

# **Energy Efficiency: The Northwest's Second Largest Resource**

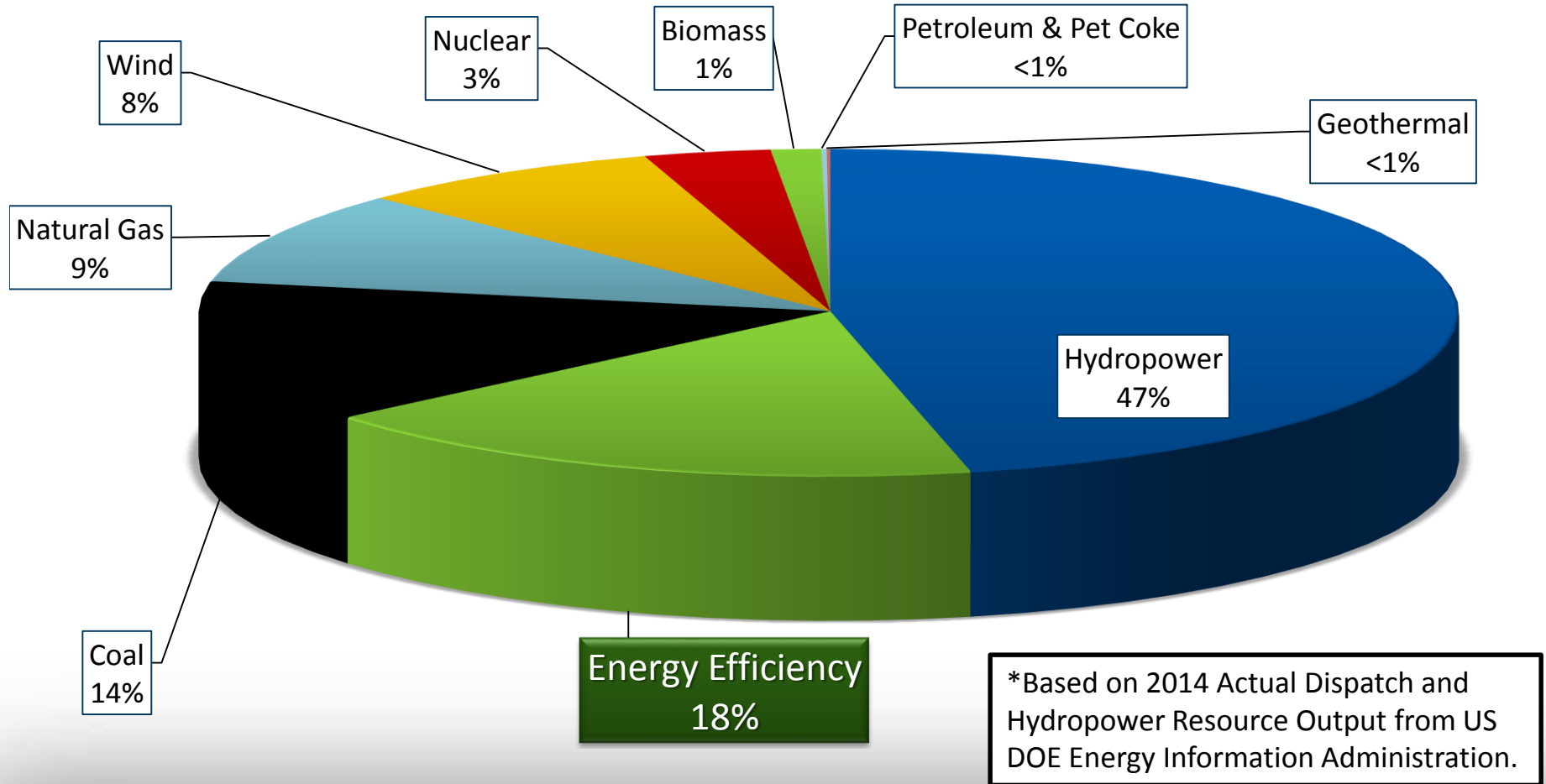
Tom Eckman  
Former Director, Power Division  
Northwest Power and Conservation Council  
Alberta Climate Summit  
September 28, 2017

# Let's Start With A Review of the Facts

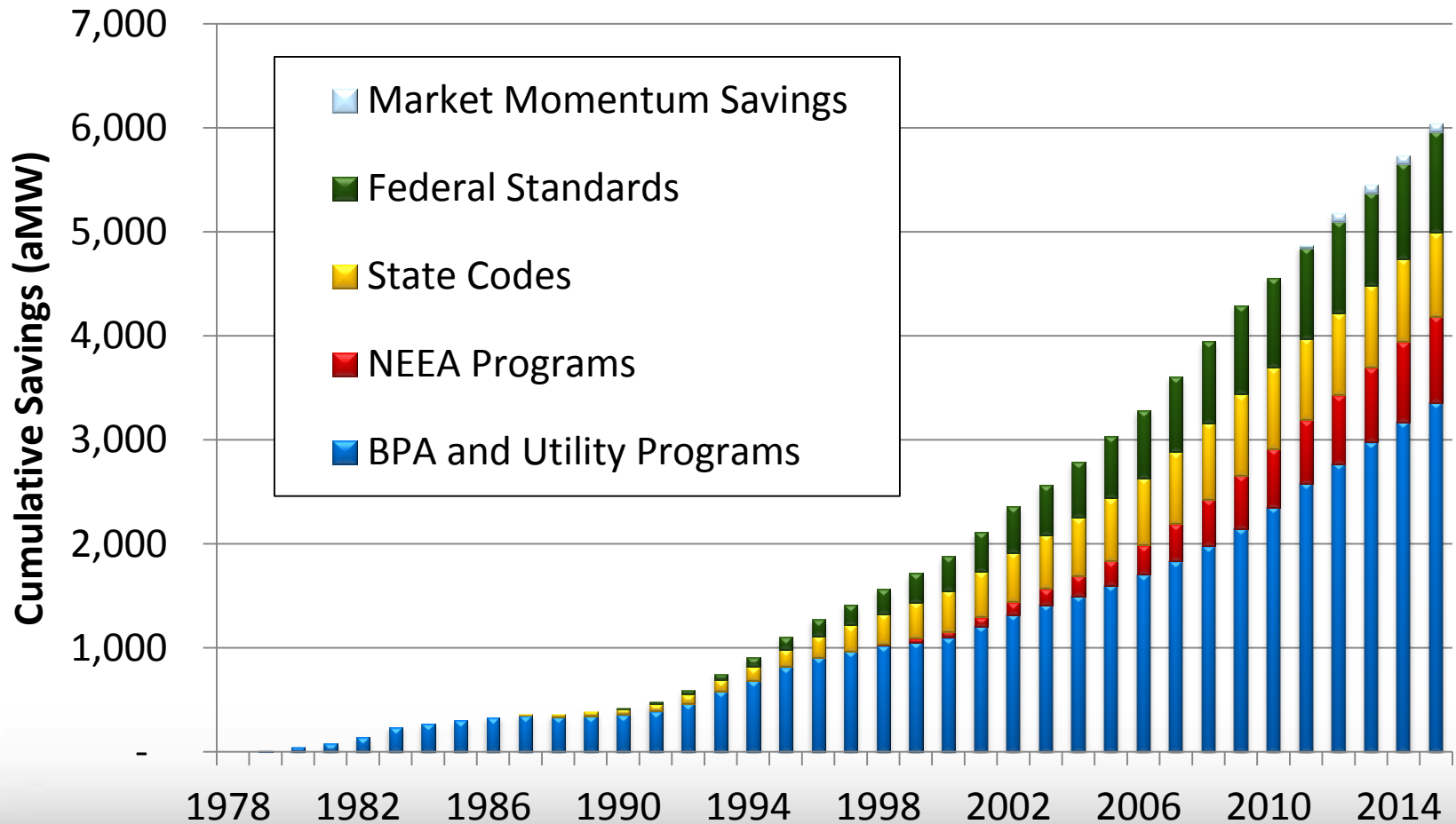


**Just the  
facts,  
mam**

# Energy Efficiency Has Been The Pacific Northwest's Second Largest Resource Since 2012\*



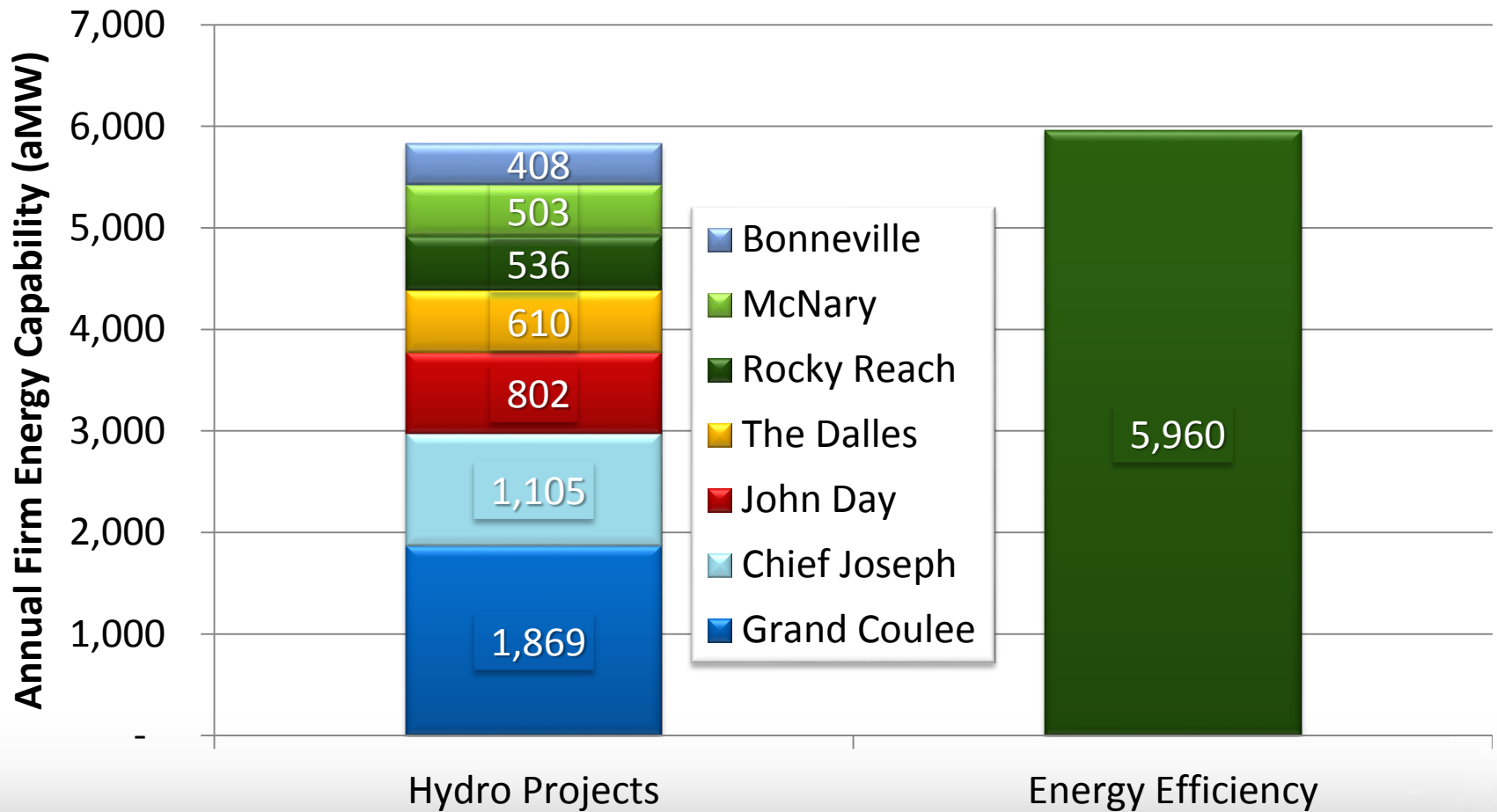
# Since 1978 Utility & Bonneville Programs, Energy Codes & Federal Efficiency Standards Have Produced Almost 6,000 MWa of Savings



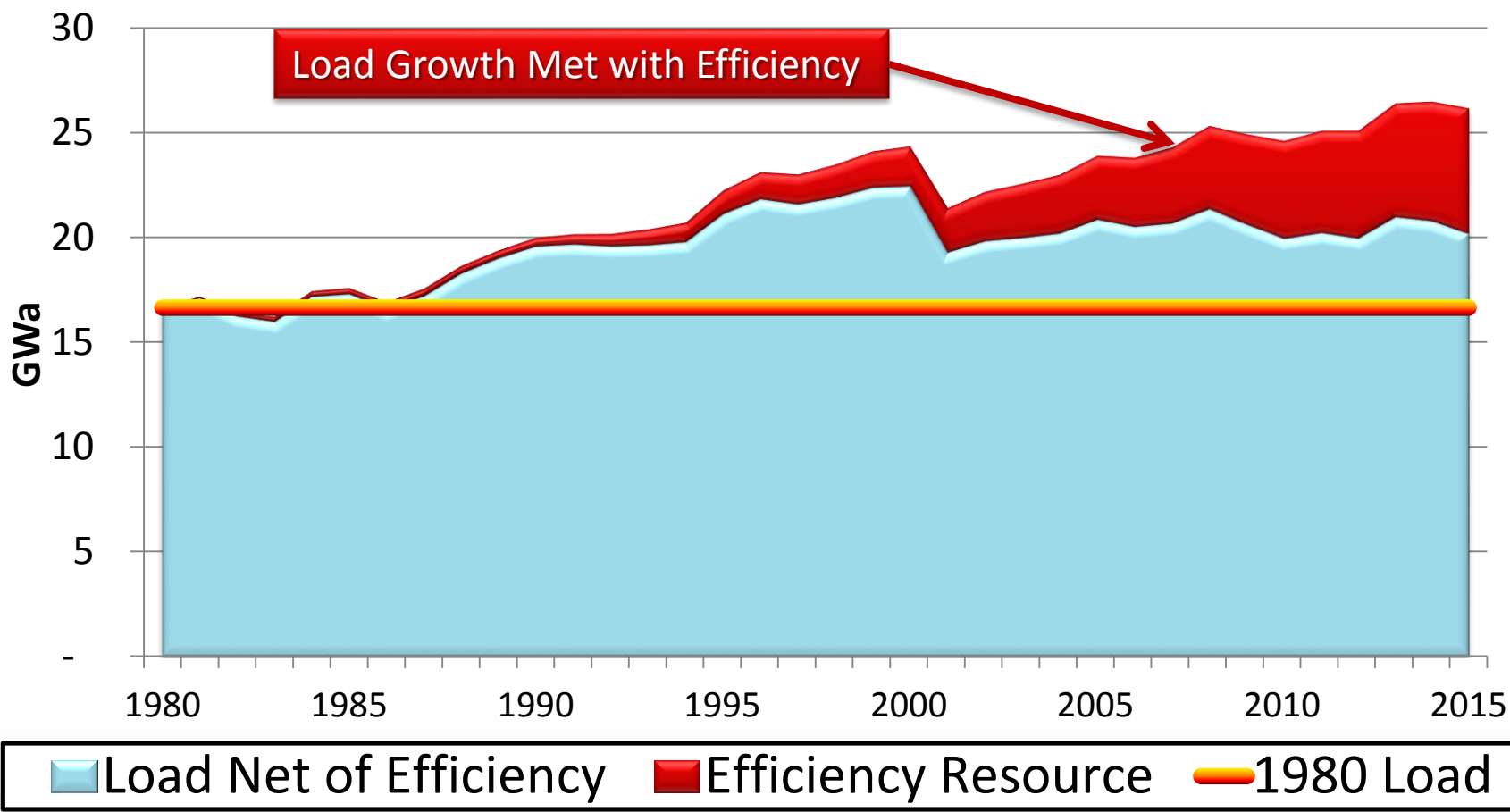
# So What's 6000 MWa?

- It's enough electricity to serve *nearly all the province of Alberta for a year*
- It saved the Pacific Northwest's electricity consumers over *\$4 billion* in 2015
- It lowered 2015 Pacific Northwest carbon emissions by an estimated *23.5 million* metric tons.

# Savings from Energy Efficiency Since 1978 Exceed the Annual Firm Energy Output of the Seven Largest Hydro Projects in the Northwest Region

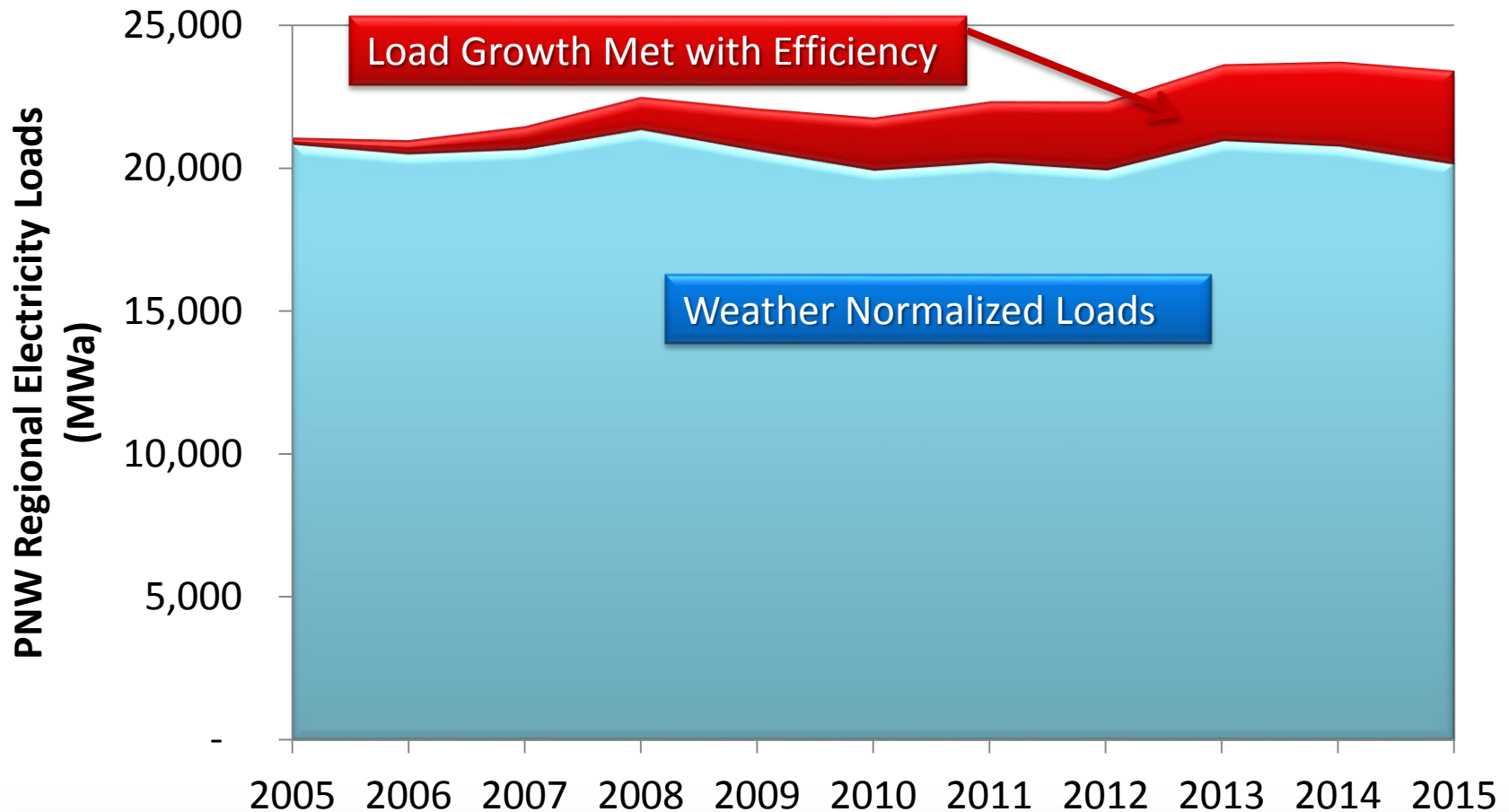


# Since 1980 Efficiency Has Met Nearly 62% of Pacific Northwest Load Growth



# Northwest Regional Electric Loads Have Remained Virtually Unchanged for a Decade

Because We've Been Meeting Most Load Growth With Efficiency!

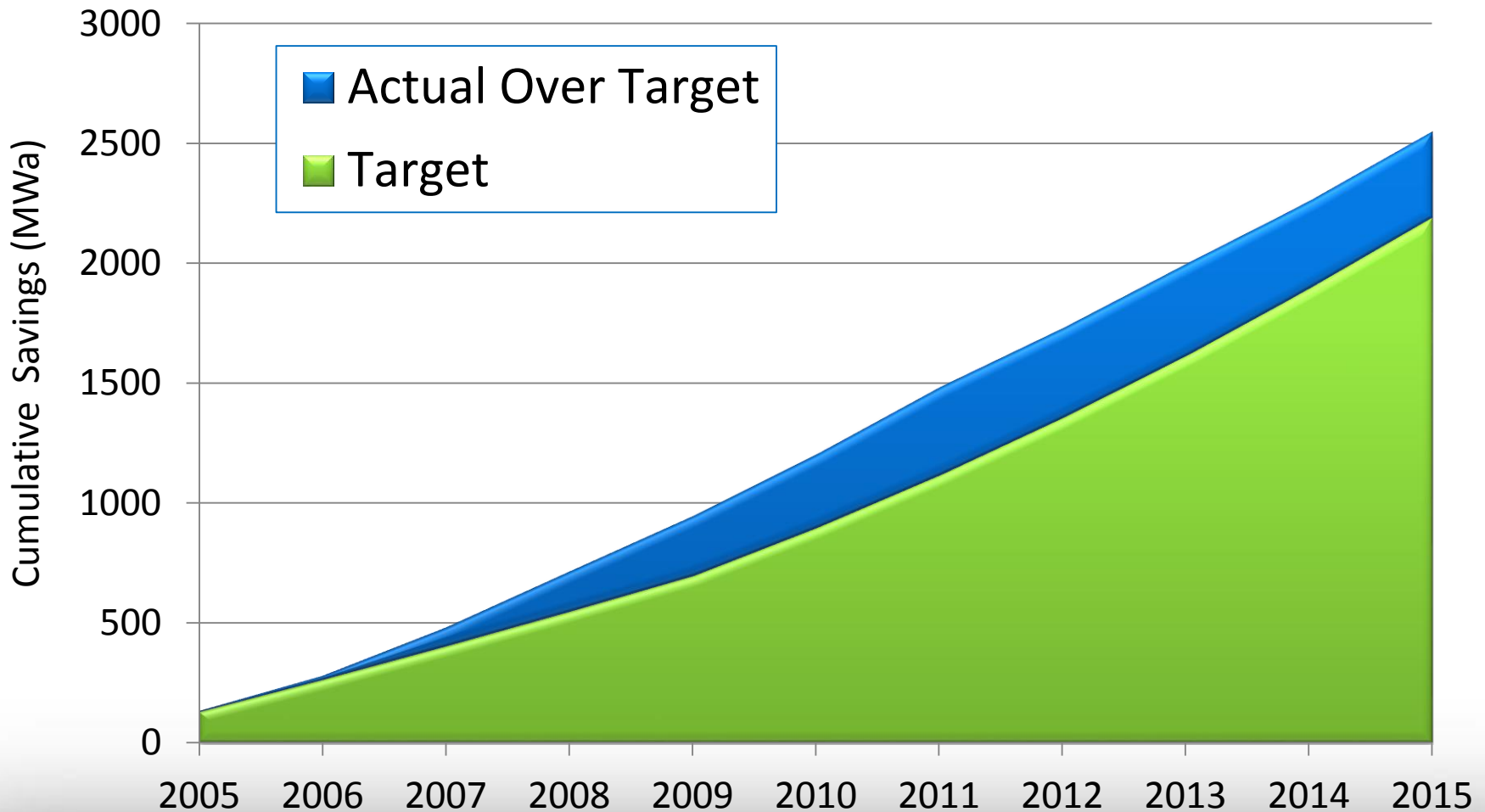


We've Offset the Equivalent of 1.1% Annual Load Growth With Efficiency Since 2006

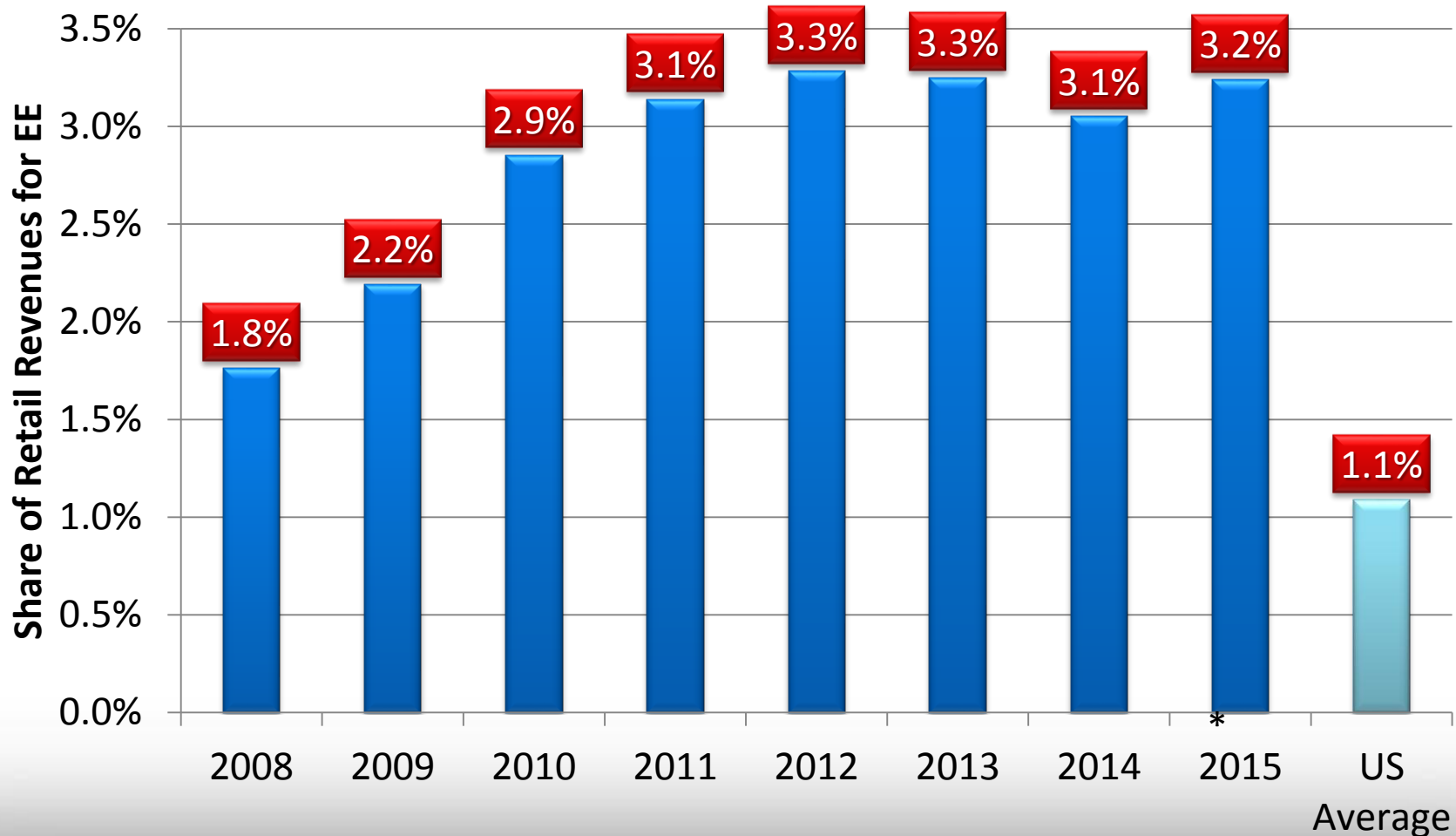


# Cumulative Utility Energy Efficiency Achievements Have Exceeded Council Plan Targets

Developing Nearly 2550 MWa Since 2005

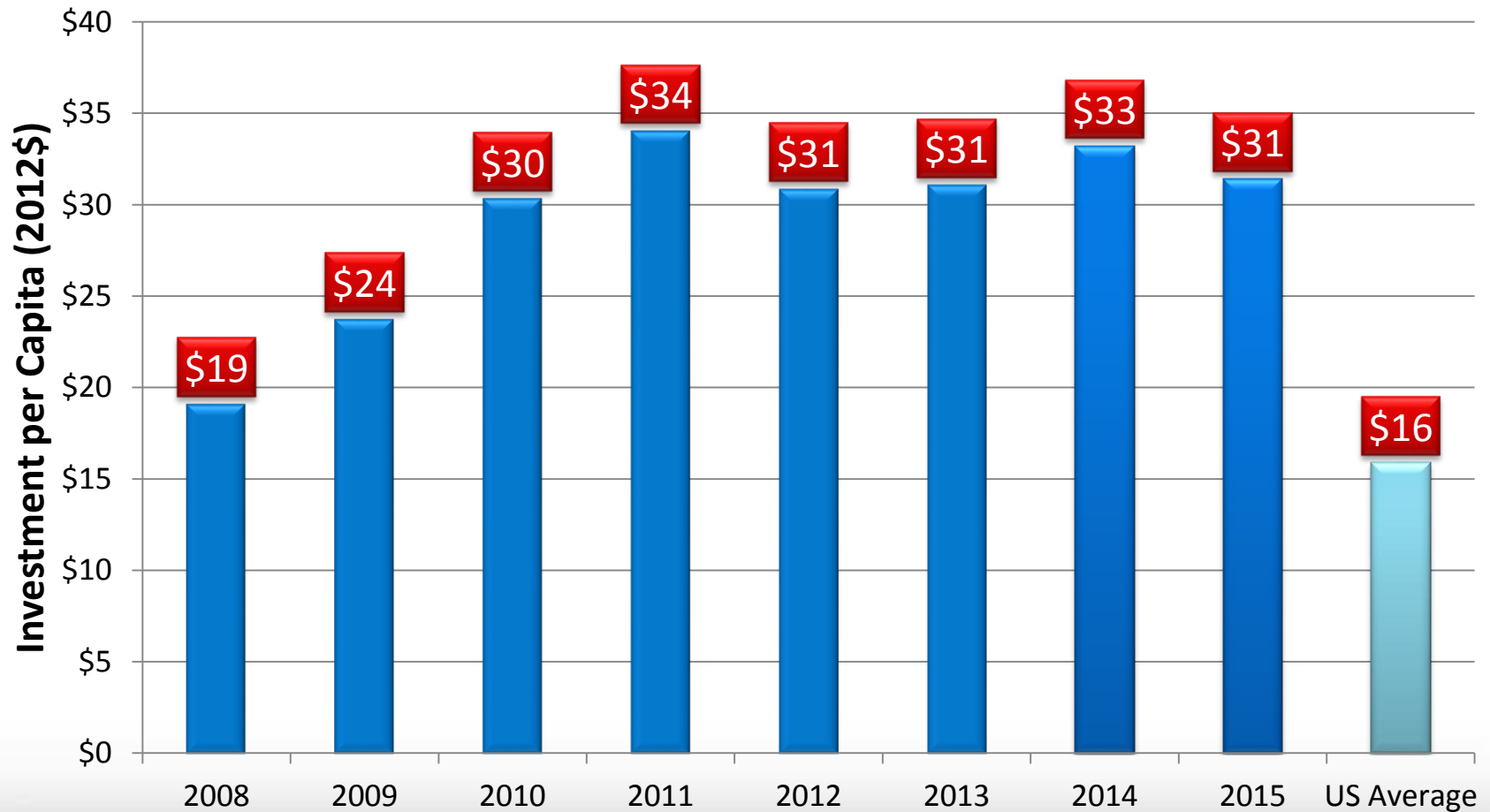


# Northwest Region Invests About Three Times the US Average Share of Its Retail Electric Revenues in Energy Efficiency

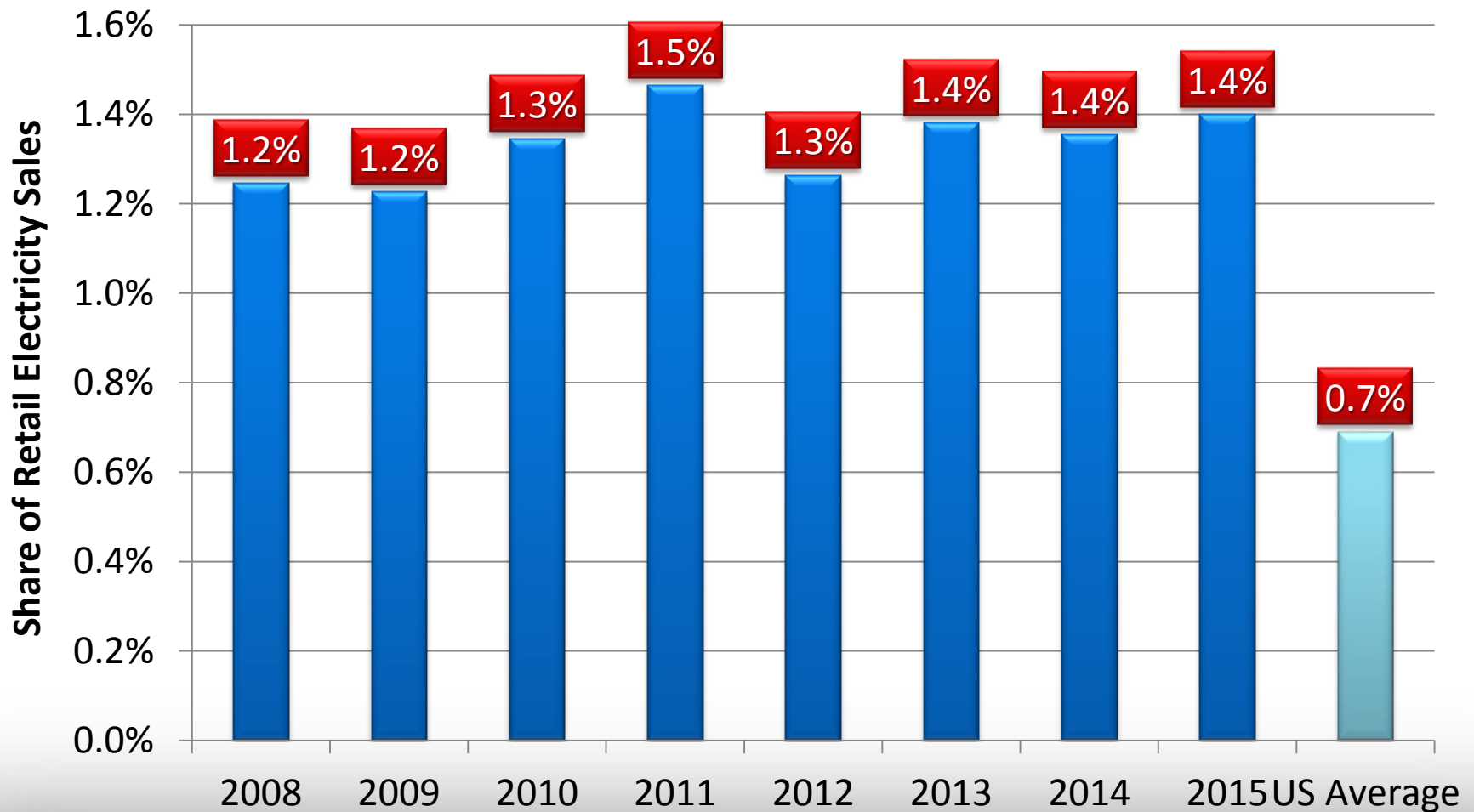


# Northwest Ratepayer's Invest Just over \$30 Per Person Annually in Energy Efficiency

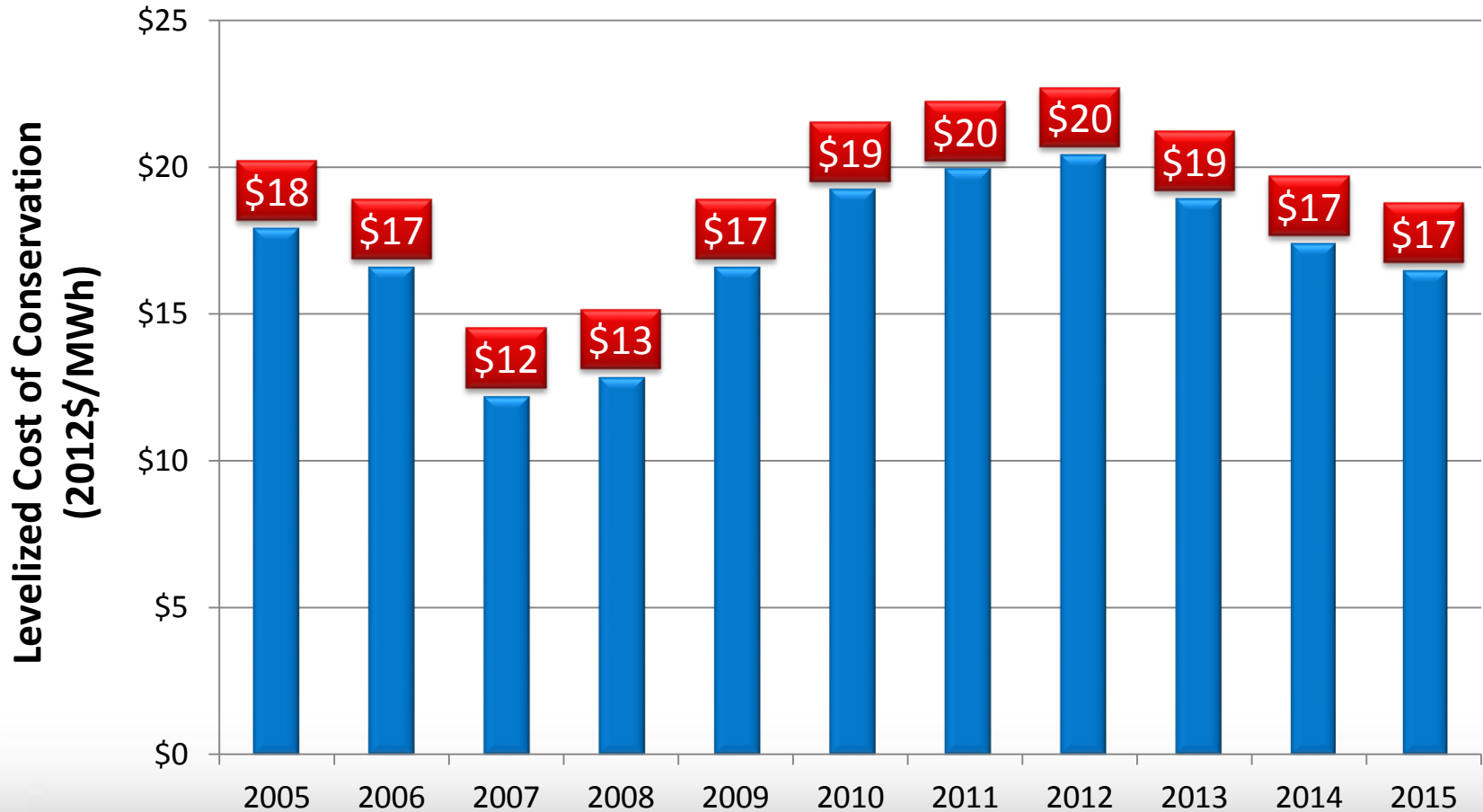
## Double the US Average



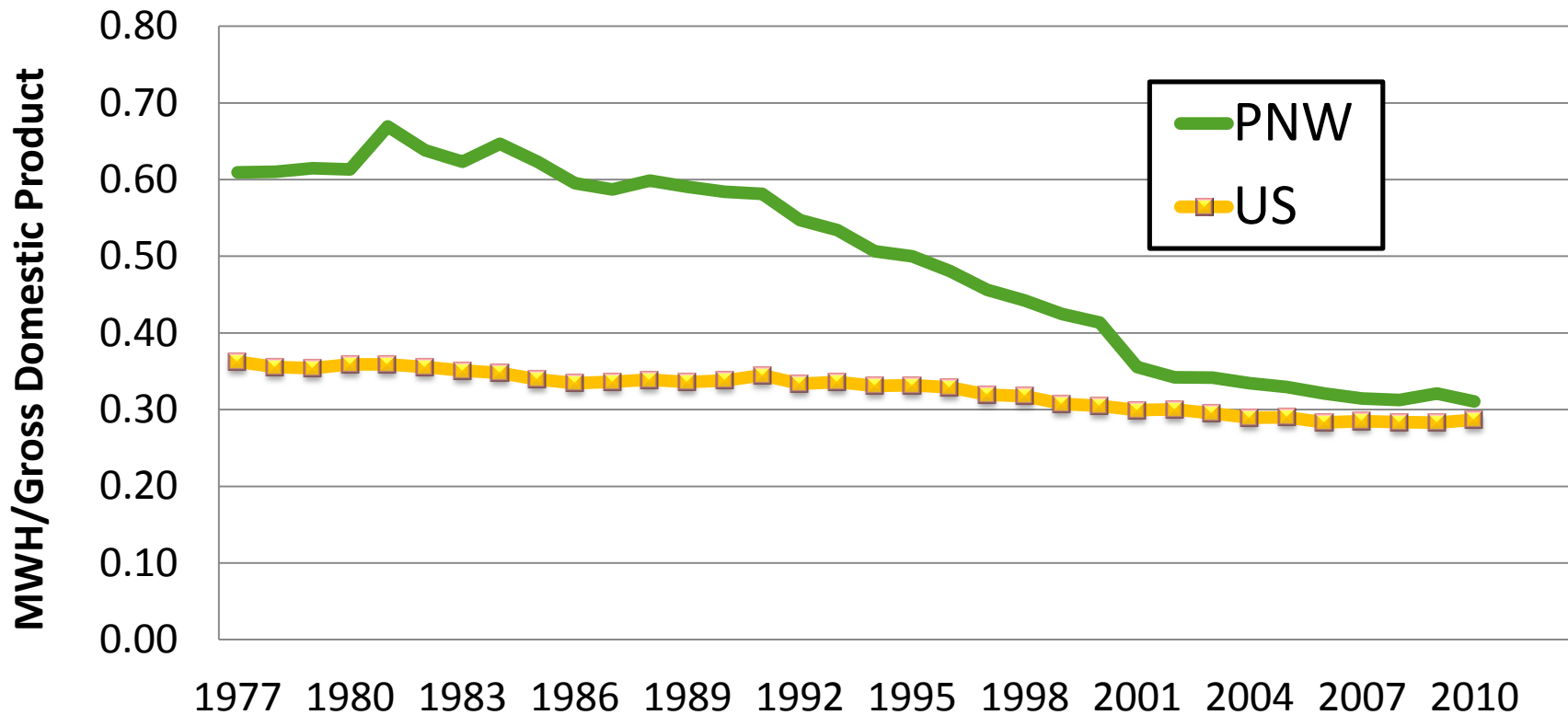
# Northwest Ratepayer Funded Savings Equaled 1.4% of Regional Electricity Sales in 2015 Double the US Average



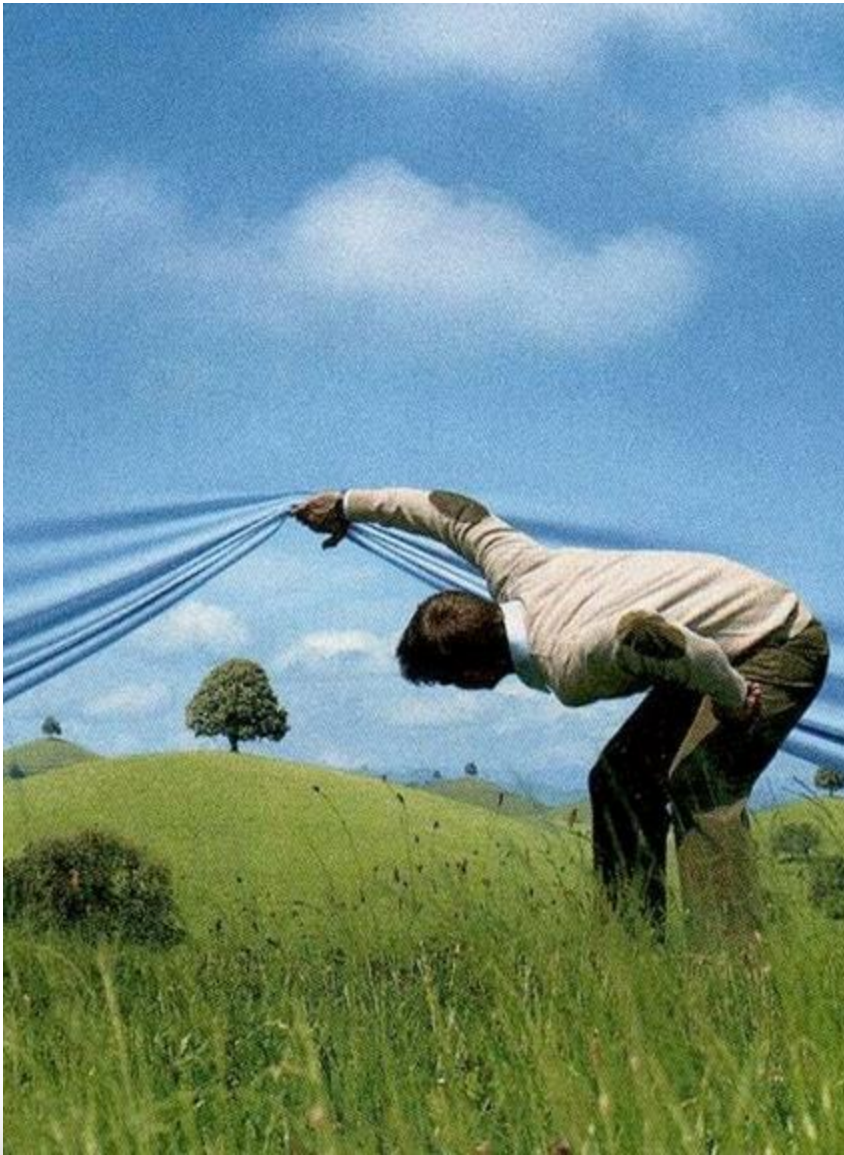
# Yet, Average Utility Levelized Cost of Energy Efficiency Remains Low



# Northwest Electricity Intensity Per Unit of Economic Output Has Been Decreasing Faster than the US Overall



Gross Domestic Product : BEA- 2015 constant dollars  
Energy Consumption: State Energy Data



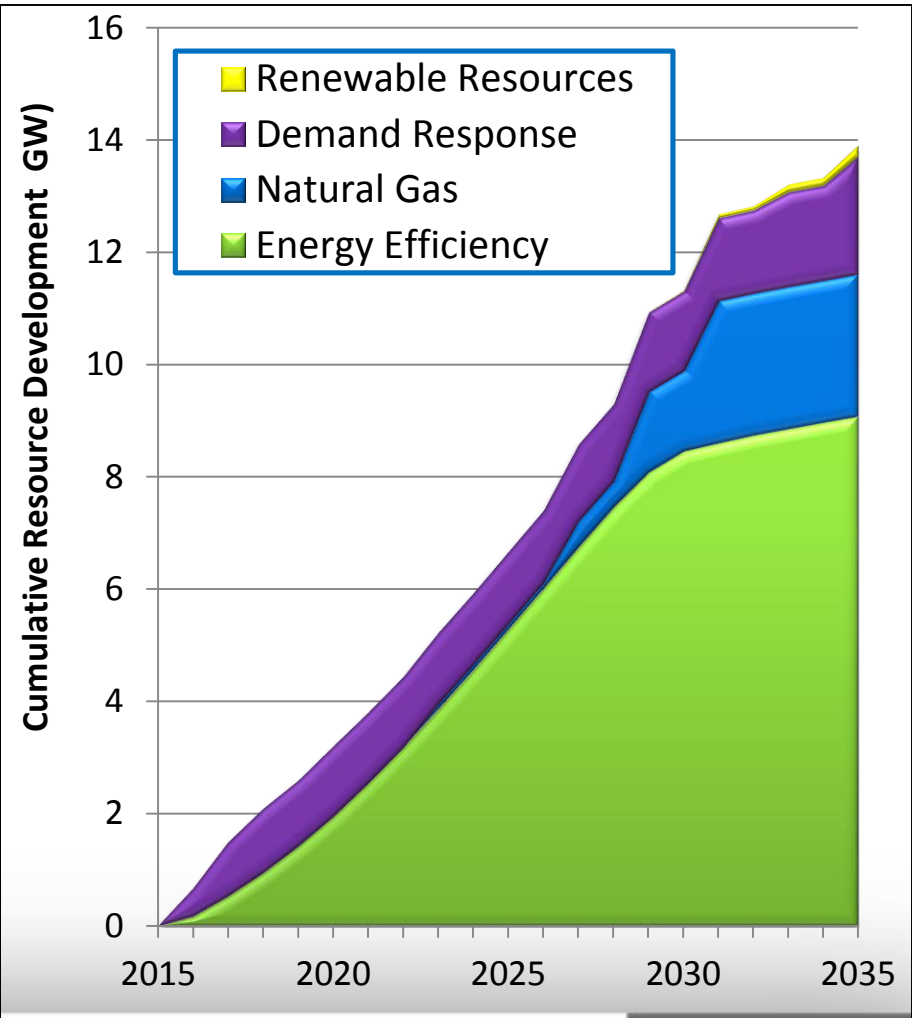
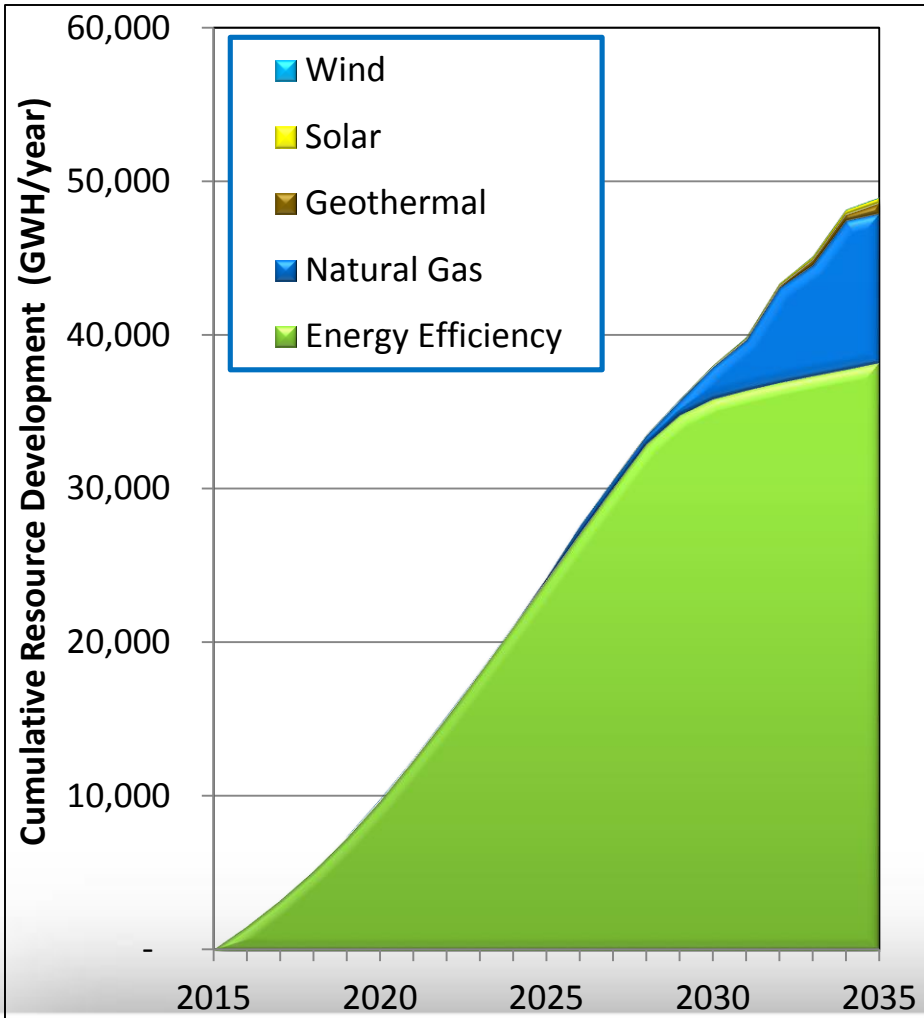
So  
What's  
Next?



SEVENTH  
NORTHWEST  
POWER PLAN



# Key Finding: Energy Efficiency and Demand Response Can Meet Nearly All Growth in Energy and Capacity Needs through 2035



# Your Mission:

