

Commercial SEM Final Report 2017

Portland Community College

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PORTLAND COMMUNITY COLLEGE

November 28, 2017

1. Participant Summary

Portland Community College (PCC), 12000 49th Ave, CSB Building, Year 3

PCC continues to be a very engaged participant, taking advantage of both the technical and engagement support provided by the SEM coaches. Through this support, the energy champion and the energy team really came together and developed an engagement approach that should help provide significant savings in the future.

2. Energy Savings Summary Table

| Site | Baseline Annual Energy Consumption | | Program Year 2017 Energy Savings | | | | | | Total Incentive |
|---|------------------------------------|----------------|----------------------------------|---------------|----------------------|---------------|-------------------------|----------|--------------------|
| | | | Overall Savings Achieved | | SEM Savings Achieved | | Incremental SEM Savings | | |
| | kWh | thms | kWh | thms | kWh | thms | kWh | thms | |
| Rock Creek Campus (All Buildings) | 6,982,058 | 149,187 | 425,452 | 16,637 | 0 | 24,286 | 0.0 | 0.0 | \$0.00 |
| Due to occupancy shifts between buildings, changes in metered loads, etc, all buildings are bundled | | | | | | | | | |
| Sylvania Campus (All Buildings) | 10,923,880 | 439,374 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | \$0.00 |
| Due to occupancy shifts between buildings, changes in metered loads, etc, all buildings are bundled | | | | | | | | | |
| Milestone: SEM Action Plan Approval | | | | | | | | | \$1,000.00 |
| Milestone: SEM Action Plan Completion | | | | | | | | | \$0.00 |
| Milestone: Occupant Engagement | | | | | | | | | \$1,000.00 |
| Milestone: Performance Tracking | | | | | | | | | \$0.00 |
| Totals | 17,905,938 | 588,561 | 425,452 | 16,637 | 0 | 24,286 | 0 | 0 | \$ 2,000.00 |

3. Participant Team

Energy Champion: Laura Ward, Energy Resource Conservation Manager

Sylvania Executive Sponsor: Dr. Lisa Avery, Campus President

Rock Creek Executive Sponsor: Sandra Fowler Hale, Campus President

Team Member: Esther Forbyn, Sustainability Analyst

Team Member: Elaine Cole, Sustainability Coordinator

Team member: Briar Schoon, Sustainability Manager

Intern: Zachariah Strife

During the 2017 engagement year, PCC's energy team went from storming to norming. At the beginning of the year, team members were focused on protecting their own territory and while that is still somewhat an issue each team member now understands their role and projects have been identified and delegated.

| | | | | |
|----------------------------------|-----------------------------------|---|-------------------------------------|------------------------------------|
| <input type="checkbox"/> Forming | <input type="checkbox"/> Storming | <input checked="" type="checkbox"/> Norming | <input type="checkbox"/> Performing | <input type="checkbox"/> Reforming |
|----------------------------------|-----------------------------------|---|-------------------------------------|------------------------------------|

4. Program Engagement Highlights

Although, PCC continues to be a very engaged organization, they struggle to achieve significant savings. This is due in part to decisions made by upper management and the team's concern for overwhelming technicians with energy projects. However, this year they have seen success in some areas that were previously challenges.

- **Successes:** Laura Ward and her engagement team developed an engagement project that is specific and will lead to significant savings at PCC Rock Creek.
- **Challenges:** Laura continues to struggle to implement projects and has difficulty getting the time of the facilities staff to support her efforts. Additionally, management has made changes to several buildings that directly affect energy use, including heating buildings for janitorial staff and running systems to eliminate odors.
- **Progress:** The major progress this year was the ability for the engagement team to come together with Laura and identify a solid project they could move forward with.
- **Services Coaches Provided:** SEM coaches conduct regular engagement calls and ops calls with the engagement team and the energy champion. Both the technical and organizational SEM coaches met with the entire team to kick-off of their engagement project.

5. Key Performance Indicators (KPIs)

Below is a list of KPI's for PCC.

| | |
|---|--|
| 2017 KPIs | |
| Milestones Achieved: | |
| <input type="checkbox"/> (Y1) Energy Team | <input checked="" type="checkbox"/> EMA Action Plan (Update) |
| <input type="checkbox"/> (Y1) Performance Tracking | <input type="checkbox"/> Performance Tracking |
| <input type="checkbox"/> (Y1) Energy Policy | <input type="checkbox"/> EMA Action Plan (Implement) |
| <input type="checkbox"/> (Y1) EMA Action Plan | <input checked="" type="checkbox"/> Occupant Engagement |
| Milestones Incentive Amount: | \$2,000 |
| Incremental Savings Incentive Amount: | \$0 |
| Total Incentive Amount: | \$2,000 |
| Percentage of Workshops Attended: | 60% |
| Percentage of Ops Calls Attended: | 75% |
| EMA Total Score / Year over Year Score: (optional 2017) | N/A |

6. Employee Engagement

2017 was a big year for PCC's engagement team. While the energy champion and the engagement team have been engaged over the course of the last few years, this year they were able to come together to collaborate on a project.

- **Activities:** With support of the energy champion, PCC's engagement team is piloting a program that engages faculty and staff to work with them to consolidate classes into rooms with similar zoning, especially during reduced class schedules, such as the summer. This will allow areas of the building to be shut down when not in use.
- **Events:** PCC's engagement team planned and participated in the EcoChallenge and TechniArt's lighting fair.
- **Communications:** Elaine Cole presented at the all-staff meeting in September.

7. Plans for Future Success & Engagement

See below for details regarding success and engagement in the upcoming year.

- **To our knowledge, PCC does not intend to enroll any additional buildings this year and will continue to focus on both Sylvania and Rock Creek campuses.**
- **Energy Management Assessment (EMA) focus area:** The energy champion's main effort is to become involved in the master planning effort at the school so that strategic energy reduction opportunities can be included. There is also going to be a focus on identifying projects and start training of key staff.
- **Engagement focus:** As mentioned above, PCC's engagement team is focusing on a pilot to consolidate classrooms into localized zones when possible.

8. Find Key Information in the Model Spreadsheet

Below is a list of the locations for key information that can be found in the model spreadsheet.

| Detail | Location (tab) |
|---|---|
| Model Format | Model elect (tab) Model gas (tab) |
| Baseline Model Statistics | Model elect (tab) Model gas (tab) |
| Previous SEM Savings (up to five years) | ETO Savings Calcs (tab) |
| Residuals | Model elect (tab) Model gas (tab) |
| Capital Projects | 2017 Projects Activity (tab) ETO Savings Calcs (tab) |
| Energy Data | Update Energy Use Monthly (tab) |

| | |
|--------------------------------------|---|
| Variable Data | Orange coded update tabs <ul style="list-style-type: none"> • Update Energy • Update Weather • Update Variable |
| Variable Plots | Operations Graphs (tab) |
| Time Series Plot, Actual vs. Modeled | Operations Graphs (tab) Operations Graphs (tab) |
| CUMSUM Chart | Update Event Log Monthly (tab) Operations Graphs (tab) |
| Detail | Location (tab) |