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September 30, 2014

MEMORANDUM

TO: Council members

FROM: Charlie Grist and Jennifer Anziano

SUBJECT: 2013 Regional Conservation Achievements and Projects for 2014-2016

BACKGROUND:

Presenter: Jennifer Anziano

Summary: Eighty entities representing almost ninety percent of the region's retail electricity 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 2013.

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

- Regional conservation savings in 2013 were 268 average megawatts, exceeding the Council's Sixth Plan target of 260 average megawatts.
- Regional savings in 2013 were equivalent to about 1.34 percent of regional retail electricity sales, which is twice the national average.
- Cumulative savings for the three years 2010-2012 total 1,051 average megawatts, almost 90 percent of the Plan's 1,200 average megawatt goal for 2010-2014.
- Based on reporting utilities, the projections for 2014 amount to 172 average megawatts. This is more than the 153 average megawatts required to meet the Sixth Plan five year conservation target. Note, these reporting utilities represent approximately 85 percent of the region's load, so total savings in 2014 are expected to be larger.

- The utilities' projections for 2014 and 2015 amount to 274 average megawatts. This reflects responses from utilities representing approximately 80 percent and 60 percent of the region's load for 2014 and 2015, respectively. 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. Further, regional conservation achievements have exceeded the conservation goals set forth in the Council's Fifth and Sixth plans for nine consecutive years.

Cumulative savings from 1978 through 2013 from utility and NEEA conservation programs, state codes and federal standards now total 5,569 average megawatts. This is roughly equivalent of the annual electricity use of the entire state of Oregon, plus that portion of Montana that is included in the region. 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 2013 were \$375 million (2006\$) or about 3.4 percent of retail electricity revenues (Note, this is based on 2012 revenue data from EIA, which will be updated for 2013 in October or November 2014).
- The average levelized cost to utilities of 2013 savings was just over \$17 per megawatt hour (2006\$).
- Regional utility investments in energy efficiency averaged just over \$28 per capita in 2013 compared to the national average of just over \$16 per capita.
- Cumulative utility investments in energy efficiency from 2010 through 2013 total \$1.52 billion (2006\$)

Relevance: The primary charge to the Council under the Northwest Electric Power Planning and Conservation Act is to prepare a long-term forecast of regional electricity needs and a plan to meet those needs. This annual survey provides insight on how the region is doing on meeting the conservation targets identified in the power plan.

Workplan: 1.A Guide regional efforts to implement the Sixth Power Plan's recommendations including energy efficiency.

Background: 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 analyst, recently completed the 2013 survey and will present their findings at the October Council meeting. In addition to collecting data on

conservation savings and expenditures for the year 2013, the RTF also asked utilities to provide projected savings for 2014 through 2016.

More Info: <http://rtf.nwcouncil.org/consreport/2013/>

Progress Toward the 6th Plan's Regional Conservation Goals

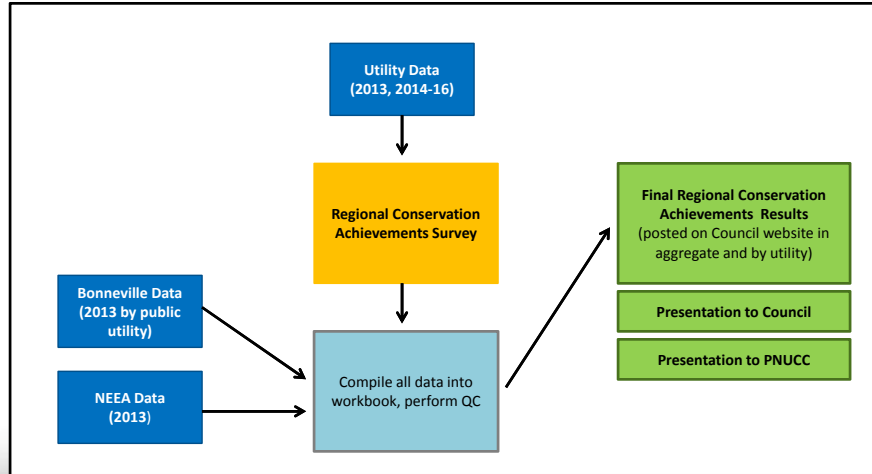
2013 Achievements
2014-2016 Projections

October 2014

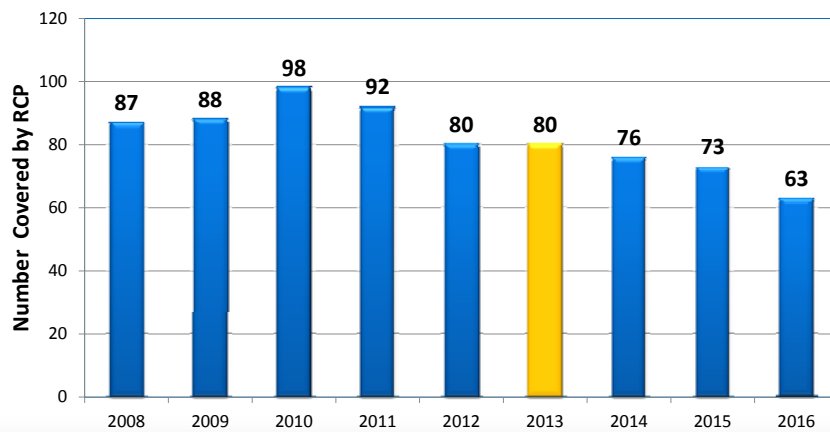
2013 Regional Conservation Achievement Report

- Annual survey conducted by the RTF and Council
- Requested actual conservation savings and expenditures for 2013
- Requested projected savings and expenditures for 2014-2016 to compare against 6th Plan targets
- Data requested from all utilities, SBC administrators, NEEA, and BPA

Survey Data and Collection Process

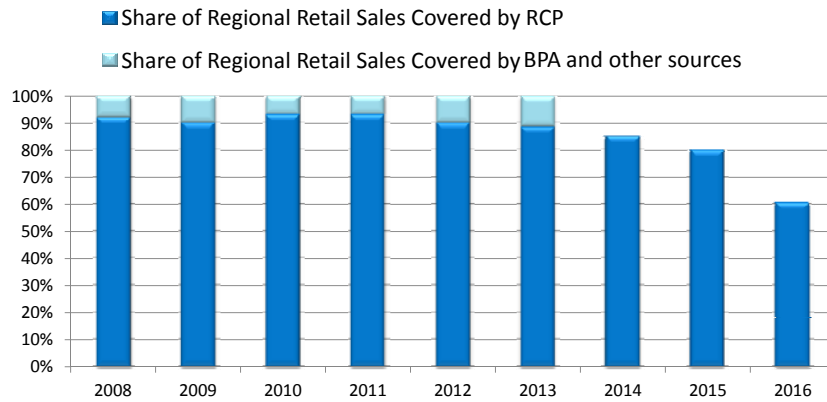


Utilities Filing Regional Conservation Progress Reports



*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



*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 FY2013 is not yet final.

The Council and RTF would like to thank all the utilities and organizations who participated in this survey!

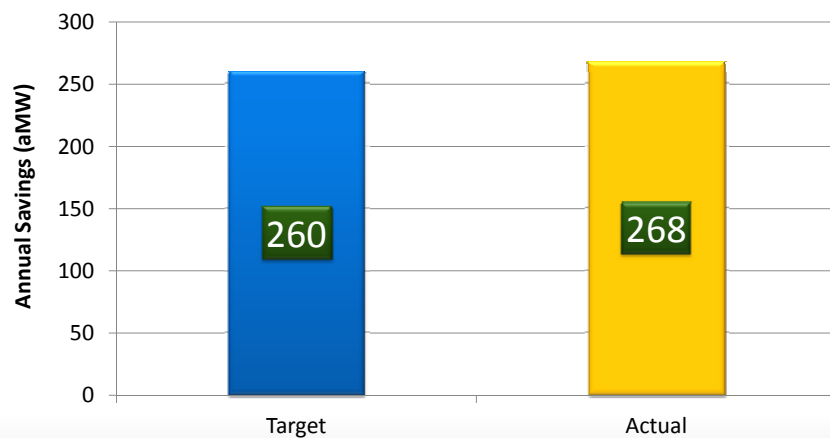


2013 Achievements

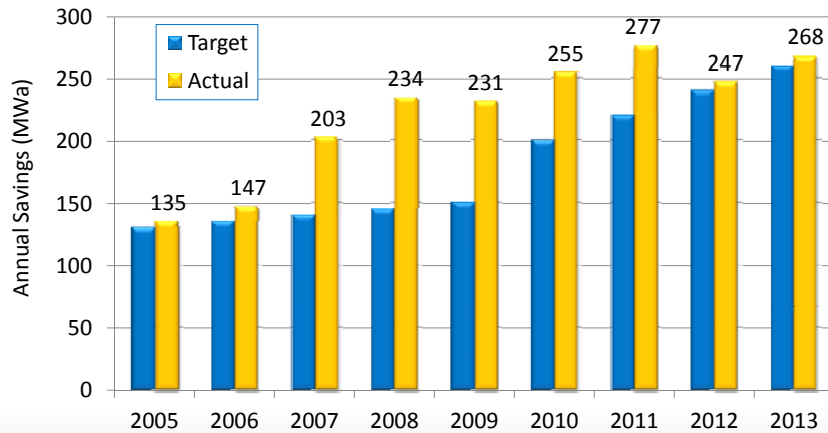


Everything is looking good... so far.

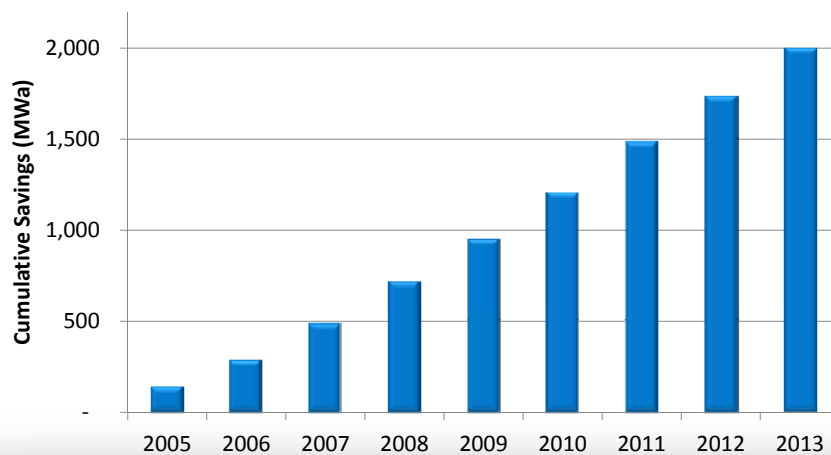
2013 Regional Accomplishments Slightly Exceeded Plan Targets



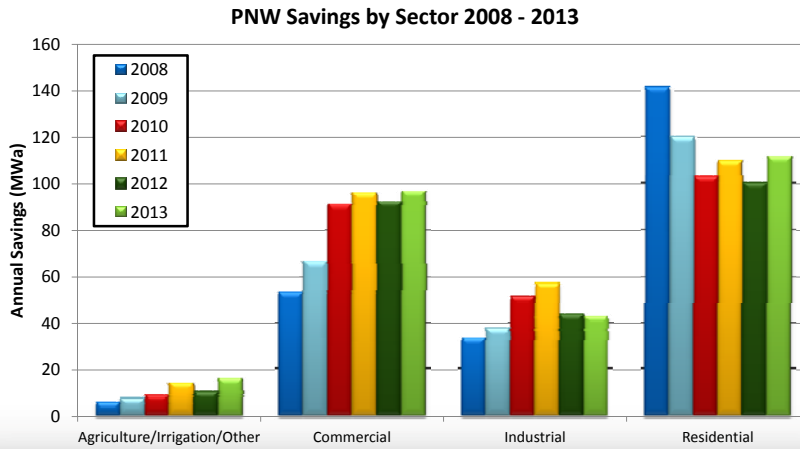
Accomplishments have Exceeded Targets Every Year Since 2005



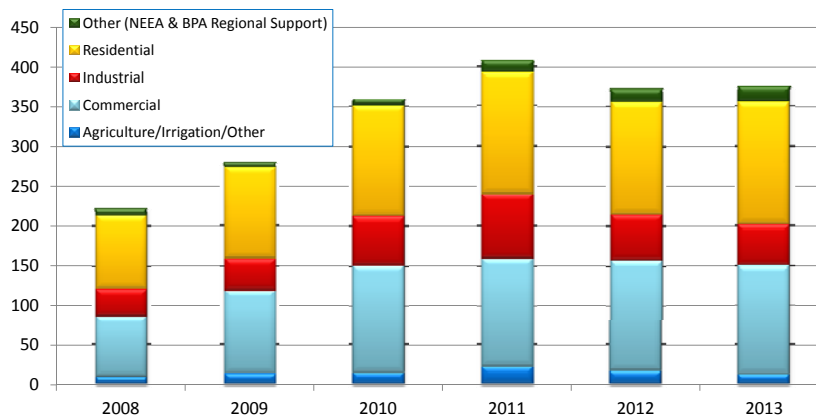
Since 2005 PNW Utilities Have Acquired Nearly 2,000 Average Megawatts of Conservation Savings



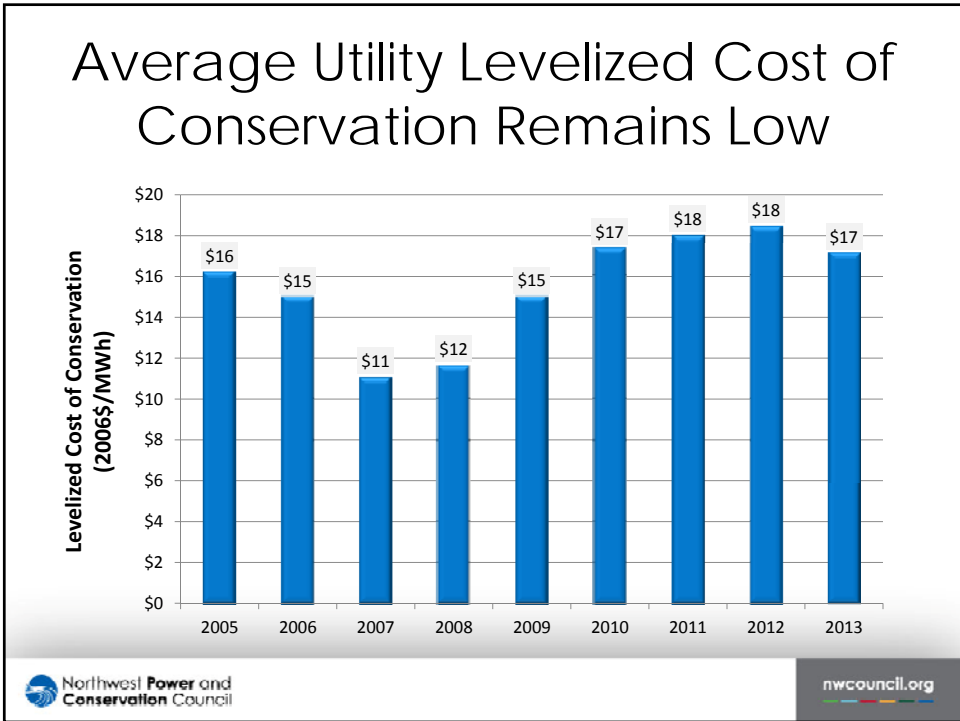
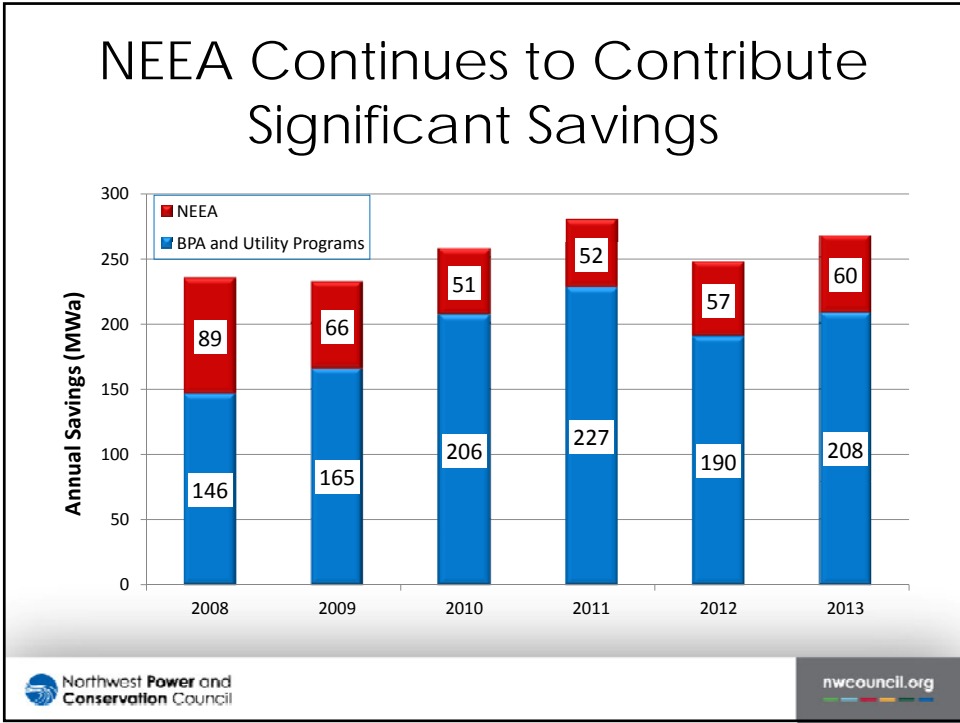
Commercial and Agricultural Savings Show Continued Growth

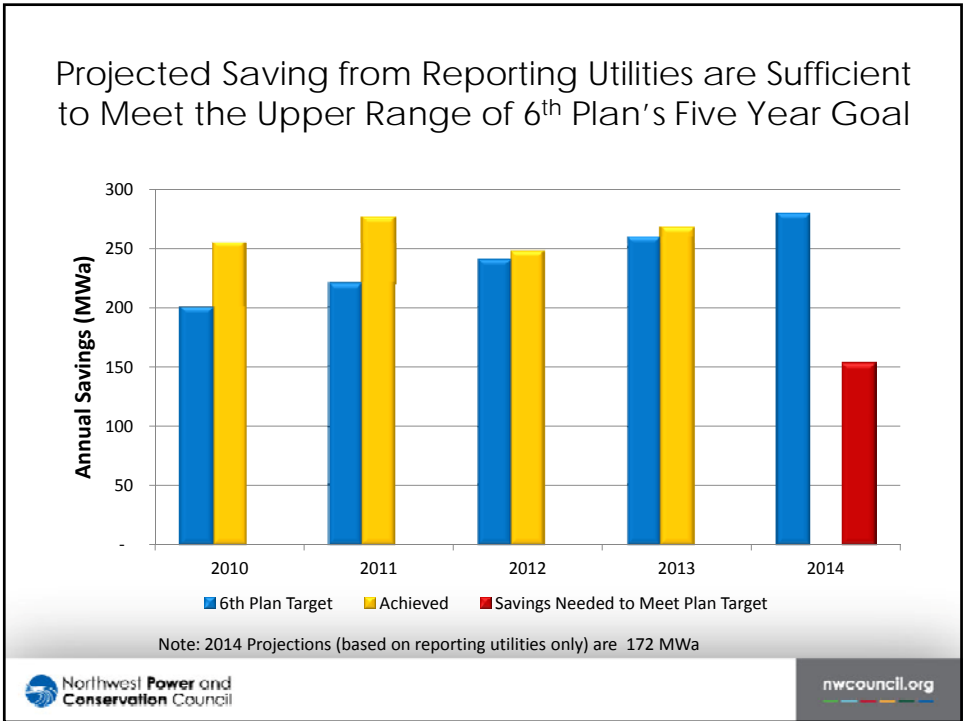
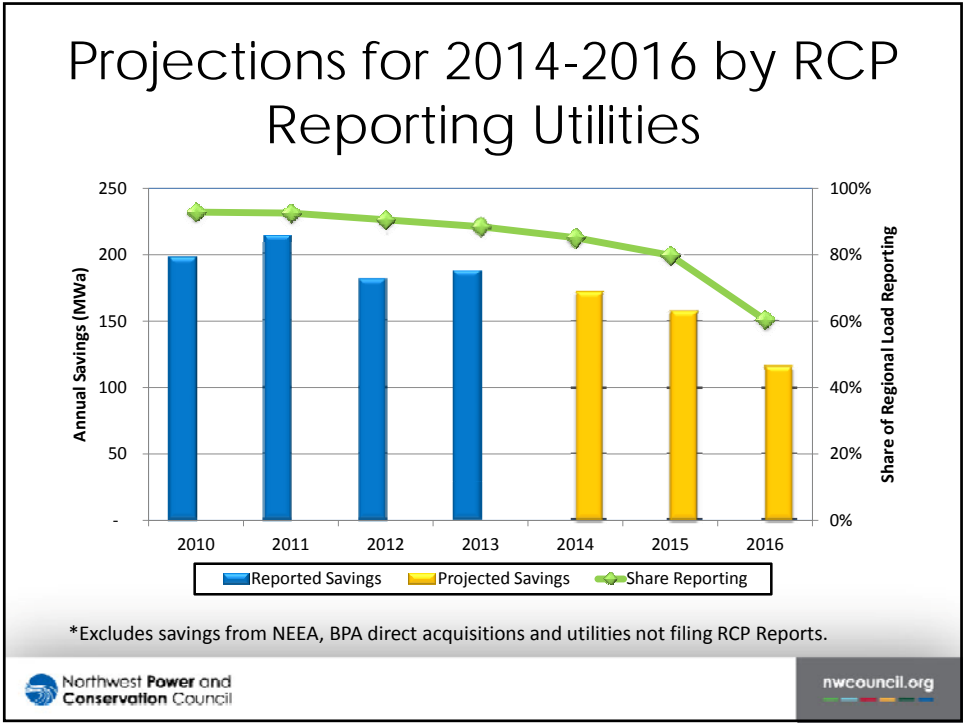


Total Utility/SBC Investments in Energy Efficiency in 2013 were \$375 million (2006\$)

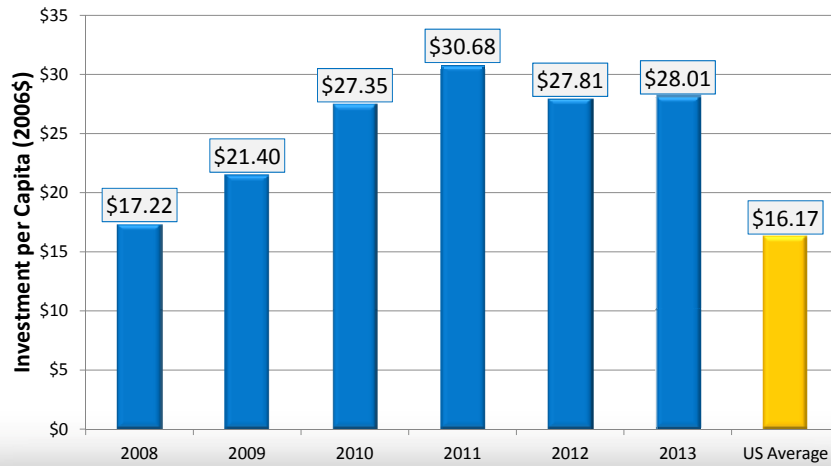


U.S. utility investment in efficiency in 2013 was just over \$5.17 billion (2006\$)*. Northwest investments represent about 7% of the total, but just under 5% of the U.S. population.
 (*Source: CEE 2013 Annual Industry Report)

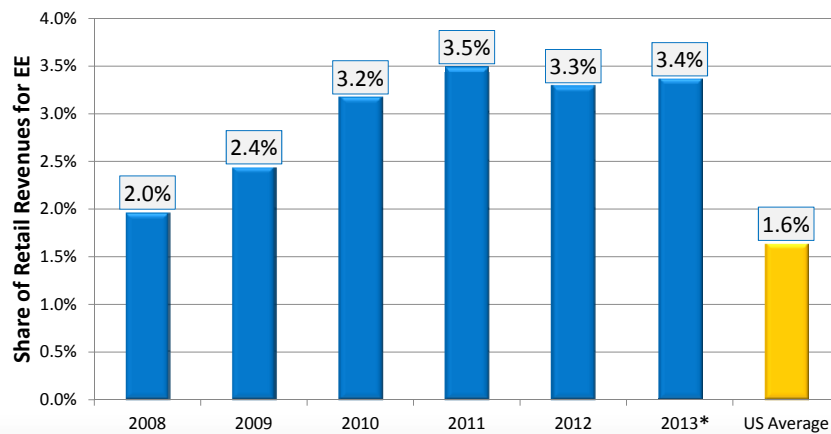




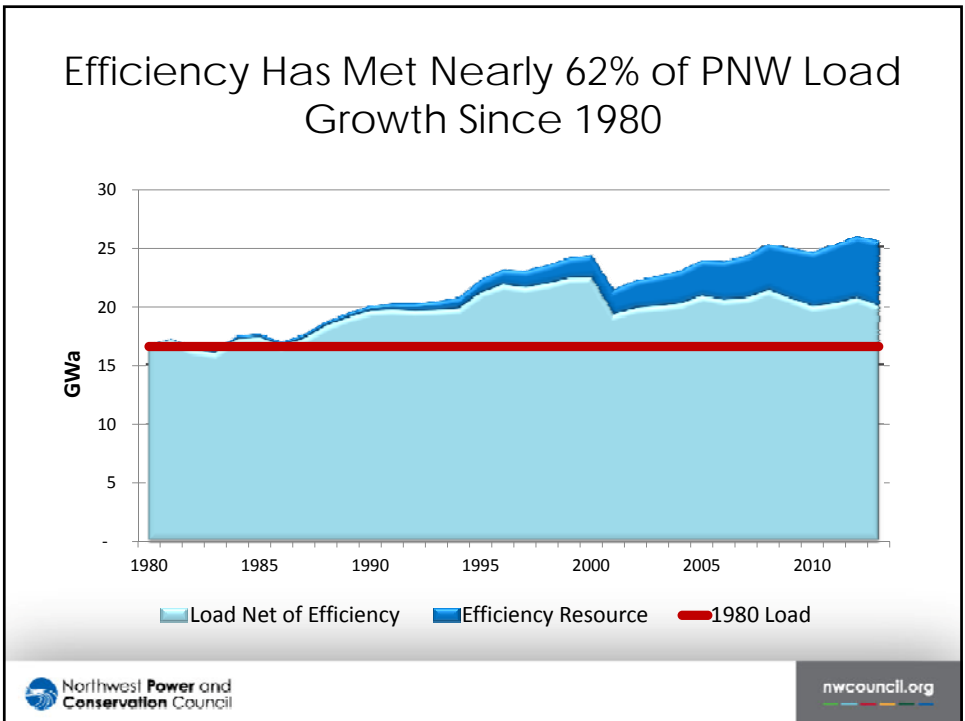
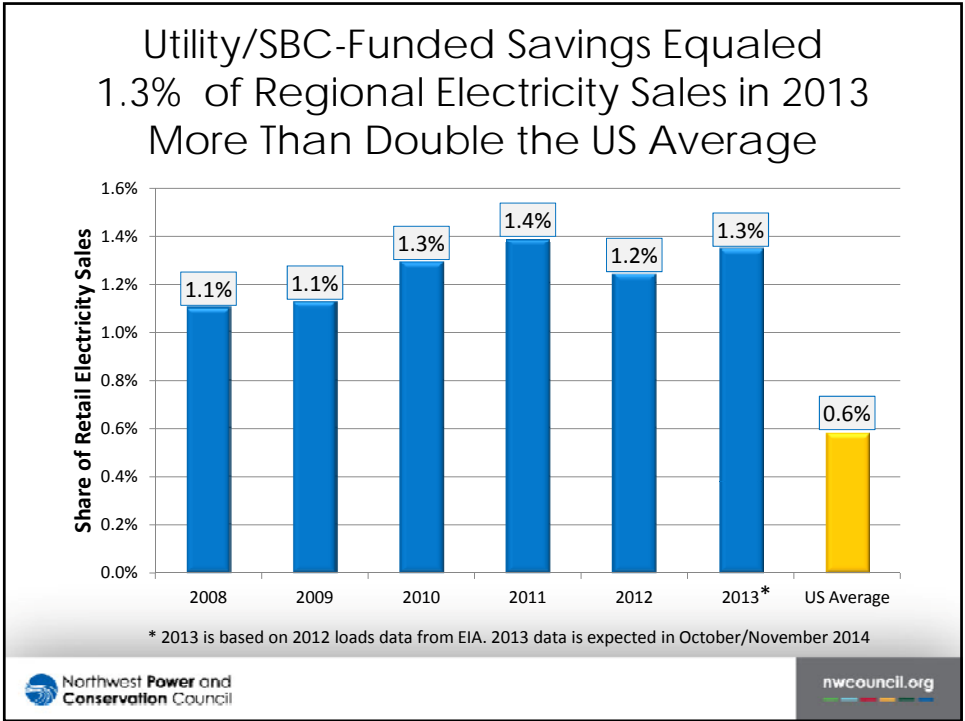
Regional Utility/SBC Energy Efficiency Investments Per Person are Nearly Double the US Average



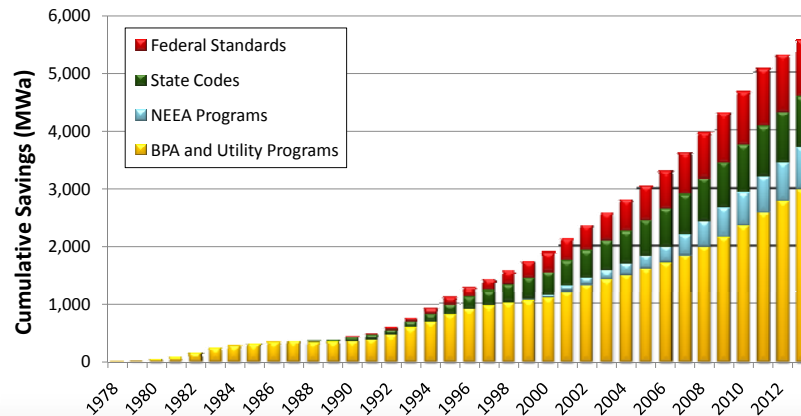
Region Invests about Twice the National Average Share of Its Retail Electric Revenues in Energy Efficiency



* 2013 is based on 2012 revenues data from EIA. 2013 data is expected in October/November 2014



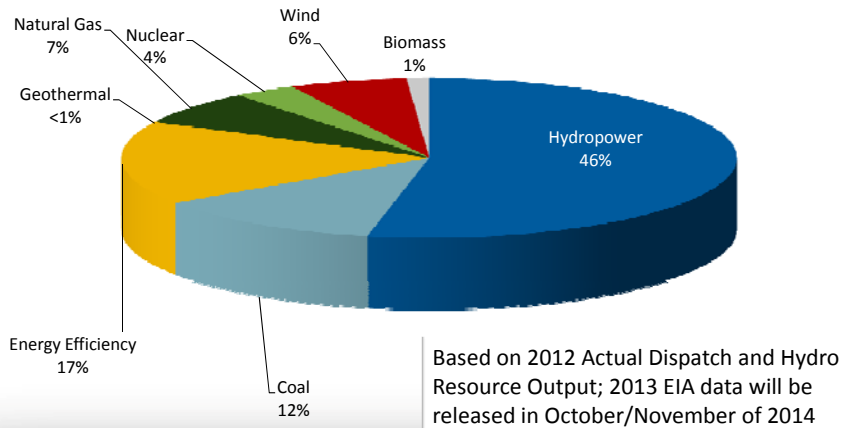
Since 1978 Utility & BPA Programs, Energy Codes & Federal Efficiency Standards Have Produced Almost 5600 MWa of Savings



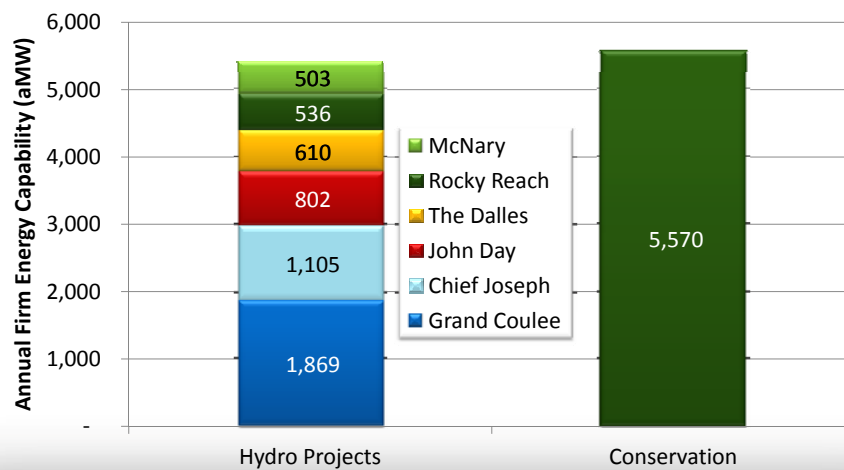
So What's 5600 MWa?

- It's enough electricity to serve the ***entire state of Oregon and Western Montana***
- It saved the region's electricity consumers nearly ***\$3.5 billion*** in 2013
- It lowered 2013 PNW carbon emissions by an estimated ***21.9 million*** MTE.

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



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



Questions?