



Seattle City Light



# CONSERVATION POTENTIAL ASSESSMENT & THE EVOLVING EE MARKET

Brendan O'Donnell | December 6, 2017

1. SCL's EE achievement and evolving market

2. Target setting process and the CPA

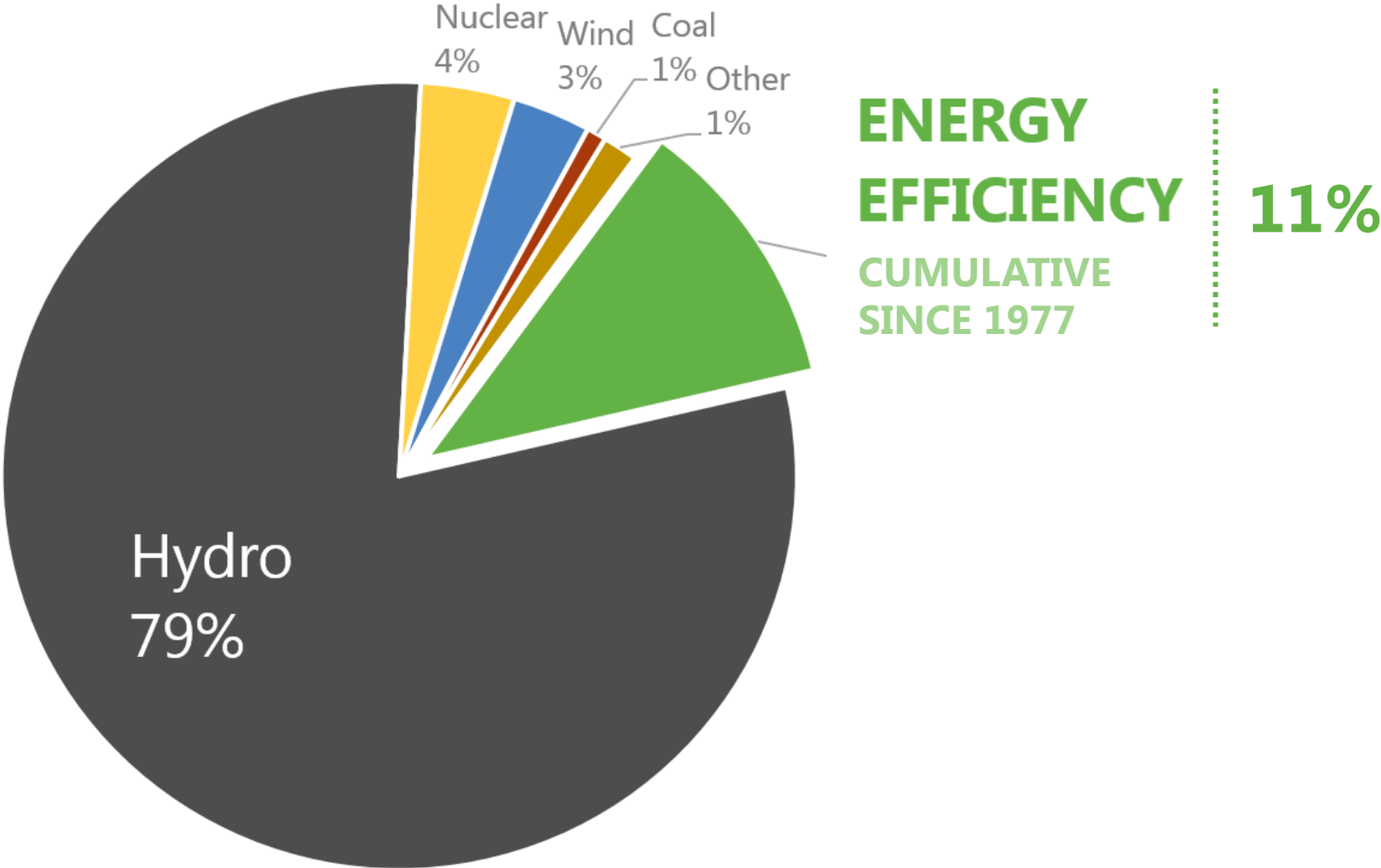
3. Changes to City Light's approach

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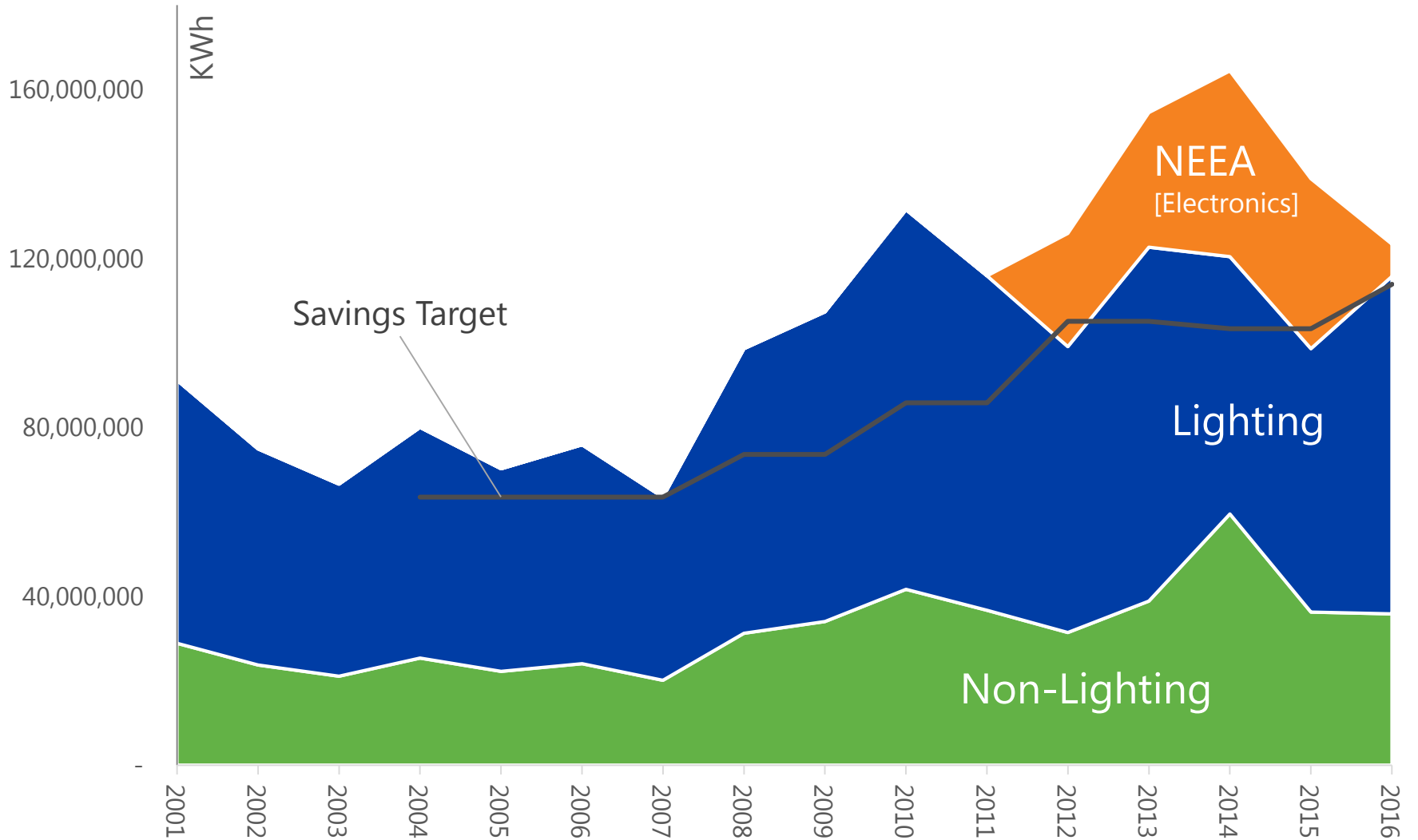
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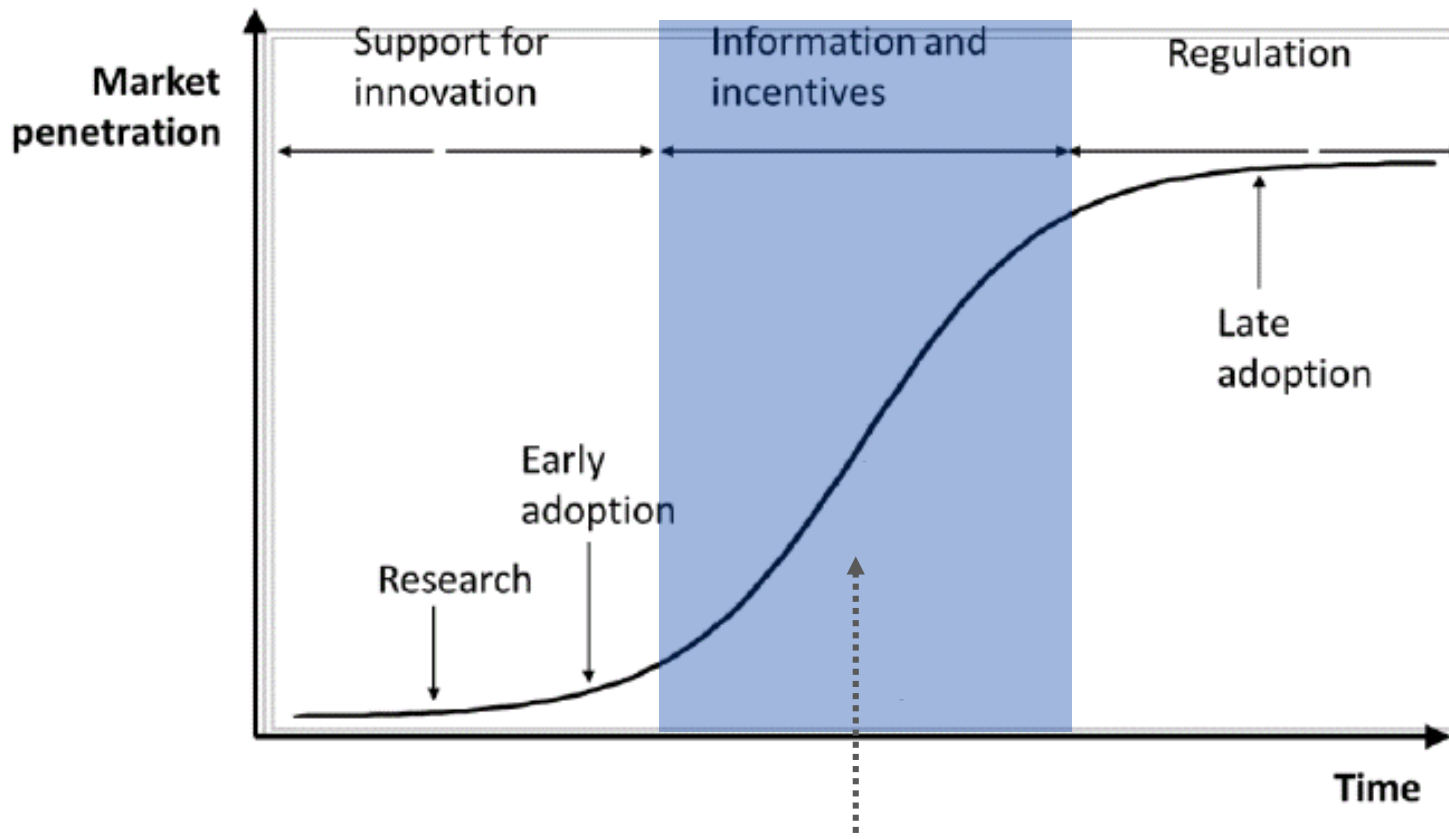
# CURRENT RESOURCE PORTFOLIO



# ANNUAL ENERGY SAVINGS



# CITY LIGHT MARKET INTERVENTION

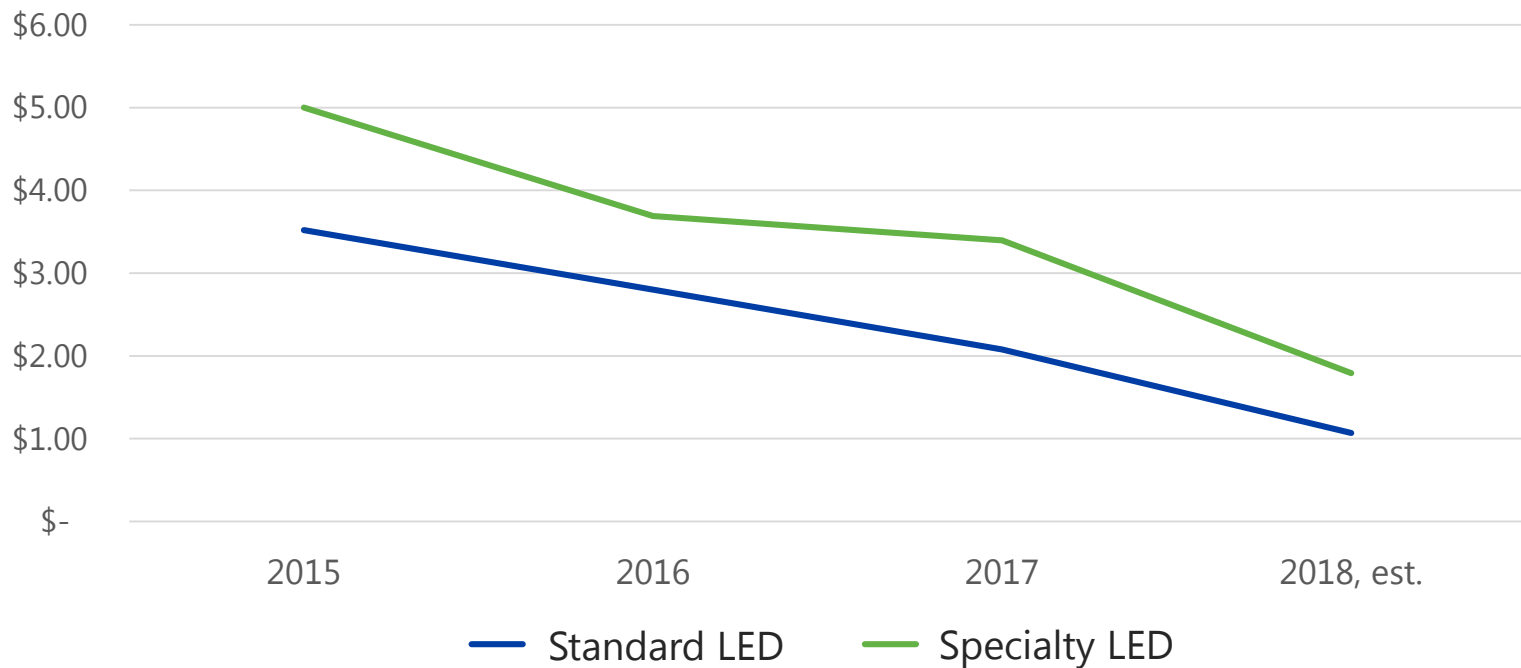


 Seattle City Light



# INCENTIVES FOLLOW THE MARKET

Retail Lighting Incentives per LED Bulb



# MARKET TRANSFORMED



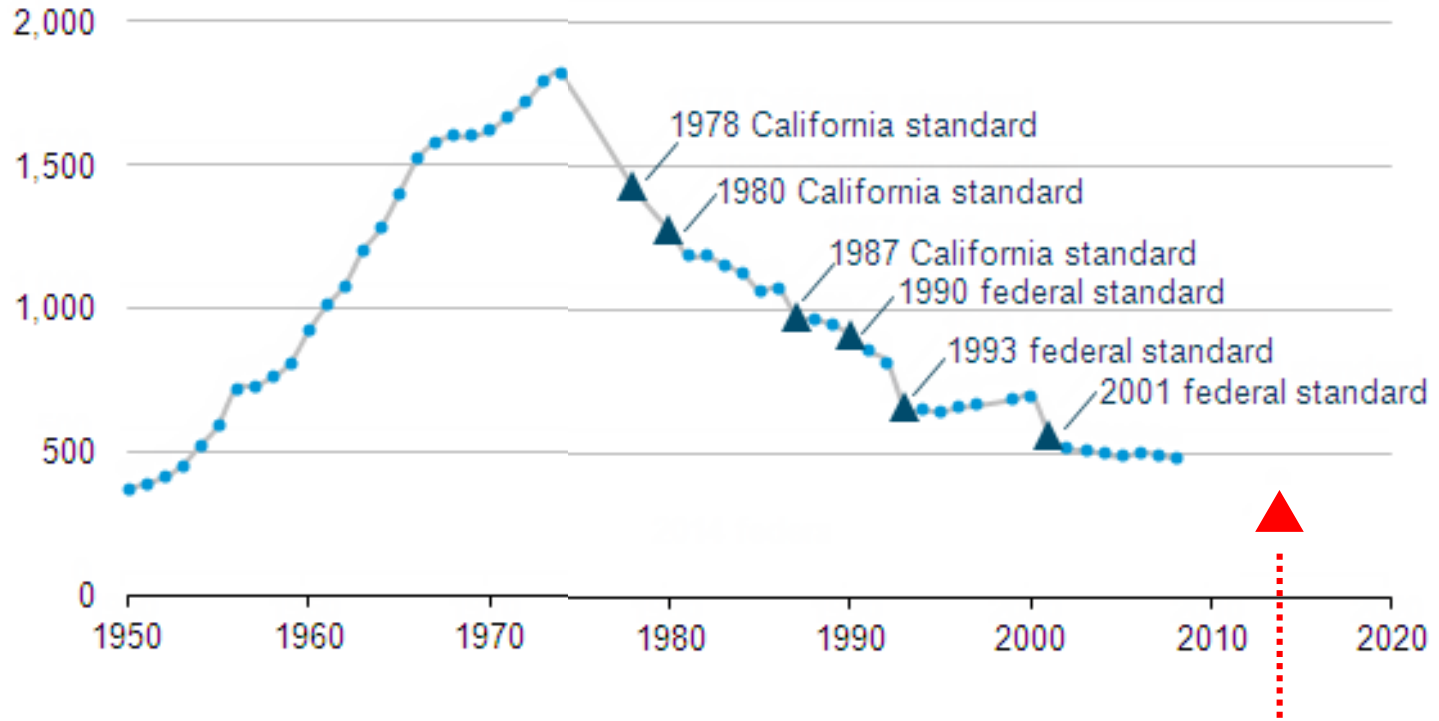


# MARKET OPPORTUNITY



50% Incandescent

Annual energy use of a new refrigerator, 1950 - 2008  
kilowatthours per year



2014 Federal Standard

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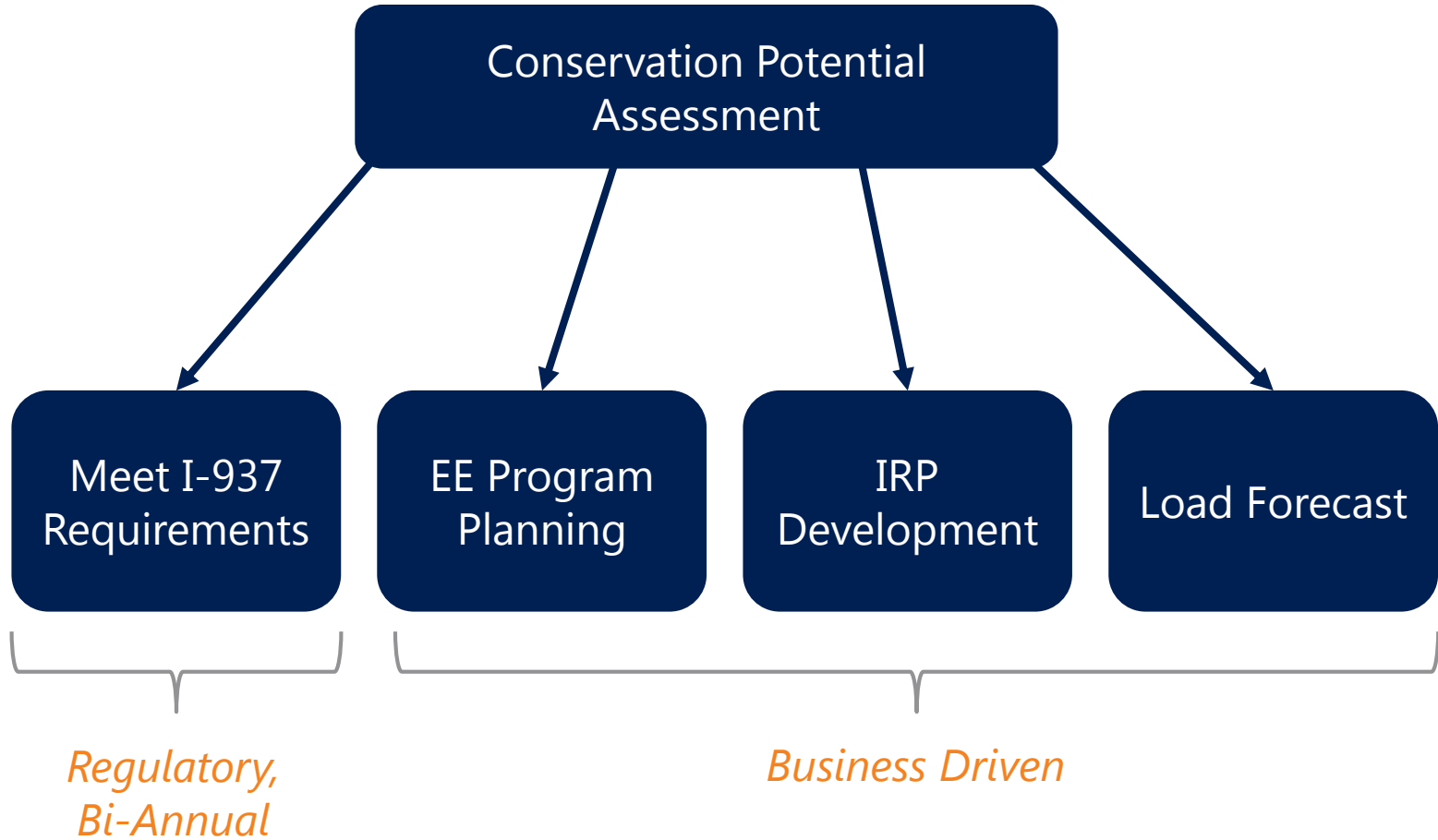
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approach

## HOW DO WE SET ENERGY EFFICIENCY TARGETS?

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- Energy efficiency is City Light's first choice power resource
  - Achieve all cost effective energy efficiency
- Conservation Potential Assessment (CPA) is the analytical study used to set targets, identifying:
  - Amount, timing and cost of energy efficiency
- Aligns with Northwest Power and Conservation Council's Power Plan methodology





# Initiative 937



Approved by voters in 2006



Methodologies consistent with NWPCC's Power Plan



All utilities with >25K customers



Two year cycles (2016-2017, 2018-19, etc)



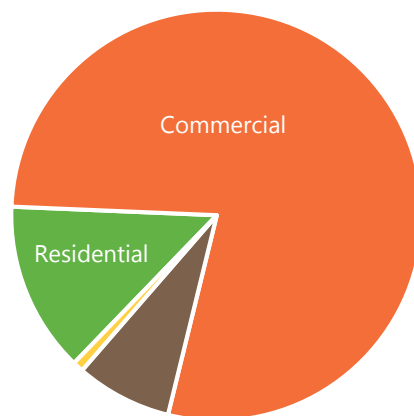
Identify and pursue "all available conservation that is cost-effective"



Report savings and targets to the State

# TOTAL ENERGY EFFICIENCY POTENTIAL (aMW)

	Two Year (2018-2019)	Ten Year (2018-2027)	20 Year (2018-2037)
<b>Prior CPA</b>	25.6	128	205
<b>Current CPA</b>	24.5	90	119



**Residential:** 14%  
**Commercial:** 78%  
**Industrial:** 7%

\*2018 20-year achievable potential

# WHAT HAS CHANGED FROM THE LAST CPA?

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## Updated saturations and program achievements

*2016 Residential Building Stock Assessment (RBSA); Program accomplishments*



## New load forecasts

*Forecasted baseline sales are 9% lower (residential), 5% lower (commercial), and 3% higher (industrial)*



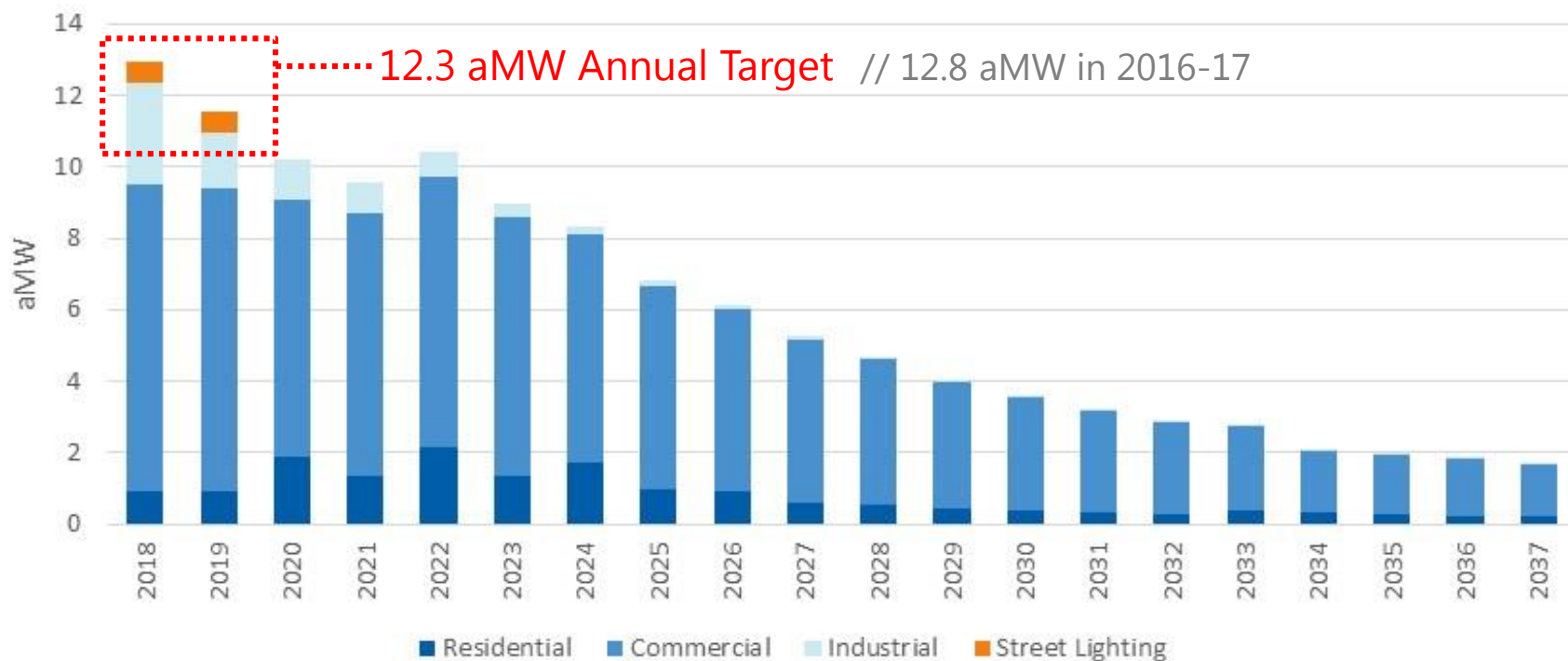
## Updated per unit measure savings

*New federal standards and baselines derived from stock assessment data; Regional Technical Forum (RTF) updates*





# ANNUAL ENERGY EFFICIENCY POTENTIAL

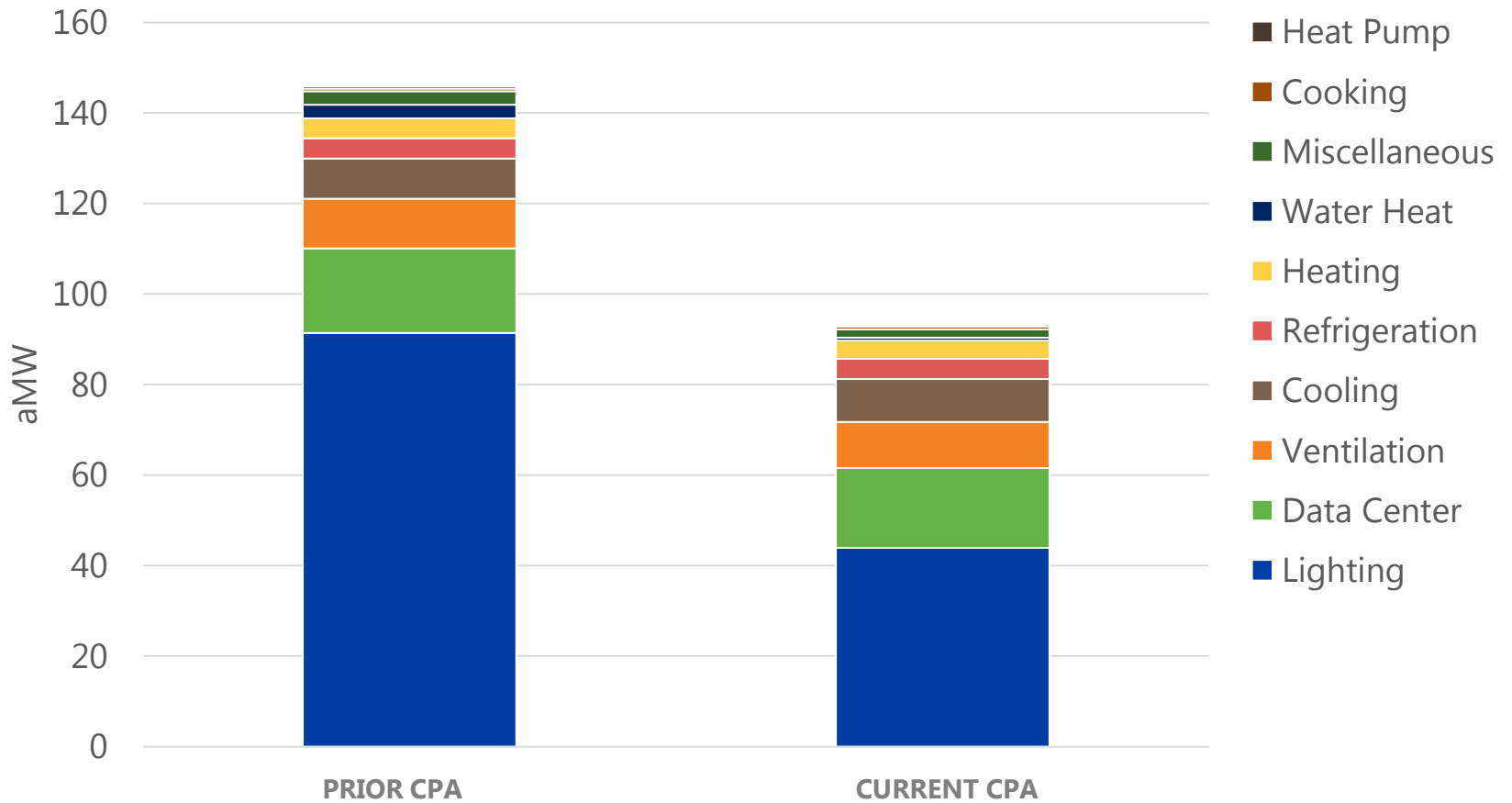


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# TOTAL COMMERCIAL POTENTIAL



## WHAT DOES THIS MEAN FOR PROGRAMS?

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- Targets are stable in the short term and EE remains a good value for the utility
- Declining lighting and residential potential
  - Utility programs, industry partner, codes/standards, and NEEA have been *very* effective
- Robust savings potential remains for commercial, particularly non-lighting measures
- This requires more creative program approaches
  - Such as Pay for Performance (P4P) and MEETS/Energy Efficiency as a Service (EEaS)



# CITY LIGHT

## OUR MISSION

Seattle City Light is dedicated to delivering customers affordable, reliable and environmentally responsible electricity services.

## OUR VISION

We resolve to provide a positive, fulfilling and engaging experience for our employees. We will expect and reinforce leadership behaviors that contribute to that culture. Our workforce is the foundation upon which we achieve our public service goals and will reflect the diversity of the community we serve.

We strive to improve quality of life by understanding and answering the needs of our customers. We aim to provide more opportunities to those with fewer resources and will protect the well-being and safety of the public.

We aspire to be the nation's greenest utility by fulfilling our mission in an environmentally and socially responsible manner.

## OUR VALUES

Safety, Environmental Stewardship, Innovation, Excellence, Customer Care



Seattle City Light