



2013 Efficiency Forum
Market Solutions Team – Breakout Session III

Overcoming Obstacles to Data Access: Who, What, Where, and How

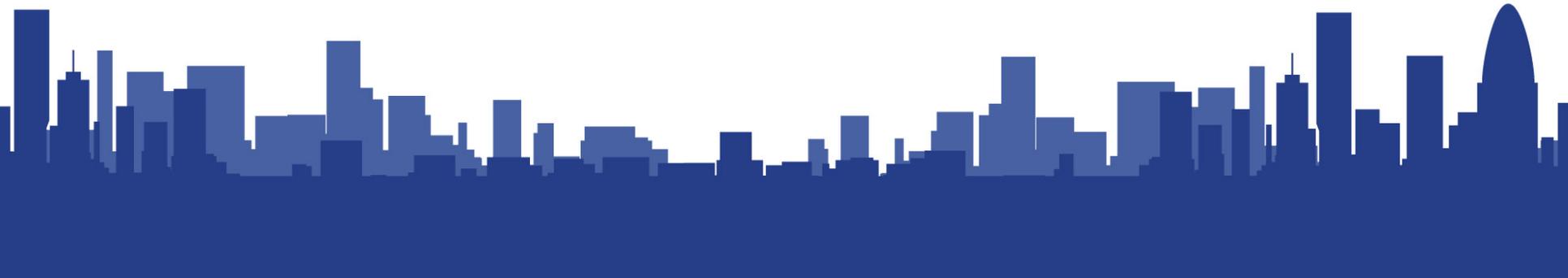
May 30, 2013
10:15 – 11:45 AM MST

- ▶ Welcome, Introductions, and Overview
 - Andrew Schulte, ICF International
- ▶ Setting the Context: The Importance of Data Access for Building Owners
 - Marla Thalheimer, Liberty Property Trust
- ▶ Utility Data Access Programs: A National Overview
 - Andrea Krukowski, Institute for Market Transformation
- ▶ Putting Data Access Into Practice: A Philadelphia Case Study
 - Laurie Actman, Energy Efficient Buildings Hub
- ▶ Panel Discussion

- ▶ Better Buildings Alliance
 - Market Solutions Team
- ▶ Better Buildings Challenge
 - Implementation Model (forthcoming)
- ▶ State & Local Energy Efficiency Action Network
 - A Utility Regulators' Guide to Data Access for Commercial Building Energy Performance Benchmarking
- ▶ Energy Efficient Buildings Hub/IMT
 - Utilities' Guide to Data Access for Building Benchmarking
- ▶ Industry/NGO Collaborations
 - Data Access and Transparency Alliance (DATA)
- ▶ Industry/Government Collaborations
 - Green Button



Marla Thalheimer
Liberty Property Trust



- ▶ Large publicly-traded office and industrial REIT
- ▶ 20 regional markets
- ▶ 79 million square feet of office and industrial properties
- ▶ A key corporate strategy to be a leader in sustainability and “High Performance” Buildings
- ▶ 60 LEED Projects Completed or Under Construction
 - ▶ 10.5+ million square feet
- ▶ 109 Energy Star Buildings Certified
 - ▶ 13+ million square feet
 - ▶ Average Portfolio Score 75
 - ▶ 21% Energy Savings



- Benchmark 100% of managed buildings
- Improved progress year over year
- Estimated over \$5M in savings



<u>Energy Goal Tracking - Same Store*</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Energy reduction over 2008 baseline	-0.5	-6.1	-9.8	-13.2	-20.4
Portfolio Average	55	59	63	69	74
Energy Star Certifications; current portfolio	6	11	50	66	89
<i>Energy Star certifications: including sold bldgs</i>	6	15	64	84	106

**This list represents the 113 buildings that we have tracked consistently over the entire time period.*



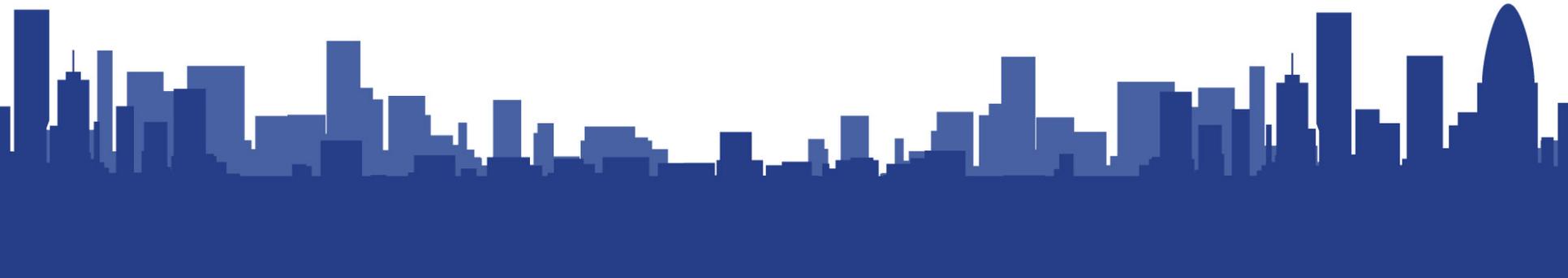
- ▶ Partnership program for tenant-controlled Buildings
- ▶ Provides value add for tenants
- ▶ Helps us better understand the efficiency of that part of the portfolio
- ▶ 65 Tenant Partners
 - Warehouse: 47 partners
 - 12 are ENERGY STAR certified
 - Single Tenant Office: 18 partners
 - 5 ENERGY STAR certified



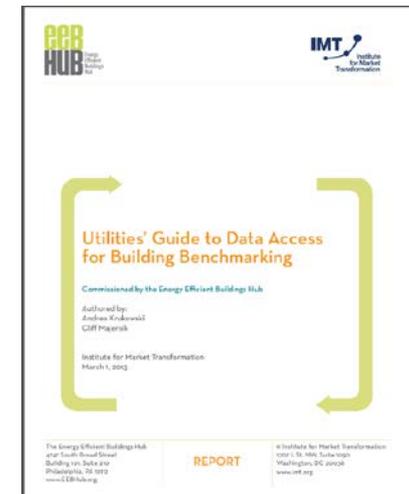
- ▶ Goal:
 - Electronic access to tenant utility accounts
 - Third party solution to gather data electronically into dashboard and upload into ESPM
- ▶ Successes:
 - Some utility companies allow us to create an online LPT account for all buildings
- ▶ Challenges:
 - Unable to get online access, currently entering data manually for 42 of the partners
 - Only way to access is through tenants online access account
 - Tenants hesitant to give us their log in (understandably)
 - Adding LPT as a user to tenant account to receive bill copies where online access not possible
 - Accounts have gone into our name and out of tenant name
 - Very inconsistent across country
 - Considering eliminating program from certain areas due to problems



Andrea Krukowski
Institute for Market Transformation



- ▶ National best practices center for design, adoption, and implementation of building energy performance policies in cities
- ▶ Policy advisor to state and local governments, federal agencies, the Administration, and industry groups
- ▶ One of founding members of Data Access and Transparency Alliance (DATA)



DATA | Data Access and Transparency Alliance



The Real Estate Roundtable



Current Utility Practices

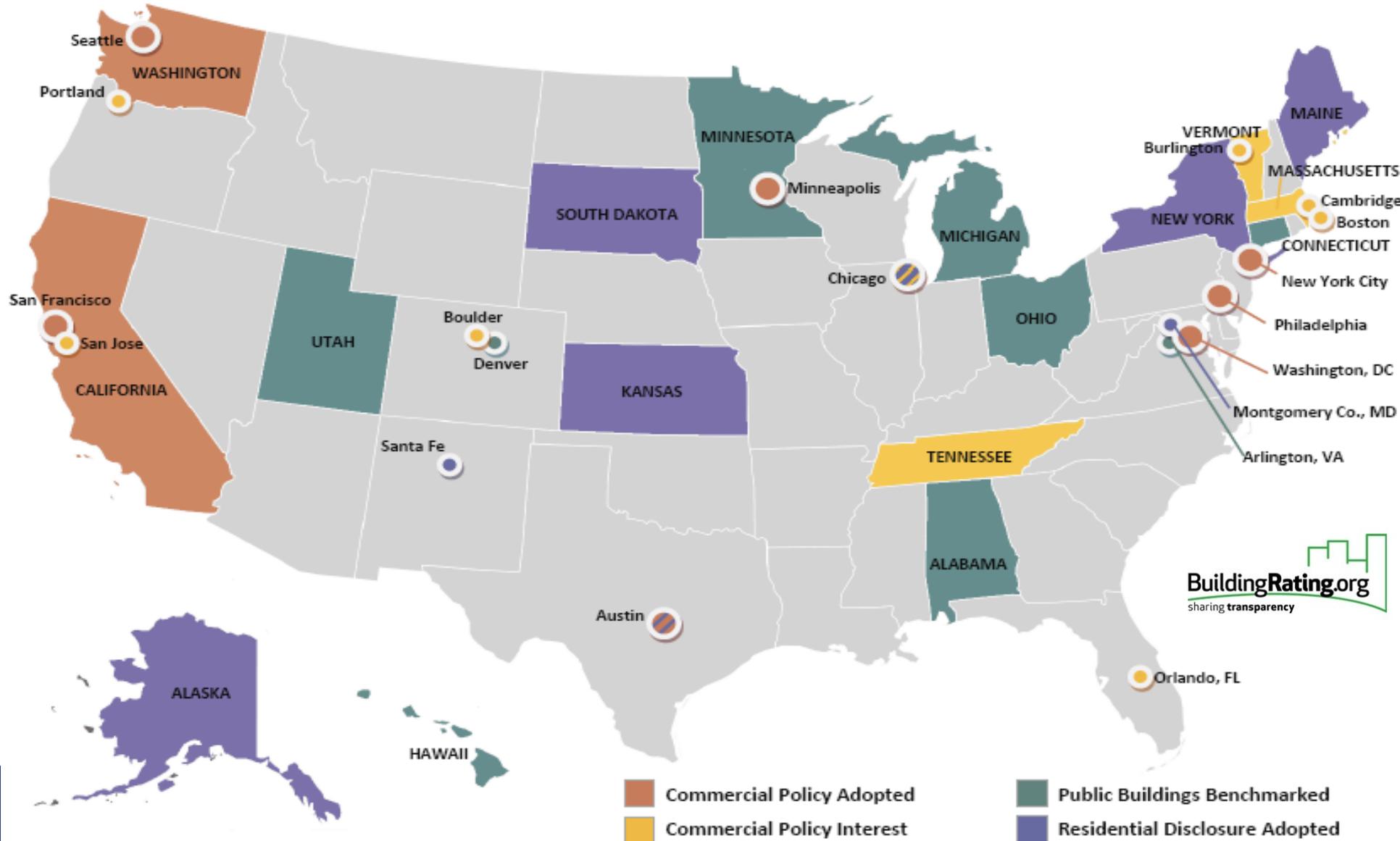
Utility Company	Aggregate Whole-building Data	Automated Upload to Portfolio Manager
Austin Energy (Texas)	✓	-
Avista (Washington)	✓	✓
California IOUs	-	✓
Commonwealth Edison (Illinois)	✓	✓
Consolidated Edison (New York)	✓	-
PECO (Pennsylvania)	-	✓
Pepco (District of Columbia)	✓	-
Puget Sound Energy (Washington)	✓	✓
Seattle City Light (Washington)	✓	✓



Utility Data Access Programs



U.S. Building Energy Benchmarking Policies

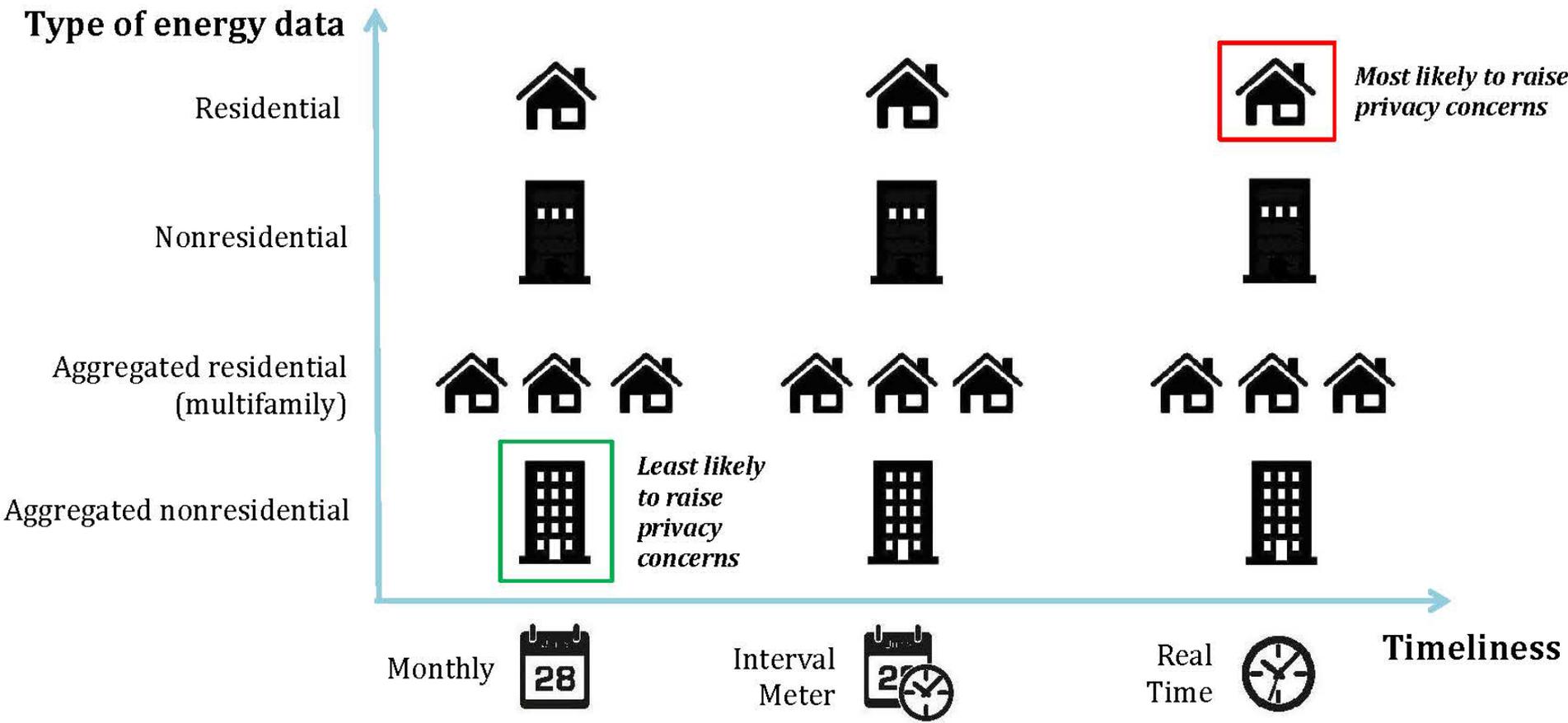


Utility Data Access Programs



- ▶ Privacy Concerns
- ▶ Cost Recovery
- ▶ Technical Infrastructure

Utility Meter Data Sensitivity



Utility Company / PUC

Account Aggregation Threshold

Number of accounts / maximum percentage of total energy usage per annum one account can contribute

Austin Energy (Texas)	4/80
Avista (Washington)	2
California IOUs	TBD
Colorado PUC	15/15
Commonwealth Edison (Illinois)	4
Consolidated Edison (New York)	2
Minnesota PUC	TBD
Pepco (District of Columbia)	5
Puget Sound Energy (Washington)	5
Seattle City Light (Washington)	2

- ▶ A gateway for other energy efficiency programs
- ▶ A tool to target and maximize savings
- ▶ Data to analyze energy efficiency programs and validate savings
- ▶ Improves customer service

Of participants who benchmarked:

- ▶ **62%** took energy management actions
- ▶ **84%** planned or implemented energy efficiency improvements
- ▶ **81%** link improvements to utility efficiency programs



Source: NMR Group, Inc. & Optimal Energy, Inc..

- ▶ Utilities don't always know what a building is
- ▶ Existing systems may not have the capability of pulling data and storing values
- ▶ Billing cycles



- ▶ DATA formed in 2011
- ▶ July 2011: NARUC approves resolution calling on regulators to provide better data access to commercial owners
- ▶ SEE Action Regulator's Guide to Data Access for Benchmarking
- ▶ DOE Voluntary Code of Conduct
- ▶ Minnesota, California PUCs currently considering issue of data aggregation
- ▶ More utilities funding efforts through energy efficiency portfolios



Laurie Actman

Energy Efficient Buildings Hub



- ▶ Third of 5 Energy Innovation Hubs
- ▶ Established in 2011 after a national competition
- ▶ Led by Penn State, 25 partners, public private-partnership
- ▶ Based at the Navy Yard in Philadelphia
- ▶ Mission to reduce energy use by 20% by 2020 in the region's commercial and multifamily building sector
 - Multi-disciplinary, broad mission focused on adoption of average sized retrofits with an integrated approach

Benchmarking and Disclosure in Philadelphia

- ▶ Requires commercial building owners of 50,000 square feet or over to annually disclose their building energy and water use using EPA's Portfolio Manager tool
- ▶ Owner also required to report building characteristics and usage
- ▶ Sellers required to provide a statement of building energy performance to buyers and lessees
- ▶ Electronic data transfer from a utility or third party provider is allowed
- ▶ Initial deadline for compliance is October 31, 2013, but ordinance effective immediately



- ▶ Early engagement with our utilities and utility regulators was very important
 - Other cities that didn't engage utilities early in the process had only moderate compliance rates
 - PUC staff needed to learn the basics
- ▶ EEB Hub served as technical advisor and led utility engagement with regard to data access
 - Brought key stakeholders together to explore data access issue—Mayor, Real Estate CEOs, PUC, Utilities
 - Launched Regional Data Access Working Group
- ▶ Process endorsed by Chair of the PUC

EEB Hub convened three meetings for utilities and content experts:

- ▶ July 2012:
 - Hub conducted research and building owner survey per PECO's request
 - Presentations from IMT, DOE, White House CEQ, EPA, PUC, PECO, City, BOMA

- ▶ October 2012:
 - Seattle, NYC, and Chicago utilities presented
 - PECO announced that it would pursue automated exchange of data with Portfolio Manager via web services, and would include in rate case filing

- ▶ February 2013
 - Presented Best Practices report with IMT
 - Resource for other utilities in the region and country

- ▶ PECO developing web services to exchange data with customer Portfolio Manager accounts
- ▶ EEB Hub recognized convener of utility-related issues in the region
- ▶ PUC now relying on the Hub for education, strategy and engagement related to building energy efficiency
- ▶ Lessons learned can scale nationally

- ▶ Key partner with MOS, DVGBC, EPA, PECO, BOMA
- ▶ Online portal
- ▶ Data collection strategy and management
- ▶ Building owner and tenant education and tools
- ▶ Policy best practices and advice (regional interest)
- ▶ Navy Yard—test bed and lead by example
- ▶ New ventures
- ▶ National convener and partner
- ▶ Leveraging interest to drive retrofit activity

Panel Discussion

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