Community Choice Energy

An alternative to electric monopolies enables communities to center people and planet

By John Farrell
February 2020

ILSR INSTITUTE FOR Local Self-Reliance

About the Institute for Local Self-Reliance

The Institute for Local Self-Reliance (ILSR) is a 45-year-old national nonprofit research and educational organization. ILSR's mission is to provide innovative strategies, working models, and timely information to support strong, community rooted, evironmentally sound, and equitable local economies. To this end, ILSR works with citizens, policymakers, and businesses to design systems, policies, and enterprises that meet local needs; to maximize human, material, natural and financial resources; and ensure that the benefits of these systems and resources accrue to all local citizens. More at www.ilsr.org.

About the Authors

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Related ILSR Publications:

The Interactive Community Power Map: a web feature showing states and communities with community choice programs.

The Local Energy Rules podcast, with several interviews about community choice aggregation:

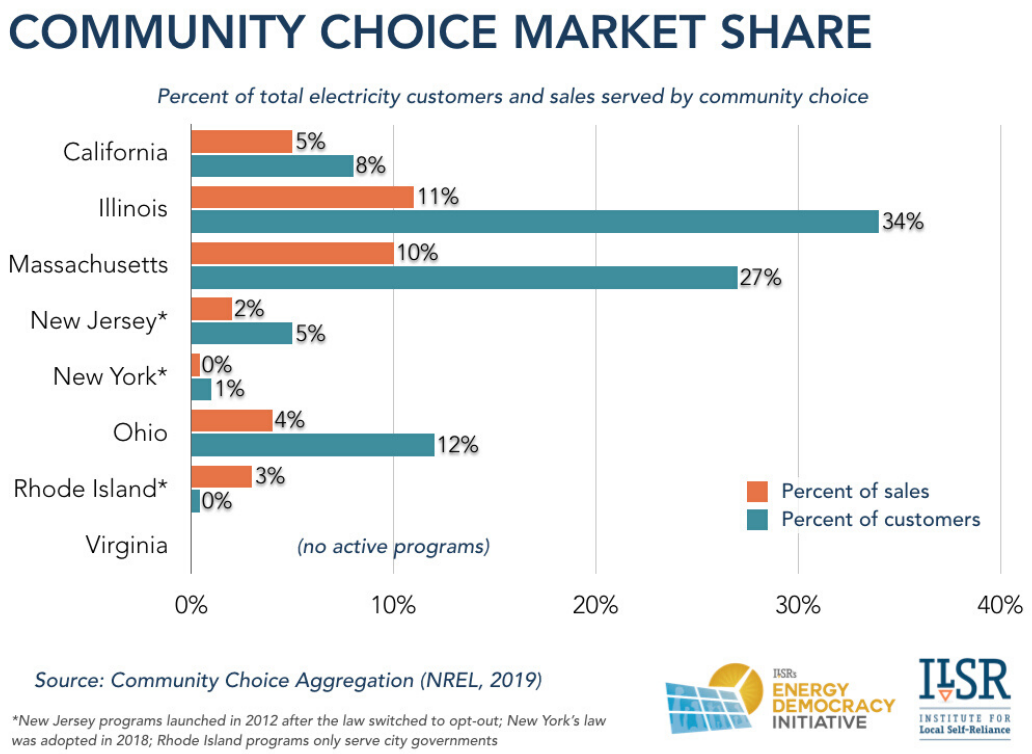
- Voices of 100%: San Diego's Pathway Forward, an interview with San Diego's Chief Sustainability Officer Cody Hooven about their efforts to reach an ambitious renewable energy target (September 2018)
- Getting San Diego Ready for 100% Renewable Energy, an interview with Nicole Capretz of the Climate Action Campaign to learn how San Diego's community choice program will move them toward 100 percent renewable electricity (March 2018)
- Ohio Residents Exercise Community Choice to Bill Themselves for Public Solar, an interview with Mathew Roberts of UpGrade Ohio about how the community used its community choice program to support local solar (July 2018)
- The Leading Community Energy Aggregator, an interview with Marin Clean Energy executive director Dawn Weisz (April 2014)

Executive Summary

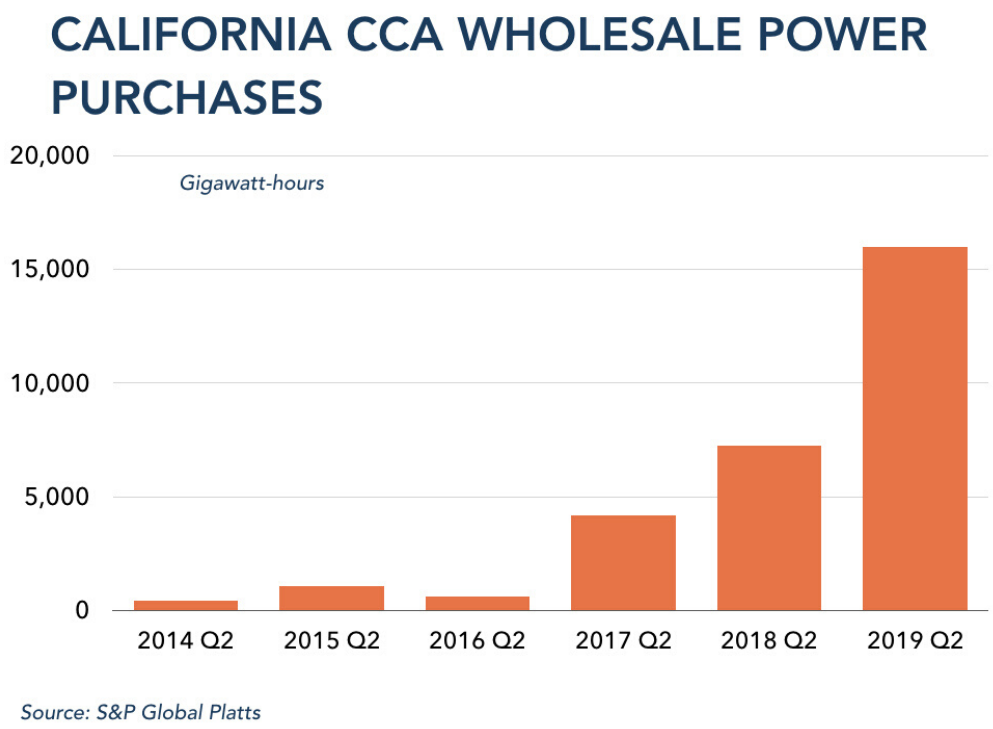
More communities than ever want to exercise control over their energy systems. In 2016, Americans collectively spent $360 billion buying electricity. Most of the revenue accrued to the benefit of increasingly-large, investor-owned utilities. Inspired by the individuals who put solar on their roofs, cities, counties, and states want the option to take charge and more widely share the financial and economic benefits of the clean energy transition. It's why an increasing number of states have allowed community choice energy.

A Growing Power

Enabled by law in nine states, numerous cities are exercising their right to purchase energy on behalf of millions of electricity customers. Community choice simplifies the more widely available tool of a utility takeover by allowing communities to make energy supply decisions without buying the poles and wires of the existing electric utility. The following chart illustrates the market share of community choice programs by state (New Hampshire is not shown, since its policy was adopted in July 2019).



In three states, in particular, community choice is growing rapidly. In California, for example, the share of sales to electricity customers rose from 5 percent to 18 percent in the last year alone. In New York, nearly fifty municipalities have joined community choice programs in the past year. In Massachusetts, 150 communities have joined since 2015.



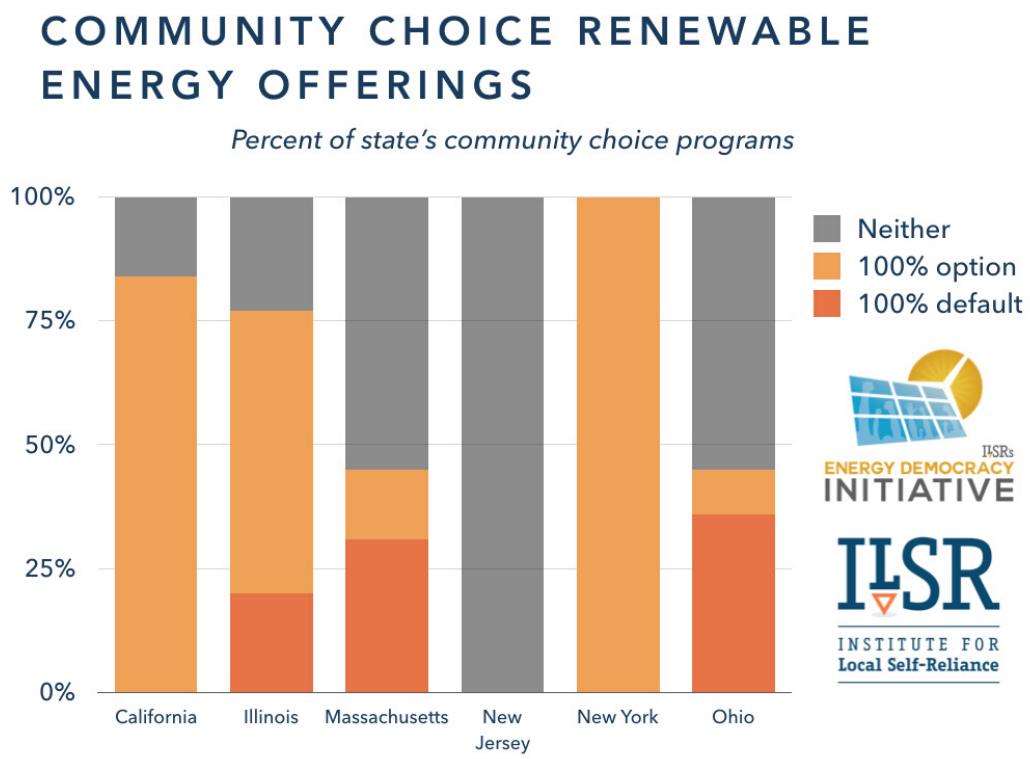
Source: S&P Global Platts

Going Deeper

While many community choice programs have modest ambitions to lower energy costs through economies of scale, a growing number of programs have expanded their scope to include:

- Facilitating ambitious energy efficiency programs
- Accelerating adoption of renewable energy
- Investing in local renewable energy projects
- Prioritizing local economic development
- Incorporating more community governance
- Integrating with city energy, economic development, and environmental planning
- Helping low-income residents access economic opportunities

For example, the following chart shows that many community choice programs offer 100% renewable electricity by default or as an option.



California Exceptionalism

In no state have community choice programs shown more ambition than in California, a complement to their rapid and expansive growth. This report explores several factors leading to California's exceptional choice agencies and several ways they continue to push the limits of public power, including:

- Struggling with incumbent monopoly utilities at the legislature, the regulatory commission, and on the ballot for the right to community choice.
- Building larger aggregations of communities than in most other states, and then banding together in a statewide trade organization.
- Signing long-term contracts enabling the construction of new renewable energy resources.
- Advancing planning and energy management by integrating with city zoning, permitting, and other local authority.
- Sparking a regulatory revolution to accommodate the likely shift of a majority of electric customers to community choice by the end of 2020.

Introduction

"Taking charge" could be the theme of our relationship to the energy industry in the past decade. The city of Winter Park, Fla., took over the electric utility from a private company in 2005. About five years later, Marin County became the first community in California to exercise its right to choose its electricity supplier. In 2013, the Minneapolis, Minn., city council openly debated a city takeover of electric and gas utilities to meet its climate action goals. Over a million homes and businesses in the United States now sport solar arrays.

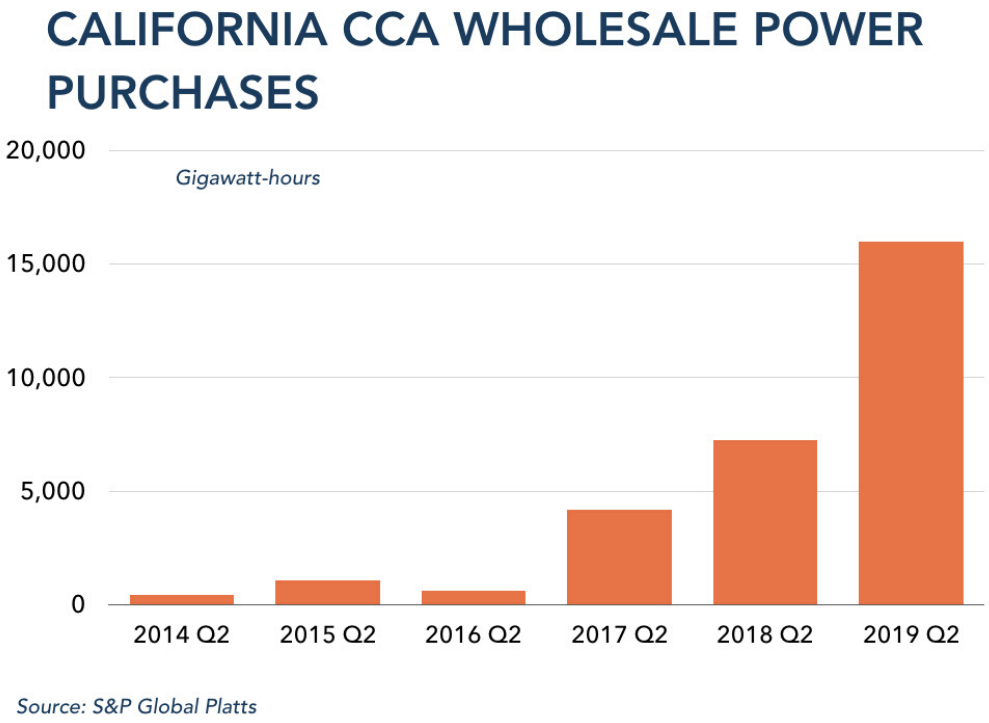
These actions sparked a broader movement for energy democracy. Citizens in Boulder, Colo., have been enmeshed in a years-long battle for local control, inspired by Winter Park. Activists in California have openly asked for a state buy-out of one of the largest (bankrupt) utilities in the country, Pacific Gas & Electric. A bill in Maine would nationalize one of the state's largest electric transmission companies.

For decades, most communities have been limited to a single method of overseeing the energy system locally: municipalization. In this case, a city uses its power of eminent domain to seize the energy infrastructure of a private company— and to pay it fair value— to operate it in the public interest. In the early 20th century, cities often took over from private providers, with some 2,000 cities still operating their own utilities in 2019. Few takeovers happen now, due to unfavorable state laws. In Minnesota, for example, a city would have to pay its incumbent utility 10 years of lost profits– and navigate utility legal challenges that take years to resolve.

A policy called community choice aggregation provides an easier path. After a citywide referendum or council vote in favor, it allows cities to take charge of their energy supply without having to become a grid operator. Few policies have accomplished more– or shown more potential– to enliven energy democracy than community choice. Expanding to nine states in the past twenty years, community choice aggregation allows cities to act on behalf of residents and small businesses in buying electricity: banding together to get a better deal. Beginning in the 1990s in a few states that had competitive electricity markets, it enabled cities to use their purchasing power to negotiate lower costs for electricity.

In the past decade, however, communities have realized this negotiating power extends beyond pricing. They have started to wield it in favor of renewable energy, local power generation, economic development, and access to good jobs. Community choice has become a crucial tool, granting cities the power to meet their goals.

The opportunity has caused community choice to grow significantly. Across the seven states with active programs at the start of 2019, community choice agencies served 12 percent of customers, and growing. (1) Over 150 communities in Massachusetts have adopted community choice programs since 2015. (2) In California alone, programs intending to serve 12 million more customers could launch in the next two years. (3) In New York, over 50 cities and towns have created community choice programs, with most joining in the past year. (4)

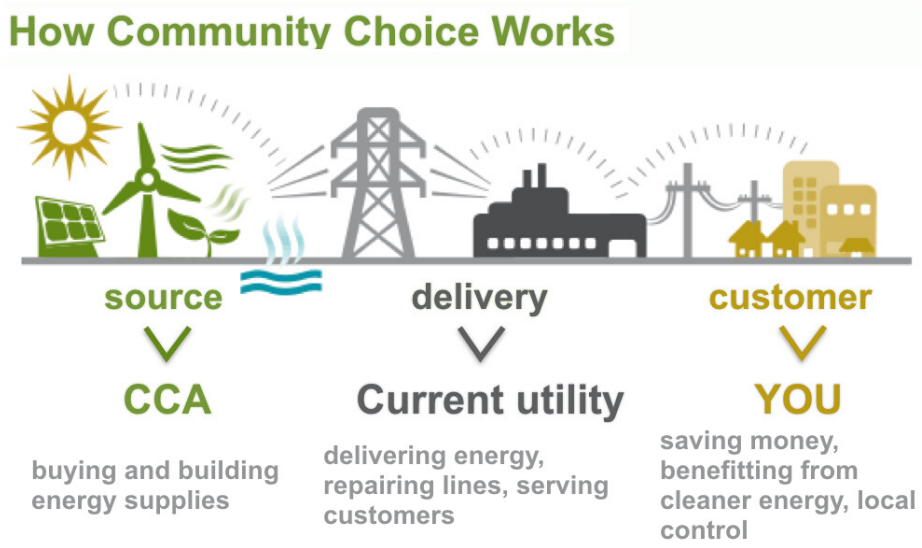


Community choice has evolved, as well. In its first iteration, it changed from from a simple buying collective to an integrated city energy planning tool. In its second iteration, community choice challenges the regulatory structure of state electricity markets. In California, for example, community choice agencies may be delivering more electricity than investor-owned utilities by the end of 2020. This report devotes an entire section to what we've called "California Exceptionalism," due to the remarkable depth and breadth of that state's community choice program activity.

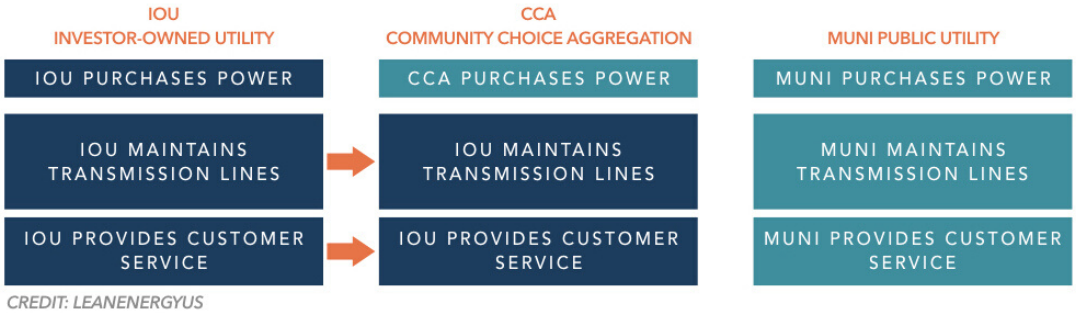
Overall, this report explains why communities want choice, how they've used it, and illustrates the programs and the state rules that best exemplify how to give communities more local power.

What is Community Choice?

Community choice aggregation (CCA) allows communities to take charge of decisions about their energy supply by aggregating residential and small commercial customers into a large buying group. Community choice simplifies the more widely available tool of a utility takeover by allowing communities to make energy supply decisions without buying the poles and wires of the existing electric utility. It's also potentially more powerful, by allowing cities and counties to team up and create a larger pool of customers. The following graphic, from Sonoma Clean Power, illustrates how a community choice program relates to the existing utility and electric customers:



With community choice aggregation– also known as community choice energy –the community itself becomes the energy retailer, rather than the utility. The electric utility still has many roles: maintaining the grid, customer service, billing, and serving customers who have opted out. The community entity purchases electricity and pays for it (with many other potential roles, as well). This cooperation between the utility company and community purchaser makes this arrangement differ from a municipal utility, as shown below.



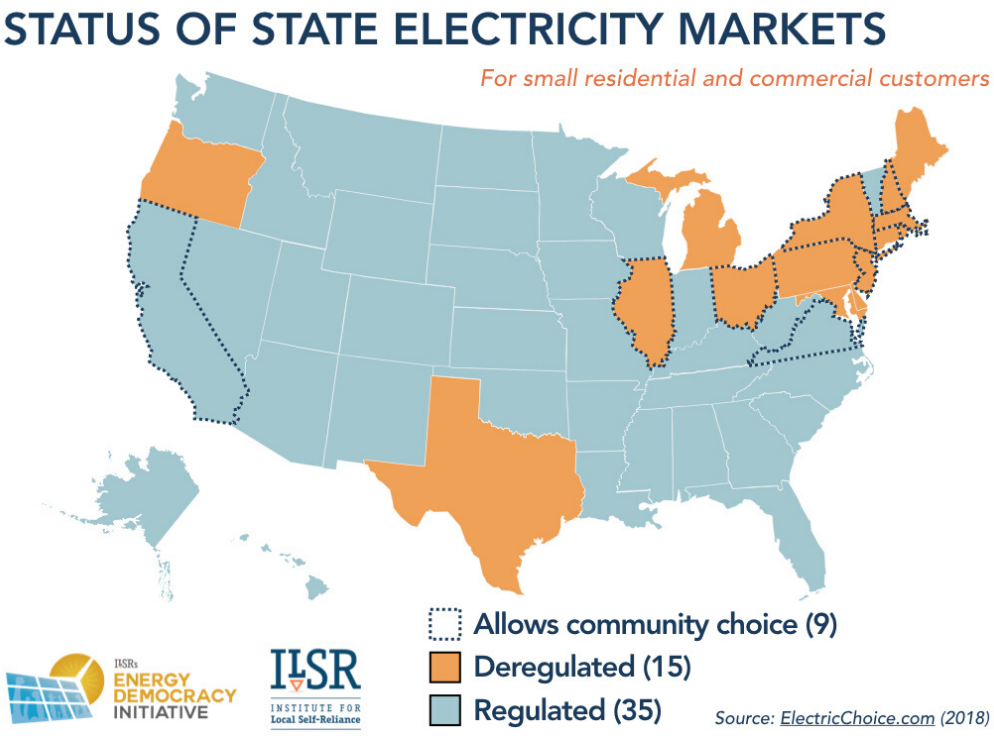
CREDIT: LEANENERGYUS

In most programs, anyone within the community's political boundaries is automatically enrolled for energy service with the community entity, with an option to opt-out. This automatic inclusion makes the group of customers large enough to have market power, allowing them to negotiate favorable prices and to satisfy their goals.

Where and How is Community Choice an Option?

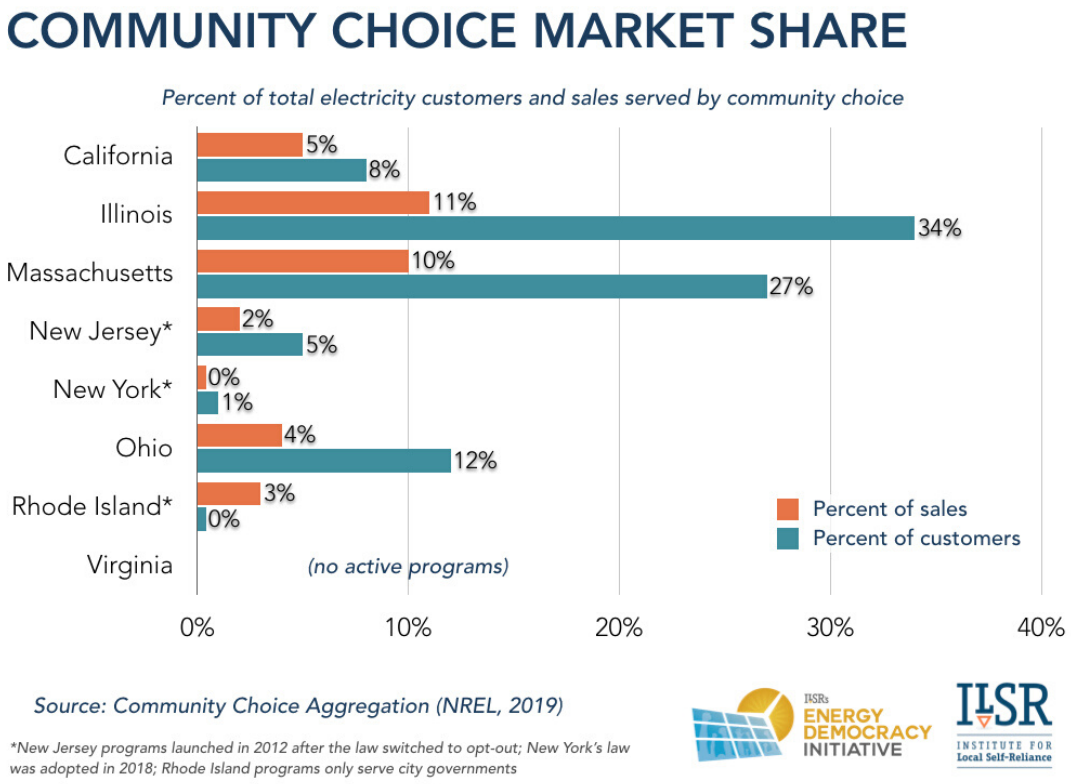
Laws in almost every state allow communities to take charge of energy choices. In most states, cities have the power to buy out the electric company from a private provider (a process called municipalization). Community choice, a simpler path, has only been adopted in nine states. In every one of those states, policy had already restructured the electricity market to allow for competition. Two, California and Virginia, subsequently suspended competition, but left community choice as an option.

In 33 of the 35 states that provide utilities a monopoly service territory, municipalization is the only option for cities wanting more control of their energy supply. The following map illustrates the electricity market structure in each state and whether it allows community choice energy.



Community choice has spread significantly in states that allow it, even though it requires a favorable vote by the governmental body or even passage of a referendum. Programs serve more than 10 percent of customers in Illinois and Massachusetts. In Ohio, programs serve fewer customers, but still represent over 10 percent of all electricity sales. Typically, community choice can only serve about one-third of the electricity market (residential and small commercial customers), leaving large businesses and industry to be served by the incumbent utility. (5)

Update: for consistency, the following chart includes only the data reported in the 2019 National Renewable Energy Laboratory report, but the share of sales by California's community choice agencies has risen from 5 percent to 16 percent (44,000 gigawatt-hours) in 2019 and its share of customers is nearly 25 percent. (6)



Opt-in Versus Opt-out

No community choice programs have developed without the opt-out framework that automatically subscribes local residents to the community's program (after the vote to create the program). New Jersey and Virginia both initially used opt-in, but when no communities overcame the enormous upfront investment to recruit participants, the states changed to the opt-out model. In summer 2019, the New Hampshire legislature joined them, expanding its existing bulk purchasing program for independent brokers into opt-out, municipally-run aggregation programs. (7)

Even given the option, few customers opt out. A 2019 review of community choice found that, "According to interviews with CCAs, typical opt-out rates are on the order of 5%–15%, meaning about 85%–95% of eligible customers remain in CCAs." (8) For some programs, the opt-out rate is much lower. In 2019, "Clean Power SF reported an opt-out rate of 2.4% and Peninsula Clean Energy reported an opt-out rate of 2.5%." (9)

Why Community Choice?

Community choice provides more local control over energy decisions for communities that don't have a cooperative or publicly-owned utility. It also removes sometimes **perverse incentives** of for-profit utilities to increase sales (and energy use), build unnecessary infrastructure to earn greater shareholder returns, or oppose customer-owned renewable energy.

Several states allow customers to individually choose a utility provider, but these competitive markets may fall short of securing customers what they want. A report by Citizens Utility Board of Illinois found that retail choice in that state mostly resulted in temporary, **promotional pricing** for electricity as is done for cable TV, rather than customers being able to choose the type of electricity service they most wanted.

The following sections highlight two types of community choice programs across various states. The "modest Community Choice Programs" focus on energy savings, by negotiating lower rates and sometimes purchasing open market renewable energy credits for cleaner energy. The "ambitious Community Choice Programs" share the same benefits as their modest cousins. However, these look to wield their local authority over a broader range of opportunities, including local renewable energy and workforce development, as well as exploring deeper community engagement and governance.

Modest CCAs

Modest programs can be found in most states with community choice, but in several states "modest" describes nearly all aggregation efforts. New York, New Jersey, and Ohio, in particular, only allow communities to purchase power under short term contracts. (10) In other states, like Illinois, it's the common practice if not the legal requirement. While this enables communities to negotiate lower power costs, it has limitations. It means communities can't contract with new renewable energy projects that require long-term contracts to secure financing. This shortcoming means that it's also difficult to cultivate more local renewable energy deployments, because—large or small—new renewable energy projects need long-term revenue to be financeable.

Although he uses different language, Samuel Golding from Community Choice Partners describes the modest community choice program as essentially, "hand[ing] over a city's worth of customers to a Retailer." (11)

Economies of Scale

The defining feature of all community choice aggregation programs is aggregation. With aggregation, customers and communities obtain market power to negotiate better prices and cleaner energy sources.

While Illinois in particular features a number of single-city programs, many community choice programs go bigger. According to a recent report from the National Renewable Energy Laboratory, "Most CCAs in states like Illinois, Massachusetts, and Ohio have implemented the town- or city-level model, while CCAs in California have implemented the cooperative model, resulting in CCAs that serve entire counties or span multiple counties." (12) For example, while Illinois has over 400 community choice programs, most serve only a single city. Most California programs, on the other hand, serve at least one or two counties, and multiple cities. (13) Growing beyond a single city allows communities to expand their purchasing power, economizing on program administration.

Lower Costs

Many community choice programs lower costs for participants, as compared to purchasing power from the incumbent utility. When Sonoma Clean Power launched in 2014, for example, it offered greener electricity at a **4-5 percent discount** to the default electric company. ILSR's **2010 report on community choice aggregation** showed that similar savings accrued to customers of Northeast Ohio Public Energy Council—the largest community choice program–serving over 100 cities and 600,000 customers:

"Its rates on the generation portion of bills are 6% lower for residential and government accounts, 4% lower for commercial and small industrial accounts, and the power provided is 70% less polluting than typical system power in Ohio. This CCA saved its customers $46 million from 2001-2005. "

In Ohio, the Public Utilities Commission describes aggregation programs as a way to give communities buying power and reduce prices. (14) The Northeast Ohio Public Energy Council (NOPEC), serving over 200 communities, says that **"no one does more to lower your utility bills."** (15)

Community choice programs typically advertise electricity at a similar or lower price than alternatives. In these cases, the savings come from multiple areas. The most significant is the ability to buy in bulk. Additionally, public agencies can borrow money at a lower cost than investor owned utilities. While owning power plants is not common for community choice agencies, signing longer term contracts (backed by public financing) is a growing option. Again, **ILSR's 2010** report highlights the advantage:

Savings from Community Choice:

1. Buying in bulk
2. Lower cost of capital
3. Lower executive salaries(sometimes)
4. Aggregating multiple cities

"The California Energy Commission estimates that the cost of capital for a [community choice entity] is almost a third of that for an [investor-owned utility], 5.5% compared to 12.9%. This means that first-year costs at new generating plants are 40% lower than if owned by [investor-owned utilities]."

Public agencies also tend to have much lower salaries for executives. The CEO of Marin Clean Energy, a community choice agency serving counties north of the San Francisco Bay Area, makes around $340,000, slightly higher than the salary of the Sacramento Municipal Utilities CEO, one of the nation's largest municipal utilities. (16) In comparison to these public agencies, the CEO of investor-owned utility Pacific Gas & Electric has a base salary of $1 million, with potential compensation of several times that. (17)

Ambitious CCAs

Unlike their modest cousins, ambitious community choice programs have significantly expanded their scope beyond lowering energy costs. These CCAs have taken up energy efficiency, local renewable energy procurement, higher shares of renewable energy, economic development, and community governance.

In some cases, this distinction is a matter of time and experience, with programs that initially focused solely on price expanding their scope. In other cases, like East Bay Community Energy, ambition was there from the beginning. The program serving Califoria's Redwood Coast has shown one one particular ambition, local self-relience.

REDWOOD COAST ENERGY AUTHORITY HIGHLIGHTS A RURAL CULTURE OF LOCAL SELF-RELIANCE

Unlike other community choice agencies, Redwood Coast (serving residents of seven cities, one county, and a municipal water district) wasted no time innovating for a cleaner, more resilient, and cost-effective electricity system in primarily rural Humboldt County, Calif. Community choice expert Samuel Golding explains the many projects the county's energy authority has taken on:

> *"They are currently building a renewable microgrid to 'island' their county airport and nearby Coast Guard base...exploring offshore wind development with a public/private consortium (under contract), installing an [electric vehicle] charging corridor along Highway 101, expanding a variety of energy efficiency and [distributed energy resource] programs, innovating on retail rate structures, sourcing 40% renewable power (including $15MM / year purchasing local biomass power [supporting] Humboldt's forestry industry ...all while lowering retail rates by $2.6MM as compared to [incumbent utility Pacific Gas & Electric]."* (18)

Energy Efficiency

Community choice programs can also deliver energy efficiency services. In California, utility efficiency programs are state regulated and only the Marin Clean Energy choice program had taken over management of efficiency programs from the incumbent utility (as of early 2017). The program includes typical energy efficiency measures like lighting and insulation, as well as no-cost energy assessments, but also some novel incentives. Commercial customers can receive bonus rebates for tackling efficiency projects across multiple areas (lighting, heating and cooling, etc) and also earn referral fees for connecting the choice agency to tenants interested in efficiency programs. (19) Similarly, multifamily building customers can receive no-cost energy assessments and free direct installation of small measures in apartments. The agency maintains a **page of case studies** of its successful projects.

East Bay Community Energy in California has a different approach. They don't administer energy efficiency programs, but they do provide access to aggregated energy use data for third parties to provide efficiency services— a service few investor-owned utilities have been willing to provide. (20)

In Ohio, the Northeast Ohio Public Energy Council and Southeast Ohio Public Energy Council offer PACE financing– tying loans to the property tax bill–to its customers in order to increase efficiency and reduce their energy use. They also offer a Savings Through Efficiency Program, or STEP, with microloans. These loans can be for energy efficiency improvements, but they can also be for larger projects like installing geothermal or solar. (21)

Renewable Energy

Numerous community choice programs offer customers greener electricity mix options than the default electricity supplier. However, the manner of the offer differs. In some cases, the community choice agency provides greener electricity by default and to opt out the customer must opt out of participation in the community choice program entirely. In other cases, customers can opt-in to a voluntary green program, often at a marginally higher cost. Sometimes, customers can "opt up" to a particular clean energy sources, such as solar. Finally, some customers receive voluntary green power by default, but can "opt down" to a less expensive and less green product. The following table from a report by the National Renewable Energy Laboratory summarizes the four options: (22)

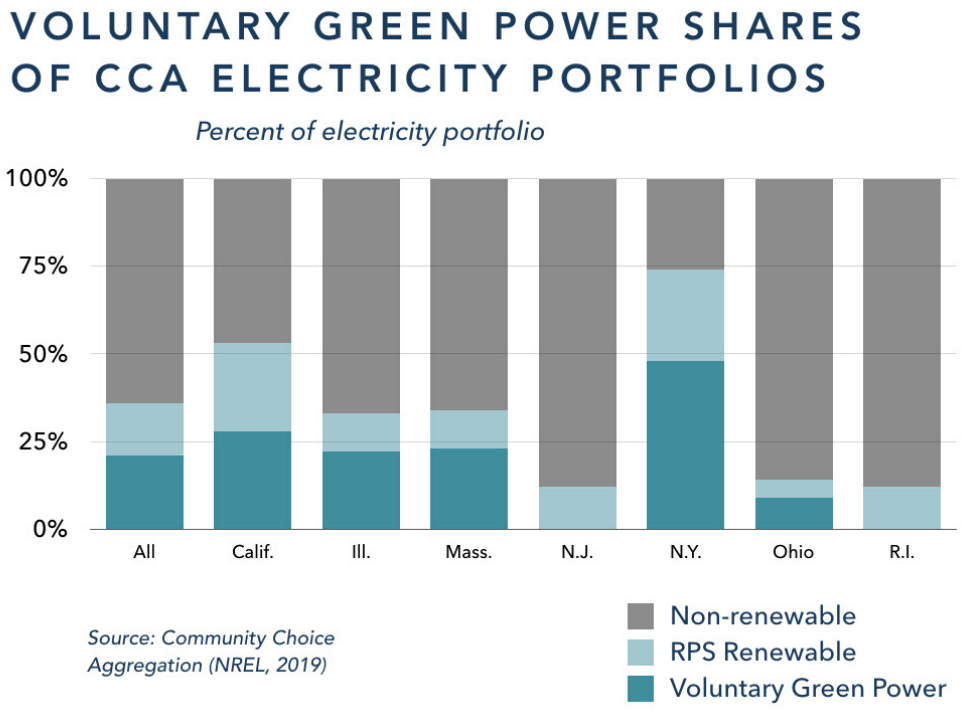
Table 3. CCA Voluntary Green Power Product Structures

Structure	Description
Opt out	All customers receive voluntary green power by default.
Opt in	Customers can choose to switch from RPS-compliant to voluntary green power at an extra cost.
Opt up	Customers can choose to switch from a voluntary green power product to a product with higher renewable energy content or a specific type of renewable (e.g., local solar).
Opt down	All customers receive voluntary green power by default, but customers can choose to opt down to a lower-cost RPS-compliant product.

Community choice agencies must weigh customer interest, the psychology of default choices, and cost in their green electricity offerings. The Cape Light Compact provides an illustration of the power of the default option where a switch to an opt out 100% renewable energy option increased renewable evergy sales by ober 200 times:

"Before 2017, Cape Light Compact offered customers the option to opt into a 50% or a 100% renewable energy product. In 2017, Cape Light Compact began offering 100% renewable energy by default (opt out). With the switch from opt in to opt out, Cape Light Compact increased voluntary green power sales from about 4,700 MWh in 2016 to about 880,000 MWh in 2017." (23)

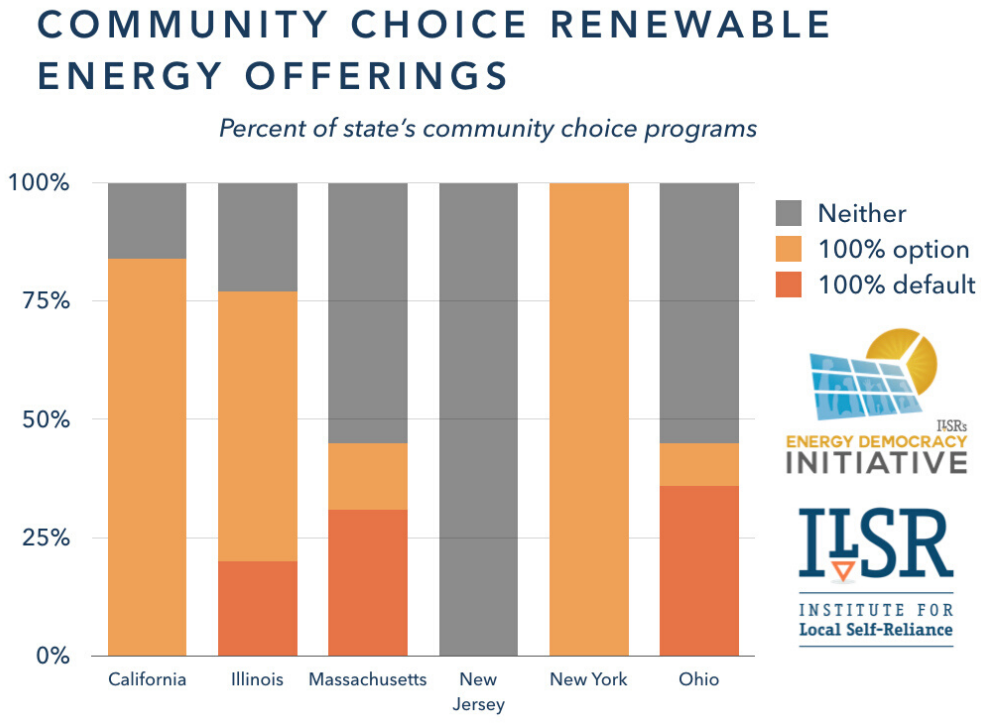
As shown in a **recent report** from the National Renewable Energy Laboratory, numerous community choice programs voluntarily procure more renewable energy than required by state mandates. (24) The chart below shows the share of energy sales by community choice agencies by state. Gray bars show non-renewable energy, light blue bars are energy procured to comply with state law, and dark blue represents purchases in excess of legal requirements.



Since electricity cost is often the defining issue for a community choice agency, cost plays an important role in the renewable electricity offering. In the National Renewable Energy Laboratory report, authors found that voluntary green power was more prevalent in states with high electricity prices:

> *"Indeed, this may explain why many CCAs offer voluntary green power in Massachusetts—where average residential rates are $0.22/kWh—while only two CCAs offer voluntary green power in Ohio, where average residential rates are $0.13/kWh...Several CCA interviewees reported a willingness to discontinue voluntary green power products if voluntary green power could no longer be offered at a discount relative to basic service."* (25)

In ILSR's examination of renewable energy offerings, however, the level of state electricity prices seemed less significant. Among existing customer options, similar percentages of community choice programs in low-price states like Illinois and Ohio had a 100% renewable default offering, as did programs in high-price states like Massachusetts. The following chart summarizes the share of programs offering 100% renewable by default, as an option, or not offering a 100% renewable product.



A full list of the renewable energy products offered by community choice programs (as of summer 2019) is in the Appendix.

Community choice programs can also enable renewable energy adoption by their customers. The Southeast Ohio Public Energy Council in Ohio is a provider of the Renewable Energy Development Assistance program through the U.S. Department of Agriculture, providing funds to help business and agricultural locations assess their potential to install renewable energy. (26)

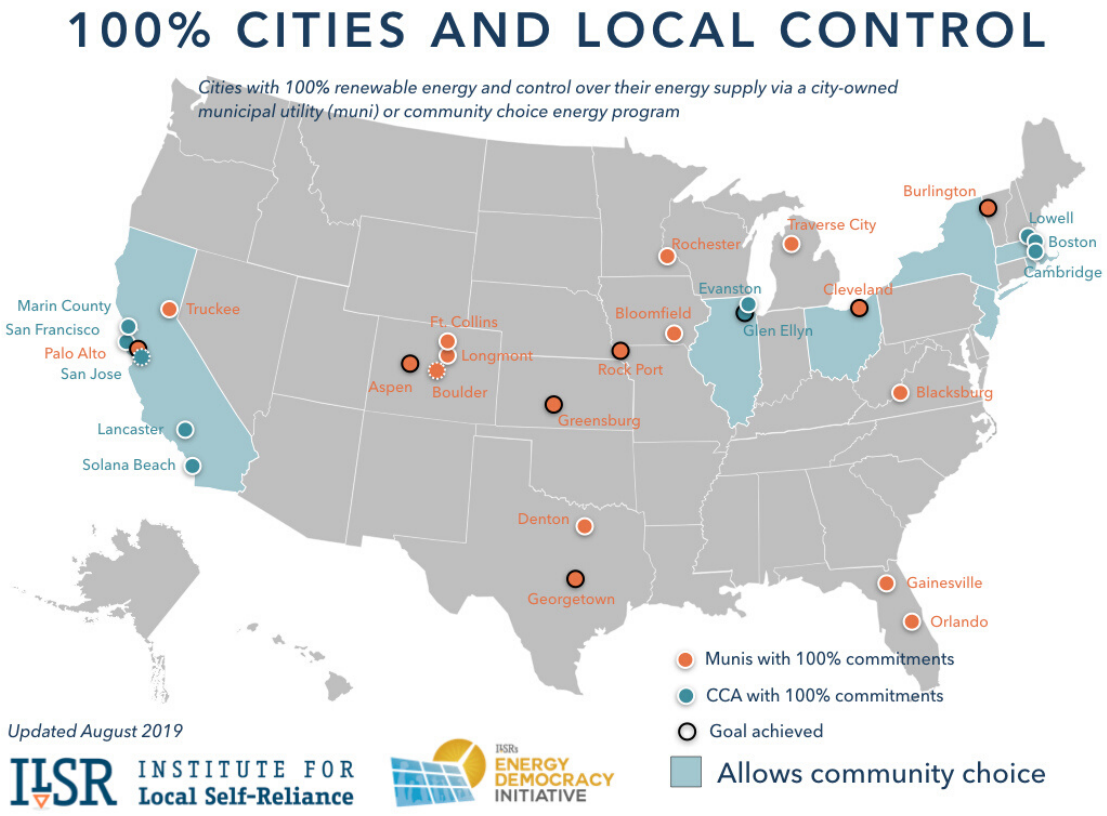
Enabling 100% Renewable Energy?

Of the more than 100 U.S. cities that have **made commitments** to reach 100% renewable energy, just over one in five have the power in their own hands. Several municipal utilities (with ownership of their local electric grids) have already achieved the target of 100% renewable power. Georgetown, Tex., owns its own utility, for example, and has **already reached the goal** of 100% renewable electricity citywide by signing contracts for inexpensive wind and solar power. In a 2019 podcast interview with ILSR, Mayor Miro Weinberger of Burlington, Vermont, expressed skepticism that their first-in-the-nation 100% renewable achievement could have happened without owning the utility:

> *"It's not an accident that it was a city with a publicly-owned utility that got there first."-- Miro Weinberger, mayor of Burlington, Vt., **speaking** of this city's achievement of 100% renewable electricity.*

Only two community choice programs offer 100% renewable electricity community-wide: Glen Ellyn, Illinois; and **Cleveland, Ohio.** (Cincinnati **offers** 100% "carbon free" electricity). However, as demonstrated by many other choice programs that offer 100% renewable electricity as a default option, local control gives communities much greater power to shift customers to renewable energy than cities that lack local authority.

See the Appendix for a list of 100% cities organized by their type of utility service and their progress toward their goal. The following map shows cities that have both a 100% renewable energy commitment and a public power agency.



Several cities with 100% renewable commitments have taken note and are considering community choice programs, including Chicago, Ill., and numerous smaller cities.

100% RENEWABLE OR NOT?

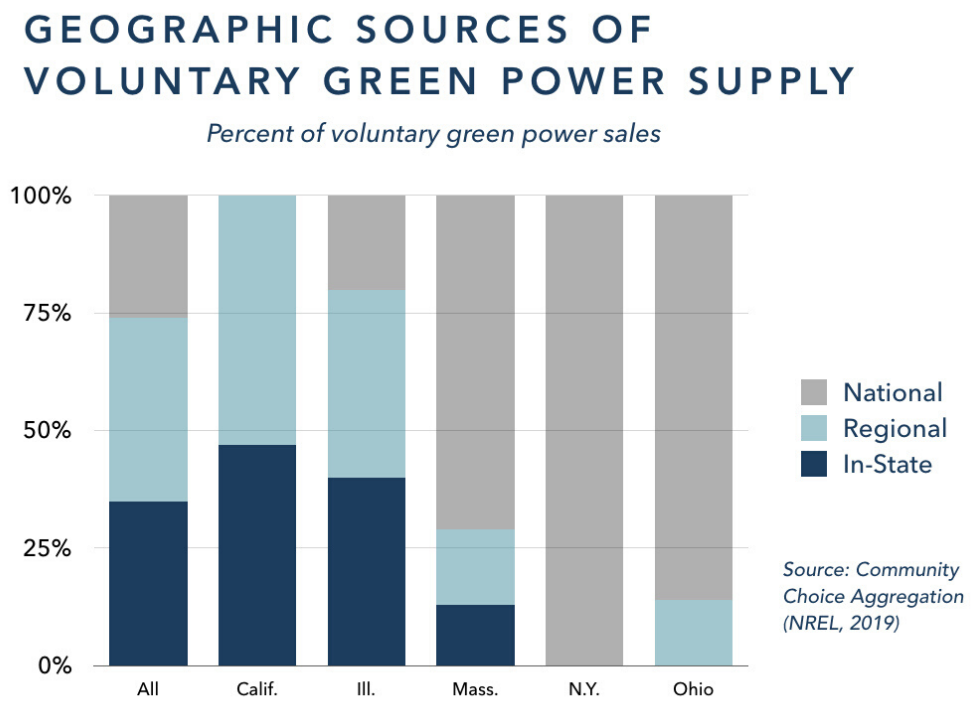
Glen Ellyn and Cleveland stand out as the only community choice programs to currently provide 100% renewable electricity citywide, but it comes with a caveat. Illinois programs in particular, but also programs in other states with short-term contracts like Ohio, do not contract to build new renewable energy projects. Rather, they purchase renewable energy credits from existing wind and solar projects. While this provides important financial support for these projects, it doesn't result in any additional renewable energy being added to the grid. ILSR explored this issue of **Greening or Greenwashing** in 2014 after interviewing the coordinator of the Oak Park, Ill., aggregation about their program in this **2014 podcast interview with K.C. Doyle.**

Local Renewable Energy

In addition to renewable energy writ large, many community choice agencies have been interested in fulfilling customer interest in locally produced energy, as reported by the National Renewable Energy Laboratory earlier this year:

> *"All CCA interviewees reported high levels of CCA and customer interest in local renewable energy and local solar in particular…Trends in voluntary green power markets suggest that green power customers prefer local renewable resources, especially local solar…some California CCAs incentivize rooftop solar through feed-in tariffs or other structures that are more generous than utility offerings…most CCAs outside California and Illinois have not emphasized local renewable energy procurement."* (27)

The following chart illustrates the source of the voluntary renewable energy supply purchased by community choice programs in the seven states with active programs.



Calculating capacities of local renewable energy has been complicated because there's no agreed upon standard. In the case of two California community choice agencies, the concept of local renewable energy is quite clear. Marin Clean Energy and Sonoma Clean Power have contracted for approximately 10 megawatts of local solar production between their two service territories. (28) Another agency, CleanPowerSF, specifies a **preference** for renewable energy generated "within the nine Bay Area counties." Clean Power Alliance, another California community choice agency, is more direct. Their recent **request for proposal** asks businesses to create a portal to facilitate more customer-owned rooftop solar.

Scale complicates the definition of local. While California community choice agencies often cover a wide geographic area (making it easier to have "local" mean "in our service area"), other community choice entities are limited to a single city (such as Chicago suburb Glen Ellyn, Ill.). In this case, the city might define local power as within 100 miles, allowing for a vicinity that includes less urbanized area. Cape Light Compact, a community choice agency in Massachusetts, provides an illustration of the confusion around local. Their **"Local Green"** option allows customers to opt-up to a 50% or 100% renewable electricity supply that comes from projects anywhere in Massachusetts, but that could be on Cape Cod. In other words, "local" means "in-state."

One Ohio city served by community choice agency, Southeast Ohio Public Energy Council, adopted a unique approach to local renewable energy: taxing themselves. In May of 2018, voters in Athens approved a 0.2-cent per kilowatt-hour increase to the electricity cost of its members. The revenue from this carbon fee supports solar installations on public buildings. (29) This fee is not only unique in Ohio, but was also the first of its kind in the country.

*For more information on UpGrade Ohio's campaign for a carbon fee in Athens, listen to **this podcast** where John Farrell interviews Mathew Roberts, Information and Outreach Director of UpGrade Ohio.*

Local Economic Development and Jobs

Several community choice programs (all in California) have added another "local" dimension to their energy service: jobs and economic development. Pioneer Clean Energy, for example, scores bids for its renewable energy procurement based on "local hiring and prevailing wage considerations." (30)

In Ohio, the Northeast Ohio Public Energy Council launched a **Powering Our Communities Grant** program, providing funding for member communities to do energy projects including conservation, renewable energy, energy education, economic development, or helping folks pay their energy bills.

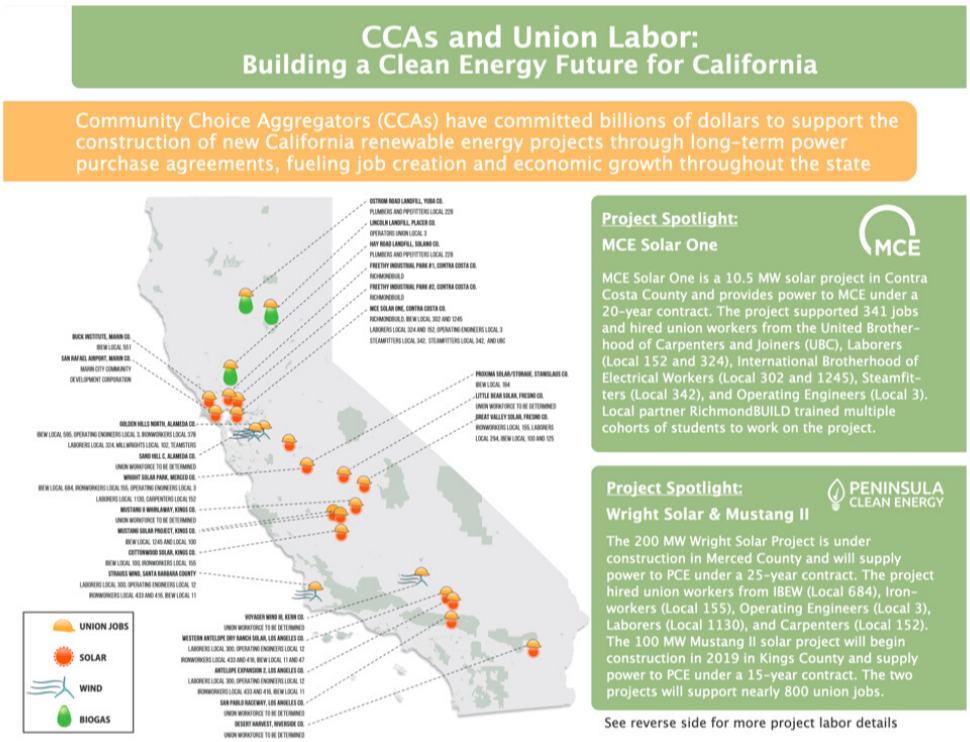
The East Bay Community Energy agency in California has gone furthest with its **Local Development Business Plan**. The program's goals include jobs constructing local wind and solar projects, measures to accelerate energy efficiency, and a focus on hiring local labor to retrofit homes of low-income residents. Investments in clean energy will include a feed-in tariff to procure local renewable energy, as well as "enhanced net metering," where the community choice agency will pay more for locally produced power that has demonstrable energy savings or employment benefits for low-income residents.

The utility set aside $4 million per year to invest in local energy initiatives, although the program is on hold pending resolution of the "power cost indifference adjustment" fee that investor-owned utilities have lobbied to charge to customers departing their service for community choice providers (more on this dispute in the California Exceptionalism section). Despite the uncertainty, the local agency **awarded** $240,000 to local nonprofits in July 2019 to support local climate action, including a solar co-op and an electric vehicle charging program for residents of multi-family housing.

The focus on local procurement has sometimes been in tension with goals for high labor standards and wages. This 2015 **resolution**, by the San Mateo County Central Labor Council, asked the San Mateo County Board to ensure that the new community choice agency will focus on "fair wage, union jobs." The resolution was in response to the limited local procurement and local labor in the early years of Marin Clean Energy, the state's first active community choice program.

The resolution had an impact. Peninsula Clean Energy, serving San Mateo County, recently commissioned the 200-megawatt **Wright Solar Project**. The project will create an estimated 400 union jobs during its construction. Marin Clean Energy has also responded, with its 10-megawatt Solar One project **committed to quality jobs**: "60 percent or more will be provided through union labor, and a minimum of 50 percent of the created jobs will go to local Richmond residents." Other community choice agencies are similarly focused on job quality. A **joint solicitation** by Silicon Valley Clean Energy and Monterey Bay Community Power requires projects to pay prevailing wage and encourages projects to seek a project labor agreement with unions. (31)

Use of union labor has even become a selling point. In a September 2019 post on Twitter, the CalCCA trade organization shared a graphic advertising its members' use of union labor for renewable energy projects: (32)



Community Governance

Elected officials oversee all community choice agencies, but some go further by including community advisory boards or committees. Eight California community choice entities have community advisory councils, including Monterey Bay Community Power, Peninsula Clean Energy, Redwood Coast Energy Authority, San Jose Clean Energy, Clean Power Alliance of SoCal, Sonoma Clean Power, Silicon Valley Clean Energy, and Valley Clean Energy. The practice is uncommon outside of California. (33)

The community advisory board provides formal and regular intervention opportunities for community members. For Peninsula Clean Energy, for example, the purpose of the Citizens Advisory Committee is to: (34)

- Act as a liaison to the community.
- Provide feedback on policy and operational objectives.
- Engage in outreach to the community, including encouraging ratepayers to opt-up to ECO100 (the 100% renewable energy product offering) and implement other carbon reducing practices.
- Assist with legislative advocacy in conjunction with staff and board.
- Provide a forum for community discussions on a wide variety of strategies to reduce carbon emissions in conjunction with staff and board.

For Redwood Coast, advisory committee members represent specific communities within the service area to ensure geographic diversity. For East Bay, the committee is meant to capture input from specific stakeholder communities, including labor, environmental justice, low income, and business. (35)

Full City Integration

Some community choice agencies push the limits of integrating their newfound energy procurement powers with existing city authority. A **presentation** prepared by Silicon Valley Clean Energy outlines a comprehensive plan for removing greenhouse gas emissions from the power system, and it combines power procurement with the exercise of city powers such as energy codes. It includes resources for developing model codes to electrify buildings and transportation, and includes items like **"reach codes,"** codes that cities adopt to require lower energy use from buildings. These codes can even specify fuel types, such as a preference for clean electricity over gas.

Other agencies, like Sonoma Clean Power, **incentivize installation** of electric vehicle chargers to aid customers switching to electric vehicles. The Southeast Ohio Public Energy Council works with the federal SolSmart program, which helps local governments install solar. (36)

The Future of Community Choice

In 2019, community choice agencies served more utility customers than ever, and this trend seems likely to continue. In several states, legislation has advanced to allow communities to seize control of electricity procurement. Growth has also been significant in at least two states with recently adopted policy: New York and California. California's community choice programs, in particular, have added depth to the breadth of community choice across the country.

RECENT COMMUNITY CHOICE POLICY DEVELOPMENTS

New Hampshire recently joined the community choice cadre, with legislation for an opt-out program signed by the governor in August 2019.

In Oregon, where commercial and industrial customers already have the option to choose their energy provider, community choice would be a less significant change in policy than for states with no existing competition. Even so, House Bill 2852 (introduced in February 2019) didn't get a hearing.

A bill introduced in Connecticut in 2019, where customers already have the option to choose their electricity supplier, was referred to committee with no further action. (37)

In Maryland, 19 co-sponsors signed onto community choice legislation that was ultimately referred to "interim study" by the Economic Matters committee.

In New Mexico, two senators sponsored Senate Bill 374 to enable community choice, but the bill was tabled indefinitely.

Growth in Existing Community Choice States

California captures the largest share of growth in community choice, with some estimates suggesting that half of the state's electricity sales could flow through choice agencies by 2020, and over 80 percent by 2025. (38) As noted in the introduction, fast growth also marks the New York and Massachusetts community choice scenes.

San Diego recently opted to move ahead with a community choice program after years of debate. Listen to our ***2014 podcast with activists*** *as the idea coalesced and our 2018 podcast with a former mayoral staffer about* ***the final push to local power.***

Growth in other states has been much more muted. In Illinois, for example, the rapid growth of five years ago has receded. Communities have suspended programs that could no longer use short-term power purchase contracts to generate electricity bill savings for customers. In Ohio, a handful of communities held votes to adopt programs in 2018, with about 10 communities representing 40,000 residents approving the move. (39) New Jersey's program grew from 10 communities to over 50 from 2014 to 2017, but no new programs have launched in the past two years. (40)

California Exceptionalism

It's hard to overstate the importance of California's community choice programs in the advancement of the concept; it has evolved from a focus solely on bulk purchasing to the integration of city planning with advancing clean energy, local economic development, and jobs. The state may owe the success of its community choice model to the program's tortuous beginnings.

Fighting the Incumbent Monopolies

Adopted in 2002, California's community choice law was part of the state's failed experiment with market restructuring and retail competition. After market manipulation by Enron caused rolling blackouts and price spikes, the state re-regulated its three large investor-owned utilities. Thus, unlike other states with existing retail customer competition, California's incumbent utilities saw community choice aggregation as an existential threat to their market share and profitability—and acted accordingly. When Marin County attempted to create the first aggregation program, utilities worked furiously to undermine it. They threw $35 million into a ballot campaign—Proposition 16—to raise the threshold for communities to approve community choice from a majority to a two-thirds vote. The ballot measure failed in 2010, but it wasn't the final effort.

*Listen to our **2014 interview** with Marin Clean Energy CEO Dawn Weisz on how community choice might not have launched in California*

In 2011, communities fought back with legislation to develop a code of conduct "to prevent utilities from using their structural advantages to influence customers or local governments against investigation of or participation in CCAs." (41) The rationale behind the legislation is cited in the rules released by the state's public regulators:

SB 790 finds that "[e]lectrical corporations have inherent market power derived from, among other things, name recognition among customers, long-standing relationships with customers, ... [and] access to competitive customer information." Towards this end, the Code of Conduct adopted in this decision defines and places limits on utility marketing and lobbying activities that could discourage exploration of or interest in a CCA.

The code of conduct didn't prevent all future utility opposition. In 2014, utilities backed a bill in the California Assembly to change community choice programs from opt-out to opt-in, likely to eliminate any new programs (see New Jersey, where no programs launched from 1999 until the state shifted to the opt-out model in 2012). The bill failed when it wasn't taken up by the state's senate.

Even now, as community choice may soon serve a majority of residential and small commercial customers, the struggle continues in debates over exit fees.

Credit: LEANENERGYUS

Operational *(19 as of April 2019)*

NORTHERN CA
PG&E Territory

- **MCE Clean Energy** — *Marin, Napa, Contra Costa and Solano Counties*
- **Sonoma Clean Power** — *Sonoma and Mendocino Counties*
- **Clean Power SF** — *City and County of San Francisco*
- **Peninsula Clean Energy** — *San Mateo County*
- **Silicon Valley Clean Energy** — *Santa Clara County*
- **San Jose Clean Energy**
- **Monterey Bay Clean Power** — *Santa Cruz, Monterey, San Benito Counties, Cities of San Luis Obispo and Morro Bay*
- **East Bay Community Energy** — *Alameda County*
- **Redwood Coast Energy Authority** — *Humboldt County*
- **King City Community Power**
- **Pioneer Community Energy** — *Placer County*
- **Valley Clean Energy Alliance** — *Unincorporated Yolo County, Cities of Davis and Woodland*

SOUTHERN CA
SCE & SDG&E Territory

- **Lancaster Choice Energy**
- **Apple Valley Choice Energy**
- **Clean Power Alliance of So. CA** — *Los Angeles and Ventura Counties*
- **Pico Rivera Municipal Energy (PRIME)**
- **San Jacinto Power**
- **Rancho Mirage Energy Authority**
- **Solana Energy Alliance**

2020/2021 Launch *(anticipated)*

- **Desert Community Energy** — *Palm Springs, Palm Desert, Cathedral City*
- **Western Community Energy** — *7 cities served by Western Riverside Council of Govts.*
- **Unincorporated Riverside County**
- **Cities of Hanford, Pomona, Palmdale, Baldwin Park, Commerce, Santa Paula**

Investigating

CITIES

- **Carlsbad**
- **Chico**
- **Chula Vista**
- **Del Mar**
- **El Monte**
- **Encinitas**
- **Fresno**
- **Irvine**
- **La Mesa**
- **Oceanside**
- **San Diego**
- **Stockton**

COUNTIES

- **Butte**
- **Fresno**
- **Orange**
- **San Diego**
- **San Joaquin**
- **San Luis Obispo**
- **Santa Barbara**

For more information on California's second community choice program, Sonoma Clean Power, read ***this 2014 post.***

Size and Contract Terms

California's exceptionalism extends to the depth of its choice programs. For one, California's choice programs are big. While most of the community choice programs in other states are single-community, California's include many. Marin Clean Energy serves 10 communities. Los Angeles County's serves over 50. The size of California's programs provides more buying power and allows them to capture economies of scale in management. It also allows for specialization in staff, explaining the depth and breadth of community choice activities in that state, from local procurement to workforce development. New York may benefit from following California's lead of large aggregations. Westchester Power, the first CCA in New York, launched in 2016 and serves 21 communities. (42)

In April of 2017, John Farrell interviewed Glenn Weinberg of Westchester Power for ***this episode*** *of Local Energy Rules.*

California's choice programs also differ in another significant way: contract length. While choice programs in other states sign contracts from two to five years long, California's programs have begun signing power purchase contracts for 15 to 20 years. The difference is more substantial than time, it's about ownership of the entire energy program. A short-term contract tends to focus solely on price and renewable content (with the renewables supplied by renewable energy certificates from existing solar and wind projects, for example).

Sonoma Clean Power and Lancaster Choice Energy procured 32% and 14% of their RPS-compliant renewable energy in 2017 through long-term contracts, respectively, despite not having a credit rating. (43)

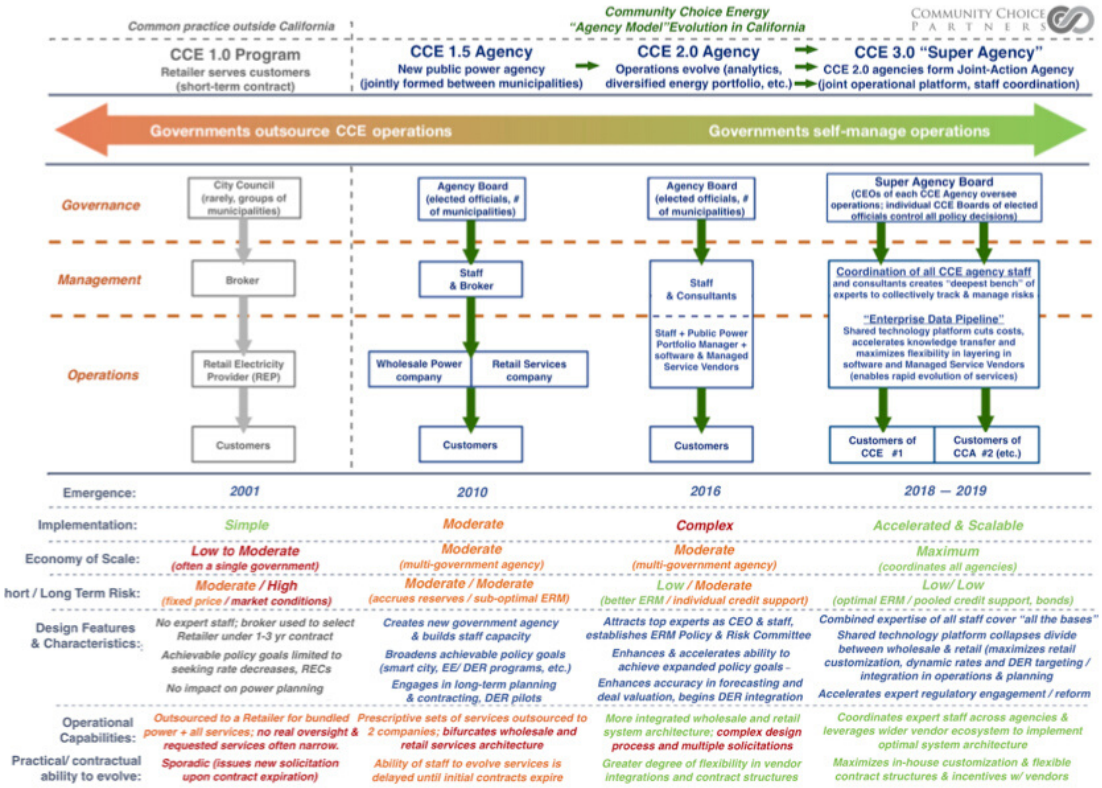
With contract terms of 15 years and longer, California choice programs can contract for brand-new renewables, giving them the power to choose location, labor and wage standards, and other important factors. The combination of size and contract terms explains why California choice programs represent most of the examples of programs with successful approaches to renewable energy, local energy production, economic development, and community governance in our Ambitious CCAs section. (For more information on contract terms in all community choice states, see the Appendix).

Advanced Planning and Energy Management

California's novel structure and powers for choice programs has led to a 2.0 and/or 3.0 model of what community choice means. When the state's first community choice program launched in 2010, Marin Clean Energy looked much like programs in other states focus on cost-competitiveness or purchasing renewable energy credits. By 2019, the agency had taken over energy efficiency programs from the incumbent utility, invested in local renewable energy projects, and received its own credit rating to allow it to secure long-term power purchases.

In addition to more sophisticated individual aggregations (either through evolution or leapfrogging), the proliferation of community choice programs has allowed these entities to coordinate. In California, the new **CalCCA alliance** has not only coordinated the political efforts of the state's community choice programs, but also lent technical expertise.

Samuel Golding of Community Choice Partners provides a very detailed **illustration** of this evolution of community choice:



For a higher resolution version of this image, go to http://bit.ly/2sNs6GN

Community Governance

As Golding explains in his LinkedIn post about the evolution, "California Community Choice agencies are actively working with other municipal agencies and departments to coordinate their activities to meet local energy policy goals — not just wholesale electricity but also distributed energy and multi-sectoral decarbonization — spanning building codes, permitting, transportation planning, zoning and land use, manufacturing, emergency planning and disaster relief." (44)

In other words, community choice becomes a tool for community-wide reductions in greenhouse gas emissions and wider community economic development goals, not just electricity procurement. He highlights two powerful examples: (45)

- The Sonoma Clean Power agency routinely works with their County Transit Planning Authority, regional Climate Protection Agency, and Water Authority — and they've implemented preferred zoning for small-scale solar PV, integrated electric vehicle charging standards into their building codes, and deployed a network of electric vehicle stations for managed charging.
- The Lancaster Choice Energy agency has been working with their regional transit agency to electrify public transportation buses — the partnership led to an electric bus manufacturer siting a manufacturing facility in Lancaster to produce the electric buses.

Challenges at the Edge of Innovation

The rapid rise of community choice energy raises some unique questions. For one, how does state level renewable energy policy incorporate community choice?

The responsibility for reaching state renewable energy goals presented a problem in Illinois, when hundreds of communities stampeded to create programs in the wake of legislation in 2012 to take advantage of lower prices. The state's renewable energy standard didn't apply to community choice programs, effectively opting them out of clean energy progress. Although the problem has since been solved, it resulted in slower than expected growth in wind and solar generation in Illinois.

In California, renewable energy issues have presented in a different way. Community choice agencies moved to accelerate adoption of renewable energy. However, the rapid shift to community power left legacy utilities holding old contracts for wind and solar and fewer customers to pay for them. These **early contracts** have much higher prices than current renewable energy projects, but it was these projects that established the market, gave developers experience, and built grid management expertise to allow the market to mature. In other words, how do state policy makers decide who pays for old clean energy deployment as communities take charge?

Already, this issue has intersected with another challenge: transition costs. The three incumbent investor-owned utilities in California have lobbied for exit fees known as **"power cost indifference adjustments"** to be applied to the bills of community choice customers. The fees would ostensibly cover the cost of investments made, with the expectation of serving the customers that have since selected a local provider. In October 2018, the California Public Utilities Commission ordered customers of community choice programs to pay a higher exit fee than previously. The result was significant, according to Utility Dive coverage:

> *"In Pacific Gas & Electric's (PG&E) territory, CCA residential customers departing in 2018 would pay an additional 1.68% on their bills. In San Diego Gas & Electric's (SDG&E) territory, the increase would top 5%".* (46)

The issue is still pending, as the trade organization representing community choice agencies has asked for a re-hearing. (47) Meanwhile, the Commission intends to revise the formula in a second phase of the process. Separating the legacy renewable energy contracts from other expenses could help resolve some of the issue, says a recent report from the National Renewable Energy Laboratory:

"The voluntary transfer of uneconomical renewable energy long-term contracts could help CCAs comply with the RPS, resource adequacy requirements, and SB 350, while reducing the price level of the [Power Cost Indifference Adjustment] PCIA." (48)

So-called "resource adequacy" represents yet another challenging issue facing community choice. Under current rules, community choice agencies must compensate incumbent utilities for backup power plants used during periods of peak demand. Community choice programs contest that the fee calculation ignores the value of their own resources that can provide capacity during these periods of peak energy use. (49) The issue has also arisen recently in Massachusetts, where the intent of Boston to create a community choice program caused the incumbent default utility, Eversource, to raise the alarm about price volatility for its remaining customers due to uncertainty about its future customer base. (50)

Ultimately, a growing community choice movement has raised fundamental questions about the required level of state regulation. State regulatory bodies were created to oversee utility companies granted monopolies by state legislatures, companies that otherwise had limited accountability. In many cases, that individual oversight expanded to statewide coordination. In states with competitive retail markets, it meant identifying the "provider of last resort" for customers that don't expressly choose their own. California, for example, doesn't define a provider of last resort should either an investor-owned utility go bankrupt—as has happened with Pacific Gas & Electric––or should a community choice agency suspend service.

California regulators are also wrestling with a "fragmenting" market. Five years ago, nearly all power plant purchases had Commission oversight via utility resource plans. Now, a substantial portion of these decisions flow through community choice agencies that aren't subject to the same oversight. In a **2017 white paper**, the Commission lamented its loss of control: (51)

"The CPUC's top-down approach to regulation will be challenged by the need to interact with many more procuring entities. Further complicating the issue is the fact that there are outstanding questions regarding what role the CPUC has in the CCA [integrated resource plan] process."

So far, the California commission hasn't taken any major steps to re-centralize system planning, but it's **August 2018 report** on choice tries to identify potential paths forward to manage the state's triple goals of reliability, affordability, and clean energy.

California Advanced Community Energy Act

Alternatively, some advocates have introduced new legislation to codify the role of local communities in planning for a clean energy future. The defining elements of the proposal advanced by the Center for Climate Protection include:

- The primacy of power generation at or near the place where it will be consumed, with a target of one-third of electricity generation coming in this fashion.
- The primacy of local planning, coordinated with regional and statewide system planning.

The proposed policy includes requirements that local governments (and their community choice agencies) include climate goals in their general plans, that state government allocate resources to support local planning, and that competing for-profit utilities no longer make money based on capital spending on new power plants and power lines, but rather for meeting socially useful performance measures.

When it comes to the future of community choice, California will serve as a "postcard from the future" to other states.

Conclusion

Community choice can accommodate the growing public demand for energy democracy. Already, nine states enable community choice. Already, several hundred communities enjoy its benefits.

Part of its power is in its evolution. Initially driven by a desire to lower energy costs by providing communities market power, communities have realized that ownership over their energy system unlocks much more than purchasing power. Community choice agencies have accelerated development of renewable energy, integrated its purchase with local jobs and economic development, leveraged their power to pursue ambitious climate goals, and more fully cemented the power of cities to manage wide swaths of the local economy in the pursuit of sustainable economic development.

The power of the public can't be understated. Community choice mimics the buying power of private companies like Costco or consumer preferences like organic food. But by centering the power of energy decision making in cities, community choice allows energy system planning to integrate with community planning, economic development, housing, and (electric) transportation. In short, it enables energy democracy.

The hunger for public power and economic democracy is growing, and community choice allows communities to tap their strength in managing the energy system for the benefit of all.

Appendix

100% Cities and Utility Ownership

The following cities have 100% renewable energy commitments and some form of control over their utility. The unlisted 100% cities (from Sierra Club's **Ready for 100 campaign page**) have private utilities.

Location	Utility ownership
Aspen, CO	city-owned
Blacksburg, VA	city-owned
Bloomfield, IA	city-owned
Boston, MA	city-owned
Burlington, VT	city-owned
Cleveland, OH	city-owned
Denton, TX	city-owned
Fort Collins, CO	city-owned
Gainesville, FL	city-owned
Georgetown, TX	city-owned
Greensburg, KS	city-owned
Longmont, CO	city-owned
Orlando, FL	city-owned
Palo Alto, CA	city-owned
Rochester, MN	city-owned
Rock Port, MO	city-owned
Traverse City, MI	city-owned
Truckee, CA	city-owned
Cambridge, MA	community choice
Evanston, IL	community choice
Glen Ellyn, IL	community choice
Lancaster, CA	community choice
Lowell, MA	community choice
Marin County, CA	community choice
San Francisco, CA	community choice
San Jose, CA	community choice
Solana Beach, CA	community choice

Contract Length Evidence

ILSR was unable to find definitive rules on contract length for every state, but the following notes offer some context for contract lengths in each state.

- California - **Able to sign long term contracts, although the lack of credit ratings** can complicate matters
- Illinois - it's unclear if the **1-3 year typical contracts length** are a feature of the energy market because of rules or practice

- Massachusetts - According to research published by the University of New Hampshire, "Massachusetts CCAs enter **short-term contracts** with competitive energy suppliers"
- New Jersey - Power contracts are **limited to 2 years**
- New York - Contracts can be up to **4 years**
- Ohio - contracts tend to be short, **approximately three years.** It appears that may align with a state requirement to send opt-out notices every three years. This **news story** about a contract rift between NOPEC and its supplier also references a three-year term.
- Rhode Island - Unsure
- Virginia - The **law doesn't specify and**, with no active CCA programs, we were unable to determine contract length

Renewable Energy Offerings

This **Google spreadsheet** provides a comprehensive list of renewable energy offerings by community choice program by state, as of summer 2019.

Photo Credit: John Farrell

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