

AGENDA

- CBSA Updates w/ Dulane Moran
- “Hard” to Reach?
- Res Lighting Final Results



Monthly Call
January 4th



ETHAN

MANTHEY



Dulane Moran

NEEA



2017-19 CBSA Status Update

Dulane Moran

January 4, 2017



CBSA: Context

- Regional baseline stock study
 - Informs efficiency planning, market models, and provides inputs into load forecasts
- Regionally representative study + optional oversamples
- Multi-year, extensive data collection



Timeline: Phased Project

Phase I
Q4 2016 - August 2017

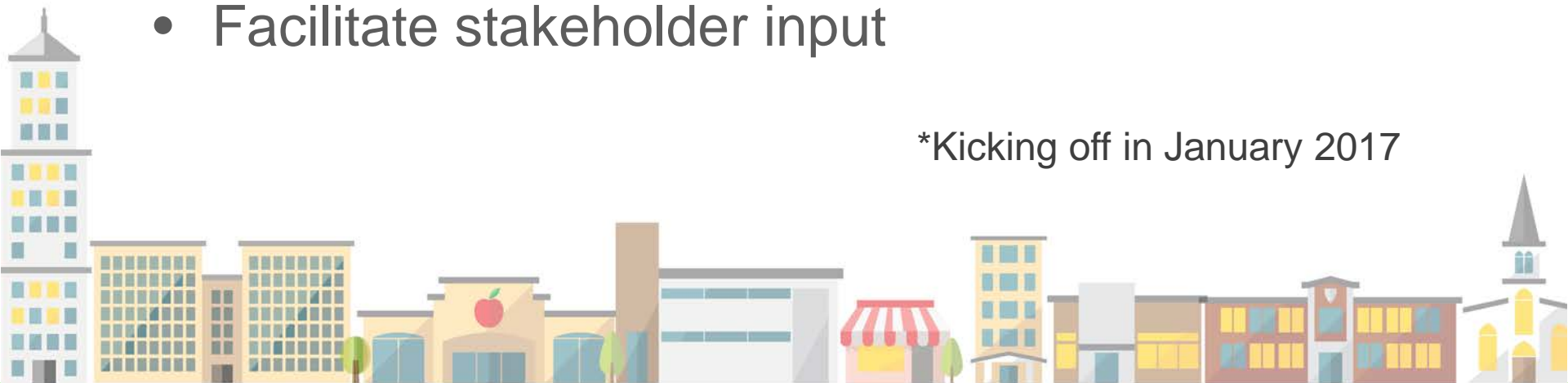
Phase II
August 2017 – December 2019



Phase I Tasks*

- Assess population frame for accuracy/completeness
- Develop sample frame and recommend sample sizes/stratification
- Refresh data collection protocols and building variables
- Facilitate stakeholder input

*Kicking off in January 2017



Phase II Tasks*

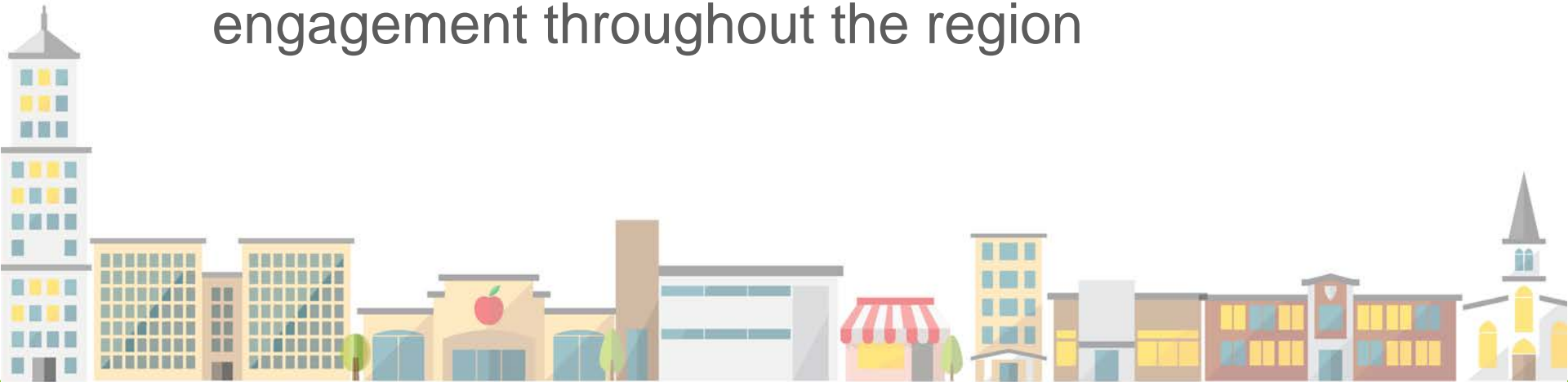
- Develop site recruitment approach and customer contact process
- Develop data collection tool
- Site recruitment & fieldwork
- Analysis and reporting

*Separate solicitation and contracting process planned for summer 2017



Regional Involvement

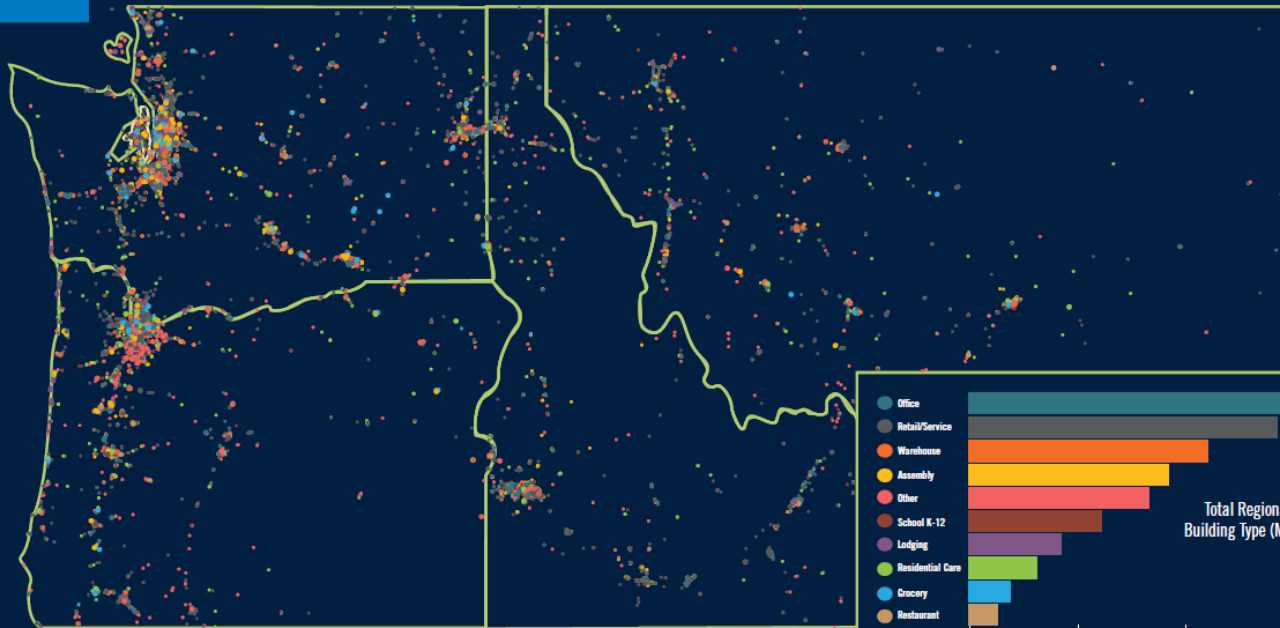
- Workgroups focused on sample design and building variables
- Oversample opportunity: 2017-2018
- Periodic, regional stakeholder reporting (Conduit, large-scale webinars)
- Phase II customer contact tasks require engagement throughout the region



Questions?



COMMERCIAL BUILDING LOCATIONS IN THE NORTHWEST



PACIFIC NORTHWEST

Total Population : 13 million

Total Number of Commercial Buildings*: 203,205

Total Floor Area : 3,122 million sq. ft.

Floor Area Heated by Electricity : 767 million sq. ft.

Floor Area Heated by Natural Gas : 1,782 million sq. ft.

* Number does not include Hospitals or University campuses, which were assessed separately.

The 2014 Commercial Building Stock Assessment (CBSA) gathered data from commercial sites across ten building types in Oregon, Washington, Idaho and Montana. The study represents the largest random sample of commercial buildings in the history of the Northwest. According to the data, commercial building floor area increased nearly 27 percent between 2009 and 2014. Over the same period electrical energy use per square foot decreased by about 11 percent, while natural gas use decreased by just under 15 percent.

NEEA.org/CBSA - pg 4

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10110110



BONNIE

WATSON



Taking the “Hard”
out of Hard to Reach

Bonneville
POWER ADMINISTRATION



the

CONVENTIONAL

wisdom

A satellite view of Earth from space, showing a large teal circular overlay in the center. The overlay contains the text "how do we EXPAND OUR REACH?". The background shows the Earth's surface with clouds and a portion of a satellite or space station in the upper right corner.

how do we
EXPAND
OUR REACH?



Building by
Building

VS.



Market
Level

Different measures or market segments need **DIFFERENT APPROACHES**



*How do we best SATURATE the
MARKET and create EQUITY?*



Price
Dynamics

AND



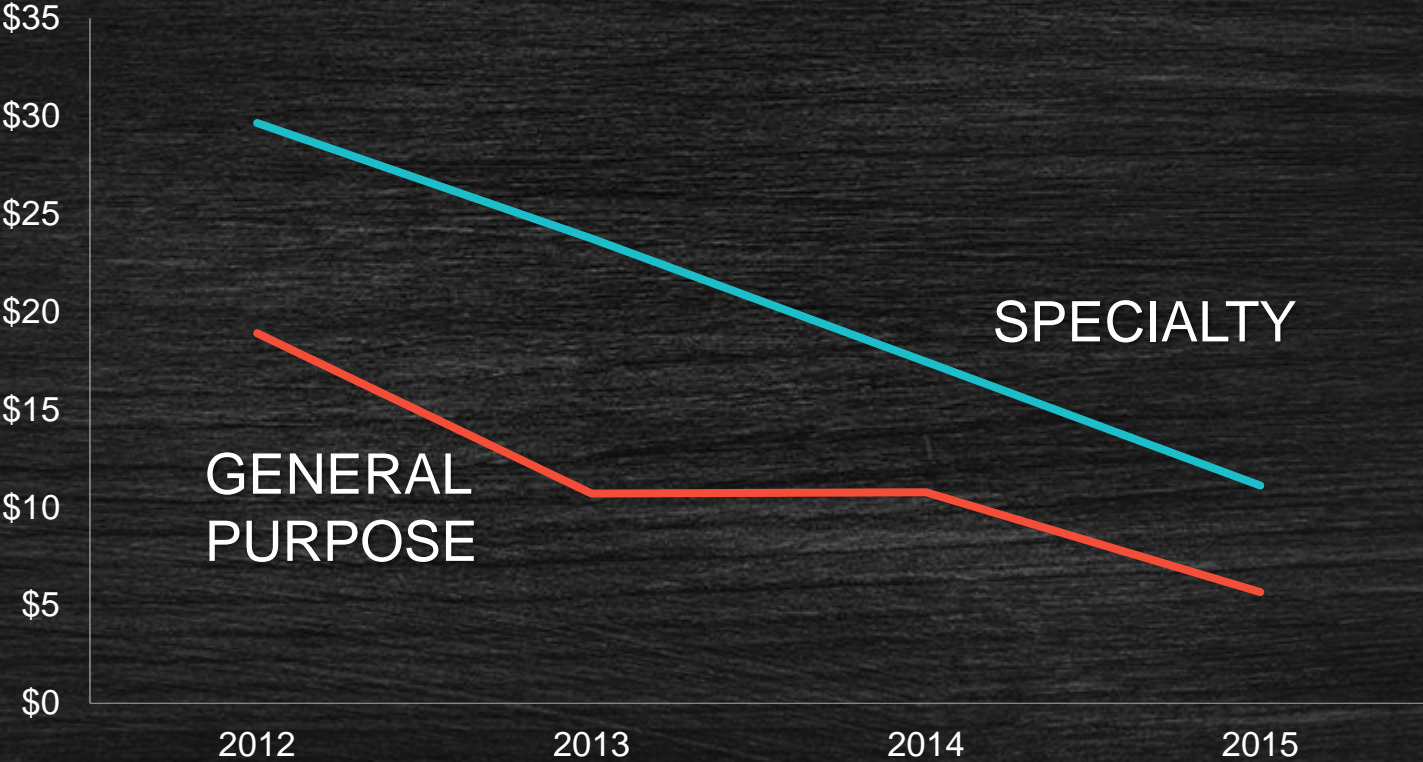
Policy
Dynamics

PRINCIPLE NO. 01

PRICE DYNAMICS

LED PRICES

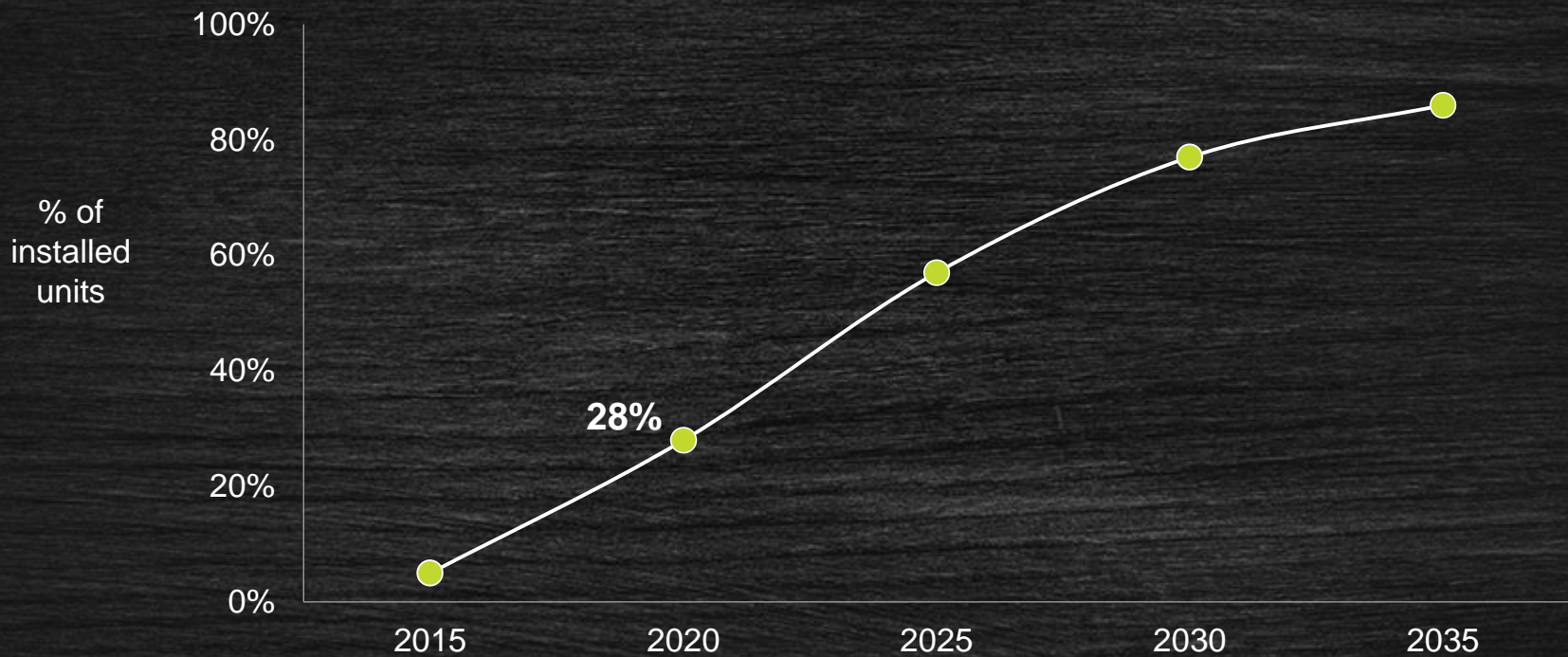
2012-2015



Source: NEEA shelf survey data

FUTURE LED STOCK SATURATION

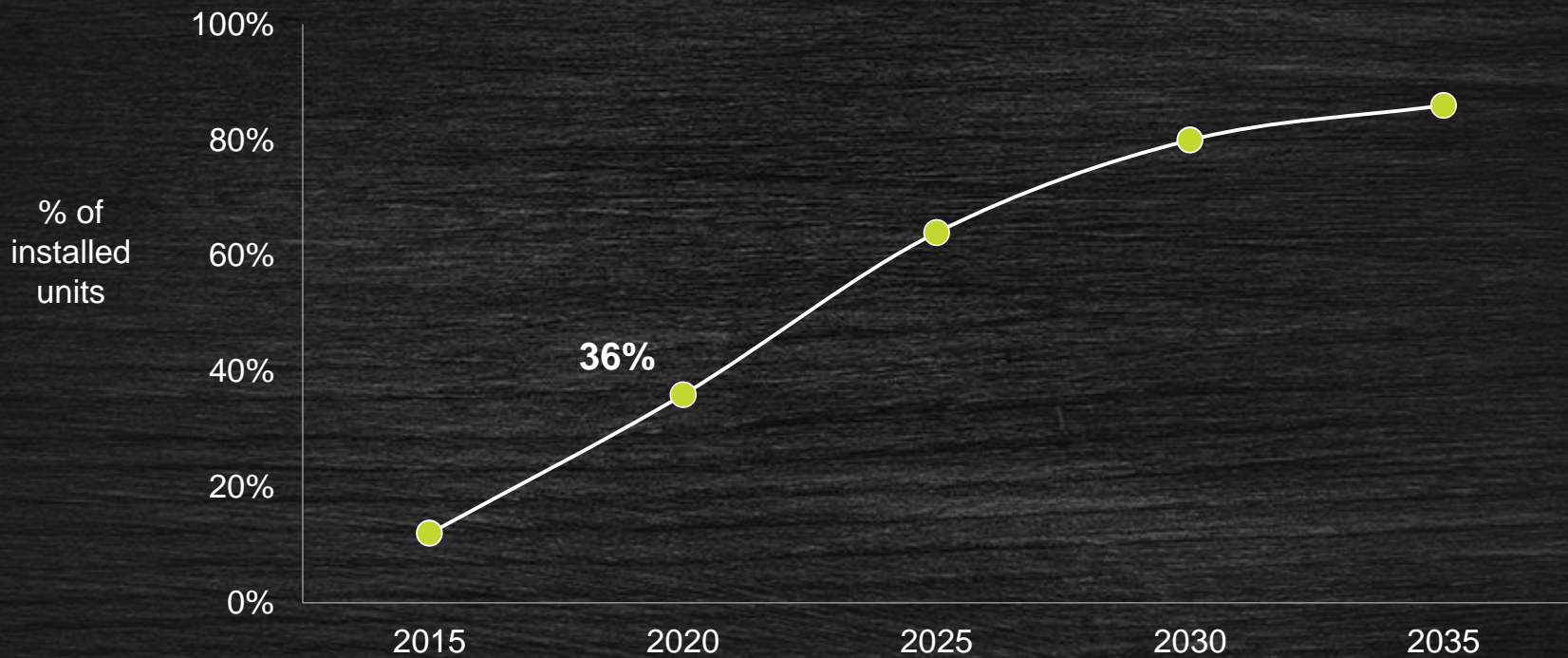
residential



Source: U.S. DOE 2016

FUTURE LED STOCK SATURATION

commercial

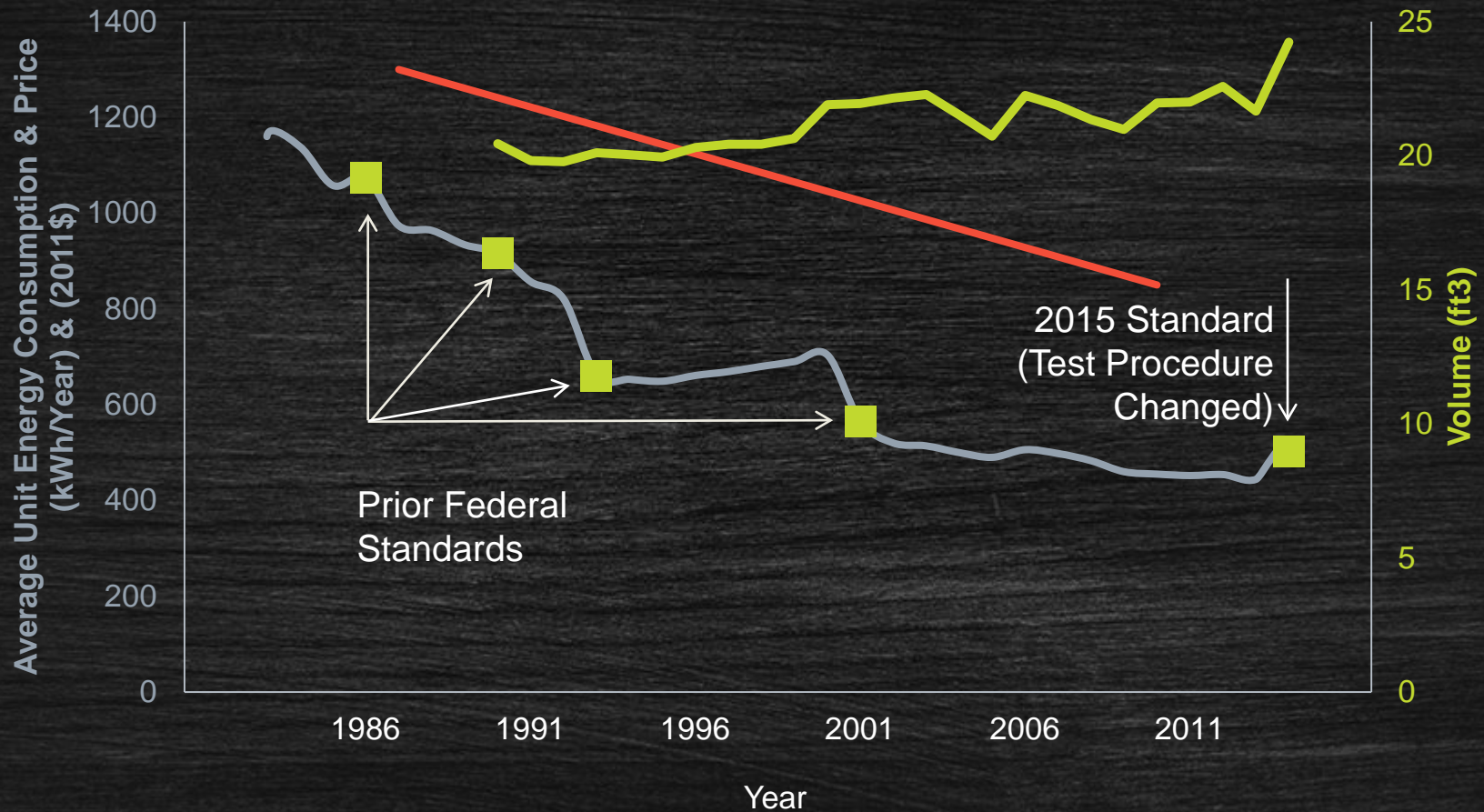


Source: U.S. DOE 2014

PRINCIPLE NO. 02

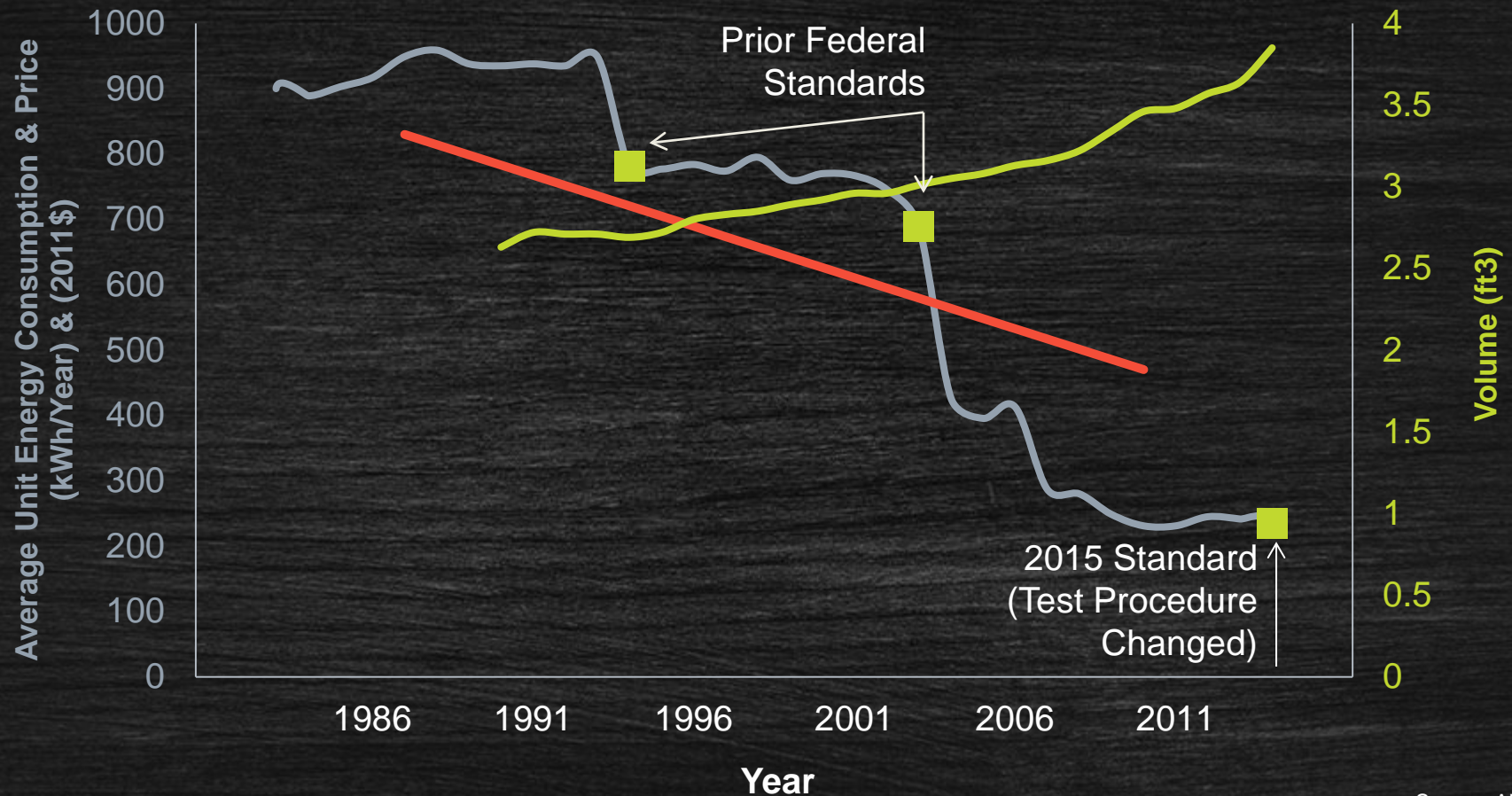
POLICY DYNAMICS

RESIDENTIAL REFRIGERATORS STANDARDS IMPACT OVER TIME



Source: AHAM

RESIDENTIAL CLOTHES WASHERS STANDARDS IMPACT OVER TIME

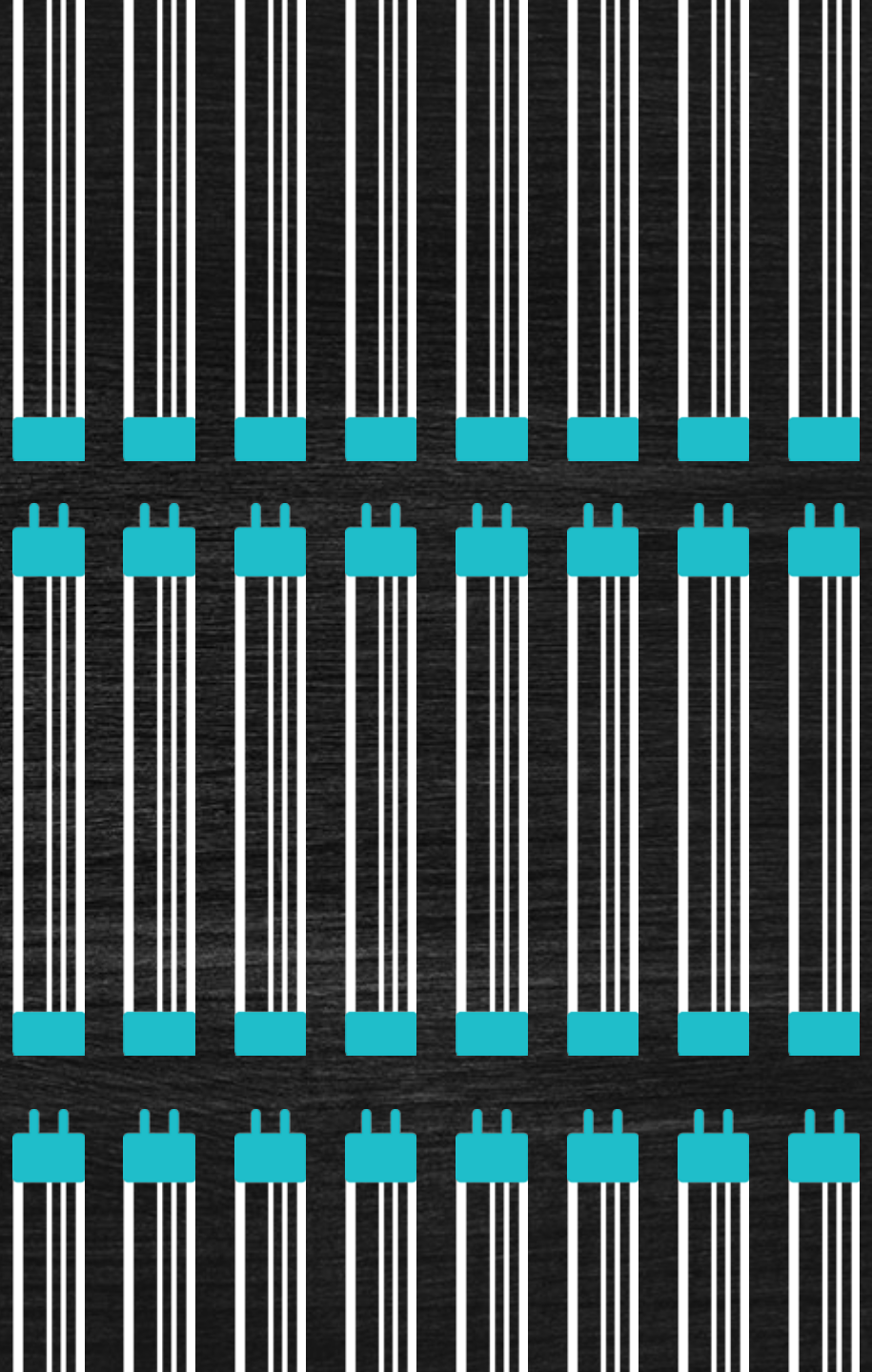


Source: AHAM

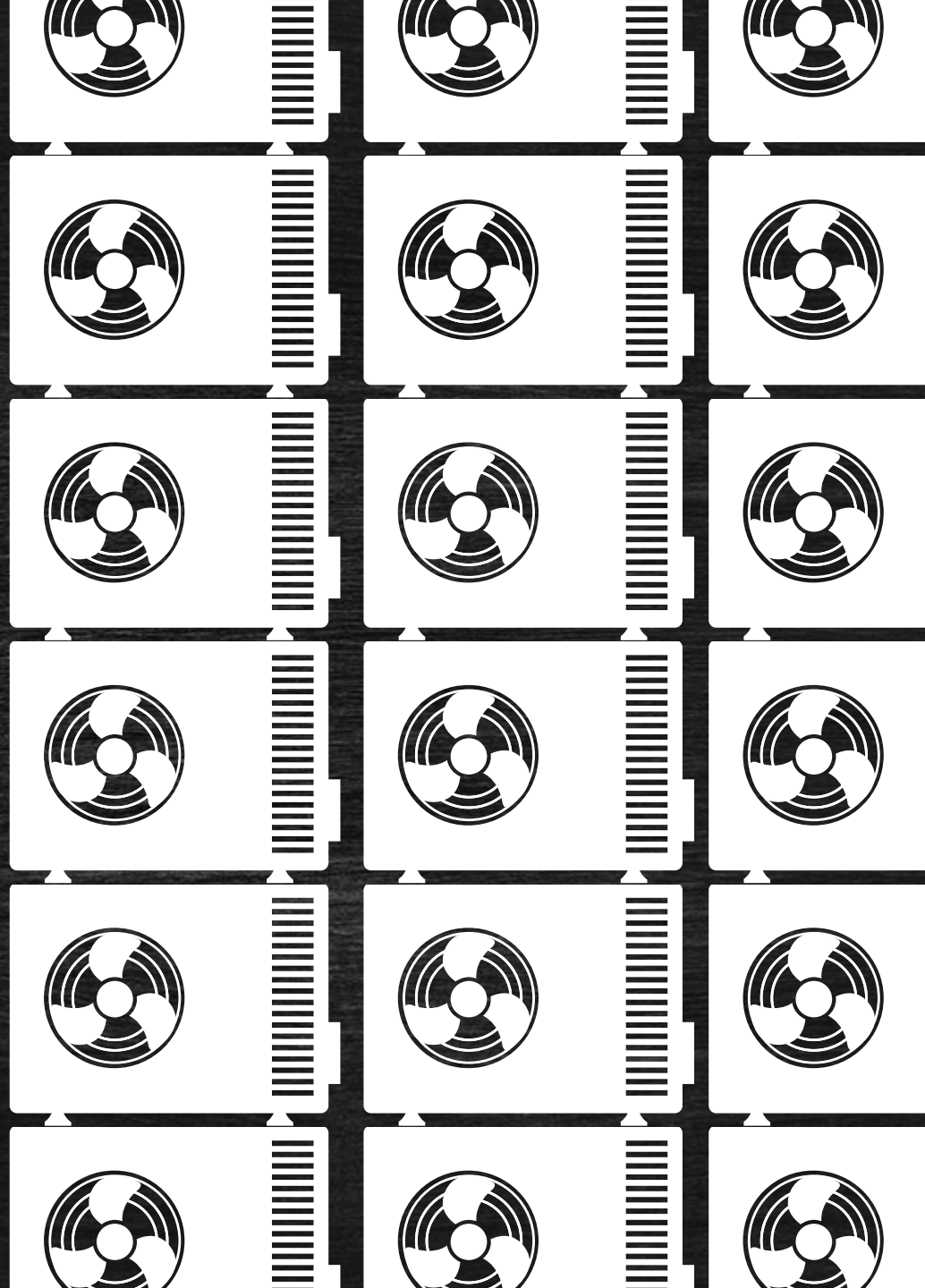
A satellite view of Earth from space, showing a large teal circular overlay in the center. The overlay contains the text "WHAT IF we thought about this DIFFERENTLY?". The background shows the Earth's surface with clouds and a portion of a satellite or space station in the upper right corner.

WHAT IF
we thought about this
DIFFERENTLY?

Lighting Maintenance Market



HVAC Supply Chain



TAKEAWAY NO. 01

Looking at entire markets tells us a lot about what is hard to reach.

TAKEAWAY NO. 02

Different measures or market segments may need different strategies to gain the most traction.

- *Building by building*
- *Market level*

TAKEAWAY NO. 03

Everyone gains access to efficiency when you drive prices down at the market level.

TAKEAWAY NO. 04

Broad-stroke strategies like policy changes creates efficiency across the entire market, ensuring everyone benefits.

Bonnie Watson

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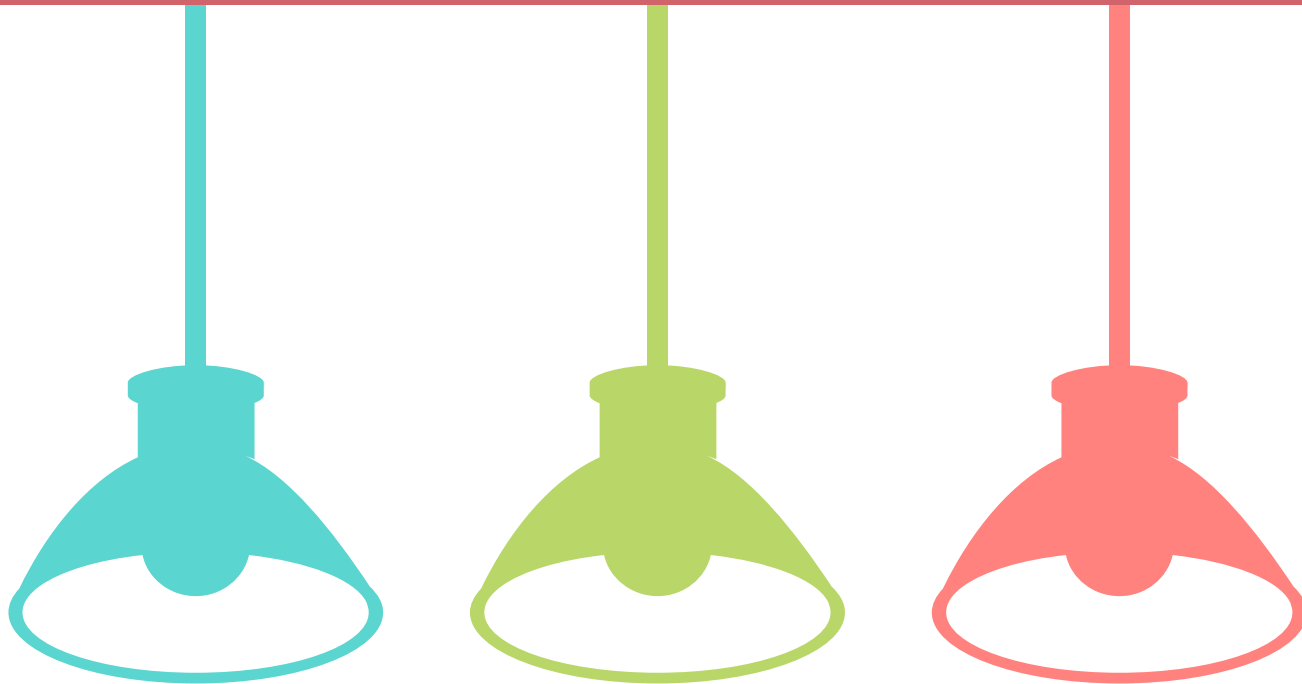
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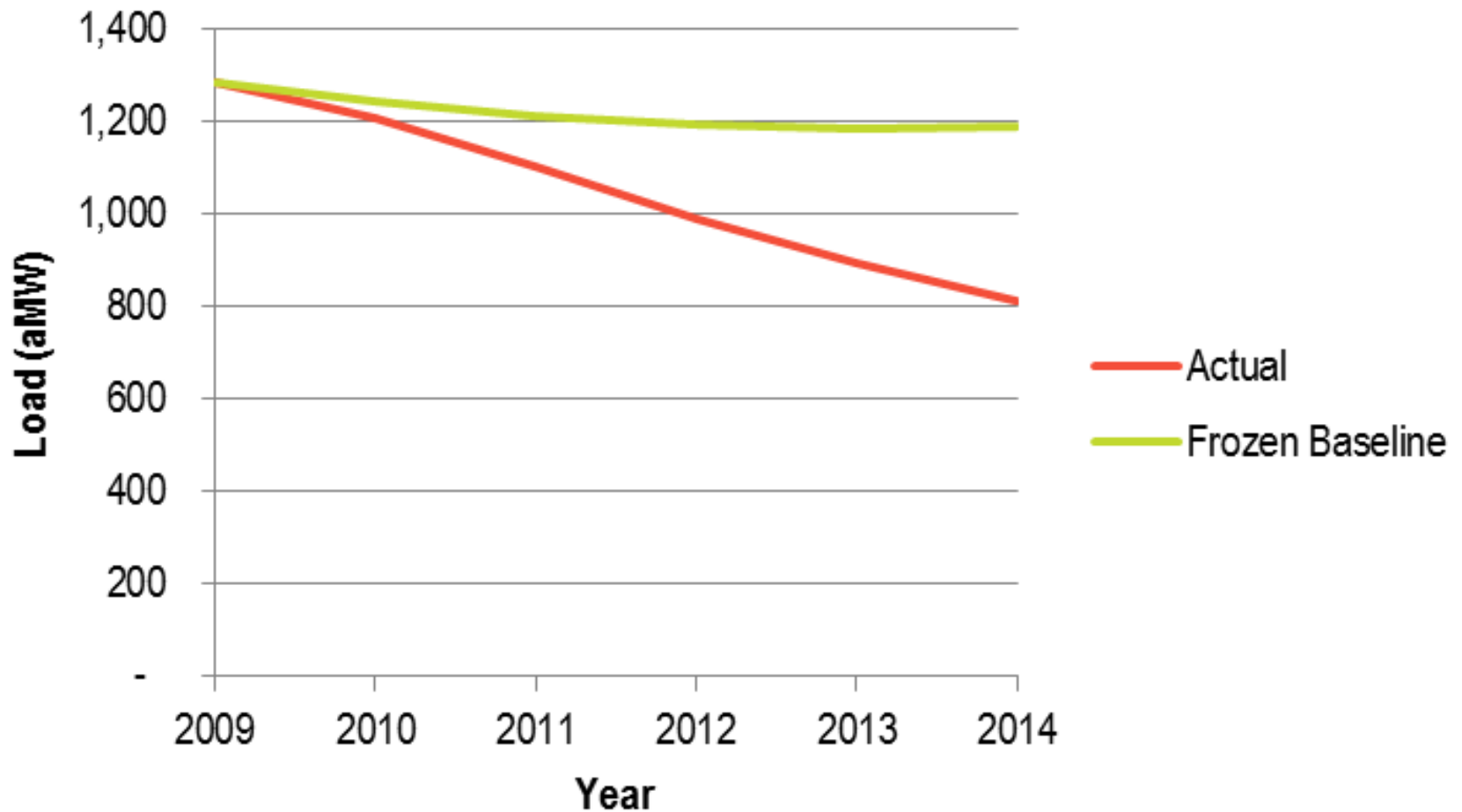
CARRIE

COBB

RESIDENTIAL LIGHTING FINAL MOMENTUM SAVINGS RESULTS



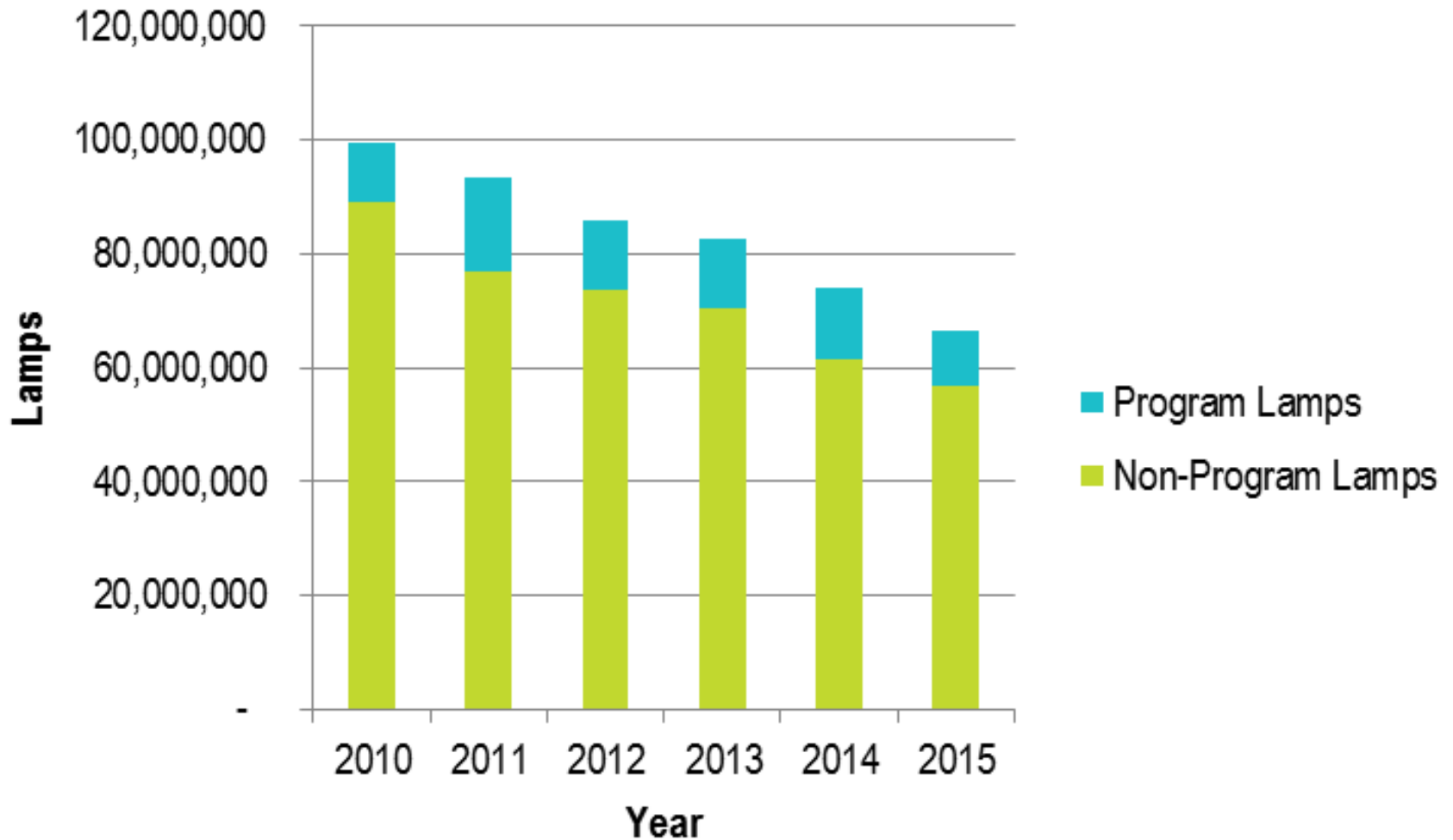
37% DECREASE IN CONSUMPTION 2010-2015



114 aMW MOMENTUM SAVINGS



PROGRAMS INCENTIVIZED 15% OF LAMPS



MODELING COMPONENTS

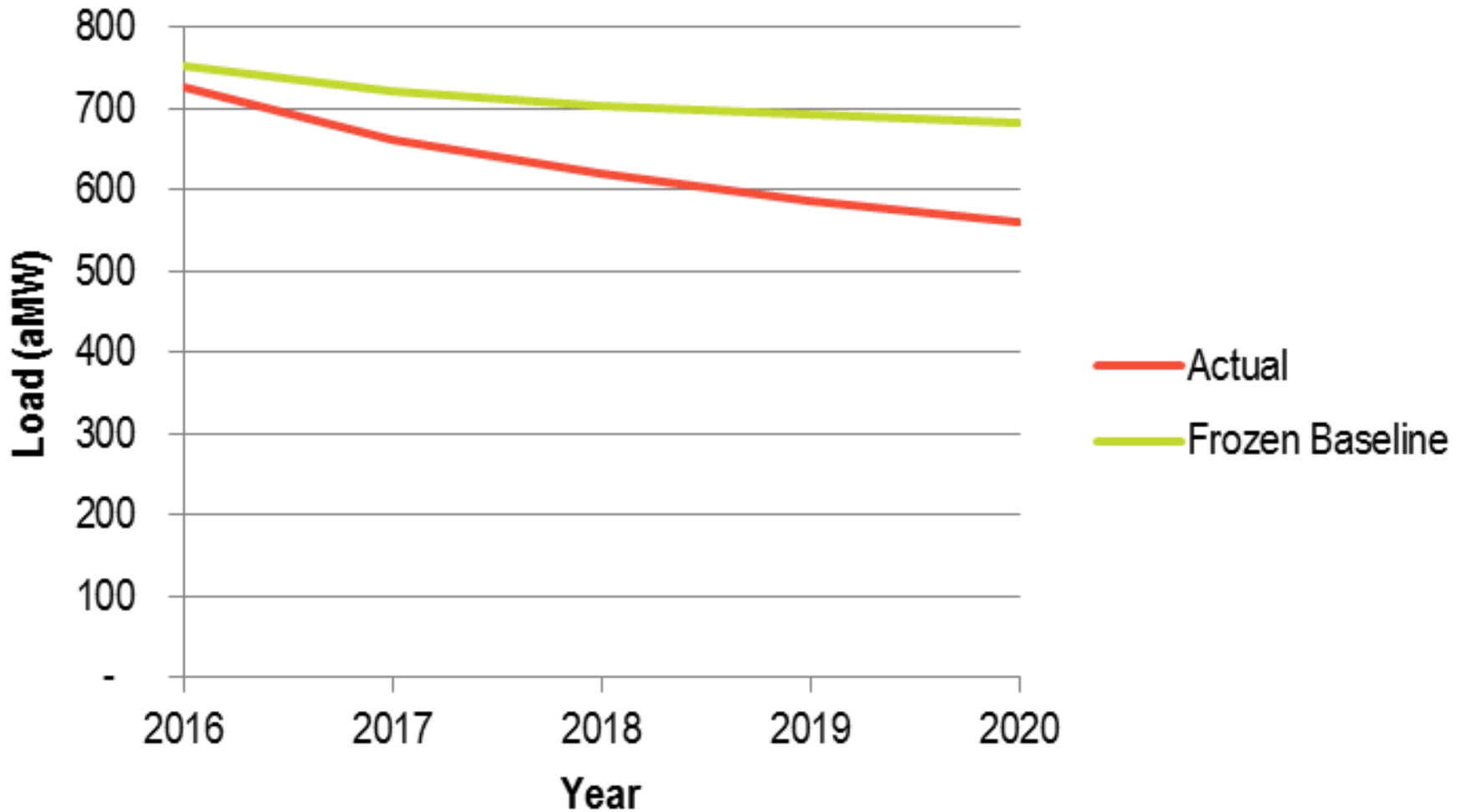


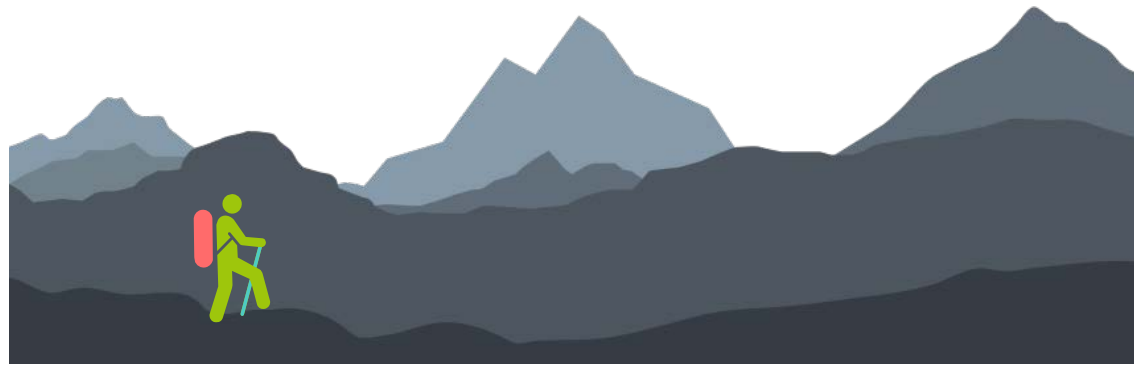
RBSA ALIGNMENT



PROGRAM DATA

23% DECREASE IN CONSUMPTION EXPECTED BY 2020





Model Results

Results are undergoing final review

Model and methodology will be posted to RTF Market Analysis Subcommittee Web page

Market Intelligence Booklet

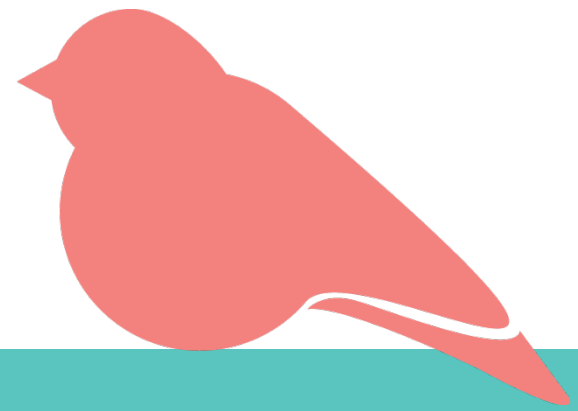
An overview of what's new in the residential and non-residential lighting market

This publication will be available in late January

Final Report

A complete summary of all the research activities BPA has completed for this study

The report and accompanying presentations will be shared out in February



See you next month!

- Next meeting: **February 1st**