



Seattle City Light



EVOLVING EE MARKET AND ROLE OF PAY-FOR-PERFORMANCE PROGRAMS

Joe Fernandi and Brendan O'Donnell | November 28, 2017

1. City Light's energy efficiency, goals, performance and the evolving market

2. How Pay for Performance (P4P) approach aligns

3. Specific P4P program designs
[DEEP RETROFIT + MEETS/ENERGY EFFICIENCY AS A SERVICE]

4. Legislation required



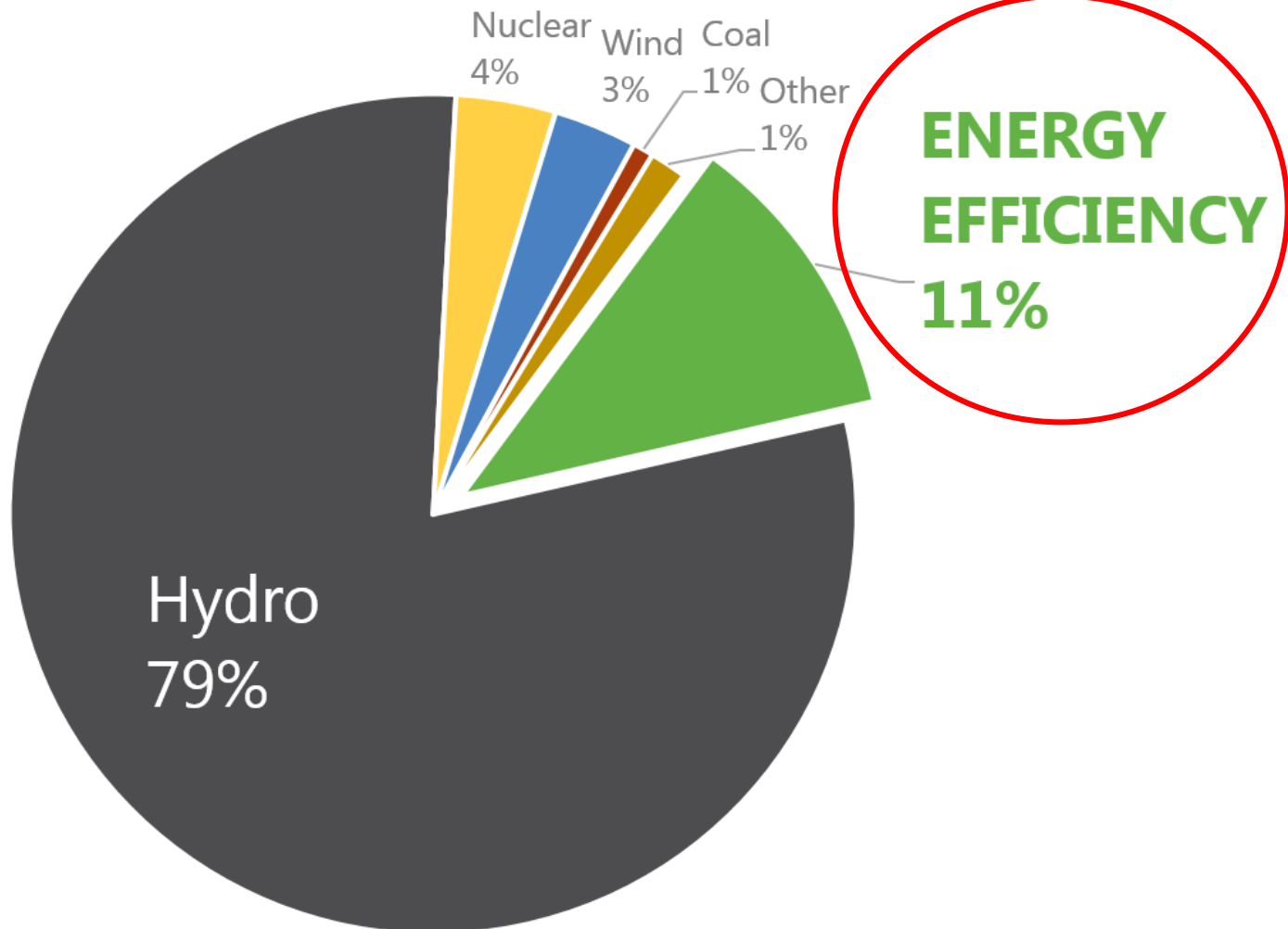
Seattle City Light

ENERGY EFFICIENCY GOALS AND THE EVOLVING MARKET

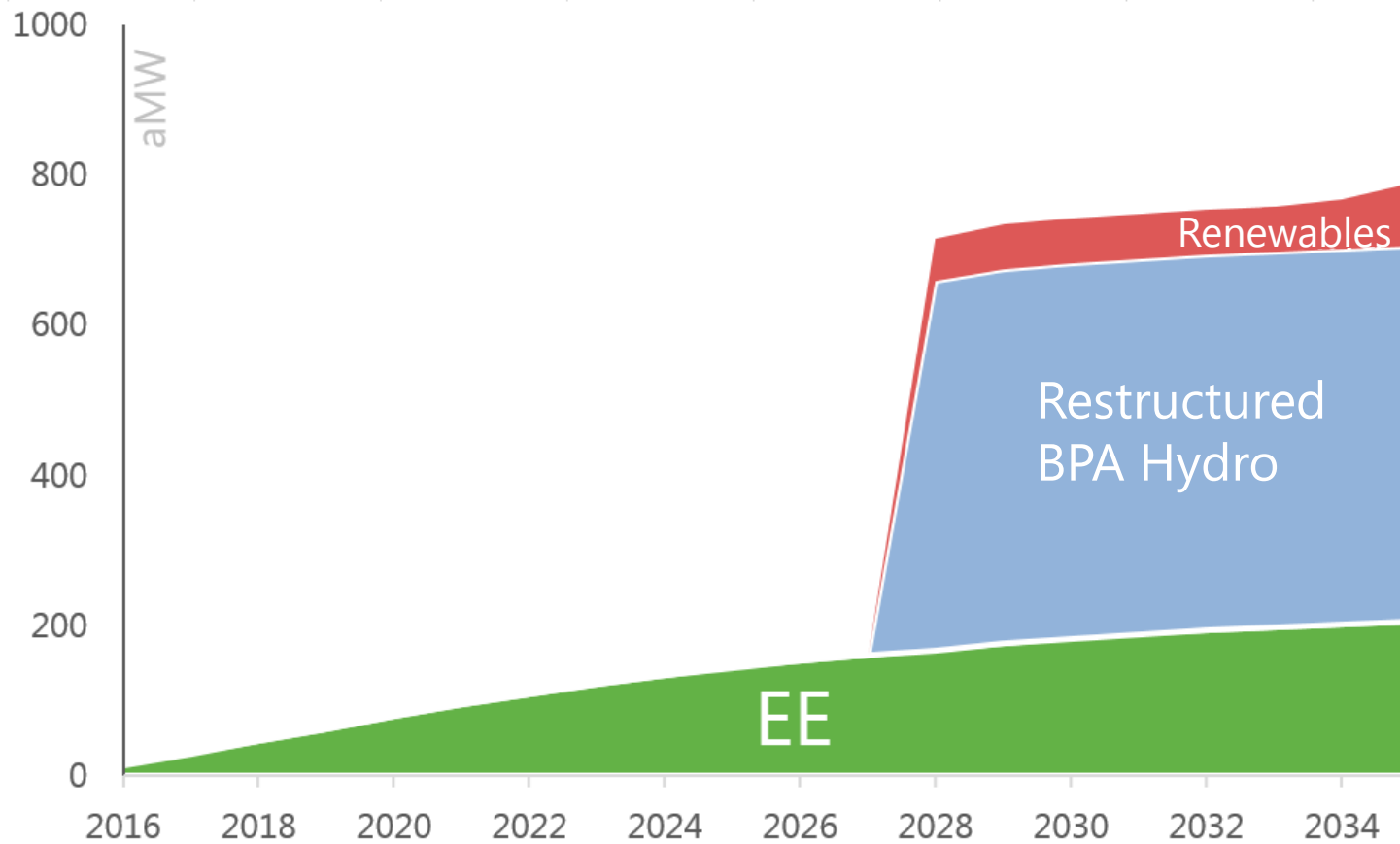
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CURRENT ENERGY PORTFOLIO

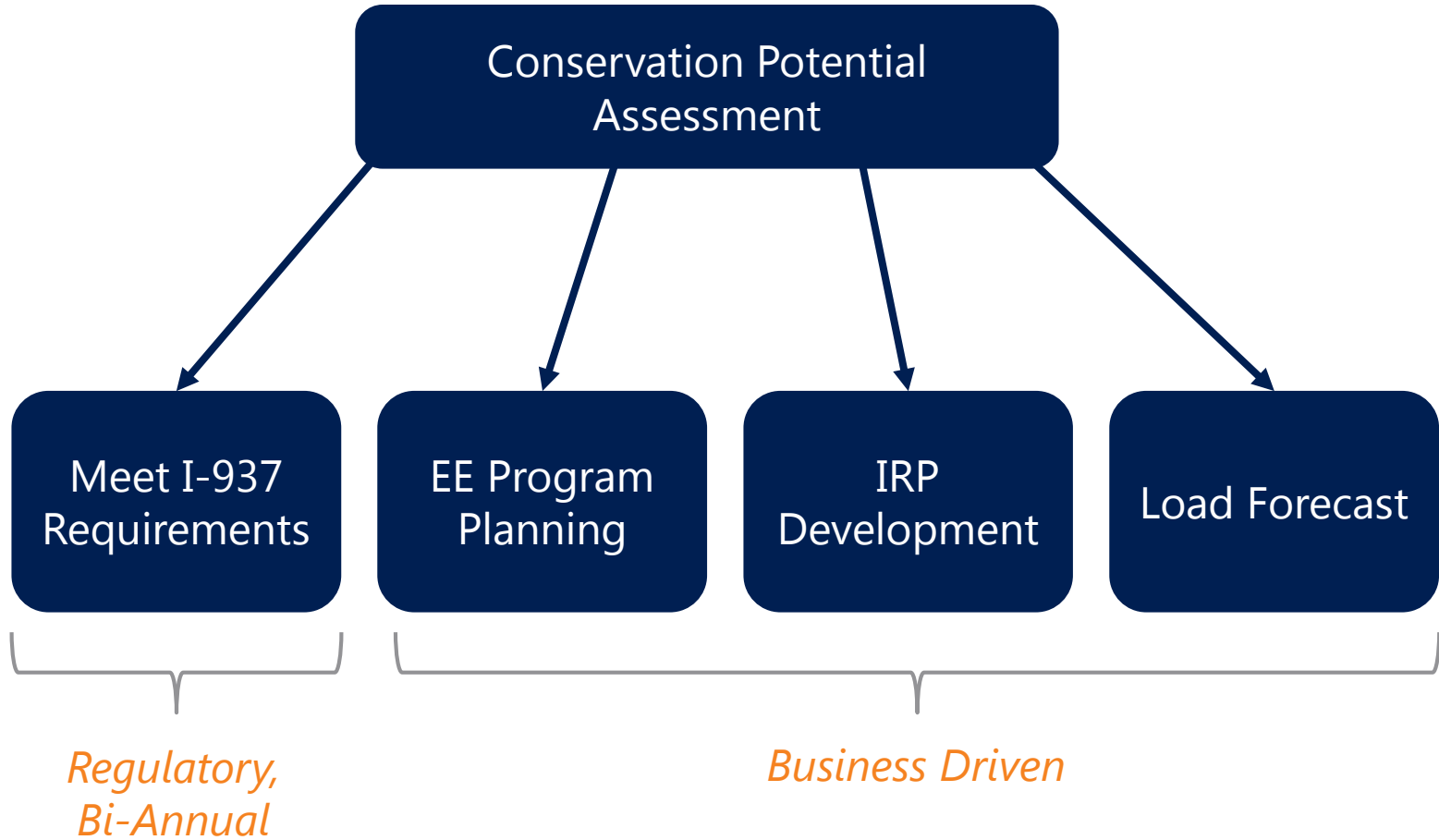


NEW RESOURCES

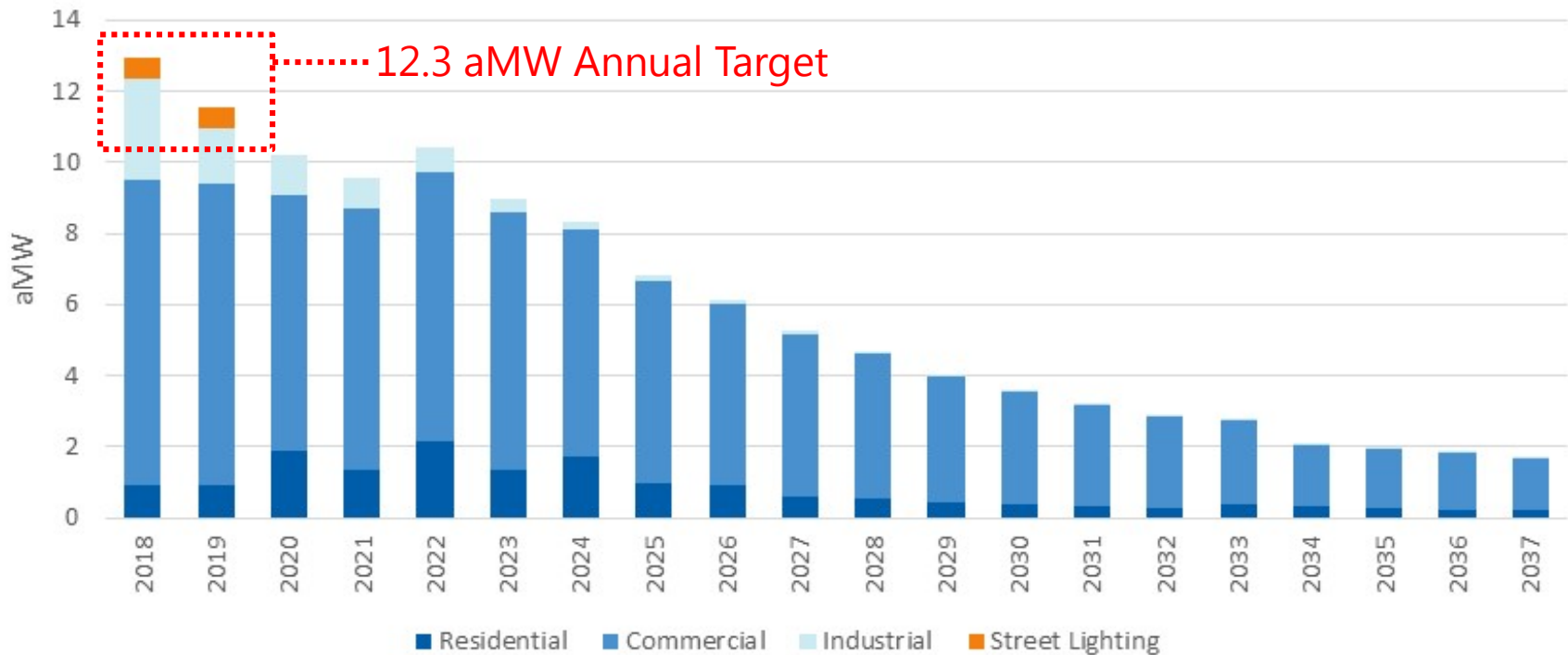


HOW DO WE SET ENERGY EFFICIENCY TARGETS?

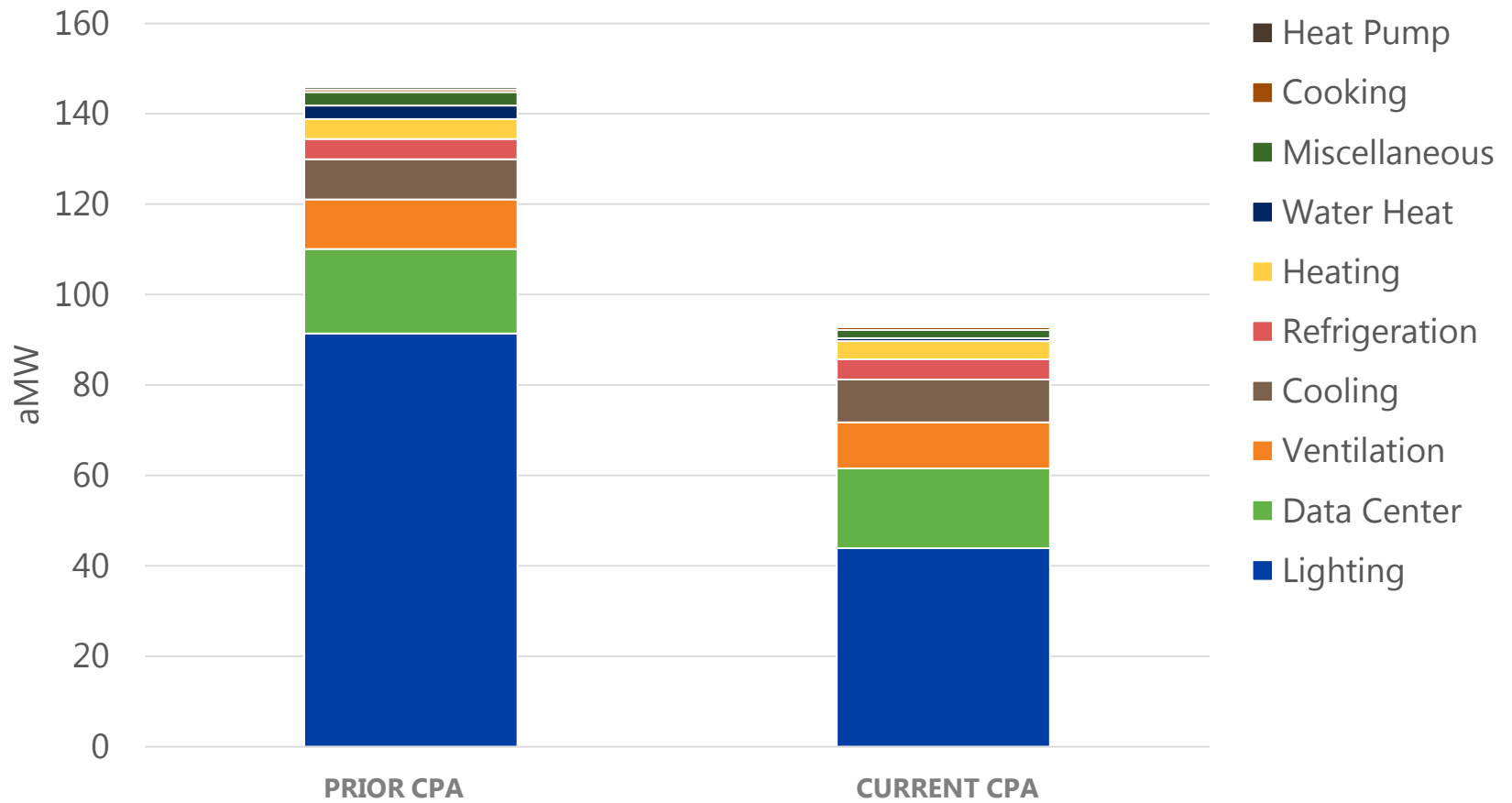
- Energy efficiency is City Light's first choice resource for serving load
 - Achieve all cost effective energy efficiency
- Conservation Potential Assessment (CPA) is the analytical study used to set targets, identifying:
 - Amount, timing and cost of energy efficiency
- Aligns with Northwest Power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



ANNUAL ENERGY EFFICIENCY POTENTIAL



20 YEAR COMMERCIAL POTENTIAL



WHAT DOES THIS MEAN FOR PROGRAMS?

- Targets are still high and EE remains a good value for the utility, but source of savings is changing
- Much lower lighting potential
 - Utility programs, along with codes and standards have been *very* effective
- Robust savings potential remains for commercial non-lighting measures
- This requires more creative program approaches
 - Such as Pay for Performance (P4P) and MEETS/Energy Efficiency as a Service (EEaS)



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PERFORMANCE-BASED PROGRAMS

Why we are pursuing - Deep Retrofit P4P & Energy Efficiency as a Service?

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BENEFITS OF PERFORMANCE-BASED PROGRAMS

- EE measured at the building meter
 - Measure blind
 - Captures O&M, behavioral and interactive savings
- Supports deep-efficiency
- Capture multiple measures through a single transaction
 - Don't need to dissect into program boxes
- Allows for flexible and creative projects
- Simplified participation (no up-front calculations)
- Multi-year agreements provide predictable cash stream relative to savings

INITIAL PROOF OF CONCEPTS

- **Deep Retrofit Pay for Performance (P4P)**



One Union Square



1111 3rd Avenue



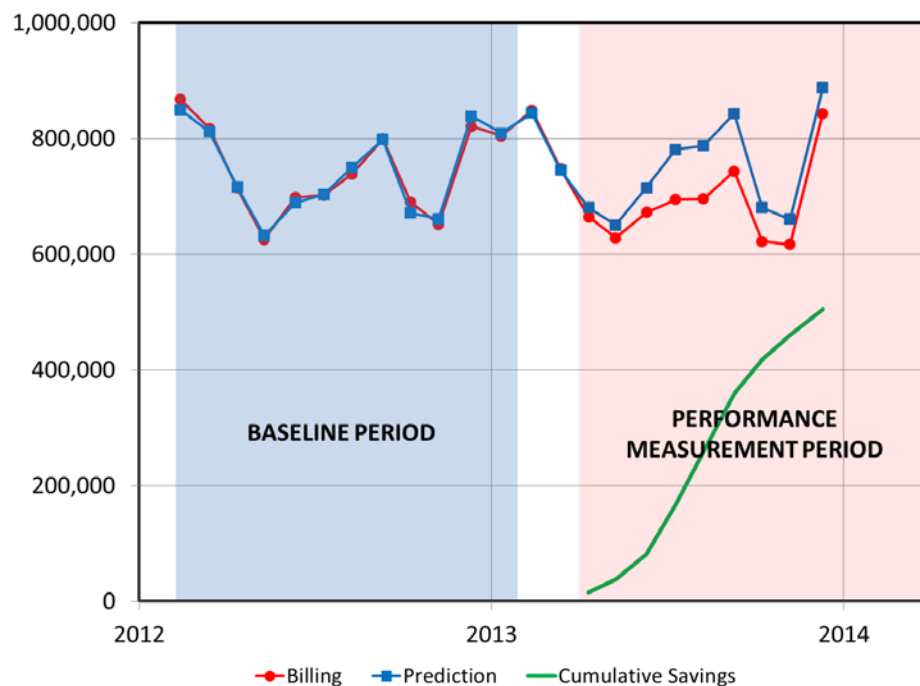
Lake Union Building

- **Bullitt Center (MEETS/Energy Efficiency as a Service)**



DEEP RETROFIT P4P – CONCEPT

- Incentive for improving whole building energy performance (\$/kWh)
- Savings determined by comparing metered to predicted consumption
- Provides customers with choice and flexibility in energy efficiency measures



DEEP RETROFIT P4P – UPDATES

- Held stakeholder workshop to inform design
- Held stakeholder workshop on workforce development
- Refined eligibility and incentive structure
- Drafted scope of work for measurement & verification guideline development



P4P Workshop Participants	
Service Providers	17
Strategic Partners	7
Owners & Operators	7
SCL & City Staff	11
Total	42

Workforce Development Workshop Participants	
Service Providers	4
Strategic Partners	2
Owners & Operators	5
SCL & City Staff	7
Total	20

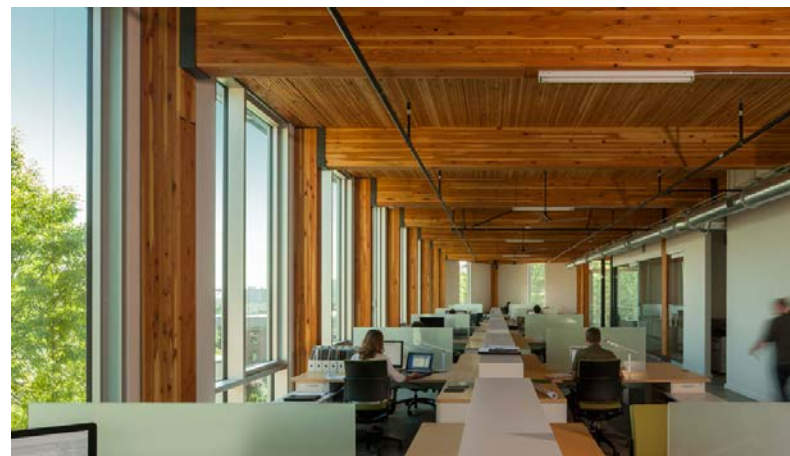
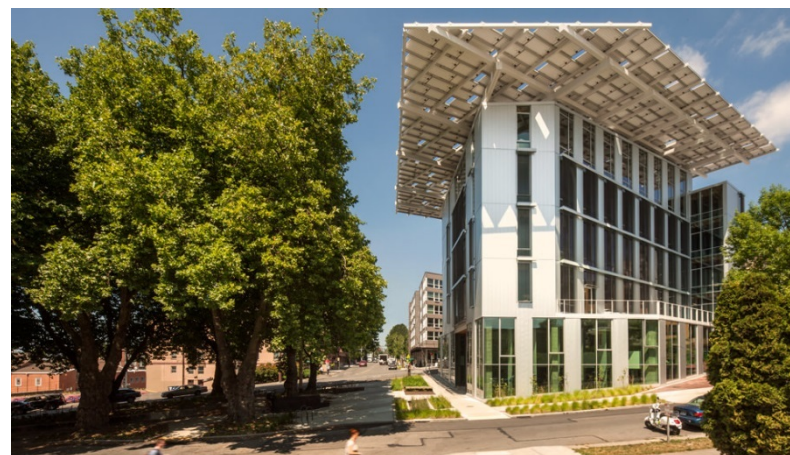
DEEP RETROFIT P4P – NEXT STEPS

- Q4 2017
 - Finalize incentive design
 - Finalize program eligibility & draft M&V guidelines
 - Integrate workforce development goals
- Q1 2018
 - Finalize M&V guidelines
 - Begin testing candidate projects for eligibility
 - Receive approval for 7-year contract authority
- Q2 2018
 - Begin enrollment



ENERGY EFFICIENCY AS A SERVICE – CONCEPT

- EEaS is a transaction structure, not an incentive
- Enables greater EE depth:
 - End users pay for energy efficiency as they would generated kilowatt hours
 - Addresses issue of split incentive between tenants and owners
- Leverage lessons learned from MEETS at the Bullitt Center



Source: www.bullittcenter.org

ENERGY EFFICIENCY AS A SERVICE – UPDATES

- Stakeholder workshop
- Impact/process evaluation of Bullitt Center
- Designing use cases for further testing
- Drafted legislation



EEaS Workshop Participants	
Service Providers	10
Strategic Partners	7
Owners & Operators	9
Investors	4
Tenants	1
SCL & City Staff	12
Total	43

ENERGY EFFICIENCY AS A SERVICE – NEXT STEPS

- Pilot of up to 10 buildings for up to 20 years
 - Explore variety of use cases, with different:
 - Building types (office, multifamily, etc.)
 - Lease types (triple-net, gross)
 - Project types (retrofit, new construction, major renovation)
 - Investor models (owner, 3rd-party, utility?)
 - Fee/payment structures
 - Identify challenges/opportunities presented by each to guide us in determining feasibility and inform design of a full-scaled program offering



COUNCIL ACTION REQUIRED

- **CPA target setting** – *Resolution* required to set energy efficiency target for I-937 compliance
- **Deep Retrofit P4P** – *Ordinance* extending contract authority from 2-years to up to 7-years. Does not require Council approval for each building
- **EEaS** – *Ordinance* enabling a pilot of up to 10 projects for up to 20 years