

Strategic Energy Management At PCC



**Portland
Community
College**



New Omic Center, a LEED Silver building

Our Energy Team

Elaine Cole, Energy Champion, Sustainability Coord.

Jennifer Piper/Karen Sanders, Executive Sponsors

Brad Ortman, Director FMS, Back-up Energy Champion

Joe Gamble, Team Member-Manager FMS

Larry Osborn, Team Member, Manager FMS

Mitch Kilgore, Team Member, Manager FMS

Briar Schoon, Team Member-Sustainability Manager

Stephania Fregosi, Team Member-Sustainability Analyst

Amelia Palmer Hansen, Strategic Energy Management Associate

Sean Scorby, Team Member, BAS Scheduling

Jimmy Hood, Team Member FOMS III (HVAC)

Doug Jay, Team Member, FOMS III (HVAC)

Evan Smith, Team Member, FOMS II (HVAC)

Duane Johnson, Team Member, FOMS III (HVAC)

Alan Little, Team Member, FOMS III (HVAC)

Krista Phillips, Team Member P&CC

Mark Erickson, Team Member-Lead Electrician

District Wide

Karen Brooks, SEM Energy Coach, Energy Trust of Oregon

Dusty Farrell, SEM Energy Coach, Energy Trust of Oregon

Accomplishments for 2021

- 50001 Ready -Worked on Task 9 Significant Energy Users (SEU's)
- Helped edit [PCC CAP](#) and member of team that presented CAP to PCC Cabinet and President Mitsui, assisted Scope 1 & 2 goals
- Helped edit [Portland Community College's Electric Vehicle Transition Policy](#) and worked with the [Electric Vehicle Collaborative](#) to draft the document
- Member of the PCC team that wrote the [PGE drive change fund grant](#) proposal to PGE.
- Participated in Professional Development:
[WOHESC](#) Conference attendee 2021
[Climate Action Pursuit](#):Toward Justice and Resilience Conference by Second Nature
[BOC Level One Training](#)
[OAPEM](#) Webinars Retro Commissioning ([GLUMAC](#))



Accomplishments for 2021

SEM Website

Documenting our SEM Mechanical, Operational and Behavioral projects, Annual Energy Plans and Energy Awareness Resources.



Accomplishments for 2021

ETO's SEM workshops

- 1/27/2021 SEM Kickoff workshop
- 3/4/2021 Colleges Market Sector Forum
- 3/18/2021 SEM Topic-specific Workshop 1 - Organizational: Back to Work
- 4/29/2021 Topic Specific Workshop 2 - Treasure Hunt Gems
- 5/4/2021 SEM Treasure Hunt Webinar 3 - Simultaneous Heating/Cooling and Sensor Error Issues
- 5/20/2021 SEM 101 Workshop



Accomplishments for 2021

SEM work

- Performed monthly updates to **Performance Tracking Tools** for ETO covering 22 buildings. PTT's calculate EUI's and graph energy savings.
- Benchmarked buildings for four campuses and one center for electricity in kW hrs and gas in Therms. Created detailed [Process for updating PTT's spreadsheets](#)
- Tracked 7 LED lighting upgrades and more are planned: [2021 PCC Lighting Projects](#)
- Participated in the following ETO SEM Incentive Actions:
 - [Strategic Energy Management Annual Plan](#)
 - SOP Milestone
 - Energy Team Milestone
 - O & M Milestone
- In 2021, PCC Expanded the number of buildings enrolled in SEM to include two new buildings at SE (Library and Student Commons) and three at Cascade Campus (Cascade Hall, Jackson Hall and Student Services Building).



Accomplishments for 2021

Volunteered for two task forces:

1. Establishment of an Energy Conservation Revolving Fund document for PCC

[Researched other colleges' GRF's](#)

Member of team that drafted [Portland Community College Energy Conservation Fund](#)

Helped craft document and form for applicants

1. PCC Energy Policy/Commitment

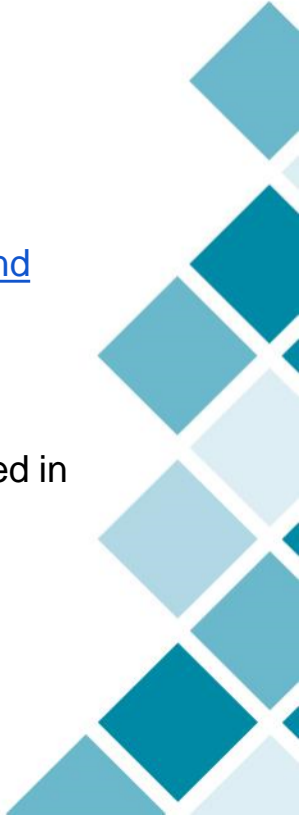
Member of team that helped draft a new PCC Energy Policy (former document was created in 2015)

[Energy Commitment / Energy Policy](#) (adopted 2015)

- a. [Energy Policy/Commitment Examples](#)

- b. [Energy Policy Revisions 2021](#) folder in SEM folder

[PCC Energy Policy Outline-DRAFT 9.15.2021](#) ←Latest Energy Policy Document



Treasure Hunts and Campus Visits 2021

Despite the Covid 19 pandemic, we were able to do *in person* treasure hunts with our ETO coach, Dusty Farrell, and campus visits with FMS staff.

- 1/29/2021 SE Campus w/ FMS staff Larry Osborn
- 2/9/2021 Rock Creek Campus w/ FMS staff Mitch Kilgore
- 3/17/2021 SE Campus Treasure Hunt with ETO's Dusty Farrell and Larry Osborn
- 3/24/2021 Cascade Campus Treasure Hunt with ETO's Dusty Farrell and Larry Osborn
- 5/26/2021 Rock Creek B1 HVAC Controls Review w/ FMS staff Evan Smith
- 5/27/2021 Sylvania tour with Jimmy Hood and Duane Johnson
- 8/24/2021 Sylvania treasure hunt with Duane Johnson and Dusty Farrell
- 9/27/2021 Sylvania campus visit in the learning garden.



Treasure Hunts and Campus Visits 2021



Duane and Jimmy removing the prefilter-MERV 8 to assess the MERV 14 filter for building health and safety



Diana and Roger install LED lighting and remove ballasts at the Sylvania campus



Dishwasher exhaust fan found on, should only run when dishwasher is in use, but kitchen staff was using it to ventilate the area.

	Portland Community College		
Campus	TOTAL AVOIDED COST 2021	BASELINE	
		Electric	Gas
		kWh	Therm
Cascade Campus Total	\$16	\$1,598,400	\$64,347
Rock Creek Campus Total	\$75,328	\$6,403,196	\$236,289
SE Campus Total	\$50,132	\$2,568,583	\$54,013
Sylvania Campus Total	\$132,308	10,197,334	483,257
TOTAL	\$257,782	20,767,513	898,378



Looking Ahead

- USDOE 50001 Ready - lots of opportunities!
- More [LED lighting upgrade projects](#)
- College-wide SOP for kitchen fan turn-off
- Additional occupant engagement strategies
- [SafeAirSpaces.com](#)
- And more!





Sustainability Team Retreat-Sylvania Learning Garden 9.2021

Thank You!