Strategic Energy Management 2022 Impact Report Klamath Community College



KLAMATH COMMUNITY COLLEGE

December 31, 2022

1. Executive Summary



Klamath Community College, 7390 S 6th St, Klamath Falls, OR 97603. Year 5.

The Klamath Community College (KCC) energy team continued to shine in 2022, despite some ongoing challenges with broader engagement at the school due to competing needs and limited staff. With their five-person core team, led by Energy Champion Mike Homfeldt, they successfully completed projects, attended ops calls and all core SEM workshops, plus participated in market sector forums. The team finished off their year by accomplishing three tasks in the 50001 Ready program – earning the college their fourth milestone of the year, and the distinction of being the only SEM participant in the rural cohorts to achieve the new 50001 Ready milestone!

Klamath Community College earned \$14,348 in incentives in 2022. We look forward to the College's continued SEM leadership in 2023.

SEM Program Incentives						
	Milestone Incentive Amount	Intern Incentive Amount	Energy Savings Incentive Amount	Total		
Year 1 (2016)	\$3,000	N/A	\$1,856	\$4,856		
Year 2 (2017)	\$1,000	N/A	\$0	\$1,000		
Year 3 (2020)	\$5,000	\$5,437	\$248	\$10,685		
Year 4 (2021)	\$4,800	\$9,067	\$1,423	\$15,290		
Year 5 (2022)	\$4,500	\$8,530	\$1,318	\$14,348		
Total	\$18,300	\$23,034	\$4,845	\$46,179		

2. Energy Savings Summary



This methodology uses engagement and program historical savings rates to determine savings for each site, which is the current basis for paying incentives. Engagement is assessed through Performance Tracking Tool (PTT) updates, workshop attendance, monthly call attendance, and the number of projects completed. To calculate energy savings, historical savings rates are determined by building type, model age, and fuel type which is applied to each enrolled site.

Normally savings are calculated with meter-level energy models in participant PTTs. The extraordinary circumstances since 2020 have required that Energy Trust adapt commercial SEM savings methodologies and program offerings. Energy Trust is only permitted to account for savings and pay incentives for efforts that are directly attributed to participation in Energy Trust programs and will result in savings over future years. As a result, a new way to calculate savings and incentives for the full year has been developed. In 2022, SEM savings were recognized and incentivized if you:

- Implemented at least five opportunities that were identified on your Annual Energy Plan
- And you completed at least two of the following:
 - Attended 50% of operations calls
 - o Attended 50% of core SEM workshops
 - Updated all PTTs at least four times

The following tables show Program Year 2022 engagement criteria and savings, and below the tables are notes describing what each column represents.

Engagement Metrics for Program Savings-Based Incentives				
Number of Workshops Attended	4/5			
Number of Operations Calls Attended	10/12			
Number of times Performance Tracking Tools Were Updated	0			
Number of Completed Qualifying SEM Projects for Incentive	16			

	Electric Baseline (kWh)	SEM Incremental Electric Savings (kWh)	Gas Baseline (therms)	SEM Incremental Gas Savings (therms)	Total Incentive
Building 2&3	155,200	3,816	7,017	151	\$107
Building 5	294,260	14,707	12,360	585	\$411
Building 6	694,800	17,085	1,071	23	\$346
Building 8&9	523,440	12,871	2,829	61	\$269
Bldg 4	126,920	7,681	4,585	159	\$185
Grand Total	1,794,620	56,160	27,862	979	\$1,318

Electric/Gas Baseline is the annual energy use during the period prior to the program/model start date.

SEM Incremental Savings includes savings specific to SEM activities that occurred in the current engagement year (does not include capital savings). For continuation participants, this is your incremental incentivized savings that exceed SEM savings from previous years.

Total Incentive is the SEM Incremental Savings (kWh) x \$0.02 plus SEM Incremental Savings (therms) x \$0.20.

3. Program Highlights



2022 was another strong year in SEM by the KCC energy team. In their five active years in the program, Mike and team have repeatedly stepped up to new opportunities to learn and grow in their project execution, planning and organization. This shows in their achievement of all eligible milestones, and the significant improvement in their Energy Management Assessment (EMA) score: from 22% in 2020, to 42% in 2022.

Key Performance Indicators				
Milestones Achieved (Max. 4 out of 5)				
⊠ Annual Energy Plan	⊠ Energy O&M Projects			
	7 /10 complete			
	⊠ 50001 Ready Navigator			
□ Energy Team	■ Bonus Electric Incentive			
	8 /10 complete			
Treasure Hunts Conducted	1 Treasure Hunt, 1 Building Management System (BMS) Review			
EMA Total Score / Previous Score	42% (2022) / 22% (2020)			

Organizational Activities

- o Successes:
 - Mike and team wisely utilized Jeff Kelly's time prior to retirement to capture Standard Operating Procedure (SOP) opportunities and support a smooth transition for his replacement.
- Challenges
 - The school continued to have challenges engaging faculty or administrative staff to fully commit to the energy team. However, Mike was able to keep communication lines open with these departments through his energy savings updates, and is committed to enlarging the team, as resources allow.
- o Progress
 - Klamath Community College built upon their success in SEM and leveraged their energy efficient operations commitment in applications for grants from Oregon Department of Energy and Pacific Power. These grants will provide funds to upgrade their infrastructure with electric vehicle charging stations and solar-ready construction.
- Technical Activities

Successes:

- The Energy Champion and energy coach performed a Building Management System (BMS) review. During this review it was identified that the outside air sensor was not reading correctly and therefore operating the building inefficiently. This was communicated to their contractor and scheduled for repair.
- The energy team and energy coaches conducted an on-site Treasure Hunt on May 25th. Through a facilitated discussion, review of mechanical documents and PTT trends the group identified opportunities for energy savings in their HVAC, controls, and lighting operations.
- The team was able to adjust lighting schedules to better match occupancy, especially around holiday periods.

Challenges:

- An internal firewall necessary to protect the college makes it difficult to provide access to relevant systems to those who can help their team with building operations. Energy team members are currently working with IT on resolution.
- Competing projects and goals has made this a challenging year for KCC.

Progress:

- KCC has made significant additions to their repository of Standard Operation Procedures (SOPs) for energy systems. By utilizing and being proactive with Jeff's time prior to retirement, KCC set themselves up with a great encyclopedia for others to learn from for operating KCC's buildings.
- The team created a Succession Plan that will be reviewed and updated annually.

4. Participant Energy Team



Energy Champion: Mike Homfeldt, Facilities Director

Executive Sponsor: Geoff LaHaie, CFO & VP Administrative Services

Back-up Energy Champion: Mark Griffith, Physical Plant Specialist

Team Member: Jeff Kelley, Facilities Specialist

Intern: Aaryan Patel

Mike Homfeldt continued to demonstrate exemplary SEM leadership in 2022 reinforced by project management support by Aaryan Patel, SEM Intern, and members of the energy team, Mark Griffith and Jeff Kelley. The Executive Sponsor, Geoff LaHaie, has been a persistent supporter and promoter of the program. Despite the challenges and competing priorities faced in 2022, the team has shown commitment to SEM. The energy coaches consider the KCC energy team to be in the "Performing" phase of Bruce Tuckman's Forming-Storming-Norming-Performing model. This theory of group development proposes that each phase is necessary and inevitable for the team to grow, face challenges, tackle problems, find solutions, plan work, and deliver results.

Energy Team Phase

Forming	Storming	Norming	×	Performing	Reforming

5. Plans for Future Success



KCC remains on track for continued SEM success going into 2023. Their seasoned and effective energy team, combined with a committed Executive Sponsor, have already paid dividends in strategic operations, sustainability, and cost control. KCC will continue to develop succession plans to prevent gaps in operational knowledge and ability, while they also look for ways to grow their team. They plan to add to their long-term energy improvement plans and add capacity to their team by making training resources more readily available to staff around energy efficient operations and maintenance. We expect KCC to continue as a role model in SEM and look forward to working with them in 2023.

- With their highly effective intern, Aaryan Patel, set to graduate in 2023, KCC will be looking for another intern this year. The SOPs and other documentation that Aaryan has created will help support this, and other transitions on the team. Coaches will work with the team to help bring new staff up to speed.
- The school's commitment to energy management, strategic operations, and long-term planning, combined with their recent achievement of the 50001 Ready milestone, position them well to achieve full recognition at their site if they choose. Coaches can provide a full assessment of the school's current standing, and level of effort needed to achieve 50001 recognition on request.

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