



HUMBOLDT COUNTY

Community Choice Energy

ROADMAP

Introduction

BACKGROUND

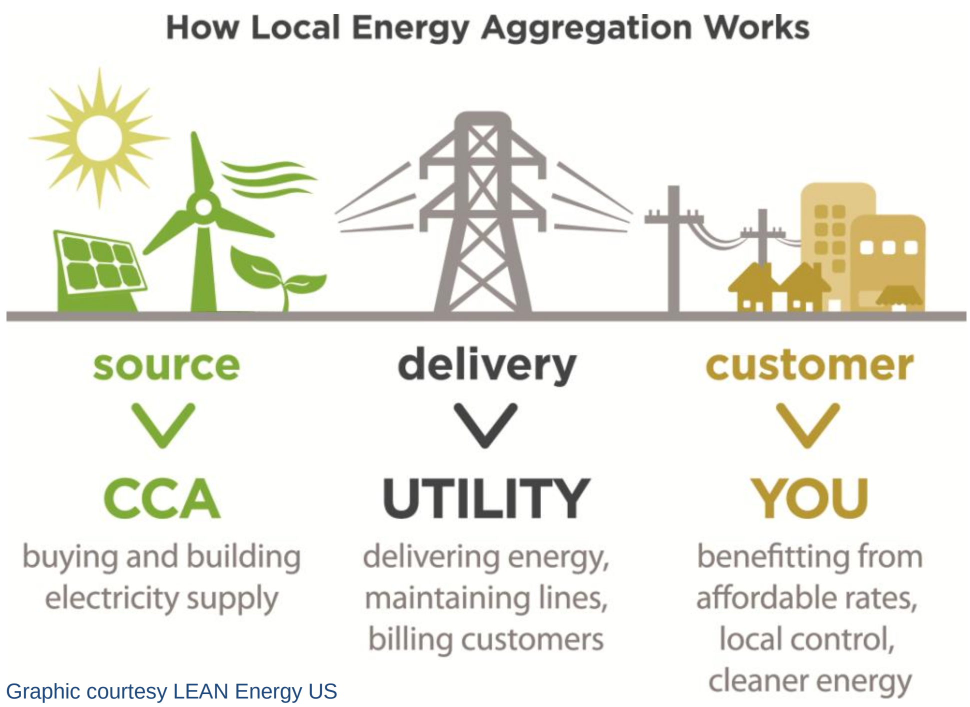
The Redwood Coast Energy Authority (RCEA) is a local government joint powers agency of the County of Humboldt, the Cities of Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, Trinidad and the Humboldt Bay Municipal Water District. Formed in 2003, RCEA's mission is to develop and implement sustainable energy initiatives that reduce energy demand, increase energy efficiency, and advance the use of clean, efficient and renewable resources available in the region. RCEA offers a range of energy related services to Humboldt County local governments, businesses, and residents in the community.

In 2012 RCEA adopted the Humboldt County Comprehensive Action Plan for Energy (CAPE), which is RCEA primary guiding document. Expanding on the strategies outlined in the CAPE, RCEA initiated RePower Humboldt, a community-wide effort to define a vision and Strategic Plan for achieving energy independence and energy security in Humboldt County. With the support of the Humboldt State University Schatz Energy Research Center, the CA Energy Commission, and many community stakeholders, this effort culminated in the development of the RePower Humboldt Strategic Plan to establish a vision for the year 2030 and guide the integration of renewable energy in Humboldt County, develop local energy infrastructure, and set energy-related goals.

RCEA has identified community choice aggregation as potentially a critical mechanism to enable the implementation of the RePower Humboldt Strategic Plan and to realize the RePower Humboldt 2030 vision and the associated community benefits of that vision. To that end, RCEA's board has directed staff to move forward with pursuing the implementation of a local community choice program.

WHAT IS A COMMUNITY CHOICE PROGRAM?

Community choice aggregation (CCA), also known as community choice energy, is a provision of California law that allows cities, counties or joint powers agencies to purchase electricity and other necessary electrical services on behalf of the customers in their territories. CCAs differ from municipal utility districts in that CCAs only provide the generation component of electricity services, which accounts for around half of a customer's electricity bill. The investor-owned utility (IOU), in our case Pacific Gas & Electric (PG&E), continues to own the electricity distribution infrastructure and to provide electricity transmission, distribution, billing, and related customer services. However, CCAs are able to determine their own energy supply mixes and rate structures.



Graphic courtesy LEAN Energy US

While CCA is relatively new in California, with three programs currently providing service to customers, there are over 1,000 CCAs operating across the country in Illinois, Ohio, New Jersey, Rhode Island, and Massachusetts.

WHY IS IT WORTH DOING?

Local Control: A CCA program allows Humboldt County to pursue our own priorities, such as local generation and programs to support economic development, and provides local control of rate-setting. Unlike IOUs, local governments are accountable to their citizens through locally elected officials whose tenures depend on serving the public good and supporting the interests of their communities. When compared with an IOU, the decision making process of a local authority will be more transparent and accessible to the public, and can better reflect the interests and desires of the community. Conversely, IOUs are required to serve the interests of their investors and are subject the regulatory constraints imposed by the CA Public Utilities Commission (CPUC).

Rates: A key motivating factor for the 1,000+ CCAs in operation has been the opportunity to reduce rates for electricity customers; like municipal utilities, CCAs have been able to provide rates sometime as much as 20-30% lower that investor-owned utilities. The established California CCAs have focused on prioritizing environmental performance, but have still managed to achieve rates 2-7% below PG&E while providing significantly higher percentages of renewable energy.

Choice: When a City or County chooses to offer a CCA program to its community, each individual household and business still has the option to opt out of the program and continue to have their generation services provided by PG&E. State law requires that customers receive multiple notices of CCA program launch to ensure they are aware of the option to opt out, and customers can also opt out after the launch anytime in the future. While no customer is forced to participate, opt-out rates are typically very low (under 10% in Sonoma County), which is not surprising when customers' utility costs are lowered by participating in the CCA .

Priorities

RCEA will implement the Humboldt County CCA program guided by three core priorities established by the RCEA Board of Directors and aligned with the RePower Humboldt Strategic Plan: maximizing the use of local renewable resources, providing competitive rates, and supporting local economic development.

COMPETITIVE RATES

A key factor in success will be our CCA's ability to achieve rate competitiveness with PG&E while pursuing other CCA program goals. To minimize customer opt-outs, the CCA must provide overall rates that are competitive with or lower than those offered by PG&E for similar power supply products.

Maintaining relative rate parity while also providing a high share of local renewable energy will be challenging. Natural gas prices are currently very low, reducing the cost of non-renewable energy. In the long run, factors such as renewable technology costs, expiration of federal renewable tax credits, natural gas prices, and greenhouse gas compliance costs will influence the ability to maintain rate parity. While these factors cannot be predicted with great confidence, one possible future benefit for a CCA would be a potentially significant financial advantage to the extent that it invests in its own generation resources, particularly if and when renewable tax credits for private developers expire. Prior to launch, RCEA is exploring a variety of supply portfolios using different cost assumptions for the above factors to determine the likelihood of maintaining rate parity while offering a larger share of renewable energy.

LOCAL RENEWABLE ENERGY

The CCA program will pursue an energy portfolio that prioritizes the use of local renewable resources, including existing facilities, to the maximum extent technically and economically feasible.

The State has aggressive goals for renewable energy, implemented through the State's Renewable Portfolio Standard (RPS) which sets targets for quantities and types of renewable energy that electricity providers must supply to their customers. These targets are 25% renewable energy by 2016, 33% by 2020, and 50% by 2030. The CCA program will strive to use local renewable resources to exceed these targets.

Existing local renewable energy generation facilities that the CCA could potentially pursue contracts with are listed in the table below along with generation information as reported by the California Energy Commission.

Facility	Nameplate Capacity (MW)	2013 net output (MWh)
Eel River Biomass Plant	32.5	134,929
Fairhaven Biomass Plant	18	115,522
Blue Lake Biomass Plant	13.8	74,450
Ruth Lake Hydroelectric Plant	2	4,228
Total	**66.3**	**329,129**

Average community-wide energy consumption in Humboldt County is around 850,000 MWh per year. So, assuming 10% customer opt-out, these existing facilities could potentially supply around 40% of the CCA's energy demand. However, the power from local facilities is not low-cost, and so a key first step in the procurement planning process will be a detailed and thorough evaluation to determine to what extent the CCA's portfolio can incorporate local renewables and still maintain competitive rates.

The CCA will also offer customer programs that offer residents and businesses options to more directly engage in the development and use of local renewable energy:

100% renewable, opt-in choice: Customers will be offered a 100% renewable energy option at a price premium, based on the costs of a 100% renewable supply.

Net energy metering tariff: Net energy metering allows customers to make their meter "spin backward" and offset their electrical usage by installing a generating system (e.g. rooftop solar).

Feed-in-tariff program: A Feed-In Tariff is a renewable energy purchasing program which sets simple and straightforward rules and pricing for purchasing surplus electricity from small-scale renewable electricity projects within the CCA's service territory.

ECONOMIC DEVELOPMENT

The CCA will strive to create quantifiable economic benefits in the region through job retention and creation and the investment of any surplus funds to develop local renewable energy projects and community energy programs that benefit customers.

The CCA will promote regional energy conservation through custom programs targeted at local customers and implementing demand management best practices. The CCA will also explore the development of energy rates and incentives that can support community business retention and expansion.

Of immediate and significant relevance to the local economy is the critical role of local biomass power plants in the forest-products sector. Biomass from sustainably managed forests is a renewable resource that can be used to generate base-load electricity, reducing the need for electricity on California's grid produced from fossil resources. In addition, biomass use in electricity generation contributes to lowering greenhouse emissions by disposing of wood residuals (sawdust, wood chips) generated from milling logs into lumber in a controlled combustion environment eliminating methane, particulate matter and other harmful emissions associated with alternative fates such as open pile burning or landfills.

Further, markets for woody materials generated from wildfire risk reduction treatments created by biomass power generation increase the likelihood that fire on the landscape can fulfill its ecological role in California's forests by allowing land managers to conduct fire risk reduction treatments on larger areas.

Two of our three local biomass plants are currently idle due to the wholesale purchase prices offered by utilities being too low for our plants to viability operate. This is the result of both the currently-low price of natural gas as well as the rapidly-decreasing cost of other renewable technologies like solar. While the low cost of other renewable resources available to utilities is an excellent development overall, the local impact of our biomass power plants shutting down has a significant negative impact on the entire forest products industry in the County in the form of increased costs of sawmill residue removal and increasing levels of logging residues left in the woods to pile burn or be burned in the next wildfire.

Yana Valachovic, University of California Cooperative Extension Forest Advisor and Humboldt - Del Norte County Director, describes the current situation this way: "Without a market to purchase sawmill residue or residue from fuel reduction or forest health activities, sawmills are scrambling, investors are looking elsewhere, and many forest stewardship activities have been stopped. This creates a significant economic and ecological crisis in this region."

The availability of local biomass facilities to utilize wood waste is the Achilles' heel of our forest-products sector, with possibly hundreds of local living-wage jobs currently threatened by the uncertain fate of our local power plants. The local control of power purchasing decisions provided by the CCA program will provide a key opportunity to potentially solve this problem. Unfortunately this urgent issue has already reached a critical point in 2014, providing an impetus for swift action to establish the CCA, determine the feasibility and parameters of incorporating biomass energy into the CCA's portfolio, and proceed with contracting if that is deemed viable.

OTHER KEY PRINCIPLES

In addition to the core priorities above, the CCA will be implemented with the following guiding principles:

Operational Excellence: The CCA will operate as a well-managed organization based on a financially sustainable and flexible business model. This will include a commitment to robust planning and risk management strategies, conservative fiscal management, and the development of a reserve fund.

Environmental Performance: In addition to the percentage of renewable energy delivered, the CCA program will pursue an energy portfolio that also reduces greenhouse gas emissions and other pollution while minimizing the use of unbundled renewable energy credits (RECs), as well as minimizing environmental and community impacts overall.

Accountability and Transparency: As a local government program the CCA will be accountable to citizens through locally elected officials who will serve the public good and supporting the interests of their communities. Customers will have access to democratically elected or appointed representatives and CCA governance decisions will be made in local, public meetings in a transparent way and will strive to reflect the best interests of the community.

Launch & Operations

The launch and operation of the CCA program can be categorized into three primary categories of activities: governance, community outreach and engagement, and operations.

GOVERNANCE

Joint Power Agreement: Established in 2003, RCEA's joint powers agreement (JPA) provides an existing foundation to move forward with a community-wide CCA program for Humboldt County. The RCEA Board has established its interest in becoming a community choice aggregator and implementing a local CCA program on behalf of those member Cities and the County that choose to become CCA participants. In order to become a community choice aggregator the RCEA JPA required revision. Pursuant to the current JPA, amendments are permissible if in writing and approved by at least 2/3 of the RECA member agencies.

In September 2014 RCEA's Board approved CCA-enabling revisions to the JPA; the nature of these changes include:

1. Any RCEA member City or the County may elect to participate in the CCA program by adopting an ordinance indicating its election to participate (staff intends to prepare a template ordinance for member agency use).

2. As specified in the current JPA, the RCEA's debt, liabilities and obligations do not become debts, liabilities or obligations of the member agencies.

3. A partially weighted voting structure based on each participating member's proportion of total electricity customers.

4. RCEA member agencies that are not CCA program participants would continue to vote on all RCEA matters except those pertaining to the CCA program. Only member agencies that become CCA program participants will vote on CCA program matters.

The RCEA Board chose to adopt a 2/3 vote weighting system to provide more representative decision making while still ensuring that a diversity of community perspectives are included. Weighting based on the share of electricity customers was selected to capture representation of both residential and commercial CCA customers, while not tying the weighting to higher consumption as other CCA have done. It should be noted that there is not currently a substantive difference regardless of whether the weighting was based on population, electricity customers, or total energy load as shown in the following table.

Jurisdiction	Population	% of pop.	% of electric. customers (selected for weighting)	% of energy load
Unincorp. County	71,925	53.4%	**52.9%**	58.2%
Eureka	26,925	20.0%	**21.1%**	21.2%
Arcata	17,730	13.2%	**12.4%**	10.6%
Fortuna	11,888	8.8%	**8.5%**	6.0%
Rio Dell	3,377	2.5%	**2.3%**	1.7%
Ferndale	1,364	1.0%	**1.4%**	0.9%
Blue Lake	1,243	0.9%	**1.0%**	0.6%
Trinidad	357	0.3%	**0.4%**	0.7%

The amended and reinstated JPA is currently in the review and approval process with RCEA's Members.

CCA Ordinance: Established by State law, the process for becoming a CCA requires that each local government governing body adopt an ordinance proclaiming their decision to participate in the CCA through RCEA, after which RCEA must then file an Implementation Plan with the CPUC. RCEA is preparing an ordinance template for Member governments that choose to participate in the CCA.

It should be reiterated that a jurisdiction choosing to be a part of the CCA is making the option of participation available to that community, but individual customers can choose initially or at a later time whether or not they want to participate.

Implementation Plan: The CPUC, which ultimately has to approve the program, requires that the CCA submit an implementation plan that covers all aspects of the set-up and operation. The plan will include the following:

- Process and consequences of aggregation
- Organizational structure of the program, its operations and funding
- Rate setting and other costs to participants
- Disclosure and due process in setting rates and allocating costs among participants
- Methods for entering and terminating agreements with other entities
- Participant rights and responsibilities
- Termination of the program
- Description of third parties that will be supplying electricity under the program, including information about financial, technical and operational capabilities

The Implementation Plan must also include a statement of intent indicating that the program must provide universal access, reliability and equitable treatment of all classes of customers, and to meet any other requirements established by state law or by the CPUC (Section 366.2 of the Public Utilities Code specifies that to form a CCA, there must be a local ordinance approved by the entity proposing the CCA, followed by the preparation of an implementation plan, which must contain specific elements outlined in the statute). After the implementation plan is approved, the CCA registers with the CPUC and provides an executed copy of the services agreement between the CCA and the utility that covers the services to be provided by the utility (eg: billing).

Funded by the CA Energy Commission, the Local Government Commission developed the template for CCA implementation plans, along with a CCA implementation guidebook, available at:
http://www.energy.ca.gov/pier/project_reports/CEC-500-2008-091.html

COMMUNITY OUTREACH & ENGAGEMENT

Media and Information Distribution: There are numerous complexities related to electricity service and how CCAs operate that are unfamiliar to the majority of citizens. To ensure that the community becomes aware of the local CCA efforts and the ramifications of CCA implementation, RCEA has begun conducing general education and outreach efforts through print, online, social media, radio, television, and through RCEA's resource center in Old Town Eureka.

Workshops: In addition to broad outreach efforts, RCEA is scheduling a series of town-hall open-house workshops around the County to provide the community numerous in-person opportunities to learn about what a CCA program is, why we are doing it, and how it works.

Rate Comparison: Developed and jointly produced with PG&E, a rate comparison provides a typical bill for various customer classes under the CCA's rates alongside the current PG&E rates. This provides a clear picture of the rate impact for customers based on the power option they choose; an example rate comparison from Sonoma Clean Power is available at:
https://sonomacleanpower.org/wp-content/uploads/2015/11/2015-09-01-SCP_Joint-Rate-Comparison.pdf

Opt-Out Notices: An important step in CCA launch is providing all customers with multiple opt-out notices. The CCA must fully inform all customers of their right to opt out of the CCA program and to continue receiving service as a bundled customer from the IOU. All customers must be notified twice within 60 days prior to the date of automatic enrollment. In addition, notification must continue for participating customers for at least two consecutive billing cycles after enrollment. Customer notification must contain the following information:

- Those customers will be automatically enrolled.
- That each customer has the right to opt out of the program without penalty.
- The terms and conditions of CCA service.

OPERATIONS

There are numerous technical and complex components of launching and operating a CCA program, including:

- Financing
- Load forecasting
- Rate analysis
- Customer service
- Accounting
- Utility data management and interface
- Regulatory compliance
- Power procurement and scheduling

To facilitate the rapid and successful roll out of the CCA, RCEA will outsource significant components of program start-up and operations work to qualified contractors with the qualifications, expertise, and overall experience to provide the CCA services, including factors such as:

- Demonstrated direct experience within and understanding of the California energy market, including relevant legislation and regulations applicable to CCA and its major participants – investor owned utilities, CA Independent System Operator, energy service providers and independent power producers, California Public Utilities Commission, and other key market players.

- Demonstrated understanding of the CCA formation process in California including - statutory and regulatory requirements, and best practices, including experience in customer data analysis.

- Demonstrated experience in resource planning and energy procurement.

- Demonstrated experience in rate setting /design and sensitivity analysis, including anticipated rate impacts related to varying levels of renewable energy procurement and local renewable project/program development as well as energy efficiency and demand reduction program implementation.

- Demonstrated experience in California energy compliance reporting as it relates to CCA.

To this end, RCEA is issuing a Request for Proposals (RFP) to select a qualified entity or group of entities to provide comprehensive services to support RCEA with the development, financing, launch, and operations of the CCA program for Humboldt County. RCEA intends to enter into an Agreement with the selected Contractor(s) for a period of up to five years.

The Table below outlines at a high-level the anticipated roles and duties of the RCEA Board, RCEA staff, and the third-party contractor(s). RCEA anticipated a heavy reliance on contracted companies in the initial 5 years, with the potential to shift certain operational activities to RCEA staff if deemed viable and cost-effective.

Function	**Start-Up**	**Near-Term (2 to 5 Years)**	**Long-Term**
Program Governance	Authority Board	Authority Board	Authority Board
Program Management	Authority staff (Third Party support)	Authority staff	Authority staff
Outreach	Authority staff	Authority staff	Authority staff
Customer Service	Authority staff (Third Party support)	Authority staff (Third Party support)	Authority staff (Third Party support)
Key Account Management	Authority staff	Authority staff	Authority staff
Regulatory	Third Party (Authority staff support)	Authority staff (Third Party support)	Authority staff
Legal	Authority staff (third Party support)	Authority staff (Third Party support)	Authority staff
Finance	Third Party (Authority staff support)	Authority staff (Third Party support)	Authority staff
Rates: Approve Rates: Develop	Authority Board Third Party (Authority staff support)	Authority Board Authority staff (third Party support)	Authority Board Authority staff
Resource Planning	Third Party (Authority staff support)	Third Party (Authority staff support)	Third Party (potentially Authority staff)
Energy Efficiency	Authority staff	Authority staff	Authority staff
Resource Development	Authority staff (Third Party support)	Authority staff (Third Party support)	Authority staff (Third Party support)
Portfolio Operations	Third Party	Third Party (Authority staff support)	Third Party (Authority staff support)
Scheduling Coordinator	Third Party	Third Party	Third Party
Data Management	Third Party	Third Party	Third Party

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