



RECOMMENDATIONS FOR COMMUNITY CHOICE AGGREGATION IN THE CITY OF SAN DIEGO

November 2018

On October 25, 2018, Mayor Kevin Faulconer announced his support for Community Choice Aggregation (CCA) as the strategy of choice to achieve the 100 percent renewable energy goals by 2035 set forth by the City of San Diego's 2015 Climate Action Plan. In preparation for that announcement, the San Diego County Taxpayers Association evaluated the benefits and costs of notable CCA programs across California to estimate the potential local impact of the implementation of a CCA in the City of San Diego. Our analysis then determines which risks a CCA must address to mitigate the financial uncertainty it creates for taxpayers. Ultimately, SDCTA intends to evaluate the City of San Diego's final CCA business plan through its official Principles for the Evaluation of Climate Action Implementation Choices, as drafted in 2017.

Overall, the Association is concerned about the implications of a Community Choice Aggregation program in the City of San Diego and about the risks that it poses to taxpayers. SDCTA looks forward to collaborating with the Mayor's Office as it prepares to launch the program in 2021 to ensure that the outcome implements sensible solutions that protect taxpayer dollars. We include a summary of the business plan released at the end of this report and provide the following recommendations:

1. A CCA must select governing board members with substantive industry background to inform long-term purchasing decisions.
2. A CCA must ensure that all proceeds from the program will be reinvested back into the community it serves through investments restricted to the pertinent infrastructure and renewable energy procurement.
3. A CCA must establish additional financial protections for the General Fund, where any capital accumulated should be refunded to taxpayers proportional to their energy consumption in a setup that functions as a cooperative with shares by taxpayers.
4. A CCA must strive to diversify its energy portfolio, negotiating a reasonable balance of short-term and long-term contracts from multiple sources to reduce the liability for the large, long-term financial obligations a jurisdiction undertakes.
5. Joint Powers Authority (JPA) governance structures are a more fiscally responsible choice for the establishment of a CCA, as the jurisdiction pools financial risks with other agencies in the JPA and establishes barriers to the General Fund.
6. A CCA must not use Renewable Energy Credits (RECs) to lower its prices so that the program remains competitive with those of the regional utility. If using RECs, a CCA must address the potential legal exposure that doing so might present for the jurisdiction.
7. CCA employees should not be paid from the General Fund, where job creation should not come at the direct expense of taxpayers.
8. A CCA must pursue arrangements with its power suppliers to eliminate or reduce the need for or size of funding for the start-up and operations costs, where investors are paid back first and any remaining revenue flows to the CCA.



9. Any savings or capital should not be offset by the costs of a new bureaucracy, where the salary setting of CCA officials should account for cost control measures and be tied to that of utilities' Chief Operating Officer.
 10. To mitigate the exposure to economic loss resulting from a customer departing the program, a CCA must ensure its ability to create a departure charge that proportionally covers the cost of excess electricity supplies and long-term contract liability.
 11. Fluctuations in market prices and future regulatory decisions could result in cost increases for CCA programs. Therefore, a program should have an exit plan if costs become too high to sustain or if a reliable system whereby customers can truly pick their energy mix (and not depend on either the utility or a CCA to do so) develops.
 12. If a CCA uses loans to meet start-up and operational costs, a CCA must establish the parameters of the loans, including principal, interest, and years. To streamline costs and protect taxpayers, any bond should have a clear schedule of payments and projects as well as a robust oversight body that includes at least one member of a bona fide taxpayers association.
 13. A CCA should fully pay the PCIA exit fee up front, regardless of the collar and cap financing mechanism available to pay it over time. Paying the full amount upfront represents the true cost without interest.
 14. Before the City Council votes on a CCA resolution, the jurisdiction must conduct a comparative cost-benefit analysis of the options for achieving the goals set out in its Climate Action Plan per its requirements.
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Background

In the Fall of 1996, California passed Assembly Bill 1890 (AB 1890), which effectively deregulated the State's energy supply and opened the market to competition. The law transferred operational jurisdiction of Investor-Owned Utilities' (IOUs) transmission systems throughout the state to an independent statewide transmission system operator (ISO), allowing all energy providers Direct Access (DA) to local markets.¹ Arguing that it would lower consumers' bills, the state allowed individual customers to purchase power from any energy supplier operating in their area, rather than from one singular regional power supplier.

The formation of the California Independent System Operator (CAISO) and the Power Exchange (PX) market enabled greater competition in the wholesale market for electricity generation. As IOUs were forced to divest their wholesale generating capacity, the UCLA Luskin School of Public

¹ [California Legislative Information. \(1996\). "Assembly Bill 1890".](#)



Affairs articulates that the developments “...reduced the technical and institutional barriers to giving ratepayers an alternative to the regulated monopoly IOU model.”²

The deregulation prompted unprecedented high prices from large energy suppliers, to which the State responded by issuing retail price caps. The intervention drove utilities near bankruptcy and created a statewide energy shortage responsible for rolling blackouts in major cities in the early 2000s. California ratepayers in IOU territories then began exploring ways in which to break the utility model.

At the same time, statewide greenhouse gas reduction targets came to the forefront of the conversation on strategies and goals to combat climate change trends. Senate Bill 1078 established California’s Renewables Portfolio Standard (RPS) in 2002, a regulation that requires the increased production of energy from renewable energy sources such as wind, solar, biomass, and geothermal with goals of obtaining 20 percent of electricity retail sales be served by renewable energy sources by 2017.³ Its acceleration four years later required that 20 percent of electricity retail sales be served by renewable energy sources by 2010.

The ability of Californian utilities to easily meet conservative targets has since prompted several amendments to those goals. Former Governor Schwarzenegger signed Assembly Bill 32 (AB 32) in 2006, which set a statewide reduction target of 1990 levels by 2020 and created a comprehensive program to reduce GhG emissions in California. He also signed an Executive Order in 2008 that mandated all retail sellers of electricity to serve 33 percent of their load with renewable energy by 2020.⁴ Senate Bill X1-2 (SB X1-2) extended that target to all agencies under RPS, such as publicly owned utilities (POUs), IOUs, electricity service providers, and community choice aggregators.⁵

More recently, the Clean Energy and Pollution Reduction Act of 2015 (SB 350) required retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable resources by 2030.⁶ Senate Bill 100 (SB 100), signed into law August 2018, revised the goals from SB 350 to mandate both procurement and all retail sellers of electricity to serve 100 percent of their load with renewable energy by December 31, 2045.

City of San Diego Climate Action Plan

The City of San Diego’s Climate Action Plan (CAP), adopted in December 2015 with goals of reducing Greenhouse Gas (GhG) emissions by achieving 100 percent renewable energy by 2035, reflect a ten-year delta between the goals of the City of San Diego and those established in SB 100. The CAP outlines five strategies to achieve its goals: energy and water efficiency; clean and renewable energy; bicycling, walking, transit, and land use; zero waste; and resiliency.

² [DeShazo, J.R. Dr. \(2017\). “The Promises and Challenges of Community Choice Aggregation in California”. UCLA Luskin School of Public Affairs. Pg. 9.](#)

³ [California Legislative Information. \(2002\). “Senate Bill No. 1078”.](#)

⁴ [California Energy Commission. Renewables Portfolio Standards.](#)

⁵ Ibid.

⁶ [California Public Utilities Commission. \(2015\). Clean Energy and Pollution Reduction Act of 2015 \(SB 350\).](#)



The CAP calculates its 2050 GhG emission reductions at 80 percent below a 2010 baseline. While the City recognizes it may become necessary to modify the CAP to account for federal and state actions or improvements in technology and efficiency and commits to doing so through its annual monitoring reports, it does not intend to update the CAP until 2020 despite the recent passing of SB 100 since the CAP's inception.

In July 2017, the City of San Diego released a feasibility study to explore the possibility of a CCA program in order to meet its Climate Action Plan goal of reaching 100 percent renewable energy by 2035, with a forecasted implementation in 2020. The following November, SDCTA opposed a City Council vote on implementing a CCA or other alternatives until the City conducted a comparative cost-benefit analysis of the options for achieving the goals set out in its Climate Action Plan per its requirements. At the time, the Power Charge Indifference Adjustment (PCIA) rate, which highly influences potential costs, had not yet been determined.

Community Choice Aggregation in California

In 2002, the California legislature passed Assembly Bill 117 (AB 117), enabling the creation of Community Choice Aggregation. These programs serve as an alternate method of energy procurement for municipal agencies, where a public agency assumes a more active role in energy procurement policy by replacing the local utility as energy purchaser. As shown in Figure 1, under a typical CCA scenario a jurisdiction (or many) gains the ability to generate and/or purchase energy for the customers within its boundaries. The regional utility continues to deliver energy to customers in the CCA program through its infrastructure. All customers are enrolled in the CCA program by default but can choose to opt out of it and continue receiving energy procurement services from the regional utility. The utility, in turn, has the ability to impose a cost-recovery exit fee on those consumers that transition into the CCA to offset the liability of its long-term purchasing contracts.

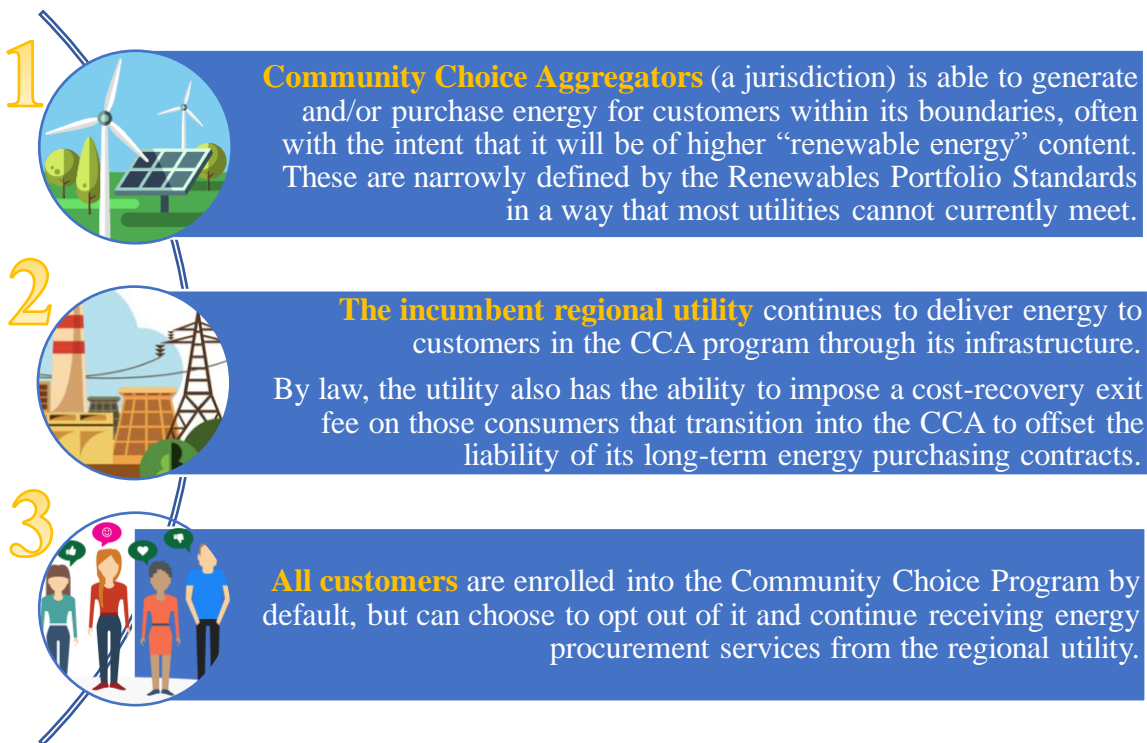
CCAs are often borne out of a desire for increased local control, as energy regulation passes from the oversight of the California Public Utilities Commission (CPUC) through utilities to that of the California Energy Commission (CEC). CCAs are also often implemented to control and achieve lower energy rates, to stimulate the economy, or to increase the use of renewable energy, where renewable energy sources include those with a lesser environmental impact than that of fossil fuels (like solar, wind, and hydropower).

CCAs have gained significant traction over the past two years, as the number of CCAs across California has doubled. According to CalCCA, an advocacy organization representing the interests of operational CCA providers, there are nineteen CCA programs serving more than 8 Million customers in California through approximately 2 Million accounts.⁷ A map of those CCAs, as well as the multiple jurisdictions considering implementing one in the near future, can be found at the

⁷ [California Community Choice Aggregation. \(2018\). CALCCA Advocates for Community Choice in California.](#)

end of this report. The California Public Utilities Commission estimates that up to 85 percent of the state’s retail load could be served by CCAs, as well as by direct access providers, by 2025.⁸ A University of California, Los Angeles study on the progress of CCAs across the state projects that half of the population will be served by CCAs by 2025.⁹

Figure 1. Community Choice Aggregation: How Does It Work?



Source: San Diego County Taxpayers Association

Marin Clean Energy (MCE)

Marin Clean Energy (MCE) serves the Marin County area and is the longest-operating CCA in California. Established in 2010, MCE currently serves approximately 255,000 local residents and businesses, supplying 57 percent of its base package utilities with renewable energy.¹⁰ This figure excludes an additional 20 percent of its procured power that is generated by large hydroelectric sources, which is considered a GhG-free source but also non-renewable. MCE has set their goal to achieve an 80 percent renewable base package by the year 2025, with a long-term goal of reaching 100 percent renewable energy for all energy packages.¹¹

⁸ [St. John, Jeff. \(2018\). “How Community Choice Aggregation Fits Into California’s Clean Energy Future”. Green Tech Media.](#)

⁹ [DeShazo, J.R. Dr. \(2017\). “The Promises and Challenges of Community Choice Aggregation in California”. UCLA Luskin School of Public Affairs. Pg. 6](#)

¹⁰ [Marin Clean Energy. \(2017\). “2018 Integrated Resource Plan”.](#)

¹¹ Ibid.



MCE is notable for having the largest, most diverse portfolio of any CCA, with a hundred and five total energy contracts, out of which forty-four are active and have delivered MCE’s load of 5,052 GWhs over the past year. Currently, MCE has short and medium-term contracts that supply 65 percent of its load at fixed prices in 2018, a lower ratio associated with the forecasted load growth pending service area expansion.¹² MCE contracts have start dates ranging from 2012 to 2023 with scheduled deliveries of both energy and capacity through 2040. MCE claims that its renewable projects have supported more than 2,800 California jobs resulting in 1.2 million union labor hours in 2016.¹³

Peninsula Clean Energy (PCE)

San Mateo County established Peninsula Clean Energy (PCE) in 2016, setting goals of achieving 100 percent GhG-free energy procurement by 2021, procurement from 100 percent RPS eligible sources by 2025, and of creating a minimum of 20 MW of new local power by 2025—all of this while providing rates at parity, or lower than those of Pacific Gas and Electric (PG&E).¹⁴ Since its inception, PCE has attained a membership base of 265,000 residential and 300,000 commercial consumers in a county with a population of 771,470 residents. PCE provides two options: one that offers 50 percent of electricity from renewable sources and 85 percent carbon-free sources at a lower rate than PG&E and one that offers 100 percent of electricity from renewable, carbon-free resources, at a rate of \$0.01 kWh more than the first option.

According to the PCE 2018 Integrated Resource Plan, the PCE Board has set a target to develop 20 MW of new power projects in San Mateo County by 2025.¹⁵ To date, no official rollout plan has been released. Since its launch, PCE has issued two Request for Offers for new renewables and already contracted for 300 MW of new solar projects in Merced and Kings Counties for contract terms of 20 years and 15 years, with construction set to begin in 2019.

Solana Energy Alliance (SEA)

In July 2017, the Solana Beach City Council adopted the Solana Beach Climate Action Plan, which identified implementing a Community Choice Aggregation program as the number one electricity and natural gas measure in reducing greenhouse gas emissions.¹⁶ The Solar Energy Alliance (SEA) then became the first and only CCA in the San Diego region in April 2018, with a 50 percent renewable and 75 percent GhG-free base package that exceeds current RPS goals and meets SB 350 State requirements. The City of Solana Beach has operated the program since its launch and contracts out to suppliers. The participation rate was 92 percent in September 2018.¹⁷ SEA’s premium energy package offers 100 percent renewable energy at a slightly higher rate. SEA

¹² Ibid.

¹³ [CalCCA. \(2018\). “Comments on the Staff White Paper”.](#)

¹⁴ [Peninsula Clean Energy. \(2017\). “2018 Integrated Resource Plan”.](#)

¹⁵ Ibid.

¹⁶ [City of Solana Beach. \(2017\). Climate Action Plan. SANDAG and the Energy Roadmap Program.](#)

¹⁷ Solana Beach Alliance Presentation at the Annual 2018 Community Choice Forum.

estimates that the average household using 400 kWh per month will pay \$1.20 per month more for SEA Green than SEA Choice. Figure 2 suggests that opt-outs at the beginning of its service have fluctuated in range, not allowing for predictability in initial opt-outs for other CCAs.

Figure 2. Solana Energy Alliance Opt-Out and Enrollment Statistics

Opt-Out		100% Renewable Option	
Month	<i>Marginal Opt-Out (Percent)</i>	Month	<i>Marginal Enrollment (Percent)</i>
April	1.29%	April	0.15%
May	4.54%	May	0.27%
June	1.03%	June	0.18%
July	0.74%	July	0.15%
August	0.50%	August	0.13%
September	0.28%	September	0.05%
October	0.10%	October	0.01%

Source: Solana Energy Alliance (2018)

Though SEA has stated that local energy procurement projects will be developed in the future, none have been established to date.

Clean Power SF

CleanPowerSF launched in May 2016 as the official Community Choice Aggregation of the City and County of San Francisco. This program is unique in that it is administered by the San Francisco Public Utilities Commission. Its supply portfolio includes long-term contracts for 147 MW of wind and solar energy with terms between 10 and 22 years. By the end of 2017, 76,055 residents were enrolled, representing 20 percent of all residents.¹⁸ Its base plan provides customers with 43

¹⁸ [City and County of SF. \(2018\). "City Performance Scorecard".](#)



percent renewable energy, while its premium package offers 100 percent renewable energy from California-certified sources with a 1.5 cents per KWh premium for residential accounts.

Clean Power SF goals include procuring 50 percent renewable energy by 2020 and 100 percent renewable energy by 2030. CleanPowerSF recently signed several multi-year deals to build new wind and solar projects that the CCA program claims "...will create more than 600 new jobs, including two long-term agreements to purchase the renewable power that, combined, should generate enough renewable energy to power over 130,000 average San Franciscan households."¹⁹ These projects are associated with the generation of 16 full-time operations-related positions and approximately 600 construction jobs during a 6-to-8-month construction period.²⁰

The Effect of CCAs on Utilities: San Diego Gas & Electric

Due to long-term contracts with producers that reflect state-mandated goals, investor-owned utilities have increasingly offered a higher percentage of renewable energy at the same time that CCAs have shrunk their customer base. Thus, even conventional utilities foresee offering 50 percent renewables by 2020, where state regulations require it by 2030. The UCLA Luskin Center for Innovation expects California's largest utilities to have an average of 67 percent renewable energy in their portfolios by 2025.²¹

SDG&E follows this observed trend. In 2015, the utility became the first investor-owned utility in California to reach the 33 percent renewable energy landmark five years ahead of schedule. By mid-2016, the utility had reached 43 percent.²² The utility complies with renewable energy procurement mandates and from a planning perspective, does not anticipate the need for additional renewable procurement until 2025 or later. According to the utility, Sempra Energy's shareholders have invested in approximately 8 MW of SDG&E-owned renewable capacity since the RPS was implemented in 2002, which represents less than 0.5 percent of the approximately 2,600 MW of renewable energy that SDG&E supplies to its customers. These projects have been financed through a mix of equity, tax equity, term debt, and construction financing, with interest rates that are embedded in the contract price. Approximately 98 percent of the existing renewable energy supply is provided through long-term contracts of at least 10 years. Contract length tends to drive the average annual cost, with the goal of arriving at the lowest rate possible.

SDG&E'S local region contains wind, small hydro and geothermal, along with smaller amounts of bio-gas and bio-mass resources, where less than 0.5 percent of SDG&E's renewable energy generation is owned by SDG&E. SDG&E's RPS portfolio currently exceeds the regulatory requirement that at least 65 percent of RPS contracts are long-term. Regulatory and financial factors prevent the utility from purchasing renewable energy on short-term contracts.

¹⁹ Ibid.

²⁰ [CleanPowerSF. \(2018\). "SFPUC Celebrates 100 Years of Clean Power with Free Sno-Cones."](#)

²¹ [McMahon, Jeff. \(2018\). "Community Choice is Driving California's Precocious Revolution." Forbes.](#)

²² (2018). SDG&E Responses to SDCTA.



The National Renewable Energy Laboratory’s Jobs and Economic Development Impact (JEDI) estimates that over 650 direct and indirect jobs have been created as a result of renewable energy projects, assuming approximately 2,600 MW of renewable energy under contract to SDG&E.²³ Costs of borrowing generally follow national trends in interest rates, which are rising; however, equipment costs have been steadily decreasing over the last 10 years, in part due to manufacturing efficiencies and in part due to technological gains. According to the utility, “...these trends are expected to continue in the short term but may eventually be offset by increases in the underlying commodity costs over the long term as manufacturing and technology gains level off.”²⁴

SDG&E also currently deploys more than 100 MW of energy storage, where its Escondido site is the largest lithium-ion battery facility in America. New projects will add over 80 MW of energy storage capacity and additional legislation authorizes up to 166 MW of additional energy storage to be deployed in SDG&E’s service territory. In context, according to the California Energy Commission, “one megawatt equals one million watts, or 1,000 kilowatts, roughly enough electricity for the instantaneous demand of 750 homes at once.”²⁵ Seasonal electrical demand changes and the source of the energy causes that number to fluctuate.

With these credentials, SDG&E filed a proposal with the City of San Diego to meet the City’s 100 percent renewable energy goal in October 2017. In a scheme similar to CCAs, the proposal offered a collaboration to shape the City’s energy procurement by allowing customers to choose different levels of renewables above the state-mandated level. However, the City’s Sustainable Energy Advisory Board (SEAB) was skeptical about the feasibility of SDG&E obtaining approval from the California Public Utilities Commission to change its regulations and held strong interest in considering a proposal with little to no risk. On October 22, 2018, SDG&E withdrew from submitting a counterproposal to CCAs to the City, claiming that “there is no clear scenario” to develop a liability-free all-renewables plan when it came to procuring energy contracts.²⁶ In a letter penned by Vice-President Kendall Helm, SDG&E also doubted that the CPUC would approve a proposal in which only one set of customers were burdened with increased costs.²⁷

Power Charge Indifference Adjustment (PCIA)

The CPUC regulates investor-owned electric and natural gas utilities operating in California by controlling their energy rates and contracts and prohibiting utilities from making a profit on the actual energy commodity that they deliver through its infrastructure. California’s RPS also narrowly defines “renewable energy” sources to include only biomass and bio-waste, small hydroelectric, solar and wind, excluding nuclear and large hydropower plants as renewable energy, despite the fact they generate no GhG emissions.

²³ (2018). SDG&E Responses to SDCTA.

²⁴ Ibid.

²⁵ [California ISO. “California ISO Glossary”.](#)

²⁶ [Nikolewski, Rob. 2018. “SDG&E Withdraws Counterproposal to Public Energy Alternative in San Diego”.](#)

²⁷ [Ibid.](#)



The CPUC also influences the wide range of potential costs through the setting of the Power Charge Indifference Adjustment (PCIA) as a type of “exit fee” required by law to protect against costs between customers. Since most utility planning happens with 10-to-20-year horizons, a utility must anticipate its long-term customer demand and make investments based on that planning at prices that, as the costs of wind and solar energy have been steadily falling, have seem expensive over time. Utilities are held liable for these long-term investments even if customers leave the utility for other providers. The PCIA guarantees that clients who leave traditional utilities like SDG&E for CCAs or other energy service providers do not pay more than their fair share of cost for power bought on their behalf. On the other hand, the PCIA also ensures that consumers who stay with the regional utilities do not pay the costs for power purchased for customers now served by the CCA.²⁸

The CPUC updated the formula because of a consensus that it did not work as intended. The CPUC found that the current PCIA methodology overestimates the market value of the utilities’ portfolio, thereby reducing the amount that customers pay when they leave to join a CCA or DA. To correct this, the new methodology, voted on October 11, 2018, maintains the same framework but adopts new benchmarks to improve its accuracy.²⁹ The impact from the change to average CCA residential customers in SDG&E territory represents an estimated 5.4 percent increase relative to 2018 bills—the highest increase among all utilities, where PG&E stands at a 1.6 percent increase and Edison territory at a 2.5 percent increase. This also depends on the energy market, the CCA itself, when the customer left of utility, as well as on how the CCAs procure energy.³⁰

Under the new method, CleanPowerSF is considering shutting down, as it would increase prices by 200 percent.³¹ Under current estimates, CleanPowerSF customers will collectively pay between \$40 and \$50 million more per year. CleanPowerSF could absorb the additional costs, but it would represent the loss of approximately 25 percent of its forecasted revenue.

Senate Bill 237 (2018) Electricity: direct transactions.

Other legislation further complicates the regulatory environment. SB 237 directs the California CPUC to expand the existing direct access (DA) service program by 4,000 GWh for non-residential costumers. Direct Access is a type of retail deregulation in which electricity customers can directly choose their Electric Service Providers (ESPs), but the local incumbent investor-owned utility still handles billing, metering, and the distribution grid for a fee that is passed onto consumers. This has important implications for CCAs.

²⁸ [California Public Utilities Commission. \(2018\). “CPUC Commissioners Discussion and Vote \(October 11, 2018\)”. YouTube.](#)

²⁹ [Ibid.](#)

³⁰ [Ibid.](#)

³¹ [Toren, Michael. 2018. “SFPUC Weighs Future of CleanPowerSF”. The San Francisco Examiner.](#)



Given that electricity demand in the City of San Diego totaled 8,695,835 MWh in 2015³², of which 72 percent was non-residential and 28 percent residential, a CCA must account for ESPs offering cheaper rates serving non-residential customers. Furthermore, the City of San Diego has not yet formulated how it intends to market CCAs in a way that makes all of their studied scenarios possible.

City of San Diego's Feasibility Study for a Community Choice Aggregate

In July 2017, the City of San Diego released a draft feasibility study that explores the possibility of a CCA program to begin in 2020. Conducted through a collaboration between the City by Willdan Financial Services and EnerNex, the study evaluates the financial and economic viability of a City of San Diego CCA program by enumerating the potential benefits and associated risks and discussing implementation requirements of several scenarios.

Estimates provided in the 2017 feasibility study conducted by the City of San Diego range from a net positive margin of \$166 Million and a net negative margin of \$2.8 Billion through 2035.³³ The study warns that the increased cost of renewable energy resources over conventional, natural gas-fired generation resources, may disadvantage the CCA program relative to SDG&E or ESPs, and may endure for an unknown amount of time.

The study conducts five scenarios, with a base case scenario with a 50 percent Renewable Portfolio Content power supply for 98 percent of CCA customers with the remaining 2 percent of CCA customers opting up to the 100 percent Renewable Portfolio Content optional program. Scenarios two through four study 50, 80, and 100 percent Renewable Portfolio Content power supply for all customers, respectively. Scenario five has an 80 percent Renewable Portfolio Content power supply for 98 percent of CCA customers with the remaining 2 percent opting up to the 100 percent option.

The City and its consultants also defined six CCA sensitivity analyses to bound the probable outcomes based on the major risks to the CCA program, which were applied to the base case. The risks these analyses test for are high and low SDG&E rates, high and low PCIA, and high and low Opt Out. However, the 20 percent of City load served under Direct Access (DA) has been excluded from a CCA program load for all scenarios and sensitivity analyses.

Size is also a risk factor. A CCA in the City of San Diego would be "... over twice the size of all the other operating CCAs, except for Peninsula Clean Energy, and nearly ten times bigger than half of the operating CCAs."³⁴ The magnitude of this proposed venture could significantly impact operations and risk exposure in ways not yet experienced by other CCA programs and on SDG&E operations.

³² [Willdan Financial Services and EnerNex. \(2017\) "City of San Diego Feasibility Study on Community Choice Aggregate"](#).

³³ Ibid.

³⁴ [Willdan Financial Services and EnerNex. \(2017\) "City of San Diego Feasibility Study on Community Choice Aggregate"](#).



This study has been highly criticized. An analytical review conducted by the Fermanian Business and Economic Institute (FBEI) at Point Loma Nazarene University calls it “at best a weak endorsement [for CCAs], especially in light of the number of risks regarding both its benefits and costs.”³⁵ FBEI found that the study’s base case only achieves a 51 percent renewable energy supply by 2035, overstating the amount of GhG reductions it would achieve by 33 percent and its potential economic impact.³⁶ The study also finds that the CCA is “unlikely to add to new renewable energy capacity at least until after a number of years when it might generate positive returns,” and it shows that the CCA utility rates necessary to cover expenses would initially be higher than those available from SDG&E.³⁷

³⁵[“Analytical Review of the Feasibility Study for a Community Choice Aggregation Program in the City of San Diego”](#). (2017). PLNU Fermanian Business & Economics Institute. Pg. 2.

³⁶ Ibid.

³⁷ Ibid.

Benefits

Benefit	Evidence	Counterarguments
<i>Local Choice and Community Engagement</i>	<ul style="list-style-type: none"> ✓ Shift of governance structure allows for public agencies to buy energy according to their environmental policy goals. ✓ Theoretically, all proceeds should be reinvested back into the community they serve through investments in the pertinent infrastructure and renewable energy procurement. 	<ul style="list-style-type: none"> ✗ By comparison, Community Choice agencies might be relatively inexperienced, and their governing boards have no industry background to inform decisions. Investor-owned utility companies and their boards tend to have decades of experience in procuring low-cost, reliable electricity.
<i>Control over Local Energy Rates (Current and Future)</i>	<ul style="list-style-type: none"> ✓ A California Energy Commission study showed current CCA capital costs were 5.5 percent compared to 12.9 percent for IOUs.³⁸ ✓ CCAs forming today typically offer rates in the range of 2 to 5 percent cheaper than the IOU. Initially, rates for MCE’s cheapest electricity option were slightly less than PG&E. 	<ul style="list-style-type: none"> ✗ Energy is a long-term business, where cities that join CCAs are liable for large, long-term financial obligations. ✗ Although MCE’s base package costs 2-5 percent less than PG&E effective March 2018, the rates have fluctuated, where customers have paid a monthly average of \$4 to \$32 more than PG&E.
<i>Lesser Environmental Impact and Reduction of Greenhouse gas emissions (GhG)</i>	<ul style="list-style-type: none"> ✓ In theory, CCAs stimulate local consumption of renewable energy at a competitive rate. ✓ If CCAs believe they can obtain better PPA prices now versus in the future, it is likely that CCAs will over-procure and therefore exceed renewable targets, rather than only procuring the minimum megawatts required to meet California’s RPS mandates. 	<ul style="list-style-type: none"> ✗ CCAs can reduce, but do not eliminate, reliance on fossil fuels: power generation from wind and solar is intermittent, use of traditional fossil sources is necessary to ensure 24/7 power. ✗ Utilities can easily meet those goals all by themselves: all load-serving entities are required to have 65 percent of its portfolio comprised

³⁸ [California Energy Commission. 2015. “Estimated Cost of New Renewable and Fossil Generation in California”.](#)

	<p>✓ MCE Solar One is expected to eliminate 3,234 metric tons of carbon-dioxide in one year, made possible in part by MCE’s commitment to local reinvestment.³⁹</p>	<p>of 4 long-term renewable resources starting in 2021.</p> <p>✗ CCAs often buy renewable energy credits that may relabel fossil fuel energy as clean. This lowers costs so CCAs can compete on price with utility companies.</p> <p>✗ The “cleanest” energy options tend to be the most expensive.</p>
<p><i>Alternative Revenue Streams to Local Government</i></p>	<p>✓ CCAs create opportunities to develop generation projects to increase employment.</p>	<p>✗ We must be cautious about overstating the economic impact a CCA may have, where job creation should not come at the expense of taxpayers.</p>
<p><i>A More Competitive Retail Marketplace</i></p>		<p>✗ CCAs represent a shift in power purchasers, not suppliers. Direct Access is more representative of a true competitive market.</p>

³⁹ [Marin Clean Energy. \(2018\). “We promised Local Renewables. Now We’re Delivering”.](#)

Costs

Costs	Evidence	Recommended Mitigation Technique
<p><i>Implementation and Contracting</i></p>	<p>✗ The CPUC requires posting of a \$100,000 bond.</p> <p>✗ CAISO requires a \$500,000 bond for any entity registering as a market participant to schedule energy load.</p> <p>✗ To initiate energy purchases, an additional several million dollars can also be required depending on the size of the jurisdiction and on the short-term approach for energy procurement.</p> <p>✗ CCAs start out with no power generation of their own and therefore must contract with existing energy providers to purchase the clean power that they claim to provide during the first few years of their implementation.</p> <p>✗ The increased cost of renewable energy resources over conventional, natural gas-fired generation resources may disadvantage the CCA program relative to SDG&E.⁴⁰</p>	<p>✓ To meet these costs, a CCA might resort to loans, for which it has to pay interest over an unknown amount of years. To streamline costs and protect taxpayers, any bond should have a clear schedule of payments and projects as well as a robust oversight body.</p> <p>✓ CCAs must negotiate the appropriate mix of short-term and long-term contracts.</p> <p>✓ According to SDG&E: “Procuring resources through short-term contracts impacts the amortization cost and can result in higher costs to customers. Long-term projects ensure sufficient recovery of the initial capital at the same time that they keep annual prices low.”⁴¹</p>
<p><i>Annual Cost</i></p>	<p>✗ On-going administrative costs for operating a CCA can range from \$1.8 to \$16 Million.</p> <p>✗ Cost estimates tend to exclude the expense of credit or capital needed to initiate energy procurement, which could potentially be close to</p>	<p>✓ A CCA can pursue arrangements with its power suppliers to eliminate or reduce the need for or size of funding for the start-up and operations costs.</p> <p>✓ CCA investors should be paid back first and any</p>

⁴⁰ [Willdan Financial Services and Enernex. \(2017\) “City of San Diego Feasibility Study on Community Choice Aggregate”.](#)

⁴¹ (2018). SDG&E Responses to SDCTA.

	<p>\$1 Million, depending on how the program is launched.⁴²</p> <p>✓ CCAs only need 10-20 people to operate smoothly.⁴³</p>	<p>remaining revenue should then flow to the CCA.</p>
<p><i>Power Charge Indifference Adjustment (PCIA)</i></p>	<p>✗ The recently approved methodology will increase residential bills for members of CCAs by 1.7-5.2 percent, with CCA customers in SDG&E territory seeing the highest increase.</p> <p>✗ Collar and cap financing mechanisms may create a long-term financial liability for cities similar to the unfunded liability created by pensions.</p>	<p>✓ A CCA should not use collar and cap financing mechanisms, where paying the full amount upfront represents the true cost without interest.</p>
<p><i>“Opt-out fees” “Re-Entry fees”</i></p>		<p>✓ To mitigate the exposure to economic loss resulting from a counterparty departing, the CCA program must ensure its ability to create a departure charge that would help cover the cost of excess electricity supplies and contract liability.</p>

⁴²[California Clean Power. \(2016\). “City of Solana Beach: Community Choice Aggregation Technical Analysis”. Pg. 20](#)

⁴³[Cameron, Colin. \(2016\). “Five Common Questions About Community Choice Aggregation”. Clean Power Exchange.](#)

Risks

Given the observed benefits and costs, the San Diego County Taxpayers Association has observed the following risks, to which it offers mitigation techniques that should guide the City of San Diego, should it choose to adopt and implement a Community Choice Aggregation plan.

Risk	Evidence	Recommended Mitigation Technique
<p><i>Market Price Volatility and Energy Composition</i></p>	<p>✗ Risk due to changes in the market prices of energy, where CCA rates may be higher than utility or demand may be underestimated.</p>	<p>✓ A CCA must account for reliability and resiliency. ✓ The procurement process must evaluate the inherent risks associated with demand forecasting and develop appropriate risk mitigation strategies, such as establishing and monitoring risk limits and tolerance.⁴⁴ ✓ A stabilization fund may allow CCA to hold prices steady even when fuel prices rise.⁴⁵</p>
<p><i>Energy Composition</i></p>	<p>✗ Most CCAs are still determining what proportion of their load will be made up by solar utility, where the remaining demand could be met with a mix of renewables that may put it at risk of resource shuffling. ✗ Resource shuffling occurs when a CCA claims that it provides clean, renewable energy, but the energy is purchased from a source that offsets the sale of clean, renewable energy by using non-renewable sources to fulfill its existing obligations and maintain rates competitive to that of the IOU.</p>	<p>✓ A CCA must be able to demonstrate that it is the likely choice to provide the greatest return on investment in terms of actual and additional global greenhouse gas emissions reduction and public health benefits versus local fiscal and economic impact, including job creation and loss. ✓ Contracts must take a long-range view that accounts for technological progress, municipal risk over time, uncertainty, and flexibility.</p>

⁴⁴ [City of Solana Beach. “Solar Energy Alliance \(SEA\)”](#).

⁴⁵ Ibid.

<p><i>Volumetric</i></p>	<p>✗ The risk of unexpected fluctuations in retail load or energy availability and their impact on revenue.</p>	<p>✓ A CCA must establish reserves and diversify its portfolio, refining and evaluating load forecasts in partnership with pertinent agencies.</p>
<p><i>Operation and Organization</i></p>	<p>✗ Any savings or capital could be offset by the costs of a new bureaucracy.</p> <p>✗ Legal exposure from Renewable Energy Credits may create additional litigation costs for a jurisdiction.</p>	<p>✓ A CCA must account for the pursuit of collaboration and, whenever possible, leverage external funding sources.</p> <p>✓ Joint Powers Authority structures are more fiscally responsible than having a single government be the sole creator and operator of a CCA, as the jurisdiction shares the responsibility and pools risks with the other agencies participating in the JPA.</p> <p>✓ A CCA must quantify actual costs and benefits to be derived using peer-reviewed and broadly-applicable methodology, applying these methodologies consistently.</p> <p>✓ Salaries of officials cannot be higher than that of the government agency's or the utility's highest operating officer.</p>
<p><i>Retention and Creation of Unfunded Liability</i></p>	<p>✗ Current CCAs' retention rates vary between 78 and 89 percent.⁴⁶</p> <p>✗ Entering into long-term, fixed-rate contracts may cause CCA subscribers to be contractually bound to pay a higher rate in the future that does not compete with the one IOUs can offer. If that were to happen, a CCA could shut down, but taxpayers would still be responsible for covering the difference.</p>	<p>✓ Typically, new projects need 10 years or more to ensure sufficient recovery of the initial capital outlay while also keeping the annual price low.</p> <p>✓ To mitigate the exposure to economic loss resulting from a customer departing, the CCA program must ensure its ability to create a departure charge that would help cover the cost of</p>

⁴⁶ [DeShazo, J.R. Dr. \(2017\). "The Promises and Challenges of Community Choice Aggregation in California". UCLA Luskin School of Public Affairs. Pg. 6](#)

	<p>✗ Governments may use the General Fund to offset the cost of operations and its liabilities from contracts and cap and collar mechanisms, adversely affecting the funding other public projects can receive and burdening the public agency.</p>	<p>excess electricity supplies and contract liability.</p> <p>✓ Contracting with multiple suppliers could reduce risk exposure.</p> <p>✓ A CCA must establish financial protections for the General Fund.</p> <p>✓ Any capital accumulated should be distributed back to taxpayers proportionally to energy consumption.</p>
<p><i>Regulatory and Legal</i></p>	<p>✗ Future regulatory decisions could result in cost increases for CCA programs.</p> <p>✗ Continued participation in CPUC proceedings will be necessary to protect CCA interests.</p>	<p>✓ Conditions for standing down the entity must be established upfront – if a reliable system whereby a customer can truly pick his/her energy mix (and not depend on either utility or CCA to do so), then the CCA should execute the appropriate exit plan.</p> <p>✓ If applicable, an agency must update its Climate Action Plan before the implementation of a CCA. SDCTA has further recommendations specific for the City of San Diego in Appendix B.</p>

Proponents

Proponents hold that community choice aggregation programs offer more than just choice, as they transfer more control to the community, where revenues get reinvested in the community, not distributed to shareholders. All aspects of the program’s operation are determined by the community while benefitting both the environment and the local economy. The main local proponents for CCAs include the California Community Choice Association, the Climate Action Campaign, and Mayor Kevin Faulconer.

Opponents

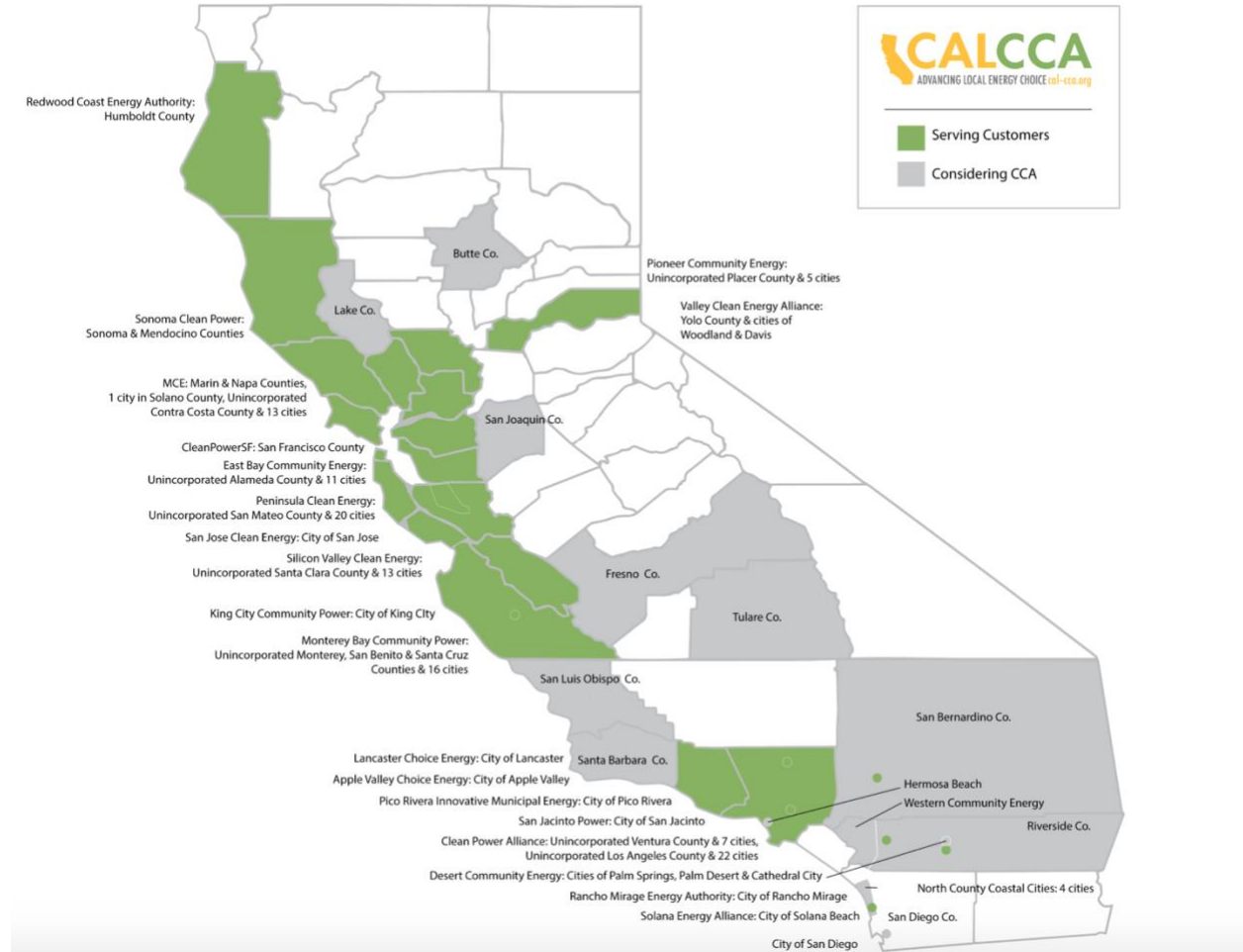
Investor-Owned Utilities in California have been long-standing opponents of CCA programs, as it represents a mechanism that takes away their customers while keeping the utilities responsible of managing the power lines, maintenance crews, and the customer service platforms that keeps them



running.⁴⁷ Other opponents argue that the financial risk is overly-burdensome for CCA jurisdictions, that it does not produce good-paying local jobs, and that jurisdictions may not have the expertise to buy and sell energy. Some question whether transportation should be real focus of GhG reductions, as it is the largest generator of that type of pollution, and further argue that jurisdictions must have more pressing policy priorities, such as housing affordability and homelessness. The main local opponents include the Clean the Air Coalition and several skeptical community members.

⁴⁷ [St. John, Jeff. 2018. "California Sets New Rules for Community Choice Aggregators". Green Tech Media.](#)

APPENDIX A: Map of CCAs across California





APPENDIX B: Principles for Updating the City of San Diego’s Climate Action Plan

After communicating with City of San Diego officials, SDCTA has found that the City’s Climate Action Plan (released in 2015 with 2010 figures and data) does not account for significant changes in state law and the state regulatory environment and will not be updated to reflect those changes in its goals until it is refreshed in 2020. The baseline “business-as-usual” reference points and reduction targets need to account for significant changes, such as the newly refreshed 100 percent zero carbon goals with the passing and approval by Governor Jerry Brown of Senate Bill 100 (SB 100); the strategies of the CAP need to be reviewed and adjusted with updated emission reduction estimates after consideration of state law to ensure that San Diego is not taking a disproportionate share of risk in California and inadvertently creating unnecessary financial and legal exposure for its taxpayers.

The San Diego County Taxpayers Association offers the following principles that should guide the CAP update:

- 1. Align the City of San Diego’s “business-as-usual” and reduction benchmarks with the goals enacted across the state through actions like water conservation targets and SB 100 to ensure that San Diegans do not bear disproportionate risk.**

The state has set numerous statewide goals since the CAP was initially adopted, and the region itself has demonstrated it can conserve water effectively. The baseline and target figures of the CAP should account for these observations and regulatory changes.

For example, SB 100 set statewide goals for emissions through energy usage, and specifically, there is a ten-year delta between the City’s goal of 100 percent renewable energy by 2035 in Strategy #2, “Clean & Renewable Energy,” and the state’s zero emission goal of 2045. A ten-year difference when the renewable energy market in California is not yet mature—supply does not yet meet needs—could result in San Diegans taking a disproportionate share of risk in the state as that market matures. As greenhouse gas emissions do not observe municipal or agency boundaries, it is unwise to create such a disparity between City and state goals.

Additionally, Strategy #1, “Energy & Water Efficient Buildings,” should account for water conservation activities in the region, as well as state-level activities that affect San Diego water consumption.

That said, the Association recognizes that the City also wishes to demonstrate leadership in climate action, so even if a refresh of the CAP created stretch goals, it should do so against updated numbers that account for the significant changes from state activities. The CAP says that itself: “[f]uture actions anticipated by the state and possible federal initiatives would reduce the need for local measures and help ensure broader participation in emission reduction efforts.”



- 2. Acknowledge the changes that have occurred since 2015 in market assumptions on various emission reduction strategies; and that the private sector is advantaged in creating pilots and tests that the City would be otherwise challenged to execute and scale.**

Technology and the rapidity of changes in the market necessitate that the City give itself more flexibility in leveraging the private sector to achieve emissions reduction goals. For example, Strategy #3, “Bicycling, Walking, Transit, and Land Use,” does not reflect the usage of scooters and how their availability could increase transit usage and reduce short-distance vehicle trips. The City should recognize in the CAP that the private sector is a more efficient mechanism to achieve goals, and the CAP should limit the City to market shaping and experimentation activities—not the creation of markets or government enterprises.

- 3. Recognize that marketplace conditions in achieving emissions reductions are significantly different than originally observed or anticipated in the CAP.**

For reasons of prudent management in the context of an ever-changing marketplace, the City should consider in rethinking CAP strategies and specifically Strategy #2, “Clean & Renewable Energy,” and Strategy #4, “Zero Waste (Gas & Waste Management)” due to changing market conditions.

For Strategy #2, the City needs to recognize that two state-level factors will create high risks in implementing a CCA. First, the California Public Utilities Commission is soon to set the Power Charge Indifference Adjustment, which has a notable impact on the cost to San Diego taxpayers of developing a CCA—in addition to non-San Diego taxpayers should the “collar and cap” mechanism being considered by the CPUC be adopted. Second, Senate Bill 237, approved by Governor Jerry Brown in September 2018, allows for more commercial customers to directly access energy suppliers, bypassing utilities and CCAs. Increased Direct Access (DA) directly affects the number of customers that may opt out of CCA service after a CCA provider has incurred long-term financial obligations on behalf of those customers, which can create significant stranded cost risk. If CCA is viewed as being able to achieve lower prices by aggregating market purchase power to buy cleaner energy, DA also severely limits a CCA’s ability to aggregate that market purchase power.

For Strategy #4, there are significant changes in recyclable management due to global trade conditions. The goals for emissions reductions through waste management should account for observed increases in costs of recycling.

- 4. Reduce legal exposure to San Diego taxpayers.**

Finally, the CAP refresh should maximally reduce legal exposure to San Diego taxpayers. This can be done in two ways:

1. Accounting for recent legal activity



Strategy #2, “Clean & Renewable Energy,” states that if neither a CCA nor alternative is used to reach 100 percent renewable energy by 2035, then the City can explore Renewable Energy Credits. Recent legal activity against the County of San Diego in the usage of similar credits in development suggests that the City ought to protect itself by not utilizing RECs at all and actually achieving real and additional emission reductions by purchasing actual renewable energy through contracts that will lead to new renewable development.

2. Updating the timeline of the CAP to reflect the realities noted in these principles with respect to changing marketplace and regulatory conditions.

5. Signal priorities and focus government activity by detailing specifically when future updates will occur.

The Association acknowledges the great effort that went into the initial drafting and adoption of the CAP and encourages continuous efforts to update the CAP. The City ought also to include in the next update more details on what and when components of the CAP will be updated as not to overwhelm both government planners and taxpayers; signaling priorities on the most meaningful ways of achieving emissions reductions will also help taxpayers get the most cost-effective strategies in achieving our shared desires in environmental stewardship.

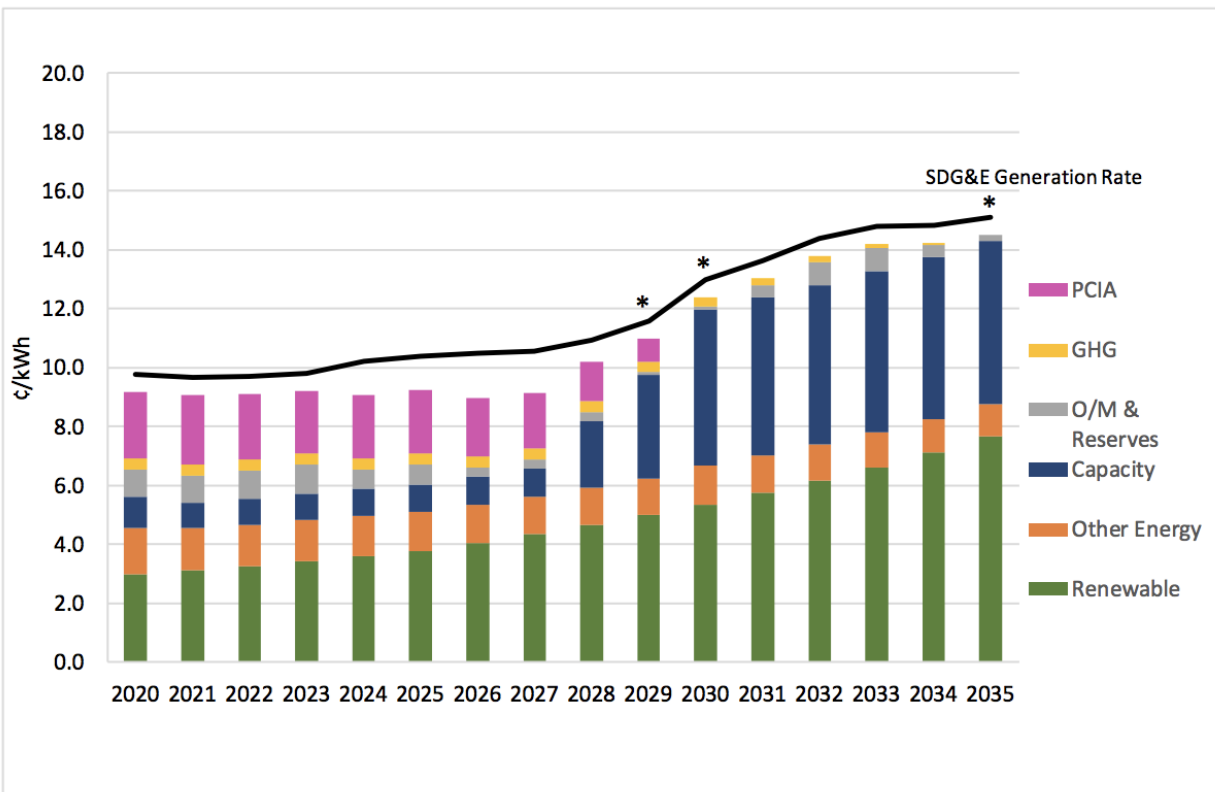


APPENDIX C: Summary of the Business Plan for the Formation of a Community Choice Aggregation Program for the City of San Diego⁴⁸

The Business Plan, released on October 25, 2018, builds upon the 2017 feasibility study to evaluate implementation options for a CCA to reach its 100 percent renewable energy goal by 2035.

Summary of the Business Plan for the Formation of a Community Choice Aggregation Program for the City of San Diego	
Intent	Description/Assumptions
<i>Program Goals</i>	1) To offer competitive rates 2) To contribute to the City’s Climate Action Plan goals 3) Others: <ul style="list-style-type: none"> • Economic development • Local jobs and employment • Prioritization of renewable power development • Local citizen input and participation
<i>Management Structure</i>	The City must decide between two primary governance options for the CCA: 1) The City as the sole government agency responsible for the CCA’s creation and operation 2) Participation with other agencies in a joint-powers authority (JPA) 3) A hybrid JPA, where the CSDCCA maintains rate and local program control, but shares some other common activities with other CCAs
<i>Load to be Served</i>	1) The pool of possible CCA customers is limited to those currently served by SDG&E, where about 33 percent of SDG&E’s load is residential, 47 percent is non-residential served by SDG&E, and 20 percent is non-residential served by Direct Access (DA). 2) The City’s total annual electric load is about 8,200 GWhs, or 45 percent of SDG&E’s total load. 3) The impact of SB 237 is included in the business plan by assuming an incremental DA load would not be served by the CCA. DA customers are not likely to join a CCA because of existing contracts with their ESPs. 4) Assuming that 5 percent of the customers who may join the CCA choose to opt out and remain on SDG&E service, the total load to be served by the San Diego CCA is a bit over 6,000 GWhs.

⁴⁸ [MRW & Associates. \(2018\). “Business Plan for the Formation of a Community Choice Aggregation Program for the City of San Diego.” Prepared for the City of San Diego.](#)

<p><i>Power Supply</i></p>	<p>1) In the short-term, the CCA would rely upon existing resources for its power supply in the first years of service. 2) In the long-term, the CCA would directly contract with specific power projects, whether they be new renewables or short-term contracts with already existing renewable or conventional resources.</p>																																																																																																																																								
<p><i>Rate Comparisons</i></p>	<p>Figure 7. Average CCA Cost Projections, Including Reserves and a Minimum Rate Savings of 0.5¢/kWh</p>  <table border="1"> <caption>Estimated Data for Figure 7: Average CCA Cost Projections (¢/kWh)</caption> <thead> <tr> <th>Year</th> <th>Renewable</th> <th>Other Energy</th> <th>Capacity</th> <th>O/M & Reserves</th> <th>GHG</th> <th>PCIA</th> <th>SDG&E Generation Rate</th> </tr> </thead> <tbody> <tr><td>2020</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>9.8</td></tr> <tr><td>2021</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>9.8</td></tr> <tr><td>2022</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>9.8</td></tr> <tr><td>2023</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>9.8</td></tr> <tr><td>2024</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>9.8</td></tr> <tr><td>2025</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>9.8</td></tr> <tr><td>2026</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>9.8</td></tr> <tr><td>2027</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>9.8</td></tr> <tr><td>2028</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>9.8</td></tr> <tr><td>2029</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>11.8*</td></tr> <tr><td>2030</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>13.8*</td></tr> <tr><td>2031</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>14.8*</td></tr> <tr><td>2032</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>15.8*</td></tr> <tr><td>2033</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>16.8*</td></tr> <tr><td>2034</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>17.8*</td></tr> <tr><td>2035</td><td>3.0</td><td>1.5</td><td>1.0</td><td>1.0</td><td>0.5</td><td>2.0</td><td>18.8*</td></tr> </tbody> </table>	Year	Renewable	Other Energy	Capacity	O/M & Reserves	GHG	PCIA	SDG&E Generation Rate	2020	3.0	1.5	1.0	1.0	0.5	2.0	9.8	2021	3.0	1.5	1.0	1.0	0.5	2.0	9.8	2022	3.0	1.5	1.0	1.0	0.5	2.0	9.8	2023	3.0	1.5	1.0	1.0	0.5	2.0	9.8	2024	3.0	1.5	1.0	1.0	0.5	2.0	9.8	2025	3.0	1.5	1.0	1.0	0.5	2.0	9.8	2026	3.0	1.5	1.0	1.0	0.5	2.0	9.8	2027	3.0	1.5	1.0	1.0	0.5	2.0	9.8	2028	3.0	1.5	1.0	1.0	0.5	2.0	9.8	2029	3.0	1.5	1.0	1.0	0.5	2.0	11.8*	2030	3.0	1.5	1.0	1.0	0.5	2.0	13.8*	2031	3.0	1.5	1.0	1.0	0.5	2.0	14.8*	2032	3.0	1.5	1.0	1.0	0.5	2.0	15.8*	2033	3.0	1.5	1.0	1.0	0.5	2.0	16.8*	2034	3.0	1.5	1.0	1.0	0.5	2.0	17.8*	2035	3.0	1.5	1.0	1.0	0.5	2.0	18.8*
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<p><i>Supply Management</i></p>	<p>The first fundamental decision that the CCA management or board would need to make would be how much, if any, of the supply management would be conducted by CCA staff, with the remainder outsourced to other entities. Some functions, such as schedule coordination (i.e., hour -to-hour management of the CCA’s power in the California Independent System Operator (CAISO) market) would need to be handled by a qualified contractor. Other functions,</p>																																																																																																																																								



	<p>such as the determination of desired resources, long-term resource planning, issuance of request for offers for power, can be handled either in-house or outsourced to qualified contractors.</p>
<p><i>Rate Setting</i></p>	<p>CCAs typically set rates as a prescribed amount below their incumbent IOU's rates, be that a percent discount or a fixed cent per kilowatt-hour discount. The discounts are set so that the CCA collects enough revenue to cover its costs.</p> <p>The three variables with the greatest potential impact on the overall average cost of the CCA were investigated:</p> <ul style="list-style-type: none"> (1) higher or lower renewable supply costs (2) higher or lower natural gas prices (3) what would happen if the PCIA was 25 percent higher than forecast (4) high opt-outs due to expanded Direct Access

Table 1. Estimated Start-Up Costs

Item	Cost	One-time or Ongoing?
Technical Study	\$150,000	One-time
JPA Formation/Development	N/A ⁷	One-time
Implementation/Business Plan Development	\$200,000	One-time
Power Supplier Solicitation & Contracting	\$100,000	Ongoing
Staffing	\$1,500,000	Ongoing
Consultants and Legal Counsel	\$700,000	Ongoing at reduced level
Marketing & Communications (incl. out-out)	\$700,000	Ongoing at reduced level
SDG&E Service Fees	\$50,000	Ongoing at reduced level
CCA Bond	\$150,000	One-time
Equipment and lease	\$1,000,000	Ongoing
Miscellaneous (contingency)	\$500,000	Ongoing at reduced level
Total	\$5,000,000	
Working Capital	\$100,000,000	One-time. Total amount after full phase-in.
Total	\$105 million	

Table 2. Ongoing Administrative and General Costs

	Cost
SDG&E Metering and Billing Fees, \$/cust/month	\$0.06
Data Management Fees \$/customer/month	\$1.88
Administration - Labor	\$2,500,000
Administration- Non-Labor	\$1,000,000
Professional Services	\$3,500,000
Data Management Fees	\$8,863,814
<u>SDG&E Metering and Billing Fees</u>	<u>\$263,382</u>
Total	\$16,127,196

<i>Back-Office</i>	Utilization of contracted services has been explored during the feasibility analysis and are assumed as the basis for many aspects of the City’s possible future CCA operation. While outsourcing services to an ESP may reduce initial startup and operational costs, the cost over time will likely be greater. An ESP may be willing to guarantee certain service components, such as savings, rate certainty, renewable content, etc., but will likely require a greater premium for doing so.
<i>Finance</i>	The City must decide between several financial options for the CCA: <ul style="list-style-type: none"> • Direct Loan from City (startup) • Collateral Arrangement from City (startup and ongoing) • Loan from a Financial Institution with Support (startup and ongoing) • Loan from a Financial Institution without Support (startup and ongoing) • Vendor Funding (ongoing) • Short-term commercial paper (ongoing) • Letters of credit (ongoing)
<i>Reserves Policies</i>	CSDCCA has a policy related to establishing reserves to support its operations. There are two main reserves: <ol style="list-style-type: none"> 1) An operating reserve target level equal to 90 days of operating expenditures 2) A contingency/rate stabilization reserve target level equal to 15 percent annual revenues



Recommendation

Staff of the City of San Diego recommends “moving forward with the formation of a Joint Powers Authority (JPA) chartered to establish a regional CCA program, capable of meeting our 100 percent renewable energy goal by 2035, in a manner which delivers reduced rates to participating residents and businesses. By launching a CCA through JPA, the City has an opportunity to remove the general fund from the financial risks associated with entering into long-term energy contracts and continued operations of a CCA. [They] also recommend the creation of an advisory board made up of energy and finance experts who can advise the Board on rate-setting matters as well as potential customer incentive programs in which to invest revenue.”⁴⁹

Proposed Timeline

2018

- December – resolution available for docketing to Committee and/or Council

2019

- First Quarter
 - o Begin formal meetings with potential founding members of a JPA to negotiate a structure and guiding principles
 - o Engage in CPUC PCIA Phase 2 proceeding
- Third Quarter
 - o City Council acts to officially form the new JPA
 - o Develop budget needs for FY20
 - Requests will include regulatory and legal support, portion of startup costs
- Fourth Quarter
 - o CCA is now stand-alone organization
 - Actions include hiring staff, determining consulting services needed, updating energy load forecasts, issuing RFO for energy procurement, developing and implementing customer engagement program.
 - Expand CCA Implementation Plan (required filing to CPUC) to reflect JPA structure
 - Adopt CCA Ordinance and file CCA Implementation for a Q1 2021 launch
 - Hire CEO and CFO for CCA

2020

- JPA continues to hire staff, update energy load forecasts, review RFOs for energy procurement, developing and implementing customer engagement program

2021

- CCA begins service to customers – phased in by customer class

⁴⁹ [Hooven, Cody. \(2018\). “Memorandum: Implementation recommendations related to 100% renewable energy.” The City of San Diego.](#)