

Appendix B: Energy Performance Management

1. Current Commercial Energy Performance Management Overview

A. Introduction & Background

Energy Performance Management (EPM) is a program track that provides approaches for comprehensive and behavioral energy savings for businesses, public sector customers and multifamily customers. Offerings include Strategic Energy Management (SEM), Pay for Performance (PfP), and incentives for trainings that support energy-saving practices, such as Building Operator Certification.

- Energy Trust initially launched its commercial Strategic Energy Management (SEM) services in late 2011. SEM has been designed as a holistic approach to energy management that supports customers in understanding opportunities and planning strategies to improve operations. The SEM offering enables Energy Trust to engage with existing customers (typically medium to large) and help them apply continuous improvement strategies to achieve energy savings in their buildings through O&M protocols and energy-efficient occupant behaviors.

Customers are recruited for participation in SEM based on their average annual energy use, designation and motivation of an energy champion and ability to make an executive-level commitment to help ensure the success of the energy management effort. It is important that the enrolled customer dedicates the staff time necessary to actively participate so the customer is able to achieve meaningful results. An overview and resources can be found on Energy Trust's website: www.energytrust.org/commercialSEM.

- In 2014, Energy Trust released an RFP for project proposals for a Pay for Performance (PfP) Phase I pilot. Only one project qualified, and it completed in 2017. The Pay for Performance pilot has had several iterations since 2014, but only one project enrolled and completed. Energy Trust has conducted two process evaluations to understand and address constraints and limitations of the pilot and released a revised version in March 2020. PfP is designed to be an alternative to SEM for medium-large customers to engage in energy management through performance-based incentives.

Pilot objectives are to gain knowledge of whole-building analysis tools, understand the implementation and verification costs, determine whether PfP offers measurable and persistent cost-effective energy savings, identify whether this offering motivates customers to implement projects, and assess the long-term potential for acquiring additional savings under this approach.

B. Overview of Current SEM Delivery Structure

The Existing Buildings PMC has contracted energy coaches to deliver SEM workshops and trainings, conduct building assessments, assist with modeling and performance tracking and develop and report energy savings analyses to help customers manage their energy consumption. The energy coaches also help customers with developing their long-term plans for energy efficiency.

The Existing Buildings PMC manages the energy coach contracts, helps Energy Trust with program development, outreach and administrative needs of the offering, and provides oversight of the M&V protocols.

Customers receive commercial SEM services primarily through a cohort approach. This approach assembles a group of customers into a cohort of enrolled participants, and each participant typically enrolls multiple buildings for participation during its SEM enrollment period. The number of customers in a cohort varies by the cohort region, which ranges anywhere from 8-50 organizations. Enrollment is typically a year-long engagement, and may be extended to include additional years if customers have continued commitment and energy savings potential.

In the first year, enrolled participants take part in a series of workshops, peer-to-peer discussions and one-on-one building audits and meetings with the energy coaches to identify, implement and track energy savings opportunities at their enrolled buildings. Energy Trust developed and owns a suite of SEM curriculum materials and tools designed to support the Year 1 customer engagement.

The SEM offering after Year 1 is referred to as Continuation. Continuation typically consists of quarterly workshops with topics chosen by the cohorts in collaboration with the energy coach. They may include, but are not limited to: occupant engagement, purchasing and procurement, organizational change and facility plans. Energy coaches facilitate discussions with customers to exchange ideas and discuss barriers to success. One-on-one support is provided to the customer by the energy coach on a case-by-case basis, contingent on customer needs and available opportunities. See the [SEM Guide](#) for an overview.

Table B1 below describes 2019 activity in SEM.

Table B1. 2019 SEM Activity

2019 SEM Data Category	Number
Customers/businesses enrolled	78
Total cohorts	14
Current number of buildings enrolled (approximate)	500
Working annual electric savings (kWh)	13,553,727
Working annual gas savings (therms)	338,387

Electric and natural gas “working savings” for a participant’s enrolled SEM buildings are quantified using whole-building regression models built and managed by the energy coaches. The cumulative savings is measured and recorded for a 12-month period that begins at the kick-off. Incentives are based on the actual measured savings for the year, as verified by the energy coach. The same methodology is applied in subsequent years of engagement. Incentives are paid out to participants annually at \$.02/kWh and \$.20/therm, which is the incremental savings value beyond the baseline consumption. Participants are also currently eligible for four or five milestone incentives annually at \$1,000 per milestone to encourage progress throughout the year, and up to \$7,000 annually for an SEM intern. As of 2020, SEM coaching is considered a service incentive and payments are made to the PMC through Energy Trust’s project tracking system. For the purposes of this RFP; however, respondent should include proposed SEM coaching costs in its proposed delivery budget rather than as incentives. Energy Trust would expect to work with the selected respondent to identify those SEM costs that may qualify as service incentives.

C. Overview of Current Pay for Performance Delivery Structure

PfP participation is available to medium-large commercial businesses. Projects must include at least three capital measures (which may include lighting) as well as O&M and behavioral measures that must estimate at least 5% energy savings beyond the baseline consumption. Savings will be determined through whole-building regression analysis. The service providers (PfP Allies) would develop the whole-building regression models, adhering to Energy Trust’s energy modeling requirements, and assist the participant in delivering energy savings data to Energy Trust. Incentives are provided at the point of installation and performance-based incentives for energy savings achievements will be issued at the end of the annual performance period.

Contractors must submit an application and be approved by the program to become a PfP Ally. They need to have experience with projects in Energy Trust’s Existing Buildings program and experience with regression modeling, and must attend a training on the PfP offering in order to serve customers with this offering.

This persistent, comprehensive approach of monitoring and delivering energy savings is expected to result in significant energy savings and will require close collaboration among Energy Trust, Existing Buildings program staff, building engineering staff and service providers in order to successfully track building performance and ensure program effectiveness.

The PfP offering is currently designed to target commercial buildings with the following attributes:

- Total conditioned area greater than 20,000 square feet;
- Total energy savings potential of at least 5%; and
- Capable of whole-building energy metering.

Respondent should additionally be aware that the duration of PfP projects is longer term; first payment typically occurs approximately 6 months from project start date and is based upon 60% of projected savings. Final payment is then typically payable one year later for all remaining achieved savings (e.g., 40%+). More information on the PfP pilot offering is located in the [PfP Fact Sheet](#).

2. Strategies

Respondent should address the following strategies in its proposal:

- Streamlined and consistent delivery to customers
 - Alignment of services across SEM cohorts
 - Selection of EPM services dependent on customer commitment and opportunity
- Sustaining EPM customer engagement
- Robust M&V support
 - Proactive and advanced analytical expertise, including type of analytics to be addressed and how
- Incentive/reward structure(s) for EPM participants with regard to efforts, accomplishments or comprehensiveness of implementation. This can include incentives for integration with other program offerings
- Expanding EPM customer participation
 - Methods/strategies for recruitment
 - Ideas for remote engagement
- Balance, distribute/allocate roles between SEM energy coach and Account Managers at different stages of engagement:
 - Pre-SEM
 - SEM
 - Post-SEM
- Leverage SEM energy coach expertise and/or in-depth site knowledge in Custom, Lighting, Solar, or other program offering processes
- Cross-coordinate or integrate EPM with Capital projects
- Implement an EPM customer annual planning approach, including strategies for:
 - Facilitating the development of the planning, including prioritization
 - Involvement in implementation and modifications to the plan
 - Engaging field staff throughout the process
- SEM Curriculum content and delivery ideas
- EPM DEI ideas, including, but not limited to:
 - Ways to engage SEM customers in workshops in areas outside metro regions
 - Leveraging remote SEM workshop options
 - Incorporating inclusivity best practices in workshop delivery/customer engagement
 - Education and workforce development

3. Future EPM Approach

All current SEM and PfP participants, as well as those currently eligible to enroll in these two offerings (typically medium-large customers), will have the option to receive enhanced services. The goal with EPM updates is to streamline delivery costs and to simplify the customer experience through a proactive and long-term, strategic approach. The focus will be on developing long-term energy plans with customers, the process of which will include processes to support prioritization for all energy projects within a given year.

An eligible customer who chooses to be part of EPM must make a commitment, based on a spectrum of services available. The level of service provided to customers in EPM will be based on their capacity/commitment, self-sufficiency, need and energy-saving potential. They will be assigned energy coaches who will be their central points of contact. These coaches will be responsible for tracking the customer's developed energy plan throughout the year and will bring in the experts in a particular program or track (e.g., Custom, Solar, Lighting) for the specific projects that are ready for implementation.

The PMC's EPM team is responsible for managing resources to budget and achieve annually-established commercial energy savings and performance goals. Making an effective business case for customer participation, coordinating and facilitating the energy plan development with customer and program staff/contractors in a professional and efficient manner and getting customers engaged to implement identified opportunities are core to the energy coaches' responsibilities.

The team will also work closely with a soon-to-be embedded evaluator on the EPM offerings. They will support them in model quality assurance and M&V research and data analysis to help inform program design and M&V decisions/improvements.

4. EPM Program Implementation

When respondent is developing **Part 2.B** and **Part 4** of its proposal for PMC services, as well as the associated Pricing and Savings Proposal for EPM, respondent should consider all of the [Appendix G: Program Implementation](#) information plus the following tasks and activities, where such tasks may be different or additional, to those as described in [Appendix G](#):

A. Energy Engineering, Analysis and Technical Support

EPM-specific roles and responsibilities in the Energy Engineering, Analysis and Technical Support program implementation category include:

Technical Coaching

- Identify energy opportunities both organizationally and building-specific
- Seek out and offer ideas on cross-program efficiencies
- Leverage details of site to inform projects outside of EPM incentives
- Develop and update gas and electric energy models
- Teach customers how to use models

- Perform detailed analyses of energy savings in the energy models to quantify final savings and incentives
- Apply solar knowledge, as applicable

Measurement and Verification

- M&V guideline update input and review
- Model QA/QC
- Savings optimization analysis
- Forecast methodology analysis
- Conduct ongoing analysis to catch issues and to prompt improvements in program design or delivery
- Work closely with Energy Trust's evaluation team and evaluators

B. Measure Development and Evaluation Support

EPM-specific roles and responsibilities in the Measure Development and Evaluation Support program implementation category include:

- Monitoring any EPM measures. Currently EPM has only one measure, Building Operator Certification (BOC). The rest of the savings are claimed through custom measures.
- Evaluation support: EPM is rolled into EB for evaluations, but meetings and/or communications to customers should include staff familiar with EPM and/or its participants. Work related to EPM-specific evaluations, pilots or coordinated research projects may occur in the future.

C. Trade Ally and Contractor Engagement

The EPM Ally pool consists solely of Pay for Performance Allies. EPM-specific roles and responsibilities in the Trade Ally and Contractor Engagement program implementation category include:

- Reviewing, monitoring, processing and managing PfP Ally participation agreements for the Pay for Performance pilot/offering
- Delivering regular communications, training and education, and program updates to PfP Allies
- Coordinating project documentation and project deliverables with PfP Ally

D. Outreach and Ongoing Project Support

EPM-specific roles and responsibilities in the Outreach and Ongoing Project Support program implementation category include:

Recruitment. The EPM team (Account Managers and coaches) will recruit customers to participate in the EPM offering and communicate with and help coordinate other Energy Trust offerings and programs to customers. This involves:

- Customer screening
- Reviewing utility data and Energy Trust project data

- Conducting market research to understand market barriers and opportunities, and specific organizations' decision-making processes
- Scheduling meetings with potential participants for detailed discussions about how PfP or SEM works, including the benefits and commitment

E. SEM Delivery

Respondent must additionally address the following Strategic Energy Management (SEM) Delivery tasks and activities in its proposed EPM program implementation:

Workshop Delivery and Customer Support

- Provide engaging and organized workshop facilitation that guides content and conversation that encourages optimal learning and action
- Engage customers directly and check in regularly to build relationships, gauge progress, and help motivate action with energy savings projects
- Teach leadership skills to participants, enabling them to demonstrate the organizational value of energy management
- Ensure that SEM coaches work with program Account Managers and other staff/contractors along with customers to help develop and implement **Annual and Multi-Year Energy Plans** that include capital, O&M, new construction and renewable energy projects. The plan development will include strong communication and guidance from coaches to help prioritize projects for implementation and ongoing support to keep customers on track and engaged.

Curriculum and Workshop Development

Develop content for workshops based on needs of the cohorts, while leveraging existing content and historically successful strategies

- Ensure that SEM coaches provide Energy Trust with ongoing recommendations on SEM curriculum, materials and tools to enhance the value to participants.

5. SEM Delivery Schedule for 2021

Figure B1 on the following page shows the timing of cohort savings and delivery cycles from Q4 2020 through Q1 2022.

Participants have been split into two different measurement and reporting periods: those that end in December (Winter track) and those that end in March (Spring track). Some cohorts are a mix of two different tracks. This is a product of cohorts merging over time. In 2021 two sets of cohorts will merge: the Portland and Mid-Willamette Valley cohorts.

Figure B1. Q4 2020-Q1 2022 SEM Cohort Delivery Timeline

