



# Energy Efficiency & Solar Programs

*Austin Energy Utility Oversight Committee*

June 25, 2015





# Overview of Topics

- Program Goals and Objectives
- Overview energy efficiency and demand response programs (Demand Side Management (DSM) programs. **Focus today on select program enhancements:**
  - Low Income Weatherization
  - Multi-family
  - Select Demand Response Programs
  - Residential and Commercial App
- Solar Program

**2014-2015  
Progress Report  
Provides Details  
on All Programs**



# Goals

1. Reduce customer costs, enhance comfort
2. Enhance customer satisfaction
3. Provide value to the utility
4. Meet resource goals in most cost effective manner



55%

55%  
renewable  
energy

900



MW

Energy  
Efficiency (EE)  
and Demand  
Response (DR)

+

950



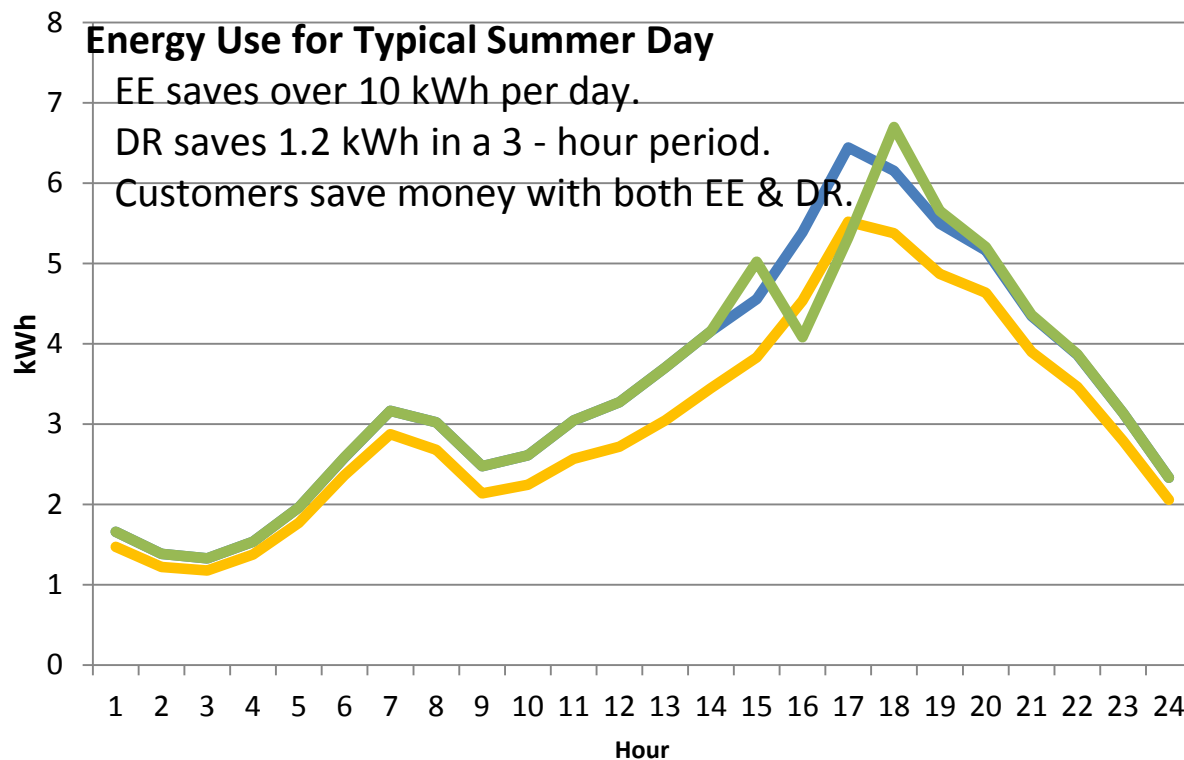
MW

Includes 200  
MW from local  
of which 100 MW  
must be  
customer-sited

**Subject to Affordability**



# DSM = Energy Efficiency (Conservation) + Demand Response (Peak Reduction)



## Customer Value:

- Reduced costs
- Increased comfort
- Improved quality

## Utility Value:

- Reduced costs
- Enhanced customer satisfaction
- Goal contribution

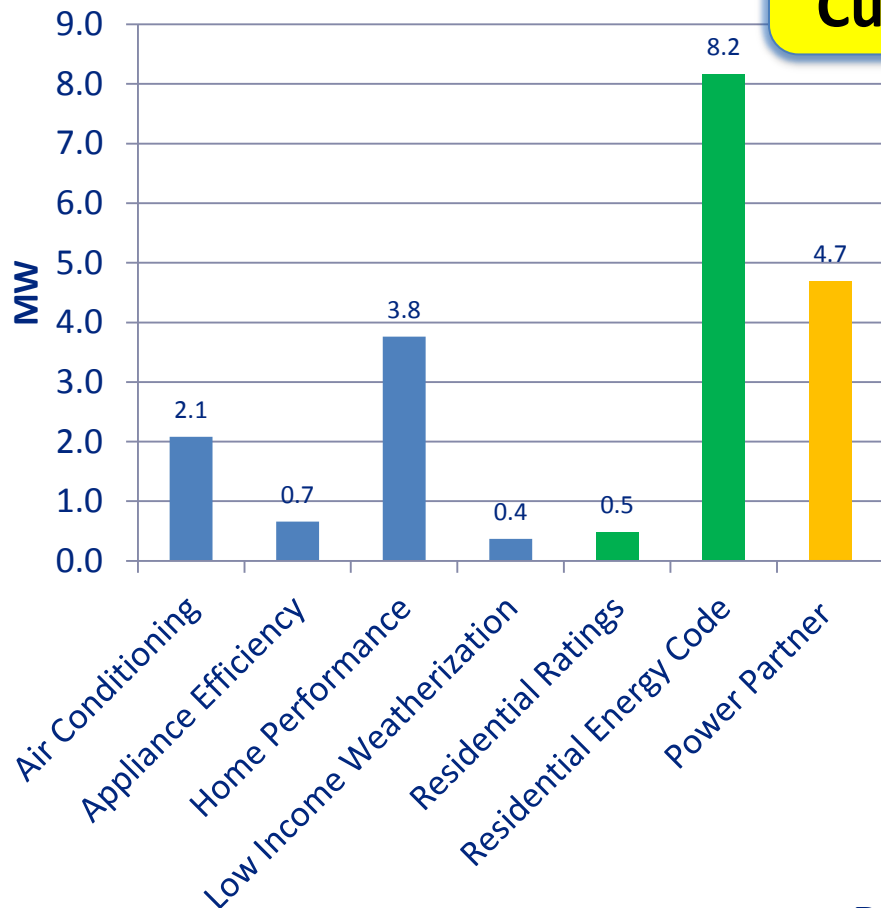


# DSM Program Savings FY14

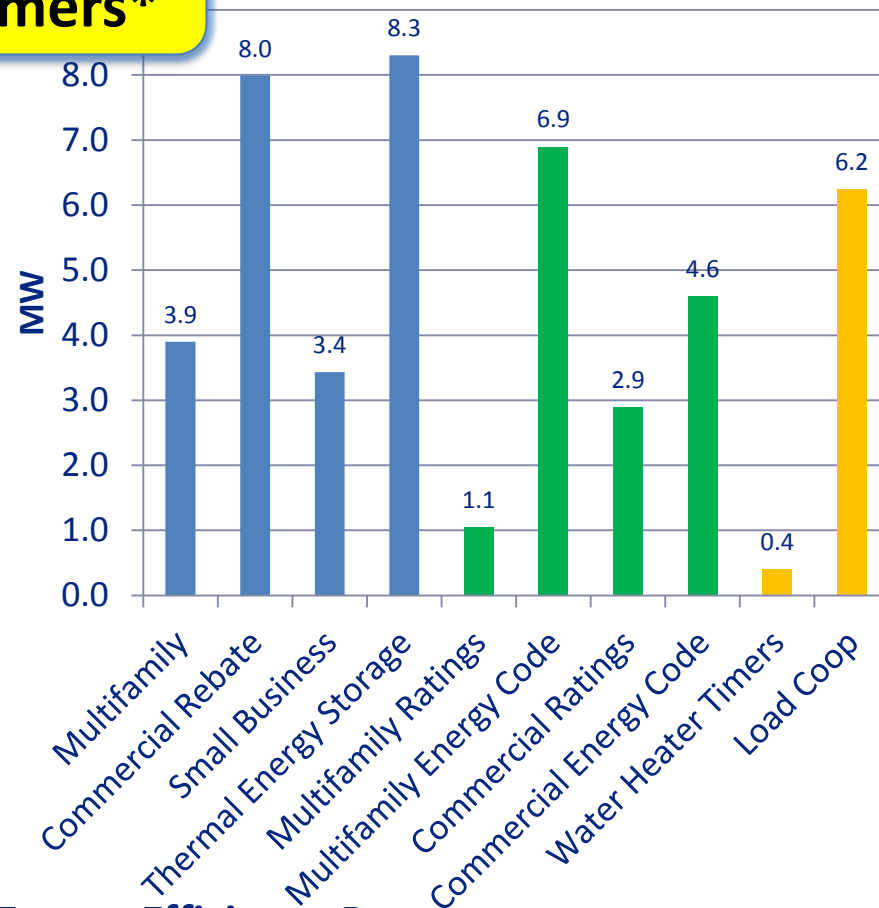
67 MW

**38,000  
Customers\***

## Residential Programs



## Commercial Programs



**Blue: Energy Efficiency Programs**

**Orange: Demand Response Programs**

**Green: Green Building Programs**

\* Excludes occupants of Green Building rated commercial space



# AE Weatherization Programs

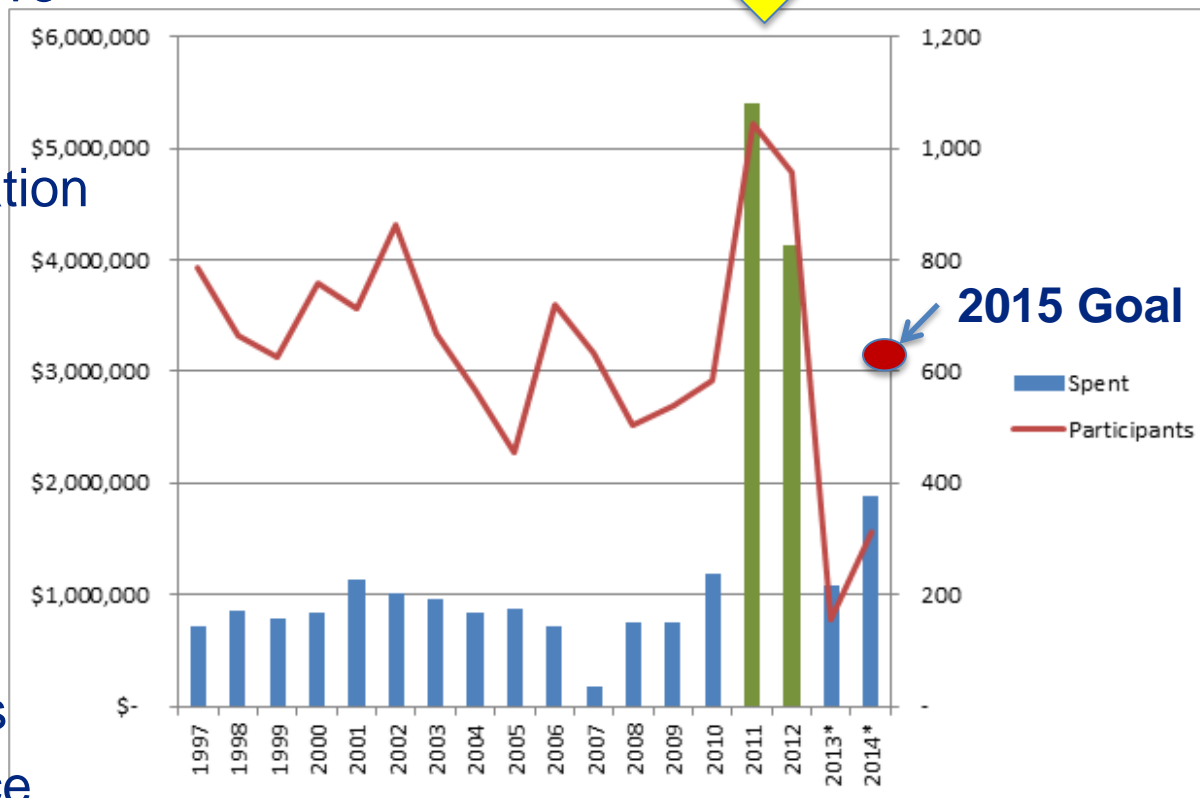
- Over 17,000 low income homes weatherized since 1983
- 45,000 Customer Assistance Program households receive bill discounts

❖ Many CAP customers eligible for weatherization

## Coordinated efforts with

- Austin Water Utility
- Texas Gas
- Housing Repair Coalition
- Neighborhood Housing
- Health & Human Services
- Home Repair & Assistance Partners and Non-profits

**Federal Stimulus Funding**







# Weatherization Program Accomplishments

## FY 2014

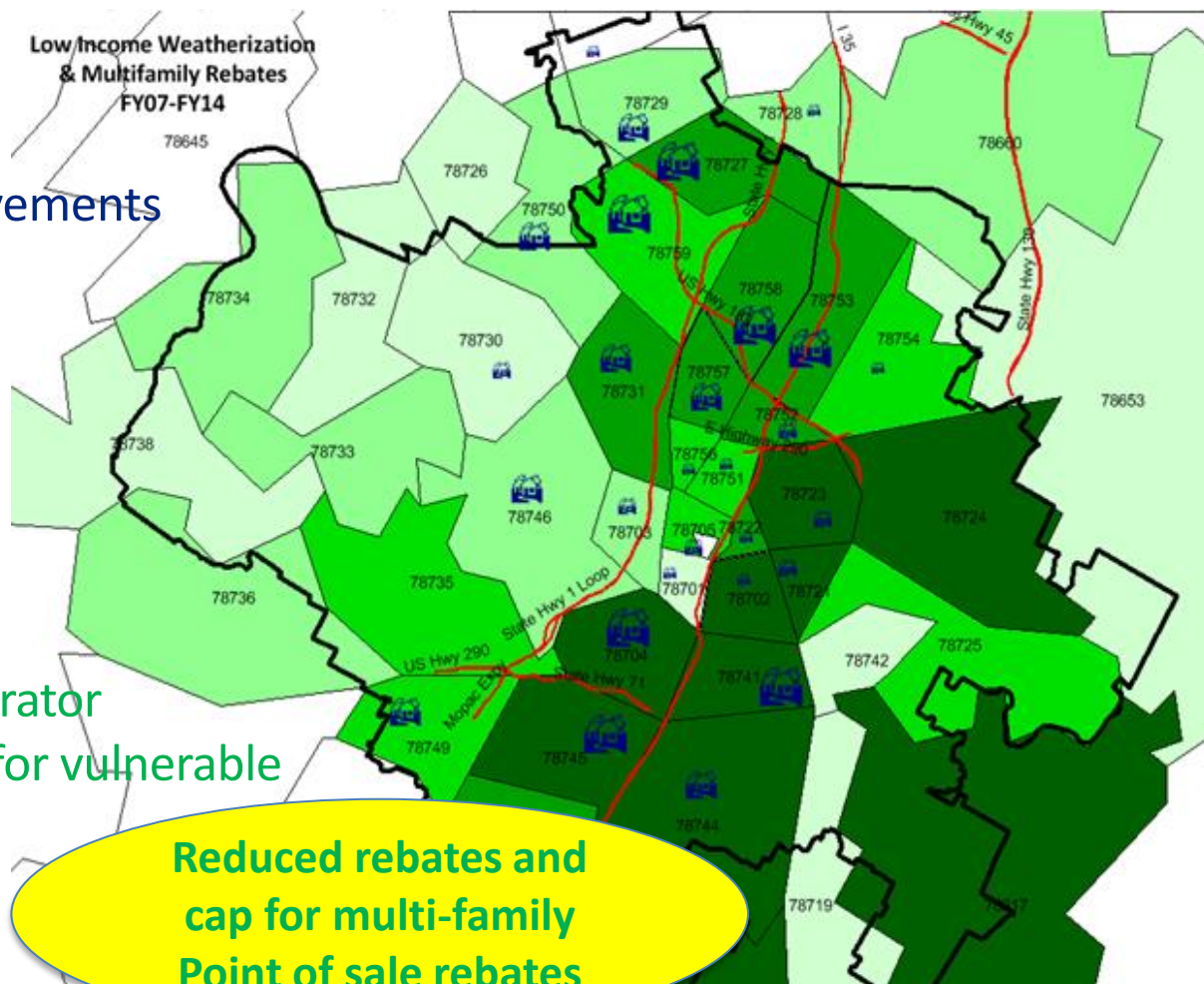
- 291 homes
- \$1.8 million in home improvements
- ~1,000 annual kWh reduction per participant

## FY 2015

- \$3 million in funding
- Goal: 600+ homes
- No air conditioning & refrigerator replacement; window units for vulnerable population
- Process enhancements

## FY2016

- Modified approaches under review



Highest concentration of Low Income Weatherization: Dark Green  
Lowest concentration: Light Green  
Icons represent multi-family efficiency projects



# Residential Bring Your Own Thermostat (BYOT) Model



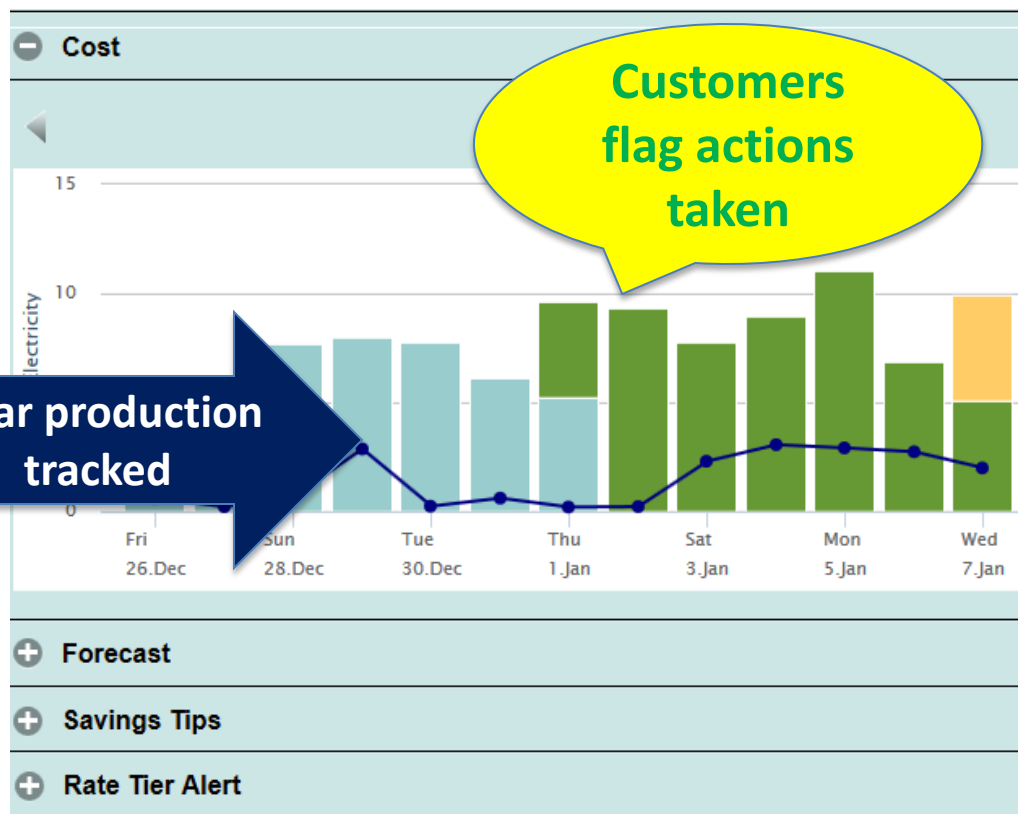
- Started in 2013; 8,500 customers
- Augments one-way thermostat and water heater timer program started in 2001
- Enroll your own wifi-enabled thermostat, AE adjusts temp settings
- Approved 2-way devices
  - Add 2 new models annually
- Rebates
  - Customer: Rush Hour Rewards: \$85
  - To Vendor: \$25/customer enrolled; \$15/year for maintain customer
- Transition single family 1-way to BYOT
- Expanding to condos and commercial customers; piloting new building control program





# Customer Web Applications and Tools

- Free and easy to use
- Accessible from any web-connected device
- Next day information
- Color-coded tiers
- Usage alerts
  - Residential – tier alerts
  - Commercial – kw and kwh alerts
- Commercial customer budget tool
- Solar production
- Over 10,000 users



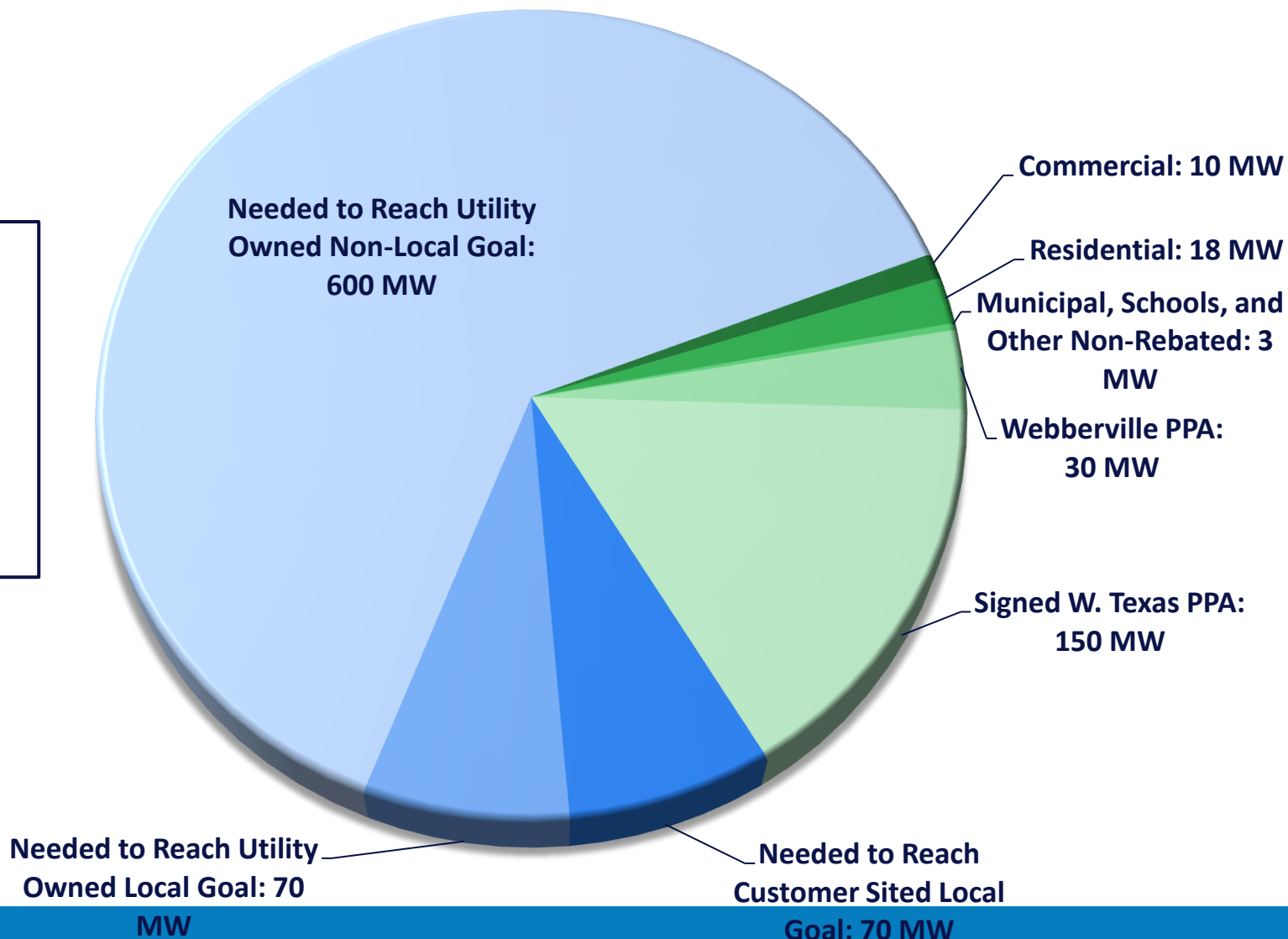
Communicate in a way  
that is relevant and  
meaningful



# Solar Status

750 MW utility scale, 200 MW local (at least 100 MW customer-sited) by 2025

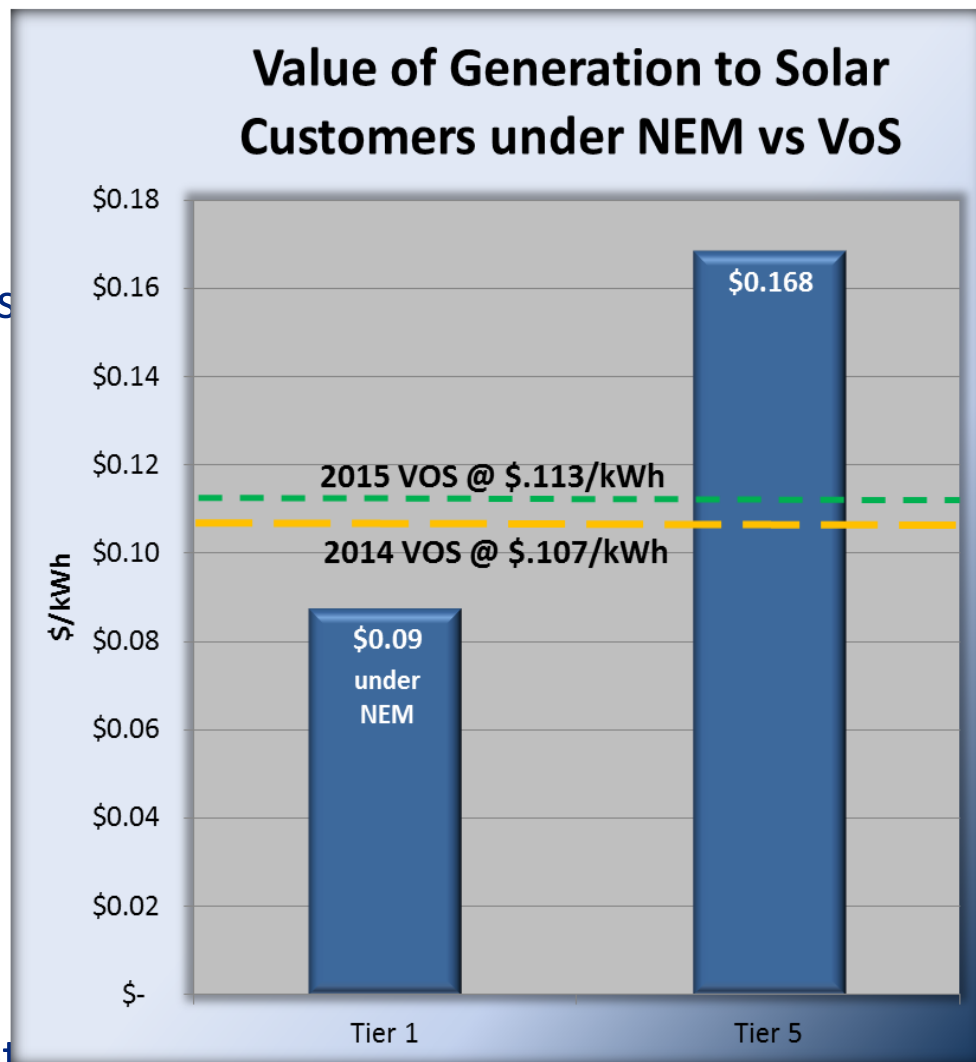
**Currently  
Installed or  
Planned:  
210 MW-ac  
Remaining:  
740 MW-ac**





# AE Solar Highlights

- Among lowest installed costs in U.S.
- 30% of Texas solar is in AE territory
- Developed strong local solar market, with 40 solar companies
- 10 year rebate history:
  - \$46M for 3,900 residential projects to date
  - \$16M for 333 commercial projects paid to date
- Residential equipment leases: no rebates
- Increased Commercial cap with lower rebate under review
- Pioneered Value of Solar (VoS), promotes conservation, improves equity among customers and recovers fixed costs; updated annually in budget





# Coming in 2016: Community Solar

- Provide access to solar energy for customers unable to install solar panels on their own homes or dwellings
  - Renters and residents with shaded roofs
  - Customers unable to make upfront investment in rooftop systems or don't want to maintain their own system
- Allows participants to receive the benefits of solar power without actually owning/hosting the solar panels on-site



- 2 - 4 MW community solar project on 10 acres around Kingsbery substation
- Integrated with 1.6 MW energy storage pilot
- Program launch in 2016



# Final Thoughts

- AE is committed to developing products and services that customers value
  - Reduce costs to customers and provide value to the utility
  - Enhance customer service
  - Provide residents and businesses more choice and control over comfort and expense
  - Meet goals in the most cost effective manner
- Continually seek opportunities to improve

# Questions?

