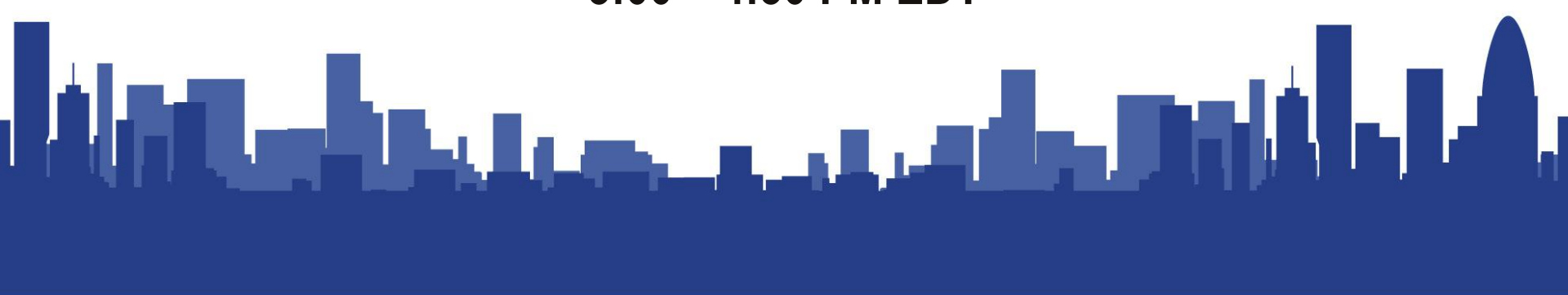




Commercial Building Energy Data Access: A Success Story

August 6, 2013
3:00 – 4:30 PM EDT



Agenda

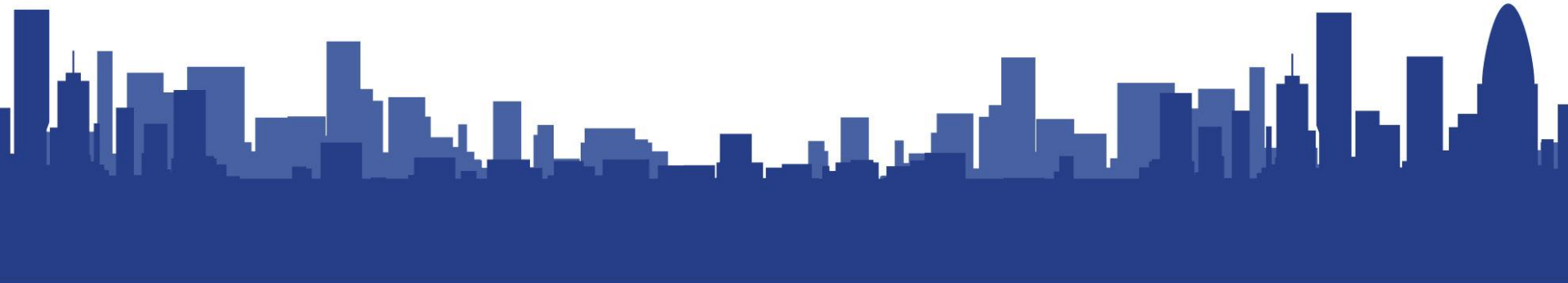
- ▶ Welcome, Introductions, and Overview
- ▶ The SEE Action Utility Regulators' Guide to Data Access for Commercial Building Energy Performance Benchmarking
- ▶ Energy Data Access: Solutions Across the Country
- ▶ The Philadelphia Story
- ▶ Additional Resources
- ▶ Question & Answer Session

Today's Presenters

Name	Role	Organization
Jim Gallagher	Co-Chair	SEE Action Existing Commercial Buildings Working Group
	Executive Director	New York State Smart Grid Consortium
Tim Wagner	Deputy Director	Energy Efficient Buildings Hub
Marla Thalheimer	Director of Sustainability	Liberty Property Trust
Tom Bonner	Manager, Issues Management & Public Policy	PECO
Darren Gill	Deputy Director, Bureau of Technical Services	PA Public Utilities Commission

The SEE Action Utility Regulators' Guide to Data Access for Commercial Building Energy Performance Benchmarking

Jim Gallagher
New York State Smart Grid Consortium



What is SEE Action?

A state and local effort facilitated by the federal government that helps states, utilities, and other local stakeholders take energy efficiency to scale and achieve all cost-effective energy efficiency by 2020.

For more information, visit: www.seeaction.energy.gov



SEE Action Leadership

- **Executive Group** of more than 30 stakeholders including state and local governments, associations, business leaders, non-governmental organizations, and others.
- **Eight Working Groups** help SEE Action achieve its goal of capturing all cost-effective energy efficiency by 2020.



A Regulator's Guide to Data Access for Benchmarking

- ▶ Explains the value of commercial building energy performance **benchmarking as a driver of energy and cost savings**;
- ▶ Identifies the **key barriers and challenges related to energy data access** for commercial customers seeking to benchmark their properties;
- ▶ Establishes **how regulators can take a more active role** in driving customer data access solutions; and
- ▶ Clarifies **key decision points and considerations** for regulators when reviewing utility data access solutions.

The Need for Energy Data to Help Building Owners and Operators to Benchmark

Building owners want to benchmark their buildings for the following reasons:

- ▶ Helps building owners manage energy costs and building performance for comfort, efficiency, maintenance
- ▶ More and more policymakers adopting requirements for building energy performance benchmarking
- ▶ Utilities and other building stakeholders have adopted benchmarking programs and challenges

In order to benchmark buildings, customers need whole-building energy data in a usable format, but...

...customers cannot consistently get access to this data because utilities are confronted with IT, legal, and capacity barriers to delivering that data

Current Barriers to Accessing Utility Data

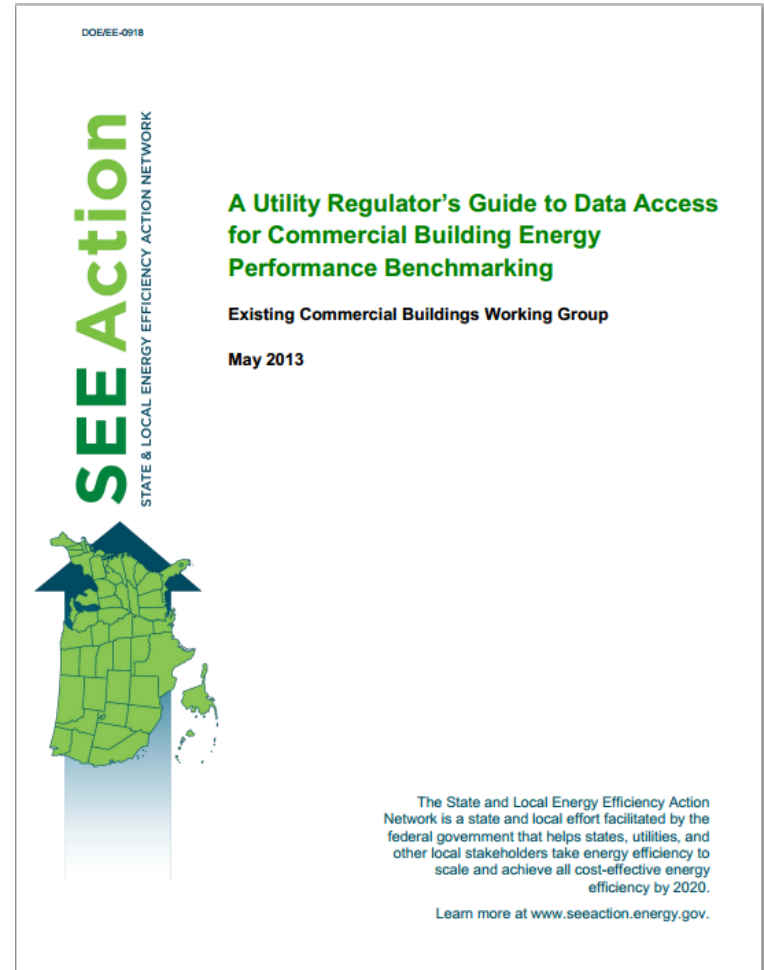
- ▶ Not all utilities are well-equipped to respond to data requests
- ▶ Utility data collection and reporting systems do not always “talk” to each other
- ▶ Multiple meters may cover one building and/or one meter may cover multiple properties
- ▶ Multi-tenant buildings can provide distinct challenges re: consent for tenant data release
- ▶ Differing levels of concern regarding the sensitivity of aggregated, whole-building data
- ▶ Lack of clarity on customer privacy and disclosure rules

Opportunities for Regulators to Take an Active Role

- ▶ Acknowledge capacity, legal and systematic issues associated with supplying utility data
 - Understand the mechanisms available to supply utility data
- ▶ Encourage utilities to be consistent and proactive in developing solutions
 - E.g., coordination among multiple utilities serving a jurisdiction; ongoing rather than one-time solutions; planning and budgeting for data access solutions as part of IT projects
- ▶ Clarify privacy and disclosure rules
 - E.g., develop guidance on the threshold for aggregation of data without prior tenant authorization; streamline tenant consent processes
- ▶ Provide cost recovery mechanisms as needed for costs related to data access solutions

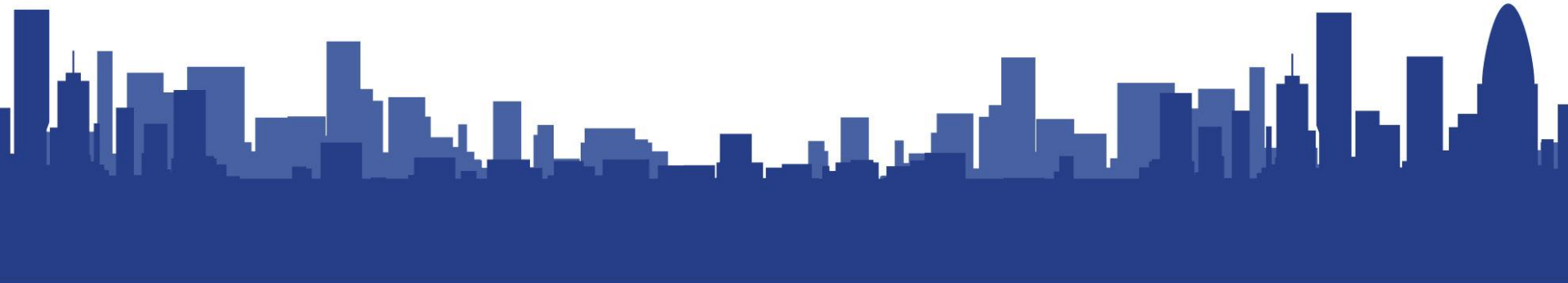
Available Now on the SEE Action Website

www1.eere.energy.gov/seeaction/pdfs/commercial_buildings_data_access_guide.pdf

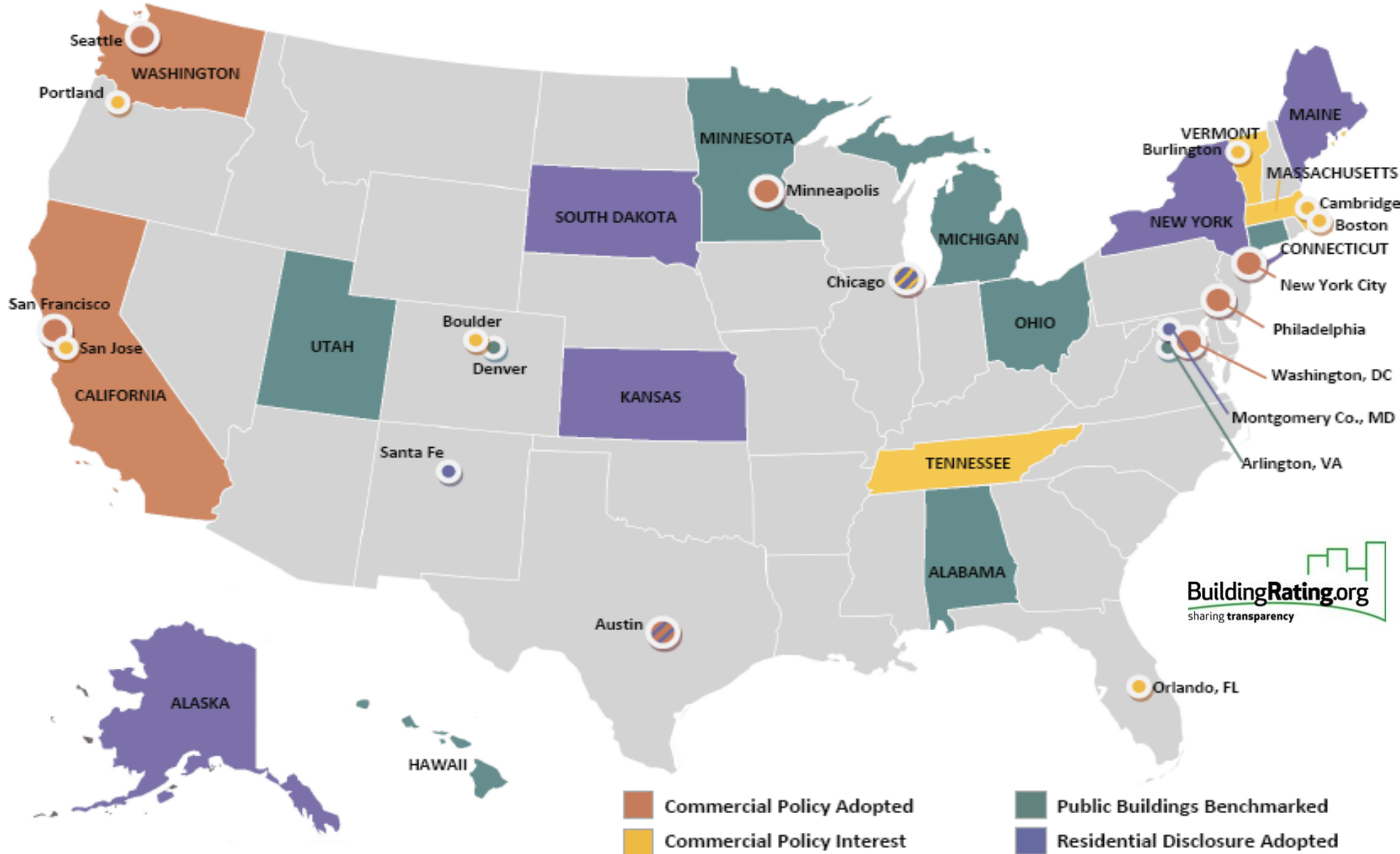


Energy Data Access: Solutions Across the Country

Tim Wagner
Energy Efficient Buildings Hub



U.S. Building Energy Benchmarking Policies



Utility Data Access Programs



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)	✓	✓

Benefits for Utilities

- ▶ 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

Report for the California Public Utility Commission (April 2012)

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..

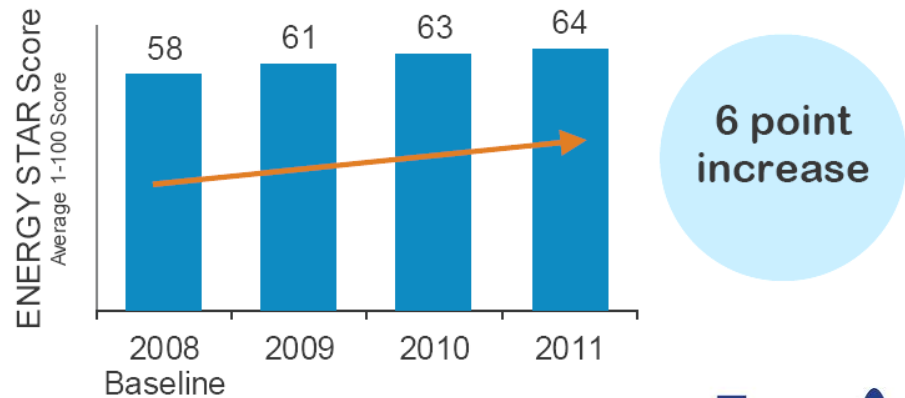
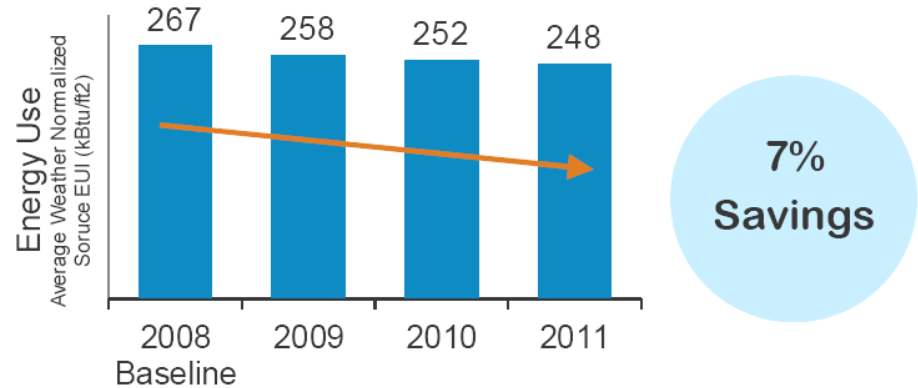
ENERGY STAR® Data Trends Report (October 2012)

Consistent benchmarking in buildings results in energy savings and improved performance

Source:

http://energystar.gov/buildings/sites/default/uploads/tools/DataTrends_Savings_20121002.pdf?a71c-0388

Energy Savings in Portfolio Manager



Momentum is Building...

- ▶ 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

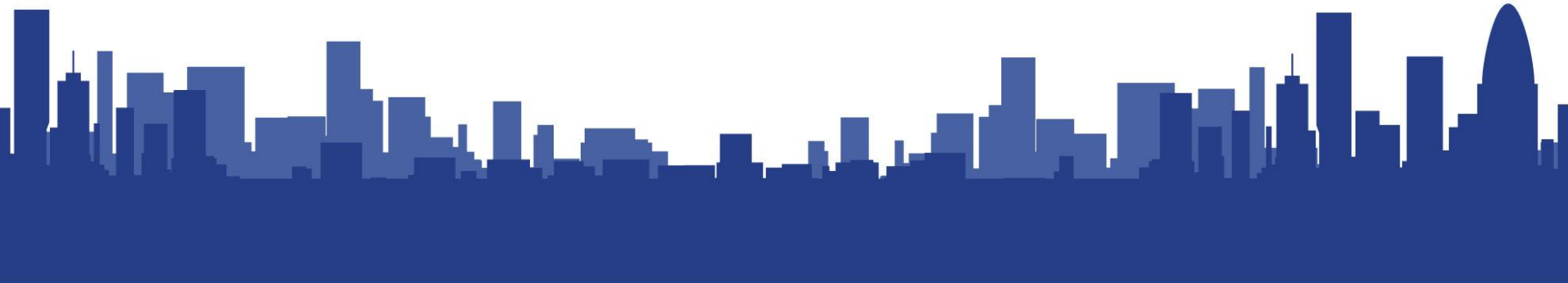
“The Philadelphia Story”

Tim Wagner, Energy Efficient Buildings Hub

Marla Thalheimer, Liberty Property Trust

Tom Bonner, PECO

Darren Gill, Pennsylvania Public Utilities Commission



Setting the Context:

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



The Building Owner's Need for Data Access: Liberty Property Trust

- ▶ Large publicly-traded office and industrial REIT
- ▶ 80 million SF in 21 markets in US and UK
- ▶ Key corporate strategy to be a leader in sustainability and “high performance” buildings
- ▶ 61 LEED projects completed or under construction
 - ▶ 12 million square feet
- ▶ 110 ENERGY STAR certified buildings
 - ▶ 15+ million square feet
 - ▶ Average Portfolio Score 75
 - ▶ 21% Energy Savings
- ▶ Started benchmarking in 2008
 - ▶ Average Portfolio Score 55
 - ▶ 6 ENERGY STAR certified buildings

LIBERTY
PROPERTY TRUST

Liberty Energy Efficiency Partnership: Overview

- ▶ Managed portfolio vs. tenant controlled portfolio
- ▶ Developed Partnership program
- ▶ 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



Liberty Energy Efficiency Partnership: Data Access Challenges

- ▶ Goal:
 - Ongoing electronic access to tenant utility accounts
 - Third party solution to gather data electronically into dashboard and upload into the ENERGY STAR Portfolio Manager tool
- ▶ 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
 - Adding LPT as a user to tenant account to receive bill copies where online access not possible
 - Very inconsistent across country
- ▶ Philadelphia Story
 - Solution for both mandatory benchmarking and meeting our corporate energy goals

Providing Data Access Solutions to Commercial Customers: The Role of the Utility

- ▶ PECO engaged with City policymakers to ensure adequate time to evaluate and integrate an Energy Usage Data Tool for customers
- ▶ PECO adopted the Green Button standard and launched efforts to enhance web-based data tools
- ▶ PECO included funding for its Energy Usage Data Tool in its November 2012 filing
- ▶ PECO will not receive credits toward energy savings directly through this tool – should encourage customers to take advantage of other PECO programs
- ▶ PECO, City of Philadelphia ,and the EEB HUB coordinating on public communications and outreach
- ▶ The Energy Usage Data Tool will also be available to Commercial and Industrial customers throughout the service territory
- ▶ PECO anticipates the Energy Usage Data Tool will be available in Q3 2013, in advance of the City's mandatory reporting date

Balancing the Costs and Benefits of Utility Efficiency Programs: The Role of the Regulator

▶ Benchmarking Initiative

- Act 129 requires the use of the Total Resource Cost (TRC) test to determine cost effectiveness of energy efficiency programs and portfolios
- PUC has approved use of residential behavioral programs which are similar to commercial benchmarking programs
- PUC needs research on how to value the energy efficiency reductions associated with commercial benchmarking programs

Coordinated Engagement Across Multiple Stakeholders: The Role of the Convener

- ▶ 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
- ▶ 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
- ▶ Process endorsed by Chair of the PUC

Key Milestones in the Engagement Process

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

Key Outcomes

- ▶ PECO developing web services to exchange data with customer Portfolio Manager accounts
- ▶ EEB Hub is now a 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

Additional Resources



Key Data Access Efforts Underway

- ▶ State & Local Energy Efficiency Action Network (SEE Action) [Utility Regulator's Guide to Data Access for Commercial Building Energy Performance Benchmarking](#)
- ▶ Regulatory Assistance Project (RAP) [Driving Building Efficiency with Aggregated Customer Data](#)
- ▶ Energy Efficient Buildings Hub / Institute for Market Transformation [Utilities' Guide to Data Access for Building Benchmarking](#)
- ▶ OpenEI [Utility Data Access Map](#)
- ▶ [Data Access and Transparency Alliance \(DATA\)](#)
- ▶ [Green Button](#)

Better Buildings Energy Data Accelerator

Utilities and **local governments** will partner with DOE to commit to providing whole-building data to commercial building owners interested in benchmarking.

▶ Accelerator Partners will:

- Demonstrate **low-cost, standardized approaches** for providing energy data for the purpose of whole building energy performance benchmarking.
- Develop best practice approaches for reliable and secure utility aggregation of energy data from multiple accounts to facilitate whole-building benchmarking while **protecting privacy** and
- Demonstrate new tools to **streamline the transfer** of utility bill data to benchmarking tools, including standard data formats for ENERGY STAR® Portfolio Manager.

Question & Answer Session



September Better Buildings Webinar

Tying Energy Efficiency to Compensation and Performance Reviews

Tuesday, September 3, 3:00-4:00 PM EST

Walt Brockway (Alcoa)

Bob Holesko (HEI Hotels)

Nick Stolatis (TIAA-CREF Financial Services)

Employees have long enjoyed bonuses, stellar annual reviews, and even free vacations for meeting sales targets or other corporate goals. Why not extend the practice to sustainability? Join representatives from [Better Buildings Challenge](#) Partners Alcoa, HEI Hotels, and TIAA-CREF to learn about initiatives their organizations have in place to reward employees for meeting energy efficiency goals.

Additional Questions? Feel Free to Contact Us

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