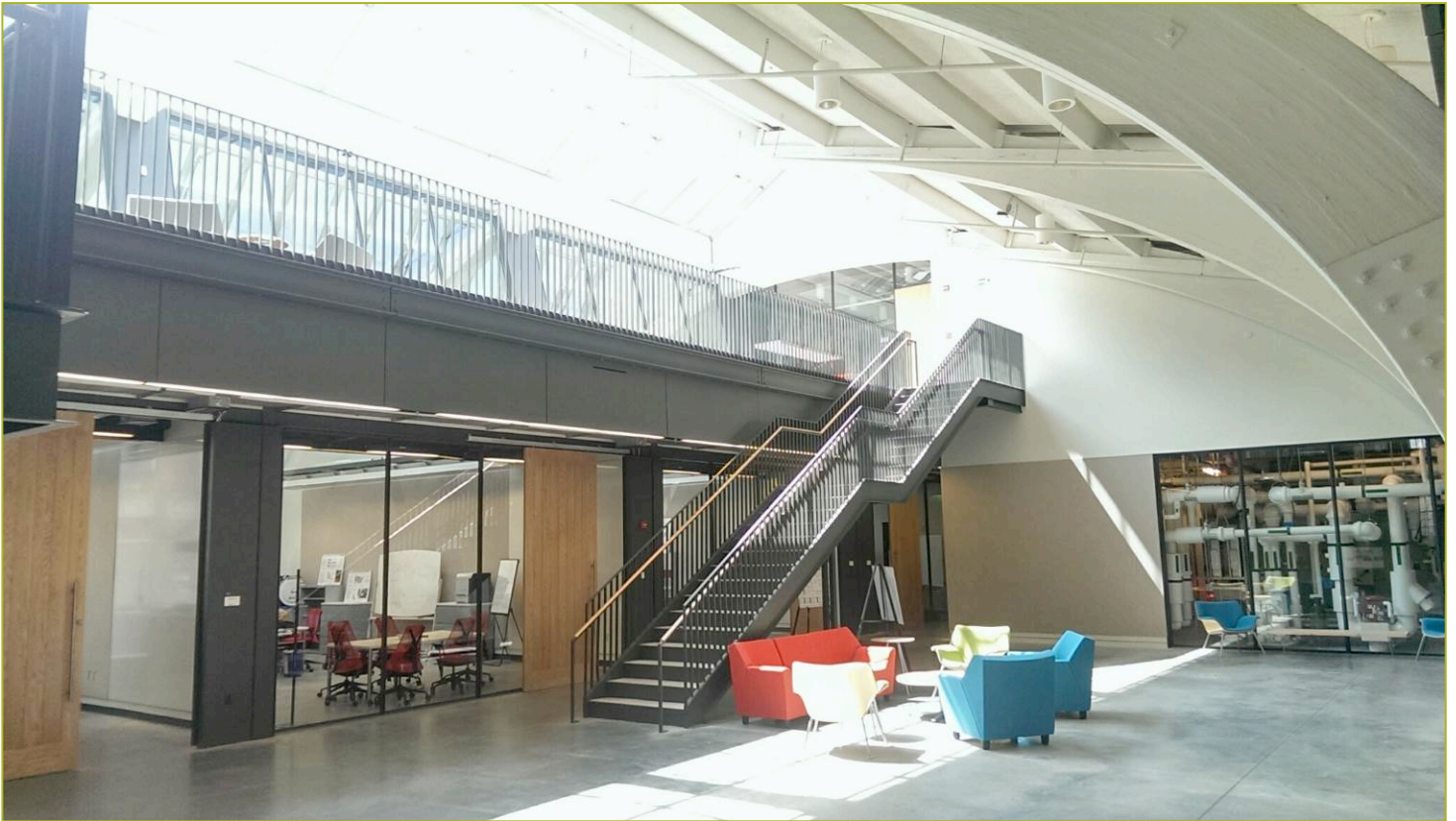# REPORT

**Title: EDA Stakeholder Engagement Continued Effort**

**Report Date: April 28, 2016**

**Report Author: Erica Cochran, Flore Marion**

CBEI REPORT

## Report Abstract

Energy consumption data may be available at a fine scale at the utility level but not accessible by a building owner. CBEI was instrumental in convening the City of Philadelphia, PECO, and building owners to identify the value of a benchmarking ordinance to each stakeholder. This approach has since been replicated in multiple cities around the country to bring stakeholders together to improve access to energy consumption data. This enables a deeper understanding of the performance of buildings in a region, which allows owners to better prioritize retrofits and cities and utilities to better design programs that incentivize energy efficiency. CBEI applied the successful strategies developed for the Philadelphia region to support 21 cities and their local utilities develop similar data accessibility programs through DOE's Energy Data Accelerator.

The Energy Data Accelerator (EDA) is a DOE effort to demonstrate low-cost, standardized approaches for accessing, providing, organizing, and utilizing energy data for the purpose of whole building energy performance benchmarking. EDA supports 22 city utility pairs, which have committed to implementing a streamlined data access solution for at least 20% of its building stock by the end of the program.

Working in collaboration with NREL and ICF who handle the technical and policy aspect, CBEI is focused on the stakeholder engagement and communication strategy for the EDA. The responsibilities involve collecting feedback from the municipalities and utilities regarding their success and experiences with data aggregation and access strategies and assist the EDA with maintaining and executing a communication strategy. Over the course of BP5, CBEI has been documenting success stories for EDA, providing recommendations for increased market presence for the EDA program at conferences and in the external energy efficiency community and assisting the EDA program with the regional aspect of the exit strategy.

## Contact Information for lead researcher

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## Contributors

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# Project Milestones and Deliverables

The CBEI team worked with other members of the DOE team, to provide stakeholder engagement support to the partner municipalities and document their experiences and success with their data access effort. CBEI team created a program inception checklist, a series of instructional case studies, and established a set of cities that will continue to act as mentors to their peers looking to replicate their successes. CBEI team also proof-read and redesigned all the toolkit documents into the Better buildings format to be made available to the public.

Secondly, the team was instrumental in maintaining and executing a communication strategy. This includes documenting success stories for EDA partners that are already providing whole-building data access and providing recommendations for increased market presence for the EDA program at conferences and in the external energy efficiency community. Finally, CBEI 6.3 team provided a regional exit strategy to further disseminate the EDA work with new governments interested in Data access for benchmarking. They were introduced the various toolkit documents and the team worked closely with the stakeholders to identify the strategies that would apply locally and establish a game plan.

**Project milestones**:

| M/GN | Description | Verification Process | Month |
|---|---|---|---|
| GN6.3.1 | Propose a set of case studies in 2-4 EDA cities where whole-building data access is already being provided and develop a set of questions or methods for assessing their experience with whole-building data access. | DOE selects 2 case studies and approves the methodology of assessment as relevant, appropriate, and not overly burdensome. | ✓ 2 |
| M6.3.a | Plan for developing the regional exit strategy. | DOE approval of the interactions and corresponding schedule required to develop the regional exit strategy | ✓ 3 |
| GN6.3.2 | Propose a regional component to the EDA exit strategy which describes how at a regional scale to disseminate best practices and solutions from the EDA program, and provide documentation from contacts with 3 new cities or municipalities. | DOE deems the regional component to the exit strategy to be appropriate, well thought out and coordinated with the broader EDA exit strategy. | ✓ 6 |
| M6.3.b | 2 draft case studies documenting building owner assessment of whole-building data access and success stories | Provide 2 draft case studies for DOE review and final case studies for publication | ✓ 8 |
| M6.3.c | 4 final case studies documenting building owner assessment of whole-building data access and success stories. | Provide final case studies for to DOE review and final case studies for publication. | ✓ 9 |
| M6.3.d | Complete the first regional session | Complete the first regional session | ✓ 10 |

| M6.3.e | Complete the second regional session | Complete the second regional session | ✓ |
| --- | --- | --- | --- |
| | | | 11 |
| M6.3.f | Complete reports and and follow up with the regional cities | Provide report to DOE of on the regional sessions including goal of the meeting, list of participants, accomplishments, and next steps. | ✓ |
| | | | 12 |

**Final BP5 Deliverables**:

D6.3.1: (a) Documentation and case studies of building owner experiences with whole-building data access findings to share with EDA team at NREL, ICF, and DOE. (b) Successful external communications for the EDA that ensure that partners see it as a valuable program and other utilities/cities understand the purpose of the EDA, what resources it has produced, and how to access them.
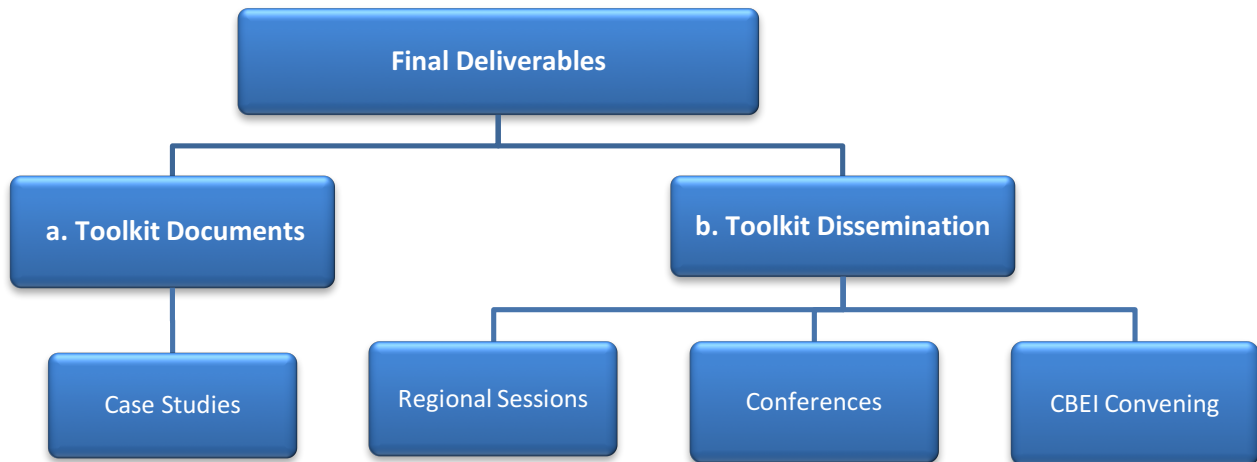


a.   **Toolkit Documents:**

As a part of the final toolkit, CBEI developed case studies based on the stakeholder engagement success stories. Through an evaluation of all the EDA Partner Cities, 6 partners, namely – Philadelphia, Salt Lake City, Washington D.C., Seattle, Boston & Cambridge were selected as potential candidates. EDA point of contacts from these cities were interviewed by CBEI in collaboration with ICF for formulating these case studies.
The interview dates are as follows:

* Seattle - 20 August 2015
* Boston and Cambridge - 20 August 2015
* Washington DC - 3 September 2015
* Salt Lake City - 10 September 2015

Post the interviews, the team put together drafts and is working closely with the EDA team to develop a comprehensive document for the toolkit. The key findings for each city are summarized below.

### *Washington DC:*

Key Driver:  The discussions about data access stemmed out of larger conversations about the District's environmental goals. The stakeholder engagement process for data access was a direct reaction to the push back received on the initial benchmarking ordinance draft.

Key Stakeholders: Pepco, D.C. Sustainable Energy Utility (DCSEU), Apartments and Office Buildings Association of metropolitan DC (AOBA) and their BOMA local association/chapter, IMT, D.C. Department of General Services, DC Department of Energy & Environment (DOEE), Some property groups had staff that were strong advocates for data access that came ahead as leaders; notably the Tower Company, DTZ and Vornado Realty. The city acted as the convener.

Key Concerns: Data access was a major issue; the first draft required the property owners to collect the data from their tenants. It became clear that they needed data access in their law for compliance by multi tenant properties. Some of the driving concerns were the aggregation threshold set by Pepco and the timeline provided by Washington Gas to launch a portal for auto-upload.

Engagement Forum:
1. The city organized convening and public meetings, which were announced in the DC Register to ensure participation from all interested parties.
2. The city held side meetings to address individual concerns that came up in public meetings.
3. The city had individual conversations with the utilities to address the concerns and get them on board.
4. A final version public hearing was organized to discuss the outcome with all the involved stakeholders.
5. The benchmarking Help center, initially managed by DCSEU , was a key element to engage with stakeholders, now it is taken over by the DOEE.

Key Tactics: The district amended Clean Affordable Energy Act to implement data access as requirement from the utilities in order to improve the overall compliance.

Method of Engagement: They followed a more typical pathway for stakeholder engagement and used the regulation to do most of it. Since the law had already been passed, they just amended the law.

Tools used: Portfolio Manager is used only for data upload. Pepco also offers Resource Advisor, an additional energy management tool to their customers.

### *Seattle:*

Key Driver:  The key driver for data access was that 'data access was a part of the State of Washington's benchmarking ordinance; it states that all qualifying utilities shall maintain records of energy consumption data of all non-residential buildings. This data must be maintained for at least the most recent twelve months.

Key Stakeholders: In Seattle, Utilities were involved from the onset, making them the key stakeholders. The 3 utilities involved are: Seattle City Lights, Puget Sound Energy, Enwave (Seattle Steam). Other important stakeholders were Leslie Cook from EPA and NWEEC. The city acted as the convener.

Key Concerns: Different utilities involved had different processes, which was confusing for the users. All the utilities had different thresholds set for aggregation and some provided the services for free while others charged their customers for it.

Engagement Forum: There were series of community discussions about implementation requirement. As the utilities were on board, the city did not follow a formal stakeholder engagement process, it was more organic and involved mostly phone calls to resolve individual issues as they came up.

Key Tactics: Utilities adopted a streamlined process to ensure that the users do not have to fill out multiple forms. The PUCs were not involved as the state legislation was in effect.

Method of Engagement: The City of Seattle worked with PSE and City Light to write a comprehensive "How to Guide" instructions and checklists that include all steps to obtain utility data and comply with the ordinance.

Tools used: Portfolio Manager is used for reporting and MyData Energy Usage (PSE customers).

## *Boston & Cambridge:*

Boston & Cambridge were jointly interviewed because they partnered with the same utility company and collaborated with each other for implementation of their data access strategy.

Key Driver:  Need for data access arose out of conversations about passing a law for benchmarking. The city worked with utilities so that they could put the concerns of data access to rest before enactment of the benchmarking ordinance.

Key Stakeholders for both the cities:

In both case, the cities acted as the convener.

1. Eversource, their utility company was the biggest stakeholder.
2. Leslie Cook from EPA Energy Star,
3. Northeast Energy Efficiency Partnership (NEEP)
4. A Better City (ABC), a Boston based non-profit working group
5. Boston Property, a group with a large portfolio of buildings across Boston & Cambridge.

Additional stakeholders for Cambridge:

National Grid, MIT & Harvard (these universities own a significant number of buildings in the city), Homeowner's Rehab Inc. (HRI, a non-profit group)

Key Concerns: Eversource had some inhibitions about demarcating the building boundary, privacy and aggregation, but the city worked with the utility partners to address all their concerns in the second draft of the ordinance. There were notable differences in preference for aggregation thresholds among utility and other key stakeholders. There were some other unique concerns in Cambridge such as need for additional ways to interpret data and compatibility between the systems in multi-family buildings. They found an effective way to overcome this to ensure that both the utility and the customer find and use the same "lingo" to define a building, billing addresses, meter addresses etc.

Engagement Forum: The stakeholder engagement process involved one-on-one meetings with the utility and other meetings with stakeholders as and when needed. The stakeholders were not directly involved in conversations with the utility.

Key Tactics: The utility had a representative that worked closely with the city. The city of Boston also appointed an advisory committee that worked on both the ordinance and need for whole building data access. Boston's advisory committee included representatives from the commercial, real estate, university & healthcare industry.

Method of Engagement: A Memorandum of Understanding was signed between the City of Boston and Cambridge for simplified transfer of knowledge and faster implementation.

Tools used: Portfolio Manager is used in both cities for reporting. There is a common template for tenant authorization forms adopted by National Grid and Eversource.

## *Salt Lake City:*

Key Driver: Governor's energy efficiency plan and Conservation Plan and the CEP Project Skyline. Data access and automation was already being discussed for state level activities. *Growing interest among the building owners to voluntarily benchmark their properties further justified the need.*

Key Stakeholders:

Utah Clean Energy acted as the convener for the city. The main stakeholders were:

1. BOMA Utah Chapter
2. Utility Companies: Rocky Mountain Power (RMP) and Questar
3. School District
4. Healthcare Group

Key Concerns:

1. Respecting the customers' privacy, they decided to settle on an aggregation threshold of 5 or more tenants.
2. Making the process as easy as possible for the customer: creating a one-stop shop.
3. Cost was an important issue for Questar.

Engagement Forum:

1. The stakeholder engagement efforts involved first having a one-on-one meeting with each stakeholder, followed by a formal workshop for project skyline, where they gave RMP an opportunity to talk about what they were doing and discuss their involvement in this effort.
2. The city also facilitated meetings between RMP & BOMA folks.
3. The city participated in the quarterly DSM meeting.
4. Lastly, they had a meeting at the RMP headquarters with representatives from each stakeholder group. The stakeholders, in essence, acted like an advisory group.
5. A workshop to educate stakeholders was hosted on February 24th 2015, which was very popular.

Key Tactics: The city and utility firmly believed that data access was an issue for them alone to figure out. Unlike other locations, they did not want to involve any other public service commissions in the process. SLC had NO involvement with their PUC.

Enabling data access helped the utility companies provide a new service to their customers, adding strategic value to the utility in some way.

Method of Engagement: Both the city and the third party convener leveraged their existing relationships with other non-profits, the private sector and other levels of government.

They also reached out to organizations and groups who had previously expressed interest in need for data access.

Tools used: Portfolio Manager is used for reporting the aggregated energy use.

### b. Toolkit Dissemination:

A 3-prongged approach was used to disseminate the EDA toolkit during and post completion of the project. During the course of the project, the team participated and presented at various conferences to disseminate the EDA work. After the program ended, CBEI team identified potential governments that could benefit from the work. The team collaborated with them through regional sessions to assist them with the stakeholder engagement process. Additionally, CBEI also hosted a regional session at its Navy Yard headquarters in Philadelphia to

### Regional Sessions:

CBEI 6.3 team identified and collaborated with next generation of governments to ensure that they can benefit from direct transfer of EDA knowledge. In order to identify the potential candidates, the CBEI 6.3 Team reached out to the energy efficiency leaders in the tri-state area. Based on their input, Montgomery County government, city of Pittsburgh and Sustainable Jersey were the best fit. We shared our resources with all of them, and collaborated with Sustainable Jersey and City of Pittsburgh to further assist them through the process.

#### 1. Sustainable Jersey (Contact: Randall Solomon)

CBEI team reached out to Randall Solomon, the representative from Sustainable Jersey, a non-profit organization that spearheads multiple sustainability and energy efficiency initiatives in the state through PPP partnerships between various municipalities in the state, energy groups and colleges. The team had a meeting with the representative to assess their needs and followed up by sharing publicly available EDA toolkit documents and resources. Following are our findings and results from this process.

- State-wide implementation is not an option as New Jersey, as it is made up of lots of small jurisdictions, there are 8 major natural gas and electric utilities and lots of local ones.

- As Sustainable Jersey has strong relations with the various stakeholders, it can leverage its existing relationships and work on behalf of the local municipalities as a local third party convener. They are looking at support to do trainings and workshops and identifying ways to incentivize the process based on the BBEDA findings.

- They already have 30 task forces in place – they provide education and assistance, and can benefit from prescriptive details on the best practices and how to implement them.

- They discussed a need for more documents to make the case to the building owners and address their concerns. CBEI 6.3 team shared the BBEDA toolkit documents with Sustainable Jersey post the official public release, as they stand to benefit from the best practices.

- They would like to co-host a webinar with the CBEI 6.3 team to introduce the various stakeholders to the importance of benchmarking and data access and its benefits as a part of their launch effort. The CBEI team is following up with them to get updates on their progress.

## 2. *City of Pittsburgh (Contact: Aftyn Giles)*

The city of Pittsburgh is working towards getting an ordinance passed on mandatory benchmarking, but is facing a lot of resistance from the utilities. The POC at the Mayor's office believes they could benefit from the learning from EDA. CBEI 6.3 team leveraged their existing relationship with the city of Pittsburgh to provide information and support for data access through various stages of development of their benchmarking ordinance. CBEI has attended 3 of their preliminary meetings to discuss what stakeholder engagement strategy to adopt. The team provided stakeholder engagement checklist and the toolkit documents to their sustainability coordinator.

The latest meeting with the city was held on March 23rd 2016, at the City Council building with the sustainability coordinator, Aftyn Giles and the AmeriCorps VISTA fellows, Emily Costello. During this meeting the CBEI team shared supporting documents to ensure that the city had access to the entire BBEDA toolkit. The City of Pittsburgh followed the example of several BBEDA partners including:

- Phasing the implementation starting by disclosure of public buildings energy use
- Developing a dedicated helpdesk that would address more complex issues while the generic city helpdesk will handle basic questions o Including other utilities than electricity in the ordinance (Water and Gas)
- The ordinance will include the word "transparency" and not "disclosure"
- The city found the checklist, case studies and other toolkit documents useful in developing their local strategy

## Conferences:

CBEI 6.3 team presented the findings from EDA at various national and regional conferences throughout the course of the program. Following is the list of conferences and convening CBEI team participated in during BP5.

| 2015 BOMA Every Building Conference & Expo | June 1-3, 2016 | Los Angeles, CA | Presented |
| --- | --- | --- | --- |
| 2015 Behavior, Energy and Climate Change conference (BECC) | Oct 19-20, 2015 | Sacramento, CA | Presented |
| KEEA (Keystone Energy Efficiency Alliance) 2015: Turning Points in Energy Efficiency | Oct 6, 2015 | Harrisburg, PA | Participated |
| EUEC 2016 | Feb 3-5,2016 | San Diego, CA | Presented |
| 2016 CMU Energy Week | Mar 14-18, 2016 | Pittsburgh, PA | Presented |
| CBEI 5 Year Celebration Event | Apr 14, 2016 | Philadelphia, PA | Presented |

| 2016 ACEEE Summer Studies | Aug 21-26 016 | Pacific Grove, CA | Accepted to present |
| --- | --- | --- | --- |

*CBEI Convening:*

CBEI hosted a convening at its Navy yard headquarters to publicly showcase the work done over past 5 years. The event saw attendance of building energy efficiency professionals from utility companies, city governments, industry and universities.

Erica Cochran led a panel discussion for portfolio solutions highlighting the key role of whole building aggregated data to achieve energy efficiency across a large portfolio of buildings. Additionally, CBEI 6.3 team designed a poster highlighting the key achievements of EDA, that was showcased during welcome reception.

# Conclusion:

 The team exceeded DOE requirement of 2 case studies, and drafted 5 of which 2 were published as a part of the final toolkit. The regional convening was successful as Pittsburgh learnt from DC's example and included all its utilities in the discussion from the conception. Pittsburgh has completed updating the draft benchmarking ordinance and will be presented to the council soon. Sustainable Jersey has initiated a dialogue among all stakeholders to highlight the need for data access.

These metrics demonstrate that CBEI 6.3 team worked closely based on the DOE requirements and successfully delivered the milestones.

Philadelphia, Credit: Photo by Pond5, photo/12274159

## Introduction

Better Buildings Energy Data Accelerator (BBEDA) partners PECO, an investor-owned electric and gas utility, and the City of Philadelphia worked with community stakeholders throughout 2012 and 2013 to design and implement a data access solution for multifamily and commercial buildings. Their efforts involved local organizations such as the Consortium for Building Energy Innovation (CBEI) and the Delaware Valley Green Building Council (DVGBC). As a result, PECO created a data access portal for its customers in 2013.
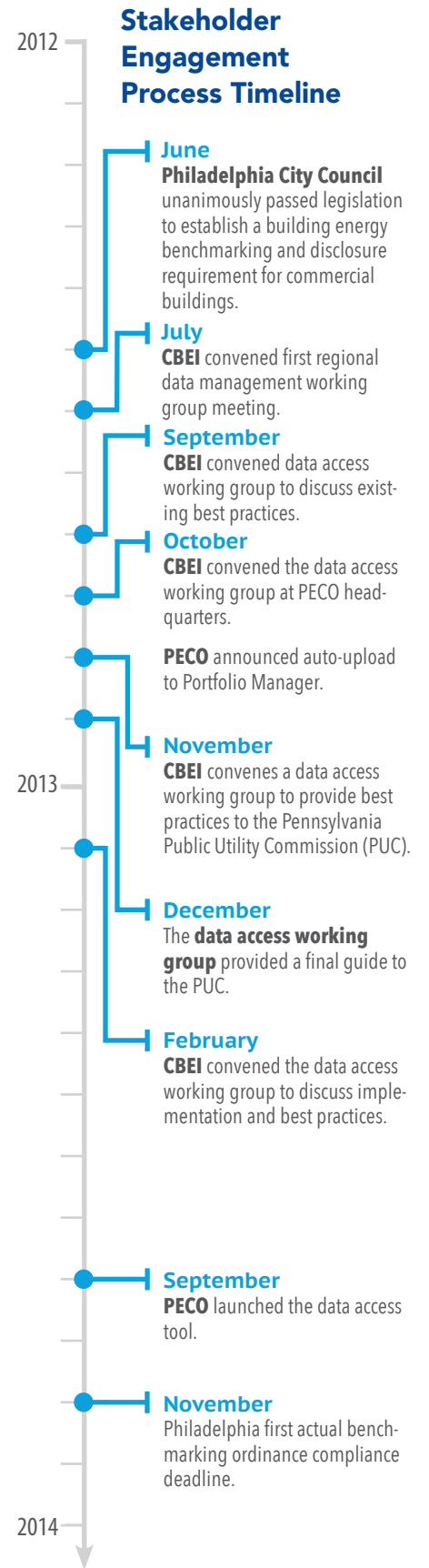
## Drivers for Energy Data Access

In June 2012, the City of Philadelphia adopted an energy benchmarking requirement for large commercial buildings within the city. Whole-building data access became a critical step to support building owners in their compliance with the new requirements.

"Gathering the right stakeholders to understand their data access needs created huge momentum to provide suitable data access solutions and strengthen collaborative work in Philadelphia."

— Martha Krebs
CBEI, 2015

Data access practices were not cited or required in the city's ordinance. Instead, the City of Philadelphia and the Pennsylvania Public Utility Commission (PUC) asked CBEI (formerly known as the EEBhub) to act as a convener and technical advisor to local utilities to recommend data access solutions. This resulted in the creation of a Regional Utility Data Access working group to discuss data access solutions at the local and regional scale. The working group was able to make progress more quickly than similar stakeholder processes in other cities, and PECO was able to provide a data access solution in September 2013.

## Stakeholder Engagement Process Timeline

**2012**

**June**
**Philadelphia City Council** unanimously passed legislation to establish a building energy benchmarking and disclosure requirement for commercial buildings.

**July**
**CBEI** convened first regional data management working group meeting.

**September**
**CBEI** convened data access working group to discuss existing best practices.

**October**
**CBEI** convened the data access working group at PECO headquarters.

**PECO** announced auto-upload to Portfolio Manager.

**2013**

**November**
**CBEI** convenes a data access working group to provide best practices to the Pennsylvania Public Utility Commission (PUC).

**December**
The **data access working group** provided a final guide to the PUC.

**February**
**CBEI** convened the data access working group to discuss implementation and best practices.

**September**
**PECO** launched the data access tool.

**November**
Philadelphia first actual benchmarking ordinance compliance deadline.

**2014**

## Identifying Stakeholders and Solutions

Supported by CBEI, Philadelphia identified its major stakeholders and their key needs related to data access.

| Stakeholders | Key Issues | Solutions |
|---|---|---|
| **PECO** | ▸ PECO was concerned about protecting customer privacy while supporting benchmarking. | ▸ PECO previously deployed master meters in the majority of commercial buildings, resolving many customer confidentiality issues.<br>▸ The City's Office of Sustainability developed a Utility Account Information Data Release Form for building owners to obtain tenant consent to access energy data when necessary. |
| **Real Estate Companies** | ▸ Real estate companies were concerned about the feasibility of collecting tenant authorizations to facilitate benchmarking and compliance with the city's ordinance. | ▸ CBEI organized sessions to educate stakeholders about whole-building data access.<br>▸ PECO provided the Smart Energy Usage Data Tool (PSEUDT) which gathered the energy data usage for all accounts associated with a given physical address. |
| **Delaware Valley Green Building Council (DVGBC)** | ▸ DVGBC, a nonprofit organization, wanted to improve awareness and understanding of the benchmarking ordinance among local building owners. | ▸ DVGBC hosted four classes facilitated by EPA trainers to train building owners on ENERGY STAR® Portfolio Manager™ benchmarking.<br>▸ DVGBC actively collaborated with CBEI and the City to support implementation of the ordinance. |
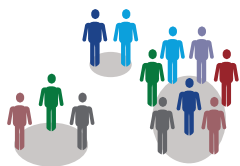
## Determining a Stakeholder Engagement Forum

The City of Philadelphia utilized a third party convener, CBEI, to work with stakeholders to form a consensus on energy data access solutions. To accelerate the stakeholder engagement process, CBEI created a Regional Utility Data Access working group, comprised of the Philadelphia Mayor, the PUC Chairperson, CEOs of local real estate companies, utilities, U.S. DOE, and U.S. EPA.

▸ The working group convened four times in six months to discuss data access issues and challenges, and to learn from emerging policy and technical best practices in other cities. The working group created a regional recommendation on data access for the PUC.

▸ CBEI facilitated interactions with peers from different jurisdictions to learn from the experiences of stakeholders who addressed data access challenges.

▸ The city committed $125,000 for data access/benchmarking stakeholder engagement and outreach efforts.

> "By requiring the measurement and recording of energy use in buildings, people will begin to think more critically about energy efficiency."
>
> — Mayor Michael A. Nutter
> City of Philadelphia, 2013

> "Knowledge is power. When we have information, we absolutely make different choices."
>
> — Councilwoman Blondell Reynolds Brown
> Philadelphia City Council, 2013

## About the Better Buildings Energy Data Accelerator

The U.S. Department of Energy's Better Building Energy Data Accelerator (BBEDA) was a two-year partnership with cities and utilities to improve energy efficiency by making energy data more accessible to building owners. As a result of best practices developed by partners in this Accelerator, 18 utilities serving more than 2.6 million commercial customers nationwide will provide whole-building energy data access to building owners by 2017. This historic expansion of data accessibility will increase building energy benchmarking, the first step many building owners take to improve energy efficiency.

Learn more at eere.energy.gov/buildings/betterbuildings/accelerators/energy.html

**U.S. DEPARTMENT OF ENERGY**

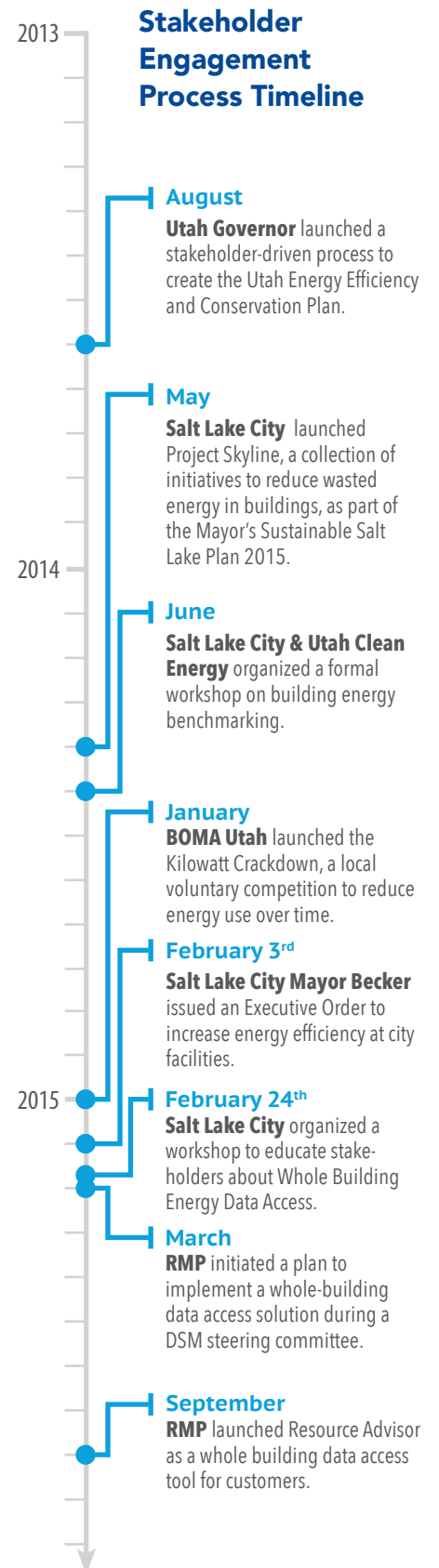Salt Lake City, Credit: Photo by Pond5, photo/44848763

## Introduction

Better Buildings Energy Data Accelerator (BBEDA) partners Salt Lake City, the investor-owned electric utility Rocky Mountain Power (RMP), and the investor-owned natural gas utility Questar worked with community stakeholders throughout 2014 and 2015 to design and implement a data access solution. As a result, RMP created a data access portal for its customers in 2016, and Questar is working toward a data access solution that will be operational by 2017.

## Drivers for Energy Data Access

Public and private sector-led efforts to encourage building energy benchmarking in the Salt Lake City area grew significantly over the past few years. Benchmarking was a key strategy in several initiatives, including the State of Utah's Energy Efficiency and Conservation Plan, Salt Lake City's Project Skyline, and the Kilowatt Crackdown program launched by the Building Owners and Managers Association Utah chapter.

Local real estate owners cited the need to access whole-building energy consumption data to conduct benchmarking and participate in these initiatives. Responding to this need, Salt Lake City officials, along with a local nonprofit organization, Utah Clean Energy, began a process to identify and convene stakeholders to develop solutions, working in close coordination with Rocky Mountain Power and Questar.

## Stakeholder Engagement Process Timeline

**2013**

**August**
**Utah Governor** launched a stakeholder-driven process to create the Utah Energy Efficiency and Conservation Plan.

**May**
**Salt Lake City** launched Project Skyline, a collection of initiatives to reduce wasted energy in buildings, as part of the Mayor's Sustainable Salt Lake Plan 2015.

**2014**

**June**
**Salt Lake City & Utah Clean Energy** organized a formal workshop on building energy benchmarking.

**January**
**BOMA Utah** launched the Kilowatt Crackdown, a local voluntary competition to reduce energy use over time.

**February 3rd**
**Salt Lake City Mayor Becker** issued an Executive Order to increase energy efficiency at city facilities.

**2015**

**February 24th**
**Salt Lake City** organized a workshop to educate stakeholders about Whole Building Energy Data Access.

**March**
**RMP** initiated a plan to implement a whole-building data access solution during a DSM steering committee.

**September**
**RMP** launched Resource Advisor as a whole building data access tool for customers.

## Identifying Stakeholders and Solutions

Supported by Utah Clean Energy, Salt Lake City identified its major stakeholders and their key needs related to data access.

| Stakeholders | Key Issues | Solutions |
|---|---|---|
| BOMA Utah<br><br>SLC School District<br><br>Intermountain Healthcare | ▸ Building owners were initially confused about whether the capabilities of a data access solution would include additional benchmarking and energy analysis assistance.<br><br>▸ Building owners wanted to respect the privacy of their tenants. | ▸ Utah Clean Energy and City officials convened meetings to clarify the expectations and objectives of a whole-building data access solution.<br><br>▸ Utah Clean Energy and City officials discussed data aggregation practices that help protect tenant privacy. Building owners were comfortable with an aggregation threshold of 5 or more tenants. |
| Rocky Mountain Power<br><br>Questar Gas | ▸ Utilities were seeking a method for protecting customer privacy.<br><br>▸ Utilities were concerned about the cost of developing a software solution to provide whole-building data to building owners. | ▸ The utilities discussed their customer privacy concerns with peer BBEDA utilities and were comfortable with an aggregation threshold of 5 or more tenants.<br><br>▸ The utilities determined that they would work with a vendor to develop data access solutions, rather than use in-house IT resources, and that development costs could be covered with DSM budgets. |
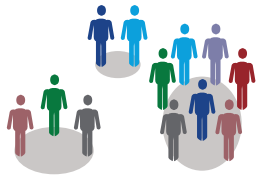
## Determining a Stakeholder Engagement Forum

Data access was identified as a foundational issue for the success of existing and future Salt Lake City energy efficiency initiatives. Working with Utah Clean Energy, City officials designed an informal approach to build support for data access within its community. Both the City and Utah Clean Energy leveraged their existing relationships for effective outreach. Utility regulators were not formally engaged. Specifically, the stakeholder engagement process involved the following:

▸ Individual, in-person meetings were organized with each stakeholder including the BOMA Utah chapter; Salt Lake City School District; Intermountain Healthcare Group, and the State of Utah, followed by a formal workshop for Project Skyline, where RMP described its proposed solution for data access.

▸ The City facilitated multiple meetings among RMP and BOMA Utah. Leveraging the membership of BOMA Utah, the city was better able to facilitate contact between multiple building owners and the utilities.

▸ BOMA Utah wrote a letter to the utilities, signed by CBRE and other major real estate stakeholders, outlining the need for a data access solution.

▸ Utah Clean Energy organized a meeting at the RMP headquarters with representatives from each stakeholder group. These stakeholders informally served as an advisory group.

## About the Better Buildings Energy Data Accelerator

The U.S. Department of Energy's Better Building Energy Data Accelerator (BBEDA) was a two-year partnership with cities and utilities to improve energy efficiency by making energy data more accessible to building owners. As a result of best practices developed by partners in this Accelerator, 18 utilities serving more than 2.6 million commercial customers nationwide will provide whole-building energy data access to building owners by 2017. This historic expansion of data accessibility will increase building energy benchmarking, the first step many building owners take to improve energy efficiency.

Learn more at eere.energy.gov/buildings/betterbuildings/accelerators/energy.html

Better Building Energy Data Accelerator partners City of Seattle and Puget Sound Energy (PSE) initiated the stakeholder engagement process early on in the course of Seattle's building energy policy planning to enable whole-building data access for multi-family and commercial building owners. As one of the first local governments to mandate benchmarking in 2010, Seattle worked with PSE and its other local utilities to ensure building owners had access to tenant data so that they could benchmark and report whole building energy use.. The local stakeholder engagement efforts also resulted in valuable feedback for future iterations of the data access offering from PSE and could serve as valuable input to other local governments embarking on their own efforts.



Seattle, Washington Skyline, Credit: Wikimedia.org

## Need for Access to Whole Building Aggregated Energy Data

With a statewide transparency legislation in place, the building owners needed easy access to whole-building energy usage data and utilities were asked to devise systems to provide the information. Within this context, following the recommendations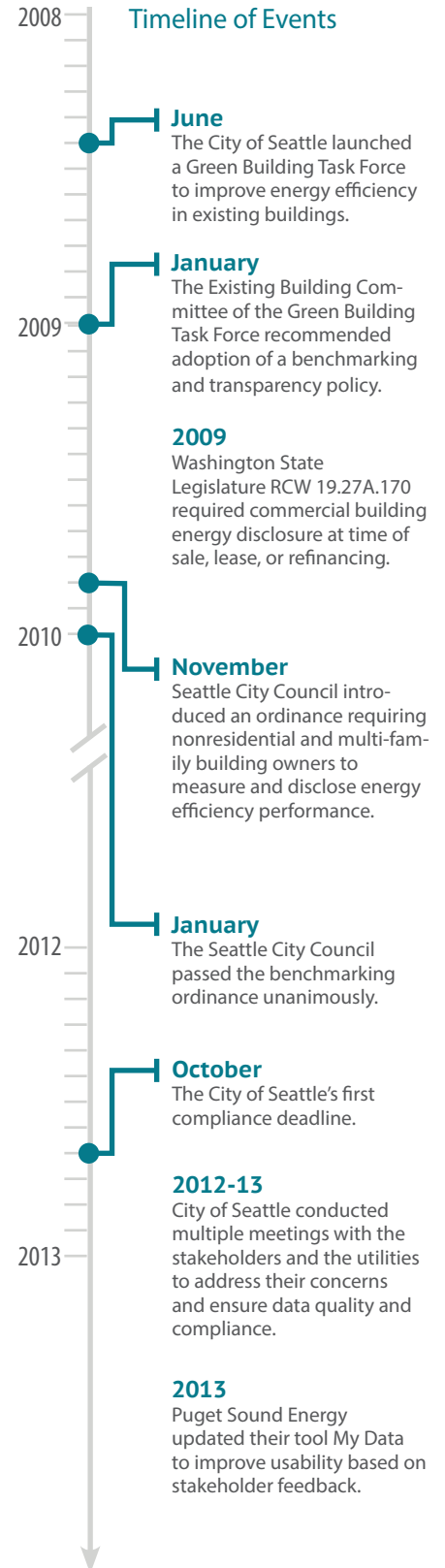 of the Existing Building Committee of the Green Building Task Force, the City of Seattle decided to adopt an energy conservation ordinance requiring building owners to measure and report energy performance as a component of their Green Building Capital Initiative. In order to enable compliance, local utilities each undertook a separate implementation pathway. PSE provided strong leadership to make aggregated data available to its customers and also developed a portal for auto-upload via web-services of energy data into ENERGY STAR® Portfolio Manager®, reducing potential entry errors.

> "Engaging the stakeholder in public meetings allows the utilities to hear the concerns and develop a data access solution with those in mind."
>
> - Jayson Antonoff
> Institute for Market Transformation (IMT), 2015

### Timeline of Events

**2008**

**June**
The City of Seattle launched a Green Building Task Force to improve energy efficiency in existing buildings.

**January**
The Existing Building Committee of the Green Building Task Force recommended adoption of a benchmarking and transparency policy.

**2009**

**2009**
Washington State Legislature RCW 19.27A.170 required commercial building energy disclosure at time of sale, lease, or refinancing.

**2010**

**November**
Seattle City Council introduced an ordinance requiring nonresidential and multi-family building owners to measure and disclose energy efficiency performance.

**2012**

**January**
The Seattle City Council passed the benchmarking ordinance unanimously.

**October**
The City of Seattle's first compliance deadline.

**2012-13**
City of Seattle conducted multiple meetings with the stakeholders and the utilities to address their concerns and ensure data quality and compliance.

**2013**

**2013**
Puget Sound Energy updated their tool My Data to improve usability based on stakeholder feedback.

## Addressing Key Stakeholders' Primary Concerns

Seattle's two major stakeholders were the utility companies and the local building owners. The key concerns they voiced and are listed below along with the strategy followed by the city to address them.

| Stakeholders | Key Issues | Solutions |
|---|---|---|
| **Seattle City Lights Puget Sound Energy** | □ Utilities lacked an existing framework and example to base their solutions on.<br>□ Utilities had a short implementation time frame to meet the needs of the city's first benchmarking timeframe.<br>□ Utilities considered whether to create a common portal shared among utilities or individual portals. | □ Utilities internally identified tool design solutions.<br>□ Utilities developed individual portals aligned with their existing systems. |
| **Building Owners** | □ Building owners were concerned about potential additional forms.<br>□ Building owners wanted a coordinated approach from the three utilities. | □ The authorization process varied by utility, however administrative requirements were reduced by automatically transferring data from year to year. |

## Stakeholder Engagement Process Followed

The city of the Seattle's main stakeholders, the utility companies, were on board from the beginning. To meet the city's needs, each utility worked internally to create a solution that fit within their existing systems. As a consequence, the process for customers to access data differed between utilities.

Once the data access solutions were developed by the utilities, the City of Seattle engaged extensively with the stakeholders to ensure compliance and high participation. The stakeholder engagement process involved:

□ A series of large stakeholder meetings involving key organizations including U.S. EPA, NEEA, NWEC to discuss data access, benchmarking, and transparency.

□ Meetings for stakeholder to voice their concerns to the utilities .

□ Follow-up meetings were held with city staff and utilities to discuss resolutions to building owner concerns.

□ The city and utility co-ordinated and provided a helpdesk, as a platform to the users for support and feedback in order to improve the participation and quality of data.

As a result of the successful stakeholder engagement, Seattle received valuable feedback which was instrumental in improving and updating the utilities' data access tools. Additionally, the utilities developed similar streamlined authorization processes to facilitate data access and improve customer service.

"Ease of accessing utility data, especially for buildings with multiple tenants, is critical."

**- Nicole Ballinger**
Outreach Advisor, Energy Benchmarking & Reporting Program, City of Seattle, 2014

"By increasing the amount of information available to building owners and occupants, disclosure of building energy performance would help identify opportunities for energy efficiency gains, encourage voluntary upgrades, and create a mechanism for market differentiation."

**- Green Building Task Force**
2008

Between October 2008 and July 2014, District of Columbia successfully completed an extensive process of stakeholder engagement to enable whole building data access for multifamily, commercial, and federal building owners in their jurisdiction. The D.C. Department of Energy and Environment (DOEE)[1], formerly known as the District Department of the Environment (DDOE), played the role of the primary convener and carried out the stakeholder engagement process. In 2013, Washington D.C. along with its utiltiy partner Pepco, signed up for the Better Buildings Energy Data Accelerator (BBEDA) to streamline their data access process.

This case study illustrates the stakeholder engagement path followed by Washington, D.C. to successfully overcome challenges and implement data access within its jurisdiction.


Washington, D.C.,Credit: Wikimedia.org

## Need for Access to Whole Building Aggregated Energy Data

After the Washington D.C. City Council passed a benchmarking ordinance, whole-building energy data access materialized as a key issue. Stakeholders were concerned about the difficulty of collecting utility data especially for buildings with multiple tenants. Numerous convening sessions were held to identify key stakeholder issues. The stakeholder engagement process in D.C. resulted in two subtitles for data access in the Sustainable DC Omnibus Amendment Act of 2014.
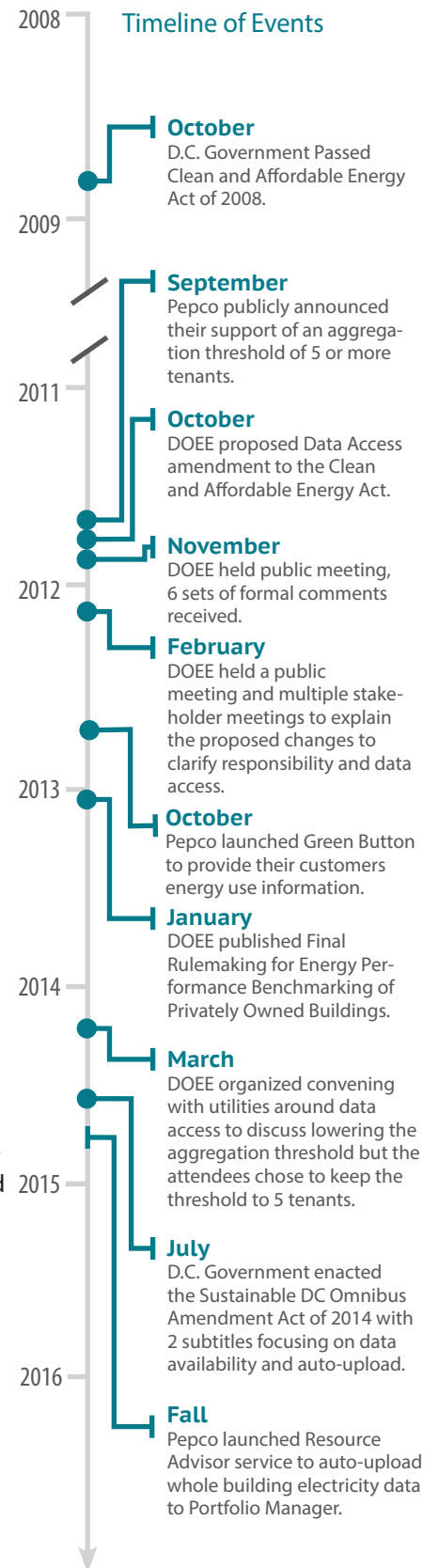
The 2014 amendments to the Clean and Affordable Energy Act of 2008 required utilities to provide aggregated whole-building energy data and auto-upload to U.S. EPA's Portfolio Manager for Washington D.C. customers. Pepco successfully implemented a solution and Washington Gas obtained an extension until 2018.

The unique status as a Federal District and presence of a local Public Service Commission gave D.C. better control over the local utilities. This allowed them to to pass an amendment specifically to require local utilities to provide streamlined access to whole-building data for benchmarking.

> "Ultimately data access allows us to do a high level assessment of the building efficiency potential at a low budget."
>
> - Bill Updike, DOEE
> March 20, 2015

### Timeline of Events

**2008**

**October**
D.C. Government Passed Clean and Affordable Energy Act of 2008.

**2009**

**September**
Pepco publicly announced their support of an aggregation threshold of 5 or more tenants.

**2011**

**October**
DOEE proposed Data Access amendment to the Clean and Affordable Energy Act.

**November**
DOEE held public meeting, 6 sets of formal comments received.

**2012**

**February**
DOEE held a public meeting and multiple stakeholder meetings to explain the proposed changes to clarify responsibility and data access.

**2013**

**October**
Pepco launched Green Button to provide their customers energy use information.

**January**
DOEE published Final Rulemaking for Energy Performance Benchmarking of Privately Owned Buildings.

**2014**

**March**
DOEE organized convening with utilities around data access to discuss lowering the aggregation threshold but the attendees chose to keep the threshold to 5 tenants.

**2015**

**July**
D.C. Government enacted the Sustainable DC Omnibus Amendment Act of 2014 with 2 subtitles focusing on data availability and auto-upload.

**2016**

**Fall**
Pepco launched Resource Advisor service to auto-upload whole building electricity data to Portfolio Manager.

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[1] D.C. Department of Energy and Environment (DOEE) was known as D.C. Department of Environment (DDOE) until August 2015.

## Addressing Key Stakeholders' Primary Concerns

DC's major stakeholders were the utility companies and the bodies representing the local building owners. The key concerns voiced and are listed below along with the strategy followed by the city to address them.

| Stakeholders | Key Issues | Solutions |
|---|---|---|
| **Apartment and Office Buildings Association (AOBA)**<br><br>**Multi-family building owners**<br><br>**D.C. Department of General Services (DGS)** | ▶ Building owners required a streamlined method for collecting data and transferring the data into U.S. EPA's Portfolio Manager.<br><br>▶ D.C. DGS wanted easy access to energy consumption data for D.C. government buildings to create solutions for building efficiency. | ▶ Negotiated with utilities to simplify the data collection process.<br><br>▶ D.C. mandated a provision for aggregated data & auto-upload via web-services to Portfolio Manager. |
| **Pepco**<br>**and**<br>**Washington Gas** | ▶ Utilities required a methodology to facilitate data access while protecting customer privacy.<br><br>▶ Utilities requested an implementation timeline that reflected the capability of the utility. | ▶ D.C. government and the Utilities agreed on an aggregation threshold of 5 tenants per building to protect individual tenant privacy.<br><br>▶ Individual timelines for auto-upload were established for each utility based on their resources. |

## Stakeholder Engagement Process Followed

The District of Columbia government began their initiative with a formal stakeholder engagement process with the passing of the Clean and Affordable Energy Act of 2008 and subsequent rulemakings. In addition, DOEE had to address numerous concerns from both individual building owners and utilities. The process for addressing these sometimes conflicting concerns included multiple individual meetings until a consensus could be reached.

The stakeholder engagement process was led by the city, which followed many avenues to identify issues and address concerns. Specifically, the DOEE organized:

▶ Public meetings, which were announced in the D.C. register to ensure participation from all interested parties.

▶ Private meetings to address individual building owner and other stakeholder concerns that arose in public meetings.

▶ Bi-lateral conversations with the utilities to address their concerns and gain their commitment.

▶ A public hearing of the final rulemaking to discuss the outcome with all the stakeholders involved.

▶ A benchmarking help-center, initially managed by DC SEU (DC Sustainable Energy Utility), now taken over by the DOEE.

Based on the feedback collected from these diverse interactions with stakeholders, the local government amended the Clean and Affordable Energy Act to implement whole-building energy data access as a requirement from the utilities in order to streamline the process and improve the overall compliance rate.

> "We're trying to re-imagine how you do energy efficiency. Operational inefficiency is more difficult to nail down. The data has become a game changer for us. The transparency of information is transformational."
>
> - Sam Brooks, D.C. DGS
> March 6, 2014 (Katherine Tweed, 2014)

> "Getting access to energy data and creating new visualization tools will be a game changer in the real-estate market."
>
> - Zach Dobelbower, D.C. DGS
> March 20, 2015

Between 2012 and 2015, Better Buildings Energy Data Accelerator partners Boston, Cambridge, and Eversource successfully completed an extensive process of stakeholder engagement to enable whole building data access for multi-family and commercial building owners in their jurisdiction. Because of a strong collaboration between the two cities, Cambridge was able to quickly build on the experience Boston had of working with Eversource to deploy a utility solution for local building owners.

The partnership between Boston, Cambridge, and Eversource is a leading example of successfully crafting a whole building data access solution in a collaborative manner.


Boston's Back Bay and Cambridge, MA. Credit: Wikimedia.org

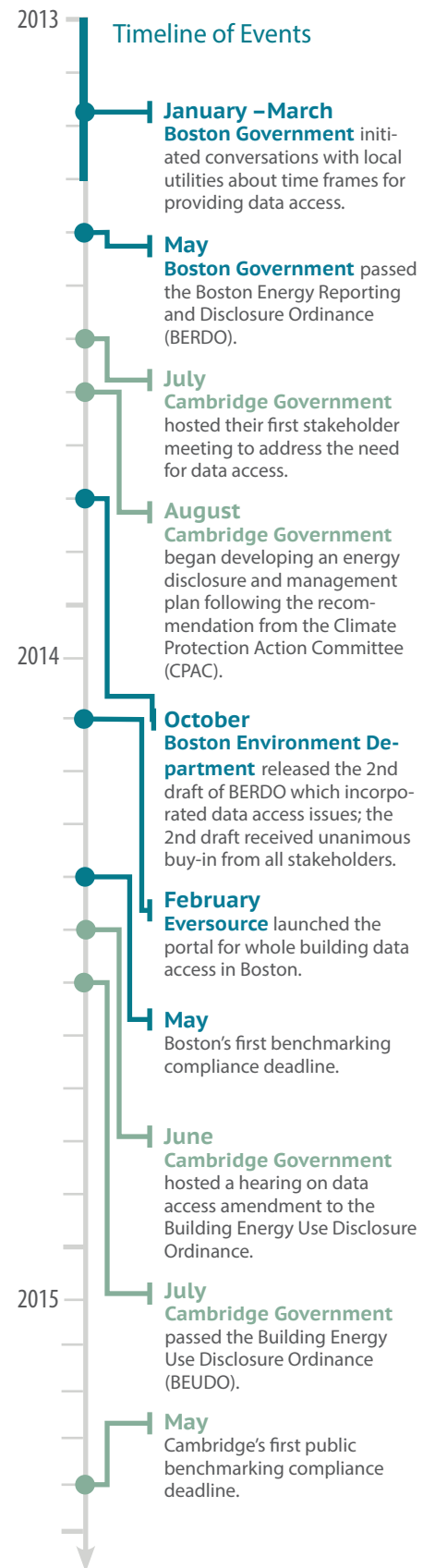## Need for Access to Whole Building Aggregated Energy Data

Boston was already working with the utilities to identify opportunities for energy efficiency when the need for streamlined data access arose. During these discussions, the city realized that data access was foundational to many of its policies and decided to pursue streamlined whole-building energy data access.

In Cambridge, data access was identified as the first step to better understand the various energy profiles of the buildings in the city in order to create adapted energy solutions for building types ranging from multi-family buildings to research centers.

Once each city realized they wanted whole-building data to drive their respective energy efficiency strategies, they established a timeline with the utilities to ensure the availability of the tools for the customer to access energy data and comply with the ordinance before the deadline.

## Addressing Key Stakeholders' Primary Concerns

Eversource signed memoranda of understanding (MOUs) with Boston and Cambridge to facilitate a stronger communication and working relationship. This resulted in a successful collaboration between the cities, utilities as well as the major stakeholders, the local building owners, universities and laboratories. The key concerns voiced by the stakeholders are listed below along with the strategy followed by the city to address them.

### Timeline of Events

**2013**

**January – March**
**Boston Government** initiated conversations with local utilities about time frames for providing data access.

**May**
**Boston Government** passed the Boston Energy Reporting and Disclosure Ordinance (BERDO).

**July**
**Cambridge Government** hosted their first stakeholder meeting to address the need for data access.

**August**
**Cambridge Government** began developing an energy disclosure and management plan following the recommendation from the Climate Protection Action Committee (CPAC).

**2014**

**October**
**Boston Environment Department** released the 2nd draft of BERDO which incorporated data access issues; the 2nd draft received unanimous buy-in from all stakeholders.

**February**
**Eversource** launched the portal for whole building data access in Boston.

**May**
Boston's first benchmarking compliance deadline.

**June**
**Cambridge Government** hosted a hearing on data access amendment to the Building Energy Use Disclosure Ordinance.

**2015**

**July**
**Cambridge Government** passed the Building Energy Use Disclosure Ordinance (BEUDO).

**May**
Cambridge's first public benchmarking compliance deadline.

| Stakeholders | Key Issues | Solutions |
|---|---|---|
| **Eversource**<br><br>**National Grid**<br>**(Boston & Cambridge)** | ▸ Utilities were interested in protecting customer privacy.<br>▸ Utilities differed on aggregation thresholds levels to protect tenant privacy. | ▸ Boston organized one-on-one conversations with each utility and larger conversations with both utilities and their technical staff to resolve differences in aggregation threshold preferences.<br>▸ The utilities agreed on aggregation threshold of 3 tenants or more. |
| **Large national property owners**<br>**Ex: Boston Properties inc.** | ▸ Building owners were concerned about the effectiveness of energy benchmarking tool.<br>▸ Multi-family owners were concerned about system compatibility issues with their current energy management tools. | ▸ Eversource developed a benchmarking portal as a comprehensive solution to improve overall customer experience and empower them with energy data.<br>▸ Cities required U.S. EPA's ENERGY STAR® Portfolio Manager® , which is the leading tool for energy benchmarking in the U.S.<br>▸ Cambridge and Eversource resolved the compatibility issue through a discussion with a multi- family association to clarify the data access requirements. |
| **Universities**<br><br>**Laboratories** | ▸ Universities with wide building portfolios historically aggregated energy data differently from the requirement of the city data access effort.<br>▸ Laboratories with high energy use due to their operations were concerned about the metrics used to represent their energy data. | ▸ Consultations and negotiations convinced the stakeholders of the importance data access at the building level and worked with the city to identify the energy usage per buildings on campus.<br>▸ U.S. EPA's Portfolio Manager offers a specific category for laboratories that allows laboratories to compare their performance to their peers. |

## Stakeholder Engagement Process Followed

Boston and Cambridge were able to approach data access needs with local stakeholders from a unique vantage point since they both had an existing MOU with the utilities to work on energy efficiency. The city of Boston focused its initial conversations to just the utility companies serving the city, Eversource and National Grid, and representatives from the U.S. DOE. In Cambridge, the same stakeholders were engaged as well as the universities when first discussing data access. Once the cities and utilities finalized their data access solutions, they followed a multi-tiered process for engaging other stakeholders:

▸ The process started with the release of draft regulations by the Boston Environment Department for which oral comments were heard on November 12, 2013. Written comments were also accepted via email until November 15 2013.

▸ Additionally oral comments were collected during phone conversations and meetings with stakeholders. This resulted in a broad participation from various stakeholder such as A Better City (ABC), Medical Academic and Scientific Community Organization (MASCO), Greater Boston Real Estate Board (GBREB).

▸ Cambridge similarly collected public comments through a public hearing on June 24, 2014. Many stakeholders were present at the meeting including representatives from U.S. EPA, Boston Properties, Cambridge Chamber of Commerce, NEEP, MIT and Harvard.

▸ Eversource provided a utility liaison to work directly in the city office to enhance communication. When issues arose from other stakeholders, this strong working relationship enabled expedient resolution of issues.

▸ Cambridge Community Development Department and Boston Green Ribbon Commission group hosted joined training and outreach sessions to ensure the building owners learned how to access their energy data and how to report data accurately.