



MOMENTUM SAVINGS

Monthly Call
August 31, 2016



AGENDA

- Draft residential lighting Momentum Savings results
- Update on baseline library and reporting savings to utilities
- Update on HVAC research
- Agriculture market research
- Website walk-through



RESIDENTIAL LIGHTING DRAFT MOMENTUM SAVINGS RESULTS





Total Market Savings



Program Savings
Above 6th Plan



Momentum Savings

QUESTION 1: WHAT IS THE MARKET?

QUESTION 2: HOW BIG IS THE MARKET?

ANNUAL MARKET SIZE

X

X

QUESTION 3: WHAT ARE THE TOTAL MARKET SAVINGS?

UNIT ENERGY CONSUMPTION

WEIGHTED BY

WEIGHTED BY

BASELINE EFFICIENCY MIX

ACTUAL EFFICIENCY MIX

=

=

BASELINE CONSUMPTION

ACTUAL CONSUMPTION

Question 3a:
What was the energy use in the year the Power Plan was written?

Question 3b:
What was the energy use in the following years?

-

TOTAL MARKET SAVINGS

-

PROGRAM SAVINGS

QUESTION 4: WHAT ARE THE PROGRAM SAVINGS?

=

MOMENTUM SAVINGS

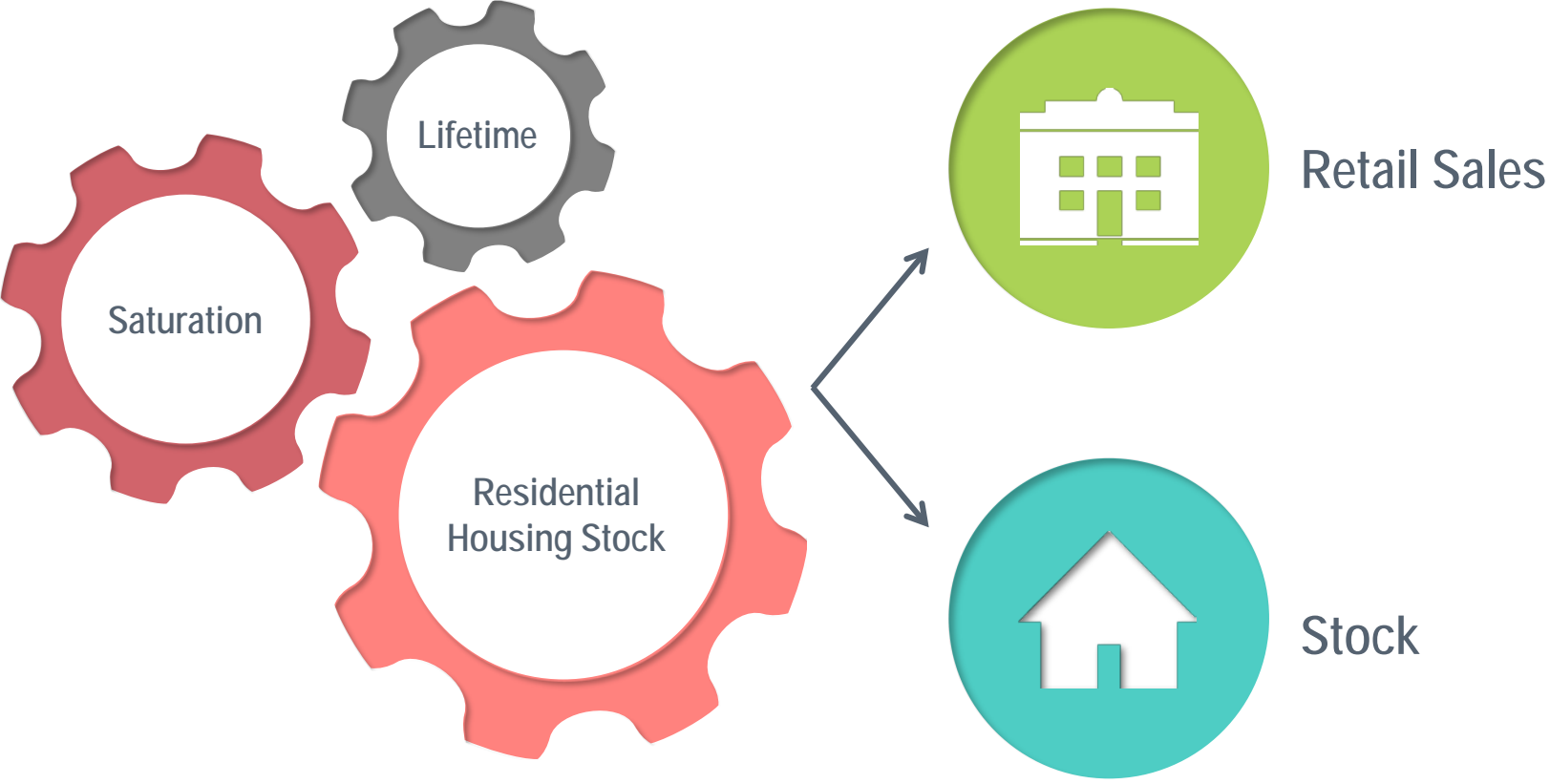
■ CALCULATED RESULTS
■ OPERATORS



Q1. WHAT IS THE MARKET?

State	Housing Type	Application	Technology	Lumen Bin / Linear Length
ID	SF	General Purpose	Incandescent	250 to 1049
OR	MF	Three-Way	Halogen	1050 to 1489
MT	Manu	Decorative & Mini-Base	CFL	1490 to 2600
WA		Globe	LED	24 inches
		Reflectors	T-12	48 inches
		Outdoor G. Purpose	T-8	96 inches
		Outdoor Reflectors	T-LED	
		Linear		

Q2. HOW BIG IS THE MARKET?





Q3. WHAT ARE THE TOTAL MARKET SAVINGS?



Retailer Market
Share



Efficiency Mix



Baselines

RETAILER MARKET SHARE



DIY



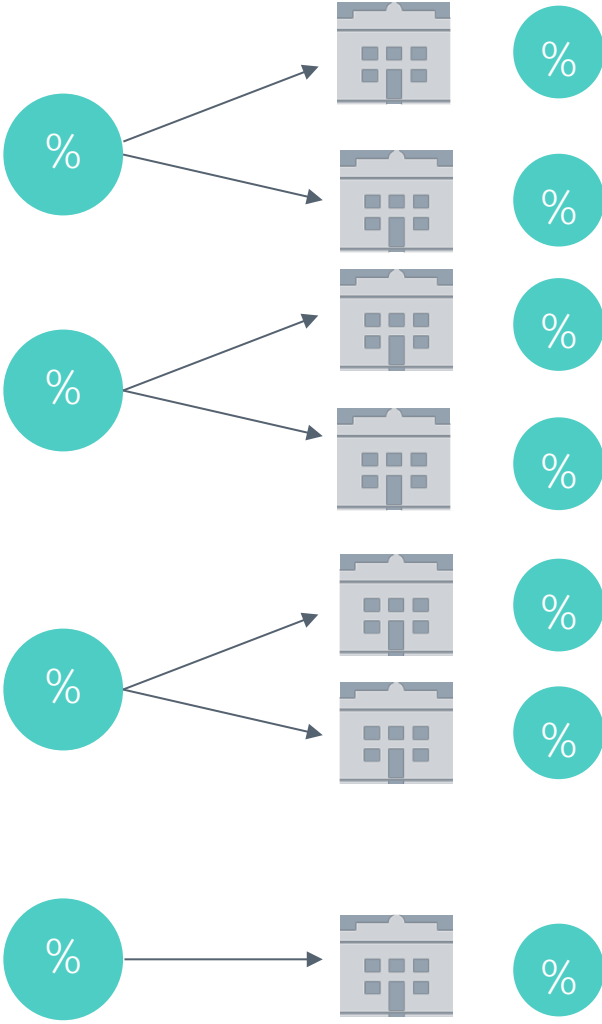
Club/
MM



Hardware



Online



Retailer category
market share



Retailer market
share



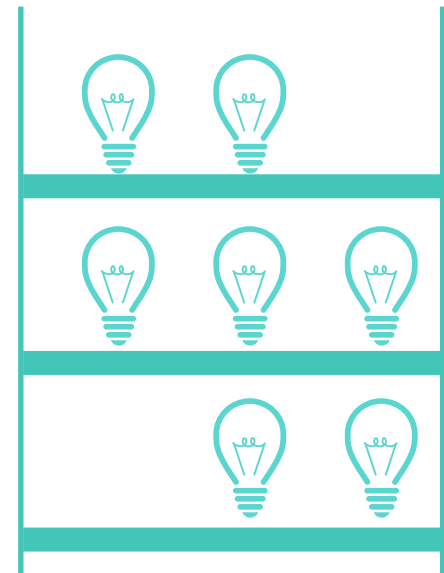
NW residential
market



EFFICIENCY MIX



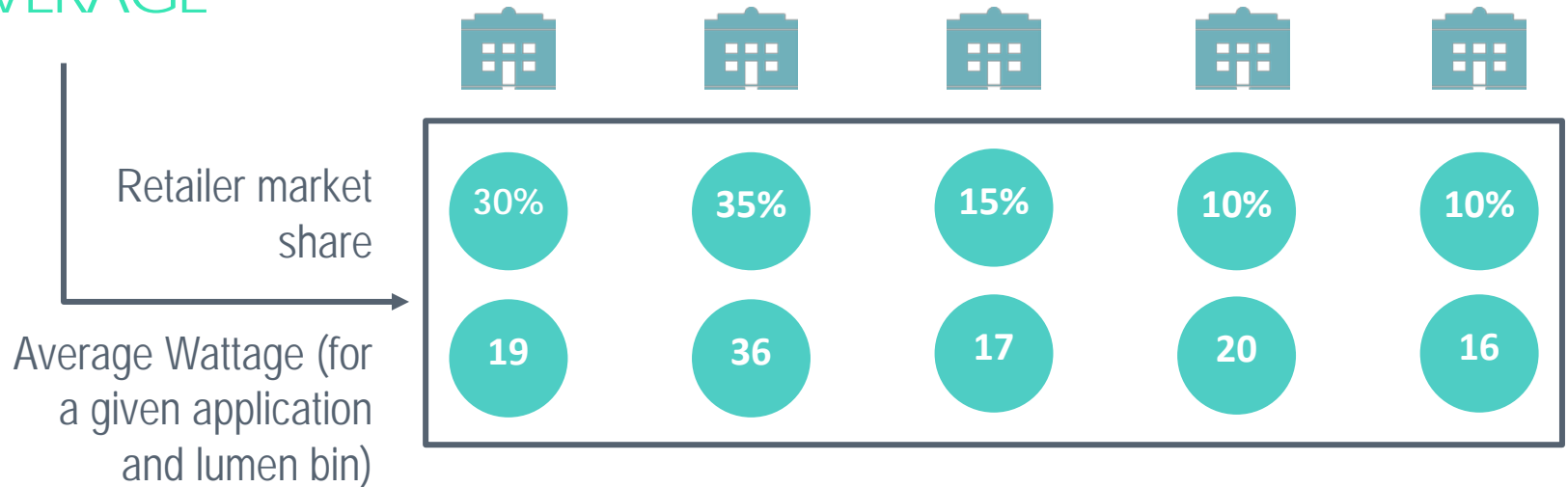
Sales Data
(Including online)



Shelf Data
(Where we do not have
sales data)

WEIGHT BY MARKET SHARE

WEIGHTED
AVERAGE



MARKET-SHARE
WEIGHTED
AVERAGE
WATTAGE

=

24



BASELINES

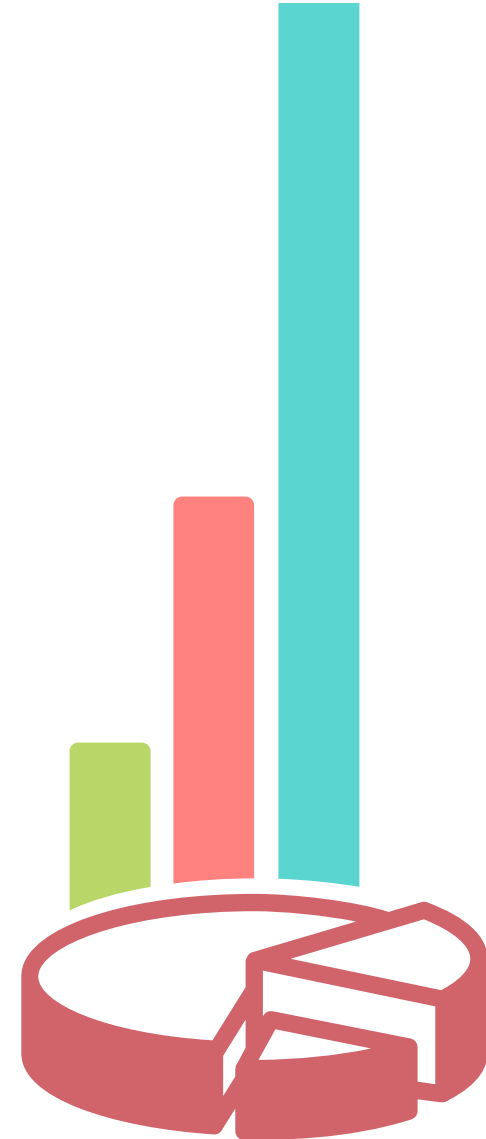
- Pre-Sixth Plan (2009) Frozen Efficiency Baseline
- RTF Residential Lighting Measure Baselines



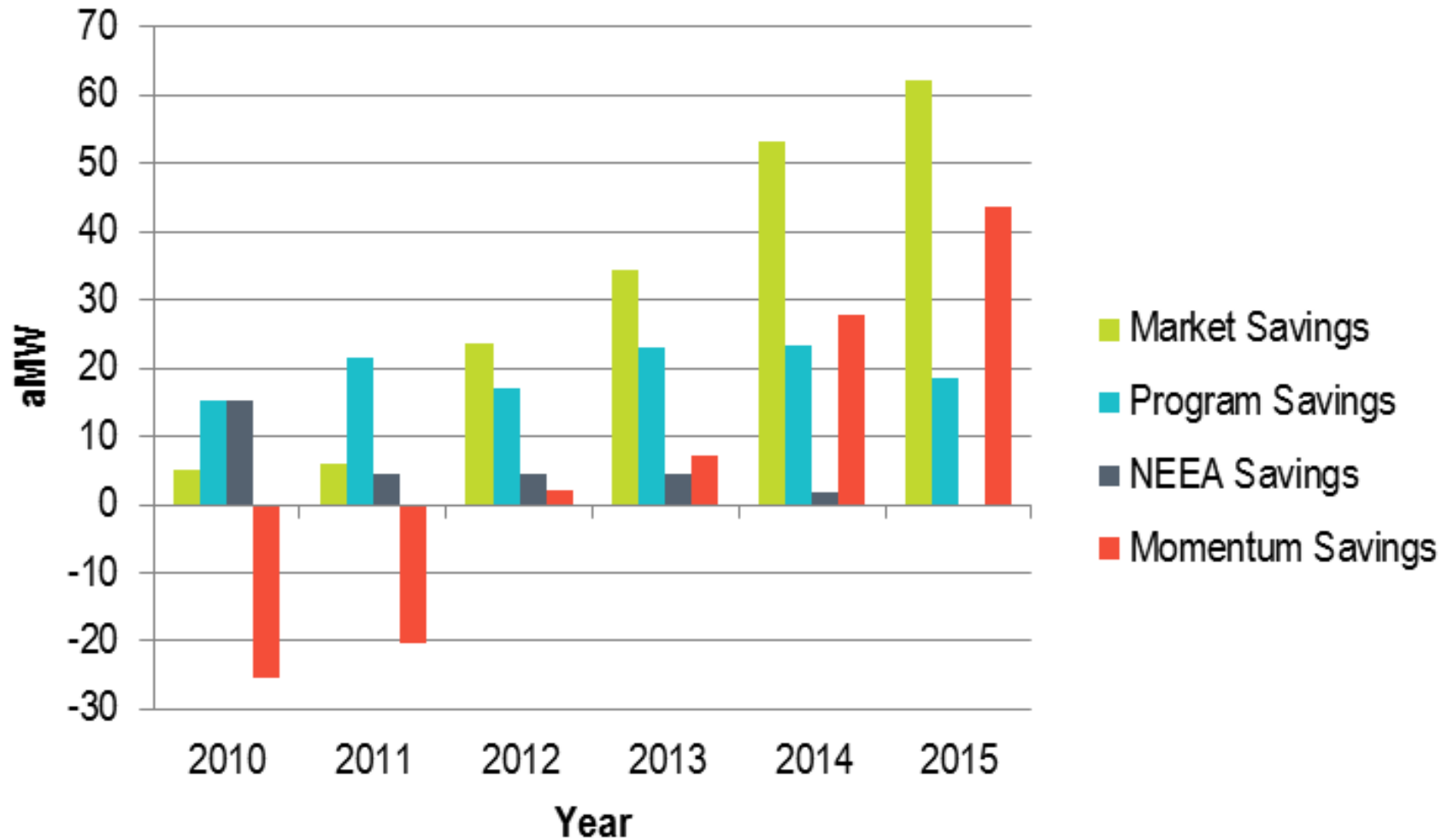


Q4. WHAT ARE THE PROGRAM SAVINGS?

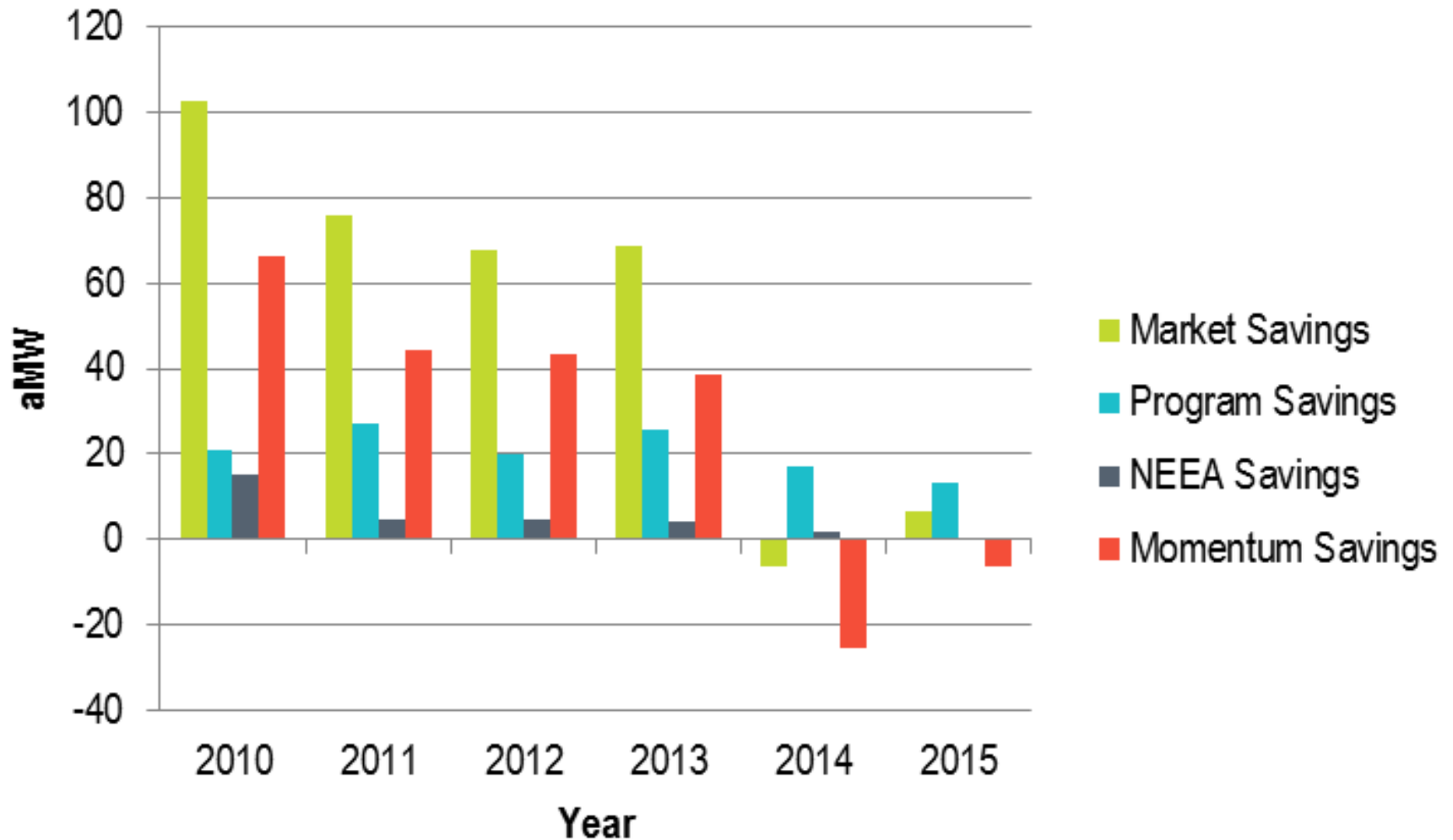
- Public Utility Program Data
- IOU Program Data
- NEEA CFL Net Market Effects



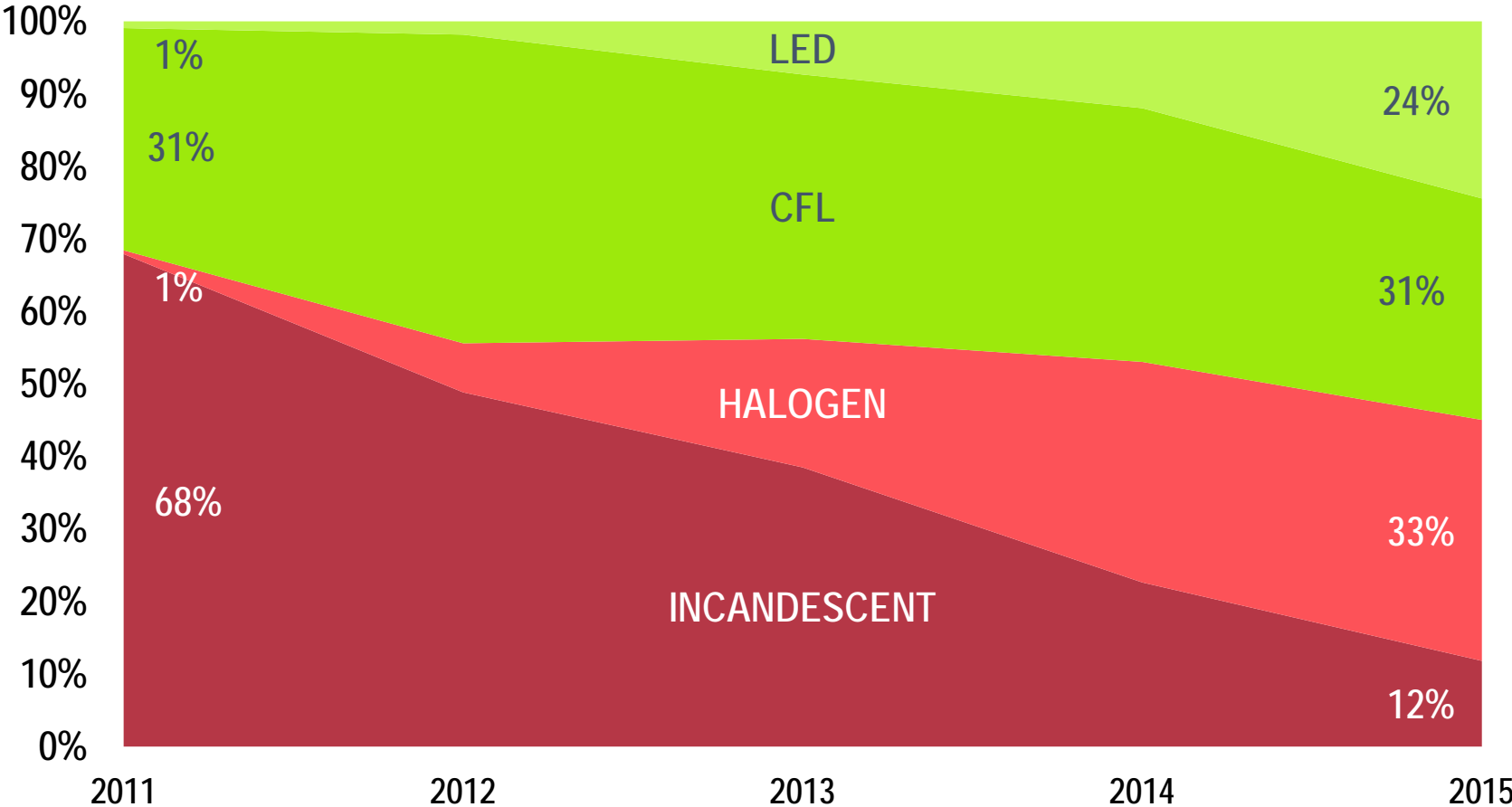
MOMENTUM SAVINGS DRAFT RESULTS – FROZEN BASELINE



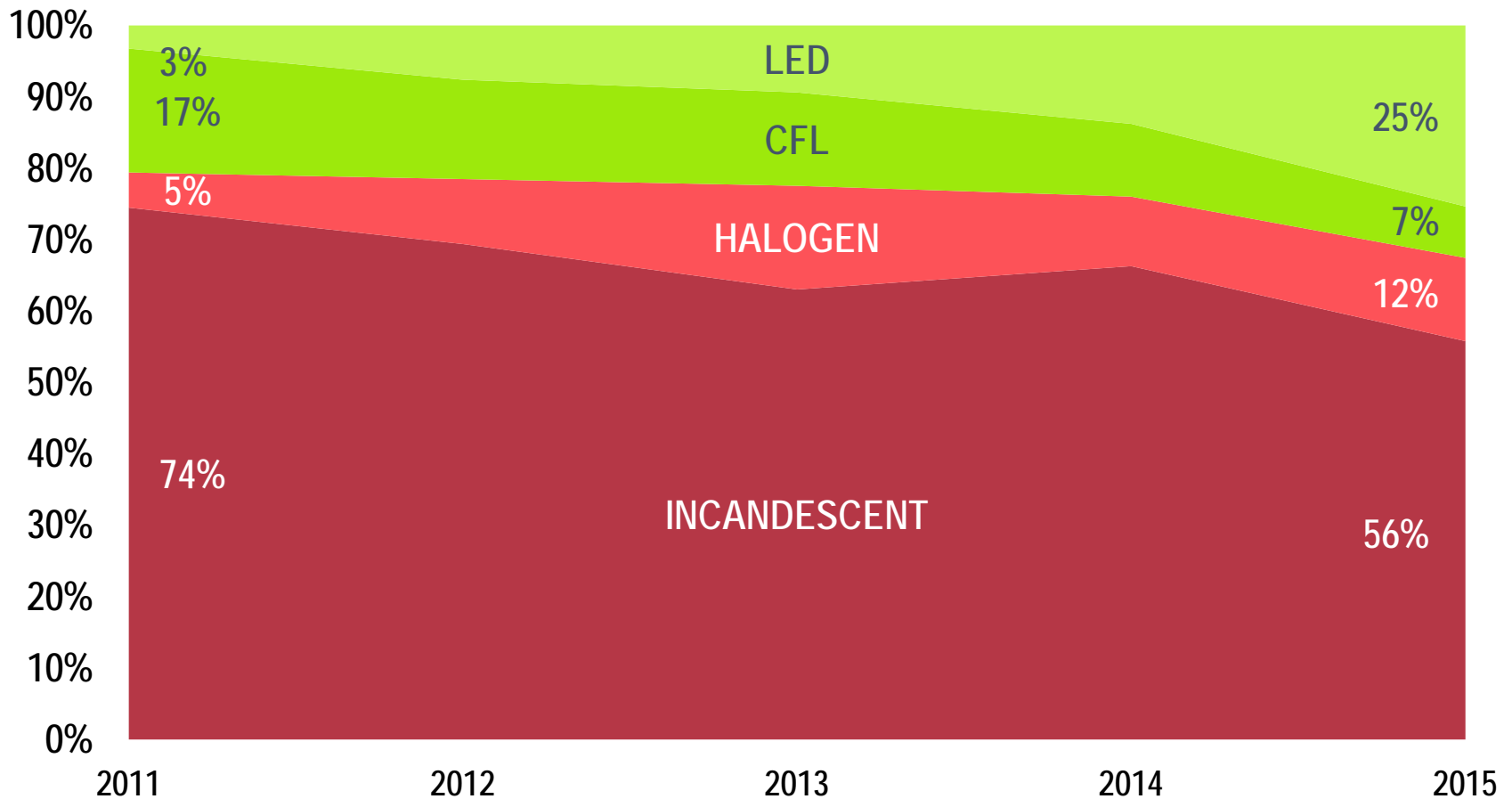
MOMENTUM SAVINGS DRAFT RESULTS – RTF BASELINE



GENERAL SERVICE LAMPS

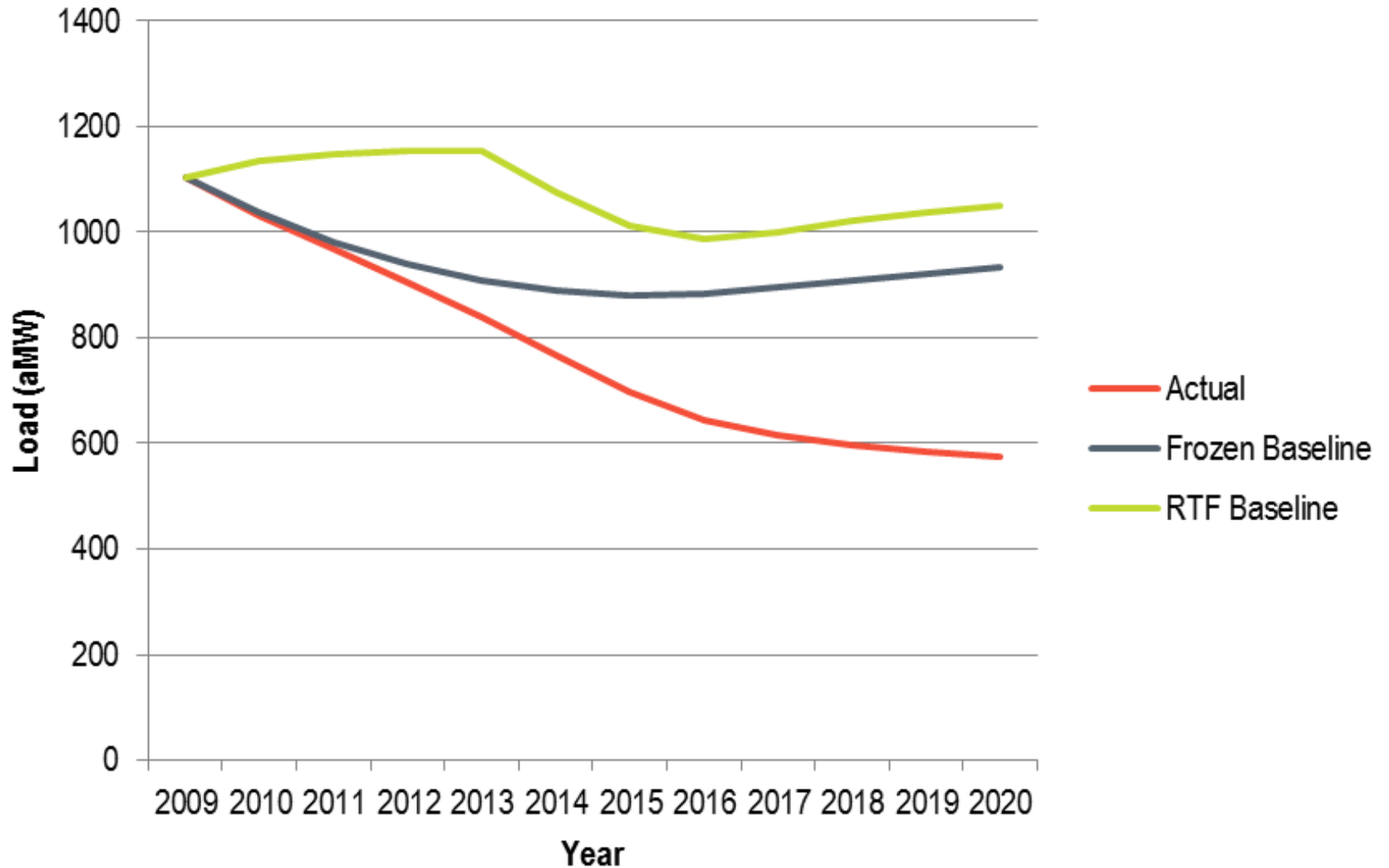


SPECIALTY LAMPS





WHERE MIGHT THE MARKET GO?



Next steps

- Analysis under review at RTF
- Comments to be incorporated—will change results
- Report, final results and final presentation forthcoming



UPDATE

BASELINE

LIBRARY

Reporting considerations

- Do the technical challenges of reporting preclude BPA from being able to allocate these savings out?
- Momentum Savings calculated against Plan baselines and over a 5-6 year timeline—hard to fit into the biennium structure

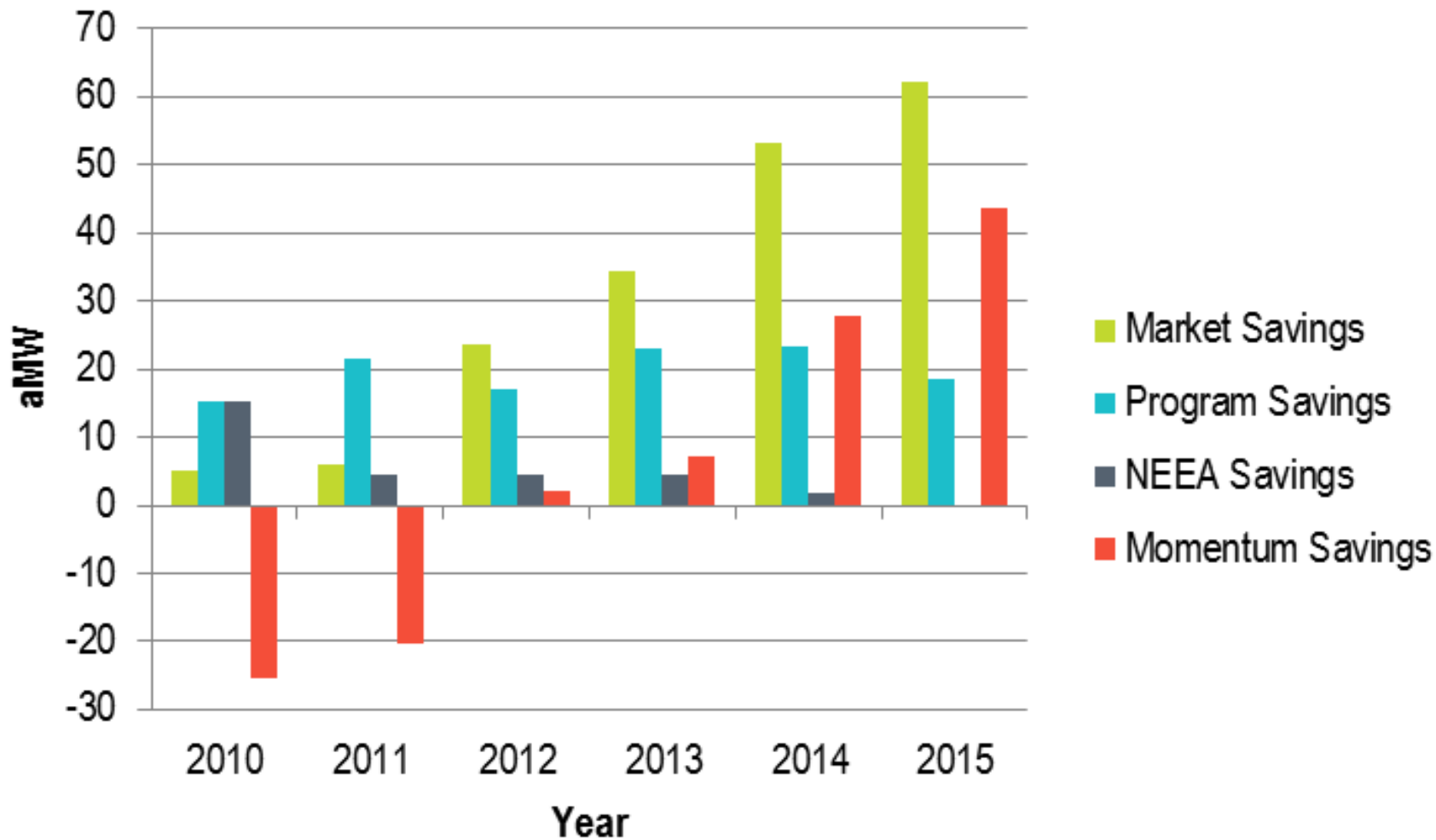
Why report?

- To maintain strategic alignment with BPA and utilities
- To provide utilities an alternative to paying for everything
- To provide data that BPA is collecting and analyzing to BPA customer utilities
- Utilities have asked for reporting

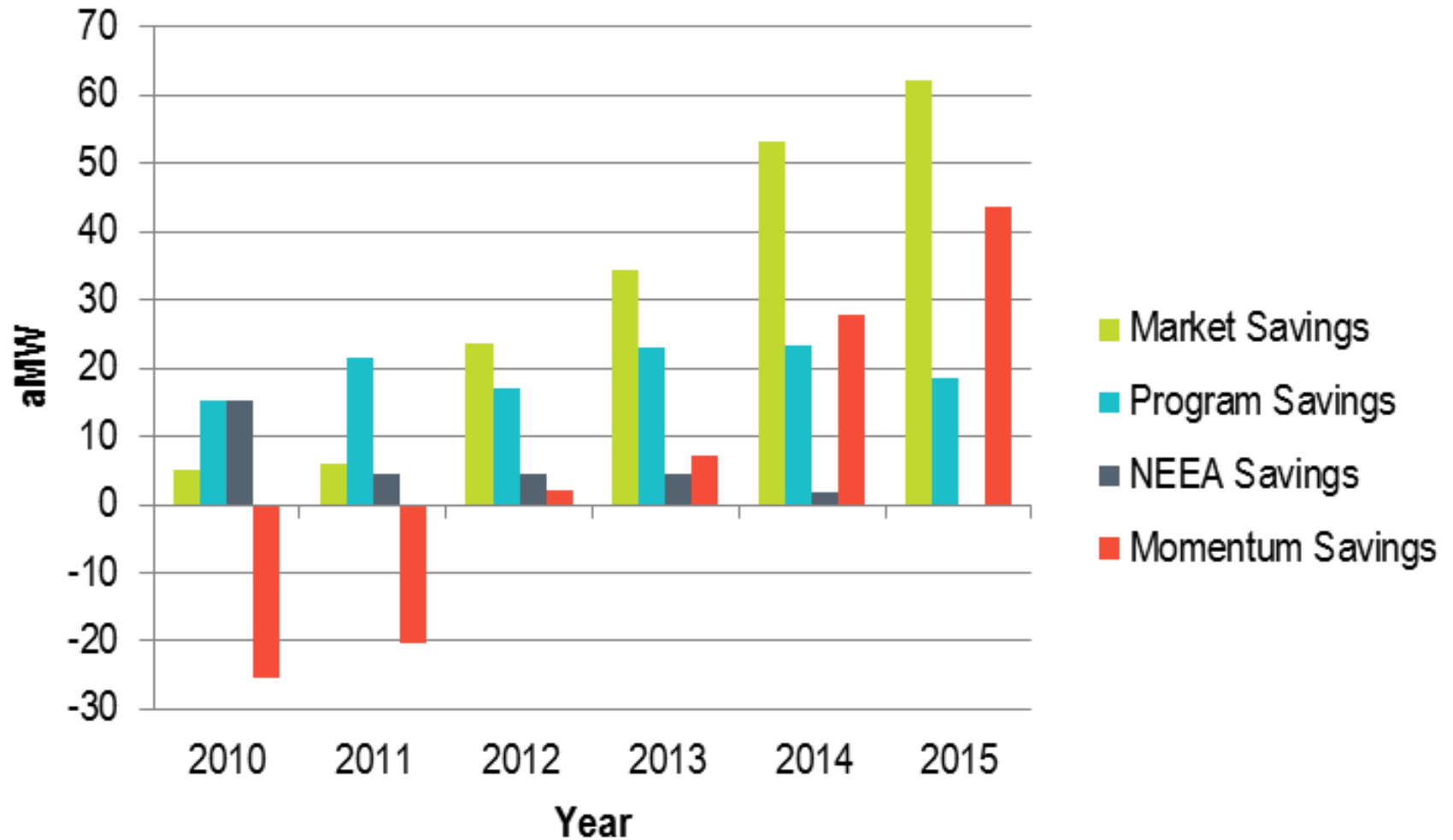
Why not report?

- Takes significant BPA resources to report out and explain savings values
- Savings are irregular: small in some biennium, big in others
- Many of the savings are already accounted for in the biennium baseline
- Very challenging technical issues to reporting against CPA vs. 7th Plan and reporting on a two year period

Issue: Negative Momentum Savings



Issue: Uneven Momentum Savings

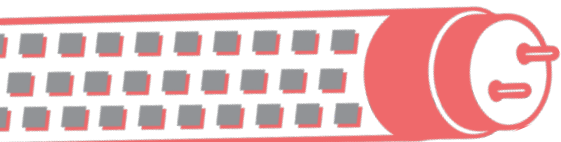


Issue: Program Savings reporting lag

- Momentum Savings = Market Savings – Program Savings
- Double-counting would occur if all energy savings were not entered into the BPA system in time to be removed from the calculation

Issue: Non-residential Lighting

- Lighting Power Density Baselines are complex, which would allow only reporting against the 7th Plan baseline
- Program savings are against a pre-existing condition baseline, creating a negative program savings value
- The savings for non-res are very large for some biennium and small for others, but the potential is shaped flat



Next Steps

BPA management reviewing the issues on reporting

BPA staff to continue working on making baseline data available via a regional library



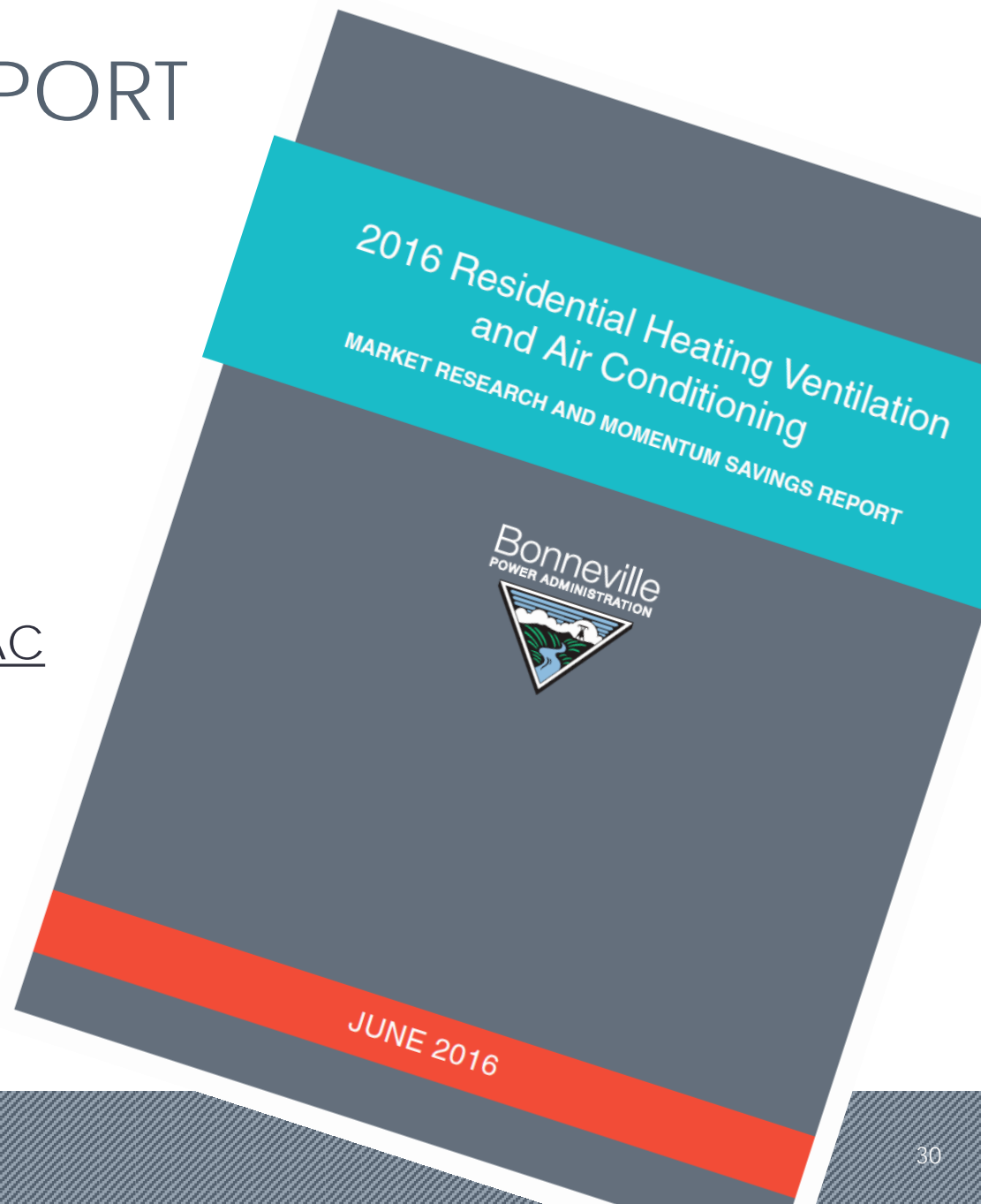
Project Update

HVAC

RESIDENTIAL REPORT

Reports,
presentations,
project updates:

www.bpa.gov/GoTo/HVAC





NEW HVAC RESEARCH

1. **CC&S Baseline Study:** Residential HVAC commissioning, controls and sizing baseline
2. **Filling data gaps:** Where new HVAC equipment is installed and what it replaces
3. **Sales data:** Working with NEEA to get updated sales data from distributors

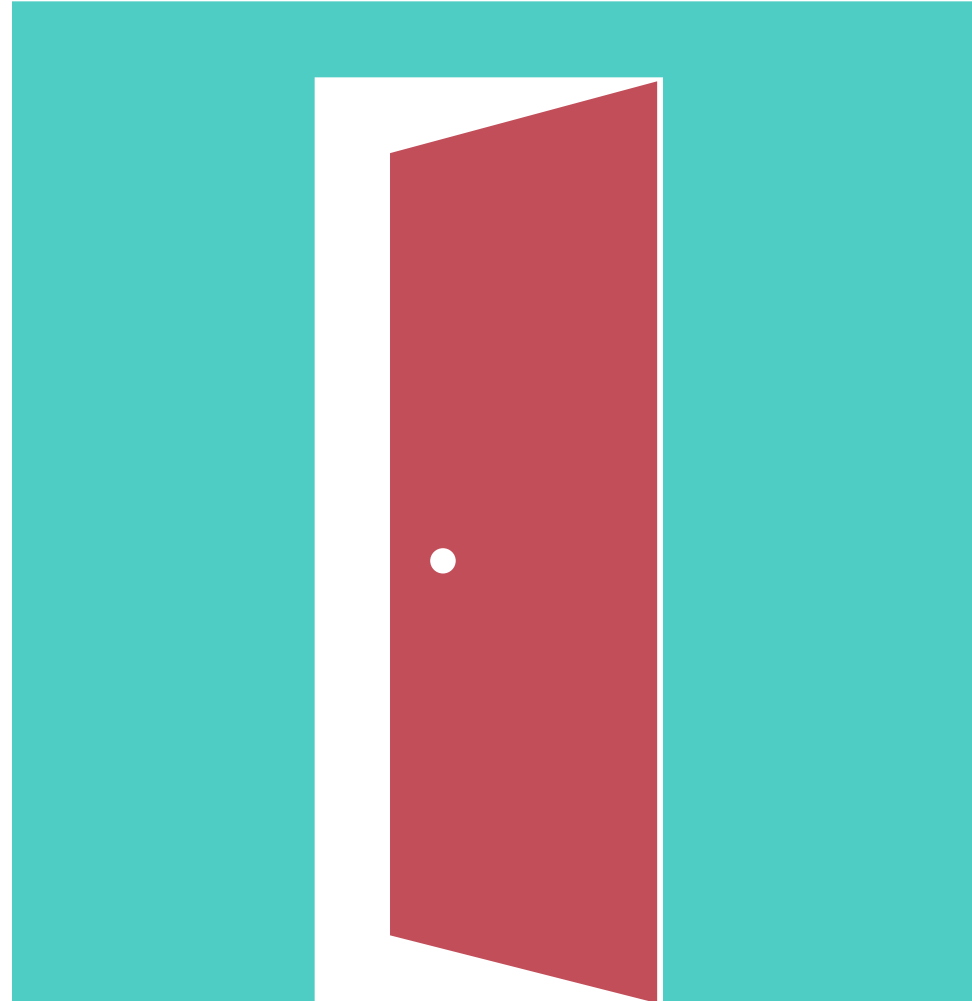


AGRICULTURE MARKET STUDY UPDATE



STUDY OBJECTIVES

1. **Assess areas of opportunity for irrigation efficiency**
2. Assess the current state of the program and the market
3. Identify market barriers
4. Try to quantify Momentum Savings





RESEARCH ACTIVITIES

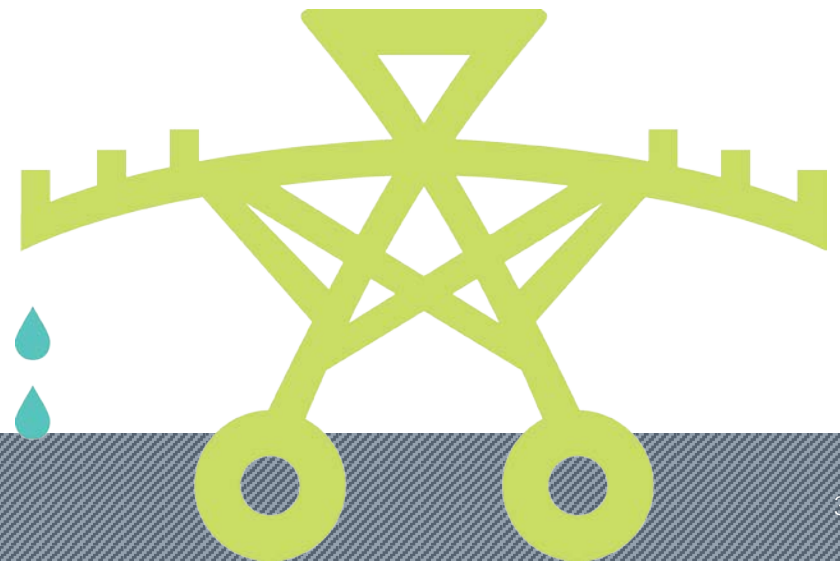
- ✓ 60 interviews
- ✓ Analyzed program data from 2010-2015
- ✓ Compared the Council's Sixth and Seventh Power Plans
- ✓ Developed a logic model
- ✓ Attended the Irrigation Show
- ✓ Analyzed Farm and Ranch Irrigation Survey (FRIS) data





AG MOMENTUM SAVINGS

- Why we are not quantifying Momentum Savings for sprinkler hardware:
 - Challenges with getting sales data
 - Savings likely to be very small





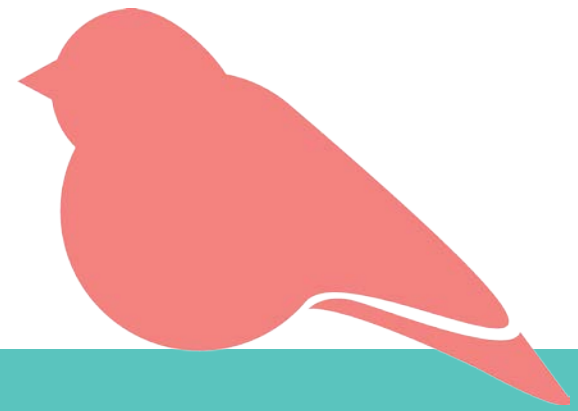
STAY TUNED
FOR THE
REPORT IN
THE FALL!



WATCH FOR

1. Ag market intelligence report
2. Non-res lighting market actor memo
3. Lighting market intelligence booklet
4. Conduit Ed series





New schedule for monthly calls!

- First week of every month
- Not meeting in September
- Next meeting: **October 5th at 9am**