



Seattle City Light



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

Brendan O'Donnell and Joe Fernandi | April 5, 2018

ENERGY EFFICIENCY PROGRAMS AT CITY LIGHT

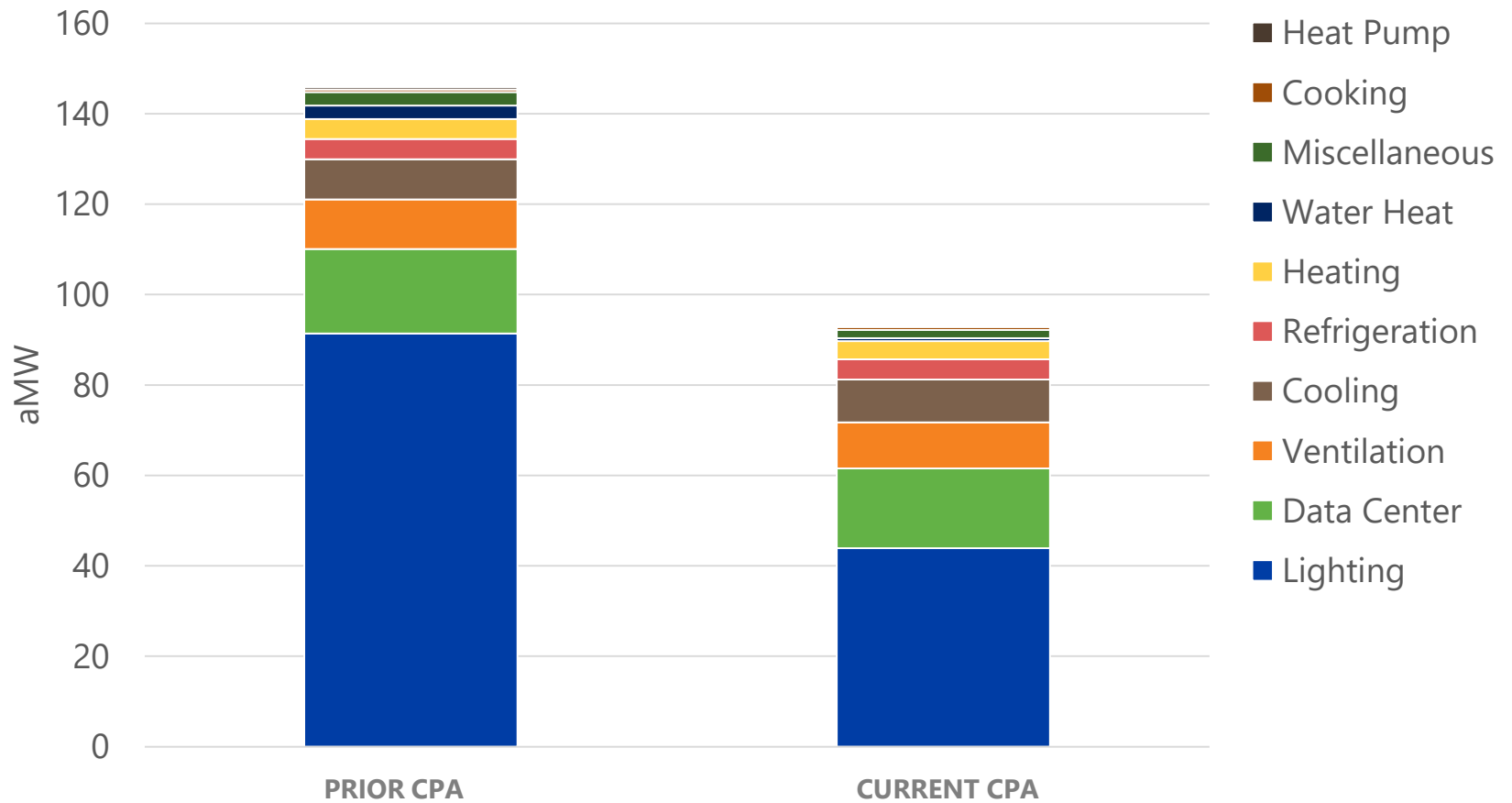
- Why do we offer energy efficiency programs?
 - Excellent customer engagement, low cost power resource, aligned with policy goals
- Diverse offerings for residential, commercial and industrial customers
 - Implemented through retail, direct install, retrofit, new construction delivery methods
- Largely leveraging upfront incentives or rebates

CHANGE IN ENERGY EFFICIENCY MARKET

- As the market saturates with LED technology and strong codes/standards (a good thing!) this narrows the opportunity for traditional utility programs
- Targets are still high and EE remains a good value for the utility, but source of savings is changing
- Much lower lighting potential going forward
- Robust savings potential remains for commercial non-lighting measures



20 YEAR COMMERCIAL SAVINGS POTENTIAL



WHAT DOES THIS MEAN FOR PROGRAMS?

- Efficiency is still a core part of our business and we need ways continue to achieve savings and meet our targets
- We're not moving away from current programs, but do need to expand our market opportunities
- Specifically, there are persistent barriers from the upfront incentive model in commercial buildings
- This requires more creative program approaches
 - Pay for Performance (P4P) and
 - Energy Efficiency as a Service (EEaS)



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PAY FOR PERFORMANCE (P4P)

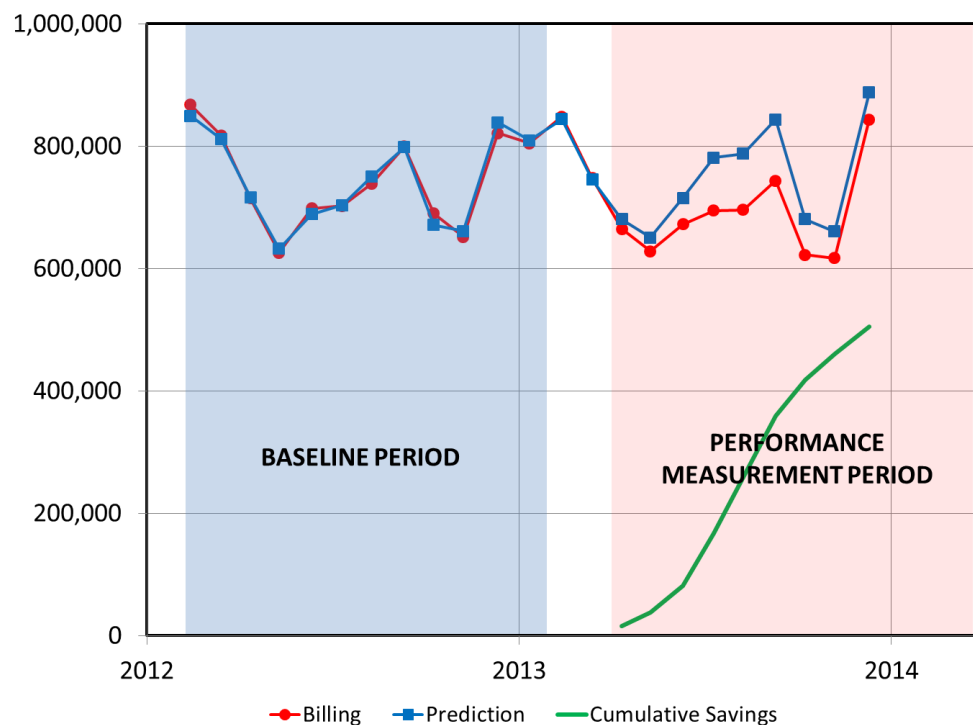
Ordinance #1 – 7-year Contract Authority

Joe Fernandi | April 5, 2018



PAY FOR PERFORMANCE (P4P) – WHAT IS IT?

- Program for improving building energy performance
- Incentive payments over time based on verified performance
- Energy savings are *measured* at a whole building level



P4P- BENEFITS

- 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

P4P – WHEN DOES IT MAKE SENSE?

- Large projects (significant energy efficiency depth)
- Interactive effects (measures impacting multiple building systems)
- Long-term (multiple projects)
- Mix of capital improvement, operational & maintenance, behavioral savings

P4P – PRIOR LEGISLATION

- **2013 Climate Action Plan**, adopted by the City Council through **Resolution 31447**, included a recommendation that City Light *“pilot a utility incentive program that would pay for actual energy savings over time instead of providing up-front payments for projected savings.”*;
- Seattle City Light 3-Building Pilot on Deep Retrofit P4P (Ordinances 124381, 124382, and 124383) [2013-2016]



One Union Square



1111 3rd Avenue



Lake Union Building

ORDINANCE AUTHORITY - P4P

- Held workshop for input on incentive structure, eligibility, and reporting requirements
- Based on stakeholder input, suggesting up to 5-year payment term, with 7-year contract to account for construction timeline



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



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ENERGY EFFICIENCY AS A SERVICE (EEaS)

Ordinance #2 – 30 Building Pilot

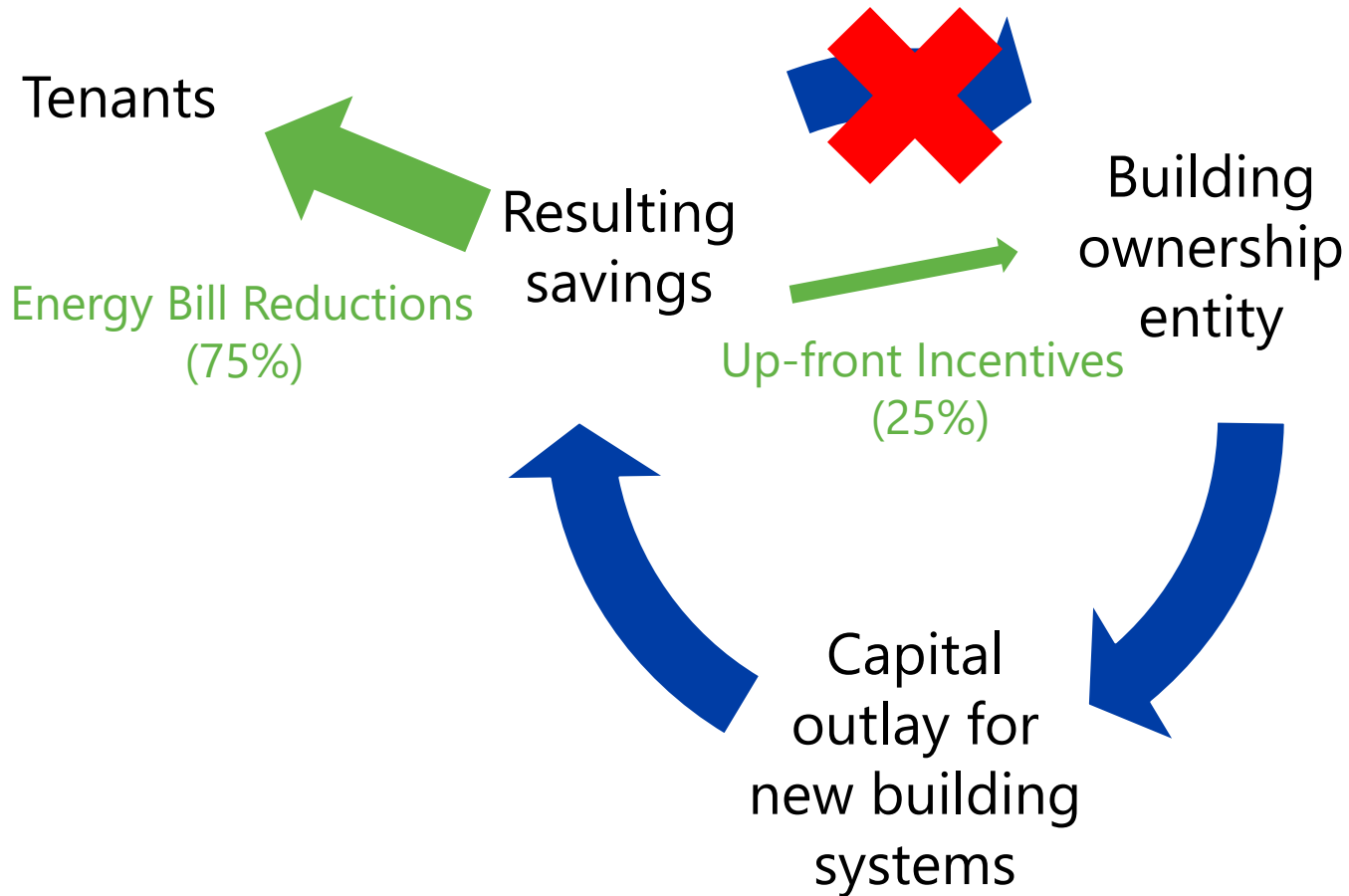
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EEaS – WHAT IS IT?

- Energy Efficiency as a Service (EEaS)
 - Utilizes pay for performance concepts
 - A transaction structure where customers pay for energy efficiency as they would delivered electricity
 - Designed to resolve the split incentive

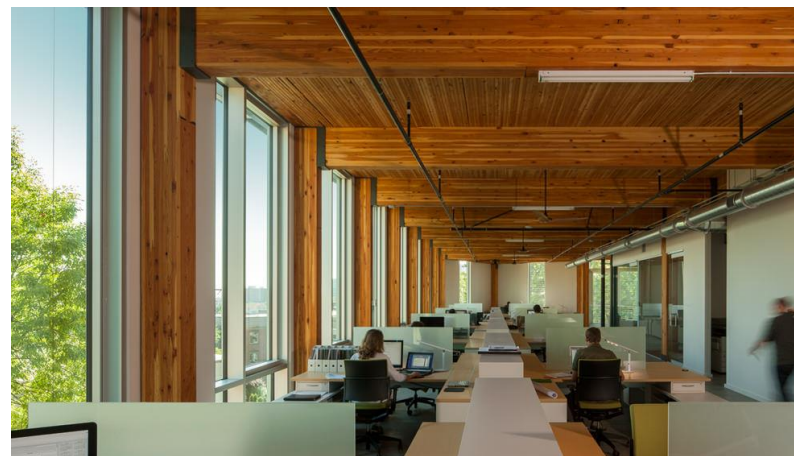
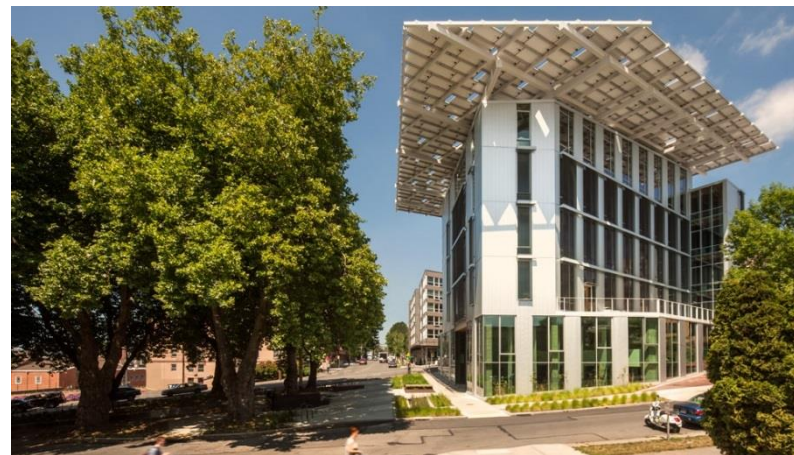
SPLIT INCENTIVE



Owners are reluctant to pursue projects

EEaS PROTOTYPE (BULLITT CENTER)

- Metered Energy Efficiency Transaction Structure (MEETS) Ordinance 124604, 20-yr term
- Enables greater EE depth:
 - **Utility** charges for energy that would have been used without efficiency upgrades
 - **Tenants** pay bill as if no energy improvement occurred, but occupy a better building
 - **Investor** receives the benefits of the efficiency upgrades through efficiency-based utility payments



Source: www.bullittcenter.org

BENEFITS

Party	Benefits
Utility	<ul style="list-style-type: none">• No risk of paying for unrealized savings• Reduces rate-pressure
Investors	<ul style="list-style-type: none">• Predictable rate of return• Finance based on utility PPA (strong counterparty)
Building Owners	<ul style="list-style-type: none">• New revenue stream• Increased asset value
Energy Efficiency Contractors	<ul style="list-style-type: none">• Long-term relationship with building• Reward for all "harvested" kWh
Tenants	<ul style="list-style-type: none">• Productive & efficient space while remaining bill-neutral
Society	<ul style="list-style-type: none">• Domestic jobs• Enhanced building stock• No tax dollars/incentives required



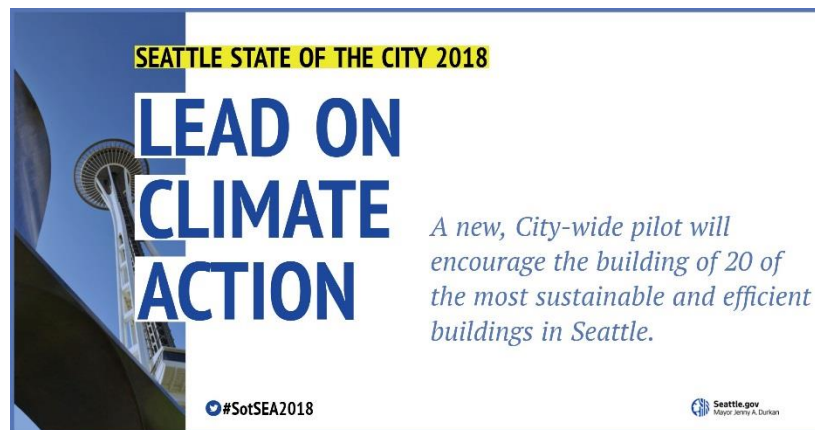
MAYOR DURKAN – 2030 CHALLENGE

- State of the City address:

- 2030 Challenge Pilot - [Living Building Pilot](#): “new City-wide pilot that will encourage the building of **20 of the most sustainable buildings anywhere**,”

- Lead on Climate Action:

- “We’ll show it can be **done to scale**, and we’ll create a new model for green cities,”



ORDINANCE AUTHORITY - EEaS

- Pilot of up to 30 buildings for up to 20 years
 - Apply lessons learned from the Bullitt Center
 - Explore variety of use cases, with different:
 - Building types (office, multifamily, etc.)
 - Lease types (triple-net, gross)
 - Project types (retrofit, new construction, major renovation)
 - Metering configurations (master-metered, sub-metered)
 - Investors (owner, 3rd-party, utility)
 - Identify challenges/opportunities presented by each to guide us in determining feasibility and inform design of a full-scaled program offering

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



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