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January 7, 2014

MEMORANDUM

TO: Council Members

FROM: Tom Eckman and Gillian Charles

SUBJECT: 2012 Regional Conservation Achievements and Projections for 2013-2015

The Council's Regional Technical Forum (RTF) is charged with conducting an annual survey to assess progress towards the Sixth Power Plan's conservation goals. Council staff, with the assistance of RTF contract staff, recently completed the 2012 survey and will present their findings at the January Council meeting. In addition to collecting data on conservation savings and expenditures for the year 2012, the RTF, at the request of PNUCC, also asked utilities to provide projected savings for 2013 through 2015.

Eighty entities representing just over ninety percent of the region's retail sales responded to the survey. When combined with the data provided by Bonneville for those public utilities that did not respond to the survey and data from the Northwest Energy Efficiency Alliance (NEEA), the survey covers the conservation savings acquired by all of the region's utilities in 2012. While NEEA's projected savings are for the entire region, the projected savings for 2013 and 2014 are from about 60 utilities and the Energy Trust of Oregon which represent only 75 percent of the region's retail sales.

Following are some of the survey's major findings for conservation savings:

- Regional conservation savings in 2012 were 253 average megawatts, exceeding the Council's Sixth Plan target of 240 average megawatts by just over five percent.
- Regional savings in 2012 were equivalent to about 1.2 percent of regional retail electricity sales. This is twice the national average.
- Cumulative savings for the three years 2010-2012 total 785 average megawatts, nearly two-thirds of the Plan's 1,200 average megawatt goal for 2010-2014.
- The utilities' projections for 2013-2014 amount to 403 average megawatts, including 197 average megawatts for 2013 and 206 average megawatts for 2014. However, this reflects responses from utilities representing only about 75 percent of the region's loads.

- The utilities' projections for 2015 amount to 127 average megawatts. However, this reflects responses from utilities representing less than 75 percent of the region's loads. It also does not include any savings from NEEA.

Based on these results, it appears that the region will meet and perhaps exceed the Sixth Plan's five year conservation target of 1,200 average megawatts. Projected savings for 2013 and 2014 from utilities providing forecasts for those years and NEEA, if achieved, would result in cumulative savings of 1,190 average megawatts, within one percent of the Sixth Plan target.

Further, regional conservation achievements have exceeded the conservation goals set forth in the Council's Fifth and Sixth plans for eight consecutive years. During 2005-2012, the cumulative conservation savings from utility, Energy Trust of Oregon, NEEA and Bonneville totaled 1,736 average megawatts.

Cumulative savings from 1978 through 2012 from utility and NEEA conservation programs, state codes and federal standards now total just over 5,300 average megawatts. This is roughly equivalent of the annual electricity use of the entire state of Oregon. Beginning in 2011, energy efficiency displaced coal as the region's second largest resource, after hydroelectricity.

Following are some of the survey's major findings for costs:

- In aggregate, regional utility investments in energy efficiency in 2012 were \$375 million (2006\$) or about 3.3 percent of retail electricity revenues.
- The average levelized cost to utilities of 2012 savings was just over \$18 per megawatt hour (2006\$).
- Regional utility investments in energy efficiency averaged just over \$28 per capita in 2012 compared to the national average of just over \$16 per capita.
- Cumulative utility investments in energy efficiency from 2010 through 2012 total \$1.14 billion (2006\$).

Progress Toward the 6th Plan's Regional Conservation Goals

2012 Achievements
2013 – 2015 Projections

Council Meeting

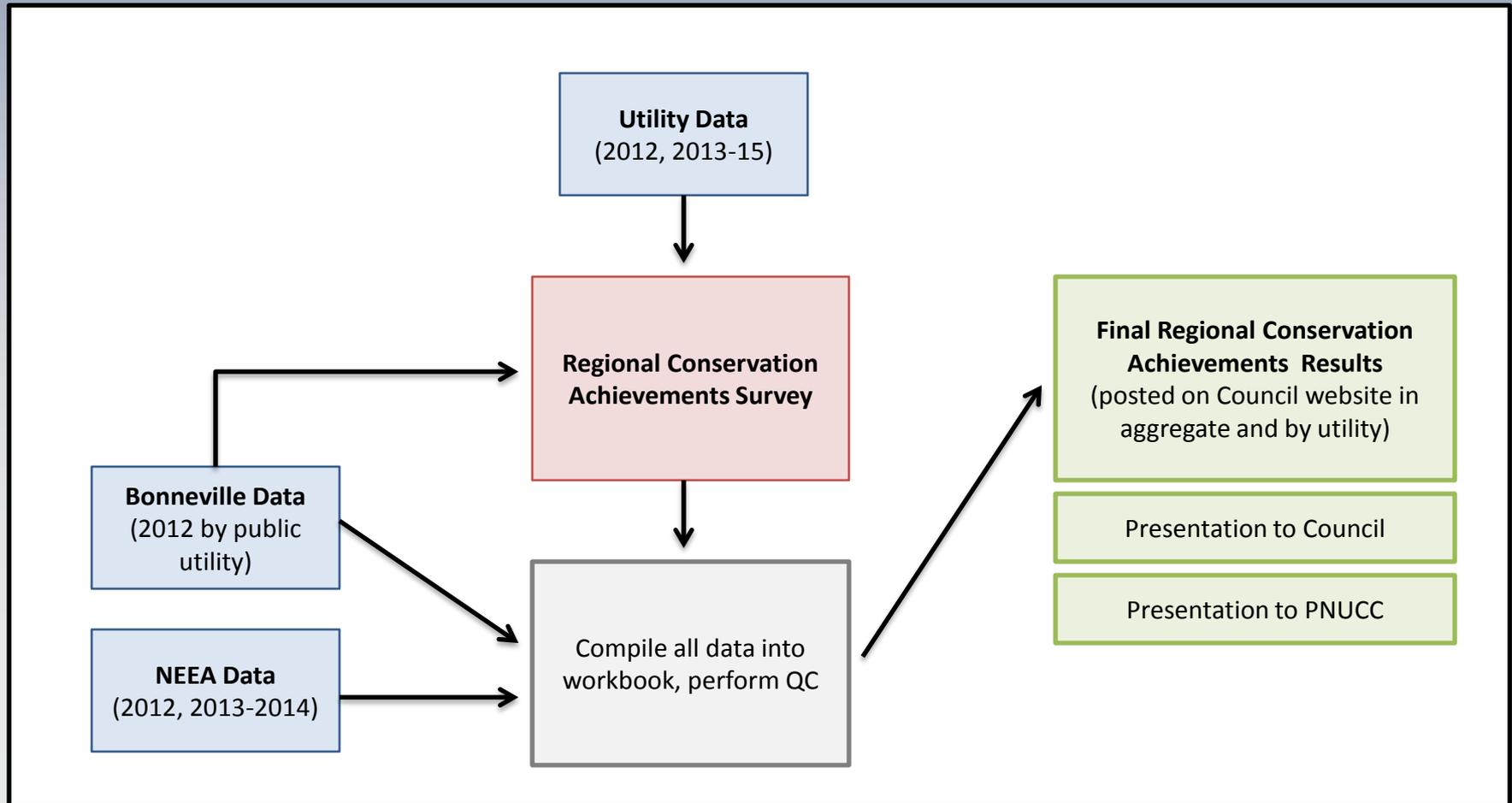
January 15, 2014

Tom Eckman and Gillian Charles

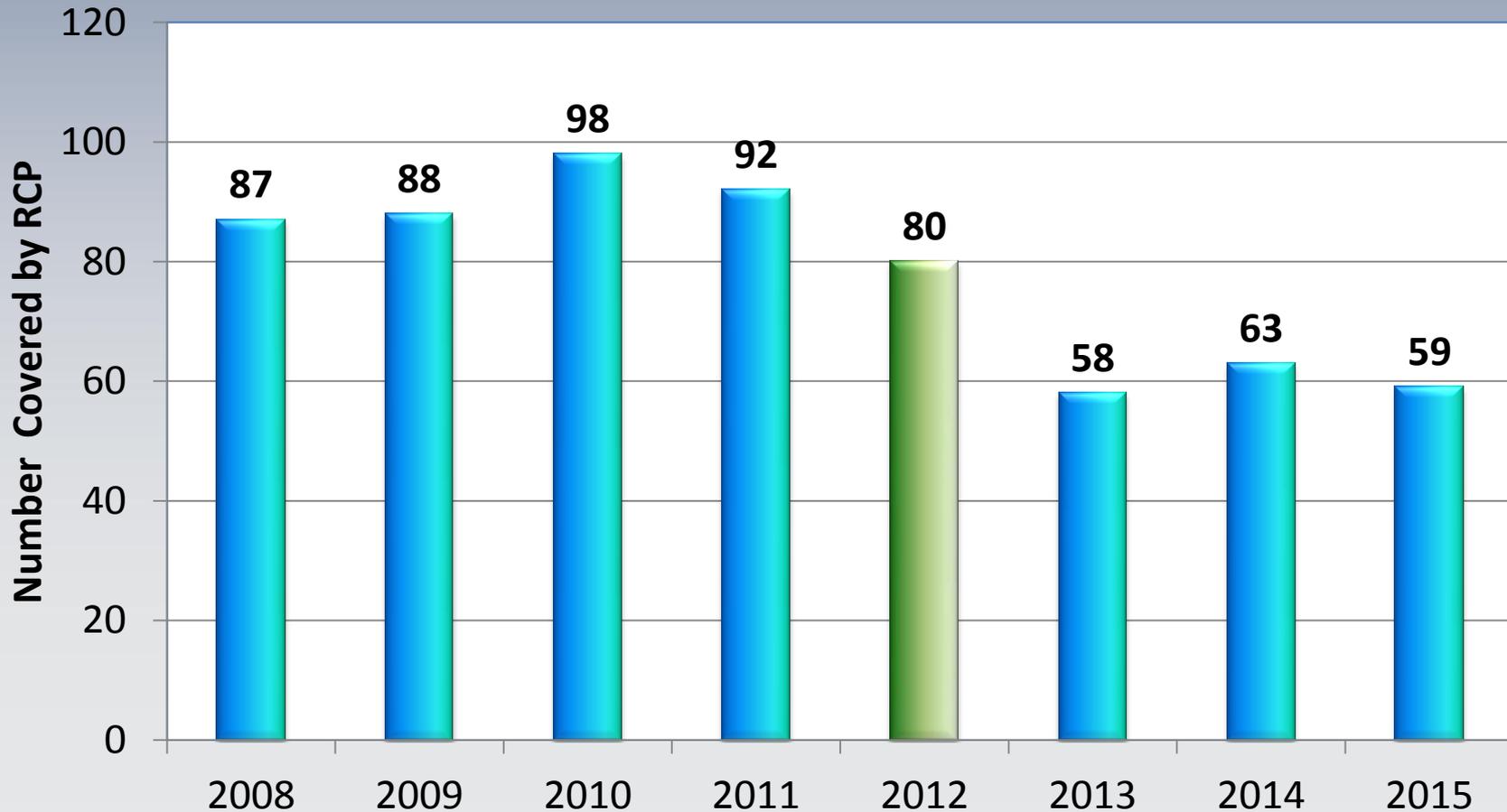
2012 Regional Conservation Achievement Report

- Annual Survey Conducted by RTF and Council
- Requested Actual Conservation Savings and Expenditures for 2012
- In coordination with PNUCC, also requested Projected Savings and Expenditures for 2013 – 2015 to compare against 6th Plan's targets
- Data was requested from all utilities, SBC Administrators, NEEA and Bonneville

Survey and Data Collection Process



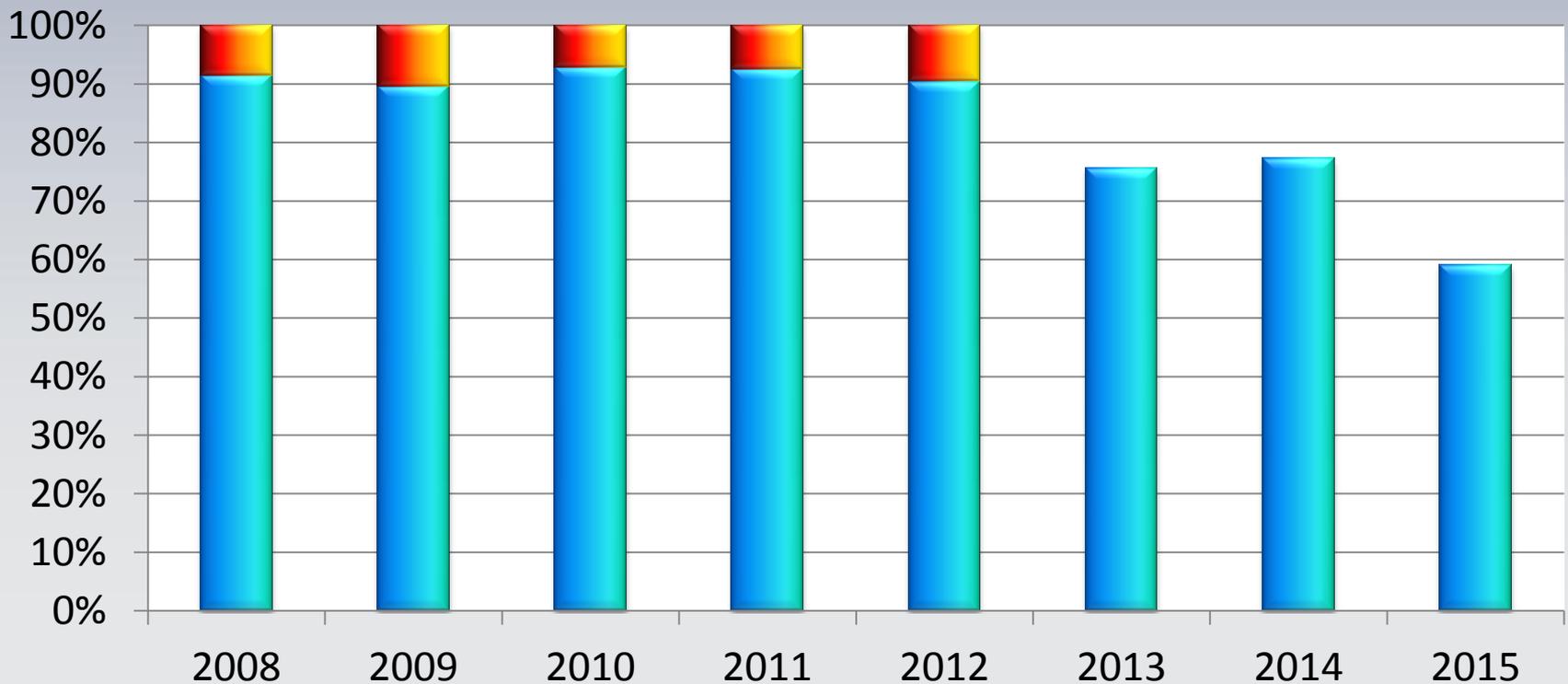
Utilities Filing Regional Conservation Progress (RCP) Reports*



* Includes Energy Trust of Oregon, and PNGC and IDEA that file on behalf of multiple utilities

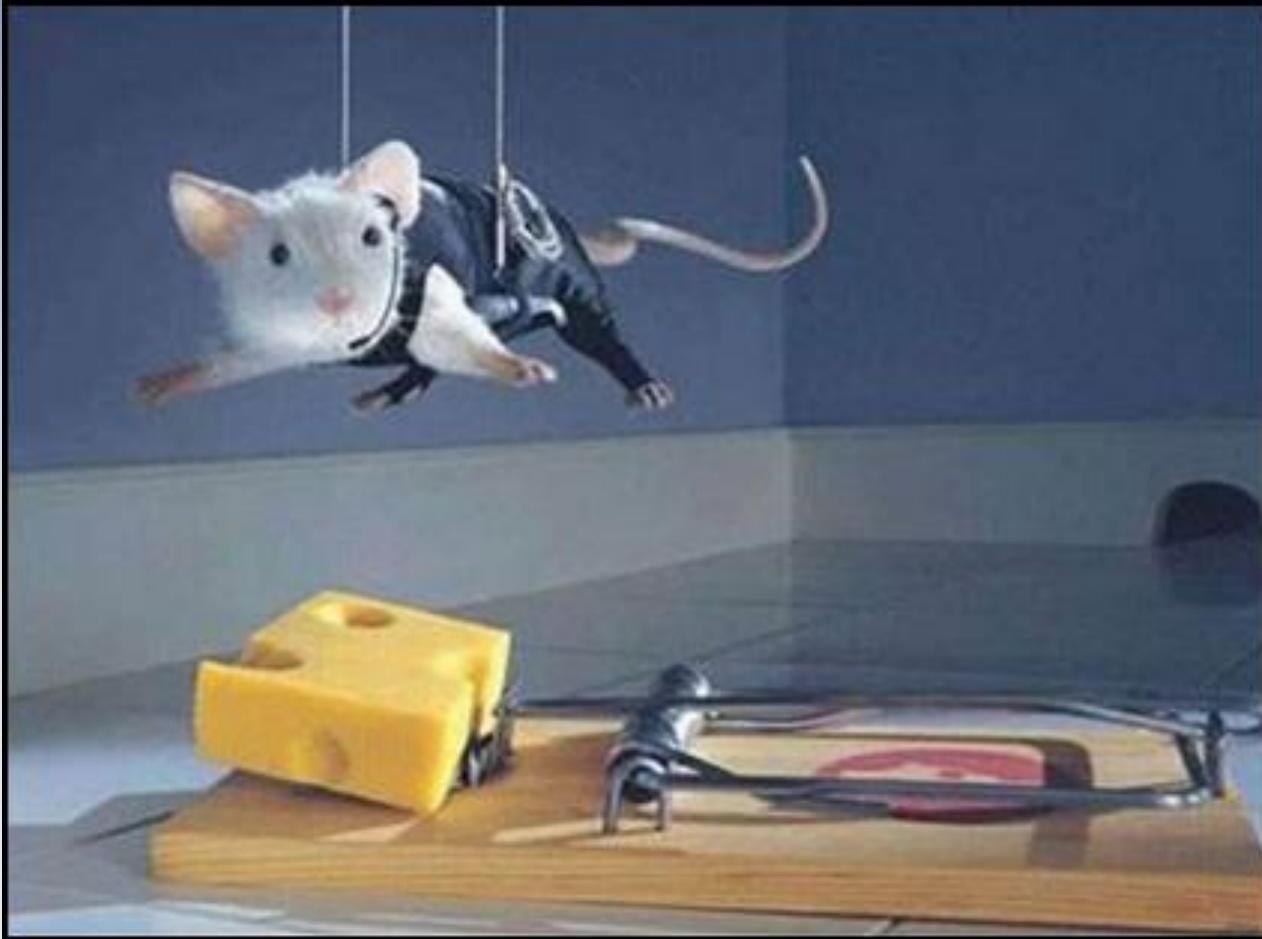
Share of Regional Retail Sales Covered by RCP and Other Sources*

- Share of Regional Retail Sales Covered by RCP
- Share of Regional Retail Sales Covered by PTR and other sources



*The Council/RTF obtains data directly from NEEA and Bonneville for public utilities that do not file RCP reports and for programs Bonneville funds directly. Bonneville data for FY2012 is not yet final.

2012 Achievements

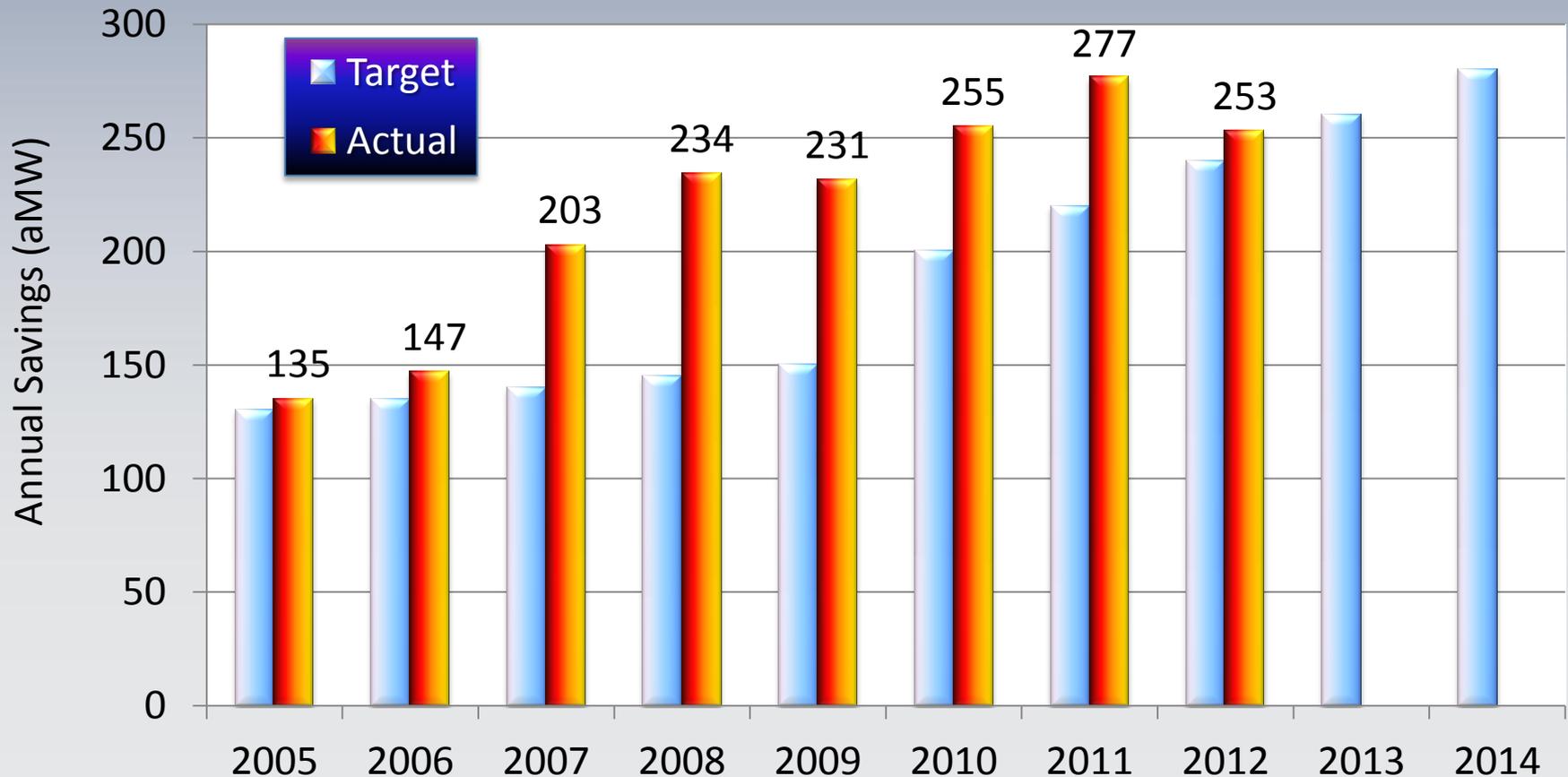


Everything Looks Good . . . So Far

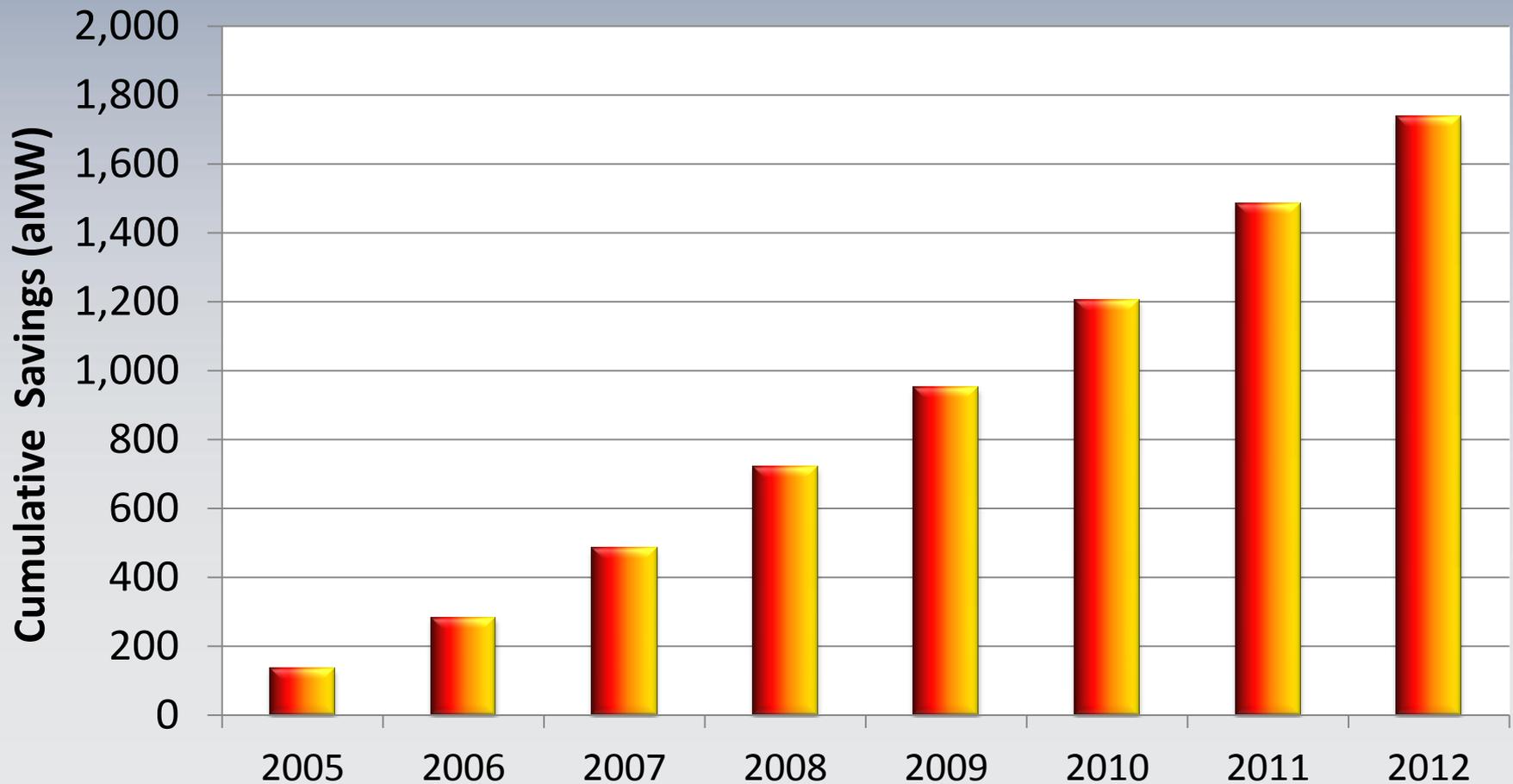
2012 Regional Accomplishments Slightly Exceeded Council Plan Target



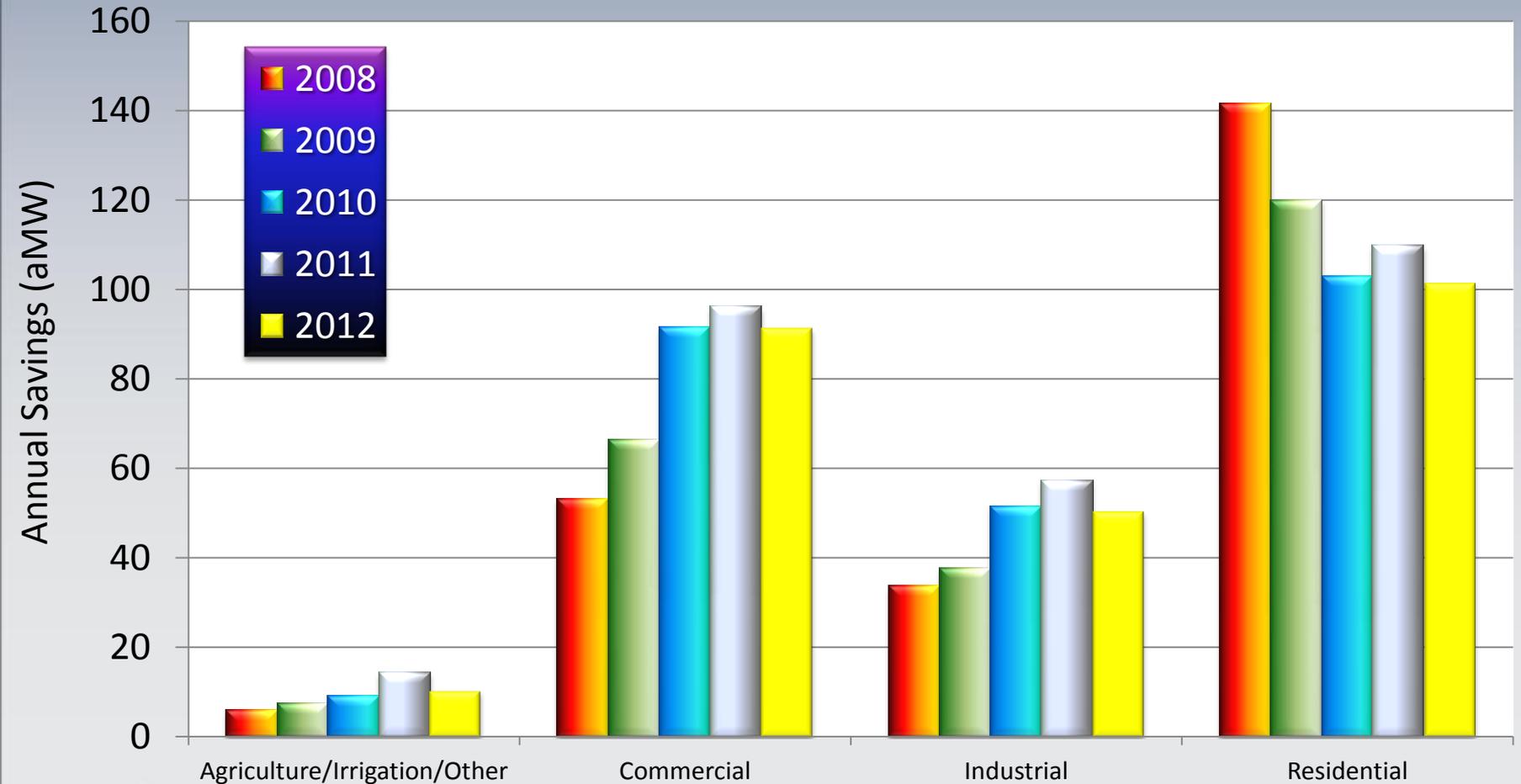
Accomplishments Have Exceeded Plan Targets Every Year Since 2005



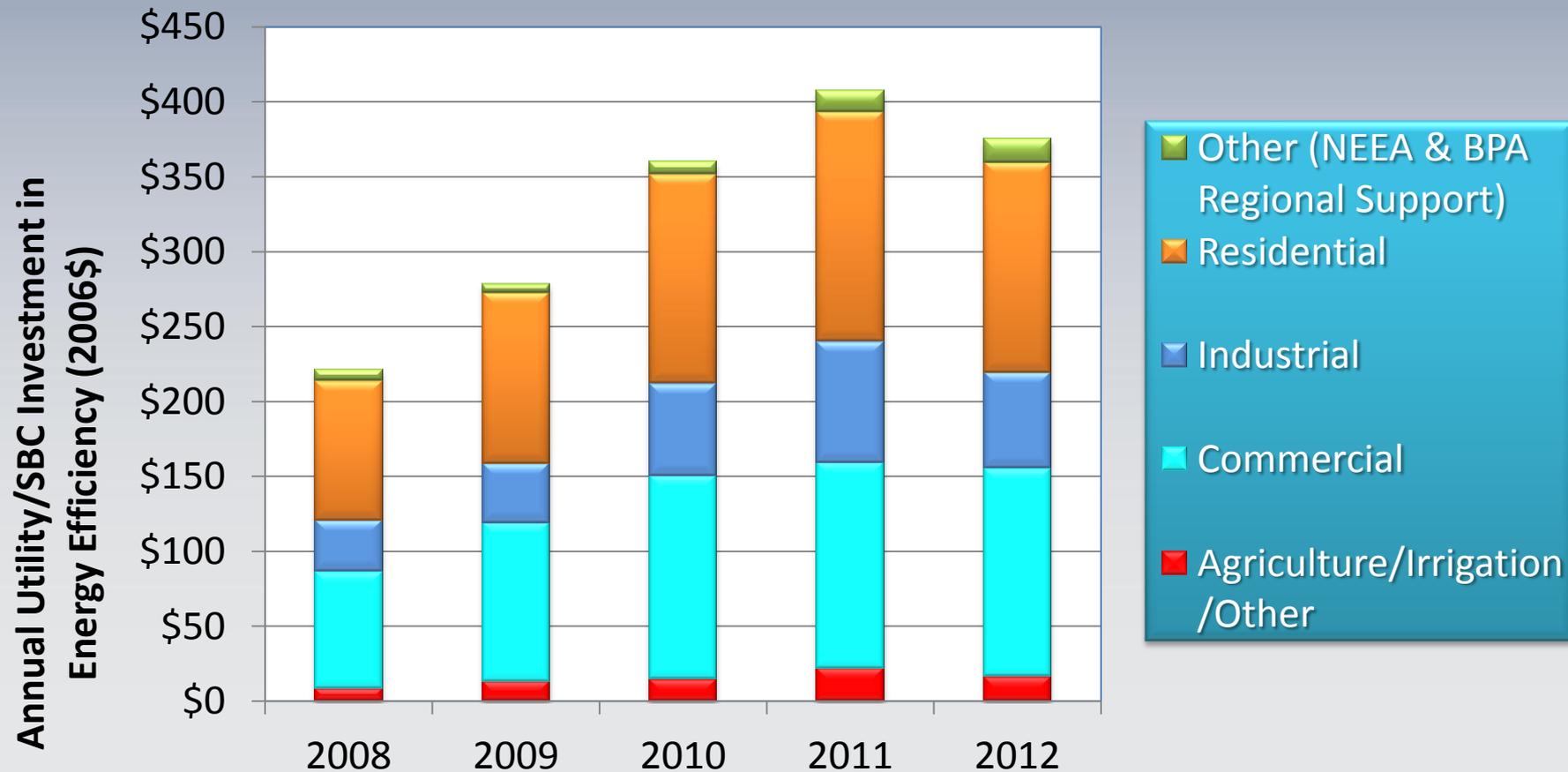
Since 2005 PNW Utilities Have Acquired Over 1,700 Average Megawatts of Conservation Savings



Commercial and Industrial Savings Continued to Grow the Most

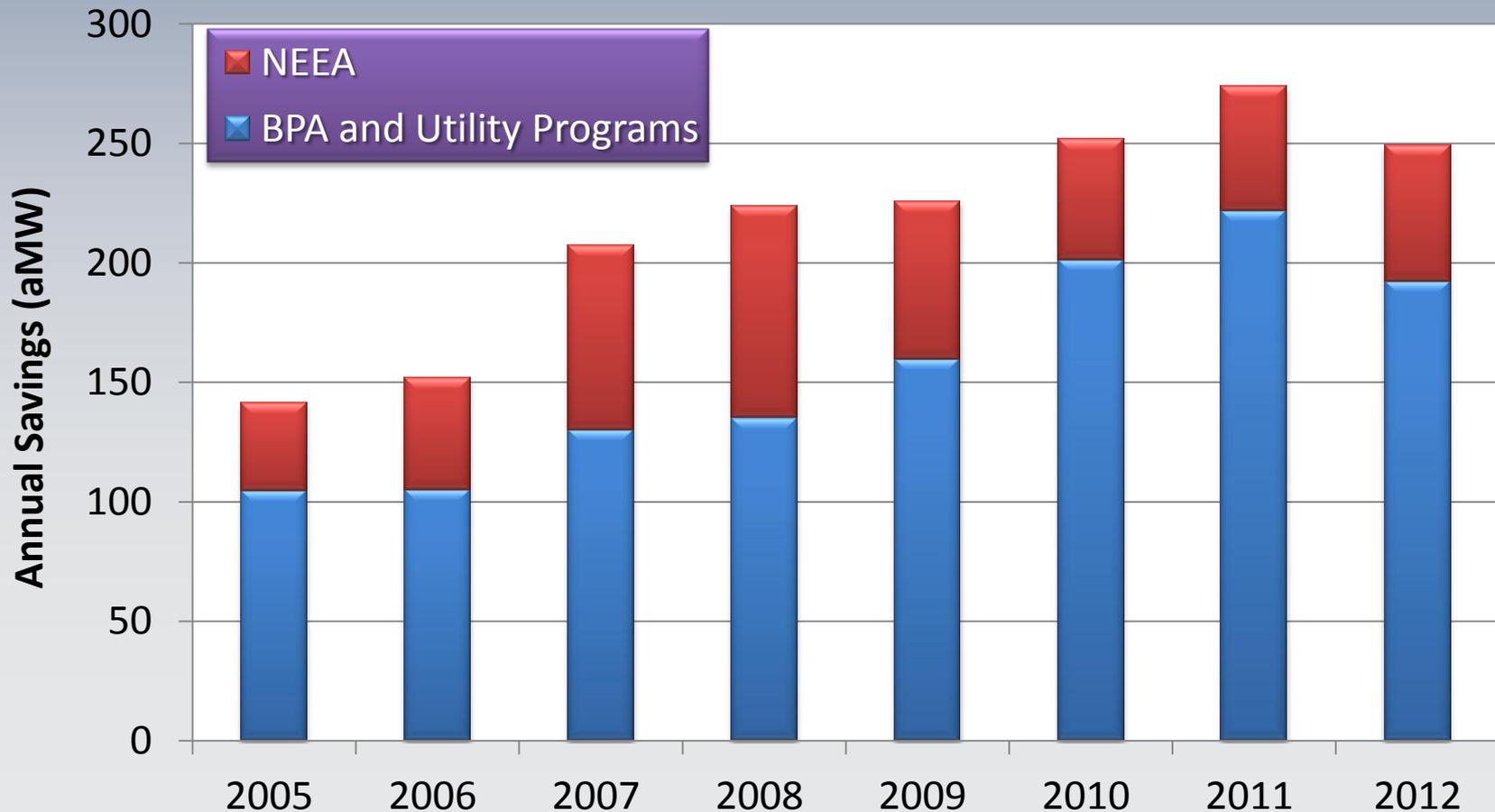


Total Utility/SBC Investments in Energy Efficiency in 2012 Were \$375 million (2006\$)

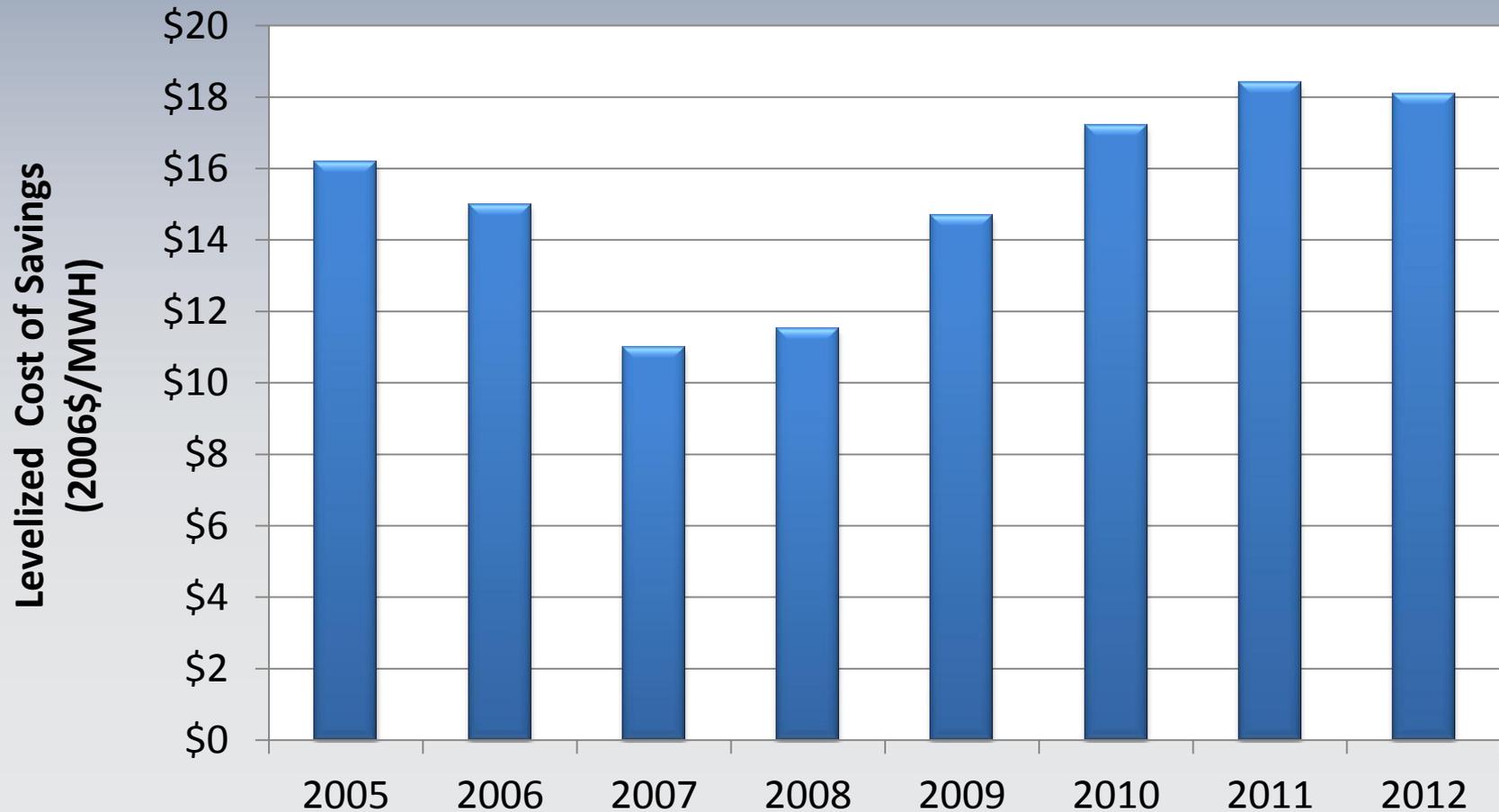


U.S. utility investment in efficiency in 2012 was just over \$5.35 billion (2006\$). Northwest investments represent about 7% of the total, but just under 5% of the U.S. population.

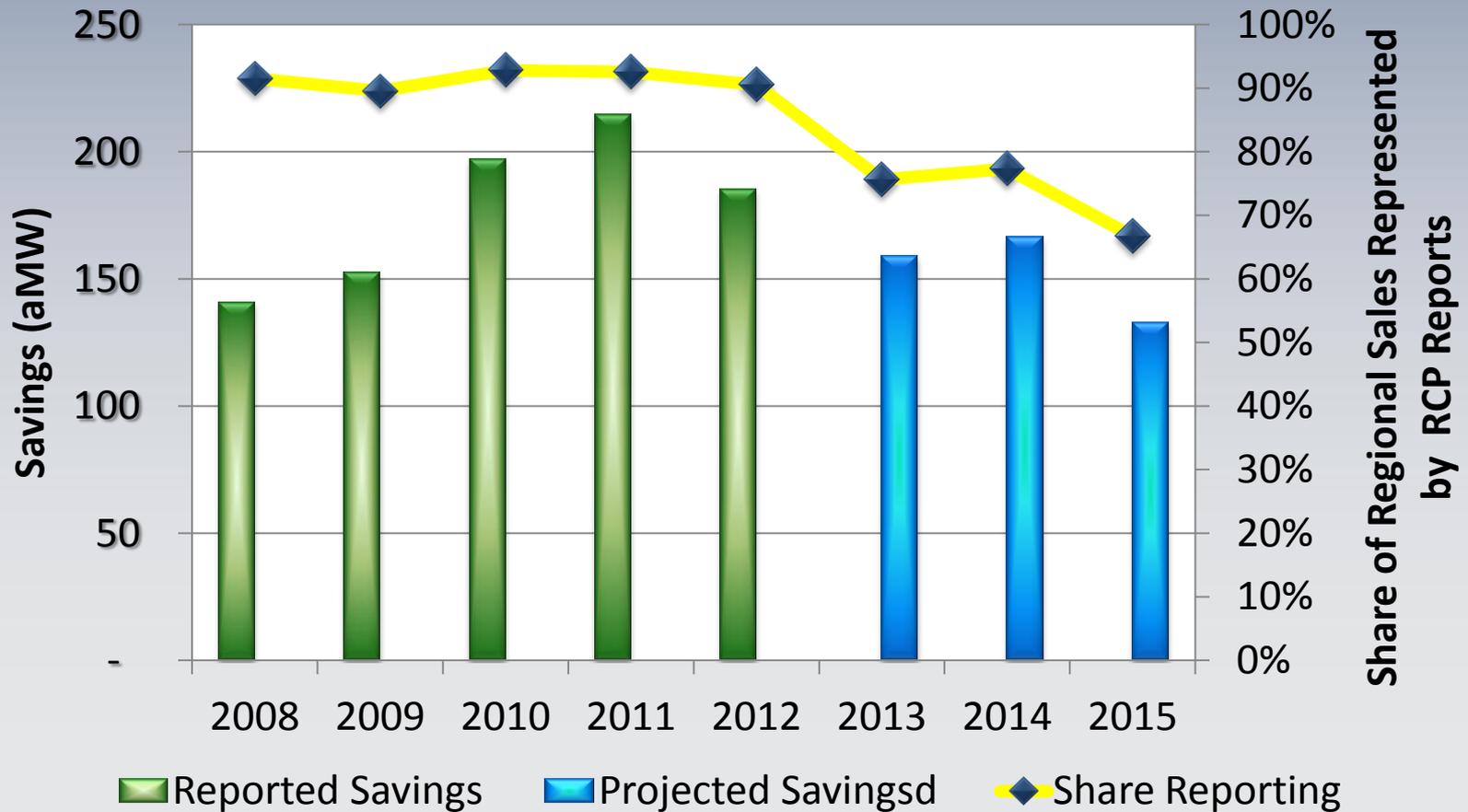
NEEA Continues to Contribute Significant Savings



Average Utility Levelized Cost of Conservation Remains Low

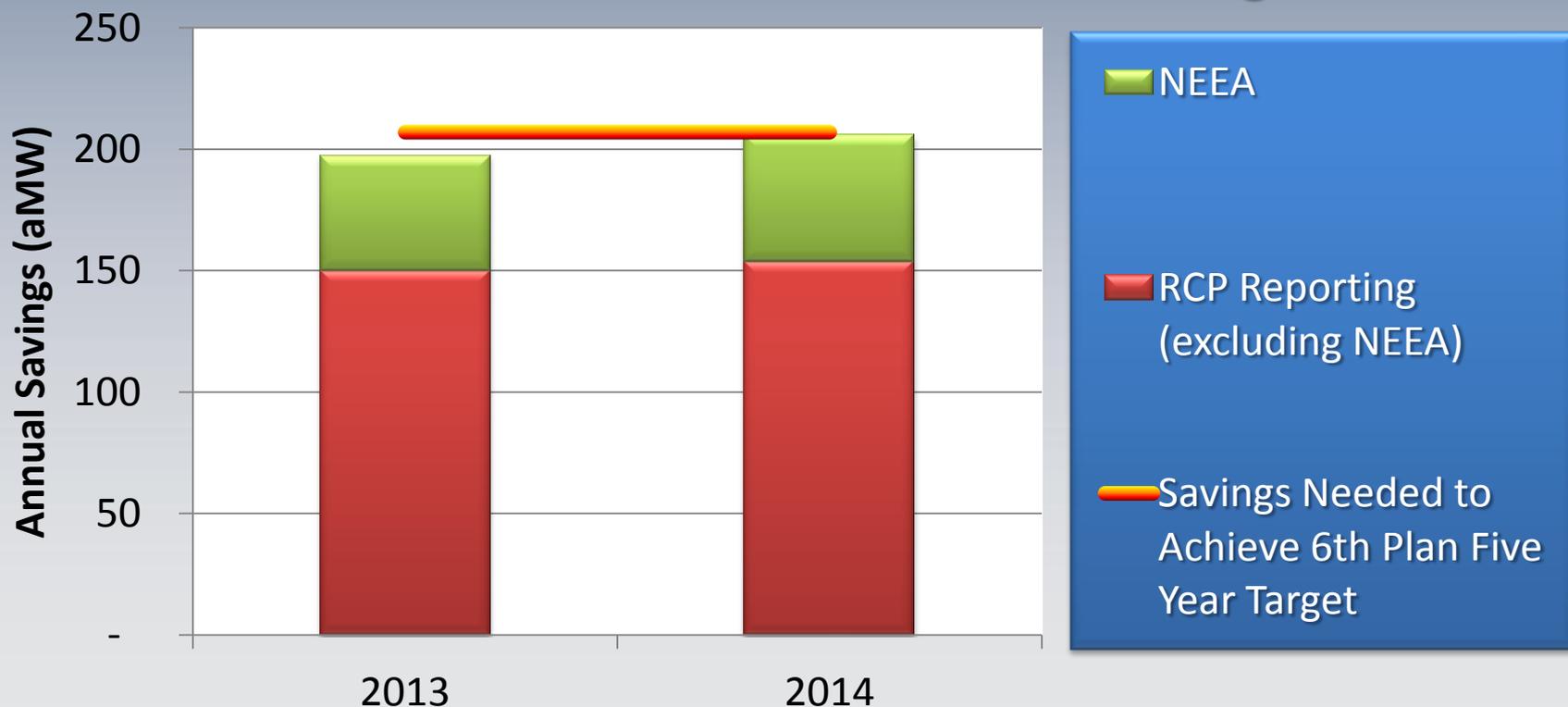


Projections for 2013 – 2015 Savings by RCP Reporting Utilities*



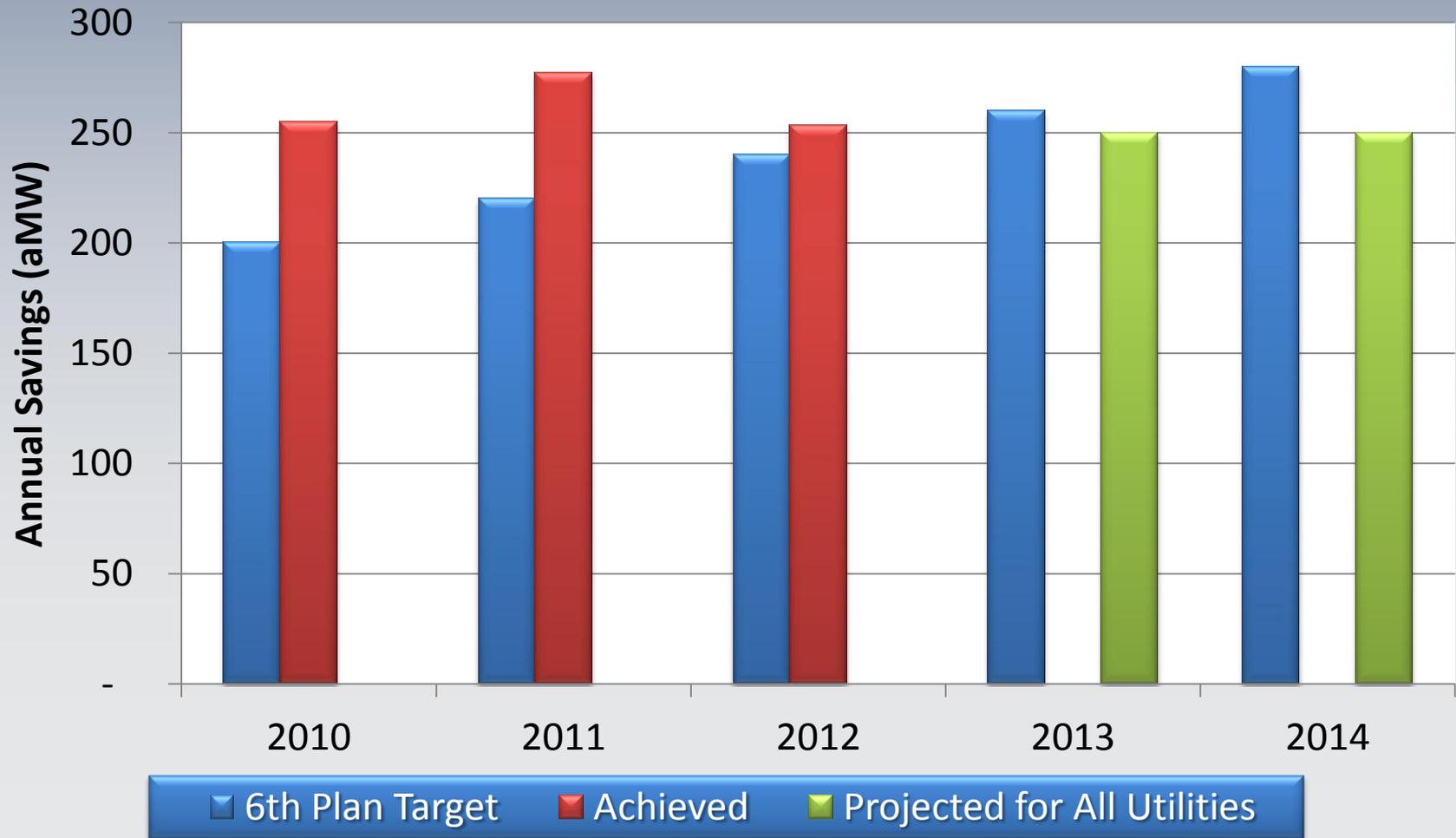
*Excludes savings from NEEA, BPA direct acquisitions and utilities not filing RCP Reports.

Projected Savings from Utilities Providing Projections for 2013 and 2014 and NEEA Are Nearly Sufficient to Achieve 6th Plan's Five Year Target*



*Utilities representing roughly 75% of PNW retail sales provided projections for 2013 and 2014. NEEAs' projections are for the entire region.

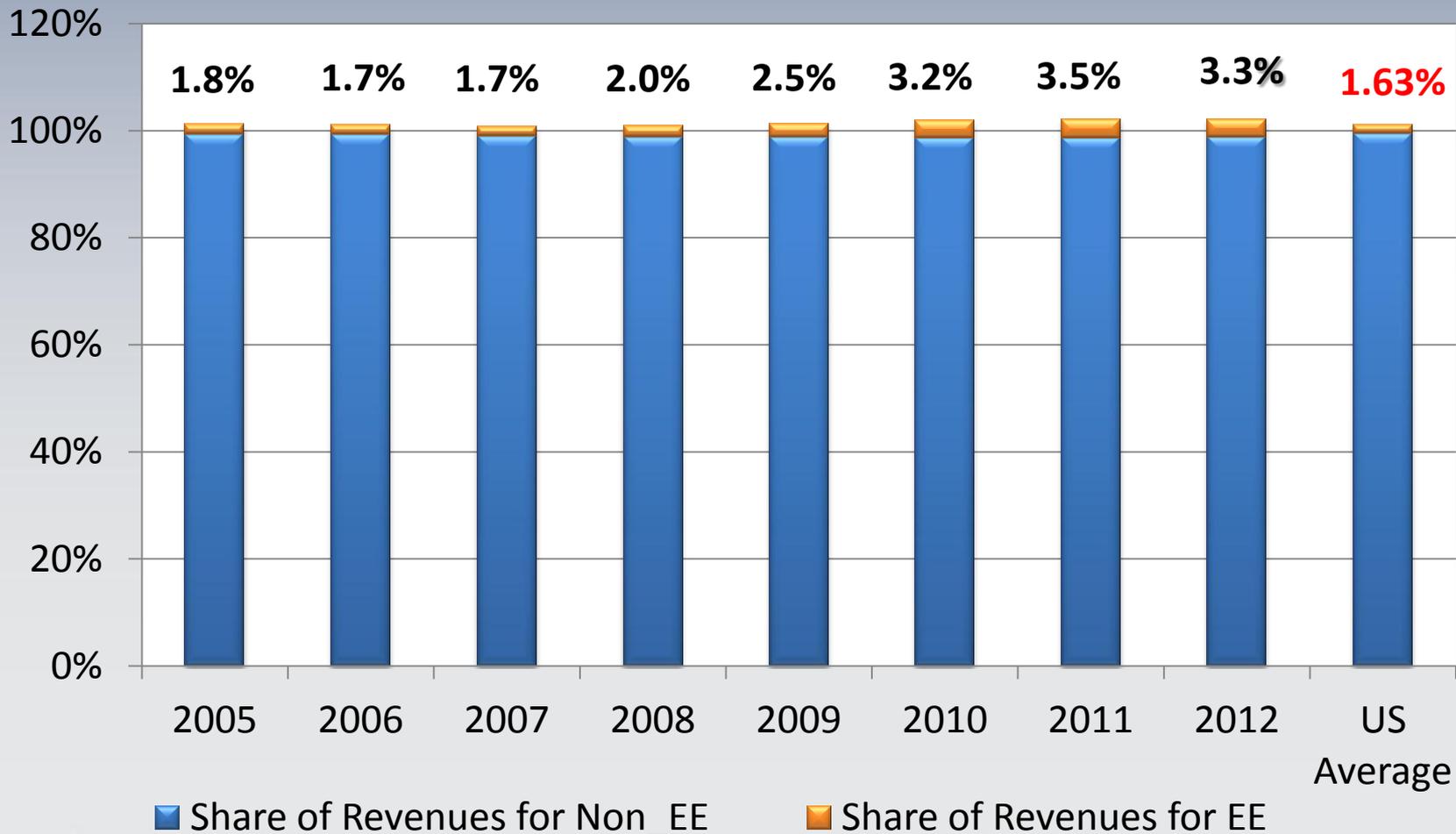
If 2013 and 2014 Savings Average 250 aMW/yr
Cumulative Savings Approach 1300 aMW,
The Upper Range of the 6th Plan's Five Year Goal



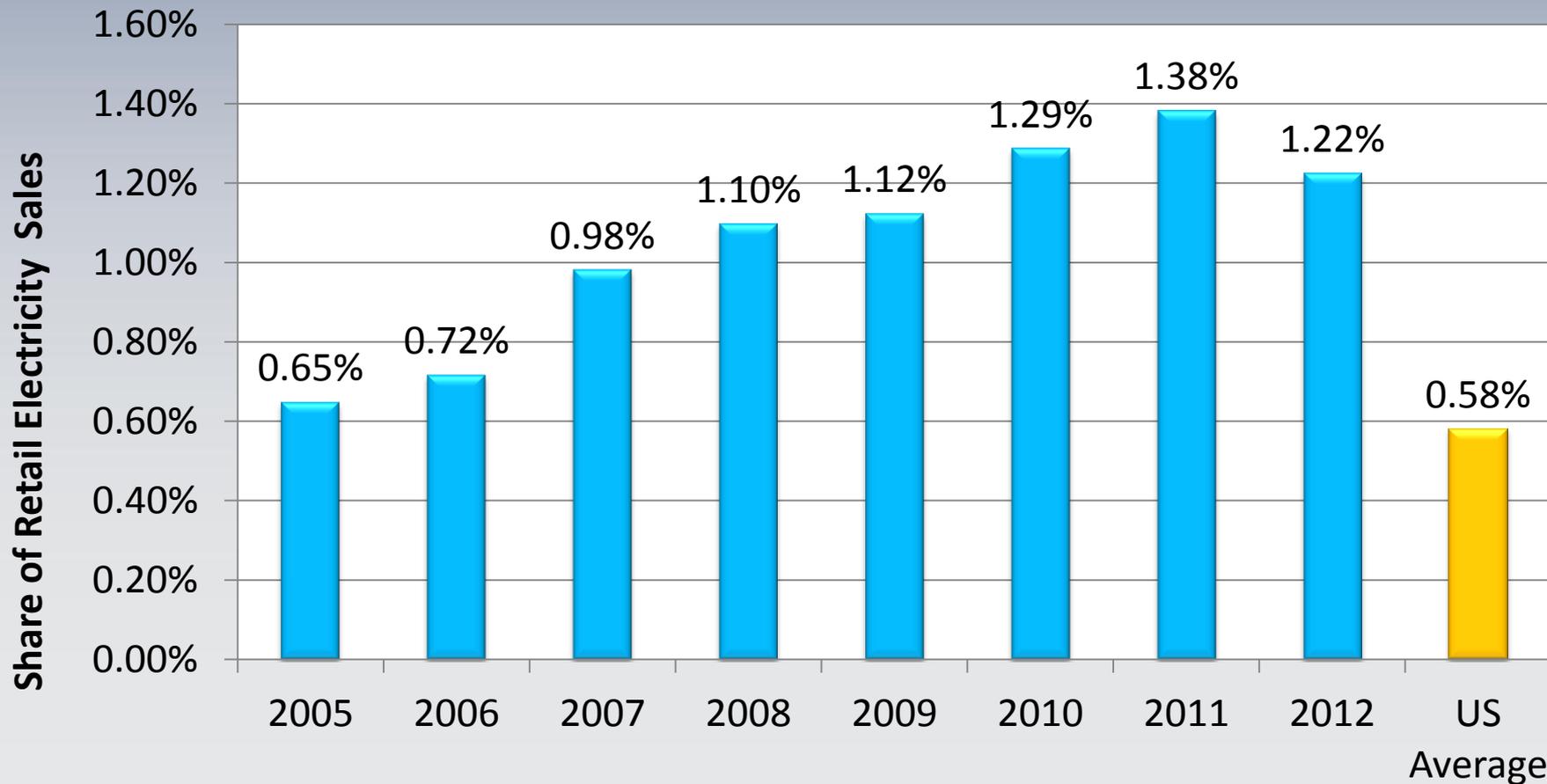
Regional Utility/SBC Energy Efficiency Investments Per Person Are Nearly Double the US Average



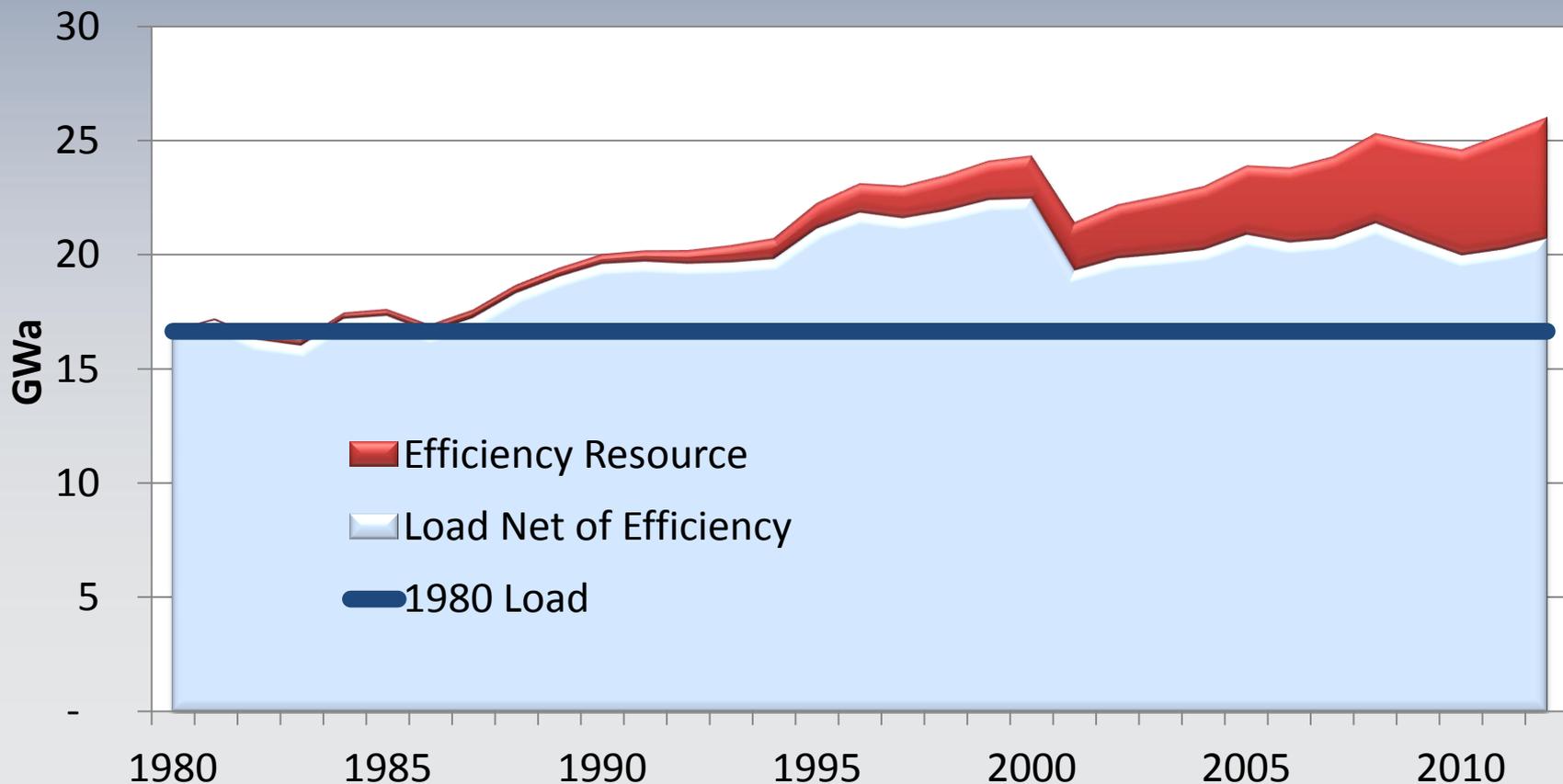
PNW Invests About Twice the National Average Share of Its Retail Electric Revenues in Energy Efficiency



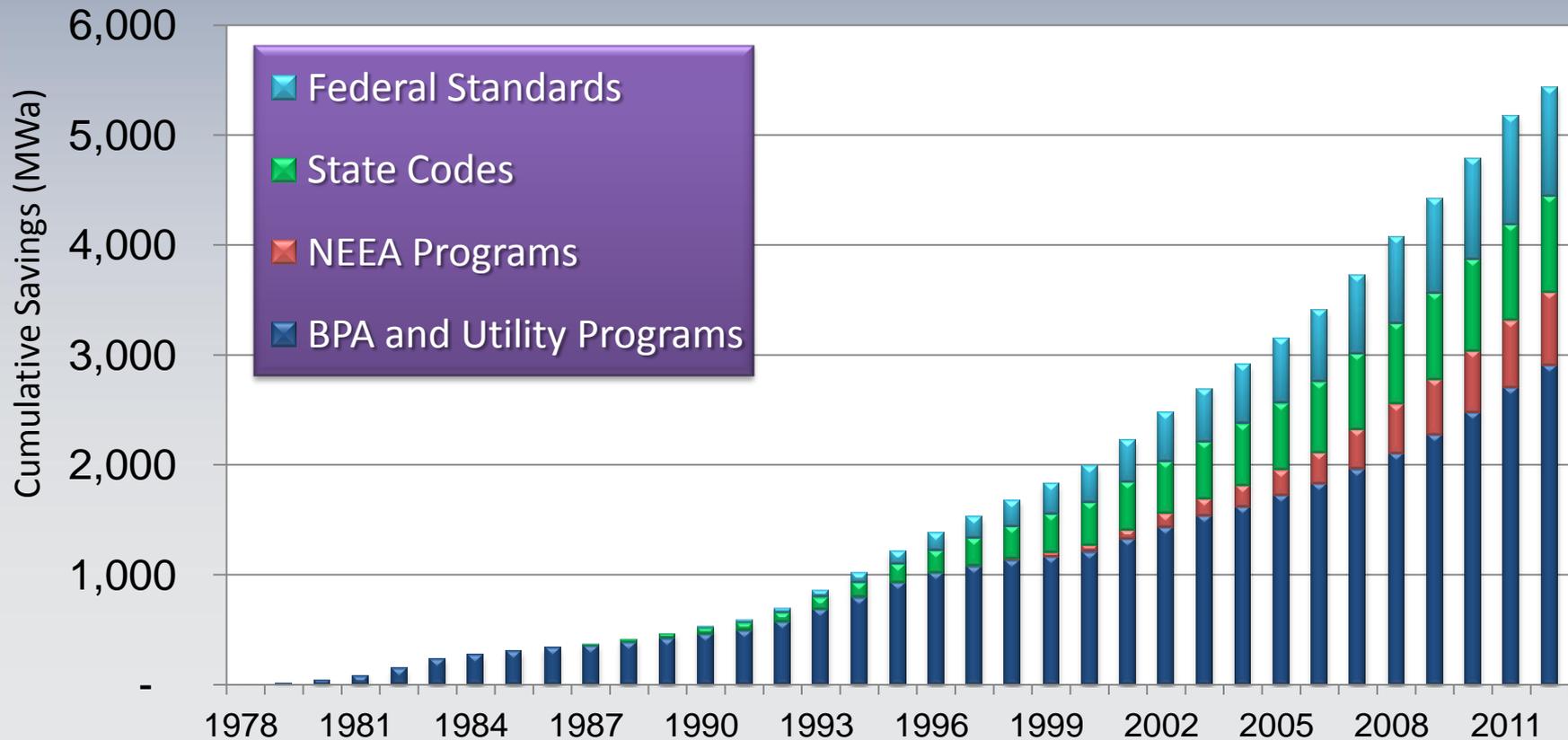
Utility/SBC-Funded Savings Equaled 1.2% of Regional Electricity Sales in 2012 More Than Double the US Average



Efficiency Has Met Nearly 60% of PNW Load Growth Since 1980



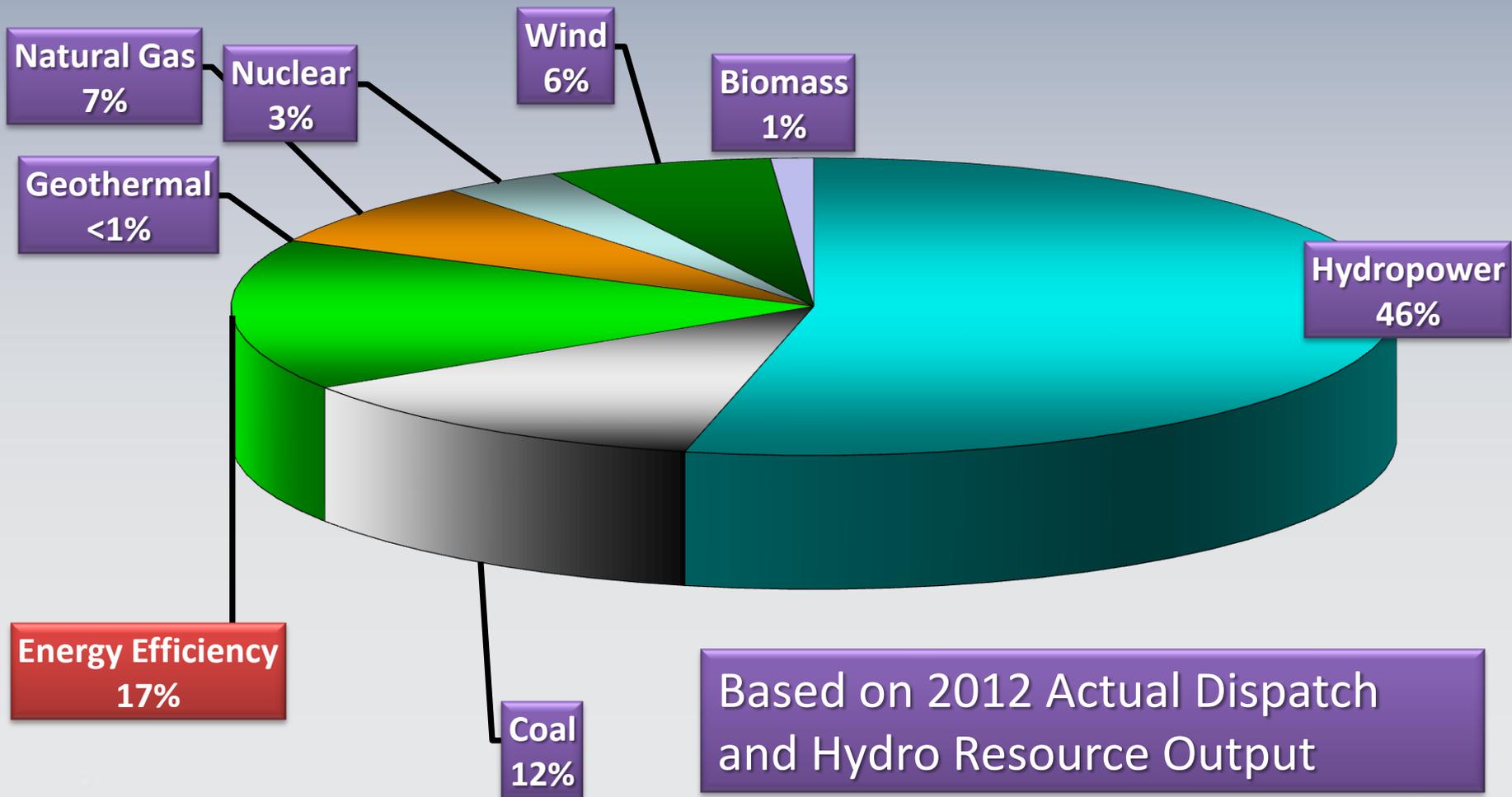
Since 1978 Utility & BPA Programs, Energy Codes & Federal Efficiency Standards Have Produced Over 5300 MWa of Savings



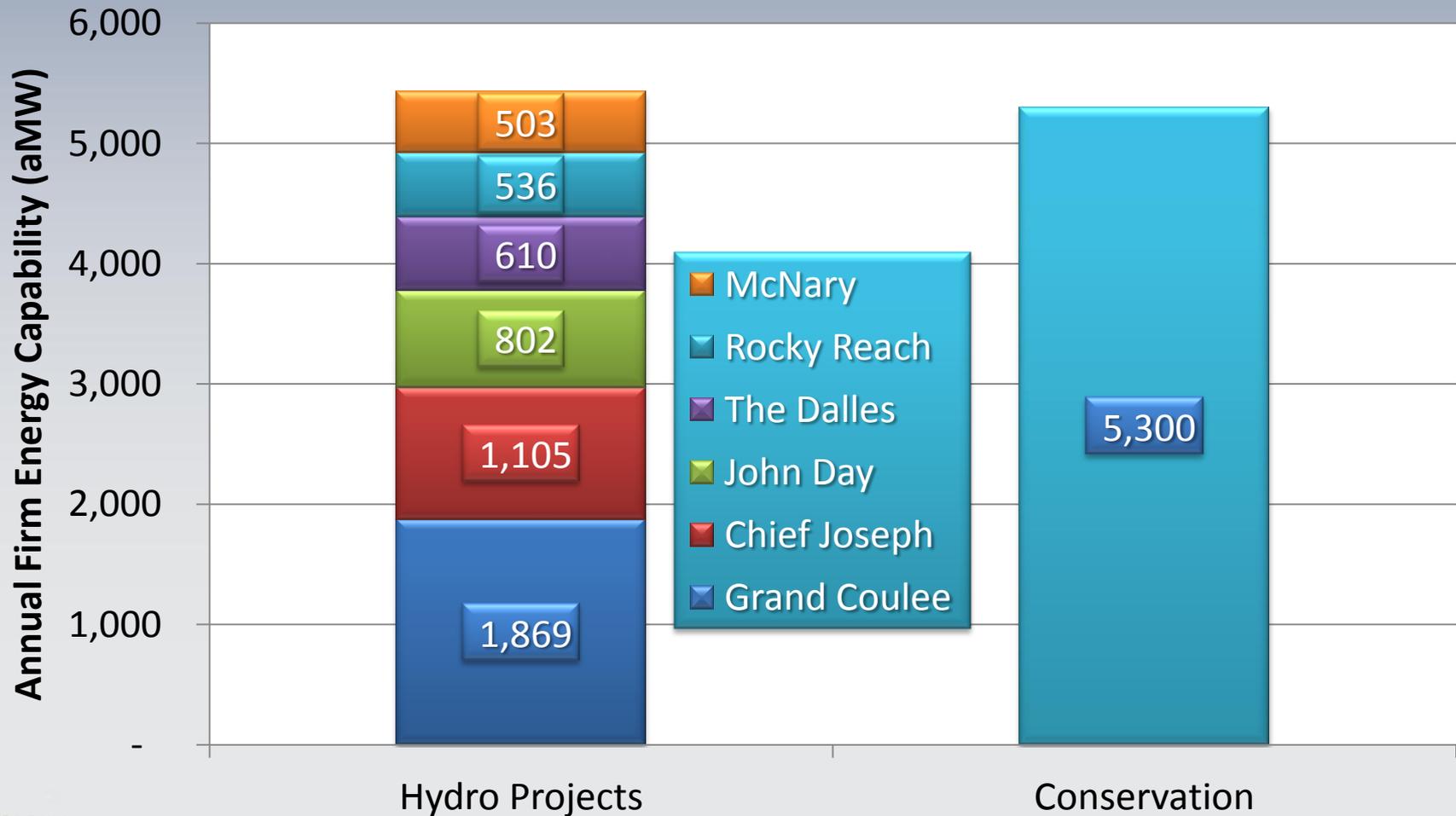
So What's 5300 MWa?

- It's enough electricity to serve the *entire state of Oregon*
- It saved the region's electricity consumers nearly *\$3.23 billion* in 2012
- It lowered 2012 PNW carbon emissions by an estimated *20.8 million* MTE.

Energy Efficiency Was The Region's Second Largest Resource in 2012



Savings from Energy Efficiency Since 1978 Nearly Equal the Annual Firm Energy Output of the Six Largest Hydro Projects in the Region



QUESTIONS?