Community Choice Energy

A ROLE FOR PUBLIC-PRIVATE PARTNERSHIPS?

Amanda McNary and Jeff Byron PublPol 135, presented 5/26/15

Can We Do More To Address Climate?

Climate consistently ranks near the bottom of social issues for Americans

Yet, 66% agree with the statement, "We need to transform the outdated ways of generating energy into new ones that create jobs and entire industries, and stop the damage we've been doing to the environment."*

What if there was an option for consumers to reduce the carbon footprint of their electricity use and save money in the process?

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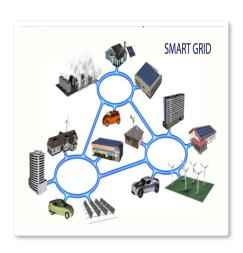
Case Study (existing): Marin Clean Energy

Case Study (future): Los Altos

Recommendations

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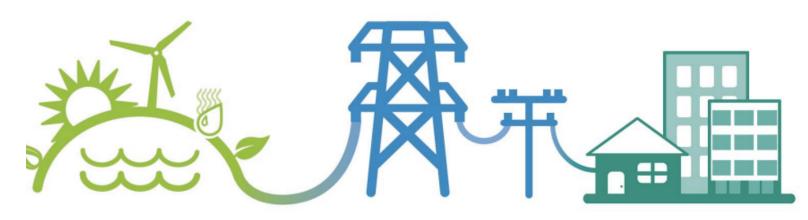
Background



What is Community Choice Aggregation?

- •Allows communities (cities, counties, even smaller communities) to procure their own power and set their own rates
- •Guaranteed right to communities via AB117 (2002)
- •Motivation formerly to reduce rates but now focus tends to be expansion of renewable energy and addressing climate goals

What is Community Choice Aggregation?



RENEWABLE ENERGY

Electric Generation

SAME SERVICE AS ALWAYS

Electric Delivery

YOUR COMMUNITY CHOICE

A Greener Electric Option

MCE

PG&E

Customer

Stanford University

Source: Marin Clean Energy

The Issue

- How should interested communities, like Los Altos, best move forward with implementing CCAs?
- What should be the role of public-private partnerships, if any?
- (Much less of a problem than the two previous groups this is more of an opportunity!)

Stakeholders (1 of 3)

Cities (City Councils)

- Make the initial decision to approve or disapprove plans for a CCA program
- Set goals for program; climate, renewables, savings, etc.
 Citizens (Consumers)
- Have the option to opt-out of a CCA program once a city council has decided to move forward
- High opt-out rates can determine the financial success or failure of a program

Stakeholders (2 of 3)

Joint Power Authorities

- In 2/3 existing CA cases cities have joined together to form an independent body
- Independent body that adopts fiscal and logistic responsibility, with initial financial support from the included cities

California Public Utilities Commission

 Must approve initial requests and all detailed implementation plans

Stakeholders (3 of 3)

IOU (PG&E, for example)

- Must continue to provide T&D service to CCA customers, as well as full services to opt-out populations
- Generally antagonistic to CCAs
 Public/Private Companies and Organizations
- Seek to aid with implementation and/or operations of CCA programs
- Examples: California Clean Power and LEAN

Interviewees

Joe Como

Acting Director, Division of Ratepayer Advocates

Dawn Weisz

Chief Executive Officer, Marin Energy Authority

Mayor Jan Pepper

Mayor, City of Los Altos

Peter Rumble

Chief Executive Officer, California Clean Power

Shawn Marshall

Co-founder and Executive Director, Local Energy Aggregation Network

Case Study: Marin Clean Energy



Program Design

Three-tier program

- "Light Green" option: default option, 50% renewable energy
- "Deep Green" option: 100% renewables (mostly wind energy)
- "Local Solar" option: 100% energy from local solar
- Separate commercial and EV-charging rate structures

Motivation: renewable growth

Benefits

- Local Build-out; Renewables, Rebates, Feed-in Tariff
- Local Programs; EV charging, Home Area Networks, Energy Efficiency
- Local Jobs and Retention of Funds

Program Design



he above comparison is based on a typical usage of 463 kWh at PG&E's rates effective as of March 1st and MCE's current rates for the April 15 to March 2016 fiscal year under the Res-1/E-1 rate schedule. Costs shown are an average of summer and winter rates in baseline territory; th gas heating; actual differences may vary depending on usage, rate schedule and other factors.

Most recently verified.

Level of Success

Serve over 125,000 customers in Marin County, unincorporated Napa County and the cities of Benicia, El Cerrito, Richmond and San Pablo

Expanding farther in 2015, including into Davis

Opt-out rate has fallen from ~20% to sub-10% Saved ratepayers \$5.9 million in 2014

Lessons Learned

- 1. Going first is difficult, but experience benefits future projects
- 2. Initial costs are not insignificant
 - > Feasibility study, proposals, marketing
- 3. Transparency is important! (fiscal and procedural)
- 4. Required expertise is available through consultants and not needed full-time
- 5. Important to build financial reserves
- 6. Utilities feel very threatened

Case Study: Los Altos

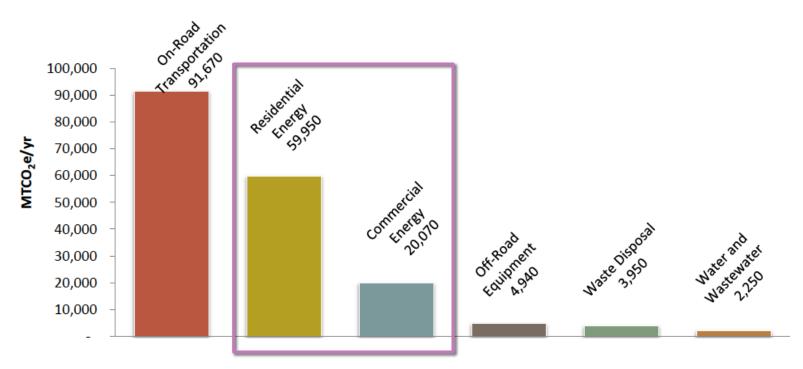


About Los Altos

- Population: 30,000 residents
- Primarily a residential community with 85% home ownership
- Median Household Income: \$ 154,821
- Motivation for CCA: fulfill goals of their Climate Action Plan
- Community choice could reach 80% of carbon reduction goal

About Los Altos

Figure 9: 2005 Community Emissions by Sector



Stanford University

Option 1: "Do It Yourself" CCA

- Form own entity to source power
- High initial costs and staffing requirements
- Assumes more risk
- May not be cost-effective for small community

Option 2: Public Partner CCA—Now

- Was originally a closed deal but hoping to expand area included
- Funds and population are pooled over a larger area
- Implementation might take longer targeting end of 2016
- Could either join now or after initial phases

Option 3: Public Partner CCA—Later

- May reduce risks and costs
- Likely occur at much later date with delayed benefits

Option 4: Commercial Partner CCA

- Promising 100% renewables for 2% below PG&E rate
- California Clean Power (CCP) is a "Public Benefit Corporation," and required to return a certain amount of the profits to the community
- Expect a short time to implementation

QuickStart - The Next Evolution

QuickStart is the state's first and ONLY no-cost, full-service solution



Stanford University

Source: California Clean Power

Option 5: Green Option

- Essentially is the "Do nothing approach"
- Can advertise membership into PG&E's upcoming green option
- PG&E voluntary program has \$.02-03/kWh premium
- No guarantee for participation rates
- No additional revenue for the city

Options Comparison By City Environment Commission

Community Choice Energy Opti	ons, and High-L	evel Comparison	of General Attr	ibutes	
		Community Choice Energy Option			
	1	2	3	4	5 PG&E
	DIY	Public Partner	Public Partner	Commercial	Green
<u>Attribute</u>	CCA	CCA - ASAP	CCA - Later	Partner CCA	Option
Potential GHG Reduction Impact	•	•	•	•	0
Speed of Implementation	0		0	•	
Potential for Customer Cost Savings				•	0
Cost Efficiency to Implement			•	•	
Degree of City Influence/Control	•		0		0
Market Precedent/Experience/Predictability	0			0	
tential for Other Customer Benefits/Programs		•	•		0
	Higher Interme	diate Lower O			

Conclusions and Recommendations



- 1. Los Altos should move forward with the South Bay JPA model (Option 2)
- Larger population → increased buying power
- Managed service model (CCP) makes sense for smaller programs, but opportunity to join JPA is also a great opportunity
- Reduces financial risk (and preserves credit score)

- 2. South Bay JPA should collaborate with PPPs to get programs set up, but retain control over operations
- Rationale: in order to reduce risk while still maintaining a lot of control over the program, should try to keep operations local
- Will also keep costs as low (and predictable) as possible; unlinks utility rates and CCA rates
- Allows 100% of savings to be channeled back into community for additional projects (direct savings, future construction, efficiency programs, etc.)

- 3. South Bay JPA should leave door open for PPP relationships down the line
- Example from Marin: cooperation with Tesla home batteries
- Efficiency programs can increase profitability
- No need to "reinvent the wheel" for new projects

- 4. Managed Service Model corporations should focus on smaller community projects and project upstart
- Great for areas with limited capacity for additional staff/agencies
- Might consider a transfer-of-services model

Conclusions

- Los Altos has been progressive with Climate Action Plan and consideration of CCA
- Community choice is a promising opportunity to help communities take control over the source of their electricity generation
- Marin and Sonoma proving that CCA works and meets their goals
- Los Altos and other south bay cities in position to build on work of others in developing successful programs

Contact Information

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