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Implementation and Outcomes from Washington's Energy Efficiency Resource Standard

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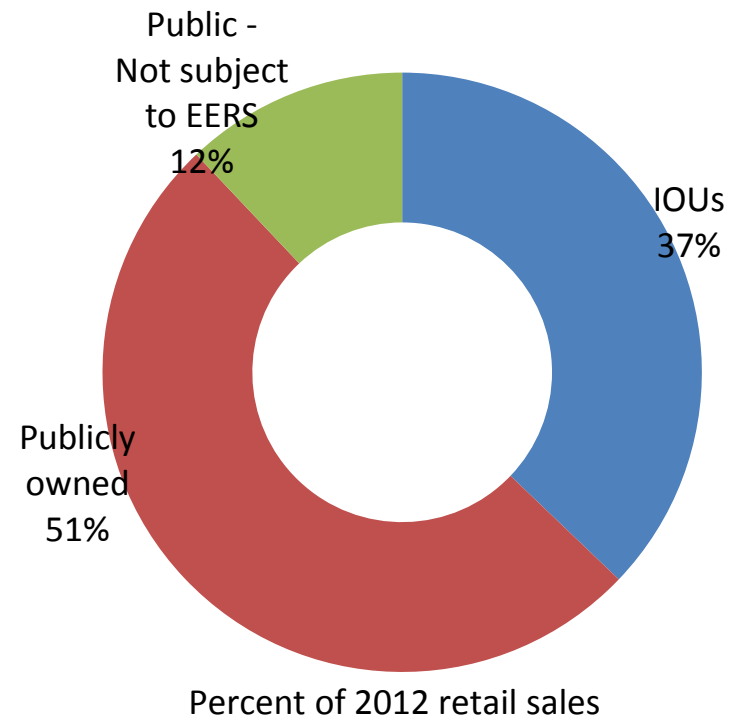
A top-line overview of the WA EERS

- Applies to utilities with more than 25,000 customers
 - About 88% of state's retail electric sales
 - Regardless of whether the utility is regulated
- Each utility must identify and acquire all energy efficiency that is available and cost-effective
- Implemented through a biennial cycle of
 - Assessing potential,
 - Establishing targets, and
 - Measuring achievement



Background on WA's electric industry structure

- Investor-owned utilities
 - Three vertically integrated utilities
 - Regulated by the state Utilities and Transportation Commission
- Publicly owned utilities
 - 14 municipal, public utility district, and cooperative utilities subject to EERS
 - Sell power from Bonneville Power Administration and their own projects
 - Not regulated by the state UTC

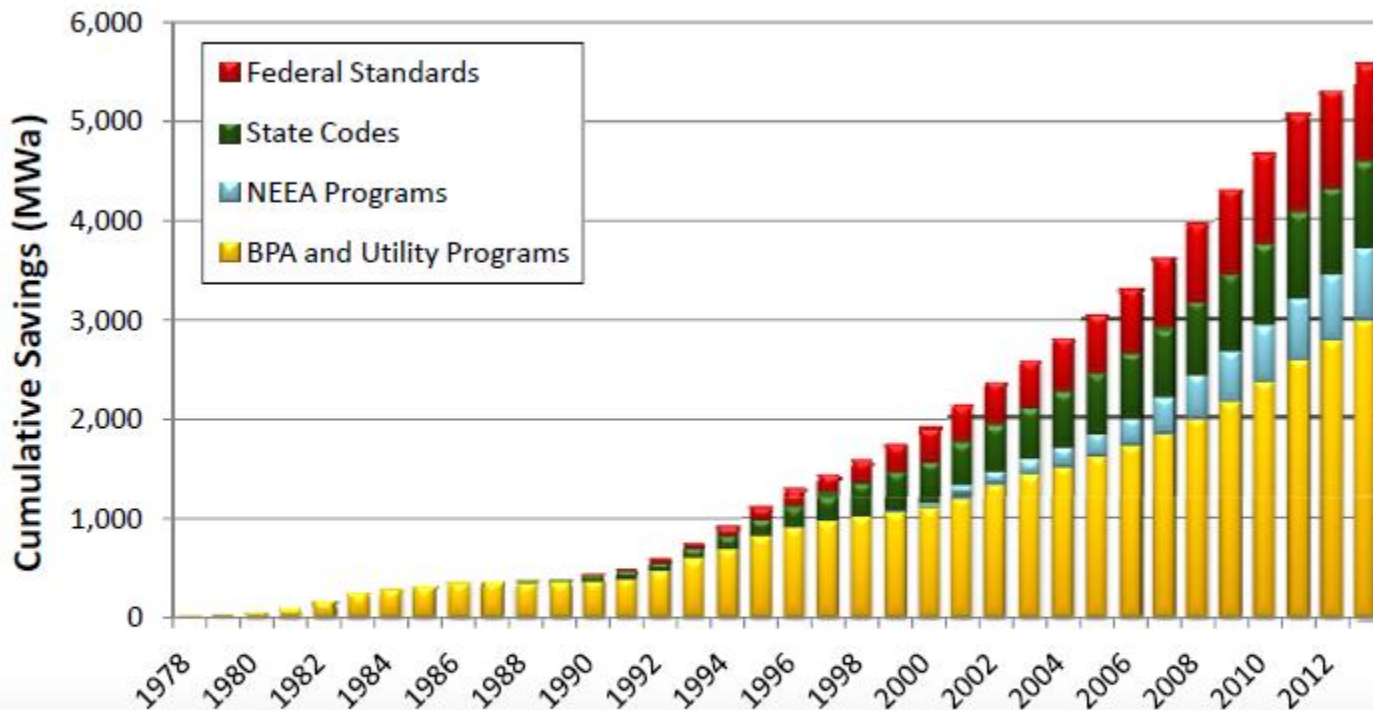


Washington's history of energy efficiency

- Energy conservation has been required in Washington since 1980
 - Northwest Power Act created four-state regional planning council
- Conservation is the preferred resource
- NW Power and Conservation Council identifies available and cost-effective conservation potential
 - Bonneville Power Administration responsible for conservation resources among its customers
 - State UTC required IOUs to plan for and acquire conservation



Cumulative regional energy efficiency savings



WA EERS adopted by voter initiative in 2006

- RPS and EERS on a single ballot measure – the “Energy Independence Act”
- For renewables, specific targets:
 - 15% of load by 2020
- For efficiency, a process based on regional model
- First efficiency target was 2010-2011



A complicated EERS governance structure

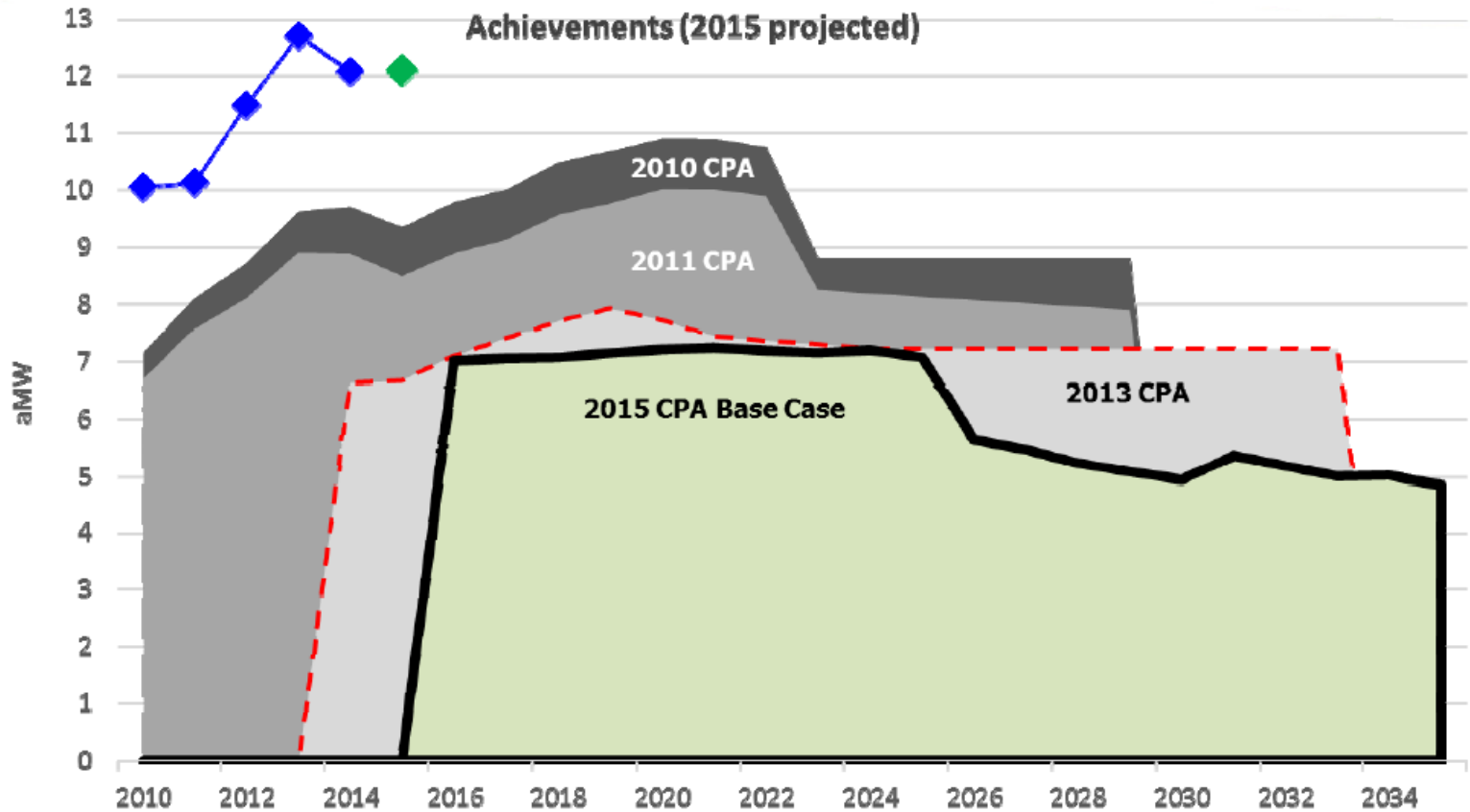
- Investor-owned utilities subject to oversight by UTC, consistent with UTC's existing practices.
- Publicly owned utilities:
 - Administrative rules adopted by State Energy Office
 - Audited by State Auditor (private auditor for cooperatives)
 - Enforcement by Attorney General
- All utilities report performance to State Energy Office annually
- All utilities must use regional plan methodologies, with no formal regional council role



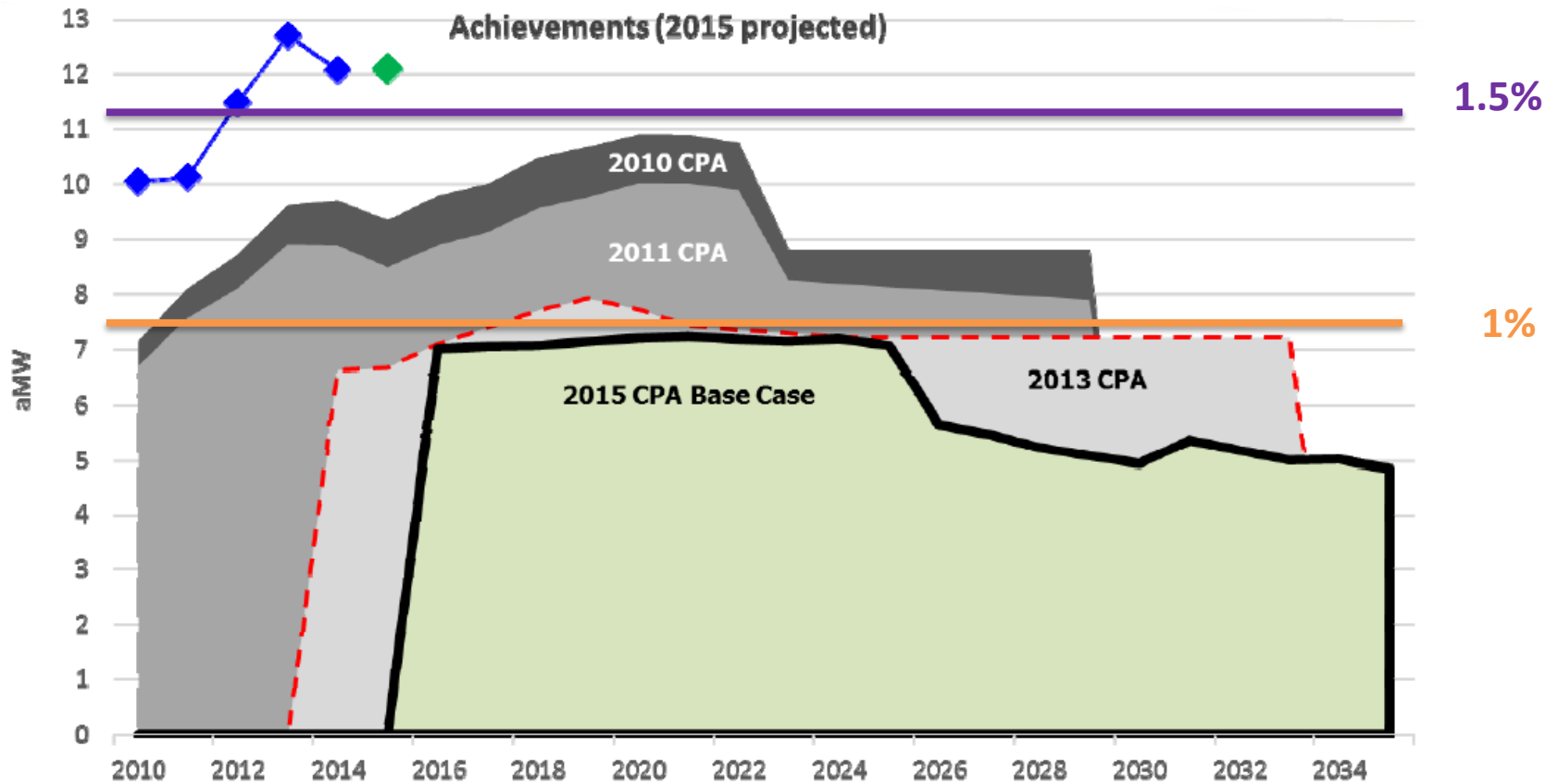
WA EERS cycle of assessment and acquisition



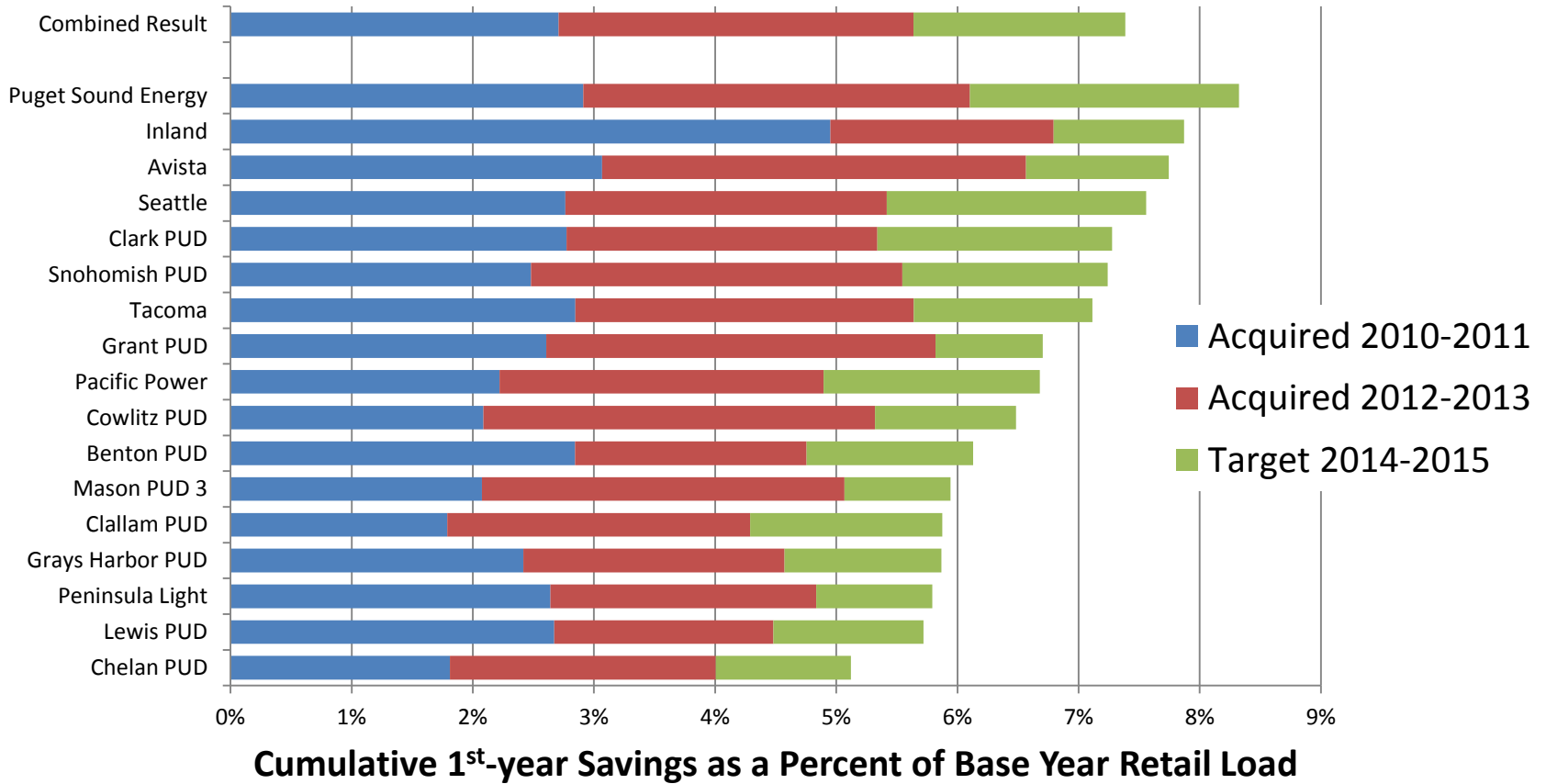
One example of iterative assessments



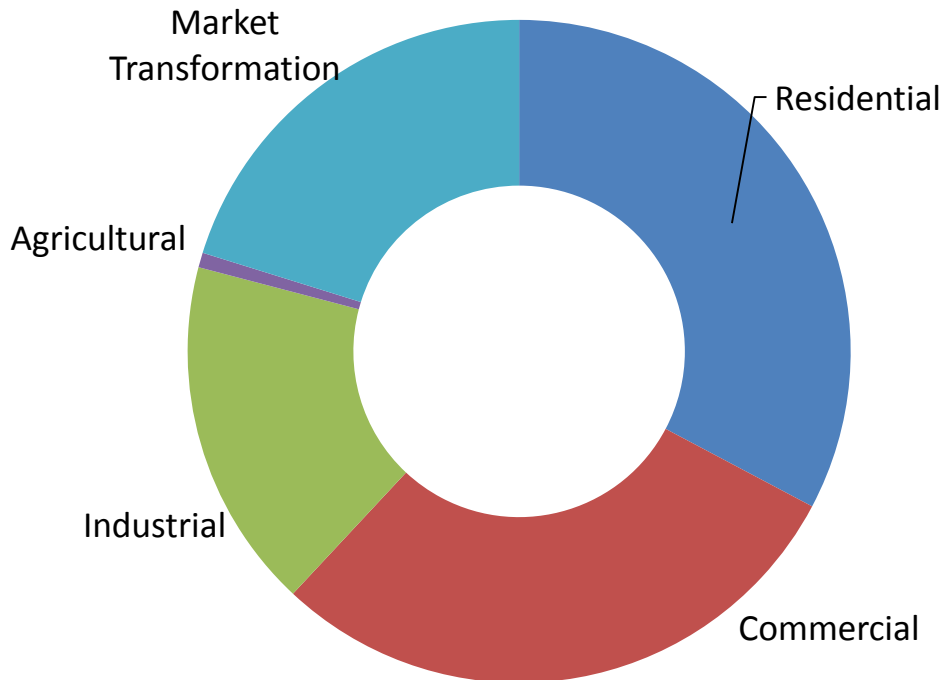
One example of iterative assessments



WA EERS results 2010-2015



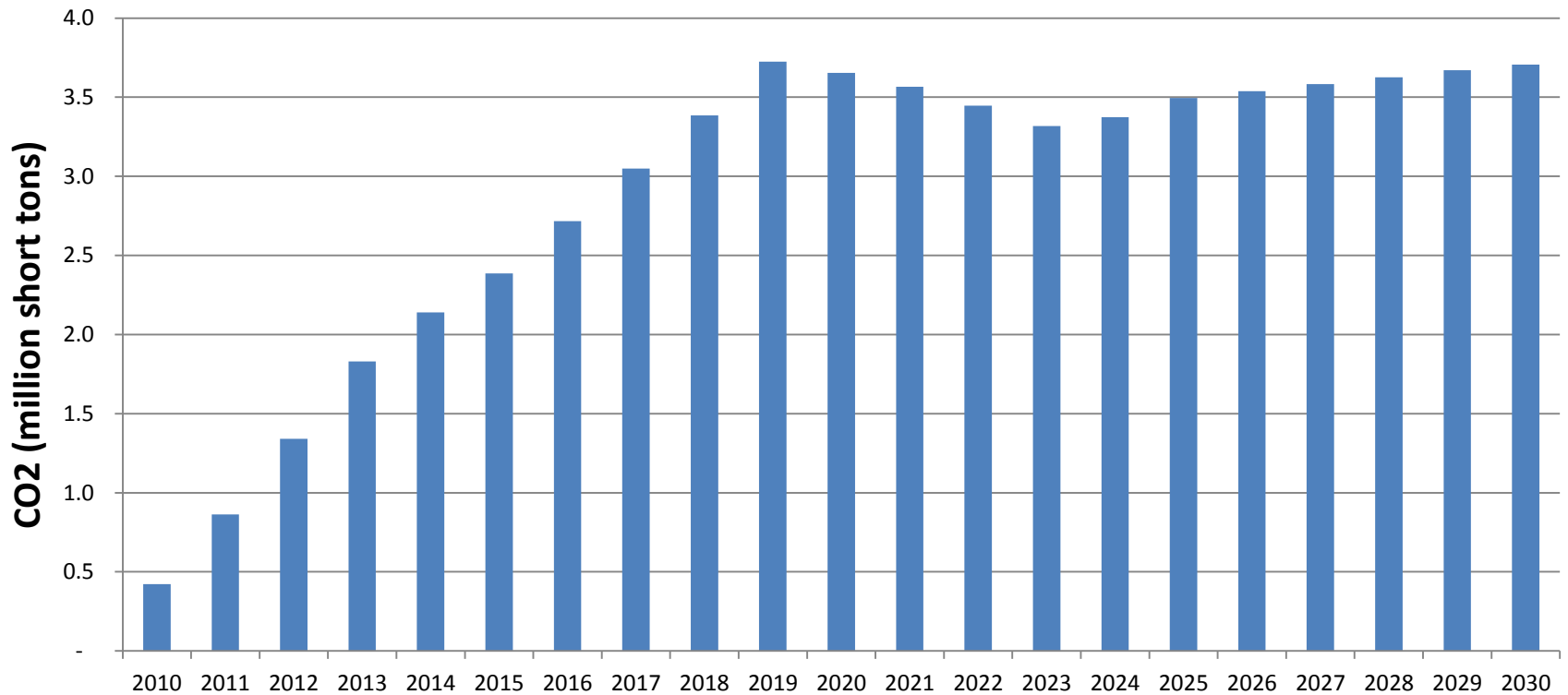
WA EERS results by end use sector



Utility expenditures range from 1.6% to 4.7% of retail revenue per year



Projected CO₂ reductions of 3.5 million tons/year



Implementation issues, so far

- Managing conservation programs to biennial targets
- Consistent standards for measurement of savings
 - Consistency between target-setting and performance reporting
 - Consistency among utilities
- Accounting for changes in unit energy savings values
- Accounting for non-programmatic savings
 - Market transformation programs
 - Codes and standards
 - “Momentum” savings
- Assessing reasonableness of targets



DOE SEP award supported implementation

- Extensive stakeholder process in 2013 and 2014 to update administrative rules
- Engaged in region-wide energy efficiency forums
- Worked with policy makers on specific concerns
 - Appliance standards
 - Consumption disclosure practices
 - On-bill financing feasibility
- Supported energy efficiency in EPA Clean Power Plan rulemaking



Adjustments to strengthen and streamline EERS

- **Statutory changes**
 - Allow utilities to carry excess conservation achievement to future periods
 - Clarify what happens when a new regional plan is adopted
- **Administrative rule amendments**
 - Remove a formula-based shortcut approach
 - More flexible cost-effectiveness standard
 - Better documentation of EM&V protocols
 - Greater emphasis on regional values for unit energy savings
- **Advisory opinion interpretations**
 - Conservation may be acquired outside utility programs
 - Conservation does not include transmission system



Future of the WA EERS

- Reconciling EERS with state's Clean Power Plan
 - Effect of carbon regulation on avoided costs
 - Potential substitutions between renewables and efficiency
- Incorporating non-utility programs
- Updating methods and data to new regional plan





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