



Innovative Models to Accelerate Program Goals and Amplify Results

Moderated By: Alexis Allan, NEEA
ACEEE, National Symposium on Market Transformation
April 20, 2015

NORTHWEST ENERGY EFFICIENCY ALLIANCE

Our Strategic Partners and Funders



Accelerating energy efficiency in partnership with Northwest utilities



What is Market Transformation...???

Market transformation is the strategic process of intervening in a market to create lasting change

Your Guest Stars....

- **Tim Michael**
Pacific Gas & Electric Company
- **Peter Banwell**
US Environmental Protection Agency
- **Paul Campbell**
Sears Holdings
- **David Hilbrich**
Best Buy

Making Energy Efficiency Incentives More Effective

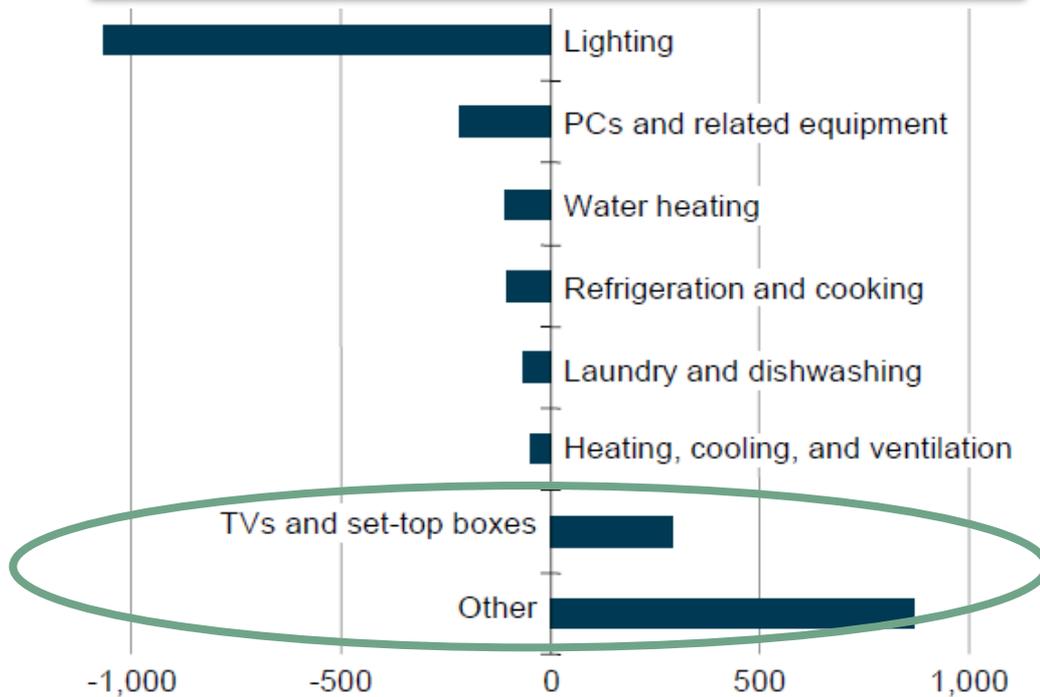
Tim Michel
April 21, 2015





Growing Miscellaneous Plug-load Energy Use

Change in residential electricity consumption per household (2012-40)



Source: U.S. Energy Information Administration | Annual Energy Outlook 2014



New Standards, Few Models. Diminishing Per Unit Savings

August 2014

Over 200* CEE Tier 3 models
Average annual kWh savings 177



March 2015

Only 4* CEE Tier 3 models
Average annual kWh savings 73

Cost effective savings only justify
a \$10 to \$25 rebate

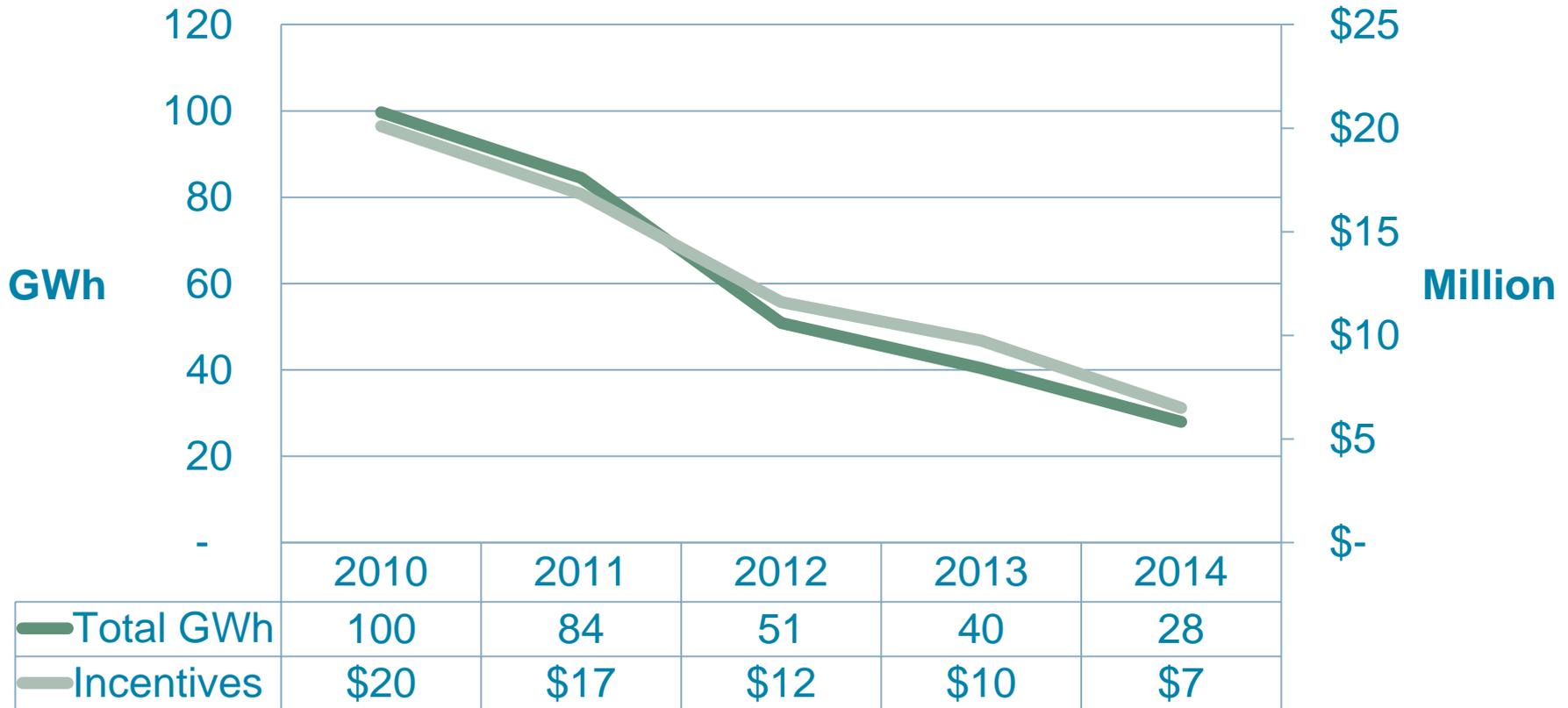
Incremental purchase price
in excess of \$200

* 2 door models



PLA Program Trend

PG&E PLA Savings & Incentives

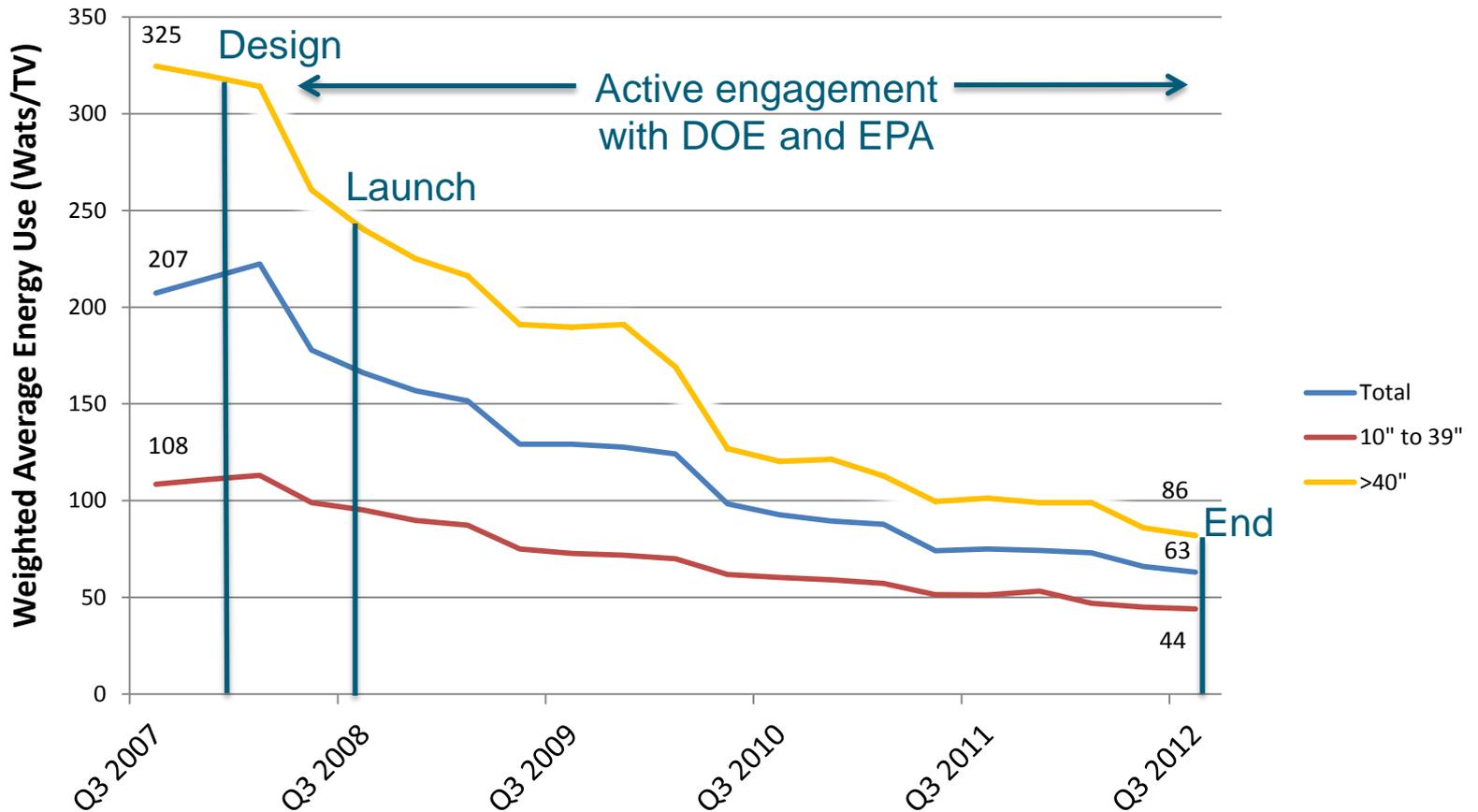


Declining savings from PLA product portfolio



Midstream Collaboration: NEEA, SMUD, PG&E and More...

Estimated Energy Use by Size for New TVs



All Major Retailers Participated



Key Learnings From TV Pilot

- **Collaboration Increases Participation**
- **New Evaluation Approaches**
- **Market Transformation**



Collaboration Increases Participation

Coordinated Utility Incentives + Streamlined Retailer Engagement



- **Greater number of efficient products on store shelves**
- **More customers choose the efficient option**
- **Energy savings**
- **Market Impacts**

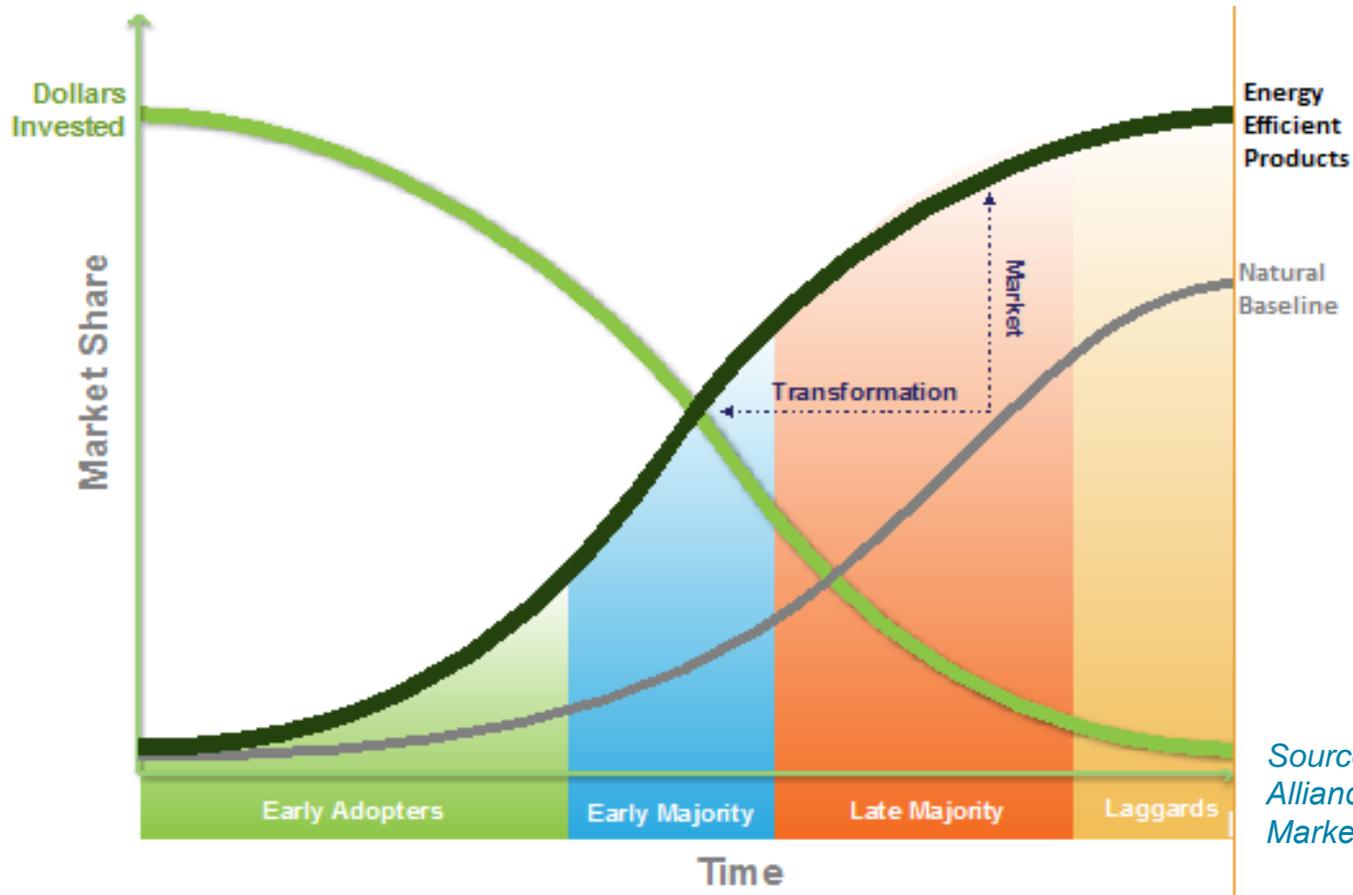




Market Transformation

Align energy efficiency programs with retailers' business models

Which triggers structural changes in the marketplace toward energy efficiency



Source: Northwest Energy Efficiency Alliance, "NEEA's Definition of Market Transformation"



Midstream Program Development

- Collaborative efforts at PG&E, NEEA and SMUD to develop midstream program that meets market transformation objectives
- Coordinated 2014 Trials tested different program design variables.
- PG&E and SMUD Trial focused on a single retailer and a broad portfolio of products with a key objective to assess evaluation methodologies
- NEEA's Trial, which included eight retailers and four products, emphasized major program processes such as product selection, data access and retailer engagement

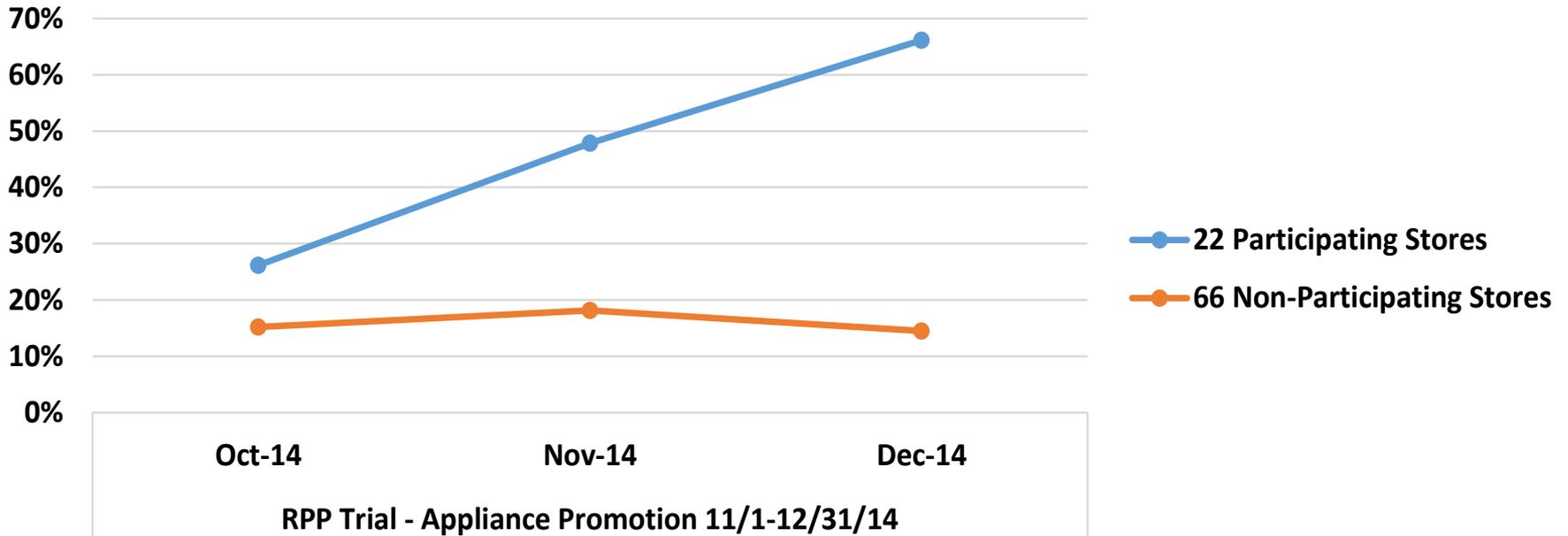


2014 PG&E and SMUD Trial



- Validate program operation, evaluation and performance

Market Share of Qualified Appliances





2014 Key Milestones

- **Retailers, Manufacturers and the EPA met with California Public Utility Commission**
- **EPA, under the ENERGY STAR brand, facilitated the start of a nationally-coordinated, midstream, market transformation platform**
- **Initial outreach to program sponsors, retailers, and manufacturers at the ENERGY STAR partners' meeting**
- **Panel discussion about midstream program innovation at the National Association of Regulatory Utility Commissioners (NARUC)**



Why is Partnering Important?





Why Scale Matters

- **Greater impact over buying decisions**
- **Administration cost-sharing**
- **Lower incentives overall**
- **Improved data collection**
- **Marketing collaboration with the retailers**

Move the market further and faster!



Retail Products Platform 2015 Trial Overview



Home-Theaters-in-a-Box/Sound Bars
(ES + 15%)



Air Cleaners



Dryers



Room Acs?



Freezers



Creating a More Energy Efficient Future for Residential Customers

The ENERGY STAR® Retail Products Platform



Peter Banwell
ACEEE/CEE

Washington DC, April 21, 2015

A Message from the ENERGY STAR Retail Action Council

(Scottsdale, AZ October 28, 2014)

- We support program sponsors efforts to build scale to be more effective and efficient via the ENERGY STAR Retail Products Platform.
- We believe this is the future of energy efficiency programs, and the future is now!
- We are offering to help regulators recognize the energy saving opportunities.
- We are excited and wish to assist innovative Program Sponsors who join together with the EPA transform the energy efficiency market.



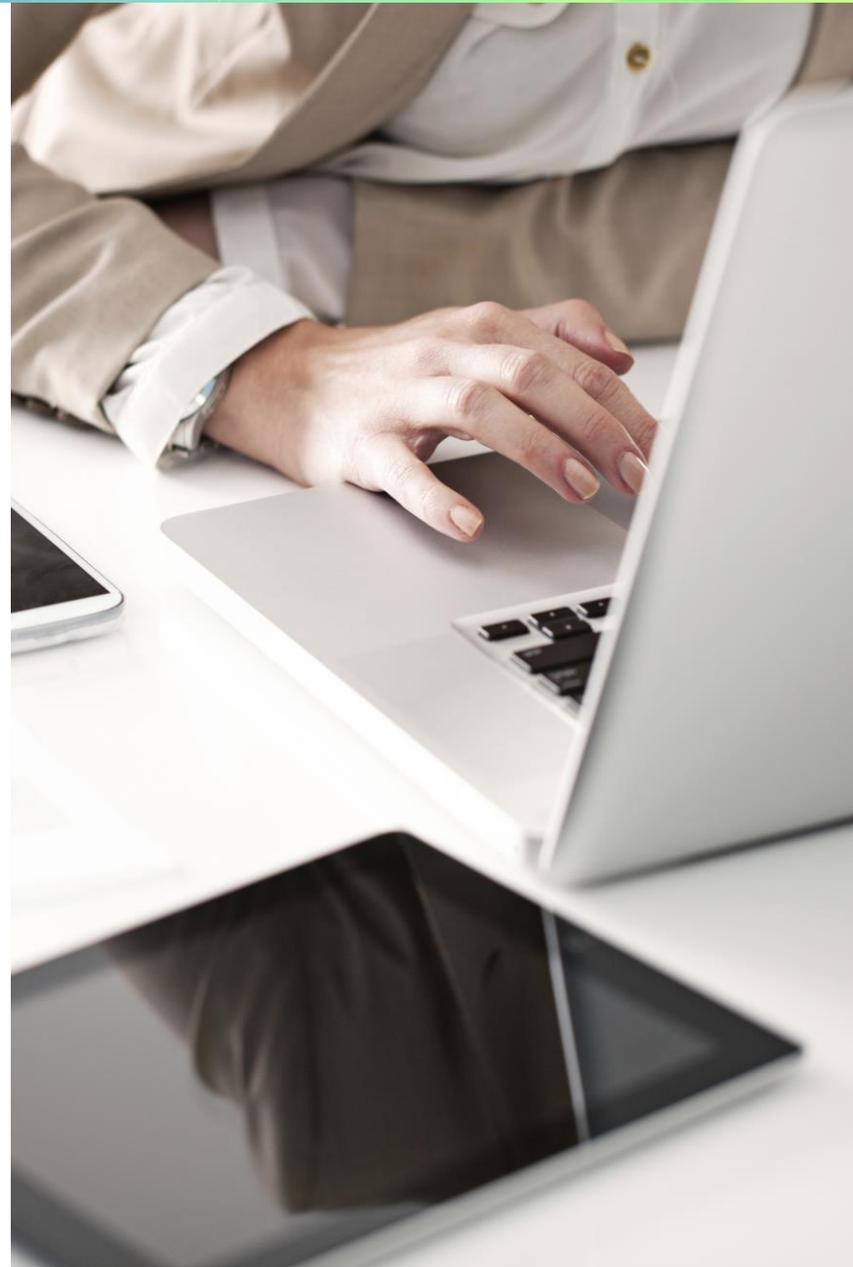


Process



Data

- Develop a consistent category sales data feed from a retailer approved data services firm
- Energy efficiency program sponsors will be able to capture full program impact. Data categories include:
 - Model number
 - Date
 - Transaction identifier
 - Zip code / Store ID
- RFP for national data solutions company





Evaluation—A Different Approach is Required

- Currently under development among stakeholders and evaluation experts from CA, Northwest and Northeast regions.
- On-going communication with state regulators (NARUC)
- General agreement that evaluation methods need to have the following characteristics:
 - Be considerably faster and less costly than current methods
 - Be based on indicators of shifts in the marketplace, using several data sources
 - Be sufficiently precise, but not as precise as traditional programs
 - Be based on a national data template provided by retailers, including regional data
 - Be a continuous ongoing and fluid process, rather than a traditional stop and start process



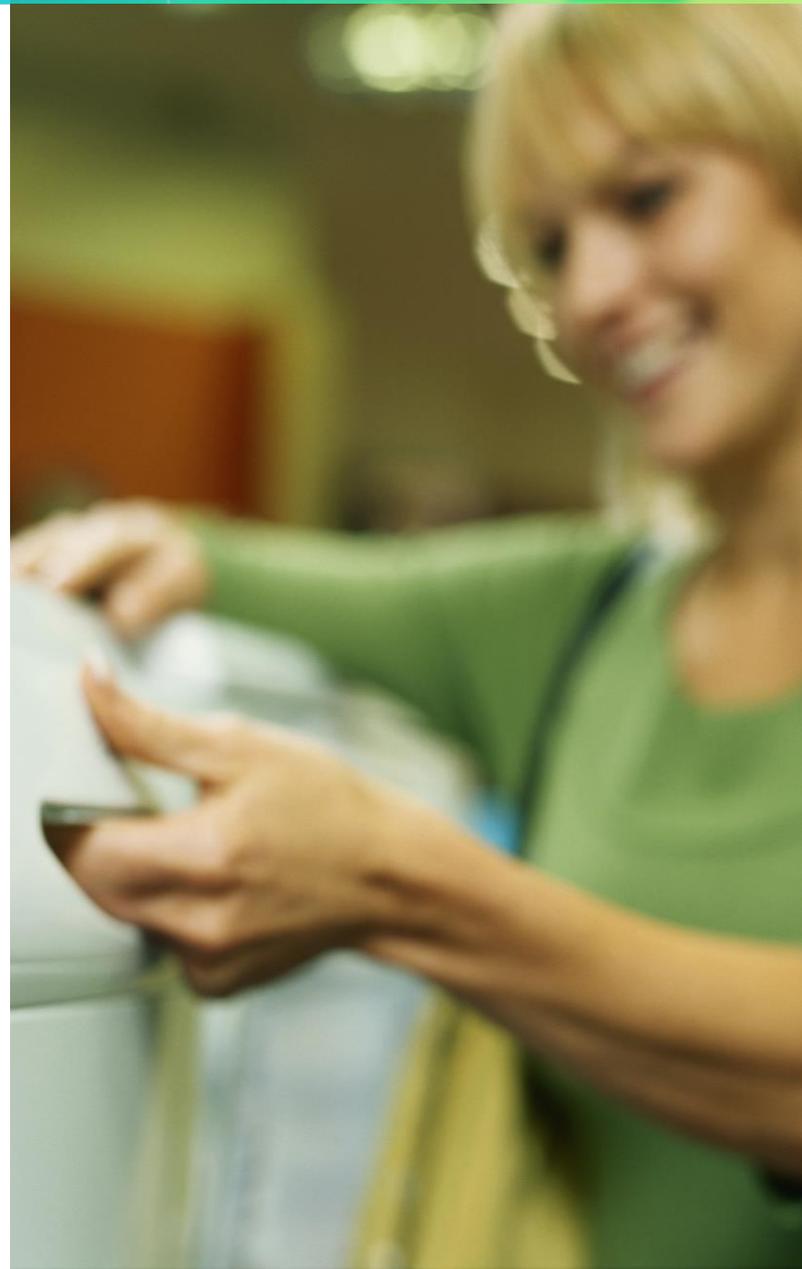
2015/6 Products

The pilot was designed to

- Test a mix of different products
- Prove the program concept, and
- Streamline implementation

The pilot is currently limited to the following products:

- **ENERGY STAR certified dryers**– new category
- **ENERGY STAR certified air cleaners**– small unit sales, high per unit energy savings
- **ENERGY STAR certified freezers**– difficult to administer cost effective downstream rebates
- **ENERGY STAR certified sound bars (+50%)**– high growth category, limited per unit savings
- **ENERGY STAR certified home theater systems**–high growth category, limited per unit savings
- **(for 2016) ENERGY STAR certified room air conditioners**–revised specification, positioned to influence stocking plans for 2016





Who is Involved (as of April 2015)

2015 Pilot Sponsors

- DC SEU – DC
- Efficiency Vermont – VT
- PG&E – CA (*on behalf of SCE, SDGE, SoCalGas*)
- SMUD – CA

2015 Participating Retailers

- Best Buy
- Sears Holdings
- The Home Depot

2015 Other Key Stakeholders

- NRDC
- NEEP
- NEEA

Interested Retailers

- Costco
- Nationwide Marketing Group
- Target
- Walmart

Sponsors Developing Filings for 2016+

- BGE – MD
- DTE Energy – MI (2017)
- PEPSCO – MD
- NJCEP – NJ
- SMECO – MD
- Eversource – CT
- UIL Holdings – CT
- Xcel – CO or MN (2017)

Other Potential Pilot Sponsors

- Austin Energy – TX
- Cape Light Compact – MA
- ComEd – IL
- FirstEnergy Utilities – PA, MD, NJ
- LADWP – CA
- Mass Save – MA
- National Grid – MA & RI
- Nstar – MA
- Oklahoma Gas Service – OK
- PECO – PA
- PSEG LI – NY
- Texas Gas Service – TX



Project Update

What's Being Worked On?

- ✓ **EM&V:** Development of guidelines and resource for 2015 pilot sponsors
- ✓ **Data:** RFP for 2016 national programs solution, May 2015 results
- ✓ **Products:** Products for pilot programs confirmed; begin development of framework for product specification transitions
- ✓ **Legal:** Draft agreement between utilities and retailers for national program
- ✓ **Marketing:** Developed draft, look, and feel, based on current retailer guidelines
- ✓ **Outreach:** Discussions at industry events (e.g. CES, NEEP's EM&V Forum, NARUC Winter Meetings)
- ✓ **Field Services:** Drafting overview document and creating tool kit for sponsors
- ✓ **Pilot Programs:** Two "classes" 2015, 2016

What's Next?

- ❑ Pilot sponsors sign participation form by end of February 2015
- ❑ PGE & NEEA complete national data RFP (on behalf of all future participants)
- ❑ Create framework for product specification transitions
- ❑ Continue developing national marketing strategy
- ❑ Develop legal agreements
- ❑ Continue discussions at industry events
- ❑ Connect with ENERGY STAR Retail Action Council members to discuss field services/implementation overview document
- ❑ Launch 2015 pilot programs, continue planning 2016 pilots



Getting Started & Contacts

Getting Started

- Contact EPA to discuss program concept and potential role
- Join the current team and develop a pilot
- Help shape discussions with regulators and evaluators

Contacts

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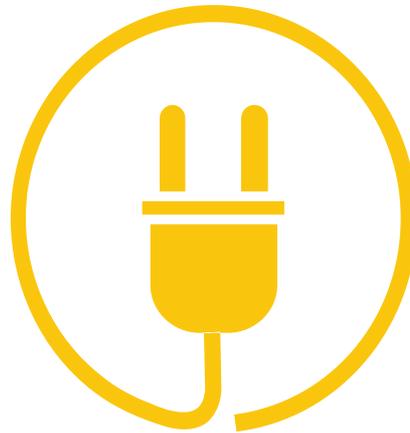
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Retailer Perspective



Hugh Cherne – Best Buy
Paul Campbell – Sears Holdings



Best Buy and Energy Star



ENERGY STAR® Partner of the Year

Best Buy is proud to be a 2015 ENERGY STAR Partner of the Year — our second consecutive year winning this award. ENERGY STAR certified products save money, reduce energy use, and protect the environment by meeting strict energy efficiency guidelines set by the US Environmental Protection Agency and the US Department of Energy.



ENERGY STAR Partner of the Year



Rebate Finder



Take the Pledge

US Retailers

- Tens of billions of annual customer contacts
- Over \$4.7 trillion in annual sales
- 3.5% average net margin



Top 10 US Retailers

- Top 10 Appliance retailers have 83% market share
- Top 10 CE retailers have 79% market share
- Sell almost 2 billion energy consuming products that use 80 million MWh per year



U.S. Retail – Macro Trends

- Shifting demographics
- Omni-channel shopping
- Personalization
- Brand loyalty
- Big data
- Security and privacy



YOUR SMARTER HOME STARTS HERE

Upgrade your home with smart thermostats, locks, lighting, routers and appliances.



Intelligent Efficiency Integration



- Practical Connectivity fully demonstrated with physical space
- Simple presentation of both real world applications and user interfaces
- Technology reliant...behavior defiant

Enhanced customer experience



- Seamless and personalized across all channels
- Quicker access to products and education
- Collaboration for program attribution

Retailers are the nexus of the value chain

Thousands of manufacturers

Millions of customers



- | | | | | |
|----------------|---------------------|-------------|---------------|----------------|
|
Ariston |
Broan |
Creda |
Danby |
DCS |
|
Electrolux |
EQUATOR |
EWAWE |
EXPLORER |
Frigidaire |
|
GE |
Gibson |
Haier |
Hotpoint |
Kitchenaid |
|
LG |
Magic Chef |
Miele |
MARVEL |
Whirlpool |
|
Roper |
Sanyo |
Wolf |
Subzero |
TAPPAN |
|
Viking |
Fisher & Paykel |
Amana |
Dacor |
Thermador |
|
Kenmore |
JENN-AIR |
Admiral |
Caloric |
GAGGENAU |
|
Samsung |
inSink erator |
ASKO |
Panasonic |
Bosch |

- These retailers have +70% share of Major Appliance market
- Critical partnerships with manufacturers

Current: Retailers assort product prior to Utility incentives are known



New: Utilities (with scale), collaborate with retailers



Customers have more energy efficient choices!



Sears Holdings and Energy Star



- "Sears Holdings values our partnership with ENERGY STAR and is honored to receive the Partner of the Year Award," said William Hutchinson, Chief Supply Chain Officer, Sears Holdings.
- "We remain committed to continuing our work to help reduce greenhouse gas emissions, increase energy efficiency and protect the environment through our operational excellence, Kenmore product offerings and partnerships with local utilities."

Questions & Discussion

- As an energy efficiency community, what specific practices support growing and maintaining successful long-term partnerships with our market partners?
- What barriers and opportunities have been identified with these new approaches?
- What are the risks associated with midstream programs and how can the energy efficiency community best mitigate these risks?
- What lessons have you learned that you wish you'd known during design?