

Energy Efficiency in Hawaii’s Performance-Based Regulation Framework: Incentivizing Savings for Low-Income Customers

Commissioner Jennifer Potter, Hawaii Public Utilities Commission
Grace Relf, Hawaii Public Utilities Commission

ABSTRACT

In June 2021, Hawaii’s investor-owned utilities began the transition from a cost-of-service regulatory model to an innovative performance-based regulation (PBR) business model. This paper provides context on the PBR framework and describes elements of the framework that support energy efficiency, such as mechanisms that aim to remove utility capital bias and those that promote development of demand-side resources. The paper focuses in particular on a performance incentive mechanism (PIM) that rewards exceptional achievement in delivering energy and capacity savings for low- and moderate- income (LMI) customers. This PIM is unique across the country, as it incentivizes collaboration amongst the utility and third-party energy efficiency administrator and focuses specifically on how energy efficiency can support both energy savings for low-income customers and a near-term capacity need in Hawaii. The paper follows the development of the PIM starting with the nearly three-year stakeholder process in which participants agreed on overarching goals, desired outcomes of the PBR framework, and priority PIMs and mechanisms to meet these goals and outcomes. Next, the paper details the PIM’s structure, including moving from concept to policy via stakeholder feedback, quantitative analysis, and iterative consideration of the PIM’s structure. Finally, the paper presents initial results from the implementation phase, ongoing challenges, and lessons learned. The paper allows readers to better understand how innovative business models can support a leading role for energy efficiency in an equitable clean energy transition and how such approaches may be developed in other jurisdictions.

Introduction

Hawaii’s Energy Landscape

Hawaii is committed to tackling climate change, as evidenced by its leadership in setting ambitious climate and clean energy policies. Hawaii was the first U.S. state to enact a 100% renewable energy mandate in 2015, setting a final deadline of 2045 and interim milestones of 30% renewable by 2020 and 70% by 2040 (Hawaii State Legislature, Act 97). Hawaii also established an Energy Efficiency Portfolio Standard (EEPS), which set a target of achieving 4,300 gigawatt-hours (GWh) savings by 2030 (AEG 2019). More recently, the Governor adopted a 2045 carbon neutrality target for the state, which complements the RPS and EEPS as a climate policy that is inclusive of sectors beyond electricity (Governor’s Office 2018). In 2021, the Hawaiian Electric Company outlined a climate change action plan, committing to a 70% carbon reduction over 2005 levels by 2030 and net zero carbon emissions by 2050 (Hawaiian Electric Company 2021).

Hawaii’s electricity needs are served by two utilities – Hawaiian Electric Company (HECO) and the Kauai Island Utility Cooperative (KIUC) – both of which are regulated by the Hawaii Public Utilities Commission (PUC, or “Commission”). HECO is an investor-owned

utility (IOU) that consists of three operating companies: Hawaiian Electric Company, which serves the most populous island of Oahu, Hawaii Electric Light Company (HELCO), which serves Hawaii Island, and Maui Electric Company (MECO), which serves the islands of Maui, Lana'i, and Moloka'i. HECO serves about 95% of customers in the state (Cross-Call, Prince, and Bronski 2020). For the purpose of this paper and the PBR framework¹, we will refer to the three Hawaiian Electric utilities as “HECO” or the “utility”.

Providing energy savings to Hawaii’s residents, Hawaii Energy is the state’s third-party energy efficiency (EE) administrator. Hawaii Energy is highly regarded in the state for its customer engagement and outreach efforts and its ability to reach LMI and other underserved populations.

As a group of island grids, Hawaii is driven to set ambitious policies due to the immediate and increasing threat of climate change, including sea level rise, hurricanes, strong winds, flooding, and increasing temperatures leading to drought and fire in the state (State of Hawaii 2022). The state, however, is also faced with unique challenges in meeting these goals. The state is not able to rely on neighboring grids to import electricity when there are shortfalls or emergencies, and sourcing and delivering replacement equipment, fuel, and other materials is a lengthy process.

As a result of the ambitious policymaking in the state, including early adoption of net-energy metering (NEM) that provided strong incentives for customers to invest in solar photovoltaics (PV), Hawaii is often deemed a “postcard from the future” due to its high penetration of rooftop solar, electric vehicles, and willingness to pursue innovation (Willson 2021). In 2021, almost a third of single-family homes in the HECO territories had PV installed, and the utility reached 38% of customer sales coming from renewable sources. Additionally, 91% of all new rooftop solar installations are paired with battery storage (Hawaiian Electric Company 2022).

Nonetheless, the state has the highest retail electricity rates in the country and is particularly vulnerable to the volatile international oil market, as about 63% of electricity in the state was produced with petroleum in 2019 (Hawaii State Energy Office 2020). Given this context, many households in Hawaii face high energy burdens and energy insecurity. A recent report found that 42% percent of households in the state live below the “asset limited, income constrained, employed” (ALICE) threshold, meaning that almost half of all families in Hawaii are struggling to make ends meet even though they are employed. Nine percent of these ALICE families are living in poverty. This trend has progressively worsened in recent years and was exacerbated by the coronavirus disease 2019 pandemic (Research and Economic Analysis Division 2021). As temperatures increase, and customers become more dependent on electricity for cooling and charging their vehicles, the grid’s reliability, resilience, and affordability is increasingly imperative.

The Performance-Based Regulation Landscape

Performance-based regulation (PBR) is a set of regulatory mechanisms and tools used in place of a traditional cost-of-service utility business model designed to align utility incentives with policy goals. PBR objectives frequently include cost control, reducing the utility incentive to grow energy sales, aligning utility profit motives with policy goals, realigning risk and value

¹ KIUC is not subject to the PBR framework as it is a cooperative utility and is managed in tandem with an elected Board of Directors.

sharing splits, and developing new profit opportunities. Tools to achieve such objectives include multi-year rate plans, decoupling of revenue from sales, modified financial practices for retiring uneconomic assets, reducing capital bias, performance incentive mechanisms (PIMs), and others (Cross-Call et. al 2018).

PBR tools, like PIMs to promote service reliability, have been used commonly, yet disparately, in the U.S. for decades. In particular, many states have long recognized the need to remove disincentives for utilities to invest in demand-side resources. As of 2020, states with PBR tools in place to promote demand-side resources included 17 with full electric revenue decoupling, 29 with PIMs for energy efficiency, and 13 with PIMs for strategic demand reduction (Berg et. al 2020 and Gold et. al 2020). While recently, legislatures are increasingly turning to PBR to meet environmental performance and other policy goals, Hawaii is the first and only state to move away from cost-of-service regulation and into a PBR model (Wilson, Felder, and Gold 2022).

Hawaii's PBR framework was informed by lessons from these past efforts, including the Commission's own experience with decoupling and PIMs for reliability and customer service, and from other jurisdictions leading in PBR implementation. The Commission invited leaders and executives to Hawaii to participate in interactive working group meetings. At one such meeting, speakers from several major financial investment firms provided insight on the potential financial impacts resulting from the new regulatory framework and provided guidance on the structure of the framework. Other jurisdictions such as New York, the United Kingdom, and Canada have been working on regulatory overhaul and generously provided the Commission with ideas and best practices for development of a finalized framework that encourages the utility to work towards performance rather than returns on capital investments. The Commission ultimately drew lessons from other jurisdictions on decisions such as appropriately sizing PIMs, setting the timeframe for the multi-year rate period, and on setting annual revenue amounts (Hawaiian Electric Company 2020).

Developing Hawaii's Performance-Based Regulation Framework

In 2018, the State passed a bill that directed the PUC to move from cost-of-service business model to a PBR framework (Bade 2018). While there were already PBR elements in place for HECO as noted above, the new model would help fully break the link between utility revenues and capital investments.

The PUC established a docket for the proceeding and pursued an innovative and ambitious stakeholder engagement process, which was divided into two Phases. Phase One consisted of Evaluation and Assessment and Phase Two consisted of Design and Implementation (Decision and Order No. 35411 2018). Phase One established:

- (1) priority goals and outcomes to guide PBR development;
- (2) characterization and assessment of the existing regulatory framework; and
- (3) changes to regulatory components and measures necessary to attain the identified goals and outcomes.

Following the facilitated stakeholder proceeding, the Commission adopted guiding principles of "a customer-centric approach", "administrative efficiency", and "utility financial integrity" (Decision and Order No. 36326 2019). These were further developed into specific goals and outcomes that were characterized as either traditional or emergent, as shown in Table 1. Stakeholders agree that dedicating significant time upfront to establishing consensus on what the PBR framework was designed to achieve was critical to the proceeding's overall success.

Table 1. Goals and outcomes for Hawaii’s PBR framework

Goal	Priority Outcomes ²	
Enhance customer experience	Traditional	Affordability
		Reliability
	Emergent	Interconnection experience
		Customer engagement
Improve utility performance	Traditional	Cost control
	Emergent	Distributed energy resource (DER) asset effectiveness
		Grid investment efficiency
Advance societal outcomes	Traditional	Capital formation
		Customer equity
	Emergent	GHG reduction
		Electrification of transportation
		Resilience

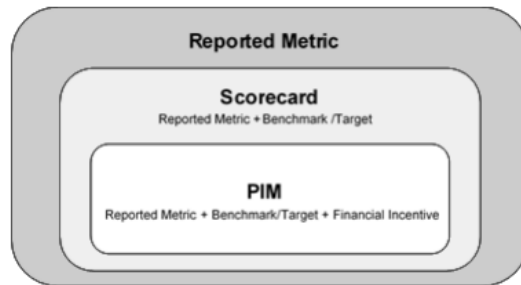
Phase Two of the proceeding then sought to develop specific regulatory mechanisms to achieve the identified goals and outcomes, keeping in mind those areas that were already well covered by existing mechanisms or regulatory structures. The specific mechanisms explored in Phase Two consist of *Revenue Adjustment Mechanisms*, *Performance Mechanisms*, *Non-Revenue Initiatives*, and *Safeguards*. Through facilitated working group meetings, stakeholders proposed and developed ideas through iterative guided exercises, coaching questions, and group brainstorming that culminated in Parties filing numerous formal proposals for the PBR framework.

The framework is organized around 5-year multi-year rate periods, in which Revenue Adjustment Mechanisms provide consistent and known revenues for HECO to conduct normal business operations. These mechanisms include an Annual Revenue Adjustment (ARA) formula, which exogenously adjusts each utility’s most recently approved test year rates for inflation, productivity, exogenous events, and customer returns. The utility can keep any savings, such as from increased operational efficiency, under the ARA, which acts as a cost control incentive. Additionally, the utility can apply for cost recovery for exceptional projects above the ARA, such as for lumpy expenditures and grid modernization projects. The framework maintains existing decoupling and cost tracker mechanisms. This group of revenue mechanisms focus mostly on traditional priority outcomes.

Performance Mechanisms include PIMs, Scorecards, and Reported Metrics, as depicted in Figure 1 (Hawaii Public Utilities Commission 2019).

Figure 1. Performance mechanisms

² See Hawaii Public Utilities Commission DMS Docket 2018-0088, Staff report, filed February 7, 2019 for a description of each outcome.



Aligned with the goals and outcomes established in Phase One, the Performance Mechanisms included in the final PBR framework focus on areas that warranted particular attention or improvement, or that are important to track given their novelty and impact on emergent priority outcomes. The PIMs include the two existing reliability and call center PIMs, and five new PIMs focused on accelerating RPS achievement (incentivizes the emergent outcomes of grid investment efficiency and GHG reduction), improving customer interconnection times and experience (incentivizes the emergent outcomes of interconnection experience, DER asset effectiveness, and customer engagement), deploying advanced metering infrastructure (AMI) (incentivizes the emergent outcome of customer engagement), quickly acquiring grid services from DERs (incentivizes the emergent outcomes of DER asset effectiveness and GHG reduction), and delivering energy savings to LMI customers (incentivizes the emergent outcomes of customer engagement, grid investment efficiency, and GHG reduction). Finally, the PBR framework encourages the utility to pursue innovation via expedited Commission review of proposed pilot projects and includes safeguards to protect the utility and customers from unexpected outcomes (Hawaii Public Utilities Commission 2020).

Mechanisms in the PBR Framework that Promote EE

The PBR framework is “customer-centric” and recognizes the critical nature of effective customer engagement to the renewable energy transition, especially in an island context where land availability for large renewable energy development is limited. As such, the framework aims to promote demand-side resources in multiple ways, including (1) reducing capital bias, and (2) utilization of performance mechanisms. Customer-sited/owned, cost-effective demand-side resources inherently meet multiple emergent priority outcomes including customer engagement, DER asset effectiveness, grid investment efficiency, GHG reduction, and to a lesser extent, resilience.

Reducing Capital Bias

The PBR framework aims to sever the link between capital expenditures and revenues by tying profit incentives to achievements on key performance metrics that are aligned with the state’s policy goals, including renewable energy goals (such as the RPS) and the carbon neutrality goal, to name a few. Within the framework’s Revenue Adjustment Mechanisms, the Exceptional Project Recovery Mechanism (EPRM) is intended to allow for cost recovery and a return on investment for exceptional projects that are not covered by the indexed rate formula. This mechanism evolved from a prior mechanism that did not allow for cost recovery for any non-capital expenses, such as software. The EPRM requirements have been modified to allow for cost recovery of O&M, demand-side resource investments, and software, although the

Commission reviews each application carefully and cost recovery isn't guaranteed. The improvements to the EPRM directly reduce capital bias by including non-capital investments as eligible projects for cost recovery and a return on investment. The EPRM is similar to the United Kingdom's Revenue = Incentives + Innovation + Outputs (RIIO) framework, which first coined the term Totex.³ The objective of this mechanism is to encourage the utility to be indifferent to capital and non-capital investments and to make project decisions based on system needs rather than focusing on the project's rate of return. HECO has not yet sought cost recovery for demand-side projects via the EPRM.

Performance Mechanisms

As noted above, Performance Mechanisms within the PBR framework are intended to track achievements and progress towards identified goals and outcomes. Tracking the established metrics is intended to provide transparency and data to be used by stakeholders and the public to ensure that the PBR framework is working as intended and that the utility is making progress towards desired outcomes. The following Performance Mechanisms provide a particular focus on demand-side resources and customer equity.⁴

- **Grid Services:** provides a \$/MW reward for expedited enrollment of DERs in grid service programs. This PIM incentivizes HECO to enroll customers in programs that will leverage their DERs to provide load building, load reductions, and fast frequency response. The PIM is agnostic as to how grid services are acquired (e.g. through contracts with aggregators, customer-run programs, or otherwise). This PIM is only in place through 2023 and is intended to be replaced when a more sophisticated mechanism can be developed that measures the effectiveness of HECO's utilization of grid services from DERs as a system resource, rather than simply rewarding acquisition.
- **AMI Utilization PIM:** provides a reward for accelerating the number of customers with AMI enabled to deliver customer benefits. To count towards PIM achievement, AMI must be delivering two of three identified key benefits that were not already planned to be delivered by HECO. The benefits include:
 - Customers authorizing sharing of their interval data with third parties. This is intended to help spur a robust energy services market in Hawaii.
 - Customers signing up to receive energy usage alerts. This is intended to promote the energy efficiency benefits of AMI.
 - Customers participating in next generation time-of-use rates and DER programs. This is intended to promote the demand flexibility and DER integration capabilities of AMI.
- **LMI EE PIM:** provides a reward for delivering energy and capacity savings to LMI customers. This PIM is explored in more depth below.

³ Totex combines a portion of utility capital expenditures (capex) and operating expenditures (opex) into one regulatory asset that allows a rate of return and cost recovery

⁴ Additional Performance Mechanisms related to equity and demand-side resources are listed in Appendix A of Decision and Order. No. 37787, Docket No. 2018-0088.

A PIM to Incentivize EE for LMI Customers

In approving the PBR framework and developing the LMI EE PIM, the Commission recognized concurrent issues and opportunities facing HECO and its customers. First, Hawaii's already high residential rates create financial hardship for LMI customers. This is exacerbated by the ongoing COVID-19 pandemic, which required increased energy consumption as everyone was directed to stay at home, a phenomenon that may have lasting effects on energy consumption patterns. Second, lack of upfront capital reduces the ability of LMI customers to participate meaningfully in and benefit from the renewable energy transition in Hawaii. The Commission noted in particular that, "the other PIMs included in the PBR Framework place a necessary emphasis on other [non-EE] DERs, but that these resources may not be accessible for all residents, underscoring the need for a PIM such as the LMI Energy Efficiency PIM" (Decision and Order No. 37507 2020). Third, energy efficiency meets many of the emergent goals of the PBR framework, such as customer engagement, grid investment efficiency, and DER asset effectiveness. The Commission states that, "Energy efficiency and demand-side management are also critical utility system resources that provide load shaping and shifting to help align supply and demand in a cost-effective manner. ... Optimizing load first can also reduce the costs necessary to achieve the RPS and the RPS-[Acceleration] PIM, providing an additional cost control measure" (Decision and Order No. 37507 2020). The Commission therefore established the LMI EE PIM to incent increased collaboration between HECO and Hawaii Energy, the state's third-party EE administrator, and to deliver savings to LMI customers.

PIM Development

As part of the Phase Two working group process, Parties were invited to propose PIMs to meet the identified PBR goals and outcomes. Parties were encouraged to assess their proposals' effectiveness, based on established principles and best practices for PIMs. For example, Parties were encouraged to think about any overlap in incented outcomes between various PIM proposals, possible unintended outcomes of the PIMs, and to use a worksheet to assess whether the PIM:

- Reflects the desired outcome – are the data tied to the outcome?
- Is clearly defined – is there a precise formula quantifying the metric?
- Is quantifiable using reasonably available data?
- Is easily interpreted?
- Is easily verified?

For the reasons noted above, the Commission identified the need to direct additional focus on equity and demand-side resources. The Commission and Commission staff developed PIM proposals for the LMI EE PIM and solicited Party input on the PIM's structure, intent, and any proposed modifications or improvements. With Party inputs, historical data, and additional research and analysis, the Commission continued to iterate on the PIM's structure. The final PIM was established in a decision following the Phase Two decision that established the PBR framework.

The PIM Structure

The PIM rewards HECO for helping Hawaii Energy to exceed their established performance targets in certain areas that focus on LMI customers. The PIM includes three components:

1. A \$/kWh reward factor for energy saved above 100% of Hawaii Energy's Residential Hard-to-Reach (RHTR) sector target level, determined based on the projected benefits, costs, and impacts for Hawaii Energy's Commission-approved annual plan for RHTR programs.
 - a. The reward factor is 50% of the projected energy-related net program benefits (total benefits minus total costs).
2. A \$/kW reward factor for peak demand reductions beyond 100% of Hawaii Energy's RHTR sector target level, determined based on the projected benefits, costs, and impacts for Hawaii Energy's Commission-approved annual plan for RHTR programs.
 - a. The reward factor is 50% of the projected demand-related net program benefits (total benefits minus total costs).
3. A \$/customer-served reward factor for customers served above 100% of Hawaii Energy's participation target.
 - a. The reward factor is 50% of Hawaii Energy's first-year bill savings for the relevant programs per targeted number of customers served.

These three metrics aim to encourage both participation and achieved savings, as both outcomes are important. As shown in Table 2, the LMI EE PIM is specifically calculated as:

Table 2. Calculating the LMI EE PIM

Description	Line #	Representative figure/calculation	Units
Energy Savings			
Target Residential Hard to Reach (RHTR) energy savings	L1	kWh savings	kWh
RHTR total budget (includes incentive and non-incentive costs; 85% allocated to energy savings)	L2	Dollars * 0.85	\$
Target RHTR Total Resource Benefits (TRB) (85% allocated to energy savings)	L3	Dollars * 0.85	\$
Net utility system benefit per kWh (TRB minus budget per target kWh savings)	L4	$(L3 - L2) / L1$	(\$/kWh)
Net benefit share to HECO (reward factor for energy savings above target)	L5	$L4 * 0.5$	(\$/kWh)
Total energy savings reward	L6	$(\text{Total realized kWh savings} - L1) * L5$	\$
Peak Demand Reduction			
Target RHTR demand reduction	L7	kW reduction	kW
RHTR total budget (includes incentive and non-incentive costs; 15% allocated to demand reduction)	L8	Dollars * 0.15	\$
Target RHTR TRB (15% allocated to demand reduction)	L9	Dollars * 0.15	\$
Net utility system benefit per kW reduced (TRB minus budget per target kW reduced)	L10	$(L9 - L8) / L7$	(\$/kW)
Net benefit share to HECO (reward factor for demand reduction above target)	L11	$L10 * 0.5$	(\$/kW)
Total demand reduction reward	L12	$(\text{Total realized kW savings} - L7) * L11$	\$

Description	Line #	Representative figure/calculation	Units
Participation			
Target Residential A&A customers served	L13	Customers served	#
Target Residential A&A first-year bill savings	L14	Dollars	\$
First-year bill savings per target customer served	L15	$L14/L13$	\$/Customer served
Net benefit share to HECO (reward factor for customers served above target)	L16	$L15 * 0.5$	\$/Customer served
Total participation reward	L17	(Total realized customers served - L13) * L16	\$
Total Reward			
Total PIM reward	L18	$L6 + L12 + L17$ (capped at \$2 million/year)	\$

Additional key components of the PIM's structure are that:

- The PIM is not intended to create competition between HECO and Hawaii Energy or to incent HECO to establish its own EE programs but rather, “to incent the Companies to promote Hawaii Energy programming and to optimize load and customer interactives via tools ... such as rate design and the provision of energy usage data”;
- The PIM should not create an additional administrative burden for Hawaii Energy
- The PIM includes reporting requirements that require HECO to identify:
 - “Relevant programs directly offered by the [HECO] Companies to customers;
 - Efforts taken by the Companies to promote Hawaii Energy programming to targeted customers;
 - The cost of the Companies' relevant efforts related to this PIM;
 - The number of eligible customers reached with relevant marketing and promotional materials, advanced rates, and data provision efforts as a result of the Companies' outreach efforts;
 - Descriptions of data sharing efforts between the Companies and Hawaii Energy”;
- The PIM is aligned with established Hawaii Energy metrics, and therefore relies on data that are verified by a third-party. The commission's third-party Energy Efficiency Manager will also conduct a survey to assess the effectiveness of the collaborative efforts between HECO and Hawaii Energy and provide an opportunity for both parties to provide feedback on areas for improvement.
- The PIM is intentionally outcome-based and aside from the reporting requirements, the reward is not based on attributing any particular actions or results to either HECO or Hawaii Energy in order to encourage collaboration and to spur broader market transformation (Decision and Order No. 37507 2020). The reporting requirements provide a necessary balance to this aspect of the PIM to ensure that HECO is not rewarded solely for the actions of Hawaii Energy.
- The PIM is initially in place for three years and will be reviewed on an annual basis (Decision and Order No. 37787 2021).

Results

Quantitative results from the PIM are not yet available, as the PBR framework took effect in June 2021, and Hawaii Energy's program year runs from July-June with verified program results typically available in spring following the program year. The first year that HECO is expected to be able to claim rewards from the PIM is in 2023. However, increased collaboration, including the development of a Memorandum of Understanding (MOU) and an improved collaboration framework between HECO and Hawaii Energy are underway and substantial progress is being made. Even without quantitative results, the collaborative efforts benefit customers as energy saving information and products are promoted by the two entities, rather than just one entity (e.g. Hawaii Energy) allowing for greater outreach.

Initial Results

A qualitative review of the current collaboration efforts reveals that it is a lengthy process to develop substantial partnership and collaboration. For example, the MOU was finalized more than a year after the Order 37057 was issued. The two entities only recently started developing efficiency marketing, education, and outreach that is co-branded. After a year, minor collaboration has occurred that would meet the PIM targets. The lack of progress is likely due to HECO and Hawaii Energy adapting, incorporating, and building a dedicated team that will prioritize collaboration for LMI EE programs and that will provide direction and assistance on EE measures to the LMI and RHTR sectors. That said, HECO recently launched an advertisement campaign that significantly promoted Hawaii Energy's programs and energy saving tips. It is highly unlikely that the Companies would have developed co-branded marketing and are pursuing other energy saving opportunities without the LMI PIM.

The two organization are also in the process of updating a previous collaboration framework by identifying the most relevant and important categories for collaboration and agreeing on key definitions. These categories include:

- Solutions for replacement capacity due to the retirement of the largest generating unit on Oahu
- Customer energy resources and energy optimization initiatives (e.g. integrated demand-side management and DERs)
- LMI customer assistance
- Electrification of transportation
- Long-term planning
- Data; and
- Marketing, education, and outreach.

Specific initiatives include social media collaborations to encourage energy literacy and cross-promotion of programming, distribution of Hawaii Energy's energy savings kits via HECO distribution channels and partners, coordinated outreach to commercial customers for peak demand savings programs, development of EE messaging for rollout of advanced metering infrastructure and a customer energy usage portal, and coordinated outreach to LMI customers seeking assistance. These efforts are new and there is a lot of learning and adaptation by both organizations as efforts proceed.

Ongoing Challenges and Lessons Learned

Given the novel nature of both this renewed collaboration effort and the PIM, there are ongoing challenges. Specific to the PIM, it is clear that both organizations have unique strengths and priorities that they are focused on. For example, Hawaii Energy has their own performance targets to meet in addition to the LMI-specific targets, and while achievement of this PIM is beneficial for Hawaii Energy, it is not tied specifically to their performance reward. Hawaii Energy is also a much smaller organization than HECO, which allows them to act more nimbly at times but also means that resources are more limited and constrained. Additionally, Hawaii Energy is lauded in the community for their success in customer outreach and engagement, particularly with the LMI community.

In contrast, HECO is a much larger organization with more resources, but also more silos and organizational barriers to moving and adapting quickly. HECO's financial reward is tied directly to achievement of this PIM, leading their focus to be on the specific metrics associated with the PIM rather than on general collaboration. HECO's position as the utility for most of Hawaii means that they have access to large amounts of customer data and information but are not always the most trusted partner for communities.

As the PIM efforts have progressed, the two organizations are aiming to use their complementary strengths to improve the efficacy of customer outreach and programming. However, both organizations are still adapting and learning how best to support one another towards their goals.

More broadly, it is important to note that a well-designed PBR framework can help reduce utility capital bias & promote demand-side resources. PIMs can be a key driver for promoting deployment of demand-side resources when there is historic and engrained capital bias. Even with efforts to reduce capital bias throughout the PBR framework, it was important to place additional emphasis on demand-side resources through PIMs and reporting requirements as they are still new as a core function of utility operations.

Additionally, policy and regulatory prioritization of demand-side resources outside of PBR are also key. EE portfolio standards, prioritization through resource planning, and efforts to quickly develop demand-side management programs have been critical to integrating those resources into the utility system. Leadership from stakeholders, the Commission, the utility, and Hawaii Energy were key to developing effective PBR mechanisms and PIMs and it has been critically important to have champions for demand-side resources in both PBR development and implementation.

PBR mechanisms should aim for continuous improvement and adaptation. The PIMs adopted in the first round of PBR are intended to serve as an initial starting point for further developing mechanisms that truly incent the desired outcomes. The PBR framework includes frequent opportunities to revisit and adjust the PIMs and other mechanisms as necessary. This continuous learning should be a key and concrete feature of any PBR framework.

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