

# COMMUNITY CHOICE ENERGY NEW FEASIBILITY STUDY RESULTS

---

Presentation to the County of Santa Barbara Board of Supervisors

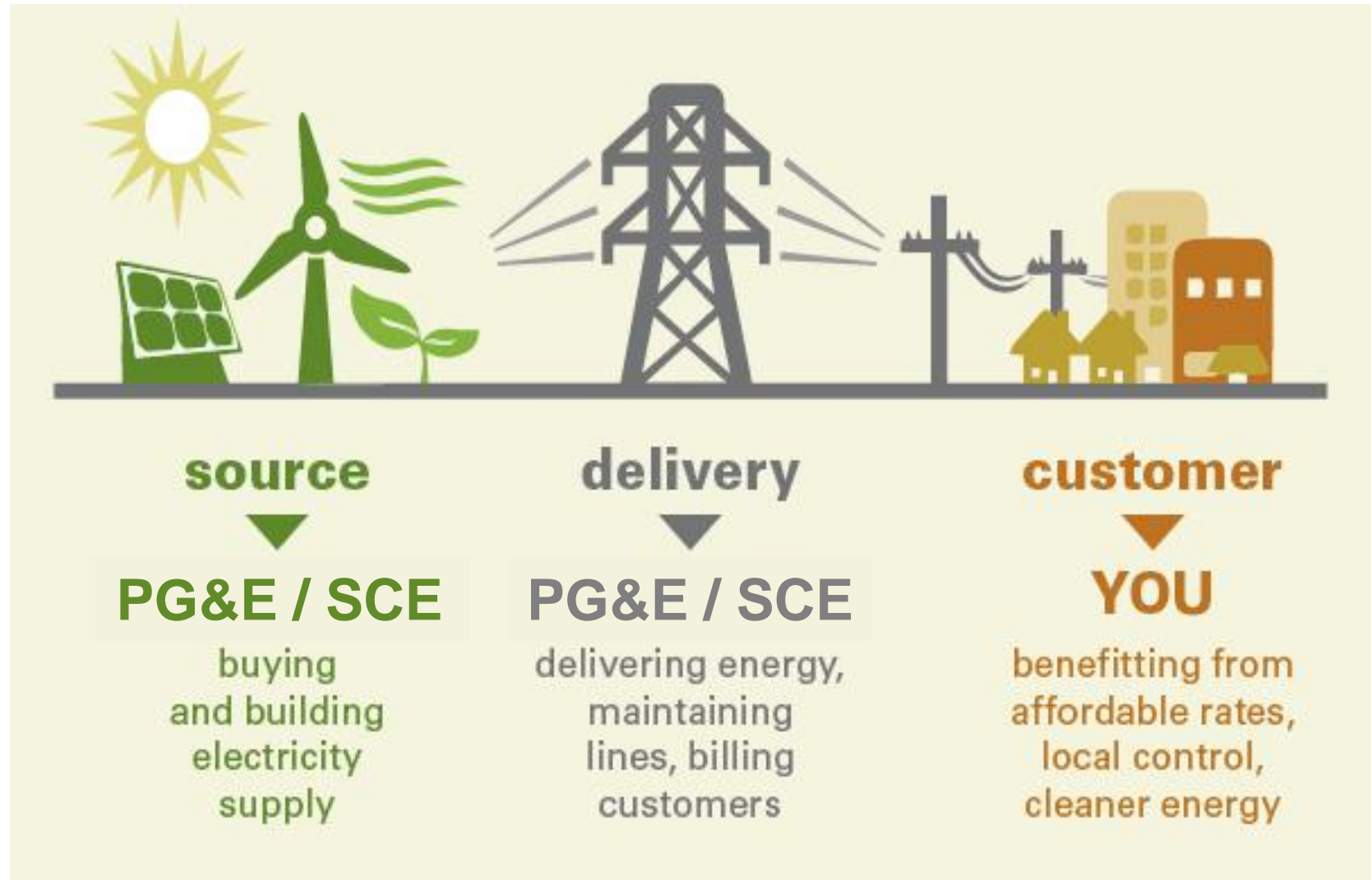
July 17, 2018



# Agenda

- CCE Background
- Feasibility Study Results
- Comparison with Previous Studies
- Policy Goals Achieved with CCE
- Options for Consideration

# How Community Choice Energy Works



# Feasibility Study Scope

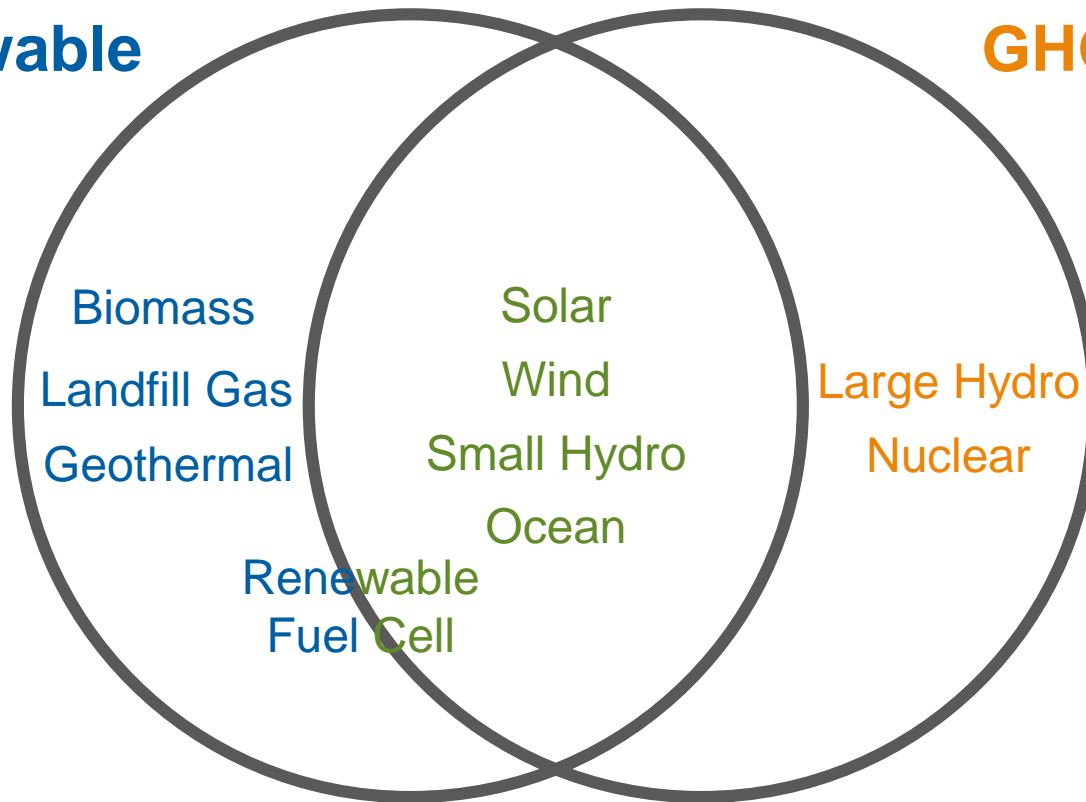
- 3 geographic participation scenarios
  - All Santa Barbara County (unincorporated + 7 incorporated cities)
  - Unincorporated Santa Barbara County Only
  - City of Santa Barbara Only
- 3 renewable energy content levels
  - RPS compliant (33% to 50% renewable)
  - **50% renewable** \*\*
  - 75% renewable
- 11-year study period: 2020-2030
- Pro forma assessment
  - Power purchase costs
  - Operational costs
  - Reserve/contingency fund
  - Debt service

# Renewable vs. GHG-Free

## RPS Renewable & GHG-Free

RPS Renewable

GHG-Free



# Comparison of CCE vs. IOU Renewable & GHG-Free Electricity Supply Portfolios

Electricity Provider	Renewable Energy			GHG-Free Energy		
	2017	2020	2030	2017	2020	2030
PG&E	33% (actual)	43% (contracted)	50% (planned)	79% (actual)	Unknown	Unknown
Local CCE for PG&E Territory	N/A	50% (modeled)	50% (modeled)	N/A	99% (modeled)	100% (modeled)
SCE	32% (actual)	41% (contracted)	50% (planned)	46% (actual)	Unknown	Unknown
Local CCE for SCE Territory	N/A	50% (modeled)	50% (modeled)	N/A	64% (modeled)	72% (modeled)

# Evaluating CCE Feasibility

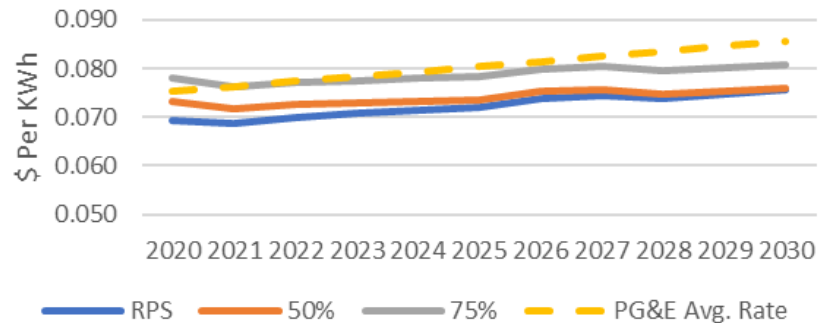
**Feasibility = Can we meet our policy goals while covering our costs and offering competitive electricity rates?**

Steps to determine CCE feasibility:

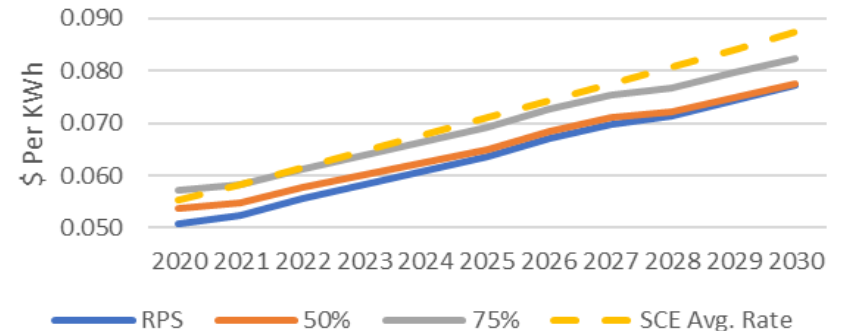
1. Estimate total CCE program costs.
2. Set CCE rates to fully recover program costs (Step 1).
3. Add CCE rates (Step 2) + estimated exit fees.
- 4a. Are CCE rates + exit fees (Step 3)  $\leq$  IOU generation rates?
- 4b. Are revenues  $>$  costs within reasonable timeframe?

## Feasibility Study Results: Rate Comparisons

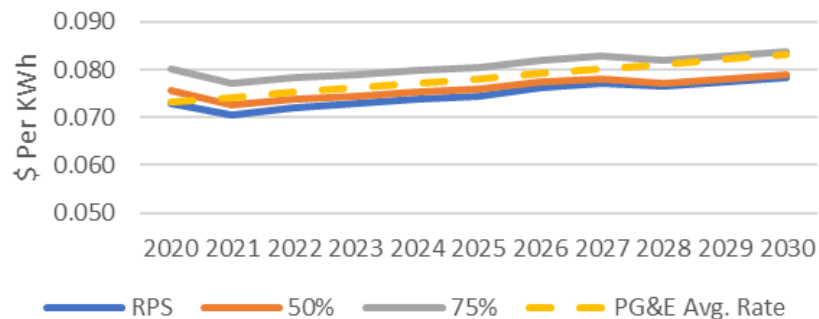
All Santa Barbara County  
Rate Comparisons - PG&E Area



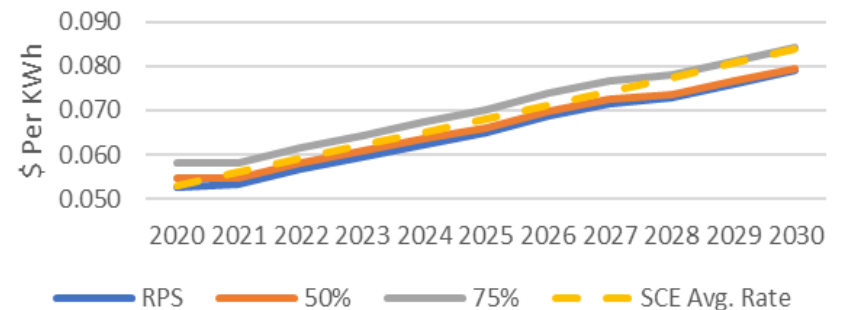
All Santa Barbara County  
Rate Comparisons - SCE Area



Unincorporated Santa Barbara County  
Rate Comparisons - PG&E Area



Unincorporated Santa Barbara County  
Rate Comparisons - SCE Area





## Feasibility Study Results: Pro Forma Overview

- The pro forma financial results indicate net surpluses would be realized by SBC if it charges similar rates as SCE and PG&E
- In the All Santa Barbara County membership structure, both the RPS-compliant and 50% Renewable Energy Supply scenarios have a net surplus starting in 2020; the 75% Renewable Energy Supply scenario has a net surplus starting in 2021.
- In the Unincorporated Santa Barbara County membership structure, the RPS-compliant, 50%, and 75% Renewable Energy Supply scenarios have a net surplus starting in 2020, 2021, and 2028, respectively.

# Feasibility Study Results: All Santa Barbara County 50% Renewable Energy Supply Pro Forma

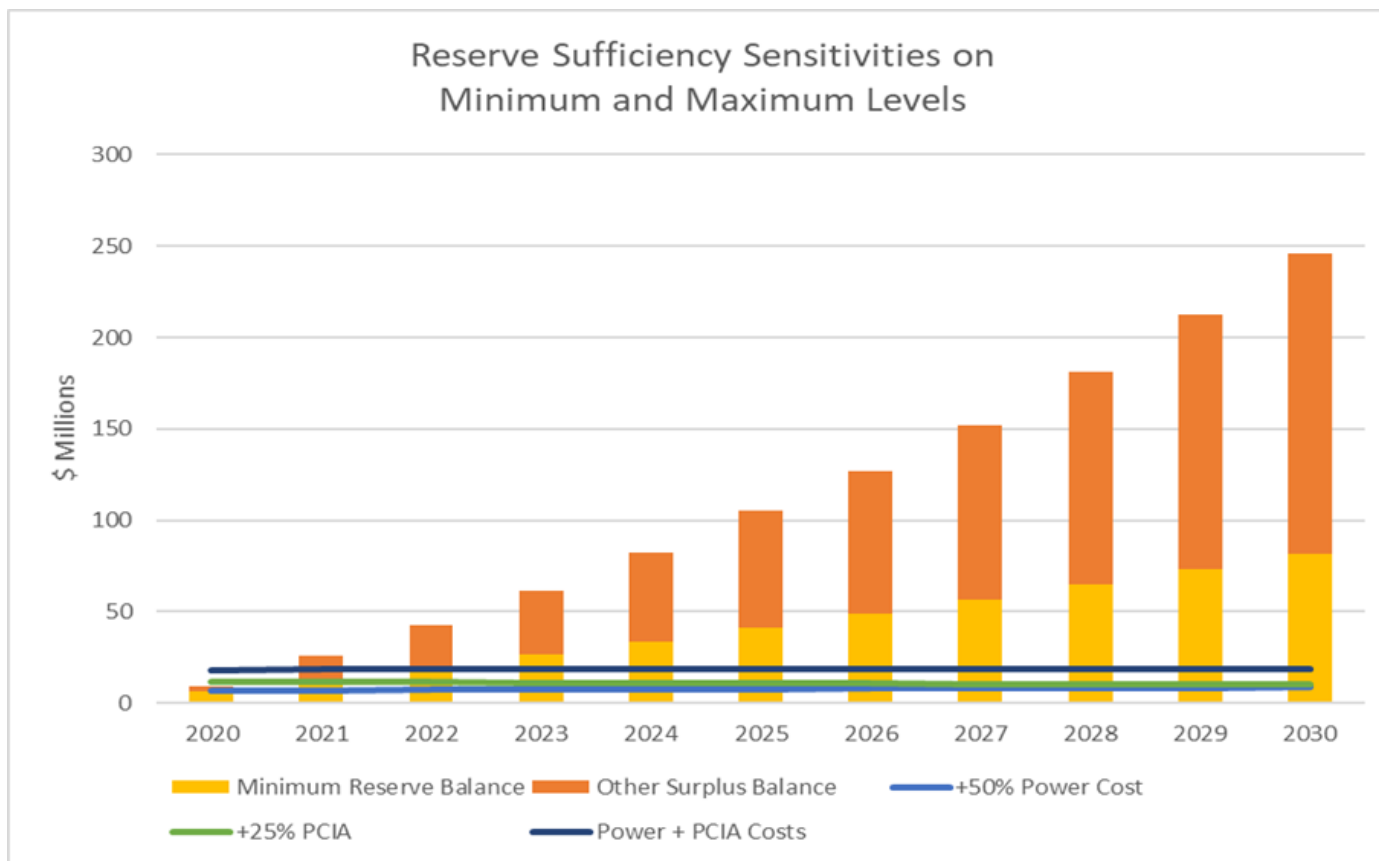
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>I. Revenue</b>	-	156,561,067	162,162,930	167,832,371	173,576,391	179,401,948	185,315,967	191,325,356	197,437,017	203,657,862	209,994,821	216,454,861
<b>II. Operating Expenses</b>												
Power Supply	-	127,017,386	135,779,407	140,721,284	144,444,843	148,036,579	151,547,796	157,963,954	161,749,459	163,923,925	168,531,988	173,017,950
Staff	583,333	3,500,000	3,587,500	3,677,188	3,769,117	3,863,345	3,959,929	4,058,927	4,160,400	3,500,000	3,500,000	3,500,000
Marketing and Communications	349,005	1,234,676	1,164,759	1,194,594	1,225,196	1,256,586	1,288,784	1,321,810	1,355,686	1,141,194	1,141,900	1,142,610
Legal, Consulting, other Prof. Services	300,000	1,500,000	1,537,500	1,575,938	1,615,336	1,655,719	1,697,112	1,739,540	1,783,029	1,500,000	1,500,000	1,500,000
Data Management	-	1,898,527	1,908,014	1,917,550	1,927,134	1,936,753	1,946,435	1,956,166	1,965,931	1,975,746	1,985,623	1,995,536
Utility Service Fees	-	431,280	426,917	436,131	445,605	455,346	465,364	475,666	425,709	427,814	429,931	432,056
Miscellaneous Admin. & General	83,333	500,000	512,500	525,313	538,445	551,906	565,704	579,847	594,343	500,000	500,000	500,000
Uncollectibles/Other	-	782,805	810,815	839,162	867,882	897,010	926,580	956,627	987,185	1,018,289	1,049,974	1,082,274
<b>Subtotal Operating Expenses</b>	<b>1,315,672</b>	<b>136,864,674</b>	<b>145,727,411</b>	<b>150,887,158</b>	<b>154,833,559</b>	<b>158,653,246</b>	<b>162,397,704</b>	<b>169,052,537</b>	<b>173,021,742</b>	<b>173,986,968</b>	<b>178,639,416</b>	<b>183,170,426</b>
<b>Operating Margin</b>	<b>(1,315,672)</b>	<b>19,696,393</b>	<b>16,435,520</b>	<b>16,945,213</b>	<b>18,742,832</b>	<b>20,748,702</b>	<b>22,918,263</b>	<b>22,272,819</b>	<b>24,415,275</b>	<b>29,670,894</b>	<b>31,355,405</b>	<b>33,284,434</b>
<b>III. Financing</b>												
Startup Funding Repayment	102,500	9,167,500	-	-	-	-	-	-	-	-	-	-
Reserve Contribution	-	6,262,443	6,486,517	6,713,295	6,943,056	7,176,078	7,412,639	7,653,014	7,897,481	8,146,314	8,399,793	8,658,194
<b>Subtotal Financing</b>	<b>102,500</b>	<b>15,429,943</b>	<b>6,486,517</b>	<b>6,713,295</b>	<b>6,943,056</b>	<b>7,176,078</b>	<b>7,412,639</b>	<b>7,653,014</b>	<b>7,897,481</b>	<b>8,146,314</b>	<b>8,399,793</b>	<b>8,658,194</b>
<b>IV. Total Revenue Requirement</b>	<b>1,418,172</b>	<b>152,294,617</b>	<b>152,213,928</b>	<b>157,600,453</b>	<b>161,776,615</b>	<b>165,829,323</b>	<b>169,810,343</b>	<b>176,705,551</b>	<b>180,919,223</b>	<b>182,133,282</b>	<b>187,039,209</b>	<b>191,828,621</b>
<b>V. Net Surplus/(Deficit)</b>	<b>(1,418,172)</b>	<b>4,266,450</b>	<b>9,949,003</b>	<b>10,231,918</b>	<b>11,799,776</b>	<b>13,572,624</b>	<b>15,505,624</b>	<b>14,619,805</b>	<b>16,517,794</b>	<b>21,524,579</b>	<b>22,955,612</b>	<b>24,626,240</b>
<b>VI. Cumulative Reserve</b>	-	6,262,443	12,748,960	19,462,255	26,405,310	33,581,388	40,994,027	48,647,041	56,544,522	64,690,836	73,090,629	81,748,824
<b>VII. Cumulative Net Surplus</b>	<b>(1,418,172)</b>	<b>2,848,278</b>	<b>12,797,281</b>	<b>23,029,199</b>	<b>34,828,975</b>	<b>48,401,599</b>	<b>63,907,223</b>	<b>78,527,028</b>	<b>95,044,823</b>	<b>116,569,402</b>	<b>139,525,014</b>	<b>164,151,254</b>
<b>VIII. Program Average Rate (\$/MWh)</b>	-	65.8	67.8	69.8	71.9	73.9	75.9	78.0	80.1	82.2	84.4	86.5
<b>IX. Power Supply (\$/MWh)</b>	-	53.4	56.8	58.5	59.8	61.0	62.1	64.4	65.6	66.2	67.7	69.2
<b>X. Program Average Cost (\$/MWh)</b>	-	64.0	63.6	65.6	67.0	68.3	69.6	72.1	73.4	73.5	75.1	76.7
<b>XI. Annual Sales (MWh)</b>	-	2,379,904	2,391,804	2,403,763	2,415,782	2,427,861	2,440,000	2,452,200	2,464,461	2,476,783	2,489,167	2,501,613

# Feasibility Study Results: Unincorporated Santa Barbara County 50% Renewable Energy Supply Pro Forma

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>I. Revenue</b>	-	80,827,550	83,353,846	85,911,542	88,503,408	91,132,196	93,800,647	96,511,498	99,267,484	102,071,345	104,925,832	107,833,708
<b>II. Operating Expenses</b>												
Power Supply	-	65,608,392	70,153,778	72,742,449	74,751,626	76,623,200	78,466,192	81,555,546	83,642,858	85,002,227	87,397,147	89,821,308
Staff	583,333	3,500,000	3,587,500	3,677,188	3,769,117	3,863,345	3,959,929	4,058,927	4,160,400	3,500,000	3,500,000	3,500,000
Marketing and Communications	291,219	1,097,703	1,083,186	1,110,563	1,138,635	1,167,417	1,196,928	1,227,187	1,258,213	1,058,783	1,059,077	1,059,373
Legal, Consulting, other Prof. Services	300,000	1,500,000	1,537,500	1,575,938	1,615,336	1,655,719	1,697,112	1,739,540	1,783,029	1,500,000	1,500,000	1,500,000
Data Management	-	665,105	668,424	671,780	675,144	678,530	681,926	685,344	688,771	692,221	695,679	699,161
Utility Service Fees	-	173,579	163,903	167,659	171,522	175,496	179,584	183,791	162,909	163,702	164,498	165,299
Miscellaneous Admin. & General	83,333	500,000	512,500	525,313	538,445	551,906	565,704	579,847	594,343	500,000	500,000	500,000
Uncollectibles/Other	-	404,138	416,769	429,558	442,517	455,661	469,003	482,557	496,337	510,357	524,629	539,169
<b>Subtotal Operating Expenses</b>	<b>1,257,885</b>	<b>73,448,916</b>	<b>78,123,560</b>	<b>80,900,446</b>	<b>83,102,341</b>	<b>85,171,276</b>	<b>87,216,379</b>	<b>90,512,740</b>	<b>92,786,860</b>	<b>92,927,290</b>	<b>95,341,031</b>	<b>97,784,309</b>
<b>Operating Margin</b>	<b>(1,257,885)</b>	<b>7,378,634</b>	<b>5,230,286</b>	<b>5,011,096</b>	<b>5,401,066</b>	<b>5,960,920</b>	<b>6,584,268</b>	<b>5,998,758</b>	<b>6,480,624</b>	<b>9,144,055</b>	<b>9,584,801</b>	<b>10,049,399</b>
<b>III. Financing</b>												
Startup Funding Repayment	77,500	6,617,500	-	-	-	-	-	-	-	-	-	-
Reserve Contribution	-	3,233,102	3,334,154	3,436,462	3,540,136	3,645,288	3,752,026	3,860,460	3,970,699	4,082,854	4,197,033	4,313,348
<b>Subtotal Financing</b>	<b>77,500</b>	<b>9,850,602</b>	<b>3,334,154</b>	<b>3,436,462</b>	<b>3,540,136</b>	<b>3,645,288</b>	<b>3,752,026</b>	<b>3,860,460</b>	<b>3,970,699</b>	<b>4,082,854</b>	<b>4,197,033</b>	<b>4,313,348</b>
<b>IV. Total Revenue Requirement</b>	<b>1,335,385</b>	<b>83,299,518</b>	<b>81,457,714</b>	<b>84,336,908</b>	<b>86,642,478</b>	<b>88,816,563</b>	<b>90,968,404</b>	<b>94,373,200</b>	<b>96,757,560</b>	<b>97,010,144</b>	<b>99,538,064</b>	<b>102,097,657</b>
<b>V. Net Surplus/(Deficit)</b>	<b>(1,335,385)</b>	<b>(2,471,968)</b>	<b>1,896,132</b>	<b>1,574,634</b>	<b>1,860,930</b>	<b>2,315,632</b>	<b>2,832,242</b>	<b>2,138,298</b>	<b>2,509,924</b>	<b>5,061,201</b>	<b>5,387,768</b>	<b>5,736,051</b>
<b>VI. Cumulative Reserve</b>	-	3,233,102	6,567,256	10,003,718	13,543,854	17,189,142	20,941,168	24,801,627	28,772,327	32,855,181	37,052,214	41,365,562
<b>VII. Cumulative Net Surplus</b>	<b>(1,335,385)</b>	<b>(3,807,353)</b>	<b>(1,911,221)</b>	<b>(336,587)</b>	<b>1,524,343</b>	<b>3,839,975</b>	<b>6,672,218</b>	<b>8,810,516</b>	<b>11,320,440</b>	<b>16,381,641</b>	<b>21,769,409</b>	<b>27,505,460</b>
<b>VIII. Program Average Rate (\$/MWh)</b>	-	65.8	67.5	69.2	71.0	72.7	74.5	76.3	78.0	79.8	81.7	83.5
<b>IX. Power Supply (\$/MWh)</b>	-	53.4	56.8	58.6	59.9	61.1	62.3	64.4	65.8	66.5	68.0	69.6
<b>X. Program Average Cost (\$/MWh)</b>	-	67.8	66.0	68.0	69.5	70.9	72.2	74.6	76.1	75.9	77.5	79.1
<b>XI. Annual Sales (MWh)</b>	-	1,228,384	1,234,526	1,240,699	1,246,902	1,253,137	1,259,402	1,265,699	1,272,028	1,278,388	1,284,780	1,291,204

## Feasibility Study Results: Stress Analyses on Reserves

- Accumulated reserves are projected to sufficiently cover the two largest risks by 2021.



## Feasibility Study Results: Key Risks and Uncertainties

- Market price risk (i.e., open positions may be higher cost if market prices rise)
- PG&E/SCE generation rates and exit fees (e.g., PCIA) may be more or less than projected impacting the CCA's rates and revenues
- Customer load risk (i.e., opt out rates may be higher than expected, growth of distributed energy resources is much higher than anticipated, etc.)
- Regulatory/legislative risk; uncertainty on how new legislation may impede the future growth of CCAs (i.e., the California Public Utilities Commission recently published a "Green Book" that poses the risks of customer choice)

# Key Differences from Previous Studies: Costs

- **Financing:**
  - PEA's start-up capital requirement estimate is much smaller than Willdan's.
  - PEA assumed a short-term bank loan whereas Willdan assumed a 30-year bond.
- **Financial Reserve Policy:** PEA's reserve contribution is much lower than Willdan or MRW.
- **Power Costs:** PEA's estimates are higher than MRW's and generally lower than Willdan's.
- **Staffing:** PEA's estimates are lower than MRW's and Willdan's.

PEA = This Study

Willdan = Tri-County Study

MRW = Peer Review

# Key Differences from Previous Studies: Rates

- **CCE Rates:** PEA developed two sets of rates for CCE customers in PG&E vs. SCE territory. Willdan assumed one set of rates for all CCE customers.
- **IOU Rates:** PEA's SCE rates escalate more quickly than Willdan and MRW, but PEA's rates for both IOUs are below Willdan's and MRW's IOU rates.
- **Rate Comparison:** PEA's CCE rates remain below the applicable IOU's rates as estimated by all consultants.

PEA = This Study

Willdan = Tri-County Study

MRW = Peer Review

# Policy Goals Achieved with CCE

- Provide greater local control of energy decisions: Yes, but subject to change with pending legislation.
- Encourage competition: Yes, IOUs have enhanced renewable energy and electric vehicle options in response to CCE.
- Increase renewable energy delivered to customers: Locally, yes; statewide, maybe.
- Lower greenhouse gas emissions: Locally, yes; statewide/globally, maybe.



# Policy Goals Achieved with CCE

- **Build new local renewable energy generation:** Maybe, but likely to take several years to build sufficient revenues.
- **Generate funding for new sustainability programs:** Yes, but likely to take several years to build sufficient revenues.
- **Create new jobs:** Yes, PEA estimates ~20 jobs to run CCE program + potential for short-term construction jobs.
- **Save customers money:** Yes, but subject to change with market and policy changes.
- **Stimulate economic development:** Yes, through jobs and bill savings being spent on other goods/services.

# CCE Options for Consideration

- **Option 1.** Form a new JPA to create and administer a CCE program with interested cities.
- **Option 2.** Create a new CCE program to be administered by the County for the unincorporated parts of Santa Barbara County only.
- **Option 3.** Join two existing CCE programs for the unincorporated parts of Santa Barbara County only.
- **Option 4.** Not implement a CCE program at this time.

## Option 1. Form a JPA for New CCE Program with Cities

- **Feasibility:** Can be rate competitive and break even in 1<sup>st</sup> year; strongest financial position among options studied
- **Costs:** estimated \$9.3M secured bank loan; GF \$ spent on program formation are reimbursable if launched
- **Launch Timing:** 2021
- **Pros:** Shields County from some risks; may lower County's share of start-up costs
- **Cons:** Dilutes County's operational control; may delay launch date
- **Next Steps:** Adopt resolution of intent; begin negotiations with interested cities on cost share and JPA

## Option 2. Create New CCE Program for Unincorporated County Only

- **Feasibility:** Can be rate competitive and break even in 2<sup>nd</sup> year; lower revenue generation potential than All County option
- **Costs:** estimated \$6.7M secured bank loan; GF \$ spent on program formation are reimbursable if launched
- **Launch Timing:** potentially 2020
- **Pros:** Greatest operational control
- **Cons:** Concentrates risks and costs
- **Next Steps:** Create new enterprise fund and potentially enterprise department; hire consultant for implementation plan

## Option 3. Join Existing CCE Programs for Unincorporated County Only

- **Feasibility:** Not yet evaluated
- **Costs:** TBD; GF \$ spent may not be reimbursable
- **Launch Timing:** 2021
- **Pros:** Shields County from some risks; likely lowest cost option
- **Cons:** Strongly dilutes County's operational control; no say in JPA structure and operating guidelines; may not be permissible under State law
- **Next Steps:** Coordinate with existing CCE program staff on logistics; contact CPUC for clarity on permissibility of split-County approach

## Option 4. Not Implement CCE Program at This Time

- **Feasibility:** N/A
- **Costs:** None
- **Launch Timing:** N/A
- **Pros:** Avoids future expenditures and risks
- **Cons:** GF \$ spent on CCE feasibility cannot be recovered; lost opportunity for CCE revenues and programming; may jeopardize ECAP greenhouse gas reduction goal
- **Next Steps:** None

# Recommended Action

Provide staff with direction regarding CCE options:

- **Option 1.** Form a new JPA to create and administer a CCE program with interested cities.
  - **Adopt Resolution of Intent to Form a CCE JPA**
- **Option 2.** Create a new CCE program to be administered by the County for the unincorporated parts of Santa Barbara County only.
- **Option 3.** Join two existing CCE programs for the unincorporated parts of Santa Barbara County only.
- **Option 4.** Not implement a CCE program at this time.

Provide other direction to staff.

# QUESTIONS?

---