City Council Agenda

City of Campbell, 70 North First Street, Campbell, California

---

CAMPBELL CITY COUNCIL STUDY SESSION
Tuesday, February 2, 2016 - 6:30 p.m.
Council Chamber – 70 N. First Street

NOTE: No action may be taken on a matter under Study Session other than direction to staff to further review or prepare a report. Any proposed action regarding items on a Study Session must be agendized for a future Regular or Special City Council meeting.

CALL TO ORDER, ROLL CALL

NEW BUSINESS

1. **Silicon Valley Clean Energy**
   Recommended Action: Conduct Study Session and provide direction to staff.

PUBLIC COMMENT

ADJOURN

MEMORANDUM

City of Campbell
City Manager's Office

To: Honorable Mayor and City Council

Date: January 28, 2016

Via: Mark Linder, City Manager

From: Al Bito, Deputy City Manager

Subject: **Community Choice Energy Study Session**

At the February 2 Council Study Session, staff, along with a representative from the Silicon Valley Choice Energy Partnership, will provide an overview on the Community Choice Energy Partnership and on the related steps needed for a municipality to become part of the new Santa Clara County Joint Powers Authority (JPA) which will be charged with purchasing renewable energy on behalf of its member customers.

The Partnership overview will include information about the goals of the Choice Energy Partnership; past and current community engagement; risks and uncertainties; current working models; technical feasibility study; potential Community Choice Energy scenarios; status of Santa Clara County cities considering the Partnership; and next steps.

The City Council Is scheduled to consider formally entering into a JPA agreement at its regular meeting on February 2.

Attachments:

- Fact Sheet
- Presentation slides

SVCleanEnergy.org

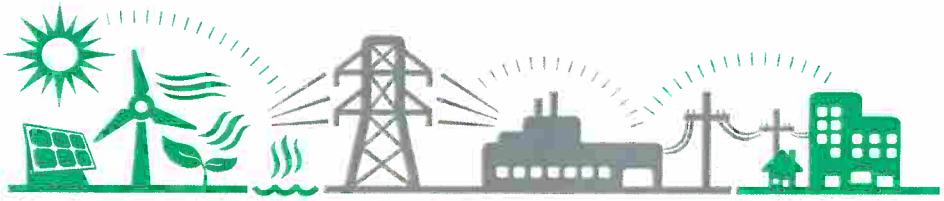
cleaner, greener electric power

SILICON VALLEY COMMUNITY CHOICE ENERGY PARTNERSHIP

local control, local benefits

A new electricity provider would be entirely locally run.

The Silicon Valley Community Choice Partnership (SVCCEP) is developing a new way to provide greener, cleaner electricity at competitive rates. Participating communities would pool the electricity demand of their homes and businesses and buy power for them. It's similar to buying in bulk or participating in a co-op.



SOURCE	DELIVERY	CUSTOMER
SVCCE	**PG&E**	**YOU**
buying and building energy supplies	delivering energy, repairing lines, serving customers	benefitting from cleaner energy, local control

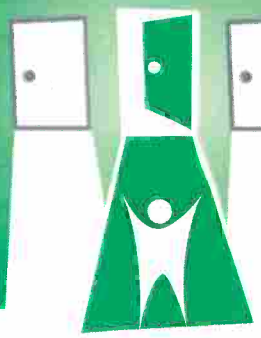
A new locally controlled non-profit would buy electricity from renewable energy sources. PG&E would continue to deliver the electricity over existing infrastructure, maintain the power lines, send bills and provide customer service. Because there are no shareholders, revenue is reinvested to develop more local energy, creating local jobs and economic development. In fact, Silicon Valley already has solar installations and has great potential to develop even more local solar, geothermal, wind, biogas and biomass energy. The non-profit could also develop local programs such as buying solar power from customers and offering new energy efficiency services. The non-profit would be completely funded by program revenue, not by taxes or by city or county general funds.

choice and competition for Silicon Valley

At the moment, residents and businesses in Santa Clara County have only one electricity provider. The Silicon Valley Community Choice Energy (SVCCE) Partnership is exploring how to provide a new choice: a community-controlled electric power supplier. Our communities would benefit from:

- More renewable energy sources
- Competitive rates
- Innovative services
- Local control

The timing is right and momentum is building.



it's a proven model

Marin Clean Energy has been successfully operating for five years, Sonoma Clean Power for about a year, and Lancaster Choice Energy began service this fall. All offer electricity with higher levels of renewables at lower prices than PG&E. Plus, customers can choose to be 100% green at a slightly higher cost. Customers can opt out and remain with PG&E if they prefer. In the existing programs, 85% of customers chose to stay with the new local non-profit as their electricity provider. Those programs paved the way—we can build on their successes here.

next steps for developing a Silicon Valley CCE

The Silicon Valley CCE Partnership is building on the experience of successful programs. Residents and businesses in participating communities could become customers as soon as Winter 2016. Sign up to stay connected through the website.

Fall 2015 > **Technical Study Draft**

Winter 2015 > **Communities decide – Form Joint Public Agency**

Spring 2016 > **Implementation Plan to Public Utilities Commission**

Summer 2016 > **Ramp up Operations & Communications**

Winter 2016 > **Program launch!**

a growing partnership

The Silicon Valley CCE Partnership currently has four members:

- City of Sunnyvale
- City of Mountain View
- City of Cupertino
- County of Santa Clara (for unincorporated communities)

During the next few months, other cities in the county will also be deciding whether to join the Partnership.

info@SVCleanEnergy.org

SVCleanEnergy.org

Community Input Meeting

Winter 2016

SILICON VALLEY COMMUNITY CHOICE ENERGY PARTNERSHIP

Welcome

Agenda

I. Live Audience Pre-Poll
II. Introduction to CCE
III. What We Learned from Round 1
IV. Overview of Progress /Draft Technical Study Results
V. Next Steps
VI. Q&A / Group Discussion
VII. Live Audience Post-Poll
VIII. Take Action: How to Get Involved

Audience Pre-Poll

To Enter The Text Poll

Step 1: Enter **22333** in the "To" bar

Step 2: Text the message "**SVCCE**" to that number

To respond on the web: **PollEv.com/svcce**

Your poll will show here

1 Install the app from pollev.com/app

2 Make sure you are in Slide Show mode

Still not working? Get help at pollev.com/app/help

or

Open poll in your web browser

Your poll will show here

1 Install the app from pollev.com/app

2 Make sure you are in Slide Show mode

Still not working? Get help at pollev.com/app/help
or
Open poll in your web browser

Your poll will show here

1 Install the app from pollev.com/app

2 Make sure you are in Slide Show mode

Still not working? Get help at pollev.com/app/help
or
Open poll in your web browser

Your poll will show here

1 Install the app from pollev.com/app

2 Make sure you are in Slide Show mode

Still not working? Get help at pollev.com/app/help
or
Open poll in your web browser

Your poll will show here

1 Install the app from pollev.com/app

2 Make sure you are in Slide Show mode

Still not working? Get help at pollev.com/app/help
or
Open poll in your web browser

Your poll will show here

1 Install the app from pollev.com/app

2 Make sure you are in Slide Show mode

Still not working? Get help at pollev.com/app/help
or
Open poll in your web browser

Introduction to Community Choice Energy (CCE)

CCE Overview

What is Community Choice Energy?

SOURCE	DELIVERY	CUSTOMER
SVCCE	PG&E	YOU

- *Customers are automatically enrolled into CCE program*
- *Customers can "opt-out" to stay with PG&E for bundled service*
- *Customers receive at least 4 notices (2 pre- and 2 post-enrollment)*

SVCCEP Overview - Silicon Valley Community Choice Energy Partnership

Sponsoring Agencies

Sunnyvale | Cupertino | Mountain View | Santa Clara County

Also Participating

Campbell | Gilroy | Los Altos | Los Altos Hills
Los Gatos | Monte Sereno | Morgan Hill | Saratoga

SVCCEP Priority Goals

- Offer **renewable energy options** that exceed the renewable content offered by PG&E.
- **Reduce GHG emissions** to support local climate action goals.
- Provide **competitive, potentially lower, electricity rates** for all customers.
- Facilitate the use of **clean technology**, local clean power, and other energy innovations.
- Create and maintain a local public agency that is **well managed and financially sustainable.**

What We Learned: Round 1 Community Meetings

Community Engagement

- Community Meetings
  - *Round 1 (6 meetings) complete*
  - *Round 2 (December/January)*
- Targeted Stakeholder Forum
  - *Sunnyvale (November 17)*
- Business Engagement
  - *Webinar (November 4)*
  - *Business Forum Meeting (December)*
  - *Business Groups, Chambers*
- Increase engagement in next phase
- Customer noticing 60 days before service

Round 1: Polling Results

Good Idea?

Answers
Yes
No
Don't Know

Most important outcome in creating a public

Answers
Create more renewable energy
Reduce our carbon footprint
Reduce prices for electricity
Create local jobs
Other

Main Concerns?

Answers
Costs will go up
Power won't be as reliable
Service will suffer
I don't have any concerns
Other

Willingness to pay - all electricity generated by renewable sources?

Answers	All
0%	6%
1-5%	28%
6-10%	25%
11-15%	34%
Don't know	6%

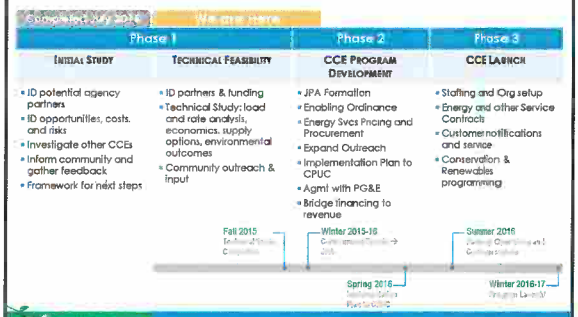
How will your network respond?

Answers	All
Enthusiastically	35%
Skeptically but interested	59%
Skeptically and not interested	2%
Negatively	3%
They won't care	0%
Not Enough information	2%

www.SVCleanEnergy.org

Overview of Progress/ Draft Technical Study Results

SVCCEP Milestones and Timeline



Assessment Report

LEAN Energy US, May 2015

Key Findings

- Good potential to meet climate action goals
- Timing is good
- Existing CCE programs are performing well
- Anticipated rate savings in the near term
- Risks exist but can be mitigated

Proven Model in Current Programs

- Green power, more renewables
- Competitive rates – currently lower
- Enhanced local energy programs
- Financially sound

MCE Clean Energy
My community. My choice.

Sonoma Clean Power

Technical Study - Scenarios

PEA

Scenario 1	Scenario 2	Scenario 3
No GHG Redux: Match PG&E GHG, Exceed PG&E RE	Reduce GHG 20% Exceed CA min. RE 51% (Yr 1), 66% (Yr 10)	MAXIMIZE RE/GHG-Free
MAXIMIZE $ Savings	$ Savings	No $ Savings: Match PG&E $

- Additional Assumptions for All Scenarios:

2% Opt-Up to 100% RE | Local Energy Programs (Net Metering, Feed-in-Tariff) | No Unbundled RECs | No Nuclear, No Coal | 85% Participation

SVCCE Load Summary

PEA

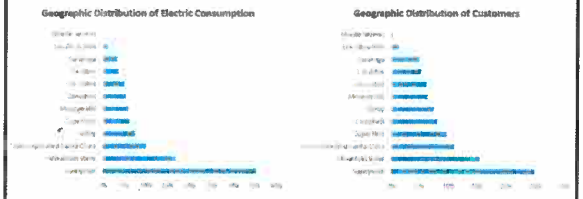
Bundled Energy Use by Customer Classification

Customer Classification	Customer Accounts	Customer Accounts (Total)	Energy Use (MWh)	Share of Energy Use (%)
Residential	218,049	90%	1,336,200	34%
Small Commercial	19,120	8%	423,180	11%
Medium Commercial	2,527	1%	569,501	14%
Large Commercial	1,166	<1%	780,723	20%
Industrial	43	<1%	771,462	19%
Ag and Pumping	944	<1%	62,238	2%
Street Lighting	1,588	1%	20,619	1%
TOTAL	243,440	100.0%	3,971,985	100%
Peak Demand (MW)	660 (July)			

Composition by Jurisdiction

PEA

The top 5 jurisdictions account for almost 76% of total SVCCE electric consumption and 68% of total SVCCE customer accounts



Risks & Uncertainties

PEA

- Financial Risk
- Competitive and Pricing Risk/ Opt-Out Rates
- Market Exposure
- Regulatory Risk
- Political Risk

Tech Study Findings & Conclusions

PEA

Scenario 1	Scenario 2	Scenario 3
Rate Competitive No GHG Impacts	Rate Competitive w/RE & Carbon-Free Content	Rate Parity w/ Environmental Benefits

- No "correct" answer, but in general terms, the technical study indicates that the SVCCE program could be economically viable while also achieving the Partners' environmental objectives

Next Steps

Parallel Tracks

- Technical Study & Program Development
- Stakeholder Engagement
- Agency Agreement & Participation

The Path Ahead

Partner Decision Making

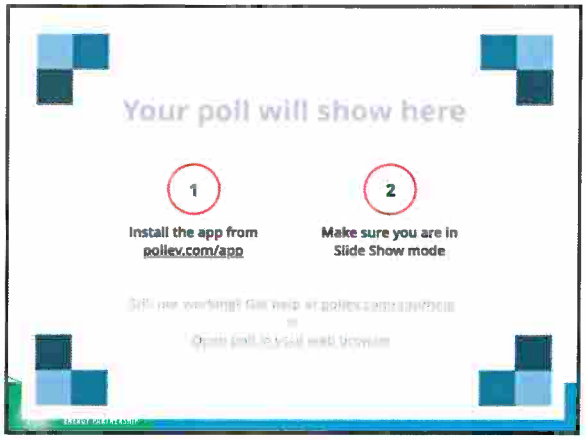
- Council/Board Action
  - *Adopt CCE Ordinance (with 2nd reading)*
  - *Resolution to Join JPA; approve final agreement*
  - *Approve Cost-sharing Contribution*
- Target – Action by March 31, 2016
  - *Council/Board preparatory info by December 9, 2015*
  - *Sponsoring Agencies targeting action by January 31, 2016*
  - *First JPA meeting in April 2016*

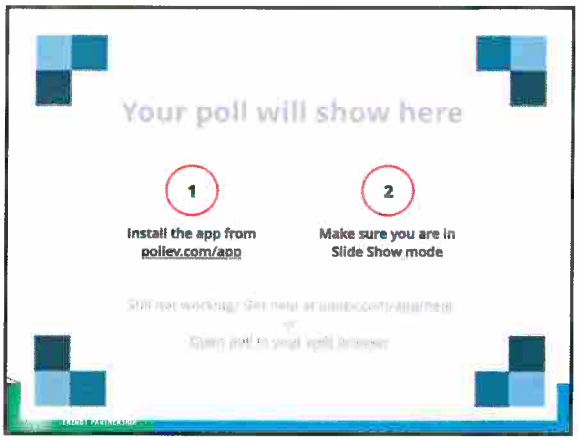
Partner Decision Making Schedule

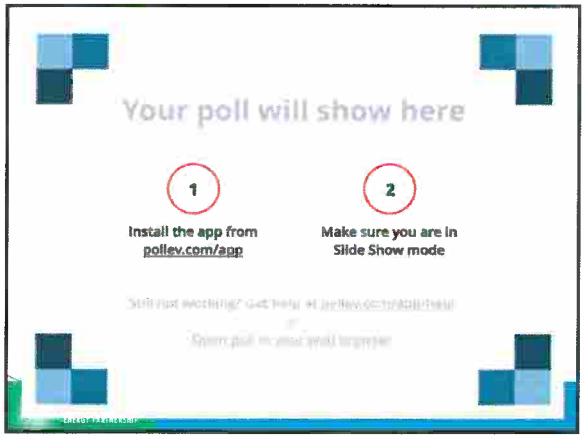
Date/ Time	Agency
Tuesday, 12/1/15	Cupertino City Council
Tuesday, 12/15/15	Sunnyvale City Council
Thursday, 12/16/15	Morgan Hill City Council
Tuesday, 1/12/16	Mountain View City Council
Wednesday, 1/20/16	Saratoga City Council
Tuesday, 1/26/16	County Board of Supervisors*
Tuesday, 1/26/16	Los Altos City Council*
Tuesday, 2/2/16	Campbell City Council
Tuesday, 2/2/16	Monte Sereno City Council
Tuesday, 2/2/16	Los Gatos Council
Thursday, 2/18/16	Los Altos Hills Council
Monday, 2/22/16	Gilroy City Council

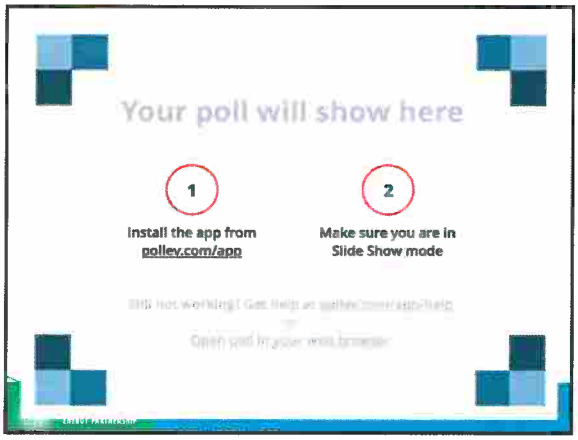
Group Discussion

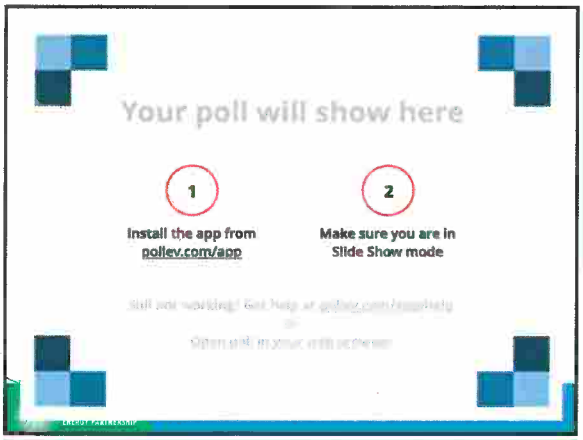
Audience Post Poll


Your poll will show here
1
Install the app from pollev.com/app
2
Make sure you are in Slide Show mode


Your poll will show here
1
Install the app from pollev.com/app
2
Make sure you are in Slide Show mode


Your poll will show here
1
Install the app from pollev.com/app
2
Make sure you are in Slide Show mode


Your poll will show here
1
Install the app from pollev.com/app
2
Make sure you are in Slide Show mode


Your poll will show here
1
Install the app from pollev.com/app
2
Make sure you are in Slide Show mode

Take Action:
How To Get Involved

Next Steps

Round 2: Community Input Meetings

Date/ Time	Location
TONIGHT!	Community Center, Campbell

Completed Round 2 Meetings:

- Cupertino
- Morgan Hill
- Mountain View
- Sunnyvale
- Santa Clara County
- Los Gatos
- Los Altos
- Saratoga

Photo Credit:

Next Steps

Date/ Time	Agency
Tuesday, 12/1/15	Cupertino City Council
Tuesday, 12/15/15	Sunnyvale City Council
Thursday, 12/16/15	Morgan Hill City Council
Tuesday, 1/12/16	Mountain View City Council
Wednesday, 1/20/16	Saratoga City Council
Tuesday, 1/26/16	County Board of Supervisors*
Tuesday, 1/26/16	Los Altos City Council*
Tuesday, 2/2/16	Campbell City Council
Tuesday, 2/2/16	Monte Serena City Council
Tuesday, 2/2/16	Los Gatos Council
Thursday, 2/18/16	Los Altos Hills Council
Monday, 2/22/16	Gilroy City Council

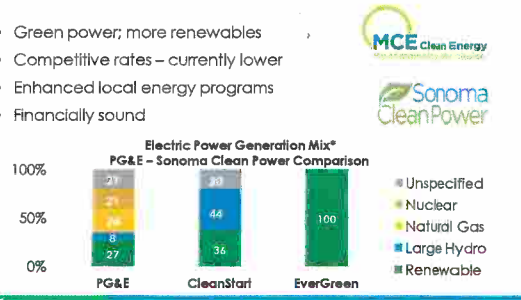
www.SVCleanEnergy.org

Thank you

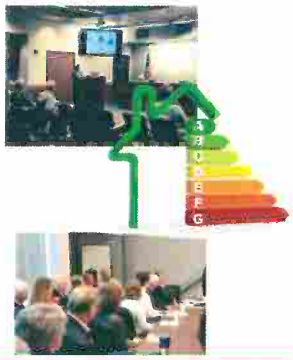
Pocket Slides

Proven Model in Current Programs

- Green power; more renewables
- Competitive rates – currently lower
- Enhanced local energy programs
- Financially sound



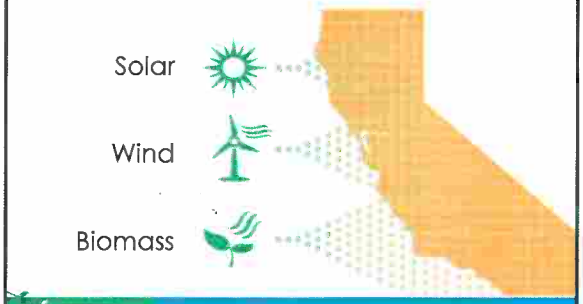
Public Nonprofit

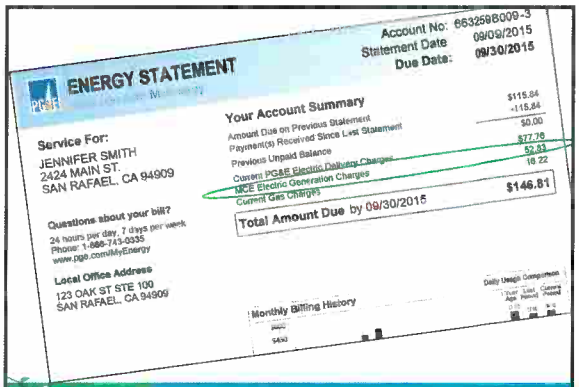


Community Engagement

- Community Meetings
  - *Round 1 (6 meetings) complete*
  - *Round 2 in December/January*
- Targeted Stakeholder Forum
  - *November 17th in Sunnyvale*
- Business Engagement
  - *Webinar November 4th*
  - *Business Forum Meeting – December*
  - *Business Groups, Chambers*
- Grows in next phase
- Customer Noticing 60 days before service

Accelerating Renewables





ENERGY STATEMENT

Account No: 6632598009-3
Statement Date 09/09/2015
Due Date: 09/30/2015

Service For:
JENNIFER SMITH
2424 MAIN ST.
SAN RAFAEL, CA 94909

Your Account Summary

Amount Due on Previous Statement	$115.84
Payment(s) Received Since Last Statement	-115.84
Previous Unpaid Balance	$0.00
Current PG&E Electric Delivery Charges	$77.76
MCE Electric Generation Charges	52.83
Current Gas Charges	16.22
Total Amount Due by 09/30/2015	$146.81

Questions about your bill?
24 hours per day, 7 days per week
Phone: 1-866-743-0335
www.pge.com/MyEnergy

Local Office Address
123 OAK ST STE 100
SAN RAFAEL, CA 94909

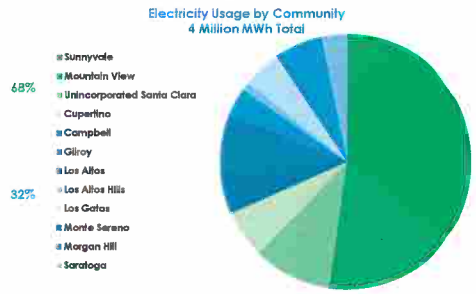
Monthly Billing History

Daily Usage Comparison

Why are we considering this?

- Communities adopting **Climate Action Plans** for Greenhouse Gas Reduction
- **Transportation** and **Electricity Consumption** are largest community contributors of GHG
- **Transforming Electricity Sourcing** is essential to reaching goals

Overview of Usage by Community



SVCCE Load Summary

PEA

SVCCE: Electric Energy Overview

Current Service Provider	Customer Accounts	Customer Accounts (% of Total)	Energy Use (MWh)	Energy Use (% of Total)
PG&E ("Bundled" electric accounts)	243,440	99.7%	3,972,985	83%
Direct Access electric accounts	765	0.3%	799,268	17%
Total – SVCCE Study Partners	**244,205**	**100.0%**	**4,772,253**	**100.0%**

Bundled Energy Use by Customer Classification

Customer Classification	Customer Accounts	Customer Accounts (% of Total)	Energy Use (MWh)	Share of Energy Use (%)
Residential	218,049	90%	1,336,200	34%
Small Commercial	19,120	8%	423,180	11%
Medium Commercial	2,527	1%	569,501	14%
Large Commercial	1,166	<1%	780,723	20%
Industrial	43	<1%	773,462	19%
Ag and Pumping	944	<1%	62,238	2%
Street Lighting	1,588	1%	20,619	1%
TOTAL	243,440	100.0%	3,972,985	100%
Peak Demand (MW)	660 (July)			

SILICON VALLEY COMMUNITY CHOICE ENERGY PARTNERSHIP | Community Meeting | Winter 2016 | 55

Risks & Uncertainties

PEA

Financial Risk
Competitive and Pricing Risk/
Opt-Out Rates
Market Exposure
Regulatory Risk
Political Risk

SILICON VALLEY COMMUNITY CHOICE ENERGY PARTNERSHIP | Community Meeting | Winter 2016 | 56

Risks & Uncertainties

PEA

- PG&E rate uncertainty (generation rates and exit fees)
- Length of current wholesale energy price trough
- Availability of large hydro resources to meet carbon-free content goals
- Opt-out rate uncertainty
- Overall program size given participation of specific jurisdictions
- Credit structure for power supply
- Future CCA-specific legislation
- Regulatory changes around renewable and capacity mandates

SILICON VALLEY COMMUNITY CHOICE ENERGY PARTNERSHIP | Community Meeting | Winter 2016 | 57

Round 1: Key Themes

- Lessons learned from existing programs
  - *Opt-out & Opt-up Drivers*
  - *Costs & Revenues – tied to cities?*
  - *Solar incentives for existing & new systems*
  - *Transition to Renewables: Lower Cost? Reliability Issues?*
- Key considerations for nonprofit public agency:
  - *Will PG&E change rates to recoup generation charge loss?*
  - *Solar incentives for existing & new systems*

Photo Credit: http://pge-starline.com/wp-content/uploads/2015/07/solar-panel-411.jpg

SILICON VALLEY COMMUNITY CHOICE ENERGY PARTNERSHIP | Community Meeting | Winter 2016 | 58

Summary of Results – Year 1

PEA

Key Considerations	Scenario 1	Scenario 2	Scenario 3
General Environmental Benefits	**36%** Renewable **63%** GHG-Free	**51%** Renewable **70%** GHG-Free	**76%** Renewable **85%** GHG-Free
Maximum Rate Competitiveness	Average **4%** savings relative to PG&E rate projections	Average **3%** savings relative to PG&E rate projections	Average savings < 1% relative to PG&E rate projections
Projected Residential Customer Relative Cost Impacts Average monthly usage for residential = 510 kWh	Average monthly cost relative to PG&E rate projections: **$5.09 savings**	Average monthly cost relative to PG&E rate projections: **$3.49 savings**	Average monthly cost relative to PG&E rate projections: **$0.76 savings**
Comparative GHG Emissions Impacts	**0.158** metric tons CO2/MWh **Zero** incremental GHG emissions impacts	**0.126** metric tons CO2/MWh **≈38,000** metric ton GHG emissions reduction **(20%)**	**0.064** metric tons CO2/MWh **≈112,000** metric ton GHG emissions reduction **(60%)**

ENERGY PARTNERSHIP

Summary of Results – Year 10

PEA

Key Considerations	Scenario 1	Scenario 2	Scenario 3
General Environmental Benefits	**49%** Renewable **75%** GHG-Free	**66%** Renewable **80%** GHG-Free	**76%** Renewable **97%** GHG-Free
Maximum Rate Competitiveness	Average **3%** savings relative to PG&E rate projections	Average **1%** savings relative to PG&E rate projections	General rate parity results in minimal cost impact.
Projected Residential Customer Relative Cost Impacts Average monthly usage for residential = 510 kWh	Average monthly cost relative to PG&E rate projections: **$4.19 savings**	Average monthly cost relative to PG&E rate projections: **$1.93 savings**	Average monthly cost relative to PG&E rate projections: **$0.14 increase**
Comparative GHG Emissions Impacts	**0.109** metric tons CO2/MWh **Zero** incremental GHG emissions impacts	**0.087** metric tons CO2/MWh **≈82,000** metric ton GHG emissions reduction **(20%)**	**0.015** metric tons CO2/MWh **≈352,000** metric ton GHG emissions reduction **(86%)**

ENERGY PARTNERSHIP

Tech Study Findings & Conclusions

PEA

- **Scenario 1**: highlights SVCCE viability on a rate competitive basis w/no GHG impacts
- **Scenario 2**: highlights SVCCE viability on renewable and carbon-free content basis (w/rate competitiveness)
- **Scenario 3**: highlights maximum SVCCE environmental impacts w/general rate parity
- No "correct" answer, but in general terms, the technical study indicates that the SVCCE program could be economically viable while also achieving the Partners' environmental objectives

Audience Pre-Poll

Question 1

Did you attend the ***first round*** of Community Meetings in October?

- o Yes
- o No

Question 2

How did you ***hear about*** the meeting tonight?

- o Email
- o Flyer
- o Social media (Facebook, Twitter)
- o Newspaper announcement
- o Word of mouth (from a friend, neighbor, colleague)
- o Other

Question 3

How ***knowledgeable*** do you consider yourself to be about of Community Choice Energy programs?

- o Very knowledgeable
- o Somewhat knowledgeable
- o Not knowledgeable

Question 4

What is the ***most important*** outcome for you in creating a locally-controlled nonprofit public agency?

- o Create more renewable energy
- o Reduce our carbon footprint
- o Reduce prices for electricity
- o Create local jobs
- o Other

Question 5

What is your ***main*** concern about our community implementing a CCE program?

- Costs will go up
- Power won't be as reliable
- Service will suffer
- I don't have any concerns
- Other

Question 6

If provided as an option, ***how much more*** would you be willing to pay to have ***all*** your electricity generated by renewable sources, such as wind and solar?

- 0%
- 1-5%
- 6-10%
- 11-15%
- Don't Know

Post Poll

Question 1

Do you think it's a ***good idea*** to create a locally controlled non-profit public agency to provide cleaner, greener electricity for you at competitive prices?

- Yes
- No
- Don't know

Question 2

What is the ***most important*** outcome for you in creating a locally-controlled nonprofit public agency?

- Create more renewable energy
- Reduce our carbon footprint
- Reduce prices for electricity
- Create local jobs
- Other

Question 3

What is your ***main*** concern about our community implementing a CCE program?

- Costs will go up
- Power won't be as reliable
- Service will suffer
- I don't have any concerns
- Other

Question 4

If provided as an option, ***how much more*** would you be willing to pay to have ***all*** your electricity generated by renewable sources, such as wind and solar?

- 0%
- 1-5%
- 6-10%
- 11-15%
- Don't Know

Question 5

What is the ***main point or key message about CCE*** to share with the general public to build community support?

- This is an easy and effective way to reduce your carbon footprint
- This offers true competition in how you buy electricity
- This is the single most effective way to meet our community climate goals
- With local control, participating cities and the County can develop local programs that directly benefit us
- Don't Know

City of Campbell CCE Questions
Compiled in response to questions received at 1/25 Community Meeting
In support of 2/2 Council Meeting

1. **What assumptions of participation over time, residential and commercial, are used in the financial viability analysis?**

   The Study summarizes the projected customer base for the program assuming all 12 agencies participate. Altogether, the program could serve 240,000 customer accounts (90% residential, ~10% commercial/industrial) with an aggregate consumption of nearly four (4) billion kilowatt hours (kWh) with 34% of usage coming from residential users and the remaining 66% from commercial/industrial (Executive Summary of the Tech Study, pg 1). For the financial viability analysis, the Study assumes that 85% of the customer base and load stay in the program with the remaining 15% exercising the option to "opt out" and stay with PG&E for bundled service. This opt out rate is similar to the experience in Marin and Sonoma's programs. The Study also projects the customers being phased in over a 25 month period to allow for adaptive program management and to smooth out the operational cost of customer enrollment. (see study Section 2, pg. 16 for more information).

2. **How does CCE work for residences that have opted in to some of PG&Es special programs such as for solar power or electric charge stations?**

   SVCCEP anticipates offering solar incentives similar to currently operational Community Choice Energy (CCE) programs in Northern California, namely Marin Clean Energy (MCE) and Sonoma Clean Power (SCP), which have also implemented Net Energy Metering (NEM) programs to support customers with on-site generating facilities. Under CCE-administered NEM programs, customers have generally enjoyed comparatively higher incentives relative to similar programs administered by PG&E. It is important to note that while it is very likely SVCCEP will have similar NEM programs to those currently offered by MCE and SCP, the decision to develop and administer such programs will ultimately fall with to SVCCEP's Board of Directors.

   There are a few key differences between NEM programs currently offered by PG&E and CCEs. *Note that SVCCEP anticipates its NEM program will be similar to those offered by the current CCEs.*

   1. Both MCE and SCP settle customer charges and credits on a monthly basis (meaning, there is no annual true-up process for charges and credits relating to CCE service). However, PG&E will continue to perform an annual true-up process for all delivery charges – remember, PG&E will continue to operate and maintain the electric delivery system in your neighborhood and will pass through related charges, which typically represent approximately one half of your energy bill.
   2. Excess generation (above what a customer uses) is paid at a wholesale rate under PG&E's NEM service option but at a retail rate under MCE and SCP NEM options. MCE

and SCP NEM programs also offer an additional $0.01/kWh bonus for any surplus energy production – this bonus is paid out on top of the customer's otherwise applicable retail rate in order to incentivize local distributed renewable energy development.

3. Under MCE and SCP NEM options, any accrued bill credits do not expire, but instead roll over to the next year. You can cash out annually if you have over $100 in credits.

Regarding EVs – it depends upon the approach the resident or business has taken in establishing their station. If it is on the same meter as the whole household/commercial enterprise, their rate schedule will be easily compared to the proposed CCE's rates. SVCEA has not yet defined more nuanced rates, but anticipates that process occurring as part of efforts leading up to launch. This will be most relevant for property owners that elect to have an independent meter to monitor energy use of their EV equipment (plug or station) and has an EV rate (see: PGE's webpage on EV rate options).

4. How does CCE work for government agencies/cities? Rebate programs, grant etc?

A City would be like any other CCE customer – SVCEA would procure power on your behalf and supply that power to the electric grid, owned, operated and maintained by PG&E. Cupertino estimates that should Scenario 2, which offers a modest 3% savings/year over PG&E rates, be achieved by the program, the City of Cupertino could save up to ~$24,000 on its annual electricity bills. While rate savings cannot be guaranteed at all times, it is the stated goal of the proposed CCE to offer competitive rates to PG&E, striving for stable and lower electrical rates over the life of the program.

Regarding rebates and grants, the California Public Utilities Commission authorizes PG&E and the other investor owned utilities to collect from all ratepayers fees known as "public good charges" to fund energy efficiency and renewable energy incentive programs. Under a CCA, PG&E will still collect these fees and CCA customers will remain eligible for these incentives and services (reference). Marin, the longest running California CCE, is currently administering $4M in ratepayer funded energy efficiency programs for their customers, exceeding service offerings available through PG&E (also still available to their customers). Other CCEs, which have been in place for less than two years, have not yet deployed this strategy, though may in the future (reference).

5. How does CCE work for school districts? Specifically wondering about all the solar panels covering school parking lots.

A school district would be like any other CCE customer – if electing to remain a customer, SVCEA would procure power on their behalf and supply that power to the electric grid, owned, operated and maintained by PG&E. Cupertino estimates that should Scenario 2, which offers a modest 3% savings/year over PG&E rates, would enable the Cupertino Union School District to achieve ~$60,000 in annual savings. While rate savings cannot be

guaranteed at all times, it is the stated goal of the proposed CCE to offer competitive rates to PG&E, striving for stable and lower electrical rates over the life of the program.

See response to question 2 RE: solar if the school/district does a direct purchase. If they have a PPA (Power Purchase Agreement) or a lease agreement with a third-party vendor, this agreement would remain in place and the school/district would continue to pay for the service as previously defined.

6. **How does CCE work for businesses compared with peak rate programs/charges? Will this rate structure continue?**

To ensure relevant rate comparisons (see MCE's Commercial Graphic), the three operational programs use tiered and time of use rates (available for preview through their annual rate filings with the Public Utilities Commission). It is anticipated that SVCEA would mirror this approach.

7. **How will CCE address low income programs and annualized payment programs?**

CCE customers remain eligible for PG&E's CARE program for income-qualified customers. No additional action is necessary to remain in the program if already enrolled. Discounts for low-income programs are applied through distribution rates, which are administered by PG&E (with oversight from the California Public Utilities Commission). Eligible customers will receive such discounts whether or not they choose to take service from SVCCE or PG&E.

Businesses/residents that have levelized (not annual) payment plans can maintain this service for PG&E delivery charges, but not for CCE generation charges with the currently operating CCEs, a model that will be considered by SVCEA. Per MCE's FAQ page:

> If you are a customer who uses the Balanced Payment Plan (BPP) option with PG&E, you will continue to receive your gas and electric delivery charges from PG&E in the BPP form. However, your electric generation charges from MCE will not be included as part of the BPP and will vary from month to month, depending on your electric energy usage. Therefore, you will see some variance on your monthly bills.

8. **What are the start-up costs? Who pays? How long to establish/implement**

SVCEA's Start-Up Costs are defined on pg. 47 of the Technical Study are estimated to be nearly $2.9 million, which would provide necessary program funding during the approximate twelve-month period immediately preceding service commencement to SVCCE customers. Start-up costs include SVCCE staffing and requisite professional services, security deposits, the CCE bond/financial security requirement, communications

and customer notices, data management, and other activities that must occur before the program begins providing electricity to its customers. These costs would be recovered through SVCCE rates after service commences. The JPA Agreement (Section 6.3.2) establishes a reimbursement date for all Initial Participants as within four years of the Effective Date. Operational CCEs have repaid funding agencies well within that timeframe.

9. What are the downside risks? Financial risks

Risks of CCE formation are defined, at length, in Section 7: Risk Analysis of the Technical Study (pg. 70 – 76) – which include:

- Financial risks to SVCCE's member municipalities in the unlikely event of CCE failure;
- Financial risks that may exist in the event that procured energy volumes fall short of or exceed actual customer energy use;
- Reasonably foreseen legislative and regulatory changes, which may limit a CCE's ability to remain competitive with the incumbent utility;
- Availability of renewable and carbon-free energy supplies required to meet compliance mandates, SVCCE program goals, and customer commitments; and
- General market volatility and price risk.

This section also defines mitigations, where clear, to insulate the CCE from these risks over time (e.g. diversified supply portfolio, transaction timing, fuel sources, and contract term lengths) that will guide SVCEA start-up activities including procurement, financing, hiring, consulting, etc. efforts.

10. How compete effectively with PG&E for same sources of renewable energy?

True that both new and existing CCEs will be subject to prevailing RPS procurement mandates and thereby represent a growing pool of renewable energy buyers that will be "competing" for requisite in-state resources. To date, renewable energy contracting opportunities within California have been abundant, providing interested buyers with cost-competitive procurement opportunities well in excess of compliance mandates and voluntary renewable energy procurement targets that have been established by certain CCEs. Furthermore, to the extent that additional CCE programs continue to form, California's largest buyers of renewable energy, represented by the three investor-owned utilities, will have diminished renewable energy procurement obligations as a result of decreasing retail sales. It is also reasonable to assume that California-based project developers will be competing for buyers in the sense that prospective renewable development opportunities (i.e., potential renewable generating capacity) may actually exceed statewide demand. This circumstance has occurred in the past, particularly when California's largest renewable energy buyers, the IOUs, have met applicable renewable energy procurement targets – in these instances, project developers are forced to "compete"

for other buyers, including CCEs, which have benefited from very favorable pricing for both short- and long-term transactions (reference: Tech Study (pg. 74).

11. How not force communities to build projects they don't want? Morrow Bay off-shore wind farm.

The SVCEA Board would make decisions regarding energy contracts including those which are held directly with quality renewable project developers. The Board would establish the criteria for securing those contracts. Section 2 of the Technical Study (Table 5) summarizes a potential approach to phasing in these sources of new renewable generation. Locally, the study contemplates new generation to come from interested property owners through a feed-in-tariff program (typically 1 MW or less for each project). These are typically large commercial or municipal properties where rooftop or carport solar are the common generation technologies employed. Marin and Sonoma have partnered with local property owners for larger solar facilities.

Such projects are anticipated to be high profile and would be vetted by the Board of Directors, with representation from each participating agency. In addition, the JPA Agreement anticipates that different communities will have different development requirements, which will all be adhered to via the following provision:

> **2.7 (pg. 4) Compliance with Local Zoning and Building Laws**. Notwithstanding any other provisions of this Agreement or state law, any facilities, buildings or structures located, constructed or caused to be constructed by the Authority within the territory of the Authority shall comply with the General Plan, zoning and building laws of the local jurisdiction within which the facilities, buildings or structures are constructed.

There are local economic development benefits of pursuing the CCE and also siting renewables in our communities. These are defined in Section 2 of the Technical Study (Local Economic Development Benefits Potential) on pg. 36.

12. What is the bonding capacity? and assumed annual budget? Staffing?

The bonding capacity of a new organization is quite low. That is why the feasibility study projects that direct investment in renewable energy projects happens after a few years of operation, to give the program time to build reserves and establish bonding capacity. Regarding annual budgeting, the study appendix includes a financial pro forma analysis which includes in Category III) CCA Operating Costs an estimate of the various cost elements including administration. The total estimated budget for Year 3, at full customer enrollment, is $246M (Scenario 2). How the program leverages staffing and contracted resources is to be determined by the Board. Generally, staffing starts small and grows as business needs and opportunities arise (such as a potential decision to offer more

energy efficiency programming which would likely add staff). For comparison, MCE has approximately 25 staff and SCP has approximately 12.

13. How get PUC support regarding PG&E efforts to significantly raise grid connection fees?

The Partnership is closely monitoring regulatory proceedings that relate to CCE operation in collaboration with our consultant, LEAN Energy, who is very active in this space. The PUC's recent proceedings have seen unprecedented engagement by CCE and solar stakeholders. It is essential that SVCEA be proactively engaged in regulatory and legislative matters as they happen to help shape outcomes. Partnering with existing and formative CCE programs presents an opportunity to leverage resources and magnify impact. LEAN is also supporting efforts of existing programs and has, in the recent past, hired a lobbyist with expertise in this matter to campaign on behalf of burgeoning and existing CCAs statewide. It is likely that SVCEA would contract for these services moving forward as well.

Interconnection fees (assuming this question is referencing Net Energy Metering (NEM) 2.0) issue was settled last week at the Public Utilities Commission — customers will pay a one-time interconnection fee depending on size of system plus fixed fee of $10/month. Also, customers will pay a few cents/kwh for electricity drawn from the grid. The win here is that the utility needs to pay retail for excess generation (not wholesale).

14. What happens in an emergency? How get/supply power in event of earthquake?

The Technical Study (pg. 77) describes the requirements for forming a CCE Program, including the Statement of Intent that must be included in the Implementation Plan submitted to the Public Utilities Commission. This Statement must include a variety of elements, specifically how the CCE will provide for universal access, **reliability**, equitable treatment of all customers, etc. The CCE program would be required to participate in the CPUC's resource adequacy program before commencing service to customers by providing load forecasts and advance demonstration of resource adequacy compliance. In simple terms, the CCE program will be responsible for ensuring "resource sufficiency," meaning that the CCE program will be required to plan for and procure a sufficient quantity of necessary energy and reserve capacity products to reliably meet the needs of its customers. PG&E will be responsible for the delivery of such energy products throughout the region (to both CCE and PG&E customers). PG&E will also remain responsible for the operation and maintenance of the local electrical distribution system, including emergency maintenance during natural disasters, accidents (such as a car running into an electric service pole) or other issues.

In the event of an earthquake (or any other natural disaster) that causes service interruption, customers should notify PG&E, which will be required to repair/replace damaged infrastructure for purposes of restoring interrupted electric service. SVCCE will continue to

procure sufficient quantities of requisite energy products during such events; when damaged infrastructure is repaired and can be safely operated, service will be restored to all customers. There will be no differentiation in the quality of service provided to SVCCE or PG&E customers.

15. How does CCE cost manage transmission lines and fees? If purchasing at a distance.

Applicable costs for electric transmission lines and related wholesale electric infrastructure are billed to all customers (both CCE and PG&E) by PG&E through a "transmission" rate that is included on each customer's monthly bill. Such costs are not separately applicable to the CCE and, therefore, will not be included in CCE charges.

To the extent that electric power is purchased by the CCE from a distant resource, there may be additional "congestion" costs imposed on such volumes – congestion costs are analogous to toll road fees, which may increase or decrease depending on the level of use observed at any specific point in time; to the extent that use/traffic is high, costs are also high; when usage is low, costs are low (or possibly zero). For California's operating CCE programs, congestion costs have been effectively evaluated when considering competing project proposals.

16. What efficiency of production is required for an acceptable renewable energy provider?

Differing renewable generating technologies have historically demonstrated a wide range of operating efficiencies, capacity factors (i.e., the amount of energy actually produced by a generator over the course of a year divided by the amount of energy that the generator could have produced if capable of operating 100% of the time) and other technical capabilities. For example, photovoltaic solar technologies typically demonstrate capacity factors ranging from 20% to 35% (or slightly more) while geothermal generating technologies typically demonstrate capacity factors approximating 90%.

These considerations (and various others) tend to have a direct impact on proposed pricing and overall project viability. With this wide range of operating considerations in mind, it is reasonable to assume that the CCE program will evaluate individual renewable generating technologies in consideration of a broad range of criteria. At this point, the CCE program has not established firm rules for renewable energy production efficiency that will be applied when evaluating such projects.

17. How does CCE address the new and ever changing State regulations such as those that require zero net energy for all new residential projects by 2020 and commercial by 2030? And the recent law for 50% renewable energy by 2030, I think.

The Technical Study notes the regulatory risk of CCA operation (pg. 72) and SVCEA's response would be consistent to that referenced to Q13 above.

Though building efficiency will continue to improve, these Zero Net Energy (ZNE) laws emphasize new buildings, whereas the California Energy Code's Building Efficiency Standards will be applied to existing buildings pursuing retrofits. Either type of building is still tied to the electricity grid. The goal of a ZNE is to still produce more energy than it consumes, but its production (daytime) timing rarely matches actual consumption (morning/night time), which is why it is grid-tied to access power when it's needed and is then supplied by PG&E via energy procured by the CCE.

The second reference in the question above to a 50% renewable energy requirement expands the current California Renewable Portfolio Standard (RPS) which requires Investor Owned Utilities, electric service providers, and CCEs to increase procurement from eligible renewable energy resources to 33% of total procurement by 2020 to 50% by January 1, 2030 via SB350. Exceeding these mandates was modeled for all scenarios evaluated in the Technical Study (see. Pg. 30), anticipating that these may grow more aggressive over SVCEA's operations. It should be noted that the currently operational programs MCE's base product is already 56% renewable, and Sonoma's base product is 36% renewable, both of which are currently offering cost savings to customers in those regions.

18. If energy contracts are pre-purchased with long time frames, how will CCE get in the game without paying the highest price for what if anything is left?

The CCE program is likely to observe a "laddered" procurement strategy, which will ensure that the CCE program is not disproportionately exposed to market conditions at any single point in time. Through a laddered procurement strategy, contract start and end dates will be staggered with the CCE program's contractual commitments (for electric power) decreasing with time. For example, a typical laddered procurement strategy would focus on procuring 100% of projected energy requirements for the current year, 80-90% in year two, 70-80% in year three… with generally decreasing proportions of contractual supply commitments thereafter. Procurement related to the longer-term planning horizon (10+ years beyond the current operating year) would range from 25-50% of anticipated energy requirements for the CCE program. Each year, the CCE program would advance the laddered procurement strategy, filling noted open positions in consideration of the aforementioned schedule. This process would avoid speculative procurement processes and disproportionate market impacts at any single point in time.