

Pacific Coast Collaborative

Mandatory Benchmarking

& Disclosure Policy Plan

plus Legislative Strategy

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FINAL REPORT

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**Project Objective**

The objective of this project is to develop a robust Model Benchmarking and Disclosure (MBD) policy with defined building targets, enforcement mechanisms, and utility requirements. This project has the additional goal of supporting policy adoption within each of the four Pacific Coast Collaborative (PCC) jurisdictions: British Columbia California, Oregon, and Washington.

**Project Outcome**

The project developed a regional model MBD policy, policy support documents, education materials and a knowledge base of MBD policies within state, provincial and local governments.

Several PCC jurisdictions have adopted or modified MBD policies, supporting infrastructure has been deployed and additional jurisdictions are considering a range of options for MBD policies. MBD policies now cover 73% of the PCC (by population). An additional 5% are have emerging policies. This includes statewide adoption in California and local adoption in Portland Oregon and the lower mainland of British Columbia.

**Lessons Learned**

The development of MBD policies requires a good understanding of a complex implementation matrix. Mapping the process is an important part of creating a complete MBD policy. Providing flexibility to the administrator provides important implementation tools.

Participation of the serving gas and electric utilities is essential to successful implementation of a mandatory benchmarking and disclosure policy. This includes aggregation of building metered data and implementation of automated updates to monthly service records. Utilities need to be compensated for these efforts through rates. These issues need to be addressed during policy development.

A program approach to assist in implementation is important. Building owners and occupants need a support system to assure high participation rates and accurate representation of building utility data.

Managing building owner privacy concerns is an important element of policy development. This is typically accomplished through meter data aggregation and exemptions for occupancies with legitimate concerns. This needs to be specified in the MBD to provide utilities and building owners with clear direction.

Benchmarking programs require financial support for implementation. Depending on the scope of the program, this can be significant.

Identify long term funding for implementation in the development of a benchmarking policy. Final approval of the policy may be contingent on the availability of funding.

**Background**

The PCC consists of four member jurisdictions: British Columbia, California, Oregon, and Washington. These jurisdictions have long been leaders in the fields of energy efficiency and renewable energy and have decided together to create consistent and coordinated policies across the entire Pacific Coast.

On October 28, 2013, the PCC signed the *Pacific Coast Action Plan on Climate and Energy* (PCC, 2013). This agreement among the governors of Washington, Oregon and California and the Premier of British Columbia sought to coordinate efforts along the Pacific Coast to lead national and international policy on climate change, transition to clean modes of transportation and invest in clean energy and climate resilient infrastructure. This included directions to “...support policy that ensures that energy efficiency is valued when buildings are bought and sold.” This initiated the Pacific Coast Collaborative Benchmarking Workgroup, which is a formal basis for cooperative action, leadership and information sharing and a common voice on issues facing Pacific North America.

The successful implementation of a Mandatory Benchmarking and Disclosure (MBD) policy enacted along the Pacific Coast could greatly increase the awareness surrounding building energy consumption and enable market participants to place a value on building efficiency. Energy benchmarking is the process of measuring a building’s energy use over time and comparing energy performance relative to similar buildings. Disclosure can take many forms, but is commonly the process of making building energy data publically accessible. This informs the real-estate market place. This will help owners and occupants better understand their building’s energy use and identify opportunities to cut energy waste.

The PCC workgroup developed this project with the hypothesis that full public disclosure of a large community of commercial building energy use information would best inform markets. This would then motivate building owners to improve the efficiency of their properties.

To advance adoption of MBD policies in the PCC, the workgroup proposed developing a uniform MDB policy for adoption by state, provincial or local governments. The workgroup also proposed creating a series of supporting documents. Finally, the PCC workgroup would provide technical support and education in support of the development of legislation, local ordinances and implementation strategies. The policy and implementation materials are available to a broad audience of potential stakeholders.

**Pacific Coast Collaborative Benchmarking Workgroup (PCC workgroup)**

The PCC workgroup included five government agencies and three prime contractors. This includes

Agencies

* British Columbia Ministry of Energy and Mines (B.C.)
* B.C. Hydro
* California Energy Commission (CEC)
* Oregon Department of Energy (ODOE)
* Washington State Department of Commerce, State Energy Office (Commerce)

Supporting Contractors

* Institute for Market Transformation (IMT)
* Northwest Energy Efficiency Council – the Smart Building Center (NEEC)
* Ross Strategic (Ross)

**Development of a regional Model Benchmarking Policy**

Benchmarking policy design is relatively simple on the surface. Ask building owners to create Energy Star Portfolio Manager Reports for each building and share them with the program administrator. However, constructing a fair, accurate and enforceable methodology requires consideration of the details. It impacts local governments, a good number of building owners, their tenants and the serving electric and gas utility.

The PCC workgroup developed a set of model MBD policies. The primary objective of this project was to develop a MDB policy that would provide good market transparency. A uniform policy across PCC jurisdictions was envisioned to create a predictable application MBD that market participants could work with across jurisdictions. Uniformity could also support further collaboration during implementation.

Development of the model benchmarking policy occurred over seven months. Eighteen phone calls or webinars were held to move the agenda forward. While policy development was the organizing factor, these meetings were also used to consider program implementation needs and develop outreach materials. In the final meetings, the PCC workgroup invited local governments to participate and comment prior to finalizing the policy.

The PCC workgroup received input from a range of experts and early adopters. The workgroup relied on a professional facilitator (Ross) and two non-profit consultants (IMT, NEEC) to move through a detailed agenda. They helped organize a range of experts who could provide valued input. This included the Environmental Protection Agency (E.P.A), U.S. Department of Energy (DOE), Natural Resources Defense Council (NRDC), and the Cities of Los Angeles, Seattle and Chicago.

During the policy development stage of this project, every participant participated in a range of support activities. The principal division of labor is as follows.

* Facilitation and documentation of the process was provided by Ross
* Development of policy options, description of supporting infrastructure, implementation budgets, additional subject matter experts, etc. were developed by IMT and NEEC
* State and Provincial policy staff each represented their jurisdictions existing and prospective policies and anticipated the concerns of local jurisdictions, serving utilities and building owners.

The participating experts provided specific input based on their specialty:

* EPA Energy Star Portfolio manager is the primary interface between the building owner client and the benchmarking program administrator. As well as providing a data input platform for the building owner, EPA has developed methods to reporting to large MBD programs.
* DOE has worked with Lawrence Berkeley National Laboratory developing the Standard Energy Efficiency Data Platform (SEED). This data management tool provides benchmarking administrators a platform to manage portfolio scale building performance data from a variety of sources.
* NRDC provided information on tenant privacy concerns that could limit the adoption of disclosure policies. They also provided recommended solutions, most notably utility meter data aggregation.
* The Cities provided the PCC workgroup with a range of information on program implementation, and commented on the developing policy. Their experience provided further clarity on what was most essential to include in the policy, and the level of support needed to be successful. They also helped scale the proposed scope of covered buildings with input on clients and outcomes.

The PCC workgroup developed a policy framework and considered essential program elements. The primary policy considerations are as follows:

* Scope: buildings, building owners and tenants covered by the policy, typically identified by building size and occupancy type
* Reporting requirements: building owner responsibility for creating energy benchmarking reports, schedules for reporting
* Disclosure: scope and timing for full public disclosure
* Lead by example: does the jurisdiction demonstrate the policy before the requirements are implemented broadly
* Utility Requirements: utility support building owners reporting with building meter aggregation and automated benchmarking services
* Managing privacy concerns: utility account aggregation at the building level, exemptions for sensitive industries
* Compliance: enforcement methods for building owners, tenants and utilities, including notifications, customer service and fines
* Sharing data: program managers, academic, utility, third party, and full public disclosure
* Rulemaking: define a administrator and provide them flexibility for program administration, implementation and enforcement

Program Support and Administration

* Customer selection and notifications
* Customer training and support program
* Data collection and management
* Data Quality control, both internal and external
* Reporting – what when to whom
* Program budgets and funding methods

The policy development discussions were supported by 19 presentations. While some simply helped facilitate the discussion, the majority provided in depth information of value to final policy decisions. These include both policy and program implementation. We have selected four example presentations to illustrate the range of content.

* *Pacific Coast Collaborative: Basic Benchmarking Policy Design (IMT)* outlines in detail the major policy decisions required to create a MBD policy.
* *Pacific Coast Collaborative: Understanding the Role of the Utility* (IMT) describes the essential role utilities play, included automated benchmarking services and the protection of tenant privacy through meter data aggregation.
* *Pacific Coast Collaborative: Anticipated Resource Needs for Implementing a Benchmarking Policy* (IMT) outlines program elements for implementation.
* *Budget Estimate Scenarios* (NEEC) provides a simple pragmatic look at program cost scenarios.
* *Data Management Systems: Using Data to Drive Efficiency Action* (Seattle) discusses the additional outreach efforts the city is undertaking to encourage building owners to implement efficiency projects. This includes individualized outreach documents based on the building benchmarking data.

The final model benchmarking policies were adopted by the PCC workgroup. There are two variations of a model policy:

1. For local government and

2. For state or provincial government.

PCC workgroup used a consensus approach to add, remove and edit portions of the policy to create a single, unified document. It was in this discussion that the group discovered the need to provide two distinct policies, as one would not be appropriate for both state and local government.

The distinction between the two policies is that the state and provincial model policy includes utility regulations that typically cannot be adopted on the local level. Because of the diverse government structures and ambitions, these policies have not been used directly. They have provided guidance to PCC jurisdictions as they consider adopting their own ordinances.

* Pacific Coast Collaborative Model Commercial Building Energy Benchmarking Policy, Comprehensive
* Pacific Coast Collaborative Model Commercial Building Energy Benchmarking Policy, Local

**Lessons Learned**

The development of MBD policies requires a good understanding of a complex implementation matrix. Mapping the process is an important part of creating a complete MBD policy. Providing flexibility to the administrator provides an important implementation tools.

Participation of the serving gas and electric utilities is essential to successful implementation of a mandatory benchmarking and disclosure policy. This includes aggregation of building metered data and implementation of automated updates to monthly service records. Utilities need to be compensated for these efforts through rates. These issues need to be addressed during policy development.

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Managing building owner privacy concerns is an important element of the policy development. This is typically accomplished through meter data aggregation and exemptions for occupancies with legitimate concerns. This needs to be specified in the MBD to provide utilities and building owners with clear direction.

Benchmarking programs require financial support for implementation. Depending on the scope of the program, this can be significant.

Identify long term funding for implementation in the development of a benchmarking policy. Final approval of the policy may be contingent on the availability of funding.

**Outreach Activities**

The following describes outreach activities that impacted the development or adoption of MDB policies in the PCC region. The policy discussion usually begins within the broader context of climate or energy efficiency planning that in many cases preceded this project. The PCC workgroup developed resources to support more specific training objectives for state and local government. This was deliver to state, provincial and local by the PCC workgroup in large groups, or using one on one communications.

**Outreach at the State Level**

California adoption of an expanded MBD policy was achieved when AB 802 (CA, 2015) passed the state legislature. Passage of this legislation was supported by the publication of the California Energy Commission, Existing Buildings Energy Efficiency Action Plan (CEC, 2015) that advocated for an updated policy. The bill also had good support from a broad coalition of stakeholders lead by the Natural Resources Defense Council. This result allowed the California Energy Commission to continue outreach activities through their rulemaking process.

The Washington State Department of Commerce began their statewide MDB work by including a review of the existing law and proposed expansion in the agency report, 2015 Biennial Energy Report and State Energy Strategy Update (Washington State Dept. of Commerce, 2014). Commerce uses this required reporting to analyze existing policies and to propose new work to the state legislature. This reporting was successful in attracting the attention of several legislators who sponsored a draft bill to revise and update the benchmarking law. Commerce and an industry partner, the Northwest Energy Council, provided technical assistance in the development of a bill. This bill advanced through several hearings but did not reach the floor. While unsuccessful, this demonstrated that the required state reporting could result in action by the legislature. Commerce shifted their strategy to a local government approach.

A number of the local government planning efforts noted above also resulted MDB adoption. This includes San Francisco, Seattle and Portland.

**Outreach to Local Government**

Each of the PCC workgroup conducted local government outreach. The work primarily focused on local government in and around major urban centers. These are typically larger urban and suburban jurisdictions. A number of these urban and suburban communities have regional coordinating bodies that work together on a variety of issues including efficiency. In addition, a few smaller cities outside of major metropolitan regions were included in the outreach activities.

As noted above, a number of local government members were included in the policy development activities. This provided early input from local government on the policy documents and provided input on based on existing municipal implementation efforts.

Concurrent with the policy development activities, the PCC workgroup developed outreach materials. Two primary documents were prepared that discuss the benefits of benchmarking. One is a two-page introduction, the other a longer supporting document. In addition, the webinars developed for the PCC workgroup discussions provided good content for local government outreach. The PCC workgroup also relied on previous work provided through IMT.

* *Energy Benchmarking & Transparency Benefits* (IMT, 2015)provides a short introduction to benchmarking and highlights the benefits.
* *The Benefits of Benchmarking Building Performance* (Hart, 2015) explores in depth the documented benefits of benchmarking. This includes indicators documenting energy and cost savings, real-estate market impacts, and how they benchmarking supports government policies.

The PCC workgroup constructed a series of three webinars to inform local government. The three webinars were very detailed training webinars, providing much of the information developed to inform the policy development. The workshops focused on understanding MBD policies, building local expertise and program considerations. Based on contacts established by each PCC workgroup member, staff of interested local government were invited. Eighteen cities and two counties participated in the webinar series. The three webinars are described below:

* *West Coast States, Provinces, Counties, and Cities: Benchmarking and Disclosure Webinar Series Webinar #1:* provided background on existing MBD policies, statement of benefits and introduction to the policy. The webinar then presented a roadmap for policy adoption, including considerations for program implementation.
* West Coast Benchmarking and Disclosure Webinar #2: Policy Options and Experiences, provided a detailed discussion of the decisions that refined the PCC workgroup’s model policy. A good deal of Q and A was part of this discussion.
* *West Coast Benchmarking and Disclosure Webinar #3: Stakeholder Engagement, Implementation, and Costs*, focused on implementation, balancing customer service with regulatory enforcement, data management and the cost of administering a program.

IMT and Ross also organized a small conference, The West Coast Building Energy Efficiency Workshop. (Ross, 2017) Funding was provided by a non-profit organization, supplementing the PCC workgroup’s efforts. This event conducted in June 2017, included PCC workgroup and 18 cities form the PCC. The objectives included:

* Share lessons, best practices, and innovations from building energy efficiency policy and program design, adoption, and implementation on the West Coast, with a particular focus on local experiences.
* Determine priorities for collaboration on tools and technical assistance to enable interested cities and counties to make significant advancements in their energy efficiency programs over the next 1-2 years.
* Identify opportunities and roles for state/provincial jurisdictions, cities, counties, utilities, and other organizations in enabling and supporting advancements in local energy efficiency programs.

**Outreach specific to each state or province**

Each PCC workgroup organization conducted outreach to local governments in their jurisdictions. Each took a different approach determined by their established networks, current government policy status, and their individual project objective. A short summary of each follows:

**British Columbia (BC)**

BC government and B.C. hydro worked together to advance MBD through local government engagement and by developing enabling infrastructure. During this project, BC government updated their Climate Leadership Plan, which emphasized provincial and local government collaborations. The BC team worked with the Lower Mainland Local Government Association, which represents 33 local governments and 59% of BC’s population. The BC team engaged the local governments represented in detailed discussions about MBD policies. This engagement followed a similar path to the development of the PCC model benchmarking policy. BC made use of the PCC workgroup materials with modifications specific to BC regulations. Because of this work, the City of Richmond sponsored a resolution calling on the BC government to make energy benchmarking and annual reporting mandatory. This resolution was adopted by the Lower Mainland Local Government Association, providing support for eventual adoption in the province.

B.C. hydro took the lead on the development of enabling infrastructure. The primary work was the development of data aggregation platforms and automated benchmarking services. This required an understanding of existing laws regulating utility disclose of personal utility billing data. The utility also studied the buildings that would be impacted by different MBD policy scopes and detailed early adopter, commercial and residential building options. B.C. Hydro has fully enabled automated benchmarking meeting the required data aggregation. They have also worked with the primary provincial gas provider who recently enabled their own customer benchmarking solutions.

**California**

As noted above, California adoption of an expanded MBD policy was achieved when AB 802 passed the state legislature in 2015. With this, much of the California Energy Commission (CEC) actions were focused on MDB implementation through formal rulemaking. They also engaged in communications with municipalities, utilities and developed a plan for broad stakeholder outreach.

Where local MBD policies already in place at local government, California must consider the overlay of the new state policy. CEC and IMT consulted with Berkeley, San Jose, San Francisco and Los Angeles to address the overlap. The primary option being considered would recognize buildings covered by a municipal MBD as meeting the state requirement. Final policy outcomes are still in development.

Utility adoption of best practices for data access to be of paramount importance for the successful rollout of AB802. CEC and IMT have continued to hold coordination meetings with utilities in the state.

IMT assisted California by creating a Stakeholder Engagement Plan for the CEC. This plan provides strategies for outreach during rulemaking, early in implementation and as the program matures. IMT also published an Overview of Utility Engagement Issues for the CEC and PCC workgroup.

* *Stakeholder Engagement Guide California Assembly Bill 802: Data Access and Benchmarking Policy* (IMT) Jayson Antonoff and Leonard Kolstad Institute for Market Transformation May 2017. This document serves to guide the CEC through the process of stakeholder engagement with a focus on what the CEC should do throughout 2017 prior to the point when the regulations are finalized and approved, to prepare the relevant parties for compliance with the law. Since stakeholder engagement is an ongoing process that should continue well beyond that point, this plan also includes a brief description of some of the higher-level activities that the CEC should plan for after the regulations are finalized, as well as after the initial benchmarking reporting cycle.
* *Overview of Utility Engagement Issues,* (IMT for the PCC) Kelly Crandall Jayson Antonoff Alissa Burger, June 2017.

The California Energy Commission engaged in a multi-year rulemaking that was finalized late in 2017 and published in the spring of 2018. (CEC, 2018)

**Oregon**

Staff at the Oregon Department of Energy (ODOE) completed internal policy feasibility discussions to explore the options and opportunities for development and successful passage of a statewide mandatory policy. After completing these discussions, it found that a statewide policy was not applicable for the upcoming legislative session. An outcome of this work was documentation and a concept document to discuss the policy option, which could be used in future discussions.

For Local Government, ODOE completed a formal stakeholder survey to gauge awareness and interest in MBD and policy development. Governments were included that were:

1. The larger city populations in Oregon (as a proxy for staff capacity and depth of programs),
2. those that have existing climate/sustainability/energy goals, plans, or commitments, and
3. those that had interfaced with ODOE in past energy programs, policies, and projects.

After the survey, a package of materials was provided to survey respondents, which included the MBD policy. After collecting results from the survey, ODOE staff responded to questions and requests by specific individuals. If respondent responded positively to the idea of policy development, ODOE staff provided specific follow-up to ask about adoption.

Soon after the PCC offered a 3-part webinar series, ODOE used the webinar to re-engage and promote the MBD policy. Following the webinar, staff completed ad-hoc communications with jurisdictions based on their availability and interest.

While this engagement did not directly result in adoption of the policy, a significant outcome was building a new and increased awareness of benchmarking as programs and policies that jurisdictions could consider. Most did not know about the increasing adoption of benchmarking requirements in the nation, nor the recently adopted City of Portland policy. ODOE did walk through benchmarking principles and the policy design/critical elements. Another critical outcome for Oregon was the establishment of a new State-Local government collaboration relating to building energy efficiency. Where past work was focused mostly in schools and state building and renewables, this outreach effort created a new opportunity to explore other building energy programs and policies that has momentum and interest at the local level.

**Washington**

Commerce primarily conducted local government outreach through existing regional collaborations. Commerce also experimented with a centralized implementation service, which provides MBD support to local governments.

Washington State participated in several regional collaborations organized by local government, most notably the King County-Cities Climate Collaboration (K4C). K4C was established to coordinate and enhance the effectiveness of local government climate and sustainability actions in the most populated county in the State. Commerce worked with a K4C staff workgroup to propose a MBD policy to the leadership of each jurisdiction. This resulted in submission of recommendations to K4C Green Building and Energy Efficiency Elected Official Summit on April 7, 2016 (King County, 2016). This summit provided an opportunity to present the recommendations to elected officials representing 1.5 million people. This document included recommendations for government leadership by example, voluntary programs and full MBD. To date, several jurisdictions have added government leadership by example and voluntary programs to their policies.

Every jurisdiction considering the adoption of a MBD ordnance must consider the staffing and infrastructure required to implement the policy. This includes creating the cohort of covered buildings, customer notifications and support, managing submission of building energy data, and analysis of the building energy data. To assist local jurisdictions with this task, Commerce provided seed funding for the Smart Building Center, Center for Benchmarking Support. This organization is available to assist local jurisdictions MBD infrastructure needs. While this does not eliminate all of the jurisdictions administrative activities, it does provide support in the areas requiring the most technical expertise. To date a number of jurisdictions with lead by example programs have used the Smart Building Center services. (NEEC, 2017) This funding was not enough to overcome local government concerns over long term funding needs.

**Measuring Success**

* Percent of population covered by MBD policies
* Successful implementation of MBD policies
* Measured energy use reduction over the population of covered buildings

**Outcomes**

Since this project began, several PCC jurisdictions have adopted or modified MBD policies, supporting infrastructure has been deployed and additional jurisdictions are considering a range of options for MBD policies. MBD policies now cover 73% of the PCC (by population). An additional 5% are have emerging policies. We do not have measured energy efficiency results yet. These will occur after some period of implementation.

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