



How Policymakers Can Ensure Access to Energy Utility Data to Support Performance Improvement in Buildings

July 13, 2021



Welcome and Overview

Agenda

- Welcome and Overview
- The Context for Utility Data Access
- The Building Owner/Manager Perspective
- Integrating Utility Data Access into Policy
- The State-Level Perspective
- Wrap-Up
- Q&A Session

Today's Speakers



Eric Duchon

**Managing Director,
Global Head of ESG**

**Blackstone Real
Estate**



Pete Zadoretzky

**Vice President,
Sustainability**

**Bozzuto Management
Company**



Kim Burke

**Senior Program
Manager**

**Colorado Energy
Office**



Jessica Brown

Program Manager

Overlay Consulting

Today's Speakers, cont'd.



Brendan Hall
Program Manager, ENERGY STAR
U.S. Environmental Protection Agency



Andrew Schulte
ENERGY STAR Support Contractor
ICF



The Context for Utility Data Access

Benchmarking is a Foundational Activity for Improving Energy Performance



Data

Information

Action



HANES
Brands Inc



TARGET



USAA Real Estate Company

Hines

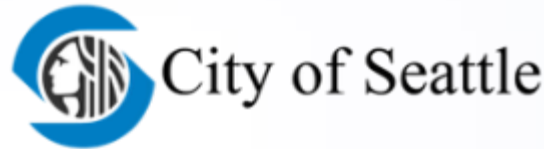
VORNADO
REALTY TRUST



sears



CORNING



STAPLES



3M



CBRE



KOHL'S



TOYOTA



TRANSWESTERN
The Performance Advantage in Real Estate

verizon

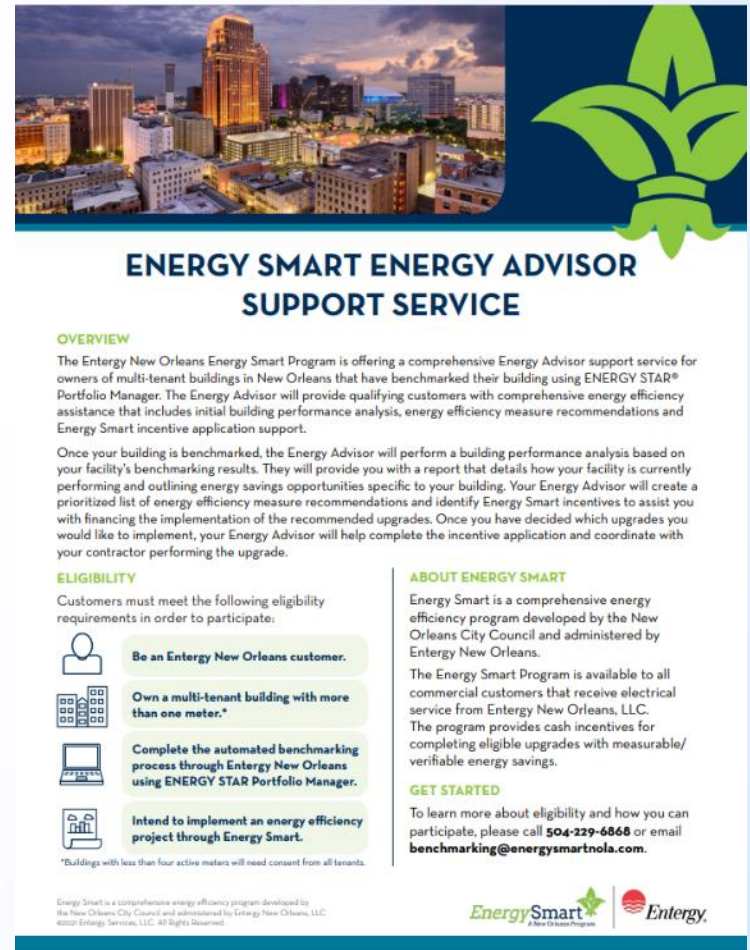


Mandatory and Voluntary Drivers at the State and Local Level



Utilities Integrating Benchmarking into Program Offerings

- Using benchmarking as a “gateway” to other energy efficiency offerings
- More opportunities for customer engagement and satisfaction
- Opportunity for utilities to play the role of trusted advisor



ENERGY SMART ENERGY ADVISOR SUPPORT SERVICE





OVERVIEW

The Entergy New Orleans Energy Smart Program is offering a comprehensive Energy Advisor support service for owners of multi-tenant buildings in New Orleans that have benchmarked their building using ENERGY STAR® Portfolio Manager. The Energy Advisor will provide qualifying customers with comprehensive energy efficiency assistance that includes initial building performance analysis, energy efficiency measure recommendations and Energy Smart incentive application support.

Once your building is benchmarked, the Energy Advisor will perform a building performance analysis based on your facility's benchmarking results. They will provide you with a report that details how your facility is currently performing and outlining energy savings opportunities specific to your building. Your Energy Advisor will create a prioritized list of energy efficiency measure recommendations and identify Energy Smart incentives to assist you with financing the implementation of the recommended upgrades. Once you have decided which upgrades you would like to implement, your Energy Advisor will help complete the incentive application and coordinate with your contractor performing the upgrade.

ELIGIBILITY

Customers must meet the following eligibility requirements in order to participate:

-  **Be an Entergy New Orleans customer.**
-  **Own a multi-tenant building with more than one meter.***
-  **Complete the automated benchmarking process through Entergy New Orleans using ENERGY STAR Portfolio Manager.**
-  **Intend to implement an energy efficiency project through Energy Smart.**

*Buildings with less than four active meters will need consent from all tenants.

ABOUT ENERGY SMART



Energy Smart is a comprehensive energy efficiency program developed by the New Orleans City Council and administered by Entergy New Orleans.

The Energy Smart Program is available to all commercial customers that receive electrical service from Entergy New Orleans, LLC. The program provides cash incentives for completing eligible upgrades with measurable/verifiable energy savings.

GET STARTED

To learn more about eligibility and how you can participate, please call **504-229-6868** or email benchmarking@energysmartnola.com.

Energy Smart is a comprehensive energy efficiency program developed by the New Orleans City Council and administered by Entergy New Orleans, LLC. ©2020 Entergy Services, LLC. All Rights Reserved.

Benefits for ENERGY STAR Buildings in the Commercial Buildings Market

- **State and local governments** provide exemption from energy audit and other laws for ENERGY STAR Certified buildings.
- **Federal agencies** must lease in ENERGY STAR certified buildings.
- **Multifamily mortgage lenders** offer significant interest rate discounts and mortgage insurance premium reductions for ENERGY STAR certified properties.
- **Green Building certifications** such as LEED, Green Globes, and others use ENERGY STAR metrics for energy and water requirements.
- **Investor reporting programs** such as Global Real Estate Sustainability Benchmark (GRESB), ULI Greenprint, Carbon Disclosure Project, include ENERGY STAR scores and certification in evaluation of performance.

What Data Do Buildings Need in Order to Benchmark?

Property use details

- Specific details differ by property type
- Includes information such as square footage, number of operating hours, number of occupants
- **Typically information that can be gathered by the property owner/manager**

Whole-building energy consumption data

- Minimum of 12 complete, consecutive months of data for each fuel type consumed to operate the property
- Can be entered meter-by-meter, or as an aggregate sum by fuel type
- **May be directly accessible by property owner/manager, but not always**

Why Would a Building Owner Not Have Complete Access to Energy Data?

- Most common in **multi-tenant configurations**
 - Office buildings
 - Multifamily properties
 - Warehouses
 - Certain retail configurations
- Owner/manager may only receive bills for common areas
- Need complete energy consumption data (tenant spaces + common spaces) to benchmark!

Why is This an Issue?

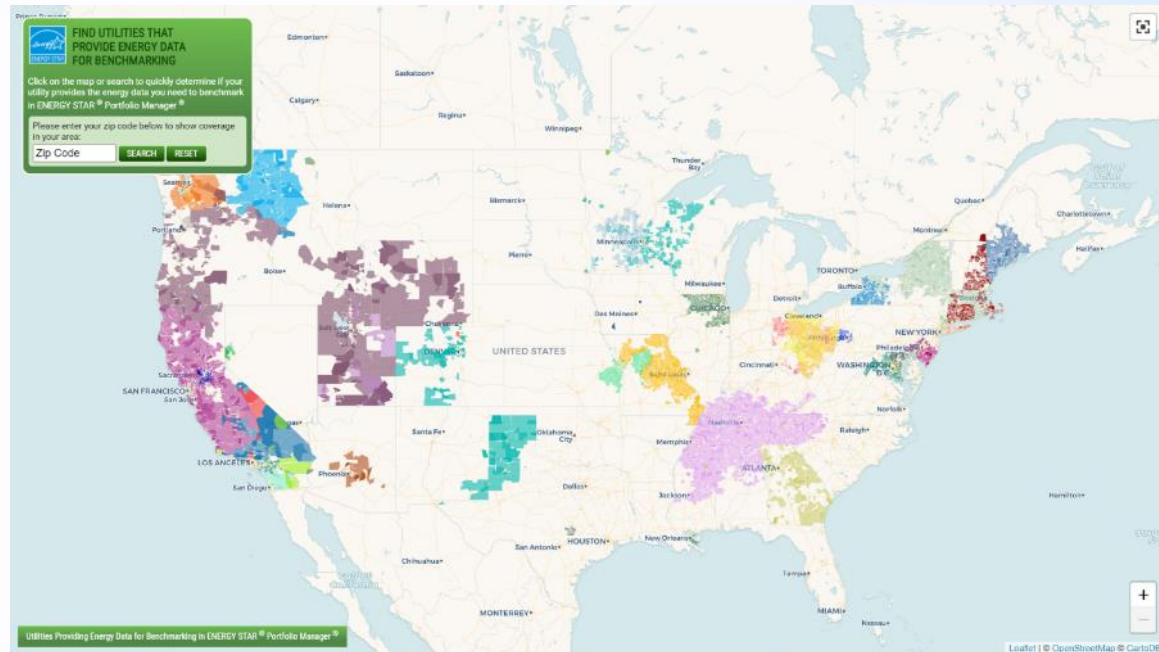
- Building owner/manager is typically the party that is benchmarking
 - In the case of state and local benchmarking mandates, the owner is the entity required to comply
- Without whole-building consumption data:
 - Miss out on the opportunity to understand and improve the energy performance of the property;
 - Miss out on the opportunity to participate in voluntary programs that require benchmarking (e.g., energy reduction competitions); and/or
 - Risk non-compliance with a state or local benchmarking ordinance

Where Does This Leave Us?

- Building owners and operators want or need to benchmark their properties
- Barriers to data access are particularly pronounced in large, multi-tenant buildings
- Even when a building owner can access complete consumption data, the option to streamline the process of data collection can be very attractive
- Less time tracking down data = more planning and undertaking energy performance improvements
- Building owners are seeking solutions to obtain whole building data more quickly and more easily

Current Utility Data Access Offerings Across the U.S.

- >50 utilities currently provide data access
 - ~80% use Portfolio Manager web services
 - ~20% offer data via spreadsheet
- Utilities helped benchmark more than 60,000 buildings via web services in 2020.



www.energystar.gov/utilitydata



The Building Owner/Manager Perspective

The Blackstone logo consists of the word "Blackstone" in a white, serif font, centered within a solid black rectangular box.

Blackstone Real Estate ESG Overview

JULY 2021

Prepared at the request of and for the exclusive use of the US Environmental Protection Agency

While Blackstone believes ESG factors can enhance long-term value, Blackstone Real Estate does not pursue an ESG-based investment strategy or limit its investments to those that meet specific ESG criteria or standards. Any reference herein to environmental or social considerations is not intended to qualify our duty to maximize risk-adjusted returns.

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What does good look like?

- **API with ENERGY STAR Portfolio Manager!!!**
- **Web Portal with well-documented process guide**
- **Clear provisions for who can obtain data – common area meter owner (no deed necessary!)**
- **QA/QC of included meters based on service addresses (no manual meter numbers!)**
- **QA/QC of data provided (monthly data is best!)**



This document (the “Materials”) is provided on a confidential basis for informational due diligence purposes only and is not, and may not be relied on in any manner as legal, tax, investment, accounting or other advice or as an offer to sell, or a solicitation of an offer to buy, any security or instrument in or to participate in any trading strategy with any Blackstone fund, account or other investment vehicle (each a “Fund”), nor shall it or the fact of its distribution form the basis of, or be relied on in connection with, any contract or investment decision. All information is as of March 31, 2021, unless otherwise indicated.

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COVID-19. Certain countries have been susceptible to epidemics which may be designated as pandemics by world health authorities, most recently COVID-19. The outbreak of such epidemics, together with any resulting restrictions on travel or quarantines imposed, has had and will continue to have a negative impact on the economy and business activity globally (including in the countries in which the Fund invests), and thereby is expected to adversely affect the performance of the Fund’s investments. Furthermore, the rapid development of epidemics could preclude prediction as to their ultimate adverse impact on economic and market conditions, and, as a result, presents material uncertainty and risk with respect to the Fund and the performance of its investments.

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Trends. There can be no assurances that any of the trends described herein will continue or will not reverse. Past events and trends do not imply, predict or guarantee, and are not necessarily indicative of, future events or results.



BOZZUTO MANAGEMENT COMPANY

Utility Data Access in Multifamily + Mixed-Use Communities

Regional Office

270 Properties 82K Units 3M Retail SF

WASHINGTON
1 Property | 400 Units

CALIFORNIA
2 Properties | 770 Units
Pipeline 3 Properties | 1,042 units

MIDWEST
16 Properties | 6,000 Units

NEW ENGLAND
26 Properties | 8,000 Units
Pipeline 20 Properties | 7,000 units

TRI-STATE
50 Properties | 15,000 Units
Pipeline 16 Properties | 5,000 units

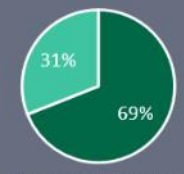
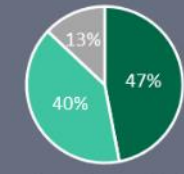
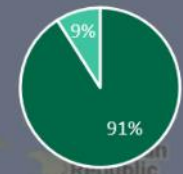
MID-ATLANTIC
161 Properties | 47,000 Units
Pipeline 50 Properties | 18,000 units

SOUTHEAST
13 Properties | 5,000 Units
Pipeline 10 Properties | 3,000 units

7X 5X 2X 5X



The Washington Post



■ Third Party Owned ■ High-Rise ■ Mid-Rise ■ Urban ■ Suburban
■ Bozzuto Owned ■ Garden



COMMITMENTS

3% ENERGY REDUCTION YEAR over YEAR

- *Achieved 3 out of last 4 years; Data access biggest issue with missed year*
- *Committed to 100% benchmarking of energy, water + waste*

RE100: 100% Renewable Electricity for entire global operations by 2040

DOE BETTER BUILDINGS: 20% Reduction in managed portfolio energy intensity by 2025, with a goal of 3% reduction annually from a 2015 baseline

Aggressively pursue opportunities for recognition at national and local level.



ACCOMPLISHMENTS

ENERGY STAR® Partner of the Year – 5 Years Running

- 2017, 2018, 2019-2021 (Sustained Excellence)
- First and only third-party multifamily management company to achieve



ENERGY STAR Certifications – 130, and counting...

- One of first multifamily operators to achieve in 2015 when certification made available
- Most by any third-party multifamily operator

Green & Healthy Building Certifications

- Over 1/3 of managed portfolio carries LEED designation
- BMC is a Fitwel Champion and oversaw some of the 1st multifamily properties to achieve certification
- Well-versed in NGBS, Green Globes, IREM, BREEAM, and more

EARTH MONTH

- Massive, portfolio-wide campaign to engage & educate residents
- Toolkit that any property can participate, regardless of budget, location, building type, resident demographics, etc.
- EPA Energy Star “Battle of the Buildings” Competitions



DRIVERS + BENEFITS

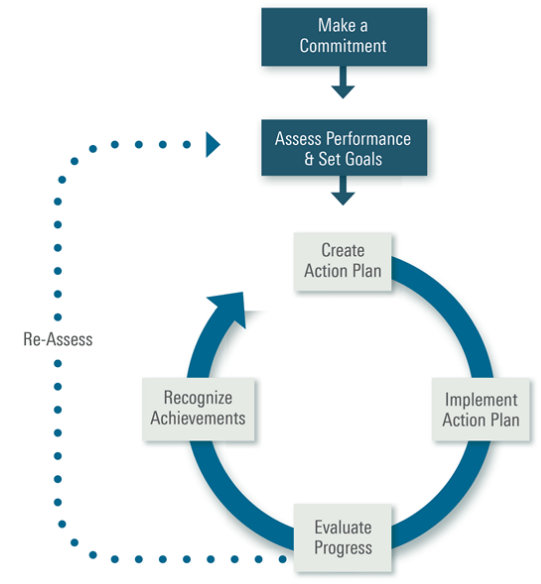
ESG KPIs

- Loan products – Fannie, Freddie, HUD
- Investment criteria
 - Due diligence
- Bozzuto Managed Portfolio:
 - **GRESB** – over **45%** of portfolio currently responding as of 2020
 - 25% Owner/minority owner publicly stated sustainability/ESG commitments
 - 80% of BMC Portfolio – Have either city or ownership reporting (or both)

OPERATIONAL BEST PRACTICES

- How are we doing?
 - Against ourselves
 - Against like properties
- Identify + Target Underperforming assets
- Measurement + Verification
- Green Building Certifications (LEED)
 - Performance pathway
- Regulatory + disposition risk

ENERGY STAR® Guidelines for Energy Management



DRIVERS + BENEFITS

MARKETING + COMMUNICATIONS

- Property level – not just appliances!
 - Community differentiator
- Owner/operator level – this is important to Bozzuto
 - Partner on goals + objectives
 - Enhanced transparency = awareness + accountability
 - Reduce energy consumption + expenses

RESIDENT + STAFF ENGAGEMENT / EDUCATION

- Community competitions
- Transparency

The screenshot shows the ENERGY STAR website interface. At the top, there is a navigation bar with links for 'ABOUT', 'FOR PARTNERS', and a search bar. Below the navigation bar, there are links for 'Find Products', 'Save at Home', 'New Homes', 'Commercial Buildings', and 'Industrial Plants'. The main content area displays search results for 'Multifamily Housing' in Arlington, VA. The results are sorted by 'Relevance' and show 6 results representing 4,304,605 square feet. The results list several properties, including ALTAIRE, DUNCORD CRYSTAL CITY, PARK ADAMS, RIVERHOUSE APARTMENTS, and THE JAMES AT RIVERHOUSE. The DUNCORD CRYSTAL CITY and PARK ADAMS entries are highlighted with a green box.

Property Name	Address	City	State	Years Certified
ALTAIRE	400 Army Navy Drive	Arlington	VA	2020
DUNCORD CRYSTAL CITY	2600 Crystal Drive	Arlington	VA	2020
PARK ADAMS	2000 North Adams Street	Arlington	VA	2017, 2018, 2019, 2020
RIVERHOUSE APARTMENTS	1400 S Joyce St	Arlington	VA	2020
THE JAMES AT RIVERHOUSE	1111 Army Navy Drive	Arlington	VA	2018, 2019, 2020

CONSIDERATIONS

MAKE IT EASY, and FREE

- Multiple entities often reviewing utility data (logins)
- Spreadsheet vs. API
- Existing Challenges:
 - Lease provisions for data access have a poor track record
 - Many of our properties have several hundred accounts (apartments + retailers) & dozens of common area accounts (i.e., garden style apartments)
 - Multiple addresses for one community or campus (i.e., garden style and multi-building communities)

ACCURACY

- Aggregated and randomized ok
- Data flags – i.e., does this look right?

AVAILABILITY

- Annually – Ok
- Quarterly – Better
- Monthly – Best



Thank You

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Integrating Utility Data Access into Policy

State & Local Governments Can Play a Role in Driving Utility Data Access

- State and local governments are an important voice calling upon utilities to provide easier, more streamlined access to energy data
- Utilities are frequently engaged as stakeholders in discussions about state/local benchmarking policies and building performance standards.
- Additionally, some jurisdictions are taking the step to require utilities to provide data via local ordinances, statewide legislation, or other policy mechanisms (CA, CO, DC, WA).

Potential Benefits of State & Local Policies on Utility Data Access

- Address jurisdictional issues.
- Reassure building owners and managers that they will have access to data for benchmarking.
- Provide clarity and consistency for utilities regarding what is expected and allowed (e.g., cost recovery, aggregation thresholds)

Policy Consideration #1: Balancing Access and Privacy

- Utilities typically cannot provide tenant energy consumption to building owners without explicit tenant authorization.
- Common solution: “data aggregation thresholds.”
- Establishment of aggregation threshold at the statewide level may help to allay utility concerns re: customer data privacy responsibilities.

Policy Consideration #2: Cost Recovery

- Utilities want to know whether and how they can recover costs associated with data access requirements.
 - Consider as an energy efficiency program expense?
 - Allocate to a broader function (e.g., customer support), to be included in base rates or other non-energy efficiency cost recovery mechanisms)?
 - Recover through a direct fee paid by the requestor?

Technical Consideration #1: Mechanism for Data Delivery

- Required data format
 - Spreadsheet
 - Direct transfer to EPA's Portfolio Manager via web services
- Differential or "tiered" requirements for small vs. large utilities

Technical Consideration #2: Ensuring Accuracy of Aggregated Data

- Addressing certain technical considerations at the policy level can streamline subsequent implementation.
- Some items related to data accuracy include:
 - Ensuring accurate meter-to-building mapping upon initial data request and over time;
 - Calendarization of individual meter entries when aggregating into monthly values;
 - Ensuring that gross, rather than net, consumption is provided for properties with onsite renewables;
 - Making use of building-level identifiers, if available.



The State-Level Perspective



Engaging Utilities in Data Access Solutions for Benchmarking

July 2021



COLORADO
Energy Office

 **Overlay Consulting**

Colorado Legislative Landscape

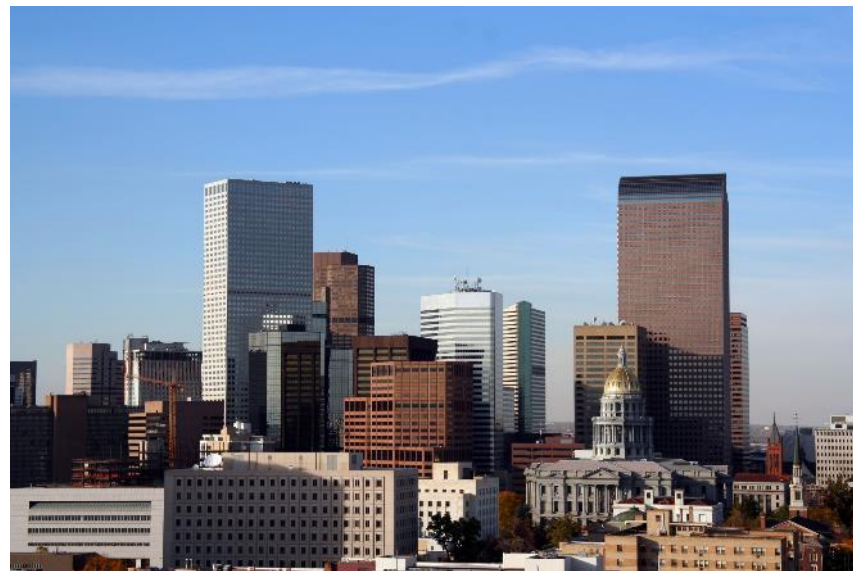
Colorado passed >30 climate bills in 2021!

- Advancing clean buildings, climate action, environmental justice, transportation electrification, renewable energy, energy efficiency, and just transition.
- Part of GHG Pollution Reduction Roadmap to achieve the statutory goals of reducing GHG pollution economy-wide 50% by 2030 and 90% by 2050 below 2005 levels.



Building Benchmarking & Performance Standards

- Requires commercial, multifamily, and public buildings >50k sq ft to annually benchmark building energy use
- Empanels a task force to develop building performance standards recommendations
- Qualifying utility requirements:
 - Secure Online Data Request
 - Aggregation threshold
 - Auto-upload to benchmarking tool



Utility Engagement



- Began outreach in late 2020 to proactively engage all utility stakeholders
- Goal: To improve utility data access for customers & advance best practices in implementing, streamlining and simplifying automatic data upload
- Ensure early understanding and information sharing

Utility Accelerator Coalition

Benchmarking Policy Key Considerations

- Utility data access requirements geared toward owner compliance
- Clear timeline for implementation
- Clear timeline for data delivery

Supplementary Policy Recommendation

- Utility accelerator workshop series



Utility Accelerator Coalition



Coalition Workshop Series Participation

- 24 Organizations
- 13 Qualifying utilities
- 39 Members

Utility focused, both qualifying and non-qualifying, to provide comprehensive implementation best practices.

Online registration with options to attend and/or receive post-workshop resources.

Utility Accelerator Coalition

Workshop Series Best Practices

- Bill requirements
 - qualifying & non-qualifying
 - gas & electric
- Corporate benefits
- Benchmarking process & expectations
- Resources and best practices
- Guest speakers
- Case studies



Utility Accelerator Coalition

Six-Part Webinar Series

- Provided live recording, meeting minutes, slide deck, supplementary materials

Workshop Series Topics

1. Intro to Bill requirements & Overview of corporate benefits
2. Case studies: Current examples & Unique problem solving
3. Standardization of Data Disclosure: Auto-upload vs. Spreadsheet
4. Utility data identification & Disclosure best practices
5. Funding options
6. Workshop best practices: A series overview & Open forum Q&A

Utility Accelerator Coalition



Workshop Series Benefits

- Inform utilities and streamline their efforts in meeting Bill requirements
- Clarify and convey owner benchmarking process
- Open communication channels and develop a support system
- Reduced burden on utilities and customer
- Ensure and increase annual compliance

Thank you

Kim Burke

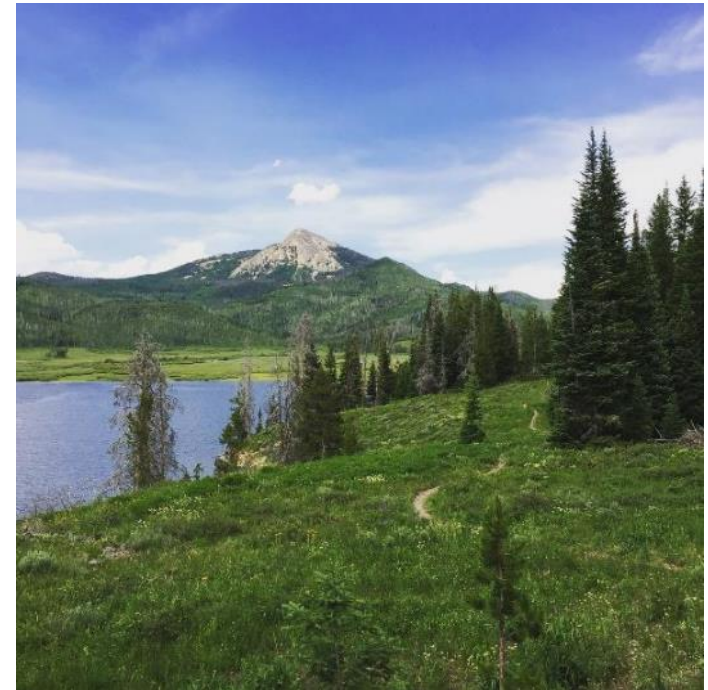
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Wrap-Up



Key Takeaways

- Drivers for commercial building benchmarking continue to multiply – both voluntary and mandatory.
- Commercial building owners/operators need access to whole-building energy consumption data to ensure accurate and effective benchmarking.
- Utilities play a significant role in delivering energy consumption data to building owners/operators.
- Policymakers can provide direction and clarity to utilities regarding data access requirements – especially when addressed at the statewide level.

EPA Benchmarking and Building Performance Standard Toolkit

- New resource!
- Includes a chapter dedicated to Data Access, along with further technical guidance including:
 - **Sample policy language**
 - Considerations for compiling and delivering aggregate whole-building data

<https://www.epa.gov/statelocalenergy/benchmarking-and-building-performance-standards-policy-toolkit>



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Q&A

