

Energy Trust of Oregon and Commercial Strategic Energy Management: A Catalyst for Accelerating Customer Energy Savings

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ABSTRACT

What does the cutting edge of commercial energy efficiency look like? Businesses and institutions in Oregon are finding out through collaboration with Energy Trust of Oregon (Energy Trust) and each other to comprehensively advance their energy management practices. Energy Trust's Strategic Energy Management, SEM Cohort, helps participants build a foundation for and culture of continuous energy improvement, moving them down the pathway of comprehensive energy management. SEM Cohort participants represent customer segments including health care; city, state and federal government; retail; public assembly; and office real estate. With broader sustainability efforts underway, many participating organizations are looking to do more with energy management. SEM Cohort provides training, technical consultation and incentives for operational savings. Participants commit to:

- Identifying an Executive Sponsor and Champion to guide the organization and lead its Energy Team.
- Developing an organization-wide Energy Management effort, including an Energy Management Policy and a comprehensive SEM plan.
- Participating in workshops and assessments addressing important energy management topics and technical energy opportunities.
- Tracking building energy use, performance, and savings on an ongoing basis.
- Participating in peer-to-peer networking and support.

This paper describes the approach, participant progress and challenges, and results to-date. With two-plus years of operational experience, SEM Cohort participants are generally realizing first-year energy savings of 5 to 15% across their portfolios by optimizing building systems performance, influencing employee and occupant behavior and accelerating investments in capital improvements. The SEM Cohort savings represented 10% of Energy Trust's Existing Buildings program electric savings and 22% of gas savings for 2013.

Introduction

In 2011 Energy Trust of Oregon (Energy Trust) rolled out an initiative designed to collaborate and engage with commercial organizations to evolve their approach to energy management. The Strategic Energy Management Cohort, SEM Cohort, formally engages and assists customers with strategic energy management planning and implementation. The intent is to help customers adopt a path of continuous energy management improvement, including optimizing the performance of existing systems and equipment, influencing employee and occupant behavior, and investing in economically attractive capital improvements.

SEM Cohort engages committed market leaders looking to go beyond “projects” to improve their energy performance. Prior to enrolling in SEM Cohort, all of the participants had been active in Energy Trust programs and had some level of internal focus on energy management. Participants include large health care organizations, governmental organizations, higher education, large corporations, and customers with significant real estate holdings.

Many of the participants initially view energy management as part of a broader company-wide sustainability initiative. This provides the opportunity to integrate aggressive energy management more broadly; however, due to sustainability’s broader focus, it is easy for an organization to lose sight of the fact that energy management is core to sustainability and often consider energy management as the purview of facilities management alone. The fact is, organizations cannot truly be sustainable without aggressively managing energy consumption. SEM Cohort participation elevates energy management to an organization-wide initiative, and as such is a catalyst for organizational change. By participating in SEM Cohort, organizations address the business practices that have limited their energy management efforts in the past, and adopt and reinforce new practices to embed in the company’s overall business culture.

SEM Cohort Objectives

Advances in federal lighting standards and more stringent state energy codes have improved standard commercial retrofit and new construction practices in Oregon. In response, energy efficiency programs identified new approaches to capture energy savings and drive the market beyond the new standards and codes. Energy Trust objectives for SEM Cohort are to build the customer’s ability to be comprehensive in addressing energy management, thereby:

- Strengthening the effectiveness of other Energy Trust demand side management offerings;
- Creating a foundation to support continuous improvement that enhances savings persistence for implemented measures and captures savings from additional efficiencies; and
- Achieving energy savings of between five to ten percent of annual energy use.

SEM Successes

In addition to energy savings, SEM Cohort has shown to provide tremendous benefits to participating customers:

- Gained understanding of energy management gaps within the organization, paving a pathway for energy management planning.
- Dedicated funding for new staff or increased internal resources dedicated to energy management
- Identification of Operations & Maintenance (O&M) and capital savings that are effectively documented and prioritized
- Development of revolving funds for energy projects
- Adoption of an energy policy with management support
- Increased staff awareness and engagement in energy from operations, occupants and executive management

SEM Cohort Approach & Key Features

Participant Commitment

- Identifying an Executive Sponsor and Champion to guide the organization and lead its Energy Team.
- Developing an organization- wide energy management effort, including an energy management policy and a comprehensive SEM action plan.
- Participating in workshops and assessments addressing important energy management topics and technical energy opportunities.
- Tracking building energy use, performance, and savings on an ongoing basis.
- Participating in peer-to-peer networking and support.

Energy Trust Commitment

- Tools, templates, and ongoing business and technical support
- Training and coaching to help apply the principles of SEM and identify specific energy saving opportunities
- Assistance tracking energy use, quantifying and documenting energy savings
- Financial incentives for documented energy savings

Financial Incentives

In the Pacific Northwest, utilities and energy efficiency program administrators agree that operational energy savings are a recognized and verifiable element of energy efficiency programs. Energy Trust provides SEM Cohort participants technical delivery services at no charge, along with financial incentives of \$0.02/kWh and \$0.20/therm for measured and documented energy savings. In support of the measurement and documentation, each participant is provided a performance tracking tool that includes a statistical model for each enrolled site with significant energy use. The statistical model of energy usage is based on regression analysis to establish a building baseline, and to track and quantify the energy savings from improving building energy performance. Participants are trained on the use of the tool and the need for clear documentation of actions and activities. The approach is compatible with the International Performance Measurement and Verification Protocol (IPMVP) Option C.

Cohort Approach

The SEM Cohort approach brings together six to twelve organizations with similar levels of energy management maturity, and guides them through a series of structured workshops and activities enabling them to develop and implement elements of a strategic energy management plan. Through SEM, Energy Champions and energy team members are called upon to be change agents within their organizations. This can be a difficult, and sometimes perceived as a risky proposition, since most organizations resist change and success is difficult to imagine.

The approach encourages peer learning, reinforces progress and encourages contributions from all participants. By working together participants see that other organizations have a similar interest in advancing energy management and similar challenges to overcome.

As characterized in Figure 1 below, workshops and assessments are on two complementary tracks. The Organizational Track examines and encourages advancement in organizational commitment, effective energy teams, energy management planning, and employee and occupant engagement. The Technical Track addresses benchmarking facility energy use, energy use analysis and audits, building operating performance, and monitoring, tracking and reporting performance.

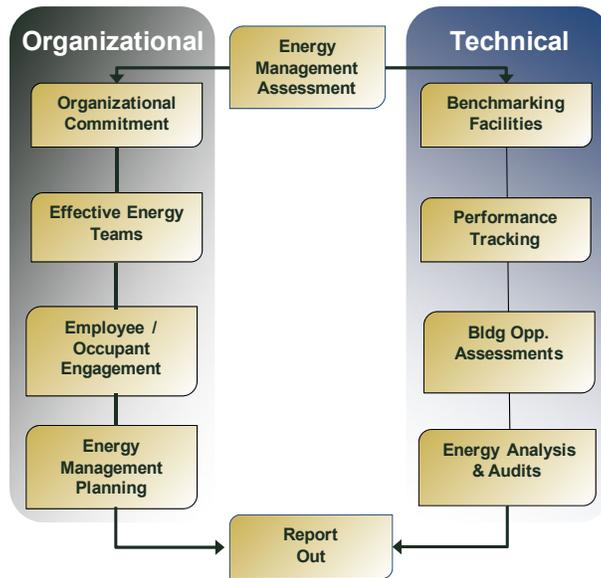


Figure 1. SEM: two tracks.

Each track is pursued simultaneously, and feeds off of the other. For example, benchmarking facility energy use can inform organizational goal setting within a formal energy management policy. Near-term building operational improvements result in tangible savings that energize an energy team and an organization’s energy management planning efforts.

An Energy Management Assessment (EMA) is one of the first activities in the SEM initiative. The EMA bridges the gap between the broader organization and facilities management by drawing attention to these areas and identifying opportunities. It is a facilitated self-assessment that benchmarks a participants current energy management practices against the International Organization for Standardization (ISO) 50001 Energy Management Standard. This gives an organization a solid understanding of where there is opportunity for improvement in their business practices. It also demonstrates the extent to which energy management spans an organization’s business practices, with assessment participants often coming away with a greater appreciation of the need for organization-wide involvement.

Participant Starting Point

Twenty-five organizations have enrolled in SEM Cohort through four different cohorts. Twelve of these organizations have completed at least one year and seven of those organizations have completed two years. Each organization starts from a different place, and has its own challenges to overcome, yet there are also many commonalities. Participants with established policies and goals have typically focused on sustainability oriented reductions in greenhouse gas

emissions rather than specific energy reduction targets. Energy Trust has also seen that, while many participants have near-term operational plans that include energy management projects, none has long-term strategic energy management plans for the full range of projects, activities and practices needed to meet and sustain aggressive goals over multiple years.

Most of the organizations participating in SEM Cohort have sustainability, or green, teams in place prior to enrolling. Some have separate, or related, energy management teams, but these teams typically do not have the breadth of organizational representation needed for a robust energy management effort. The energy management teams primarily consist of facility management personnel. Employee and occupant engagement is a topic all organizations are interested in, and there is growing recognition that effective energy management is as much about behavior as it is technical solutions. While all SEM Cohort participants have implemented some type of employee/occupant awareness activities prior to SEM, they all feel there is more to do to engage employees and building occupants as partners.

From the technical perspective, most of the participants have benchmarked their buildings with ENERGY STAR® Portfolio Manager, with a number of buildings ENERGY STAR certified. Facilities personnel are stretched and running lean in all instances, and the time and abilities they have available to dedicate to energy management varies. Energy management is most often oriented towards capital projects when internal funding and external financial incentives are available - replacing lights, HVAC equipment and related controls. Rarely are specific O&M protocols or check-lists in place related to energy use and performance. For those that contract out for routine building O&M services, they often assume service providers keep the equipment operating well, yet have no metrics in place to know whether or not that is the case.

Participant Activity and Progress

All organizations have made good progress through the initiative to-date with three exceptions. Each of the three exceptions was unable to commit the staff resources necessary, and reluctantly dropped out. For the remaining participants, involvement and outcomes from participation has highlighted both the business value of a concerted energy management effort and the need for additional staff resources to implement, a discussion that has eventually takes place within each organization. Of the 12 participants that have completed at least one year, all but one has hired or allocated additional internal resources to dedicate to energy management.

All of the engaged participants are actively moving forward with energy management, both organizationally as a broad-based initiative, and technically through projects and activities. An important factor in participant progress is advancement on the organizational and technical tracks simultaneously, which often reinforce one another. While a few organizations had what they considered an “energy management policy” none had a policy that included all the suggested key components with top management sign-off and support moving forward. Some of the policies in place prior to engagement in SEM were technical in nature, such as specifying building operating standards, rather than laying the foundation for a broad based initiative. All the organizations involved in the Initiative are now adopting policies to enable a broad based energy management initiative. Each has their own processes for formally adopting organization-wide policies, with the adoption process itself providing a great opportunity to educate and gain broader organizational support

Changing business practices. An outgrowth of the energy management assessment is a near-term action plan to address high priority items as identified by the organization's EMA session participants. This gives the Energy Champion and the organization's energy team immediate tasks to focus on that provide short-term value. These tasks may be technical, such as developing an opportunity register of potential energy management projects or activities; they may be organizational, such as clarifying purchasing standards, establishing financing evaluation methods or identifying source of capital for energy projects. An important action item that all participants undertake is establishing both baseline and target energy intensities (kWh, therms, btus/sq. ft.) for all their buildings and facilities. Tracking energy use at the site level, and aligning particular projects and activities with site-specific energy reduction targets, is an important step in creating a multi-year strategic energy management plan, SEMP, or road map, for achieving the organization's long-term energy management policy goals. Two of the workshops - Building Opportunity Assessment and the Performance Tracking workshops - focus on these topics.

Strategic energy management planning. Developing the SEMP is an important step forward for participants. While they have been identifying and implementing energy efficiency projects and have annual operating plans in place, SEM participants have not yet implemented a multi-year SEMP that ties together the organizational practices, projects and activities to be addressed in meeting long-term energy management goals and energy reduction targets. The SEMP addresses the organizational barriers to implementing the energy management efforts. For example, establishing key energy performance indicators, by building, can be relatively straightforward once the need is clear. Establishing financial evaluation methods and criteria for making investment decisions can be less daunting for an organization that has learned to consider energy management as a business opportunity to reduce operating costs.

Optimizing building systems. The Building Opportunity Assessment workshop is a full day workshop with facility management personnel, their O&M contractors, and others to learn techniques for assessing the operating performance of existing building systems and equipment, and improving current operating performance through changes in operating practices. Capital project opportunities are identified, as well. All of the workshops have yielded viable opportunities, and participants are charged with conducting similar assessments on other buildings and facilities.

Tracking performance. The Performance Tracking workshop provides participants with the tools and training to monitor and track whole building performance on a monthly, daily, or hourly basis. Some participants already have tools in place for monitoring and tracking performance; others are looking for guidance on obtaining this capability. For those organizations without an acceptable commercially available product, Energy Trust provides an Excel[®] spreadsheet-based tool to track performance and energy savings on a monthly basis. The tool uses linear regression to account for weather, occupied square feet, events, holidays and other external factors outside the organizations control. Participants receive instruction on using the tool to track and present results, and monitor the effectiveness of energy efficiency projects and activities, placing them in a strong position to take corrective action when appropriate and document the results of their efforts as a means of gaining further organizational support.

Establishing energy teams. Each participating organization is making progress in establishing effective energy teams. As previously mentioned, to the extent energy management teams did exist prior to engagement in SEM, they consisted of facility management personnel. And while most participants also had “green teams” with broader-based organizational involvement, there was little or no connection with an energy team prior to enrollment. SEM Cohort participation facilitates a change in this structure. First, since an Energy Champion and an Executive Sponsor are needed to participate, each participant now has a designated leader for its energy team and a direct connection to senior management. Second, through the organizational EMA participants recognize the importance of connecting energy management and sustainability and broadening its energy team to include other parts of the organization, such as financial management and human resources. And third, the work of the teams is evolving to include developing a SEMP that identifies team member specific roles and responsibilities associated with plan implementation.

Organizational change. Once decision-makers understand that the challenges go hand-in-hand with the business benefits of SEM, they are generally more willing to move forward with and support a broad-based energy management effort. With some or all of the dollars saved through current projects and activities, several participants have established revolving funds to invest in new energy projects and activities helping to assure continuity in the organization’s efforts.

Tracking and reporting the effectiveness of past projects and activities against newly established metrics gives the energy management effort credibility and sustains organizational support. At the operational level, personnel see and take responsibility for building performance, and take corrective action when performance slips. These reports keep senior management and decision-makers informed of the status, progress and issues associated with the energy management initiative, and their support can be enlisted to address particular challenges

An area where all participants acknowledge they need to do more is with occupant or employee engagement and awareness. From the O&M staff perspective, occupant behavior often drives how the building is operated, particularly if the organizational culture is one where occupant complaints are to be accommodated almost regardless of circumstances. Yet all participants are moving forward on this front. For example, individual space heaters are no longer allowed in many participant buildings, per newly created standards of operation. Standards of operation specify acceptable seasonal temperature ranges, operating hours and limits of after- hour service. Awareness campaigns address use of office equipment and how occupants help manage energy consumption. One participant said that they get more ideas and suggestions on energy efficiency than on any other topic in their company’s electronic suggestion box. .

Participants are also getting more deliberate in planning and scheduling capital energy projects that improve energy performance. While the energy savings and incentives from these projects are accounted for in other Energy Trust program offerings, SEM Cohort is helping to fill the Energy Trust pipeline as participants follow through on capital projects included in their SEMP.

Energy Savings Results

Over the last two years, SEM Cohort participants have saved a total of almost 15 million kWh and 500,000 therms from operational and behavioral changes at their sites. In 2013, SEM’s operational and behavioral savings represented 10 percent of Energy Trust’s Existing Buildings

program electric savings and 22 percent of gas savings. With participant energy savings goals ranging from 10 percent of their total energy usage over 3 years, to 30+ percent over five years, Energy Trust expects to see continued savings for all participants as each continues to implement their SEMP. To date, SEM has resulted in cost-effective savings, coming in at \$.02/kWh and \$.32/therm levelized costs, which falls below the Oregon Public Utility performance thresholds.

Participant Savings

Figure 2 below shows total and percentage savings for electricity and natural gas by participant for the first cohort (SEM Cohort 1) to participate, broken out by operational and behavioral savings and capital projects incented by Energy Trust. The cohort has been engaged for two years and the savings are for 2014. It is important to note that the largest total savings is in Health Care, but it is also the lowest yield as a percentage of their total energy usage. Since year one, the implementation of SEM projects and activities at healthcare sites has been slower than anticipated, primarily due to the large number of sites and complexity of the healthcare decision-making processes. Both of the healthcare participants agree, however, that many savings are still to be realized but will require a longer timeframe than originally anticipated. As a group SEM Cohort 1 saved 4.7 percent of their combined electricity usage and 3.8 percent of their natural gas usage.

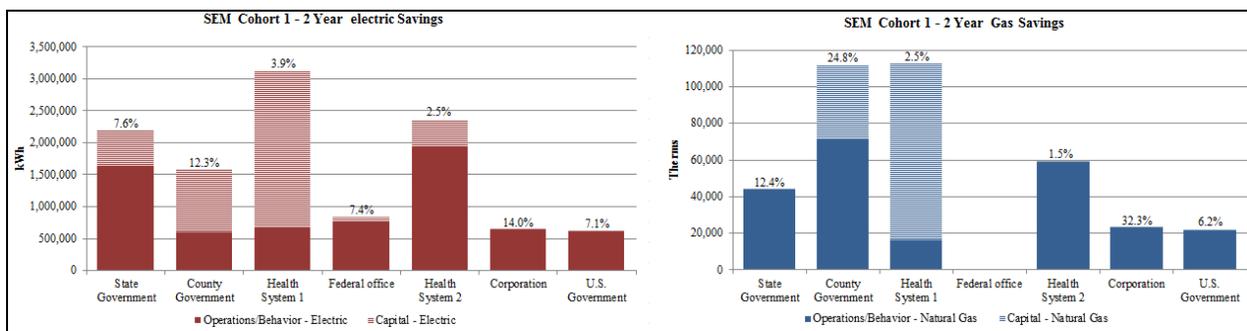


Figure 2. SEM cohort 1: energy savings.

Figure 3 below shows the first year total and percentage savings for electricity and natural gas by participant for SEM Cohort 2. This cohort has completed one year of engagement and is beginning year two. Several minor adjustments were made to program delivery from SEM Cohort 1 to SEM Cohort 2 (described in Lessons Learned below) that improved effectiveness of executive sponsorship and accelerated the implementation of identified opportunities to impact first year energy savings. Overall the group saved 6.7 percent of their combined enrolled electricity usage and 9.8 percent of their natural gas usage in the first year.

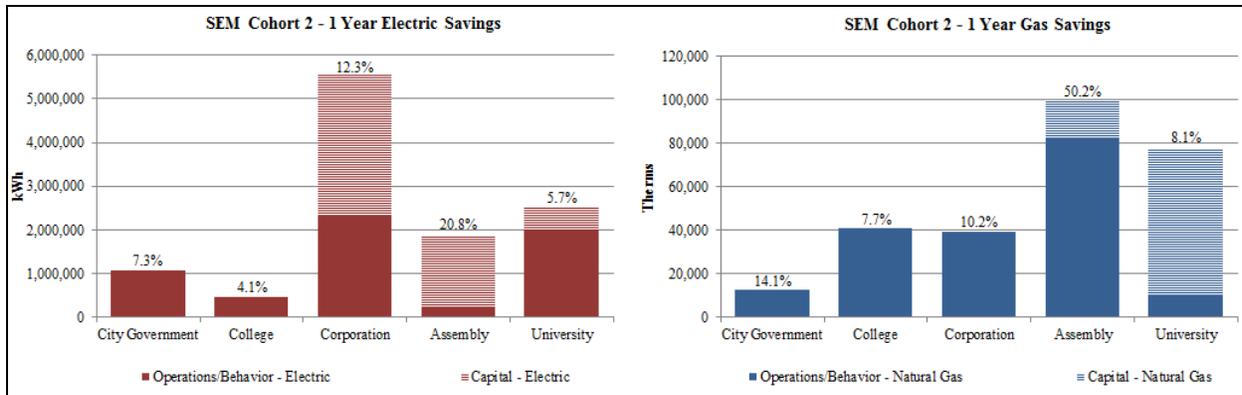


Figure 3. SEM cohort 2: year 1 energy savings.

Lessons Learned & Adjustments Made

Bringing together groups of like-minded organizations creates a group dynamic of “co-opetition” (cooperative competition) that enhances participant activity, and motivates and enables participants to address organizational and technical challenges that have limited their energy management efforts in the past. Organizations are fully engaged and have made good progress with their energy management efforts. The lessons learned validate many of SEM’s design elements and provide new ideas based on the delivery experience.

Validating Assumptions

A strong internal champion with executive support is critical to successful SEM implementation. Designating an energy champion and lining up executive support is critically important to moving the energy management initiative forward; however, gaining up-front executive level sponsorship for initiative participation can be a serious challenge depending on executive management’s current mindset concerning the importance of energy management and sustainability. Without an energy champion to push the initiative forward within the organization, and an executive sponsor to support the champion in obtaining necessary organizational participation and resources, it is difficult for much progress to be made.

Adjustment: For the first SEM Cohort (Cohort 1) one or the other of these organizational pieces was usually not in place prior to the start of the initiative. Typically an Energy Champion was in place, but executive support was lacking. Subsequent cohorts now include a stronger commitment from executive management that includes quarterly check-in meetings to review progress, discuss issues and identify potential organizational resource needs.

Most companies have neither clear energy management goals or targets, nor a strategic or operational plan in place to get there. Several participants have aggressive goals or specific targets for reducing energy use set by executive orders or mandates, but data availability, inadequate baseline usage, and a clear methodology for calculating and reporting progress requires further definition. (e.g. one participant has a 20 percent reduction goal from the 2004 baseline; however the referenced data is unavailable.) Others are actively implementing energy efficiency projects, but don’t have specific organizational goals or targets to meet. All participants were interested in developing a SEMP and annual operating plans to meet long-term

goals or targets as contained in an energy policy. Some have doubts about whether or not they will get organizational buy-in to fully implement the plan and achieve these goals or targets, but they recognize that the lack of a comprehensive plan has hindered energy management efforts in the past.

Adjustment: While lack of clear goals and targets was expected, it's important to establish these foundational elements immediately. Recognizing the need to accelerate this activity, more emphasis was placed on providing each organization time in the Organizational Commitment workshop to work through the elements of the Energy Policy.

Significant challenges in moving the energy management effort beyond the facilities group, and in gaining recognition for company responsibilities and impacts throughout organization. A common dilemma for most participants has been moving the energy management effort beyond the facilities group – the area where energy management has traditionally been delegated. While the facilities group does exert the greatest influence on building performance, others throughout the organization have a significant impact as well. For example, those that purchase energy consuming equipment and supplies, managers that determine what projects get funded, or what training is supported, either support or detract from energy management activity through their actions. Participants are broadening their energy teams to include representatives from across the organization to better address all business areas that impact energy use directly or indirectly.

Adjustment: Modifying the sequence of workshop delivery by moving the Effective Energy Teams workshop earlier in the sequence helps highlight the need for broader representation and allows buy-in for the broader team as they work through drafting and adopting an Energy Policy. This modification combined with better executive support enables the earlier formation of an energy team with broader organizational representation and support.

The organizational assessment often leads to an organizational “a ha...I get it now” moment. The energy management assessment (EMA) often represents that “a ha” when participants get the significance of an organization-wide energy management initiative. Energy Trust has determined that the EMA needs to be completed first to allow participants to benchmark their own efforts against “best practices” as defined in ISO 50001. Usually it is the first time senior management, facilities management and staff, and representatives from other parts of the organization have come together with energy management as the primary agenda. The conversations and perspective on what the organization is or isn't doing related to energy management has been enlightening to all and gives everyone involved a better appreciation of their role in managing energy costs.

Tracking building operating performance and actively managing energy performance is not the norm for most organizations. This is something many companies say they do, yet it is not usually done at a level where it is actively used to improve building performance. Facilities personnel readily admit that this is something they do not devote much attention to unless there is an obvious problem. What is gratifying is to see the degree to which staff can get into being an “energy detective” given the training and opportunity to do so. A big part of the challenge here is simply carving out enough time for this to happen, which means that management needs to make it a priority and build it into activity schedules and job performance expectations. Identifying and seeing the benefits through tracking savings from some initial operating improvements helps establish the value on an ongoing basis.

Adjustment: To embed the habit of performance tracking and enable a more complete set of performance tracking documents, a monthly operations call was instituted. It is used to review site energy performance, improvements and activities and identify where additional sleuthing may be required to fix performance issues.

Significant Energy savings from operational and behavioral activities are possible, measureable and are important components of a successful comprehensive energy management effort. It is clear operational and behavioral energy savings are quantifiable and significant in the commercial sector. Furthermore, those savings can be obtained cost-effectively through SEM-type initiatives. And while the impact of Strategic Energy Management on other Energy Trust commercial demand side management (DSM) programs has yet to be quantified, anecdotal evidence and the impacts seen on Energy Trust's Industrial DSM programs show that impact is likely very real. The majority of energy savings results achieved so far by participating organizations are from initial operational and behavioral based changes, with much more being implemented as time goes on. The key is to confront organizational and technical challenges and opportunities at the same time, allowing each success to reinforce the implementation of the other, thus creating the organizational will to do more, and the internal organizational change required for that to happen.

New Learning

Obtaining initial organizational commitment is challenging when overall company awareness and understanding is unclear (sustainability initiatives a plus). Although organizations are typically extremely interested in joining a SEM cohort, recruiting takes significantly longer and is more involved than was initially anticipated. The recruiting cycle was approximately six to eight weeks per customer, with at least two or three meetings per participant taking approximately four to six months to form a cohort. The primary barrier to enrollment is the up-front time commitment needed to participate. The organization must determine how serious they are about energy management and their willingness to dedicate the staff time and resources required, before they can agree to participate.

Each organization has its own culture and norms, yet there are commonalities, including a growing appreciation for the need for aggressive energy management. Energy Trust is observing a growing appreciation for energy management and the benefits it provides. The most successful SEM Cohort participants work within their existing culture and effect their cultures and norms through formal and informal activities, led by the Energy Champion, Executive Sponsor, and members of the energy team. Outside expertise delivered by Energy Trust provides direction, but the changes need to come from within the organization and re-enforced by top management over time to be sustainable.

External energy management efforts, such as building operator certification (BOC) and user groups on tracking performance and interpreting data offer additional support to participants. In addition to informing participants about the Energy Trust Existing Buildings for energy efficiency capital projects, SEM provides opportunities to connect to other Energy Trust services, such as Building Operator Certification (BOC), a training opportunity for facilities personnel seeking to strengthen their energy management skill set. Participants have also expressed interest in forming a "users group" for benchmarking, tracking and interpreting

building energy use data and information. As SEM continues to build a community of energy champions, Energy Trust expects additional opportunities and connections to be made

There is the potential to make this a three or more year effort as organizations establish a long-term goal and the SEMP. SEM Cohort is set up as a two year effort, but the participants are establishing energy reduction goals and developing SEMPs with longer time horizons (e.g. 3 to 5 years.) In addition, some participants involved in SEM Cohort are very large organizations and it takes significant time to impact all the buildings and facilities in their portfolios, resulting in lower first year energy savings (2-4% of energy usage.) Energy Trust currently assumes a three-year measure life for identified savings, but with high and consistent commitment from participants, longer measure lives may be reasonable. This would result in even better cost-effectiveness overall. Energy Trust believes that the available savings could justify a longer SEM Cohort engagement where participants could continue to advance their energy management efforts to achieve aggressive long-term energy reduction goals.

Payment of modest incentives for actual performance on an ongoing basis helps assure persistence of savings and encourages continuous improvement. Energy Trust is paying incentives for projected energy savings in year-one and offering additional incentives for exceeding those projections in year two. Given how quickly savings are realized, switching to a payment scheme based on actual instead of projected performance may motivate participants to be more aware of building performance and implement additional changes. Energy Trust could also be in a better position to continue working with participants who see value in continued support as they set goals for even higher energy savings.

Conclusions

The SEM concepts help customers adopt a path of continuous energy management improvement, including optimizing the performance of existing systems and equipment, influencing the behavior of employees and building occupants, and investing in economically attractive capital improvements. SEM addresses the organizational and technical areas that fundamentally impact the way an organization manages energy resulting in long lasting energy savings.

This key concept has been validated through SEM Cohort -- participants are adjusting their business and operating practices and changing organizational behavior to advance their energy management efforts. Energy Trust SEM has created a new channel for cost-effective resource acquisition and appears to be providing a catalyst for deeper and more active engagement with other existing DSM programs.

Through the collaborative process incorporated in SEM Cohort, participants see the Energy Trust as a partner and resource for improving their overall building operating performance and impacting the bottom line. Energy Trust is in a stronger position to work with each organization through their SEMP and influence its implementation across the organization as they complete the identified operational, behavioral, capital and new construction projects. SEM Cohort related savings representing 10 percent of Energy Trust Existing Buildings electric savings and 22 percent of natural gas savings for 2013, Energy Trust will expand the SEM effort to expand opportunities for energy savings in the commercial sector.