Unleashing New York's Energy Efficiency Market Once and for All

A Journey Through the Results from the 1st Person Perspective and a Look Into The Future

A Look Back at the Results

A Framework for examining the past: Business Models, Financing, and Policy

Where it all began: 2008 – 20012 EEPS 1 and What I Learned

How do you grow?: 2012 – 2015 EEPS 2 and What the Industry Accomplished

Seeing past the present: 2015 – 2030 ETIPS an Opportunity to Change

Framework for Scalable Energy Efficiency

2008-2012


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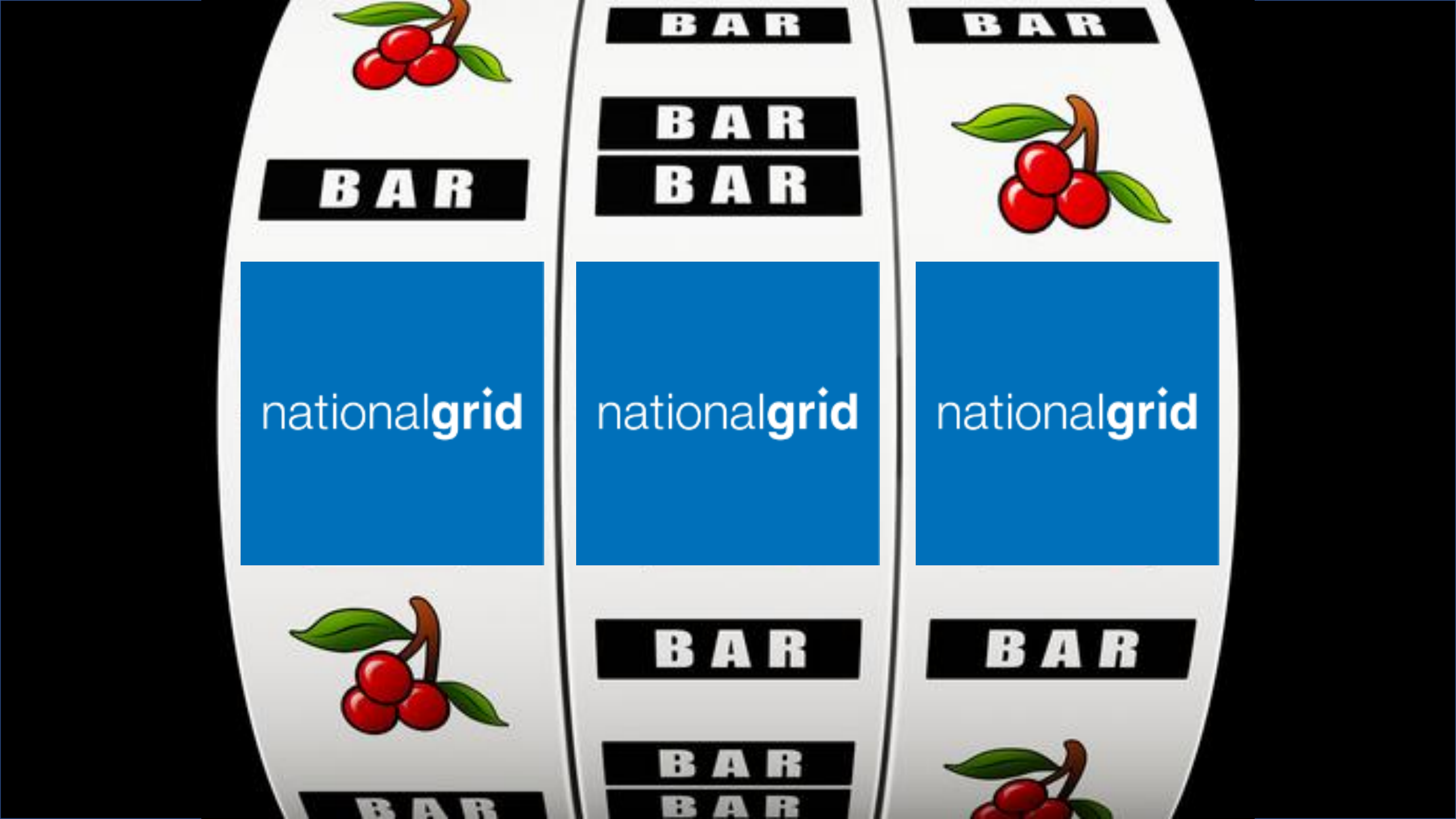
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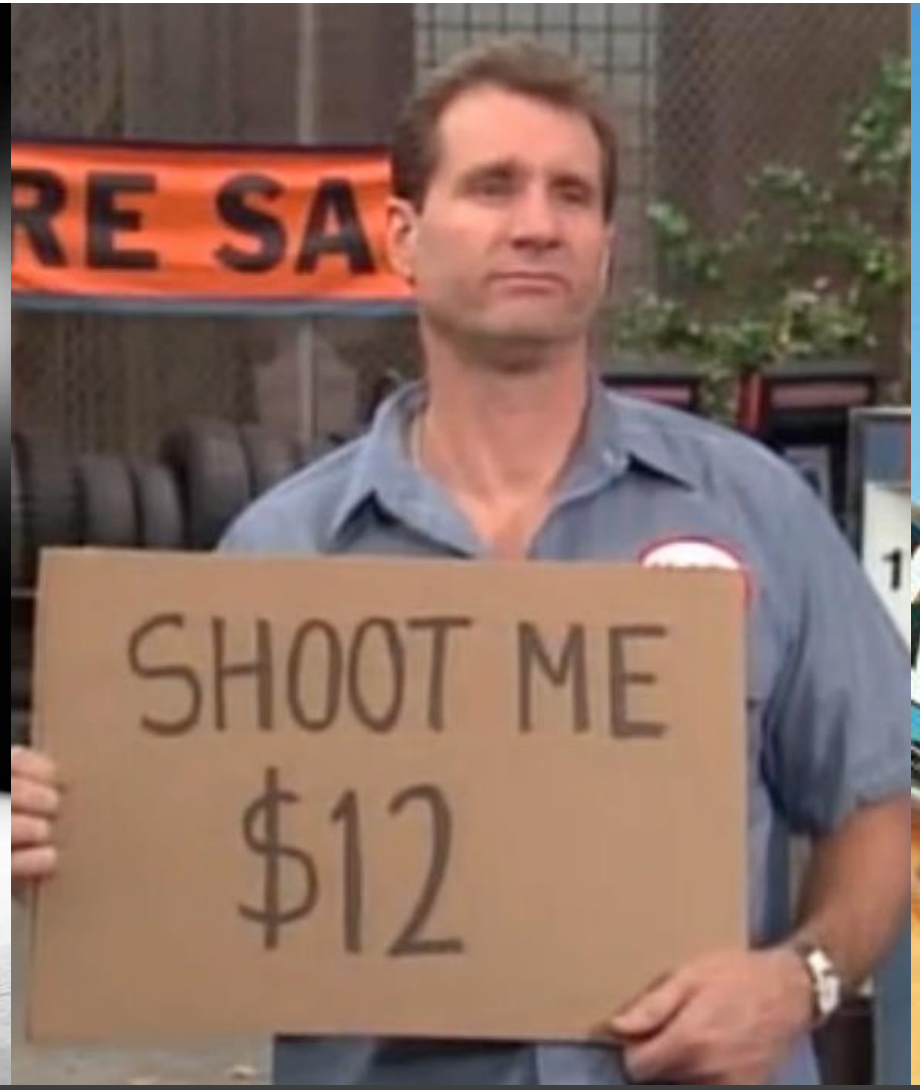
Lack of Time



Shortage of Capital

Deficit of Trust

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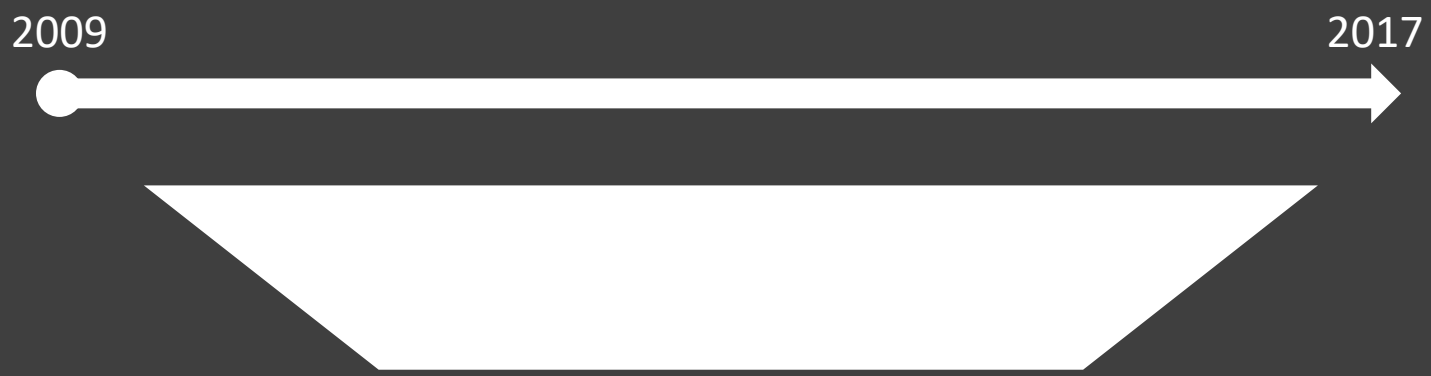


How do you achieve energy-efficiency at scale in a very hard to reach market?

How do you sell lightbulbs to people who don't know they need them?
(and don't see anything wrong with the ones they already have?)

2008-2012

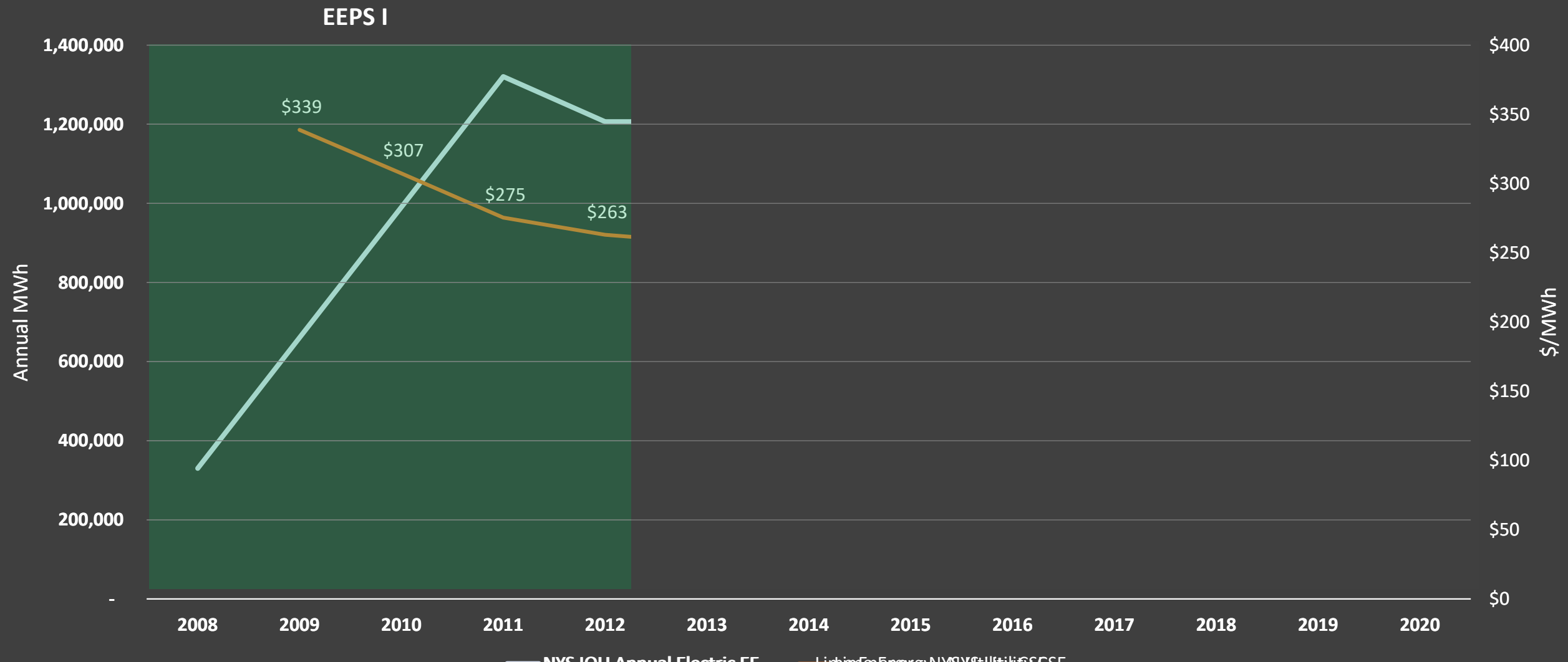
- Performance Based Incentives for Implementation
- Based on TRM Calculations of Savings

- On Bill Financing

Policy and Regulation

- NY Fast Track Programs
- Ability to Calculate Savings Based on Actual Customer Data

NYS IOU Electric Efficiency vs. Lime Energy Utility Cost of Saved Energy (CSE)



2012-2015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nationalgrid
People. Power. Possibilities.
Central Hudson
A FORTIS COMPANY
LIPA
Long Island Power Authority

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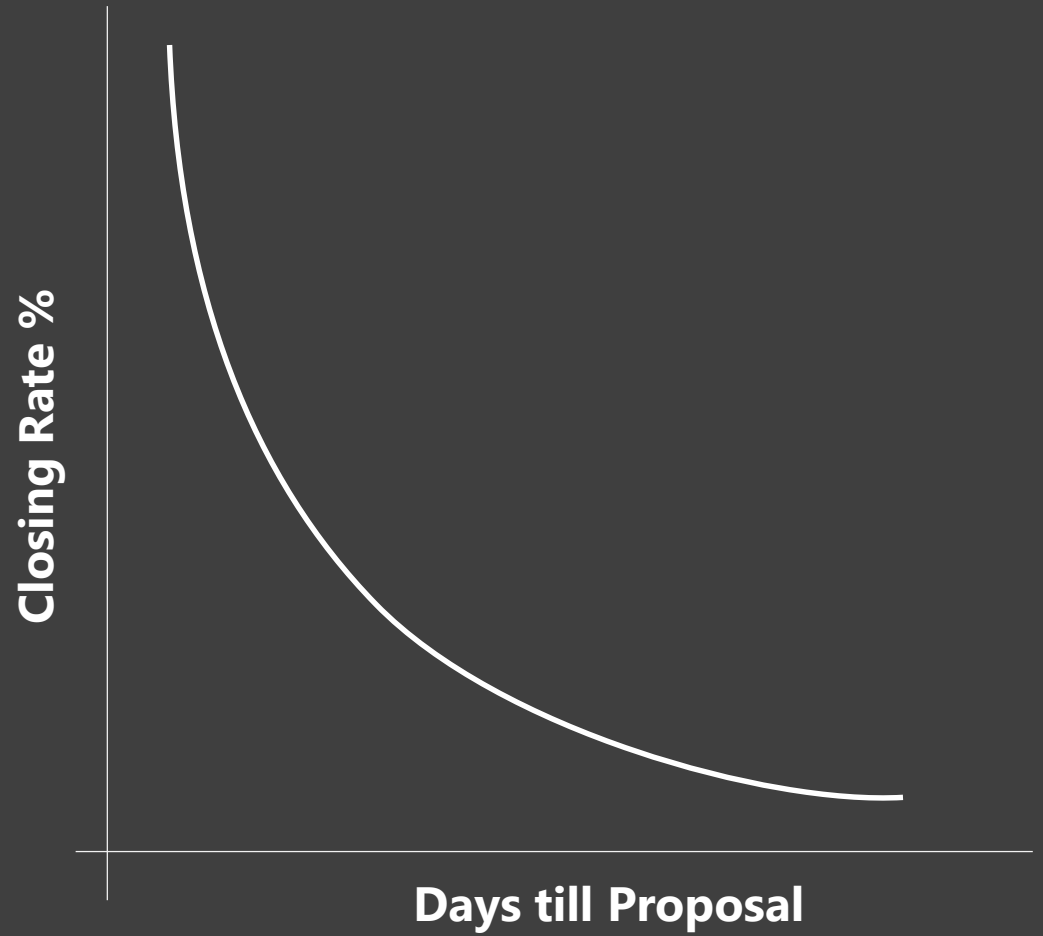
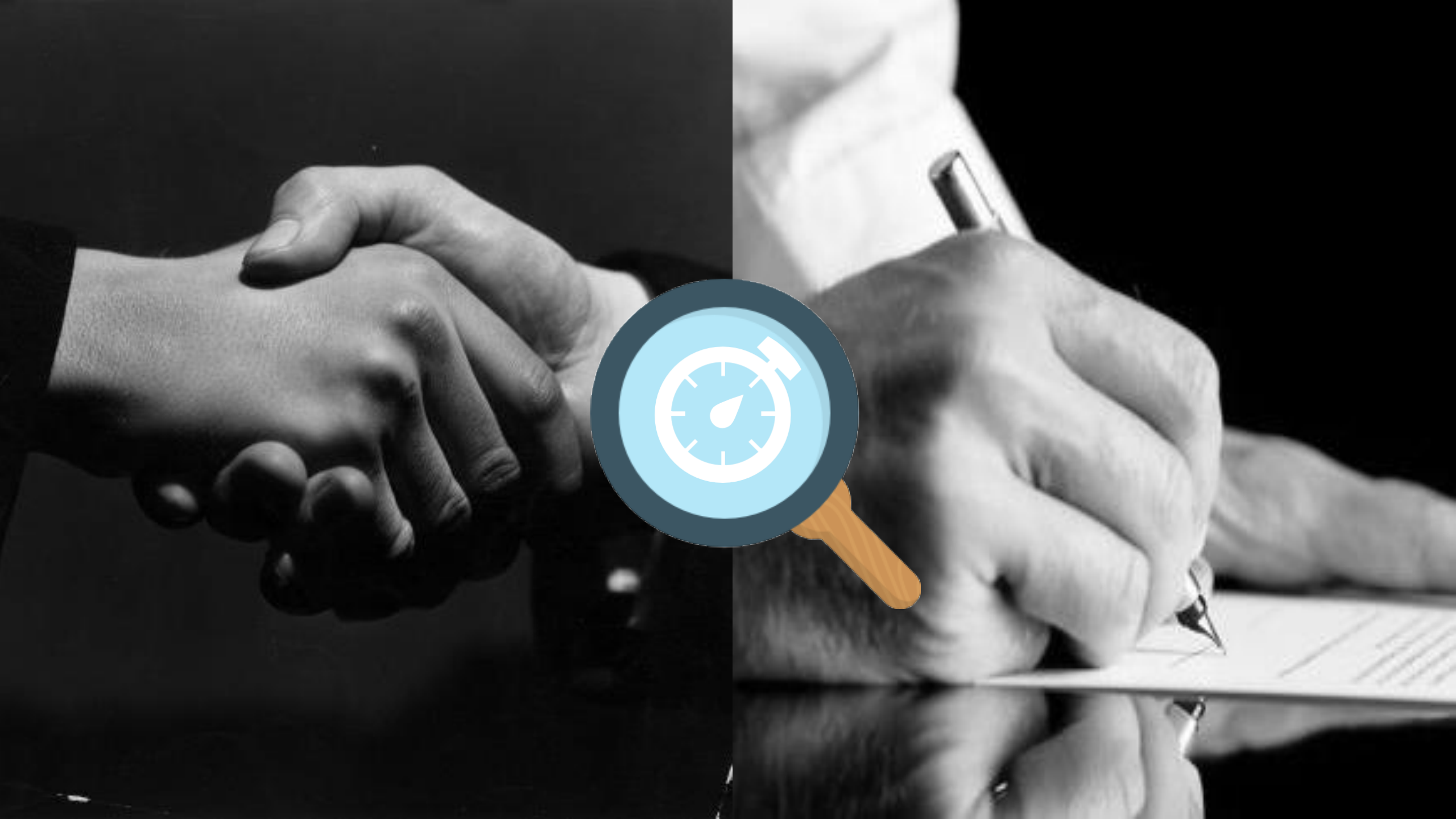
Lack of time was an obvious problem for small business owners.

How it impacted participation was striking.





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Savings Results	Dollars*	Energy
Monthly Usage Savings	$76.33	636 kWh
Annual Usage Savings	$916.00	7,632 kWh
5 Year Savings	$4,580.00	38,160 kWh

Cost Proposal

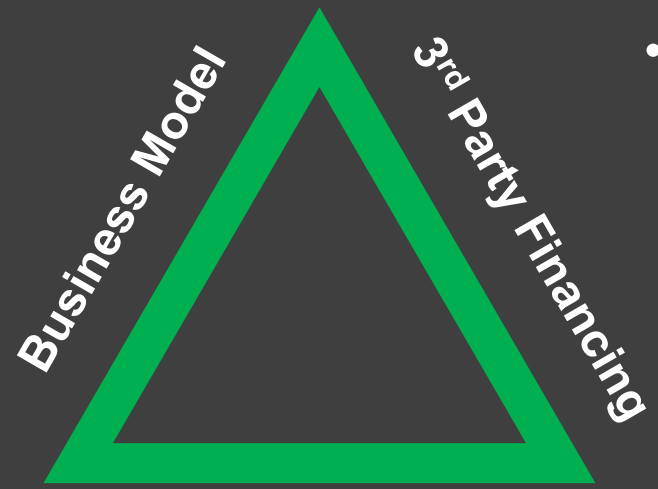
Project Cost	$3,123.12
Utility Incentive	$1,648.51
Net Cost	**$1,474.61**
Simple Payback	**19 Months**

Lump Sum and Extended Payment Options

	Lump Sum @ 11% Disc.	12 Monthly Payments	24 Monthly Payments
Estimated Savings/Month	$76.33	$76.33	$76.33
Payment(s)	$1,312.40	$122.88	$61.44
Effective Monthly Cashflow	N/A	($46.55)	$14.89
Deposit	$0.00	$0.00	$0.00
Net Customer Cost	**$1,312.40**	**$1,474.61**	**$1,474.61**

2012-2015

- Same Day Proposals using an iPad based technology platform
- Performance Based Incentives. *Implementation AND Program Administration*



- Developed a 24 month On-Balance-Sheet financing offering to simulate National Grid

- Expansion of Goals
- Shift in Cost Benefit Requirements from Measure to Program Level

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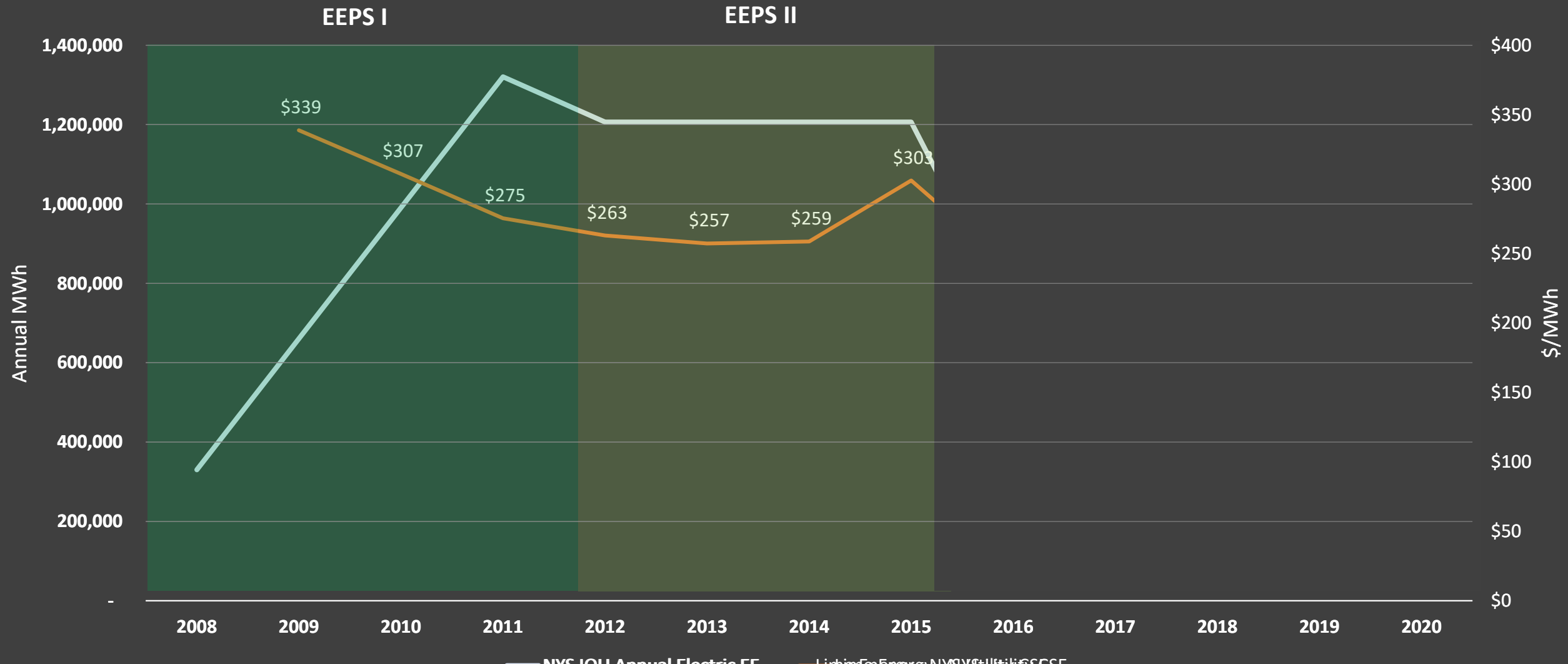
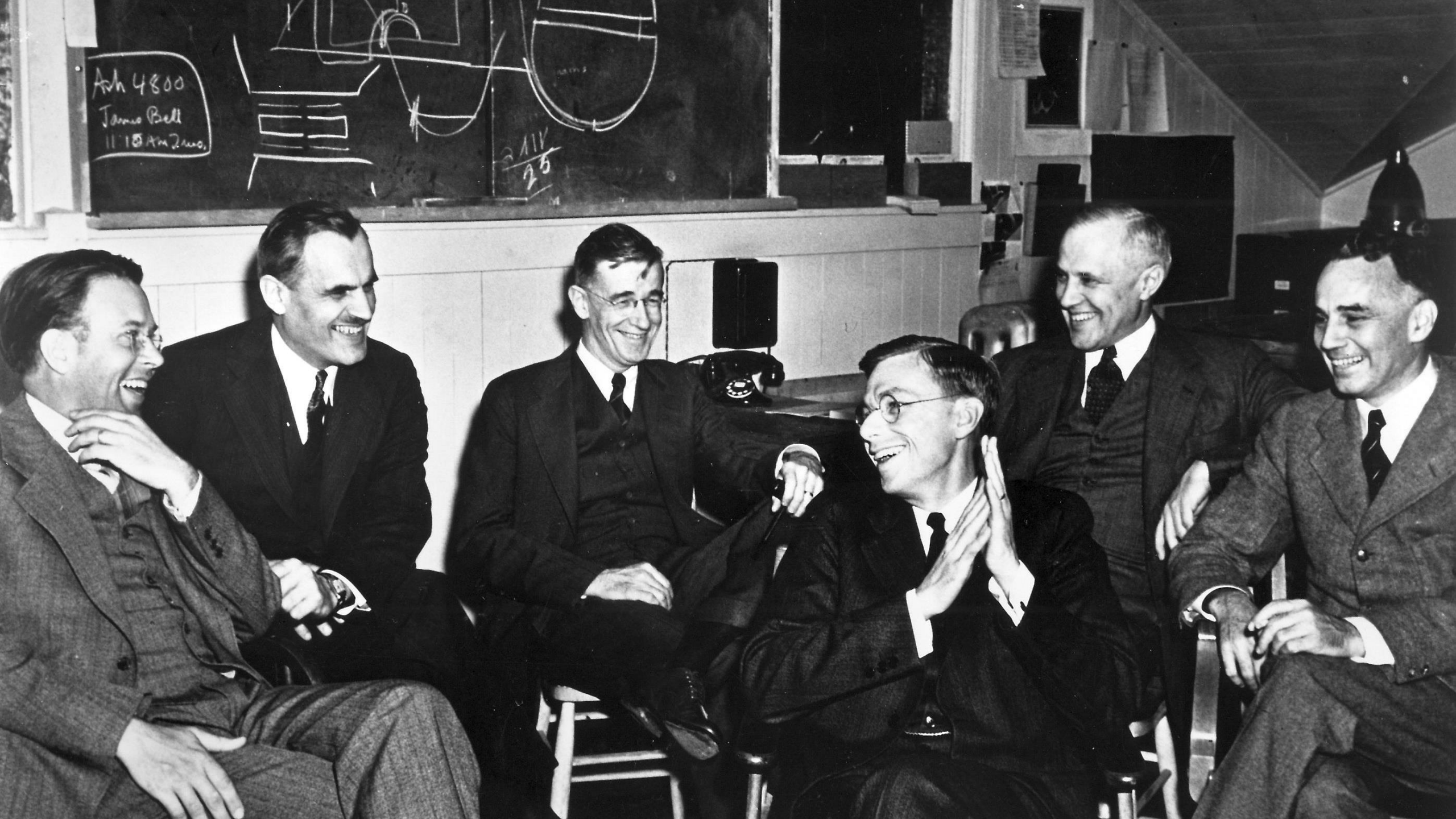


2015-2030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Setting the Stage in New York

REV 2030 Goals

Reforming the Energy Vision

40% Reduction in GHG emissions from 1990

50% Generation of electricity from renewables

23% Decrease in building energy consumption from 2012

What's at Stake?

40% Reduction in GHG emissions from 1990

50% Generation of electricity from renewables

Estimated Costs to Achieve Goal

Scenario 1
$3.2 Billion Renewables
$0.5 Billion Efficiency
$3.7 Billion

Scenario 2
$5.6 Billion Renewables
$0.0 Billion Efficiency
$5.6 Billion

$2 Billion Value of Hitting EE Goals

23% Decrease in building energy consumption from 2012

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Deeper Measures &
Lasting Engagement

Low Incentive
Environment

No More Stick, and a
Dried-up Carrot

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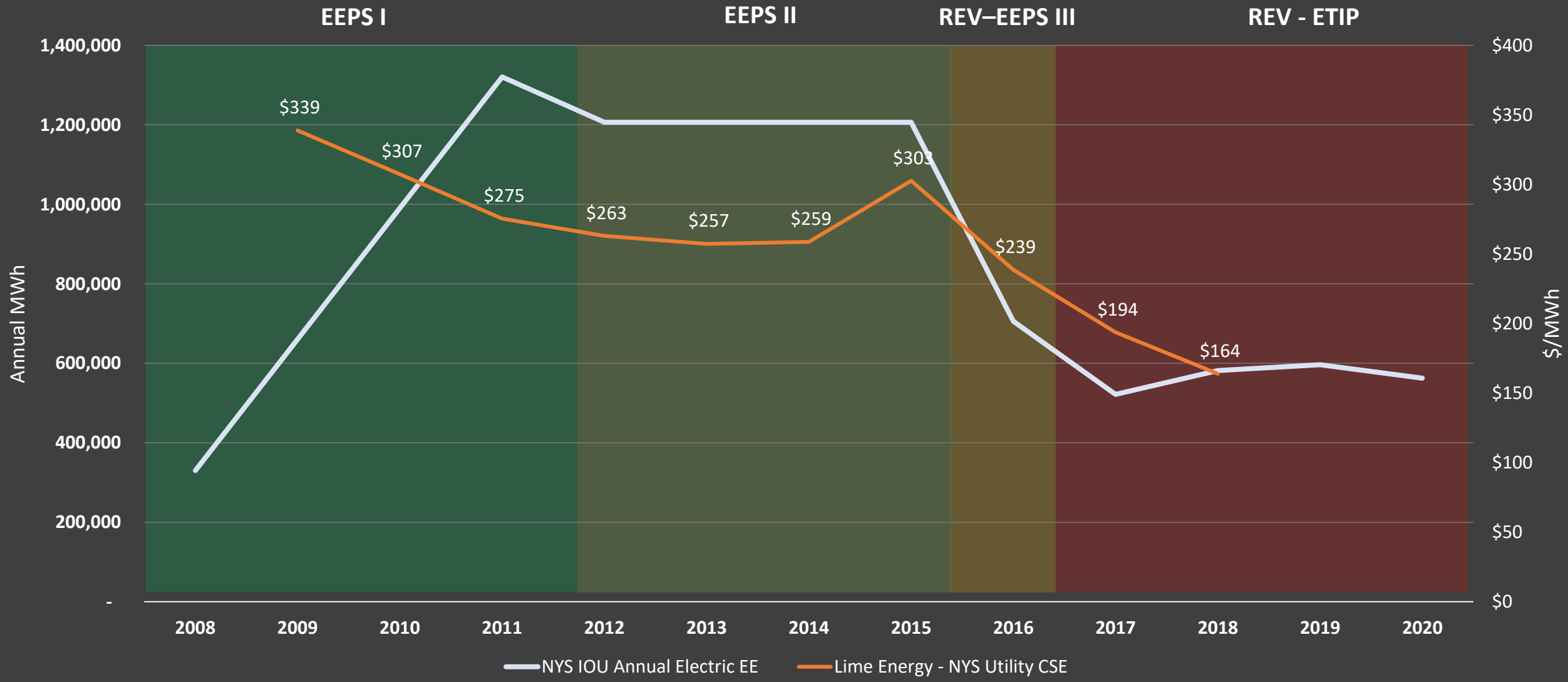

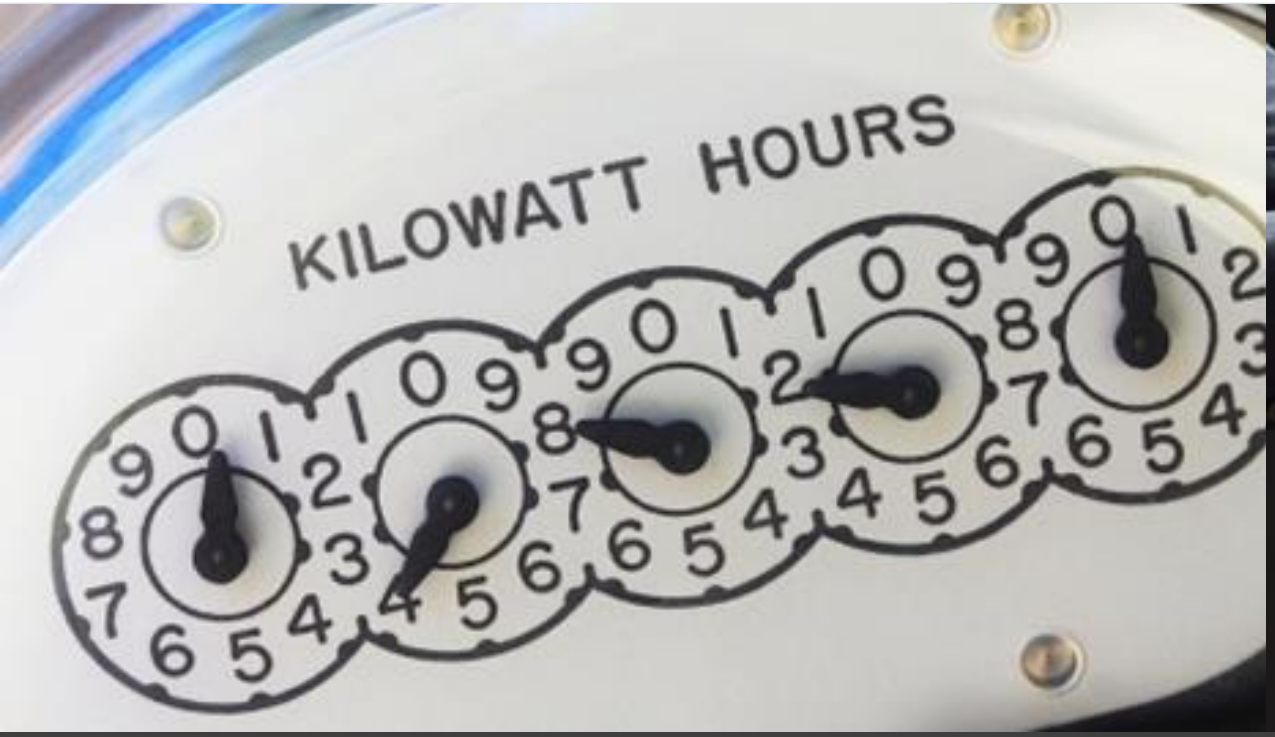

Continuous M&V and
a transparent price signal,
based on the value of EE to the grid

Performance Based Payments
Through a transparent Market Place

3rd Party Financing and Performance Insurance Instruments for Efficiency Portfolios

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No Upfront Cost - No Debt

Increased Visibility & Safety

Performance Guaranteed

Lower Utility Bills

Field Tool

Lime Labs: Project Apiary

Wireless Sensor Gateway

Lime Labs: Project Apiary

Long-term Lime M&V installations contain wireless Current Transformers that transmit to a metering gateway. The Canary (metering gateway) receives, processes, and transmits data wirelessly or via cellular modem to Lime servers for data processing and disaggregation for billing.

- Performance Guarantees for Small Customers
- Pay for Metered Performance Incentives
- Connected Devices that allow for continuous improvement and continuous opportunity assessment

2015-2030

Policy and Regulation

- 3rd Party Project Financing for the Customer Portion of Project Costs
- 3rd Party Financing for Performance Incentive Cashflows
- Insurance Products that defray performance risk

- Standardized Measurement of Efficiency
- Paying for Efficiency Based on its Value to the Grid
- Allowing Utility to Rate Base EE, or Share in Savings from Differed Infrastructure Investments

Setting the Stage in New York

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Thank You!