



Market Transformation in the Northwest

ACEEE Market Transformation Symposium

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NORTHWEST ENERGY EFFICIENCY ALLIANCE

Energy Efficiency in the Northwest

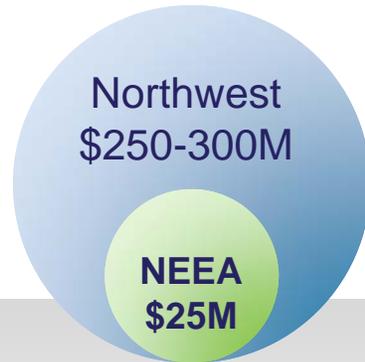
85%

of new growth for electricity through 2029 can be met with efficiency

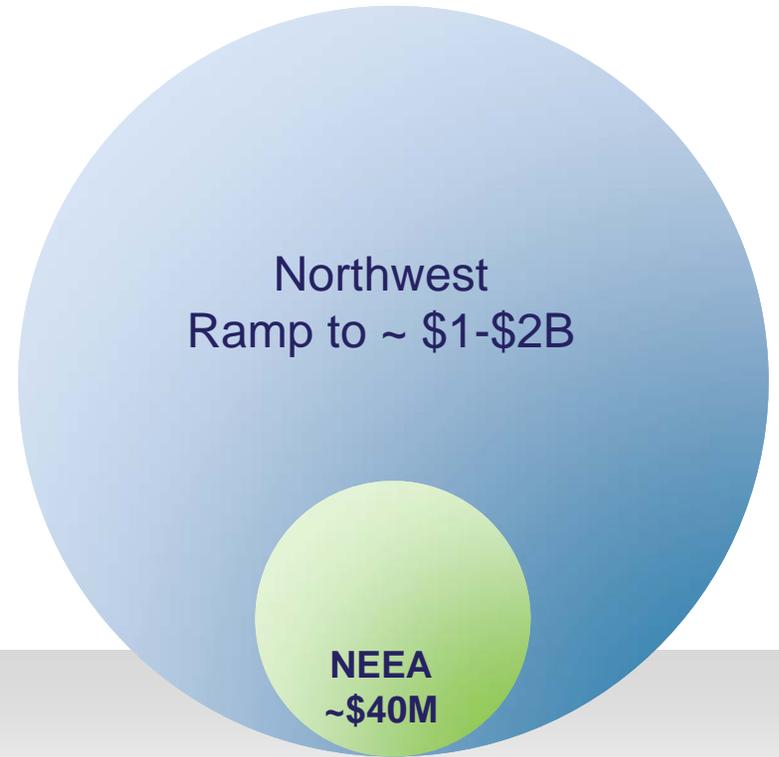
Northwest Investment - Annual



1995
Deregulation



2005-2009
Codes and standards
accelerate

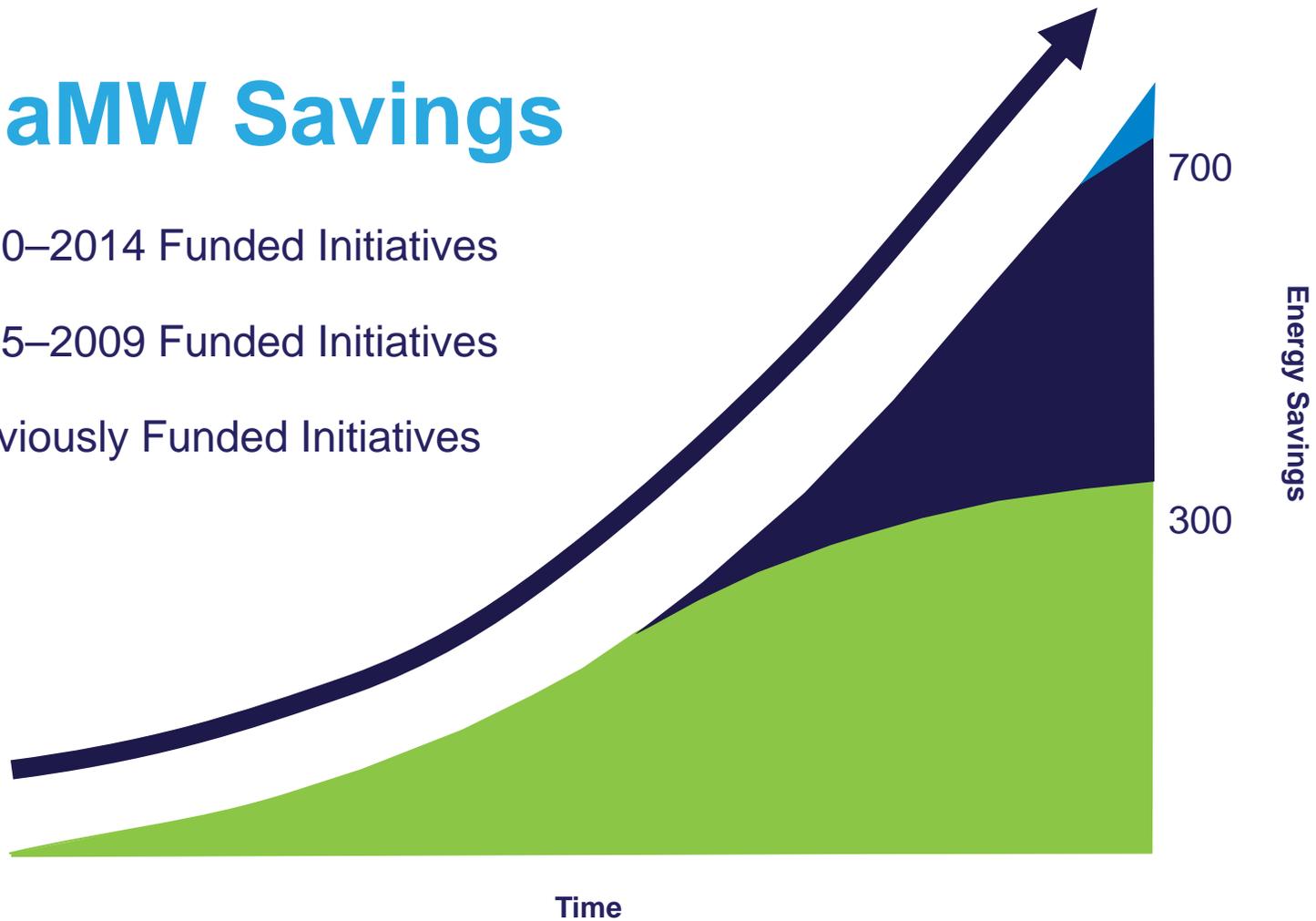


2010-2014
Economic challenge

Total Regional Savings for NEEA Initiatives

707 aMW Savings

- 2010–2014 Funded Initiatives
- 2005–2009 Funded Initiatives
- Previously Funded Initiatives



Northwest Trends

Rate Increases

Falling Gas Prices

Generation Rising



States

Idaho Energy Plan

Idaho Commission

Oregon Energy Action Plan

Washington - I-937



Different Perspective and Utilization



- Idaho
 - Idaho Power viewing DR as a new near term balancing resource
- Oregon
 - Established Clean Energy Works Oregon, a energy efficiency financing retrofit group headquartered in Portland.
 - Portland has the highest concentration of energy efficiency professionals.
- Washington
 - The Legislature established Innovate Washington

Regional Innovation



NEEA is a unique, regional initiative

- Voluntarily funded to \$38+ MM/year (2010-2014)
- 2010-2014 plan includes investment in emerging technologies and regional stakeholder support
- Examples:
 - Northern Climate spec for heat pump water heaters
 - Conduit
 - Regional Messaging

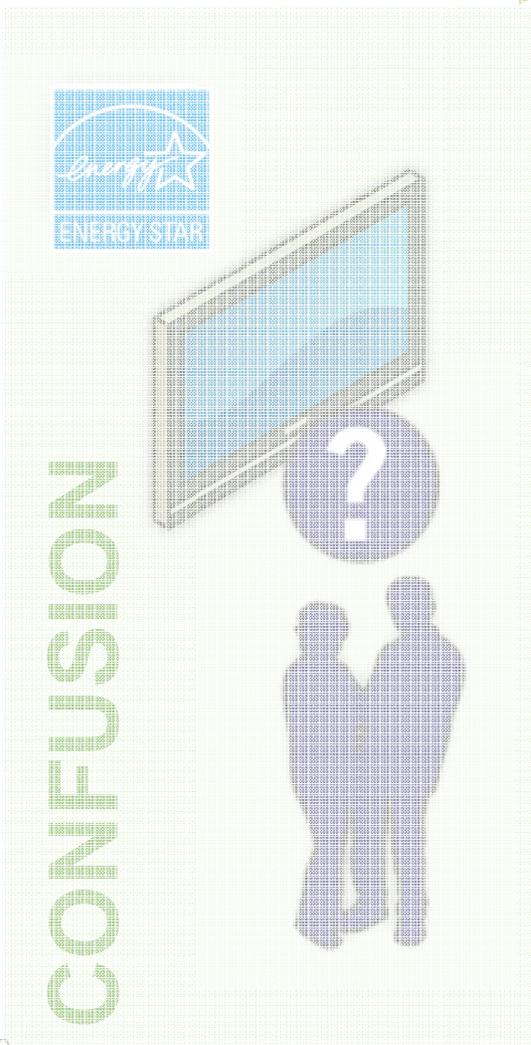
Opportunities

- TVs
- Strategic Energy Management
- Street Lights
- Heat Pump Water Heaters
- Irrigation

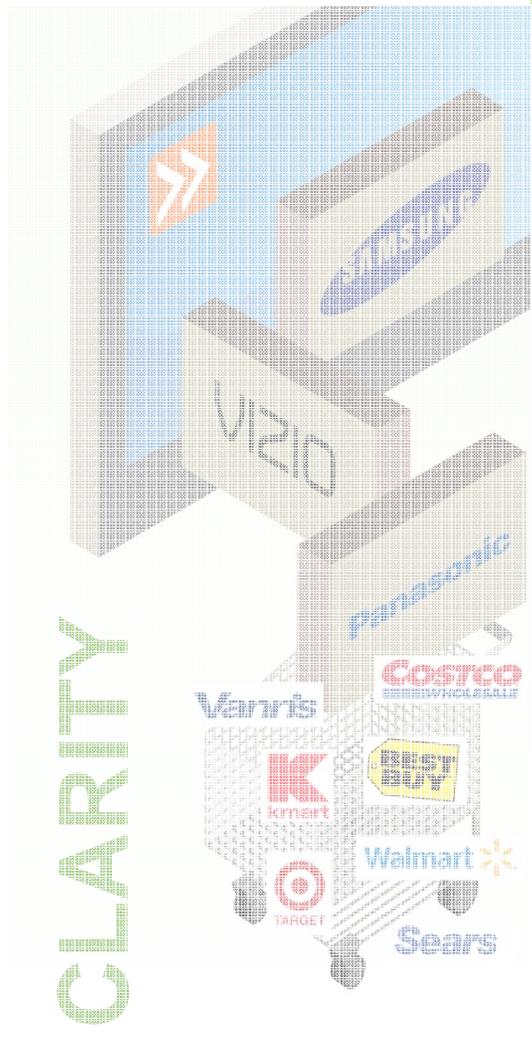


TV Story

IDENTIFY BARRIER



MARKET INTERVENTION



MARKET TRANSFORMED

Retailers representing

80% of TVs sold in the Northwest promote Energy Forward TVs in their stores.

The market responded and today TVs are

50% more efficient than just three years ago.

SUCCESS



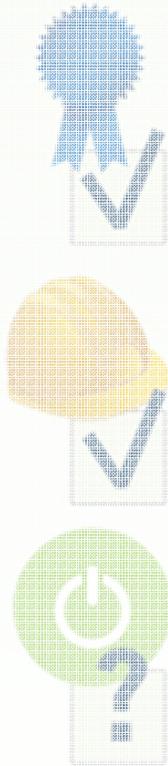
Food Processors/Manufacturing

IDENTIFY BARRIER

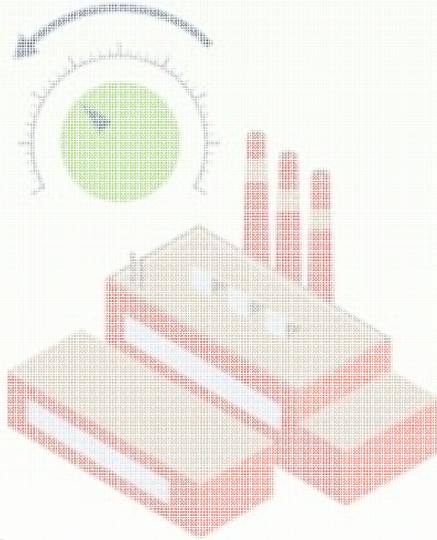
MARKET INTERVENTION

MARKET TRANSFORMED

CONFUSION



CLARITY



SUCCESS

The NWFPA set an industry-wide goal to reduce energy intensity by **25% in 10** years and 50% in 20 years.

More than **15%** of large Northwest food processors are implementing SEM.



Heat Pump Water Heater Opportunity

492 aMW

60% homes

1800 kwh/year savings per
unit

(But many barriers...)



“Have You Hugged Your
Water Heater Today?”

Solid State Streetlighting (Emerging)



Objective: Prove cost-effectiveness of combining LED lighting with network control systems

Planned Research and Pilots

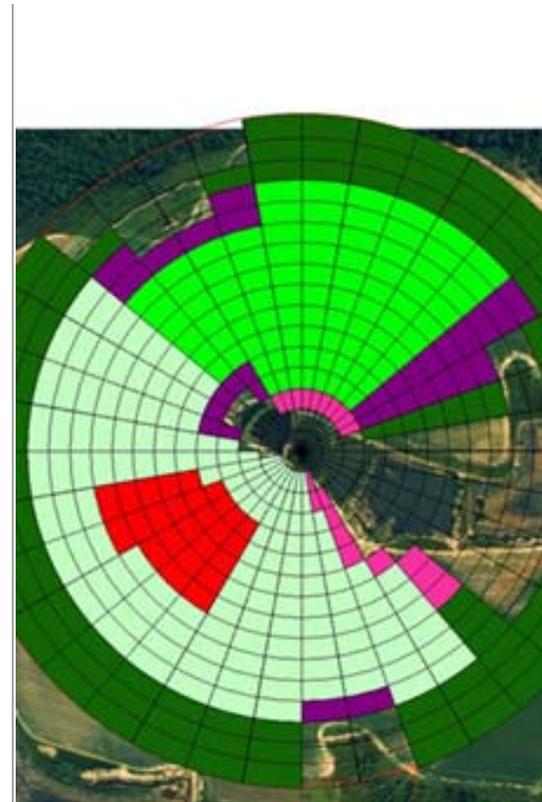
- 115 aMW annual savings potential
- Visual performance test completed in Seattle
- Determine acceptable standards for illumination nationwide

Irrigation (Emerging)

Objective: Develop an integrated agricultural irrigation solution using existing technologies for precise water application on crop fields.

Opportunity

- 42 aMW 20-year savings potential
- 20% reduction by 2020
- Two pilot irrigation sites confirmed
- Create a model that increases profitability
- Combines soil mapping, weather data, and improved technologies



Soil Map

Questions & Comments

Filling the
Energy
Efficiency
Pipeline

Accelerating
Market
Adoption

Delivering
Regional
Advantage



Thank You!

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