



Portland Community College's 2020 Energy Saving Efforts

by Farid Kayali



Who is leading the effort?



Who is leading the effort?

- Administration
 - Jen Piper, SEM Executive Sponsor
- Energy Team Leaders
 - Elaine Cole, Energy Champion
 - Brad Ortman, Back-up Energy Champion
- Energy Team Members
 - Briar Schoon
 - Stephania Fregosi
 - Krista Phillips
 - Larry Osborn
 - Joe Gamble
 - Sean Scorby
 - Mitch Kilgore
 - Jimmy Hood
 - Doug Jay
 - Evan Smith
 - Mark Erickson
 - Amelia Palmer Hansen/Farid Kayali

Why are we doing this?

We are all in this Together



Everyone has a responsibility for energy awareness and energy management in their work!

Who is leading the effort?

SEM Coaching Support

- Annual Planning
- Engagement
- Monthly Operations Calls
- Measurement and Verification
- Building Opportunity Assessments

**Dusty Farrell, SEM Energy Coach,
Energy Trust of Oregon**

2020:

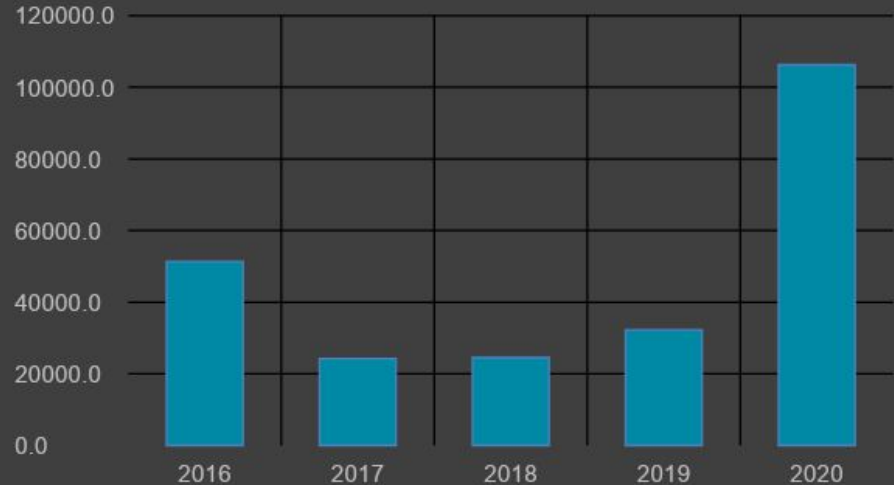
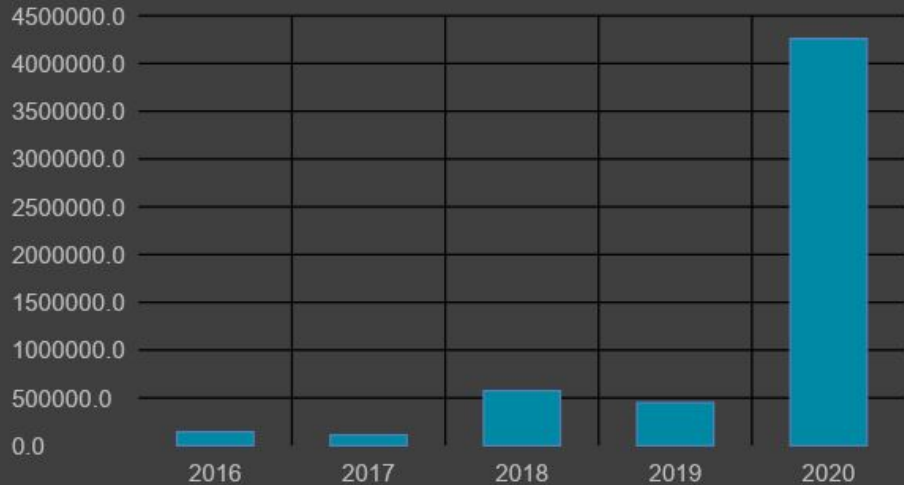
Alex Bertolucci, SEM Energy Coach, ETO
Wendy Gibson, SEM Energy Coach, ETO



SEM Milestones Earned in 2020

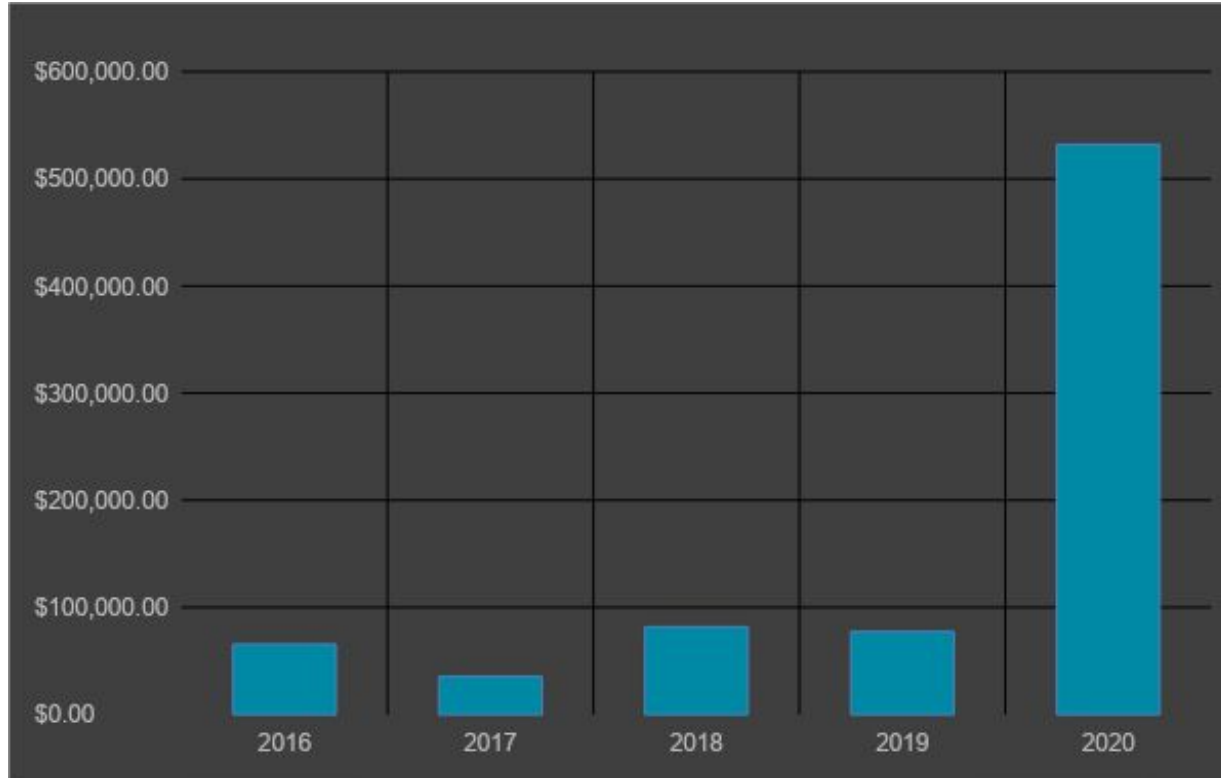
- Annual Energy Plan March 12, 2020
 - Standard Operating Procedure May 7, 2020
 - Energy Team July 16, 2020
 - Standard Operating Procedure – Resiliency July 23, 2020
 - Energy O&M Projects September 10, 2020
 - Executive Sponsor Engagement December 10, 2020
 - New Intern Incentive
-
- \$1,000/incentive to date PCC has received over \$83,000 in cash incentives

Overall Savings



Source:
Dropbox -> SHARED - PCC -> Archived ->
PCC RC_SY 2015 - 2018 Total SEM Savings Summary

Avoided Cost



Source:
Dropbox ->
SHARED - PCC ->
Archived ->
PCC RC_SY 2015
- 2018 Total SEM
Savings Summary

SEM Team's Accomplishments

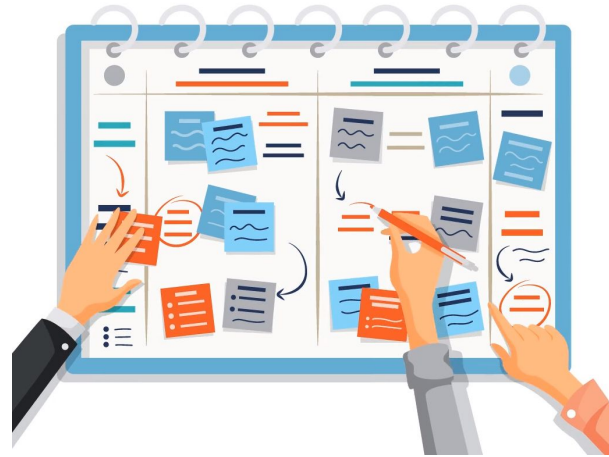
- ❖ Strategic Scheduling Plan
 - Shutdown
 - Events2HVAC
 - Class scheduling
- ❖ **50001 Ready-USDOE**
- ❖ **Night Audit Project Management**
- ❖ Maps and diagrams
 - Energy Systems Conceptual Map
 - Energy Systems Google Earth Map
 - HVAC Zoning Map
 - Meter Maps
 - Emergency System Conceptual Map
 - Carbon Offset Diagram
 - BAS Map
- ❖ Energy STAR Portfolio Manager
- ❖ **Higher Education Benchmarking Initiative**
- ❖ Energy Resiliency SOP
- ❖ **MEP (Mechanical-Electrical-Plumbing) Data**
- ❖ **Tools & Software from DOE**
- ❖ **Heat Map (Dusty)**
- ❖ **Technology Roadmap Heating and Cooling Equipment**
- ❖ Climate Action Plan (Scope I & II)
- ❖ Saved college over 500K in energy savings
- ❖ iTree (Ecosystem Analysis)
- ❖ Outreach (PowerShift)

SEM Team's Accomplishments

- ❖ Updated SEM documents
- ❖ Attended ETO workshops
- ❖ Utilized Building OS and Dashboards
- ❖ Building modeling with new energy sheets
- ❖ Help meet all SEM deadlines and incentives
- ❖ Help draft 2020 Annual Plan
- ❖ Association for the Advancement of Sustainability in Higher Education Conference-attended
- ❖ Create marketing materials to promote SEM
- ❖ Quarterly SEM Leadership meetings
- ❖ Earth Week participation
- ❖ EcoChallenge participation
- ❖ Rock Creek GreenTeam meetings

Strategic Scheduling Opportunities

- I. Optimizing Class Scheduling
- II. Occupancy Scheduling
- III. District-wide shutdown



ETO's SEM Awards

- Most Engaged Energy Team
- Exemplary Employee Engagement for Remote Operations
- Earned all of the milestones
- Above and Beyond Award (Jimmy Hood)
- Attended the most monthly operations calls



ETO's SEM Awards

- Most Engaged Energy Team
- Exemplary Employee Engagement for Remote Operations
- Earned all of the milestones
- Above and Beyond Award (Jimmy Hood)
- Attended the most monthly operations calls



Questions?



Old graph

