Leveraging DSM Programs to Deliver on the Promise of Benchmarking and Disclosure Policies

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ABSTRACT

Across the country, many jurisdictions are implementing energy benchmarking and disclosure ordinances. These states and municipalities believe that benchmarking is a foundational policy for improving energy efficiency in buildings. To capture the intended savings, however, building owners and operators must see a direct path to improve energy performance. While state/local governments establish the policy framework, local utilities and efficiency program sponsors are positioned to actually deliver on the promise of these savings via demand-side management (DSM) programs. The ultimate ability of benchmarking mandates to drive large-scale efficiency gains depends on successful coordination of state/local government and utility efforts, with each party maximizing their respective roles. This paper explores this concept through case studies. We will discuss the collaboration between the City of Cambridge, MA and Eversource to provide whole-building energy data to property owners to drive the success of the local benchmarking ordinance. We will explore an Eversource initiative in Connecticut that builds upon a statewide public building benchmarking effort to develop strategic action plans that facilitate energy improvement projects in municipal buildings. Finally, we will examine how Energy Trust of Oregon is coordinating with the City of Portland, local utilities, and the Northwest Energy Efficiency Alliance (NEEA) to provide actionable next steps for building owners to improve their energy performance scores. Through these examples, we will present replicable best practices, ranging from the design of benchmarking policies and collaboration models with local utilities, to design of utility program offerings to capitalize on the energy savings opportunities behind benchmarking mandates.

Introduction

Energy performance benchmarking is widely regarded as a critical foundation for strategic energy management in buildings. There are a number of factors currently driving the increase in benchmarking activity across the country, including the proliferation of policies that require (or encourage) benchmarking and disclosure by property owners. While experience to date points to a strong correlation between benchmarking and energy performance improvement in buildings, it is critical that building owners see a clear path between benchmarking and "next steps" to energy improvement, and that they are presented with mechanisms to move from information to action.

In this paper, we discuss the role that utilities and program sponsors can play in establishing that clear path to action for customers that are already, or will soon be, benchmarking. In the sections to follow, we present the general context and background within which benchmarking has gained prominence in the national energy policy discourse. Then, we explore the link between benchmarking and energy improvement, and discuss the importance of utilities in actualizing that link. Then, we review three examples of utilities and/or program sponsors that are proactively designing and deploying their program offerings to leverage existing benchmarking policies in their service territory. Finally, we identify best practices and offer recommendations based on these examples, which may be broadly applicable to any state or local jurisdiction that is considering or actively pursuing a benchmarking policy.

Context and Background

The goal of energy benchmarking is to help building owners and operators understand how their buildings are performing relative to peers, in order to identify, prioritize, and pursue energy reduction measures – which can take the form of operational, behavioral, or capital equipment/system improvements. Rooted in the adage that "you can't manage what you don't measure," an emphasis on benchmarking presumes that enhanced awareness of a building's energy performance will lead to greater efforts to improve that performance – especially in cases where buildings start out as underperformers. In addition, the continuous benchmarking of buildings over time allows owners and managers to keep tabs on their properties' performance – and can be especially useful in identifying where operational best practices may have slipped, and must be re-established in order to maintain or further drive improved performance.

While there are a number of energy benchmarking tools deployed throughout the marketplace, the most well-known and widely-used tool is the U.S Environmental Protection Agency's (EPA's) ENERGY STAR[®] Portfolio Manager[®]. Portfolio Manager is a free, online software tool that allows building owners and operators to enter basic energy consumption and property use data, and obtain calculated metrics that can be used to track whole-building performance over time and/or compare buildings against one another. All properties can use Portfolio Manager to calculate whole-building metrics such as energy use intensity, greenhouse gas (GHG) emissions associated with energy consumption, and energy cost. For a subset of property types representing a majority of the U.S. building stock, Portfolio Manager can go a step further, calculating a 1-to-100 energy performance score that objectively compares properties against their peers, taking into account building size, location, and key operating parameters. Operating like a "miles per gallon" rating for buildings, the ENERGY STAR score can help owners and operators understand how their property is performing compared to similar properties nationwide. The score also serves as a quick and effective way to communicate energy performance to a range of audiences, both technical and non-technical – and buildings with scores of 75 or above are eligible to receive the ENERGY STAR Certification, signifying superior energy performance and allowing the building to tap into the value of the widelyrecognized ENERGY STAR brand.

Since the introduction of Portfolio Manager in 1999, the national uptake of benchmarking has continually climbed, growing to more than 400,000 buildings as of the end of 2014 (EPA, 2015). In addition to EPA's regular updates and enhancements to Portfolio Manager, including the periodic release of new property types eligible for the 1-to-100 score, there are a few key drivers for this explosion in activity:

- Voluntary adoption by property owners and managers who consider benchmarking to be a low-cost, high-return best practice for driving strategic energy management;
- Uptake by utilities seeking to integrate benchmarking support into program offerings whether as a customer service or, increasingly, as a means for better targeting customers with savings opportunities;

- Voluntary benchmarking initiatives, campaigns, and competitions the state and local level (e.g., "Kilowatt Crackdowns"); and
- Mandatory benchmarking of public and/or privately-owned properties through state and local policies/regulations/ordinances.

It is important to note that Portfolio Manager remains a voluntary tool at the national level. However, the decision by a number of city and state governments to require or strongly promote benchmarking in Portfolio Manager reflects policymakers' growing understanding of benchmarking as an enabling activity for higher-level energy efficiency goals and climate action plans.¹ In addition to requiring that building owners benchmark their properties, a significant number of cities also require that benchmarked building performance be disclosed to various parties. In some cases, disclosure is triggered by sale, refinance, or lease, and disclosure is only provided to the buyer, financier, or lessee. In other cases (16 cities/counties and two states, as of early 2016), the building owner is required to disclose benchmarking performance on a regular basis (often annually), and this information may be posted on a public website and/or aggregated for reporting at the city level. Across all iterations of benchmarking policies, the driving assumption is that energy performance transparency in the marketplace will lead to a greater demand for energy-efficient buildings, which will drive owners and operators to take steps to improve the energy performance of their properties. As we discuss in the next section, there is significant support for this assumption – but it is important that there be supporting mechanisms in place to facilitate the translation of benchmarking *information* into action.

Translating Energy Benchmarking into Energy Improvements

Readers will note that the act of benchmarking, in and of itself, does not directly drive energy performance. After all, benchmarking, at its most basic, is a matter of data entry into an online application. Rather, the value-added metrics and comparative information gathered through benchmarking will ideally become inputs into decision-making around efficiency improvements – including the identification of underperformers and the prioritization and staging of projects and strategies at various buildings over time. For this reason, it is widely accepted that benchmarking activity will be strongly correlated with improved energy performance – and furthermore, that benchmarking will result in the pursuit of energy efficiency improvements that would not otherwise have taken place.

A number of studies support this expectation, most notably EPA's finding that, across 35,000 commercial properties that benchmarked continuously over three years (2008-2011), these properties achieved average savings of 7 percent during the observation period – or 2.4 percent year-over-year (EPA, 2012). This observation is echoed by Washington, DC's finding that weather-normalized energy use intensity of large commercial buildings responding to its local ordinance decreased by 3 percent between 2012 and 2013 (DDOE, 2015). Similarly, San Francisco observed an average savings of 8 percent over a four year period (2010 - 2014) for buildings that consistently submitted annual data in compliance with its ordinance (Hooper et al., 2015, p. 4).

¹ Both EPA and the Institute for Market Transformation (IMT) host maps that track the growth of voluntary benchmarking initiatives and mandatory benchmarking policies across the country. For the EPA map, see https://www.energystar.gov/buildings/program-administrators/state-and-local-governments. For the IMT map, see http://buildingrating.org/graphic/us-benchmarking-policy-landscape. Each of these resources is regularly updated.

We cannot say for certain that the insights gained through benchmarking led directly to these observed savings. However, it is worth noting a 2012 process evaluation of the statewide benchmarking efforts undertaken by California investor-owned utilities, which revealed that, among those customers who participated in utility benchmarking programs:

- 62 percent indicated that benchmarking influenced how their organization manages building energy use;
- 84 percent planned or implemented energy efficiency improvements with 81 percent of these leveraging or planning to leverage their utility's efficiency programs to do so; and
- More than 50 percent agreed that benchmarking leads to implementation of more comprehensive energy efficiency measures (NMR, 2012, pp. 2-3).

Findings such as these help to further solidify the relationship between benchmarking and energy improvement. But especially notable among the California evaluation results is the observation that customers accessed (or intended to access) their utilities' DSM programs in order to pursue the energy improvement opportunities revealed through benchmarking. In other words, a significant majority of customers recognized their utility's efficiency program offerings as a *direct connection* between benchmarking and improvement. Findings such as these suggest the critical role that utility programs can play in driving results "beyond benchmarking" – and below, we will discuss the special importance of this role in the context of state and local benchmarking policies.

Benchmarking: From Compliance Activity to Savings Opportunity

The passage of a state or local benchmarking ordinance (especially one with penalties for noncompliance) will almost certainly drive up benchmarking numbers – which serves as a short-term indicator of success. The longer-term question for policy makers, however, is whether the policy will spur the uptake of efficiency measures to improve building performance and result in meaningful energy and carbon reductions. For this to happen, affected building owners must be both *encouraged* and *enabled* to see beyond the perceived burden of a rote compliance activity, and to understand the benefits that they stand to gain from having completed this activity.

This will require a delicate touch – especially in the commercial building sector, where additional mandates or regulations are not always welcomed. And no matter what, a certain percentage of building owners may never be willing to view benchmarking as more than just another reporting burden to be dealt with as quickly as possible. However, if building owners are shown a clear and direct path between benchmarking and savings opportunities – and, moreover, are provided with concrete tools and resources to capture those opportunities while they are top-of-mind – the likelihood of achieving significant energy savings at the city or state level becomes much greater.

At a minimum, these tools and resources will need to include education and technical assistance in the form of published benchmarking guidance and job aids, technical "helpdesks" or call centers, and/or live and web-based trainings. Such resources are already in use across a number of cities and states, and help meet the immediate need of affected building owners to understand how to benchmark and submit required data in order to comply with the ordinance.²

² See, for example, the Technical Assistance resources made available by the City of Cambridge, <u>http://www.cambridgema.gov/CDD/zoninganddevelopment/sustainablebldgs/buildingenergydisclosureordinance.</u>

However, to drive maximum impact, these resources should be supplemented by clear guidance and specific next steps for driving action "beyond benchmarking." In light of the California evaluation results discussed above, it is clear that utility efficiency program offerings can help play this significant role through both technical assistance and direct financial incentives. As we will discuss below, it is not a matter of simply promoting the availability of program offerings; rather, building owners need to understand what offerings are right for them, taking into account their building's benchmarking performance. Moreover, these opportunities must be presented at the right time, taking into account the owner's interest and attention, as well as other considerations such as budget cycle.

This introduces the need for a new level of coordination between local and state governments and their respective utilities, which may lie outside of traditional practice. After all, the utility is typically not responsible for local policy decisions – and a local government is not directly responsible for the makeup of their utility's portfolio of efficiency programs. However, as we will see in the case studies that follow, leading state and local governments are working with their local utilities – sometimes directly, and sometimes with contractor assistance – to find ways to streamline, harmonize, and otherwise coordinate between benchmarking requirements and efficiency program offerings. In doing so, these partnerships are being positioned to bring about the concrete savings promised by benchmarking policies.

Case Study: Cambridge, MA and Eversource

The Cambridge, MA Building Energy Use Disclosure Ordinance (BEUDO) was enacted by the Cambridge City Council on July 28, 2014. The ordinance is a key step in efforts to reduce Cambridge's GHG emissions. Energy use in buildings accounts for about 80 percent of GHG emissions in Cambridge, with two-thirds of the total related to commercial, institutional, and large multifamily buildings. Efforts to improve the energy performance of Cambridge's building stock are hampered by the invisible nature of energy use.

The ordinance is intended to address this problem by requiring owners of larger buildings to track and report annual energy use to the City, which then publicly discloses the data. Disclosure places the information in the marketplace, where various users such as potential property buyers, tenants, realtors, energy service providers, and others can use the data and create value for higher energy performing properties. The data will also aid the City and others in planning for higher energy performance across the local building stock. The ordinance is a foundational strategy for various community sustainability initiatives, including the Community Compact for a Sustainable Future, Kendall Square EcoDistrict, and efforts to move the community toward net zero emissions.

Eversource provides electric and gas service to the commercial and residential customers of Cambridge. Eversource is New England's largest energy delivery company, with more than 3.6 million electric and natural gas customers in Connecticut, Massachusetts and New Hampshire. The energy efficiency programs provided by Eversource in Massachusetts are designed collaboratively with all Massachusetts investor-owned utilities, through a process that originated from the Massachusetts Green Communities Act of 2008. The energy efficiency

<u>aspx</u>, as well as the resource provided by the City of Chicago, <u>http://www.cityofchicago.org/city/en/depts/mayor/supp_info/chicago-energy-benchmarking/Chicago_Energy_Benchmarking-Training.html</u>.

program offerings include a broad range of technical assistance, prescriptive and custom incentives, rebates, and project financing.

Eversource collaborated with the City of Cambridge during the development of its Ordinance and continued support during the first year of Cambridge BEUDO Reporting in 2015. Eversource provided support in three distinct ways: (1) staff resources were dedicated to working with Cambridge and its customers; (2) a web portal was developed to facilitate customer download of whole-building energy data needed for benchmarking; and (3) Eversource staff helped respond to inquiries received directly from customers, as well as from the Cambridge Helpdesk, which is staffed by ICF International and provides technical support to customers complying with BEUDO reporting requirements. With the first year of reporting completed, Eversource and the City of Cambridge are now exploring next steps to engage customers in using the energy data provided through the BEUDO reporting process to identify and implement energy reduction projects, using the incentives and resources provided by Eversource.

Building owners initially benefit from Cambridge BEUDO reporting and the collaboration with Eversource by gaining a greater understanding of their facility's energy use. Graphic reporting from the City of Cambridge (to be made public in 2016) will also provide comparative data to allow customers to assess their energy intensity relative to other Cambridge property owners. Additionally, as the program matures, customers will benefit by learning about specific energy conservation measures and financial incentives from Eversource that may improve the energy performance of their facilities, hopefully resulting in financial improvements to their bottom line.

Eversource is responding to the Cambridge BEUDO, and the customer needs and interests resulting from the ordinance, with additional strategic planning. In particular, Eversource has developed an innovative Customer Engagement Platform that is designed to enhance the customer experience; provide comprehensive energy use data to customers that can be used to comply with benchmarking reporting requirements; and use the benchmarking data to target customers who may benefit from participation in energy efficiency programs. This webbased platform, which will be easily accessible on the Eversource site, will provide an exchange of information between the customer and Eversource to help prioritize projects and track customer improvements in energy performance. This will be conducted using benchmarking data from the EPA's Portfolio Manager tool.

The Tenant Efficiency Program is one example of a targeted program that emerged from a review of customer energy data. This program responds to the specific needs of commercial operators, with a special focus on small- to medium-size tenants in multi-tenanted office buildings. The Program provides a free energy assessment, including project recommendations, costs and estimated savings that may be expected from the project, along with incentives and potential financing options. The Tenant Efficiency Program represents the type of feedback loop that can result in sustainable energy performance improvements as an outcome of the Cambridge BEUDO. As a result of the significant collaboration undertaken to date, the City of Cambridge provides a structure for tracking energy improvements through the BEUDO; Eversource provides customer energy data for benchmarking in Portfolio Manager; both the City and Eversource can use the benchmarking data for targeted outreach to customers to implement energy efficiency improvements; and the building owners that represent City constituents and utility customers are benefitting from the energy and cost savings that come from building improvements.

Case Study: State of Connecticut and Eversource

In 2011, Eversource program administrators, alongside regulators and other partners, revised the Connecticut Clean Energy Communities Program and established the voluntary goal for local governments to benchmark public sector buildings using EPA's Portfolio Manager tool. Under the program, a number of Connecticut cities and towns voluntarily pledged to track and reduce municipal building energy consumption by 20 percent by 2018, and to voluntarily purchase 20 percent of municipal electrical needs from renewable sources by 2018. The initiative is promoted through the Connecticut Department of Energy and Environmental Protection (DEEP), which also seeks the engagement of the investor-owned utilities.

There are a total of 169 municipalities in Connecticut, and of those, Eversource provides electric service to 149 towns and natural gas service to 71 towns. Connecticut energy efficiency programs are designed jointly by Eversource and The United Illuminating Company, under the approval of the Connecticut Energy Efficiency Board. The energy efficiency program offerings include a broad range of technical assistance, prescriptive rebates, custom rebates, and project on-bill financing with low or no interest.

In response to the combined benchmarking and energy reduction goals of the Connecticut Clean Energy Communities Program, Eversource recognized the need to provide "hands-on" technical assistance for participating local governments – not only to help them benchmark in Portfolio Manager, but also to identify and pursue substantive measures for reducing energy consumption. The Municipal Technical Assistance Project was specifically created to meet this need.

Eversource selected ICF International to help design and implement the Project, which has been operational since 2012. Key elements of the Project include:

- Training on the development and maintenance of local "green teams," so that each local government can benefit from a sustainable program infrastructure. Training is provided through regular team calls over a period of six months.
- Benchmarking all municipally-owned buildings (including Board of Education-owned properties) in Portfolio Manager, through hands-on assistance, as well as training to the local green teams.
- Providing an analysis of the municipal portfolio, based on benchmarking results, and helping the green team to select the municipal building most in need of an ASHRAE Level I energy assessment.
- Delivering one ASHRAE Level I Energy Assessment, along with a corresponding report, for each municipality to identify potential energy reduction projects. The auditor is supported by Eversource energy engineers, who help review potential energy efficiency technologies and measure recommendations to identify those that are eligible to receive incentives from Eversource.
- Preparing a customized Municipal Action Plan for each participating local government, along with tracking tools to encourage the continuation of benchmarking and the development of a project implementation schedule to achieve a 20 percent energy reduction across the portfolio.
- Extensive collaboration from a team that includes Eversource Clean Energy Communities staff, Engineers, and Community Services Representatives. The ICF implementation team provides Liaisons to work with both towns and Eversource staff to deliver technical

training, perform ASHRAE Level I energy assessments, prepare Municipal Action Plans, and provide project management.

Benchmarking with Portfolio Manager is critical throughout the entire Municipal Technical Assistance Project. Eversource staff set up participating towns' Portfolio Manager accounts and compile historical energy data to ensure accuracy. The ICF implementation team provides analysis of the initial Portfolio Manager reports, as well as further training on the tool so the municipalities will continue to benchmark after this initial setup. Municipalities report progress annually to Eversource, via the Portfolio Manager custom reporting functionality, in order to track their progress toward meeting the 20 percent energy reduction goal.

The significant level of technical assistance provided through this program is of great value to participating cities and towns, which are often resource-constrained. It provides a structured framework and process not only for establishing a benchmarking initiative, but also for helping local governments implement projects informed by benchmarking results. The collaboration with Eversource staff provides direct links between the municipalities and Eversource energy efficiency program administrators to encourage participation in incentive programs. The customized Action Plan and tracking tools help towns to inform municipal decision makers about projects that have been completed, as well as future projects that can or should be pursued. In turn, the Project has provided great value to Eversource by fostering stronger connections and customer service with their public sector customers. The Portfolio Manager reports delivered annually through the Clean Energy Communities Program provide indictors for Eversource energy efficiency program managers who may use the energy data to help target key customers for participation in incentive programs.

Finally, participating municipalities also benefit from recognition events and grant awards. Through participation in energy-saving and renewable energy programs, communities can receive points toward rewards. For every 100 points earned through participation in energy efficiency programs, a community is eligible to receive a Bright Idea Grant, ranging from \$5,000 to \$15,000, to be used on a community-selected energy efficiency project. Similarly, for every 100 points earned through participation in renewable initiatives, a community can receive a reward of \$4,500, to be used on any project involving energy efficiency, renewable energy, or alternative fuel vehicles. In October 2015, a Clean Energy Awards Ceremony was held to recognize the achievements of 145 communities across Connecticut. Recognition included:

- 89 bronze award recipients that had pledged to the Clean Energy Communities Program.
- 53 silver award recipients that completed the Pledge, established an energy task force, engaged in community awareness programs, earned a Bright Idea Grant, and completed one full year of benchmarking municipal energy usage.
- 5 gold awards recipients that completed all the tasks of the Bronze and Silver awards. Additionally, these municipalities redeemed their Bright Idea grant after completing a project, conducted a community outreach campaign, achieved 20 percent participation in residential programs, and 15 percent participation by commercial customers.

Case Study: Portland, OR and Energy Trust of Oregon

According to ACEEE, Oregon ranks fourth in energy efficiency as a state, and the City of Portland, a leader in energy efficiency, is currently ranked as the eighth highest-performing city

in America. Portland's Bureau of Planning and Sustainability works with various stakeholders through innovation, collaboration, and practical solutions to improve energy efficiency and the environment. Portland's Climate Action Plan, adopted in 2015, established goals to reduce carbon emission 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050. The key element of the Climate Action Plan is to reduce the total energy use of existing commercial buildings built before 2010 by 25 percent by 2030.

To help reach this goal, in 2015 the City also enacted Portland City Code Chapter 17.104 – Energy Performance Reporting – which seeks to increase the transparency of energy performance in commercial buildings and thereby motivate investment in energy efficiency improvements that will reduce carbon emissions. This new requirement for annual energy tracking and reporting by Portland's largest commercial buildings will enable the City to measure and manage progress toward its climate goals. Under the administrative rules, "covered buildings" means any commercial building with a gross floor area of at least 20,000 ft², where no more than 50 percent of the gross floor area is used for housing, nursing home, parking, primary and secondary education, industrial, warehouse, or worship purposes.

The administrative rules require the use of EPA's Portfolio Manager to benchmark building energy use. All buildings over 50,000 ft² must be benchmarked by April 22, 2016, and scores will become public in 2017. All buildings over 20,000 ft² must be benchmarked by April 22, 2017, and scores will become public in 2018. Fines will be imposed for buildings failing to benchmark as required.

Energy Trust of Oregon is an independent nonprofit organization dedicated to providing utility customers of Portland General Electric, Pacific Power, NW Natural, and Cascade Natural Gas with low-cost, clean energy solutions. With the exception of Cascade Natural Gas, each of these utilities serve sections of the City of Portland.

Once the City made the decision to require benchmarking, Energy Trust initiated a plan to support customers required to benchmark by leveraging the Energy Trust Existing Buildings (hereafter, "the Program") outreach team, program services, and cash incentives, helping them to save energy and thereby improve their benchmarking scores. The Program offers incentives for Standard (prescriptive) measures, lighting, and Custom measures for both gas and electric. Equally important, the Program provides Walkthrough Surveys and technical analysis studies (TAS) at no cost to qualified customers to help them identify cost-effective energy-efficient measures, and estimate their potential savings.

The Program developed a multi-pronged approach to reach customers subject to the benchmarking ordinance, and make them aware of how Energy Trust could help:

• Energy Trust Program Account Managers already work directly with the owners and managers of many of the largest properties in the City. Through these relationships, Account Managers began spreading the word to customers during routine outreach visits and events. For instance, the Program Management Contractor (ICF International) and Energy Trust staff worked with the local chapter of Building Owners and Manager Association (BOMA) International to help them understand that the sooner they implemented energy saving measures, the better their score would be. Program staff also attended other organizational meetings to spread the word, such as Women in Commercial Real Estate (CREW).

- The City held two trainings for property owners and managers to explain the Energy Performance Reporting Code and Administrative Rules. For each of these sessions, EPA staff came to Portland to provide an overview of Portfolio Manager, as well as hands-on training on benchmarking in Portfolio Manager. At both meetings, Energy Trust Program Representatives also explained how Energy Trust programs and services could help buildings owners identify opportunities and what incentives could be available to reduce the cost of energy upgrades.
- Around the same time the Code was adopted, the Program was developing an offering for Retrocommissioning under the Custom program. Energy Trust took the opportunity to expand the offering to help those Portland customers required to benchmark (as well as any other qualified customer in the state interested in benchmarking). Now, any customer that implements a Retrocommissioning measure in their building is also eligible to receive additional financial assistance to help offset some of the cost to benchmark with Portfolio Manager.
- Energy Trust, in coordination with the City, is working to identify customers subject to the Energy Performance Reporting Code that have not previously participated in the Program, and will use this information for driving additional Program participation.

Based on program experience, Energy Trust anticipates that buildings in the 20,000 to 50,000 ft² range may need the most assistance for benchmarking and identifying and implementing "next steps." However, Energy Trust is engaging with all affected property owners and managers to ensure they have the information they need to most productively engage with Energy Trust as a means to act upon and improve their benchmarking results.

Discussion and Recommendations

The three case studies presented above provide a range of examples of programs in different states of maturity. Two of these are taking place in cities with relatively recent mandatory benchmarking policies, while another reflects an established statewide effort where benchmarking and reporting is voluntary but strongly encouraged. In all cases, we see local utilities and program sponsors responding creatively and thoughtfully, in order to ensure that information and insights generated through benchmarking activity can be readily translated into actionable next steps and energy savings for building owners. Across these three examples, there are a number of recommendations and best practices that emerge.

• State/local benchmarking policies can and should be viewed as an opportunity, rather than a burden, for both program sponsors and affected building owners. As demonstrated through our case studies, leading utilities and program sponsors already recognize this, and are positioning themselves accordingly. Utilities and program sponsors can play a significant role in helping building owners to both understand and pursue the savings opportunities unlocked by benchmarking policies – as opposed to focusing solely on compliance with a mandate.

- Focus on what each party (state/local government; utility/program sponsor) does best, but ensure these strengths are coordinated to the extent possible. Local governments have the power to develop and enact policy, as well as the ability to reach and educate affected parties through workshops, trainings, etc. Meanwhile, utilities and program sponsors have the program delivery infrastructure, as well as the funding to drive the implementation of actual energy improvement measures. Wherever possible, identify opportunities for these respective strengths to facilitate one another, rather than being deployed in siloed workstreams.
- Even if utilities/program sponsors are not (or cannot be) involved in the proposal, development, and passage of the benchmarking policies themselves, they should explore the opportunity to engage as a stakeholder in the process in order to: understand the key components of the policy being proposed; help other stakeholders understand the implications of the policy for utility customers including potential interactions with current utility program offerings; and help other stakeholders understand current utility efficiency program offerings, in order to identify and promote policy components that will serve to encourage building owners to take advantage of program resources.
- Be flexible in terms of developing pilot initiatives (or even expansions on existing program offerings, where possible) in order to capitalize on the kind of information becoming available as a result of benchmarking initiatives. It is critical that these programs are coordinated with the timing of the benchmarking ordinance, so that customers can be made aware of available resources to drive energy improvements at the same time as they are going through the benchmarking process.
- Embrace the opportunity to help building owners gain access to and/or understand their energy consumption data not only to facilitate compliance (primarily a customer service benefit), but also to better understand customer energy performance at the whole-building level, in order to drive identification of and participation in the most relevant and beneficial efficiency program offerings. For utilities and program sponsors, better targeting of efficiency programs to building owners can mean lower cost of acquisition, better cost-effectiveness (targeting efforts at buildings more likely to drive large savings), and lower risk of stranded costs (e.g., assessments performed on buildings that never act on recommendations).

Conclusion

In this paper, we have explored the role that utilities and other program sponsors can play in helping to actualize the energy savings that are intended by state and local policymakers through the deployment of benchmarking initiatives (whether mandatory or voluntary). While utilities and program sponsors themselves may not be involved directly in the development of such policies, the decision to design and/or deploy complementary offerings through efficiency programming is something over which they do have control – and which can deliver shared benefits for building owners/utility customers, state and local policymakers, and the utilities themselves. As illustrated in the case studies above, utilities and program sponsors can deploy a number of creative approaches to target incentives and technical assistance resources to customers that are also required or encouraged to benchmark. In doing so, they assist building owners to see beyond the immediate act of benchmarking, and to follow through with the implementation of measures that will lead to demonstrable energy and cost savings.

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