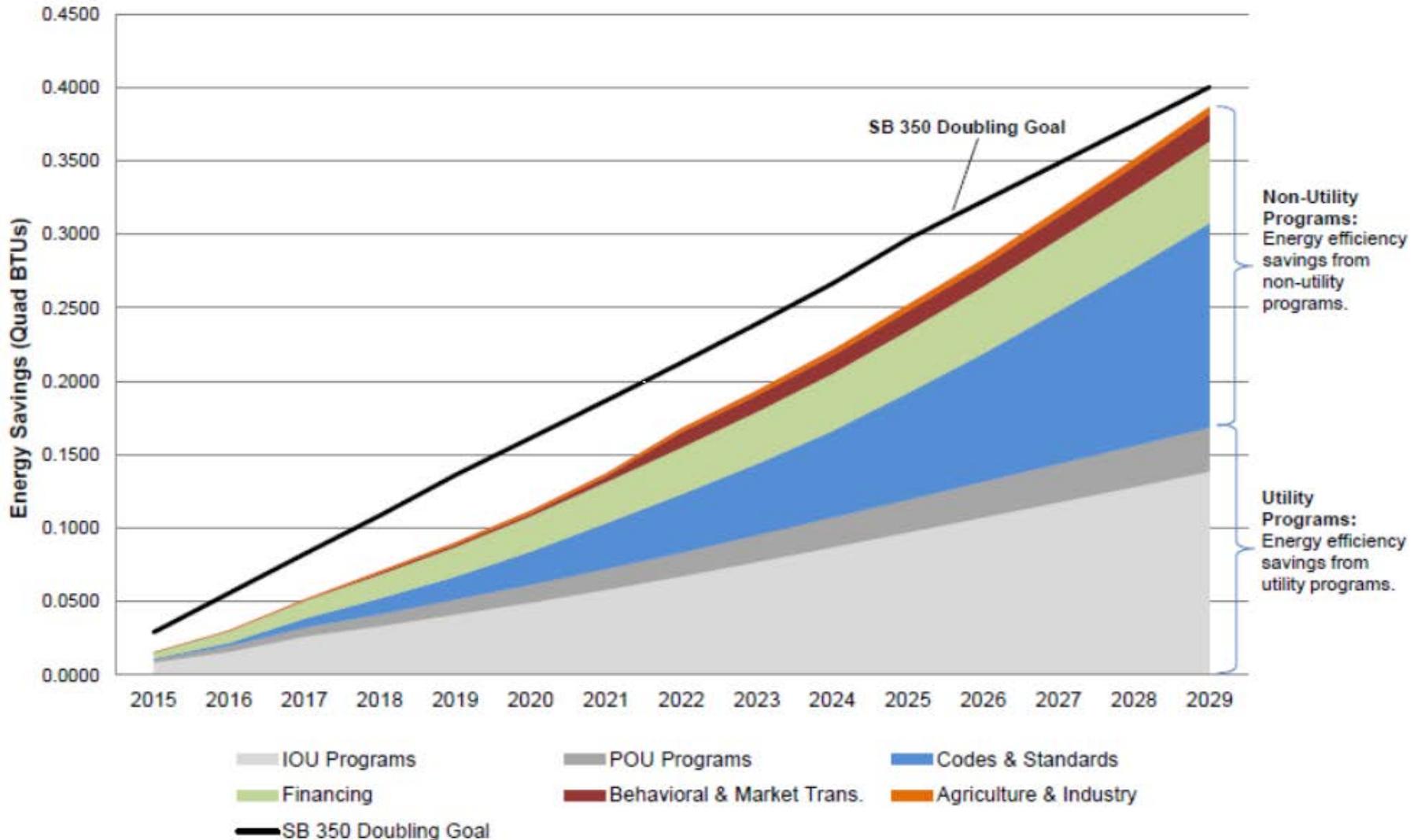
Hawaii PUC. 2018. Report to the 2019 Legislature on Hawaii's Energy Efficiency Portfolio Standards, Issued Pursuant to Section 269-96 Hawaii Revised Statutes.

- Multiple goals under discussion
 - Cumulative persisting electricity & peak demand savings
 - CO2e reductions
 - Fossil fuel reductions

California

- Existing EERS
 - Resource-specific goals
 - Non-target indicators: ex. avg energy intensity of single-family homes
- Top drivers of change
 - Doubling efficiency standards (SB 350)
 - Decarbonization push (AB 3232, SB 1477, EO B-55-18)
- Next steps
 - Fuel substitution considerations
 - Private-sector program design and delivery
 - Consideration of time & locational value in IRP
 - Market transformation: codes & standards advocacy

California



Key recommendations

- Understand policy drivers and design solutions to match
- Update resource planning and potential studies to reflect new rules and targets
- Consider multiple goals, potentially including fuel-neutral and resource-specific goals, to meet multiple policy objectives

Next Generation Energy Efficiency Resource Standards

<https://aceee.org/research-report/u1905>

