

Executive Committee Meeting

August 9, 2021

CEO Report

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Building Electrification On-Bill Financing Program

Executive Committee Aug. 09, 2021 Item 4

Agenda

- Background
- Existing programs
- PCE's proposed OBF Program
- Customer Experience
- Timeline and Next steps

Background

- Existing building electrification needs large upfront capital
- Rebates are helpful but not scalable
- Financing can reduce upfront cost barrier
 - Important option as volumes increase
- HMB and Menlo Park are working on existing building ordinances
 - Could trigger larger volume

On-bill finance approach & benefits

Approach

• Typical loan but payments added to monthly utility bill

Benefits

Less complexity	Streamlined underwriting and payment
Widely adopted, low default rates	Median 0.08% for residential
Low/no interest rate	Attractive to customers
Widely applicable	Can accommodate many energy measures

Existing Programs

- SCP launched OBF March 2021
- SVCE has identified finance as top priority
- Widely used among utilities (2014 DOE study)

Sector	Number of participants	Lifetime Loan Volume (nominal \$)	n =	Average Size of Loan	Median value and range of default rates	n =
Residential	182,324	\$1.05B	20	\$5,787	0.08% (0 to 3%)	15
Non-residential	50,339	\$775M	7	\$15,400	0.9% (0.6 to 2.9%)	7
Total	232,663	\$1.83B	27 ⁶	\$7,867		22 ⁷

Sonoma Clean Power Program

• \$1M revolving capital fund

• Terms

- $_{\odot}$ \$10,000 maximum loans
- $_{\odot}$ Up to 10-year term, 0% interest, fixed monthly payments
- $_{\odot}$ Customer is homeowner
- Customer may qualify for multiple loans
- Customer must be in good standing (3 billing cycles), no other underwriting
- $_{\odot}$ SSN recorded for collections, if necessary
- Measures
 - Electrification (water heating, HVAC, panels, etc.), Efficiency, Batteries
 - Combined with equipment discounts and rebates
- Launched March 2021 (32 applications to-date, ave. loan: \$3,750)

PCE's Proposed OBF Program

- \$1M PCE capital fund
- Up to \$10,000 per customer, 10-year max. loan term
- 0% interest
- Electrification & related measures (water & space heating, panels)
- Integrate with BayREN Home+ program
- Typical bill:
 - Water heater upfront cost: \$5,000 (\$2,500 after incentives)
 - \circ \$2,500, 5-year loan term
 - o \$41.67/month charge

Customer Experience



Bill Presentment

Details of Sonoma Clean Power Electric Generation Charges

06/11/2021 - 07/12/2021 (32 billing days) Service For:

Service Agreement ID:

ESP Customer Number:

06/11/2021 - 07/12/2021

Rate Schedule: E-1				
EverGreen	695.846200	kWh	@ \$0.0	2500
Generation - Total	695.846200	kWh	@ \$0.0	7962
Improvement Repayment 1 of 60				
		Net C	harges	131

Energy Commission Surcharge

Total Sonoma Clean Power Electric Generation Charges

Service Information

Total Usage 695.846200 kWh For questions regarding charges on this page, please contact: SONOMA CLEAN POWER PO BOX 1030 SANTA ROSA CA 95402 1-855-202-2139 www.sonomacleanpower.org

Additional Messages

\$17.40

55.40

58.73

0.21

\$131.74

131.53

At Sonoma Clean Power, sustainable solutions

and deliver programs that positively impact the lives of our customers.

Our default electricity service is 50% renewable* and 97% carbon free. We partner with PG&E, who continues to deliver your electricity, and our shared customers receive one monthly bill from PG&E.

By providing you a choice of increased renewables that reduce greenhouse gas emissions, our customers help solve the climate crisis at the local level.

*Based on the official 2019 California Energy Commission Annual Power Content Label Calculation.

SCP example

- Separate line on PCE portion of the bill
- Exact text to be determined

Prospective Timeline

- Request Board approval for \$1M PCE capital fund Aug 2021
- Program launch January 2022

On-Bill Finance: Request

Program: Existing Building Electrification

<u>Request</u>: Recommend Board approval of on-bill finance program

Budget

- Up to \$1,000,000 revolving capital
- Administrative cost
 - Startup ~\$50,000
 - Annual <=\$10,000/year



School District Sustainability Dashboard

Executive Committee, 8/9/21 Item 5

Proposal to Expand Pilot

Objective: Obtain Exec Committee input prior to bringing contract to August 26 Board Meeting for approval

- Background Purpose and Benefits
- Status and findings from San Carlos School District pilot
- Expansion opportunities
- Proposed approach and budget

Schools as Learning Labs for Climate Solutions

- Integrates with other sustainability initiatives of the San Mateo County Office of Education
- Utility data can support student learning about
 - $_{\odot}$ how facilities operations contribute to GHGs
 - $_{\odot}$ how to develop solutions to reduce GHGs
- But utility data not accessible for students and faculty
- Solution: make facilities operations data (energy, water, waste, etc.) available in an easy-to-use, transparent manner

Benefits of the Dashboard

- Ideally benefits multiple stakeholders for learning, advocacy and action
- Administrators can analyze patterns/trends for intervention or to apply for recognition
- Teachers can use the dashboard in curricula
- Student groups can better focus their campus engagement efforts and evaluate the impact of their initiatives

San Carlos School District Pilot

- Initial pilot program implemented by San Mateo County Office of Education (SMCOE) with funding from Peninsula Clean Energy
- Initiated in 2019-2020 at a cost of \$35K
- SMCOE developed curriculum resources for various grade bands
- SMCOE coordinated the development of the template and worked with building analytics SaaS company, Lucid Design Group (now part of Acuity Brands)





SCSDk8.org San Carlos School District Sustainability Dashboard	SCSD & Sustainability San Carlos School District has a history of teaching beyond traditional class subjects as part of supporting the development of the whole child - including sustainability and the environment. This dashboard serves both as an instructional and management tool. It can be used by teachers for environmental and sustainability education, as well as by the facilities team to identify areas for improvement.
How does this Sustainability Dashboard work?	Use the buttons at the bottom of this page navigate the chapters of this dashboard. Chapters include Energy, Water, Waste, Transportation, Individual School Information, and Sustainability Competition pages.
4	Energy The <u>Energy</u> page contains natural gas and electricity usage information derived from the district's utility accounts with Pacific Gas & Energy (PG&E) and Peninsula Clean Energy (PCE). Sustainable energy means finding renewable and greenhouse gas emission-free sources for generation and reducing usage.
	Water The <u>Water</u> page contains water consumption information derived from the district's utility account with California Water Service (CalWater). Sustainable water management involves reducing usage, switching to recycled water when possible, and conserving stormwater.
	Waste The <u>Waste</u> page contains waste production and diversion information derived from the district's utility account with Recology. Sustainable waste management involves reducing production, using recyclable or compostable materials, and properly sorting.
	Transportation The <u>Transportation</u> page contains information on typical commuting patterns of members within SCSD derived from direct data collection. Sustainable transportation involves reducing single-occupancy vehicles on the road, increasing walking or rolling modes of transportation, and increasing public transportation use.

Learning from SCSD Pilot

• Use of the dashboard:

- Sustainability Competition across all 8 district schools was planned for April 2020 but abandoned due to COVID
- Instead a Sustainability Classroom online was offered April-June 2020 for grades 3-8. Twenty students participated
- Success requires several commitments from the district:
 - A key point of contact at the district who has access to the needed data
 - Budget to fund the dashboard subscription fees after the first year
 - Plan to use the dashboard (administration, curriculum, extra-curricular clubs)
- A dashboard template will streamline deployment to more sites • But the SCSD dashboard probably requires some refinement

Pilot Process

- Purpose of pilot \rightarrow evaluate before scaling
- Climate Corps Fellow engaged by SMCOE for 10-month assignment
 - $_{\odot}$ Review SCSD dashboard and revise, if needed
 - Work with district stakeholders for technical assessment and dashboard development based upon SCSD template
 - $_{\odot}$ Support training of facilities and curriculum leads
 - Develop pilot evaluation criteria
 - Evaluate and report pilot results
- Following the conclusion of the pilots, determine whether and how to roll out the dashboard to additional, interested districts
- Consider executing a 2-year agreement to encompass pilots and early rollouts, contingent on pilot success

Expanding the Pilot

- Two interested districts have completed a baseline buildings analysis
- Ravenswood
 - $_{\odot}$ 9 teachers and 2 admins enrolled in fellowship programs
 - $_{\odot}$ Have funding for future years
 - Have designated coordinator to manage the process for the district
 - $_{\odot}$ Have used PG&E bills in classroom
- San Mateo High School District
 - Superintendent wants the dashboard to track facilities operations (spent lots on facilities)
 - $_{\odot}$ Teachers have been trained
 - o Implemented a model of sustainability champion (teacher or staff) at each site
 - Budgeted for SaaS contract in future years
 - $_{\odot}$ Green clubs at the schools

Expanding the Pilot

- Two additional districts have also expressed interest
- Menlo Park City School District
 - Peninsula Clean Energy Board Chair, Rick DeGolia and Andra Yeghoian of SMCOE, met with Asst. Superintendent of Instruction
 - CBO, curriculum, and maintenance/facilities leaders are committed
 - Some teachers have participated in SMELC fellowship program

Bayshore

- Started on a dashboard project; paused for COVID
- Several teachers have taken the clean energy fellowship program
- $_{\odot}$ Intends to budget for future years

Options

- 1. Support a restart and refinement of the SCSD dashboard pilot. Evaluate impact **before expanding** to additional districts.
- 2. Restart/refine the SCSD dashboard pilot and build out a dashboard pilot for **two** additional districts (Ravenswood and SMUHSD).*
- 3. Restart/refine the SCSD dashboard pilot and build out a dashboard pilot for **three** additional districts (Ravenswood, SMUHSD and one other).

Under any option: consider a working/advisory group with representatives from each district to learn from the pilot(s)

* Recommended

Estimated Budget by Option

	Option 1		Option 2*		Option 3	
	S	CSD restart		SCSD + 2		SCSD + 3
Climate Corps Fellow	\$	28,000	\$	28,000	\$	28,000
Startup Cost (~\$25K/dashboard)	\$	-	\$	50,000	\$	75,000
1st year subscription (\$5-10K/district)			\$	15,000	\$	22,500
Indirect expenses for SMCOE (14%)	\$	3,920	\$	13,020	\$	17,570
Total	\$	31,920	\$	106,020	\$	143,070

* Recommended

Note: Estimated cost, before price escalation, to roll out to all remaining school districts in San Mateo County is ~\$800K. However, it is not known whether all districts would want to deploy the dashboard.

Evaluating the Impact of Pilots (Draft)

Potential impact measures by school and for the district at large:

- Number of classroom activities by grade that use the dashboard
- Number, types of classroom courses using the dashboard
- Number of students and teachers accessing the dashboard for curricular purposes and frequency of usage
- Number of schools in district using dashboard with curriculum
- Inventory of uses of the dashboard for administrative purposes, qualitative assessment of impact
- Inventory of uses of the dashboard for extra-curricular purposes by students

In Context of Other School Programs

Current Annual Investment

• SMELC Fellowships (Teacher, Admin)

Total per year

- Youth Climate Ambassador
- Sustainable and Climate Resilient Schools
- Energize Colleges SMCCCD intern program

\$205K 40K 3K 92K

\$340K



Annual Awareness -Survey

August 9, 2021 Item 6



Agenda

- Summary of Key Results of Awareness/Perceptions Study
 - \circ Objectives
 - \circ Approach
 - Energy Provider Awareness
 - Electric Vehicles
- Discussion of Implications, Next Steps for Marketing and Programs



To assess awareness and perception among San Mateo County residents of:

- Peninsula Clean Energy brand
- Benefits, obstacles to adoption and purchase interest in Electric Vehicles (EVs)

Approach

- Random sample of all households in San Mateo County
- Letter invitation, in English and Spanish, sent from*:
 - County of San Mateo Office of Sustainability (OOS)
 - City County Association of Governments (C/CAG)
- 35,000 letters sent, 6.2% response rate overall
- 22-minute self-administered survey offered in English and Spanish
- Surveys were completed April 21 to May 12, 2021
 - * Affiliation with OOS and C/CAG provided an opportunity to
 - 1. capture "unaided awareness" and
 - 2. assess whether there was pro-environment bias due to affiliation with OOS (there was not)

Approach

- Sample was "normalized" to better reflect the population
- Resulting sample:

	Sample Size	Margin of Error at 95% Confidence*	Trend analysis possible?
OOS Sample	509	+/- 4.3%	Yes
C/CAG Sample	1,114	+/- 2.9%	No
		* Slightly higher for subgroups	

Significant differences are noted on the slides

Energy Provider Awareness

Summary Findings

- About 1 in 3 residents recall or recognize the Peninsula Clean Energy brand. This has not changed since the 2020 survey.
- Of the "aware," most are favorable, receptive to using Peninsula Clean Energy, and acknowledge being a current customer. Most of the "aware" respondents, correctly link the brand with its environmental objectives.
 - Our metrics are strongest among those over 55 years of age, who are white, homeowners, and live in single-family dwellings.
 - Perception lags among younger renters of color, and low-income Hispanic households
- Only 1 in 5 respondents know that they are current customers even though we serve 97% of the residents.

Persuasion MonitorTM – Peninsula Clean Energy



Q1 – Q6 Persuasion Monitor Base: Total Sample (n=2,261 / 509 / 1,114)

Arrows indicate a significant difference among OOS sponsored data from the prior year at the 95% confidence level

Perceptions of Peninsula Clean Energy



Peninsula Clean Energy **Q9 - For each statement, please indicate if you think it is true or false about Peninsula Clean Energy.** Base: Aware of PCE (n=156 / 413)

Among those who recognize our name, our intended messages are mostly getting through

Perceptions of Peninsula Clean Energy



Among those who know that Peninsula Clean Energy is their provider, most attributes are about the same as all aware residents, except for having more agreement (45%) that Peninsula Clean Energy charges lower rates that PG&E.

Peninsula Clean Energy **Q9 - For each statement, please indicate if you think it is true or false about Peninsula Clean Energy.** Base: Aware of PCE (n=156 / 413)

Summary Findings

- Top priority for "energy providers" is low electricity rates. Among those aware of Peninsula Clean Energy, about one-third think our rates are lower than PG&E's. Of those who acknowledge that they are customers, 45% think our rates are lower than PG&E's.
- About 1/3 of residents have highly engaged environmental attitudes. There is a strong correlation between this type of engagement and awareness of Peninsula Clean Energy.

Resident Priorities



About half of respondents rank lower electric rates as the #1 priority in an electricity provider

Q7a - If a provider of electricity to your home could offer all the advantages listed below, which three would be most important to you? Base: Total Sample (n=2,261 / 509)

Peninsula Clean Energy

Arrows indicate a significant difference among OOS sponsored data from the prior year at the 95% confidence level

Implications

- Lots of upside to improve total brand awareness
 - Especially among certain segments such as younger renters of color and lowincome Hispanic households
- But perceptions remain favorable among those who are aware of the agency
- Awareness of our lower rates remains quite weak and may suffer from various challenges, hypothetically:
 - "Set and forget" not shopping for electricity
 - Bill complexity gas + transmission/distribution + electricity generation
 - Peninsula Clean Energy may still be seen as a surcharge

Electric Vehicles

Summary Findings

- EVs are well known and well regarded.
- Consideration is stifled by a lack of familiarity and pricing/cost.
- Other obstacles include concerns over range, access to charging, affordability.
 - The young, renters of color segment is very aware and favorable toward EVs but also very aware of limitations on charging access
- Half of residents who are considering a vehicle purchase are likely (8 to 10 on a scale of 10) to consider a fully electric vehicle

Persuasion Monitor[™]– Fully Electric Vehicles

Low Familiarity alongside high Awareness and Favorability indicates the need for substance in communications, such as range/price/operating cost details (to overcome barriers).



Perceptions of EVs

- Residents have high agreement on most perceptions of EVs
- Opportunities for increasing familiarity: the ability to plug into a standard outlet, operating costs, and range.
 (Strongly / Somewhat Agree)



QEV3 - Please indicate your agreement with the following statements about plug-in electric vehicles (EVs).

Peninsula Clean Energy Base: Total Sample (509 / 1,114)

EV Motivators

New EV: cost of use, pricing, and charging stations are the top motivators. Used EV: vehicle pricing is top motivator and cited much more often than last year



* 2020 was only asked of licensed decision makers

QEV12 - If you were in the market for a NEW/USED vehicle, what are two or three things that might motivate you to consider getting an electric vehicle?

EV Barriers

- Availability of charging stations, affordability, and range are top barriers for new or used EVs.
- Battery condition is a barrier for those considering used EVs.



* 2020 was only asked of licensed decision makers

you when considering an electric vehicle?

QEV13 - If you were in the market for a NEW/USED vehicle, what are two or three things that might be a concern to

Peninsula Clean Energy

Base: Expecting to buy/lease a new/used car (n=1,111 / 404) (n=381 / 306)

Arrows indicate a significant difference among OOS sponsored 19 data from the prior year at the 95% confidence level

Implications

- Residents are strongly aware of EVs and view them favorably
- High level of interest in EVs (incl. used) across all income groups means that campaigns can target ALL residents
- Opportunities exist for education about charging, operating costs and range.
- Improving charging availability (public, multi-unit dwellings) and awareness thereof could increase adoption among the young renters segment
- Opportunity to influence used vehicle buyers toward EVs