

Commercial SEM Annual Energy Plan 2021

Portland Community College

Elaine Cole, PhD, Energy Champion

Rock Creek – 17705 NW Springville Road, Portland, OR
97229

971-722-7635
elaine.cole16@pcc.edu





Contents

- 1. **Annual Energy Plan Summary**..... 3
- 2. **Energy Team Roster** 3
- 3. **Energy Savings Goals and Targets**..... 4
 - Total 2021 SEM Portfolio Goals 4
 - 2021 SEM Site Goals..... 4
- 4. **Operations and Maintenance Projects**..... 5
- 5. **Organizational EMA Action Items**..... 8
- 6. **Capital Projects**..... 10

|| PORTLAND COMMUNITY COLLEGE

1. Annual Energy Plan Summary

Instructions: Use this template to create a blueprint for your organization's enrollment year goals. It is intended to focus your priorities and is a living document that you can update. Use this completed plan throughout the year as a high-level reference to your more detailed documents.

Write a high-level summary of your energy saving plans, organizational objectives, and high-level projects that you want to complete this year. Three to five sentences are sufficient.

Portland Community College continues its closure of all campuses and centers as we start 2021. Our annual plan will have to reflect the continued pivot as most staff are working remotely off campus and our FMS staff are able to work in some capacity onsite. As the college plans for modified and limited reopening for the Spring quarter, FMS staff will be focused on new and time-consuming protocols to make buildings safer with more outside air, night flushing, etc.

The PCC SEM team will continue working on a variety of operational and mechanical energy conservation projects at Rock Creek, Sylvania, while expanding efforts at SE and the Cascade campus for year seven. We will have to be creative to address organizational and occupant behavior among the PCC community in our work from home status and hopeful return to campus!

2. Energy Team Roster

Instructions: Write down the name, role, and contact information of each member on your energy team. Update this table if there is any transition on your team throughout the year.

Name	Energy Team Role	Email	Phone Number
Elaine Cole	Energy Champion	elaine.cole16@pcc.edu	971-722-7635
Jennifer Piper	Executive Sponsor	jennifer.piper1@pcc.edu	971-722-6232
Brad Ortman	Back-up Energy Champion	brad.ortman@pcc.edu	971-722-4477
Larry Osborn	Team Member, Manager	laurence.osborn@pcc.edu	971-722-5510
Amelia Palmer Hansen	Strategic Energy Associate	amelia.palmer15@pcc.edu	503-703-9953
Briar Schoon	Team Member-Sustainability	briar.schoon@pcc.edu	971-722-8322
Stephania Fregosi	Team Member-Sustainability Analyst	stephania.fregosi@pcc.edu	971-722-8404
Joe Gamble	Team Member-Manager	joe.gamble@pcc.edu	971-722-8049
Sean Scorby	Team Member, BAS Scheduling	sean.scorby@pcc.edu	971-722-8113
Mitch Kilgore	Team Member, Manager	mitch.kilgore@pcc.edu	503-422-6079
Jimmy Hood	Team Member	Jimmy.hood@pcc.edu	971-269-5731

Doug Jay	Team Member	Doug.jay@pcc.edu	971-722-7385
Evan Smith	Team Member	Evan.smith@pcc.edu	971-722-7385
Mark Erickson	Team Member-Electrician	Mark.erickson3@pcc.edu	971-722-4588
Krista Phillips	Team Member	Krista.phillips@pcc.edu	971-722-8169
Alan Little	Team Member	alan.little@pcc.edu	971-722-5502

3. Energy Savings Goals and Targets

Instructions: This section is meant to evaluate and communicate savings potential — above and beyond prior years — at strategically enrolled sites. It is important to understand both how larger goals can be broken into manageable pieces, as well as how to communicate goals and success at a portfolio level to stakeholders. Site-level or portfolio-level goals are acceptable, but understanding both is beneficial.

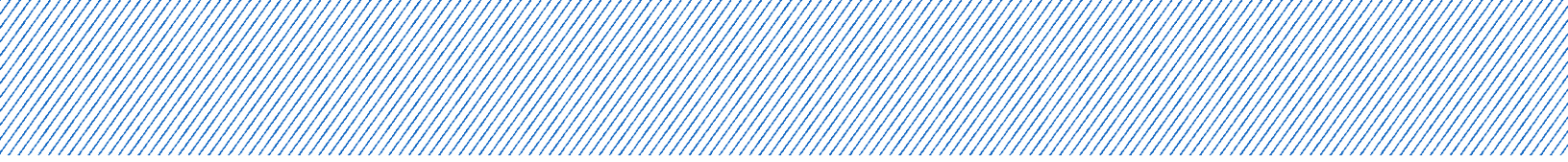
- First, consider previous savings at all sites enrolled in the SEM program with priority projects.
- Second, set a savings target – this can be at the site or portfolio level. You can find information about your baseline energy use in your PTT or ask your SEM coach for assistance.
- Third, translate your targets to the other table to help guide your efforts and communications in 2021.

Annual SEM Portfolio Goals

Fuel	Portfolio Baseline (kWh/therms)	Portfolio 2021 Savings Goal (kWh/therms)	Portfolio 2021 Savings Goal (% of Baseline)	Long-term Savings Goal (kWh/therms or %, Future Year)
E.g.: Electric	600,000 kWh (Bldg A & B)	18,000 kWh (9,000 kWh at each bldg)	3% of portfolio (3% at each bldg)	60,000 kWh by 2026 (or 10% savings in 5 years)
Electric	18,194,795 kWh	1,631,351 kWh predicted savings	5%	$18,194,795 \times .035 = 636,817$ kWh
Gas	820,183 therms	100,847 therms predicted savings	5%	$820,183 \times .035 = 28,706$ therms
Other (GHG, etc.)				

Annual SEM Site Goals

	Building Name	Electric Baseline (kWh)	Gas Baseline (therms)	Electric 2021 Savings Goal (5%)	Gas 2021 Savings Goal (3%)
0.	E.g.: Bldg A	300,000 kWh	50,000 therms	9,000 kWh or 3% baseline	1,500 therms or 3% baseline
1.	Rock Creek - Bundle	3,247,032	148,930	162,352	4,468
2.	Rock Creek – Bldg. 7	1,329,200	55,255	66,460	1,658
3.	Rock Creek – Bldg. 9	1,001,932	14,785	50,097	444
4.	Sylvania - Bundle	10,197,334	483,257	509,867	14,498



5.	SE Campus	Recently enrolled			
6.	Willow Creek	Recently enrolled			
7.	Cascade	Just enrolled			

4. Operations and Maintenance Projects

Instructions: Select at least five energy-saving projects from your Opportunity Register(s) or other O&M projects identified. This form provides ten rows to correspond with the Operations and Maintenance (O&M) milestone, where you can receive \$100 per project, up to ten projects for a total of \$1,000. Please list specific projects you intend to complete this year.

	Rock Creek Opportunity Register Item #	Building Name	Project Name (copy from Column C of Opportunity Register)	Person(s) Responsible	Target Completion Date	Status	Notes
1.	#49	Rock Creek/ Willow Creek	Confirm economizer function and OSA minimums at RC and WCC	Mitch Kilgore	ongoing	In Progress	
2.	#50	Willow Creek lobby, 3 rd floor, RC building 7, 9-library	Test night flush function of all operable windows and make repairs as necessary	Mitch Kilgore	8.15.2021	In Progress	costly
3.	#51	Rock Creek Building 9	Work on B9 balance report discrepancies list (select low cost items).	Mitch Kilgore	9.2021	In Progress	Need to hire a balancing company to finish balancing
4.		Building 5 Gymnasium	Domestic hot water heater replacement, could have a smaller more efficient unit	Evan Smith		In Progress	Need to talk to Mitch to get accurate completion date
5.		Building 2	Renovating HVAC system on B2: Reducing the number of air handlers and replace AC with a chiller	Doug Jay	12.2021	In progress	May go into 2022
6.		Building 2, 6	Compressed air system replacement, control via EMS so that compressors can be staged	Doug Jay	9.2021	In progress	
7.		All buildings	Clean air handlers	Doug Jay, Evan Smith, Rudy Jeffrey, Tony Cullen	9.2021	Ongoing	

8.		All Buildings	Implement COVID reopening protocols-night flushes, outside air handlers, revise scheduling, etc.		4.2021	In Progress	Limited CTE opening-6, 2, 7, kennel

	Sylvania Opportunity Register Item #	Building Name	Project Name (copy from Column C of Opportunity Register)	Person(s) Responsible	Target Completion Date	Status	Notes
1.	#31	CC	Check with IT about raising set point in the information data rooms, currently at 68 can be warmer ~72). Wasting energy big time!!	Joe Gamble	10/1/2021	In progress	Ask Joe. Meet with Frank Harris 3 or 4 meetings. IT guys just changing the temperature.
2.		SY	Pump rotation confirmation and schedule	Jimmy, Duane, Sean	6/2021	In progress	Increases the efficiency of motors and longevity
3.	#22	CC	Adjust hours for cafeteria lighting. Need project status, lights go right to breakers and not easy to locate due to remodeling	Mark Erickson	9/2021	In progress	Mark will add time clock (automatic), Emergency power is wired in with this
4.	#40	SY- Library, CC, CT buildings	Switch to LED lights for interior buildings-need to identify buildings	Mark Erickson, Roger Jose-Electricians	6.2021	Library. CC and CT, CSB in progress	Proactive project-ETO Incentive list-Platt, Trade A
5.		SY	Condensing boilers temp is too high and not condensing	Jimmy, Duane	5.1.2021	In progress	
6.		SY-SS building, 2 nd floor	IDF room	Jimmy, Duane	4.1.2021		Replace air conditioner w/ unit w/ higher SEER rating
7.							

8.							
----	--	--	--	--	--	--	--

	Southeast Opportunity Register Item #	Building Name	Project Name (copy from Column C of Opportunity Register)	Person(s) Responsible	Target Completion Date	Status	Notes
1.		Southeast buildings	Treasure Hunt-tasks to be added to plan after this	Larry	5.1.2021	3.17.21	Larry, Amelia, Dusty, Alan
2.		Southeast	Reprogram building lighting schedule, install new updated lighting control software	IT, P&CC, Larry	10.31.2021	In progress	Lights on all night. Working w/ Paul to get programming changed
3.		Mt. Tabor & Mt. Scott	Larry was issued BAS login credentials for his campus to allow system interrogation of schedules & equipment performance	Larry Osborn	6.1.2021	In progress	
4.							
5.							
6.							
7.							
8.							
9.							
10.							

	Cascade Opportunity Register Item #	Building Name	Project Name (copy from Column C of Opportunity Register)	Person(s) Responsible	Target Completion Date	Status	Notes
--	-------------------------------------	---------------	---	-----------------------	------------------------	--------	-------

1.		Cascade buildings	Treasure Hunt-tasks to be added to plan after this	Larry, Amelia, Dusty, Alan	5.1.2021	3.24.21	
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

5. Organizational EMA Action Items

Instructions: Select at least five organizational and/or engagement action items from your Energy Management Assessment (EMA) Action Plan or other identified items that are related to people, processes and organizational systems you intend to complete this year.

	EMA Item Number	Building Name	Project Name (copy from EMA Action Plan)	Person(s) Responsible	Target Completion Date	Status	Notes
1.		College	Continue work on completion of PCC Climate Action Plan	SEM Team	5.2021	In Progress	
2.	9.22	College	Regularly report on energy performance & achievements to management. Schedule quarterly SEM leadership team meetings to report out to Executive Sponsor.	Elaine, Amelia	9.1.2021	In Progress	
3.		College	Support & encourage FMS staff to attend SEM technical workshops, PCC SEM meetings and	Brad, Mitch, Joe, Larry	6.1.2021	In Progress	

			professional development training.				
4.		College	Facilitate Green Team meetings with energy conservation on the agenda	Elaine, Amelia, Davida, Taryn	9/30/2021	In Progress	
5.		College	Update our energy/SEM related PCC webpages	Elaine, Amelia, Rachel		In Progress	Add 2020 energy report, new photos, update content, new stories
6.		College	SEM incentive account establishing process for use and to monitor budget.	Jen, Brad	5.2021	In Progress	No process yet, needs a name. Meet w/ Jen, add proven energy savings to this acct.
7.		College	Identify 2-3 communication outreach strategies to highlight SEM accomplishments to PCC community	Jennifer Piper, Elaine, Amelia	9.1.2021	In Progress	*highlight new buildings enrolled at SE, WC, Cascade, web communication, college budget planning committee, EcoChallenge energy focus Oct., end of year results, back to campus energy impact
8.		College	Switch NW Natural contract to non-interruptible service for Sylvania (re different rate program for curtailment issues	Brad	6.2021	In Progress	Rock Creek was switched to non-interruptible service 5.2020
9.		College	Set up Operation Cozy PowerPoint for PCC Faculty/Staff to address work from home energy conservation	Amelia	4.30.2021	In Progress	
10.		College	US DOE 50001 Ready Certification-Complete 12 tasks	Amelia & Elaine, w/ team	12/2021	In Progress	
11.		College	BOC training approval & \$ support for FMS staff	Jen, Brad	2.2021	complete	Training 2021-completed in August
12.		College	Update Energy Commitment written in 2015	Elaine, Briar, Stephania, Krista, Jen	12/2021	In Progress	Task in Climate Action Plan

6. Capital Projects

Instructions: Select at least three capital projects you intend to complete either in the current or following year. Consider projects even if they are only wish list, not yet defined, or considered unlikely to be funded. These are projects you will work on with your Energy Advisor for Energy Trust incentives.

	Report Item Number	Building Name	Capital Project Name	Person(s) Responsible	Target Completion Date	Status	Notes
0.	E.g.: #2		Exterior LED fixture, 21-40W.	Jason	Click or tap to enter a date.	Choose an item.	
1.	See progress poster	RC Building 2	Welding Shop upgrade	Mitch	?	In Progress	
2.	See progress poster	SY AM building	Replace (MZU) Multi Zone Unit to VAV-Variable Air	Joe	?	In Progress	Custom study complete & sent to Laura W, Lisa waiting for bids from PCC
3.	See progress poster	SE-Mt Scott Hall-BDF, MTH-114	Data room air conditioning replacements (2)	Larry	4.30.2021	In Progress	ETO qualified incentives, Lisa will follow up
4.	See progress poster	SE-Community Hall Annex-CHA	Electric boiler removal and install heat pump	Larry	5.31.2021	In Progress	
4.	See progress poster						


 Approved By _____
 Date 3/12/21

Executive Sponsor

Elaine J. Cole 
 Approved By _____
 Date 3/12/2021

Energy Champion