

Peninsula Clean Energy Board of Directors Meeting

June 23, 2016



Agenda

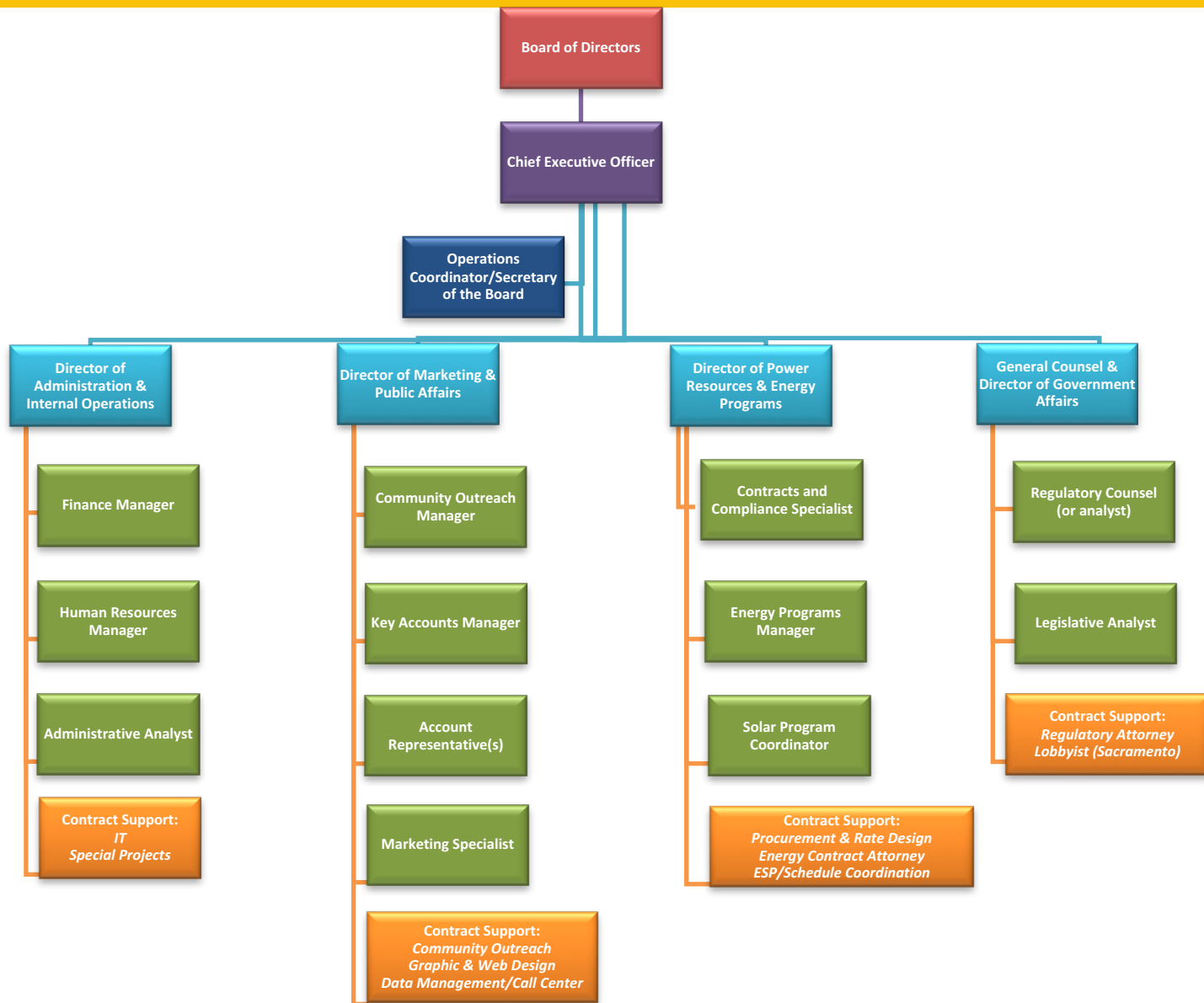
Call to order / Roll call

Public Comment

Action to set the agenda and approve consent items

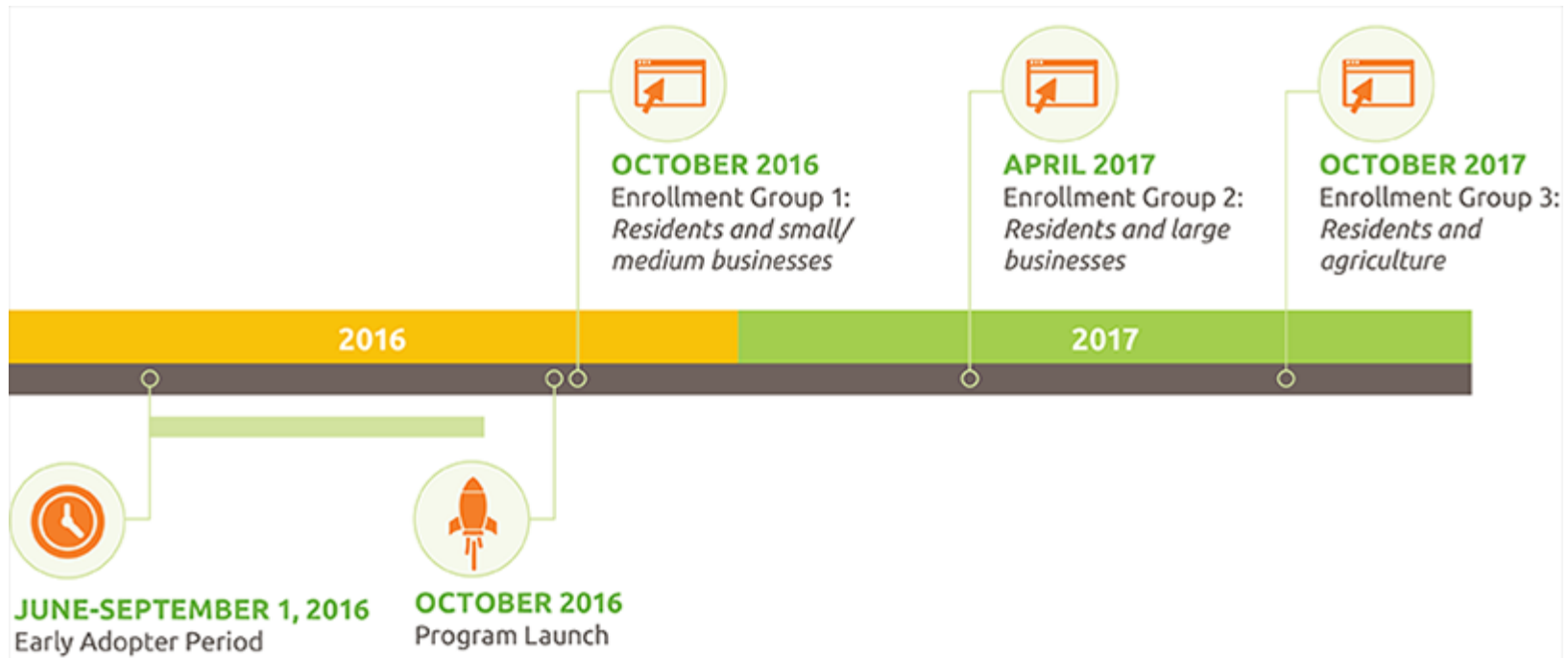
Regular Agenda

1. CEO Report (Discussion)



Regular Agenda

2. Consideration of Alternative Rollout Schedule for Phases 2 and 3 (Discussion)



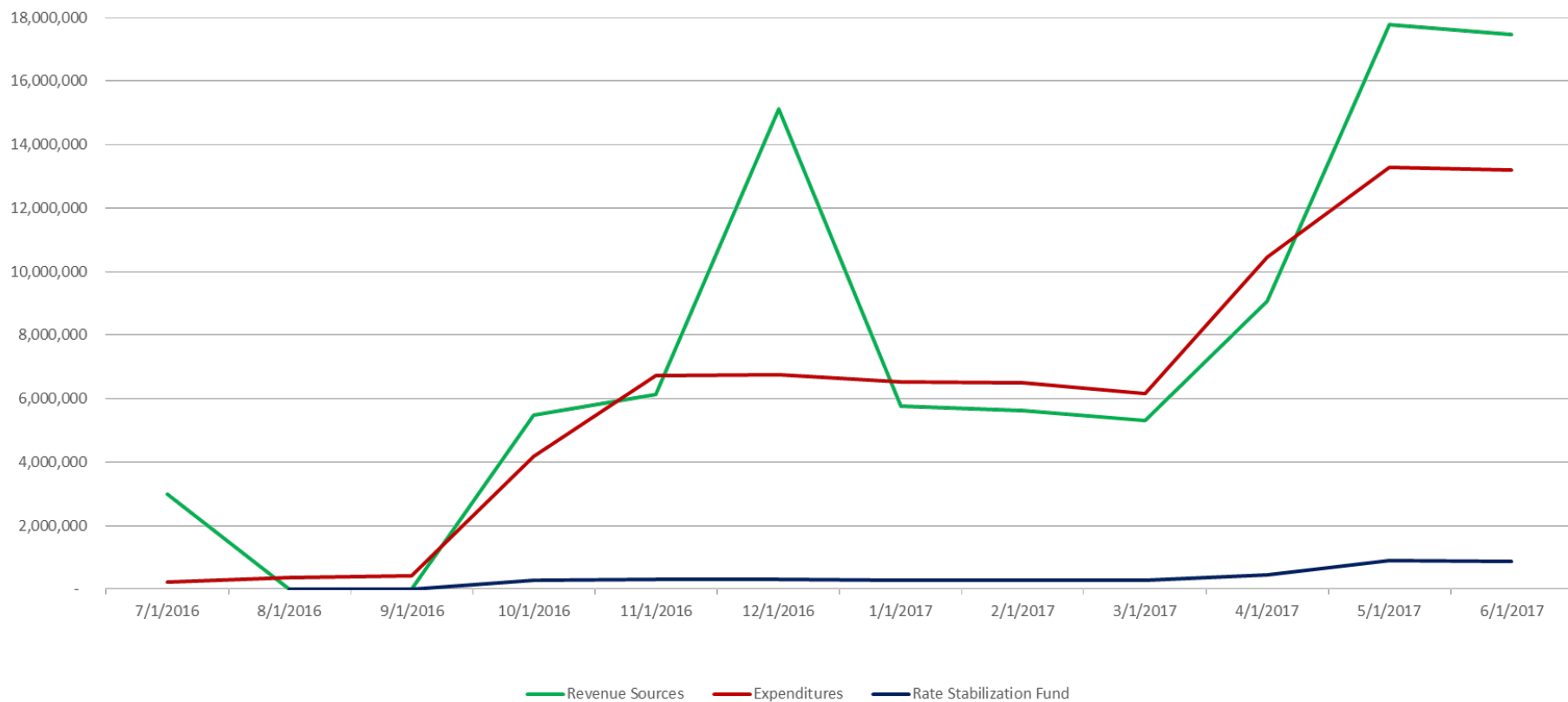
Consideration of Alternative Rollout Schedule

- Proposal: Move Phase 3 to June 2017 or April 2017 enrollment, rather than October 2017
- Pros:
 - Power costs are low right now – prudent to accelerate power procurement
 - Many CCAs are forming and more organizations will be in the market for power
 - Costs are relatively the same – noticing, etc is the same – just accelerated
 - Faster rollout allows PCE to green and clean the county's electricity supply more quickly
 - Customers who are in Phase 3 won't have to wait for a full year to be a PCE customer
 - Increases revenues and rate stabilization fund slightly as PCE can receive higher summer revenues from Phase 3 enrollees
 - Executive Committee supported this provided it was revenue positive or neutral, and vendors could handle it
 - Noble has said they can handle moving up Phase 3
- Cons:
 - May put some additional strain on the PCE organization

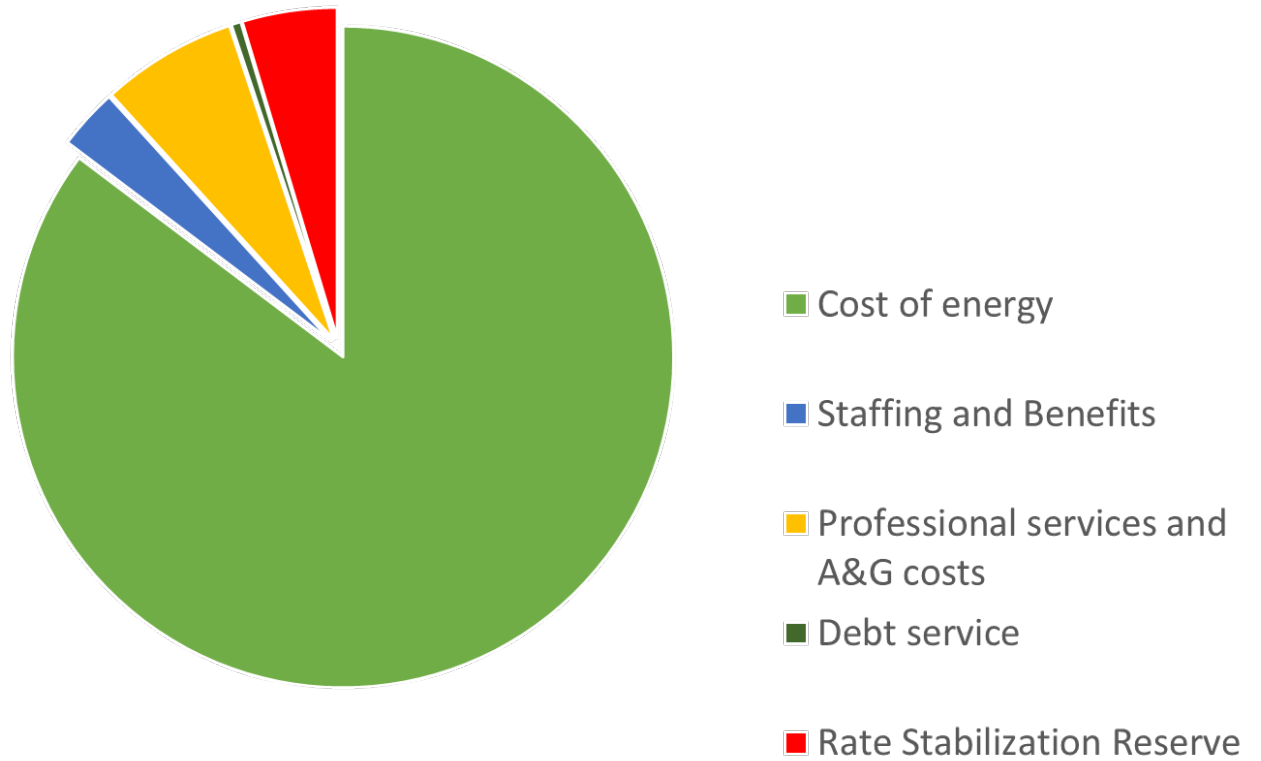
Regular Agenda

3. Adopt Budget for 2016-17 Fiscal Year(Action)

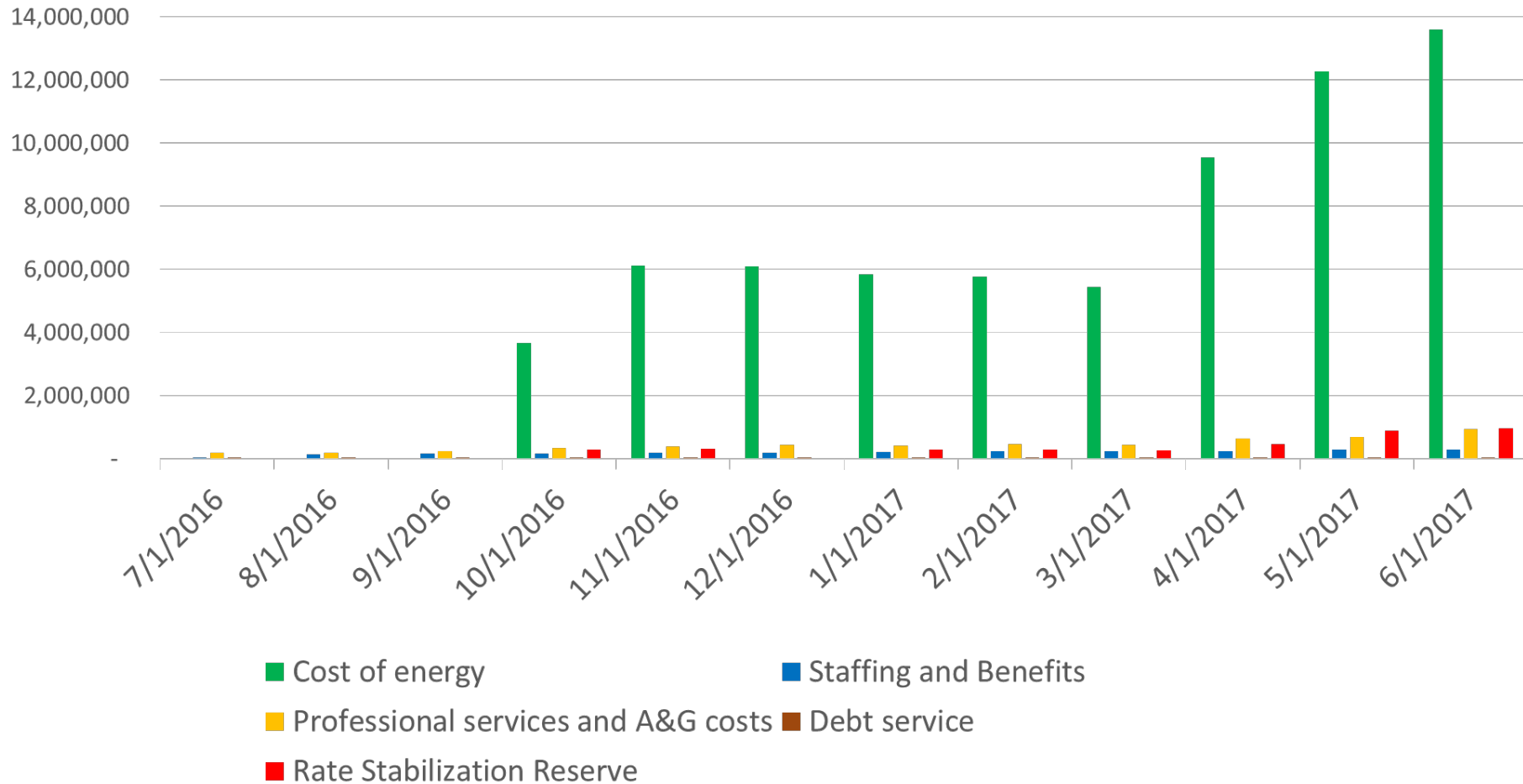
FY 17 Monthly Revenues and Expenditures



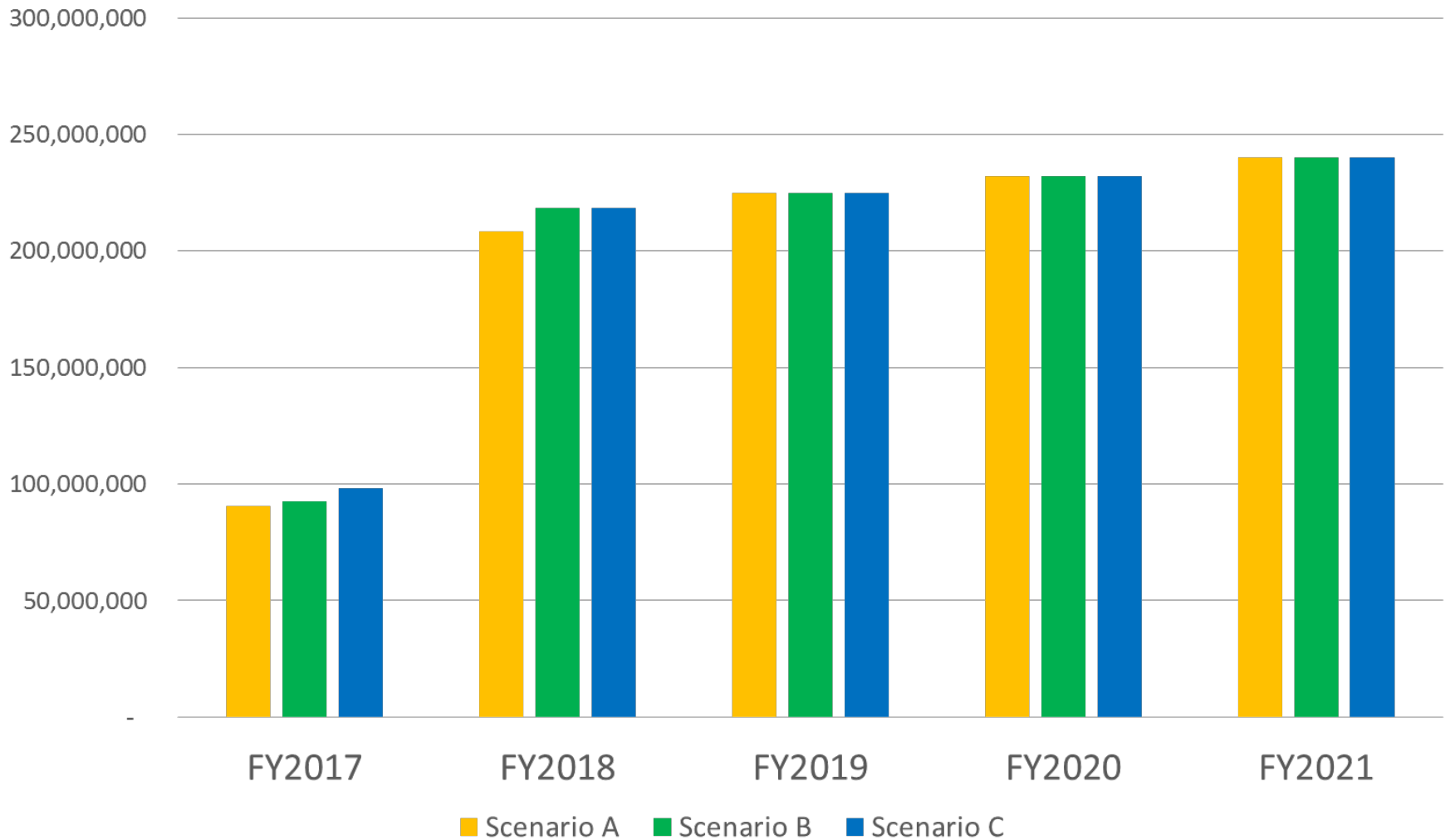
FY17 Expenditures



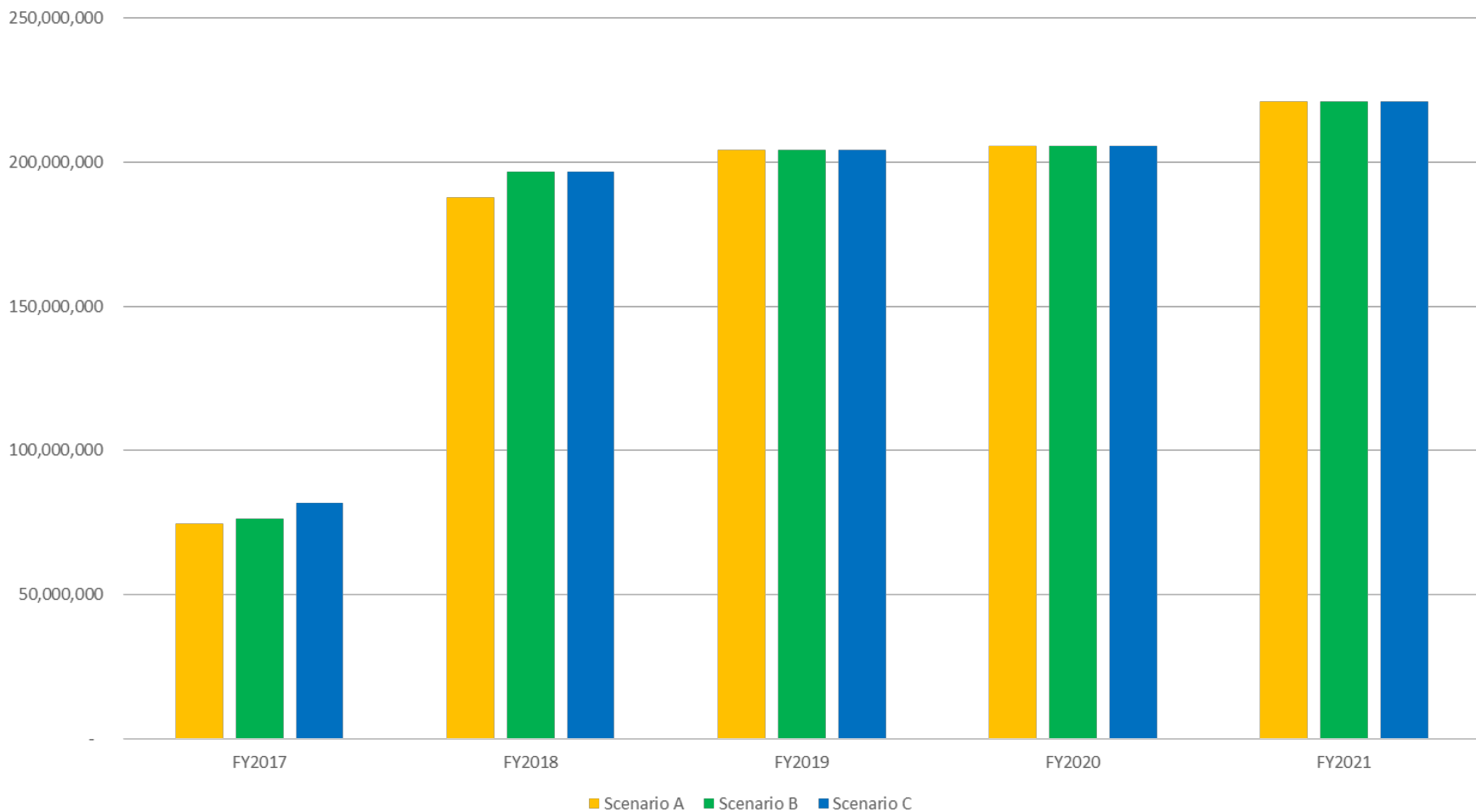
Monthly Expenditures – FY17



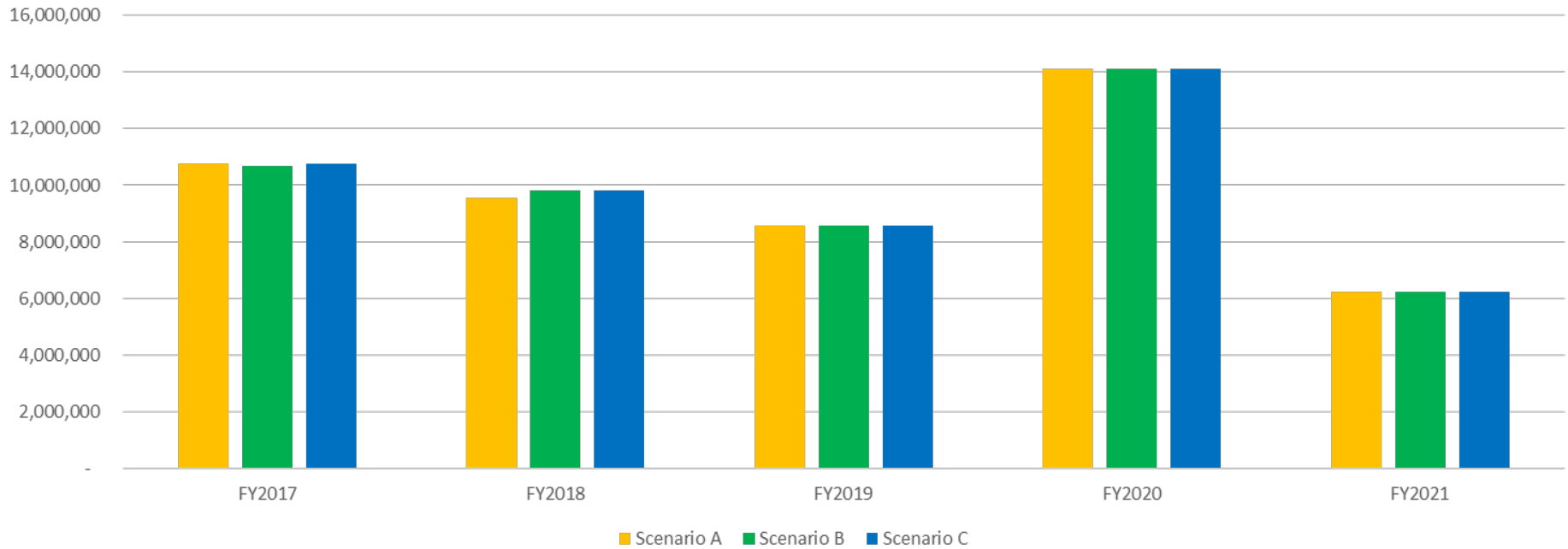
Revenue Comparison



Expenditure Comparison

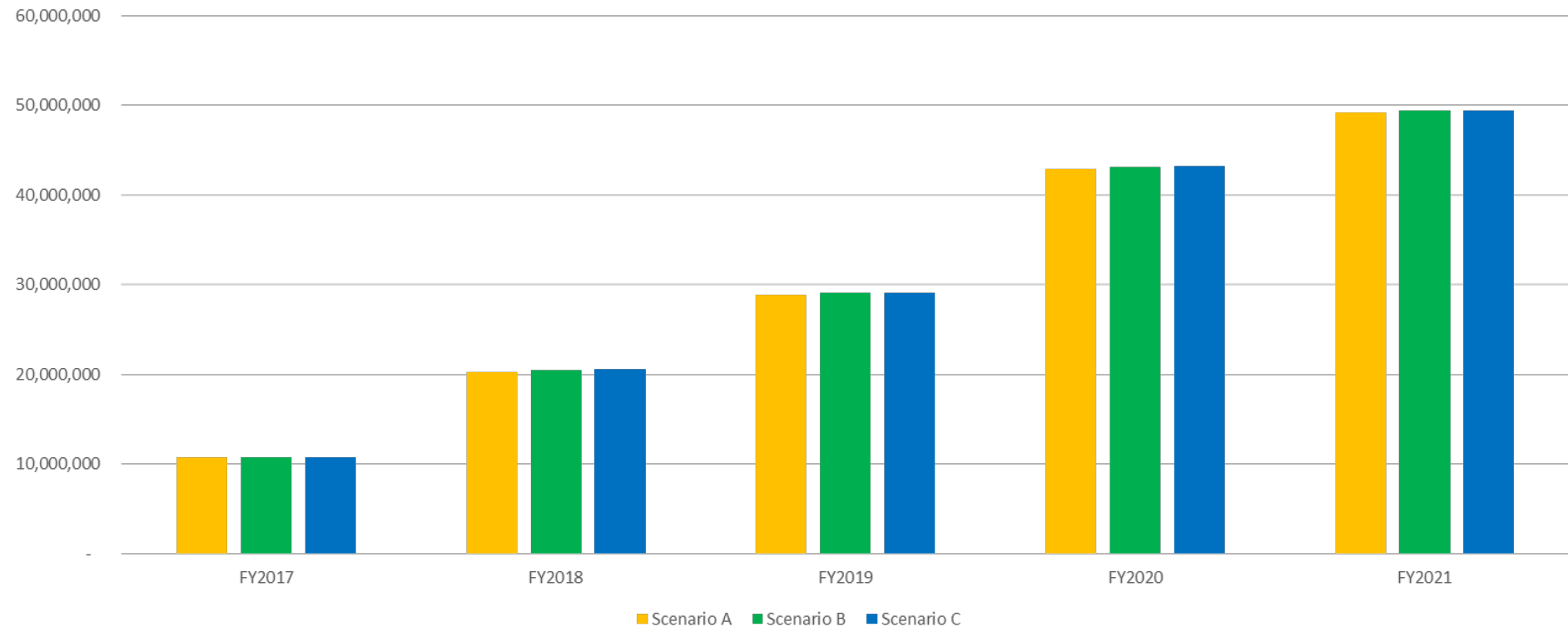


Annual Surplus



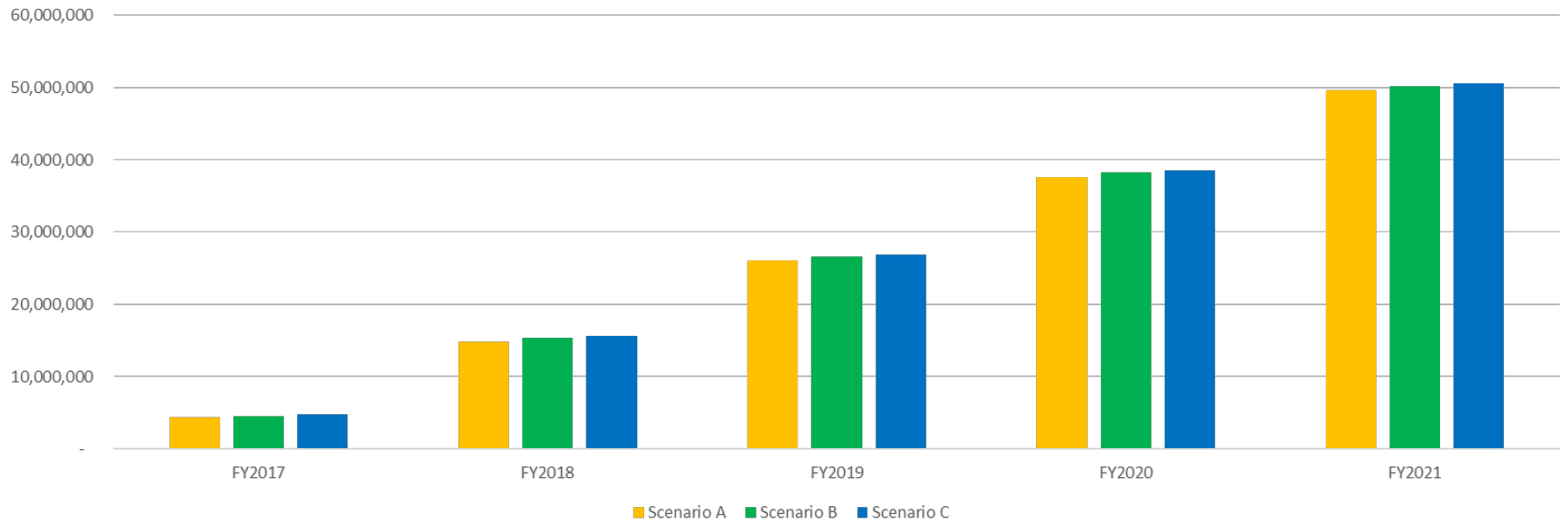
Annual Surplus	FY2017	FY2018	FY2019	FY2020	FY2021
Scenario A	10,735,929	9,548,671	8,559,648	14,084,484	6,231,428
Scenario B	10,688,762	9,806,327	8,559,648	14,084,484	6,231,428
Scenario C	10,746,541	9,806,327	8,559,648	14,084,484	6,231,428

Cumulative Surplus



Cumulative Surplus	FY2017	FY2018	FY2019	FY2020	FY2021
Scenario A	10,735,929	20,284,600	28,844,248	42,928,732	49,160,160
Scenario B	10,688,762	20,495,089	29,054,737	43,139,220	49,370,649
Scenario C	10,746,541	20,552,868	29,112,516	43,196,999	49,428,428

Cumulative Rate Stabilization Fund



Cumulative Rate Stabilization Fund	FY2017	FY2018	FY2019	FY2020	FY2021
Scenario A	4,386,429	14,806,171	26,046,785	37,651,962	49,664,034
Scenario B	4,471,348	15,384,064	26,624,678	38,229,855	50,241,927
Scenario C	4,757,530	15,670,246	26,910,860	38,516,038	50,528,110

Regular Agenda

4. Adopt a Resolution delegating authority to the Chief Executive Officer to execute three Phase 1 Confirmation Agreements with Direct Energy for Resource Adequacy with terms consistent with those presented, in a form approved by the General Counsel and for terms ending December 31, 2017 (Action)

Regular Agenda

5. Marketing and Communications: Marketing Strategies for Commercial Customers (Discussion)

Commercial Marketing



Commercial Customers

Commercial customers include ‘traditional’ businesses, as well as schools, special districts, hospitals, transit agencies, etc.

- ✓ Office spaces
- ✓ Restaurants
- ✓ Retail
- ✓ Hospitality
- ✓ Schools – K-12; Community colleges; Universities
- ✓ Special districts—Water agencies; wastewater
- ✓ Hospitals
- ✓ Transit agencies



Messaging

Cleaner electricity at lower rates

- Lower rates: Emphasizing that PCE's default product—ECOplus—is cheaper than PG&E
- Local benefit: Program revenue reinvested back in San Mateo County
- Cleaner: ECOplus is 50% renewable and 75% carbon free. ECO100 is 100% renewable and carbon free, for only slightly more than what they pay now.
- Automatic enrollment

Keeping messaging clean and simple.

Challenges

- Hard to reach the “decision-maker”—Either the business owner or the property owner
- New program—Lack of education/awareness
- “Green” benefit may have limited appeal, especially if it is perceived to be more expensive
- Skepticism of government programs
- Different rates for different customers – May cause customer confusion

Commercial Outreach Strategies

- ✓ Collateral
- ✓ Informational workshops
- ✓ Merchant walks
- ✓ Website
- ✓ Presentations/Tabling
- ✓ Partnerships



Collateral

Collateral

- Printed + web
- To inform customers:
Pamphlet, FAQ, Copy of enrollment notice, Packet w/branded folders
- For customers to help market PCE:
Postcard, poster, web-badge, window cling



Website



EARLY ADOPTER



HOME

LEARN MORE ▾

RESIDENTS

BUSINESSES

RATES

ENERGY OPTIONS

RESOURCES ▾



Businesses

Cleaner Energy at Work



If your business is located in San Mateo County, you'll be automatically enrolled with Peninsula Clean Energy (PCE) ECOplus. PCE will help your business meet sustainability goals, and the easiest part is that you won't have to do a thing! PCE is a community choice energy (CCE) program that offers a local option for affordable, renewable energy you can rely on.

The Choice Is Yours

Peninsula Clean Energy offers **two product options**, each with a different amount of renewable energy.

Stay Connected

With our newsletter, you won't miss a thing!

Sign up to stay connected with Peninsula Clean Energy updates!

* Indicates required

Name

Job Title (or "Resident")

Organization (or city of residence)

Email Address

*

Workshops

Informational workshops

- 4 workshops + webinars
 - Invitations via chambers/partner newsletters, fliers, links of websites, local press?
- Target audience: Small and medium commercial customers (business owners)
- Goal: Educate local business owners on PCE's benefits and lower rates
- Potential partnerships: Chambers, business organizations, cities

Spread the word: Circulate workshop fliers, invite local business owners, provide PCE staff lists of local businesses, article in your newsletter



Merchant Walks

Merchant walks

- PCE staff and training volunteers will walk key business corridors and talk to business owners about PCE
 - Host training workshop
 - Provide packet of information - collateral
 - Identify key business corridors
- Target audience: Small and medium commercial customers (business owners)
- Goal: Educate local business owners on PCE's benefits and lower rates
- Potential partnerships: All PCE champions

Spread the word: Volunteer to walk your city/neighborhood, Help us recruit volunteers, Provide list of business corridors, Talk to local business owners



Presentations/Tabling

Presentations/Tabling

- Presentations at business events, business organizations/associations and events targeted at commercial customers
- Continue to table at community events
- 1:1 meetings with large/industrial customers
- Target audience: Small and medium commercial customers (business owners)
- Goal: Increase awareness about and interest in PCE and build brand recognition.
- Potential partnerships: All PCE champions, Cities, Chambers/Business Organizations

Spread the word: Volunteer to table, Notify PCE staff of potential tabling/presentation opportunities (events, board meetings, membership meetings, etc.)

Schools

Schools

- Target audience: K-12 & Universities/community colleges; Private + public
- Goal: Educate local superintendents and CBOs on PCE's benefits and lower rates
- Challenges: Rate sensitivity; Multiple accounts in different locations; Potentially complex rate structures
- Potential partnerships: SMC School Boards Associations, SMC Office of Education, Cities



SPREAD THE WORD

How you can help:

- Provide PCE staff with a list of business organizations, local businesses and/or business corridors in your area
- Volunteer on a merchant walk in your neighborhood
- Recruit volunteers for merchant walk
- Circulate information for volunteer training and/or business workshops



SPREAD THE WORD

How you can help:

- Leverage and/or build 1:1 connections with local business owners
- Circulate collateral
- Put an article about PCE in your newsletter
- Notify PCE staff of opportunities to table or provide a presentation

Questions?



Regular Agenda

6. Report on Renewable vs Greenhouse Gas Free Energy (Discussion)

Greenhouse Gas-Free Versus Renewable Energy. What's the Difference and Why Does it Matter?

Avana Andrade

7/14/2016 | PCEA Board Meeting



Roadmap

1: Overview of Renewable vs. Greenhouse Gas-Free Energy

2: Renewable Energy in California

3: Greenhouse Gas-Free Energy in California

4: Marketing Challenges

5: Next steps



1: Overview of Renewable vs. Greenhouse Gas-Free Energy

Renewable Energy - electricity from a source that is not depleted when used, and is not derived from fossil or nuclear fuel.

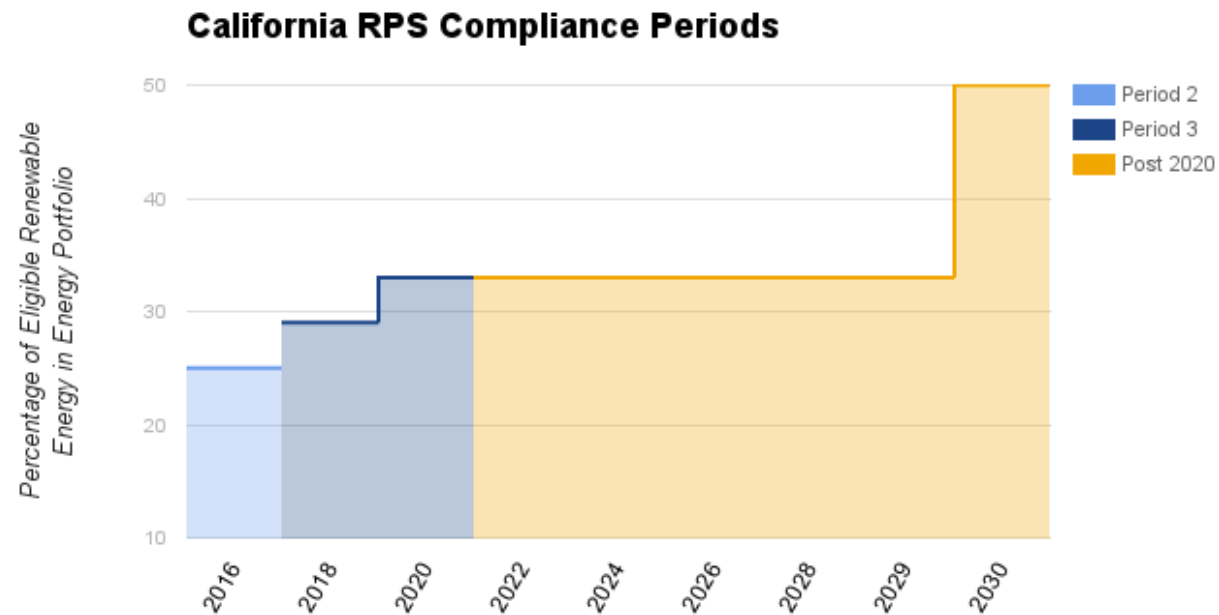
GHG-Free Energy - electricity that does not emit carbon or other greenhouse gases.

Renewable	GHG-Free
Biomass and Waste	Large Hydroelectric
Geothermal	Nuclear
Small Hydroelectric	
Solar	
Wind	

2: Renewable Energy in California



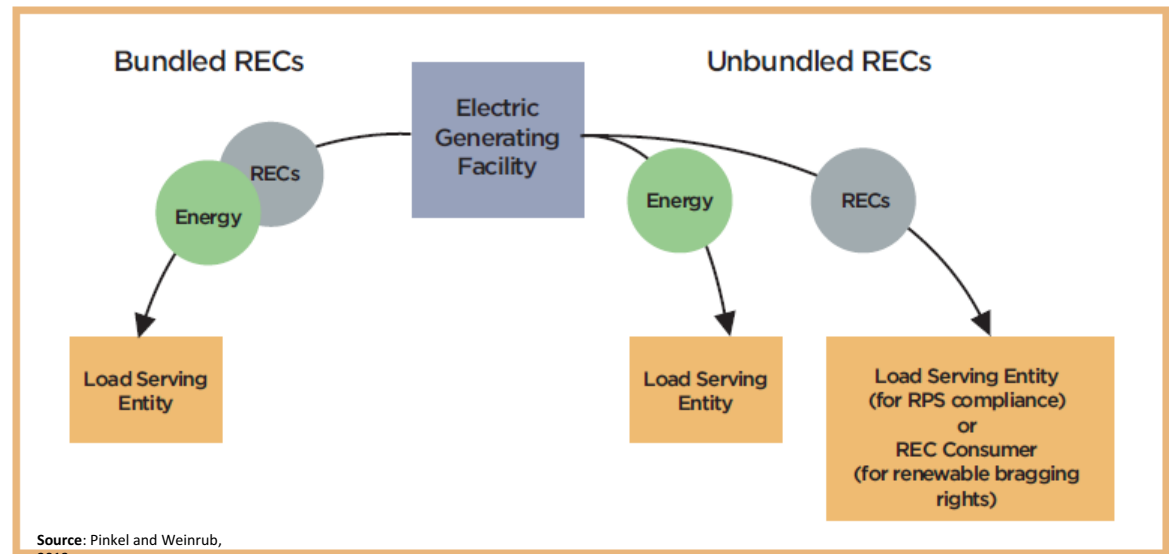
California's Renewable Portfolio Standards (RPS) – requires retail sellers of electricity to source a certain percentage of electricity from renewable sources by fixed dates.



2: Renewable Energy in California

Renewable Energy Certificates (RECs)

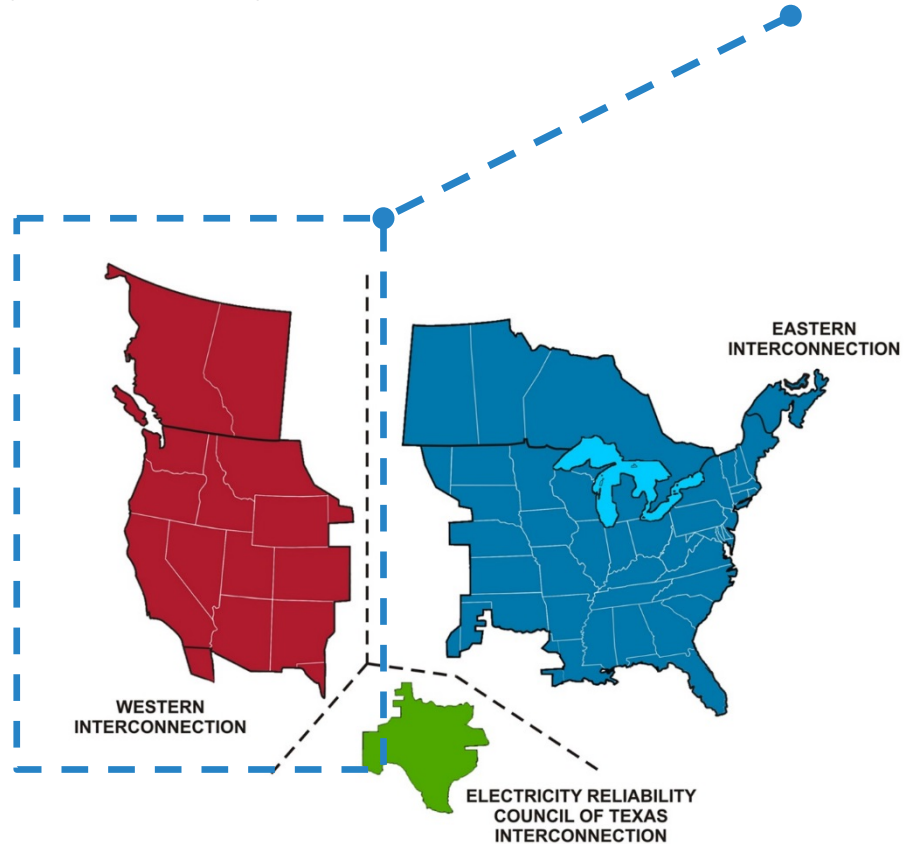
- Accepted mechanism for verifying “renewable” power.
- Represent attributes (type of generation, facility location, date of service, etc.) of one Megawatt-Hour (MWh) of power.
- Can be either “bundled” with the power they represent and included in the sale, or “unbundled” and sold separately.



2: Renewable Energy in California



California RPS Portfolio Content Requirements – renewable facilities may be located anywhere in the Western Interconnection region.



Source: Washington Post, 2013

2: Renewable Energy in California

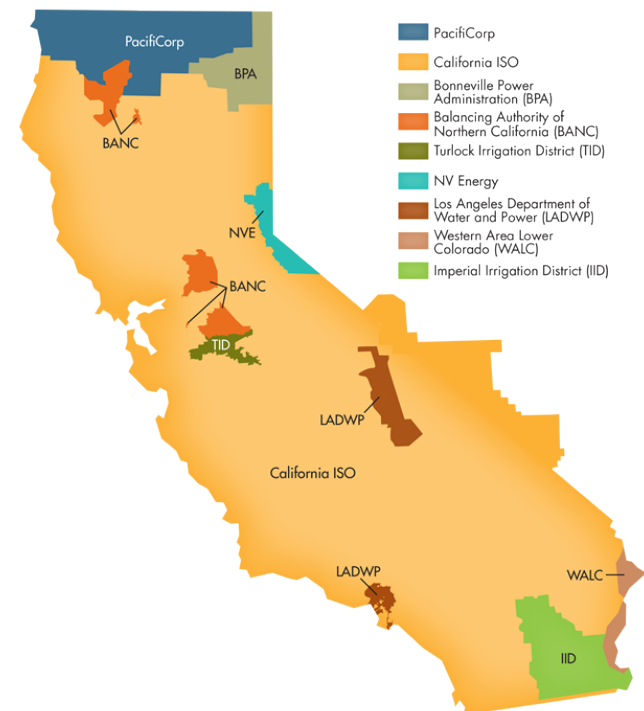
Balancing authorities are entities responsible for operating a transmission control area. They match generation with load and maintain electric frequency on the grid.



California RPS Portfolio Content Requirements – all renewable energy procured from contracts after June 1, 2010 are separated into three categories, or “buckets.”

-Retailers are required to meet RPS obligations with a minimum percentage of bucket 1 RECs and a maximum percentage of bucket 3 RECs.

California balancing authorities



Source: California ISO, 2016

2: Renewable Energy in California

Category 1 RECs – Bundled renewable energy, typically from a California facility, delivered to a California balancing authority, which, for PCE, will be the California Independent System Operator (CAISO).

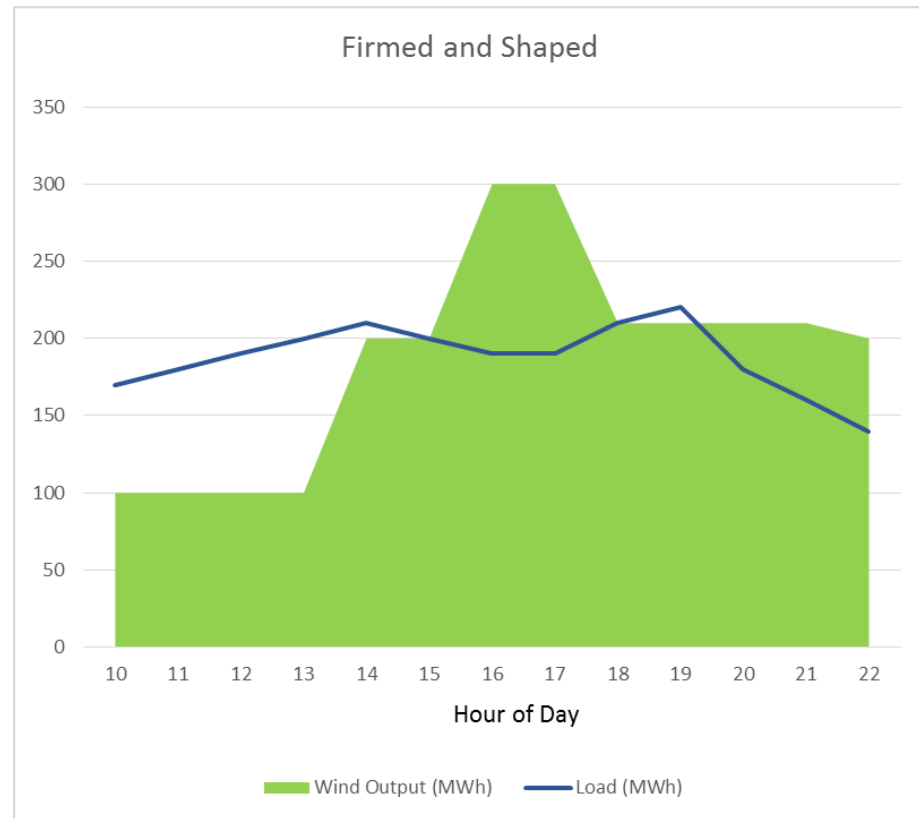


2: Renewable Energy in California

Bucket 2 energy is 'firmed and shaped'



Category 2 RECs – Energy and RECs (typically from an out-of-state renewable energy project) that cannot be delivered to CAISO without substituting energy from another source



2: Renewable Energy in California

Unbundled RECs do not contain energy, rather they are the rights to the renewable attributes



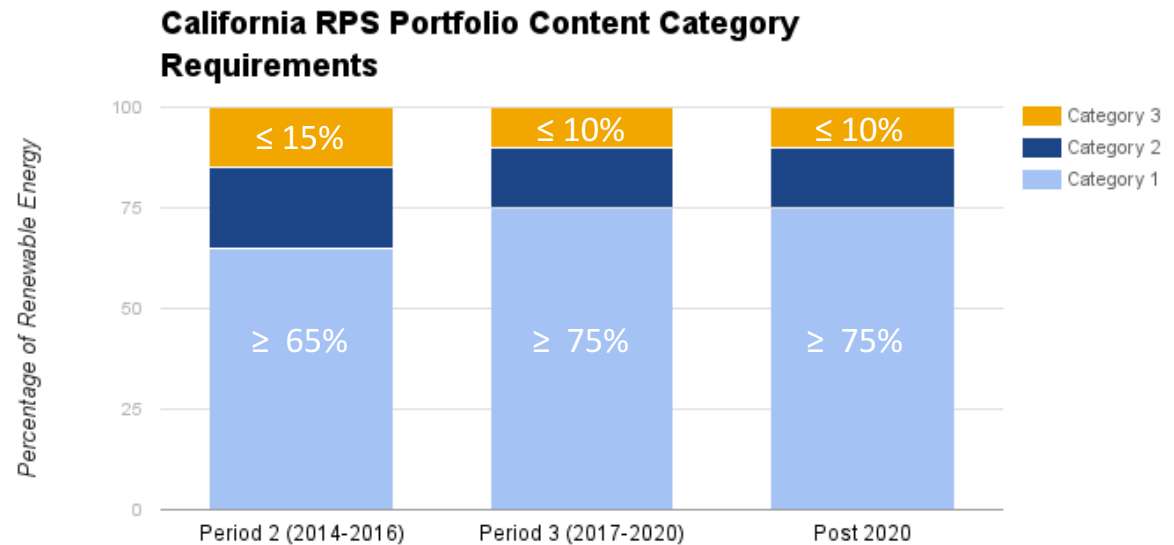
Category 3 RECs – Unbundled RECs, or RECs that do not meet Category 1 and 2 conditions.

2: Renewable Energy in California

Trend toward **increasing** Bucket 1 RECs (CA renewable energy) and **decreasing** unbundled RECs.



California RPS Portfolio Content Requirements – retailers are required to meet RPS obligations with a minimum percentage of Bucket 1 RECs and a maximum percentage of Bucket 3 RECs over time.



2: Renewable Energy in California

Power Content Label – information related to where electricity retailers source their renewable energy – as well as total energy – is found here (distributed annually by energy retailers)

- “Nutrition label” for electricity.
- It does not correlate to RPS compliance (RECs retired versus actually energy brought into grid)

POWER CONTENT LABEL		
ENERGY RESOURCES	2014 POWER MIX	2014 CA POWER MIX**
Eligible Renewable	32%	20%
Biomass & waste	7%	3%
Geothermal	2%	4%
Small hydroelectric	4%	1%
Solar	12%	4%
Wind	7%	8%
Coal	10%	6%
Large Hydroelectric	8%	6%
Natural Gas	38%	45%
Nuclear	0%	9%
Other	0%	0%
Unspecified sources of power*	12%	14%
TOTAL	100%	100%

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.

** Percentages are estimated annually by the California Energy Commission based on the electricity sold to California consumers during the previous year.

For specific information about this electricity product, contact: **Sample** 555-555-5555

For general information about the Power Content Label, consult: California Energy Commission 1-844-217-4925 <http://www.energy.ca.gov/pcl/>

3: Greenhouse Gas-Free Energy in California

GHG-Free Energy – All renewable energy sources, large hydroelectric, and nuclear facilities

- GHG emissions for different sources are calculated with a variety of different standards and methodologies. In CA, the California Air Resources Board provides the closest to an industry-accepted standard.
- Retailers use a **GHG emissions factor** to determine the proportionate use of energy sources within their portfolio. An emissions factor goes up when energy delivered to the grid contains GHGs (i.e. coal), and goes down when energy delivered to the grid is derived from GHG-free sources.

3: Greenhouse Gas-Free Energy in California



Marin Clean Energy Emissions Factor Summary

2014 Calendar Year	MWh Purchased	% Total	Emission Rate (metric tons CO ₂ e/MWh)	Total Emissions (metric tons)	Emission Rate (lbs CO ₂ e/MWh)	Total Emissions (lbs)
Total Renewable Energy	717,631	57.2%	0.002	8,144	5	3,589,600
RPS – Eligible	717,631	57.2%	0.002	8,144	5	3,589,600
Non-RPS Eligible Renewable	0	0.0%	0.000	0	0	0
Zero Carbon	110,000	8.8%	0.000	0	0	0
System Power	427,163	34.0%	0.428	176,310	944	403,061,611
Totals	1,254,794	100%	0.147	184,454	324	406,651,211

PG&E Emission Factor Summary

412

Emission Type	Emission Factor			Source
	Year	Lbs CO ₂ /MWh	Metric tons CO ₂ /MWh	
Historical Emissions	2003	620	0.281	PG&E's third-party-verified GHG inventory submitted to the California Climate Action Registry (CCAR) ² (2003-2008) or The Climate Registry (TCR) (2009-2013)
	2004	566	0.257	
	2005	489	0.222	
	2006	456	0.207	
	2007	636	0.288	
	2008	641	0.291	
	2009	575	0.261	
	2010	445	0.202	
	2011	393	0.178	
	2012	445	0.202	
	2013	427	0.194	
2009-2013 Average	2009-2013	457	0.2074	Average of the last five years of historical emissions
CPUC Future Emissions (estimated in 2010 prior to the drought)	2014	412	0.187	CPUC GHG Calculator, which provides an independent forecast of PG&E's emission factors as part of a model on how the electricity sector would reduce emissions under AB 32 ³
	2015	391	0.177	
	2016	370	0.168	
	2017	349	0.158	
	2018	328	0.149	
	2019	307	0.139	
	2020	290	0.131	

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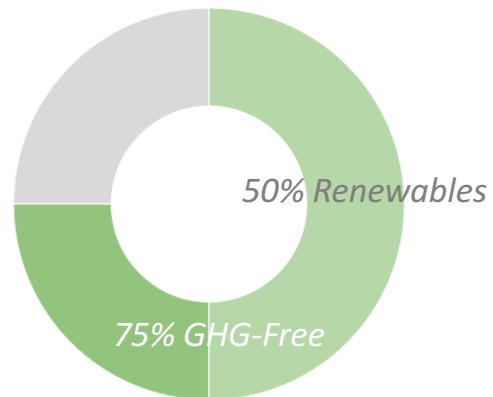
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4: Marketing Challenges

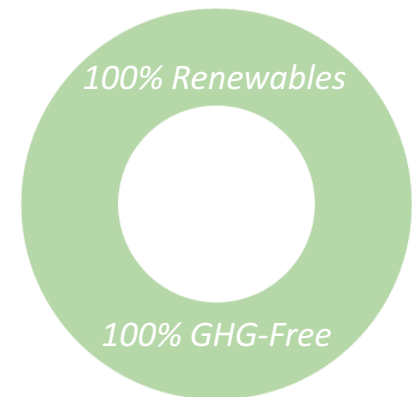


PCE Clean Energy: two products

Eco Plus (Default)



Eco 100

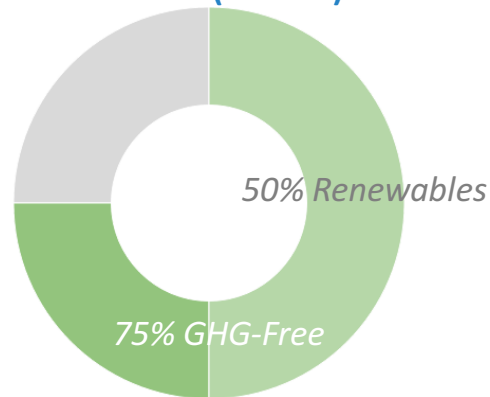


4: Marketing Challenges

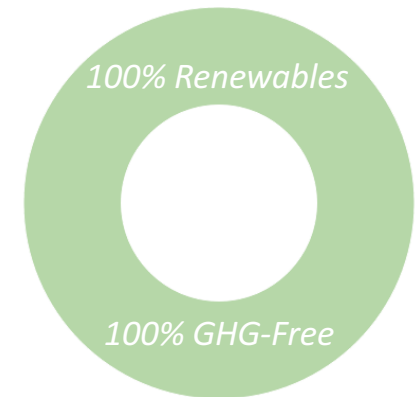


PCE Clean Energy vs. PG&E

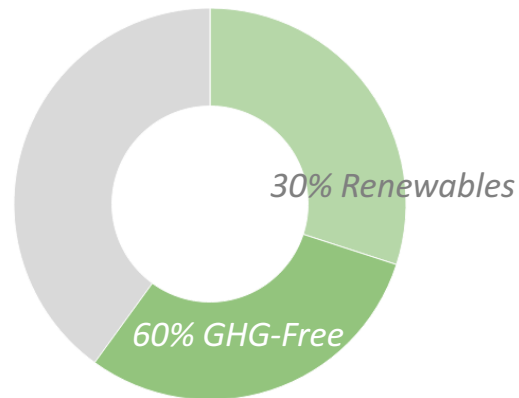
Eco Plus (Default)



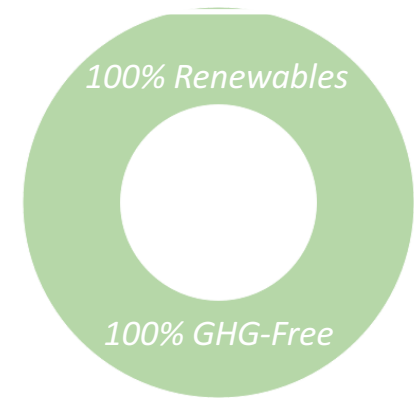
Eco 100



PG&E (Default)



PG&E Solar Choice



4: Marketing Challenges



Pricing: PCE & PG&E

Sample **Residential** Cost Comparison
(Effective June 23, 2016)
Typical Monthly Electric Charges*

Peninsula Clean Energy ECOplus	Peninsula Clean Energy ECO100	PG&E (opt-out)
50% renewable energy**	100% renewable energy**	30% renewable energy**
\$44.97 PG&E Electric Delivery	\$44.97 PG&E Electric Delivery	\$44.97 PG&E Electric Delivery
\$30.33 Electric Generation	\$34.78 Electric Generation	\$43.09 PG&E Electric Generation
\$10.61 Additional PG&E Fees	\$10.61 Additional PG&E Fees	— Additional PG&E Fees
\$85.91 avg. total cost	\$93.94 avg. total cost	\$88.07 avg. total cost

4: Marketing Challenges



PCE Marketing: focus messaging efforts on either “renewable” or “GHG-free.” Challenges and drawbacks to both:

- Marketing PCE as GHG-Free:
 - Higher percentage of default product is GHG-free in comparison to renewable energy.
 - PCE’s portfolio contains 15% more GHG-free energy than PG&E’s default choice.
 - Future State legislation may standardize greenhouse gas emission accounting (this is currently not standardized) and potentially change the percentage of GHG-free energy that PCE can claim in its energy portfolio.
 - Local Climate Action Plans are based on reducing greenhouse gas emissions.
 - It remains unclear whether local residents more positively perceive the term “GHG-free.”

4: Marketing Challenges

PCE Marketing: focus messaging efforts on either “renewable” or “GHG-free.” Challenges and drawbacks to both:

- Marketing PCE as Renewable:
 - Focusing on renewable content is consistent with existing State legislation and RPS reporting requirements, possibly leading to less consumer confusion and more stable marketing.
 - PCE’s default product contains 20% more renewable energy than PG&E’s standard product.
 - It remains unclear whether local residents more positively perceive the term “renewable” versus “GHG-free” energy.

How should we message our product?

Carbon free, GHG free or renewable? All of the above?



5: Next steps

Regular Agenda

7. Citizens Advisory Committee Report (Discussion)

Regular Agenda

8. Board Members Reports

Regular Agenda

Adjourn

Next meeting: July 28, 2016