



**COMMUNITY
ENERGY®**

**Statement of Qualifications and Experience
2021**



Pennsylvania Headquarters:

Three Radnor Corporate Center, Suite 300
100 Matsonford Road, Radnor, PA 19087

Colorado Office:

1120 Pearl Street, Suite 200
Boulder, CO 80302

www.communityenergyinc.com
866.946.3123



Table of Contents

Mission Statement:	3
Who We Are:	3
Community and Environmental Impact:	3
Recognition:	4
Strategic Advantage:	4
Finance Experience:	4
Community Energy Online/Social Media:	5
Selected Solar Projects.....	6
<i>Amazon Solar Farm Virginia – Eastern Shore – 80 MW (AC), Accomack County, VA</i>	7
<i>Amazon Solar Farm Virginia – Southampton – 100 MW (AC), Southampton County, VA</i>	8
<i>Keystone Solar – 5 MW (AC), Lancaster County, PA</i>	9
<i>Comanche Solar – 120 MW (AC), Pueblo, CO</i>	10
<i>Butler Solar – 103 MW (AC), Butler, GA</i>	11
<i>North Star Solar – 100 MW (AC), Chisago County, MN</i>	12
<i>Berkley East Solar – 3 MW (AC), Berkley, MA</i>	13
<i>Gateway Solar – 6 MW (AC), Worcester County, MD</i>	14
<i>New Jersey Solar Portfolio – 37 MW (AC)</i>	15
<i>North Vineland Solar – 3 MW (AC), Vineland, NJ</i>	16
<i>West Vineland Solar – 4 MW (AC), Vineland, NJ</i>	17
<i>Mount Olive Solar – 2 MW (AC), Wayne County, NC</i>	18
<i>North Carolina Solar Portfolio – 120 MW (AC)</i>	19
<i>Dunn Solar – 2 MW (AC), Dunn, NC</i>	20
<i>Rose Hill Solar – 2 MW (AC), Rose Hill, NC</i>	21
<i>Franklin Solar – 2 MW (AC), Louisburg, NC</i>	22
<i>Lake County Solar – 2 MW (AC), East Chicago, IN</i>	23
<i>Lake County Solar – 2 MW (AC), Griffith, IN</i>	24
<i>Marion County Solar – 7.1 MW (DC), Indianapolis, IN</i>	25
Selected Community Solar Projects.....	26
<i>Rutland Solar – 990 kW (AC), Worcester County, MA</i>	27
<i>Barre Solar – 1.9 MW (AC), Worcester County, MA</i>	28
<i>Lafayette Solar Gardens – 1 MW (AC), Lafayette, CO</i>	29



<i>Antonito Solar Garden – 500 kW (DC), Antonito, CO</i>	30
<i>San Luis Solar Garden – 1.2 MW (AC), San Luis Valley, CO</i>	31
<i>Lafayette Horizon Solar – 1,56 MW (AC), Antonito, CO</i>	32
<i>Sterling Solar – 2.5 MW (DC), Sterling, MA</i>	33
<i>Clarkson Solar – 2 MW (AC), Potsdam, NY</i>	34
<i>Elizabethtown College Solar – 2 MW (AC), Elizabethtown, PA</i>	35
<i>Temple University Solar – 63 kW (DC), Philadelphia, PA</i>	36
<i>Eastern University Solar – 56 kW (DC), Delaware County, PA</i>	37
<i>Smith College Solar – 28 kW (DC), Northampton, MA</i>	38
Our Team	39



Mission Statement:

Community Energy's mission is to balance people and the planet starting with the climate crisis.

Who We Are:

Community Energy has a 20+ year history of leadership in renewable energy.

Community Energy has been a pioneer in renewable energy generation for 22 years, developing and financing 2.7 GW of renewable energy projects across the United States, including 2 GW of solar, and delivering the first solar and wind projects at scale in 12 states. Community Energy is a pure play developer with a 60-person team that anticipates, originates, and develops competitively advantaged solar plus storage projects throughout the country. Community Energy has a large and diverse project pipeline in support of its mission to accelerate the transition to a 24/7 carbon-free grid. Community Energy has offices near Philadelphia, PA and in Boulder, CO.

Community and Environmental Impact:

Making a difference, one clean energy project at a time.

Community Energy strives to be a good neighbor by working closely with local partners to ensure that all projects support community needs for the long-term.

Our team goes beyond building reliable energy infrastructure — we positively impact communities and enhance environmental benefits.

CE values its relationships with energy partners and the local community and delivers renewable energy projects that provide consistent long-term benefits to landowners and local economies.

Land Stewardship – We understand that a great project begins with thoughtful, collaborative site design and continues with how we care for the land and the soil as living resources for generations to come.

Sustainable Infrastructure – We value our relationships with local partners and community members and work diligently to ensure our renewable energy projects will be good neighbors for long-term success.

Community Benefit – We seek to create benefit for participating landowners and create significant economic opportunities in the community, without burden on existing infrastructure.

Our solar projects are designed through gentle construction to blend into the landscape and promote agricultural land preservation. Solar projects are good neighbors and benefit the local communities.



Recognition:

2019 – Brent Alderfer, Founder and CEO of Community Energy won the Epstein Lifetime Achievement Award by the Sustainable Energy Fund for a career advancing sustainability in energy.

2016 – Brent Alderfer won the Ernst & Young Entrepreneur of The Year Award in Greater Philadelphia for innovation in energy and cleantech.

2014 – Keystone Solar Project was the lead article in the June 2014 issue of enerG magazine and the subject of the only business school case study of utility-scale solar by Columbia University.

2013 – Keystone Solar won the 2013 Photovoltaic (PV) Projects of Distinction Award at PV America East 2013 in Philadelphia, PA. Sterling Solar project in Massachusetts was the cover story of Solar Industry magazine in November 2013.

2011 – Community Energy was included in the Top 300 Startups' 2011 Edition compiled by fundedIDEAS.

2004 - 2011 – Community Energy's programs maintained National Renewable Energy Laboratory (NREL) Top Ten Green Power Program rankings.

Strategic Advantage:

CE's long track record of proven projects highlights the company's ability to de-risk and reliably deliver energy projects for its partners. The company's long-term relationships attest to its integrity and its ability to develop creative solutions and deliver on its promises. As compared to recent market entrants or single product offers, CE offers the depth of development, expertise, experience and financial stability to complete projects that meet customer, financing and community requirements.

Finance Experience:

CE has a strong history of financing clean energy projects with many well-regarded entities: Dominion Energy, Inc., Southern Company, Exelon/Constellation Energy, Duke, DE Shaw, New Jersey Resources, Keybank and the Sustainable Energy Fund and executed off-take with Amazon Web Services, Xcel Energy, Indianapolis Power & Light, North Indiana Public Service Company, Georgia Power, Henderson Municipal Power and Light, Big Rivers Electric Corporation, and Exelon on deals as large as 120 MW-AC.



**COMMUNITY
ENERGY®**

Community Energy Online/Social Media:



Website

<https://www.communityenergyinc.com>



Twitter

www.twitter.com/commenergyinc



Facebook

www.facebook.com/communityenergy



YouTube

www.youtube.com/user/communityenergyinc



Selected Solar Projects



The Philadelphia Phillies Phanatic in attendance at the Keystone Solar “Turn the Power On” event on October 2012 in Lancaster County, PA

Amazon Solar Farm Virginia – Eastern Shore – 80 MW (AC), Accomack County, VA



Distinguishing Features

- *A cluster of projects across roughly 1,000 acres in the vicinity of the Oak Hall substation*
- *Generates 171,000 Megawatt-hours of electricity per year – enough to power 15,000 homes*
- *Energy purchased by Amazon Web Services for data centers in Northern Virginia*
- *Acquired by Dominion Energy, Inc., a subsidiary of Dominion (NYSE: D) in 2015*

Amazon Solar Farm Virginia — Eastern Shore is a solar project on the Delmarva Peninsula in Accomack County, Virginia supplying supply Amazon Web Services data centers in Virginia under a long-term Power Purchase Agreement. Community Energy Solar chose the Delmarva Peninsula for the project site because it offers excellent solar resource and flat land ideal for constructing a solar project of this size. In addition, Community Energy Solar is utilizing single-axis tracker technology, which follows the sun's path providing high peak production.

Community Energy Solar included an educational “Solar Walk” designed for school children and the public to visit. Amazon Solar Farm Virginia — Eastern Shore was approved for a Conditional Use Permit by a unanimous vote from the Accomack County Board of Supervisors. This was the first project ever approved under the Virginia Permit by Rule for Renewable Energy.

Amazon Solar Farm Virginia — Eastern Shore has been online since 2016.



Amazon Solar Farm Virginia – Southampton – 100 MW (AC), Southampton County, VA



Distinguishing Features

- *The largest solar farm ever constructed in Virginia*
- *Generates 210,000 Megawatt-hours of electricity per year – enough to power 19,000 homes*
- *Energy purchased by Amazon Web Services as part of their effort to achieve 100% renewable energy use for their data centers*
- *Built, owned and operated by Dominion Energy, Inc., a subsidiary of Dominion (NYSE: D)*
- *Acquired by Dominion Energy, Inc., a subsidiary of Dominion (NYSE: D) in 2015*

Amazon Solar Farm Virginia – Southampton is a solar project in Southampton County, Virginia that will supply Amazon Web Services data centers in Virginia under a long-term Power Purchase Agreement. The solar project will avoid the release of 134,377 tons of carbon dioxide, 631 tons of sulfur dioxide, 315 tons of nitrogen oxides, and 12 tons of particulate matter annually. The project utilizes single-axis tracker technology, which follows the sun's path providing high peak production.

Amazon Solar Farm Virginia – Southampton achieved commercial operation in 2017.

The Amazon Solar Farm Virginia – Southampton logo is a trademark of Amazon.com, Inc. or its affiliates.



Keystone Solar – 5 MW (AC), Lancaster County, PA



Distinguishing Features

- *Winner of the PV America 2013 Project of Distinction Award*
- *Largest customer-driven utility scale solar project in PA*
- *Enabled by voluntary SREC retail buyers*
- *Attracted significant public grant support*
- *Subject of Columbia University Business School case study*

Keystone Solar is the largest customer driven utility-scale solar project in PA. Exelon Generation and Community Energy's retail marketing division committed to buy the output and back the financing for the project, which supplies the highest-quality green electricity – local solar power – to customers who sign up for a share of the generation. Several high-profile customers signed up for a share of the renewable energy credits, including Drexel University, Franklin & Marshall College, Eastern University, Clean Air Council, the Philadelphia Phillies, Millersville University, Marywood University and Juniata College.

The project was the recipient of the PV America East 2013 Project of Distinction Award. This is a national award that recognizes major achievements in the U.S. solar market. Keystone Solar was one of three projects selected out of more than 130 submitted. Columbia University School of Business produced a business case study on the project, the first case study in the U.S. on a utility-scale solar project.

Keystone Solar has been online since 2012.

Comanche Solar – 120 MW (AC), Pueblo, CO



PHOTO CREDIT: Construction Contractor, RES America Construction Inc.

Distinguishing Features

- *Largest solar project east of the Rockies at 120 MW (AC)*
- *Project generation will be enough to power more than 31,000 homes*
- *6 billion kilowatt hours of clean energy generated and 3.5 million tons of CO₂ reduction over 25-year lifecycle*

The Comanche Solar project was selected by Xcel Energy through a competitive bid process to supply the majority of its solar generation portfolio. The project was found to be more cost effective than natural gas on a dollar per megawatt hour basis. The March 2014 press release covering the announcement of Comanche Solar is included in the appendix.

Comanche Solar has been online since 2016.

Butler Solar – 103 MW (AC), Butler, GA



PHOTO CREDIT: Southern Power

Distinguishing Features

- *At 103 MW (AC) the project was built on approximately 1,050 acres of land and delivers enough energy to power more than 25,000 homes*
- *Originated through a competitive bid process announced by Georgia Power*
- *Employs tracker technology, which follows the sun's path to optimize production*
- *Purchased in 2015 by Southern Power, subsidiary of Southern Company (NYSE: SO)*

The Butler Solar project was selected by Georgia Power through a competitive bid process. The utility determined that the project was competitive and cost effective and decided to include it in its 2015 energy portfolio.

The June 2015 press release covering the announcement of Butler Solar is included in the appendix.

Butler Solar has been online since 2016.

North Star Solar – 100 MW (AC), Chisago County, MN



PHOTO CREDIT: D.E. Shaw Renewable Investments

Distinguishing Features

- *Selected by Northern States Power (Xcel Energy), through a competitive bid process as one of the most cost effective solar projects in Minnesota*
- *Utilizes linear tracking technology to maximize energy production, particularly during summer afternoons when electricity demand is highest*

The 100 MW (AC) North Star Solar Project is located in Chisago County, Minnesota – approximately four miles southeast of North Branch, MN. The project connects to the grid at the Chisago Substation, a point of significant transmission infrastructure and strong electrical ties to Xcel Energy load. The North Star Solar Project provides Xcel Energy with a cost-effective and efficient solution to meeting their 1.5 percent solar energy requirement in Minnesota. Approved by the Minnesota Public Utilities Commission, the North Star Solar Project is the largest solar energy facility in the Midwest, producing enough energy to power approximately 20,000 homes.

North Star Solar has been online since 2016.

Berkley East Solar – 3 MW (AC), Berkley, MA



Distinguishing Features

- *Endangered Species Habitat Plan*
- *Supplies energy to Taunton Municipal Lighting Plant, the largest municipal utility in MA*
- *Payment in Lieu of Taxes (PILOT) - Annual payments to Town of Berkley*

Berkley East Solar, located in the Town of Berkley, Massachusetts, is a 3 Megawatt (AC) photovoltaic solar project. The total generation of the project is purchased by the Taunton Municipal Lighting Plant (TMLP) through a long-term power purchase agreement. TMLP, the state's largest municipal utility, will pass along the economic benefits of purchasing competitively priced solar energy to its 36,000 customers. The project also provides annual revenue to the Town of Berkley through a payment in lieu of taxes (PILOT) agreement and to landowners through lease payments; all without any additional burden to the local infrastructure.

Community Energy Solar worked closely with the Massachusetts Division of Fisheries and Wildlife to develop and install special habitat and protections for the Eastern Box Turtle, a Species of Special Concern under the Massachusetts Natural Heritage and Endangered Species Program. The turtle habitat is planted with a conservation grass seed mix native to New England and includes special nesting areas to promote reproduction.

Berkley East Solar has been online since September 2012.

Gateway Solar – 6 MW (AC), Worcester County, MD



Distinguishing Features

- 52,000 photovoltaic panels set on 120 acres
- Adds ~10 megawatts to the grid and aid in Maryland's renewable power goals
- Offers economic benefit to the Eastern Shore by bringing jobs to the area for construction

Developed by Community Energy Solar and acquired by Constellation, an Exelon company.

Gateway Solar achieved commercial operation in 2018.

New Jersey Solar Portfolio – 37 MW (AC)



Distinguishing Features

- *7 NJ Solar projects totaling 37 MW (AC) have been developed through the state's three major utilities (PSE&G, JCP&L and ACE)*
- *Low mow turf-grass reduces storm water and improves organic content for future agricultural use*
- *The projects are designed to respect the agricultural character of the community*
- *A 200-Year old oak tree was saved at one of the projects*
- *The New Jersey Board of Public Utilities approved these projects under Subsection Q of the 2012 NJ Solar Act*

New Jersey Solar Projects have been online since 2016.

North Vineland Solar – 3 MW (AC), Vineland, NJ



Distinguishing Features

- *Supplies energy to the Vineland Municipal Electric Utility (VMEU)*
- *Early project in NJ SREC Program*

Community Energy Solar developed and arranged for the construction of the 3 MW (AC) North Vineland Solar facility in conjunction with Vineland Municipal Electric Utility (VMEU) and Constellation Energy Group. The energy is sold to the VMEU through a 25-year power purchase agreement.

North Vineland Solar has been online since 2011.

West Vineland Solar – 4 MW (AC), Vineland, NJ



Distinguishing Features

- *Project sited at the Landis Sewage Authority and integrated into operations*
- *Supplies energy to the Vineland Municipal Electric Utility (VMEU)*
- *Early project in NJ SREC Program*

Community Energy developed and arranged for the construction of the 4 MW (AC) West Vineland Solar facility in conjunction with Vineland Municipal Electric Utility (VMEU) and Constellation Energy Group. The energy is sold to the VMEU through a 25-year power purchase agreement.

West Vineland Solar has been online since 2011.

Mount Olive Solar – 2 MW (AC), Wayne County, NC



Distinguishing Features

- *Owned and operated by Community Energy*
- *Generates 4200 megawatt-hours of electricity per year – enough to power 400 homes*
- *Energy purchased by Duke Energy Progress*

Mount Olive Solar is a solar project in Wayne County, NC, located adjacent to the Town of Mount Olive. It supplies clean, renewable energy to Duke Energy Progress under a long-term Power Purchase Agreement. Having developed over 30 distribution-scale solar farms in NC for 3rd party investors, Community Energy decided to retain Mount Olive Solar for its operating asset portfolio.

Mount Olive Solar achieved commercial operation in December 2016.

North Carolina Solar Portfolio – 120 MW (AC)



Distinguishing Features

- *102 Megawatts (AC) currently online in Progress Energy and Dominion Power utility territories*
- *Individual projects are in the 2.5 MW to 6.25 MW range*

Community Energy has successfully developed a sizable solar portfolio in North Carolina. Projects are grid-connected into the Progress Energy Carolinas and Dominion North Carolina Power service territories.

North Carolina provides a favorable environment for solar energy development through a 35% state investment tax credit on the eligible costs of the project, which is in addition to the federal investment tax credit. In addition, a large portion of the solar facility value is exempt from personal property tax.

North Carolina Solar Projects have been online since 2016.



Dunn Solar – 2 MW (AC), Dunn, NC



Distinguishing Features

- *High profile project adjacent to I-95, where 49,000 cars pass every day*
- *Offtake under guaranteed Progress Energy Carolinas standard offer Feed-In-Tariff*
- *Financial structure to take advantage of 35% state investment tax credit in addition to the 30% federal investment tax credit*

Dunn Solar is a 2.5 MW (DC) solar project located in Dunn, North Carolina. The electricity generated from the solar arrays is purchased by Progress Energy Carolinas through a standard contract power purchase agreement. This agreement provides guaranteed offtake for the power and a fixed across-the-board energy rate for solar power. This eliminates the competitive bid process from the equation and minimizes the economic uncertainty related to renewable energy development.

North Carolina provides a favorable environment for solar energy development through a 35% state investment tax credit on the eligible costs of the project, which is in addition to the federal investment tax credit. In addition, a large portion of the solar facility value is exempt from personal property tax.

Dunn Solar has been online since August 2012.



Rose Hill Solar – 2 MW (AC), Rose Hill, NC



Distinguishing Features

- *Features solar modules manufactured by Suniva Inc., a U.S. manufacturer based in Georgia*
- *Developed in an unincorporated area of NC with expedited site development process*
- *Offtake under guaranteed Progress Energy Carolinas standard offer Feed-In-Tariff*
- *Financial structure to take advantage of 35% state investment tax credit in addition to the 30% federal investment tax credit*

Rose Hill Solar is a 2.5 MW (DC) solar project located in Rose Hill, North Carolina. The electricity generated from the solar array is purchased by Progress Energy Carolinas through a standard contract power purchase agreement. This agreement provides guaranteed offtake for the power and a fixed across-the-board energy rate for solar power. This eliminates the competitive bid process from the equation and minimizes the economic uncertainty related to renewable energy development.

Rose Hill Solar has been online since August 2012.



Franklin Solar – 2 MW (AC), Louisburg, NC



Distinguishing Features

- *Design compatible with neighboring elementary school*
- *Offtake under guaranteed Progress Energy Carolinas standard offer Feed-In-Tariff*
- *Financial structure to take advantage of 35% state investment tax credit in addition to the 30% federal investment tax credit*

Franklin Solar is a 2 (AC) solar project located in Louisburg, North Carolina. The electricity generated from the solar array is purchased by Progress Energy Carolinas through a standard contract power purchase agreement. This agreement provides guaranteed offtake for the power and a fixed across-the-board energy rate for solar power. This eliminates the competitive bid process from the equation and minimizes the economic uncertainty related to renewable energy development.

North Carolina provides a favorable environment for solar energy development through a 35% state investment tax credit on the eligible costs of the project, which is in addition to the federal investment tax credit. In addition, a large portion of the solar facility value is exempt from personal property tax.

Franklin Solar has been online since April 2013.

Lake County Solar – 2 MW (AC), East Chicago, IN



Distinguishing Features

- *Developed under national account with a major pipeline company*
- *Ballasted technology*
- *Power production secured by a guaranteed Feed-In-Tariff (FIT) with Northern Indiana Public Service Company (NIPSCO)*

The 2 MW (AC) Lake County Solar East Chicago Project is located on an industrial site in Northern Indiana which is owned and operated by Buckeye Partners, L.P., a leading national energy pipeline and storage company. The array is interconnected into the Northern Indiana Public Service Company (NIPSCO) grid in East Chicago, Illinois. Lake County Solar is enabled by a feed-in-tariff, or guaranteed long term standard offer contract, offered by NIPSCO. Community Energy and Buckeye have entered into such an agreement, which establishes NIPSCO as the both the power purchaser and SREC off-taker.

The project site is located on industrial land. Land that was previously underutilized has now been redeveloped to support the production of clean renewable energy. It is expected to produce approximately 3,120 Megawatt hours annually, avoiding 2,615 tons of carbon dioxide emissions each year and the equivalent of removing over 7,410 cars from Indiana's roads over the 15-year term of the power purchase agreement.

Lake County Solar (East Chicago, IN) has been online since August 2013.

Lake County Solar – 2 MW (AC), Griffith, IN



Distinguishing Features

- *Safety analysis and plan integrated with pipeline operations*
- *Ballasted technology*
- *Power production secured by a guaranteed Feed-In-Tariff (FIT) with Northern Indiana Public Service Company (NIPSCO)*

The 2 MW (AC) Lake County Solar Griffith Project is located on an industrial site in Northern Indiana which is owned and operated by Buckeye Partners, L.P., a leading national energy pipeline and storage company. The array is interconnected into the Northern Indiana Public Service Company (NIPSCO) grid in the town of Griffith, Indiana. Lake County Solar is enabled by a feed-in-tariff, or guaranteed long term standard offer contract, offered by NIPSCO. Community Energy and Buckeye have entered into such an agreement, which establishes NIPSCO as the both the power purchaser and SREC off-taker.

The project site is located on industrial land. Land that was previously underutilized has now been redeveloped to support the production of clean renewable energy. It is expected to produce approximately 3,120 Megawatt hours annually, avoiding 2,615 tons of carbon dioxide emissions each year and the equivalent of removing over 7,410 cars from Indiana's roads over the 15-year term of the power purchase agreement.

Lake County Solar (Griffith, IN) has been online since August 2013.

Marion County Solar – 7.1 MW (DC), Indianapolis, IN



Distinguishing Features

- Consists of two separate sites hosted by Citizens Energy Group:
 - 1.9 MW (DC) next to the Citizens Liquid Natural Gas plant
 - 5.2 MW (DC) Belmont site
- The projects utilize ballasted fixed tilt arrays with near zero soil penetration
- The power is sold into the Indiana Power and Light electric grid

The 7.1 MW (DC) Marion County Solar project consists of two sites, the 1.9 MW Citizens Liquid Natural Gas site and the 5.2 MW Belmont site. Citizens Energy Group, a public charitable trust that distributes natural gas, water, and wastewater services to more than 300,000 customers, hosts the sites. Community Energy has a power purchase agreement with Citizens Energy and Indiana Power & Light.

Marion County Solar has been online since 2015.



Selected Community Solar Projects





Rutland Solar – 990 kW (AC), Worcester County, MA



Distinguishing Features

- *Project generation enough to power more than 135 homes*
- *Over 1.7 million kilowatt hours of clean energy generated; eliminating over 2.8 million pounds of CO₂ from the atmosphere*
- *Corporate purchase of generation output by large anchor customer*
- *Community Energy owns and operates the system and sells the power*

Community Energy's first Massachusetts community solar garden, located in Rutland, MA has 100 subscribed households and 1 commercial customer.

Rutland Solar achieved commercial operation in 2017.

Barre Solar – 1.9 MW (AC), Worcester County, MA



Distinguishing Features

- *Comprised of three co-located projects totaling 2 MW with project generation enough to power more than 350 homes*
- *Over 3 million kilowatt hours of clean energy generated; eliminating over 5 million pounds of CO₂ from the atmosphere*
- *Community Energy used sale-leaseback financing, which includes a Power Purchase Agreement and allows monetization of the tax benefits, inclusive of the investment tax credit and depreciation*
- *Corporate purchase of generation output by large anchor customer*
- *Owned and operated by Community Energy Solar*

Barre Solar is Community Energy's second Massachusetts community solar garden located in Massachusetts. This Community Solar project provides local residents (in National Grid utility territory) the opportunity to sign up for a Solar Share and save money on their electric bills. Project utilizes a fixed tilt, ground-mounted system.

Barre Solar achieved commercial operation in 2018.

Lafayette Solar Gardens – 1 MW (AC), Lafayette, CO



Distinguishing Features

- *One of the first community solar models in the U.S.*
- *Part of Xcel Energy's performance-based Solar*Rewards Community Program*
- *In-house design and finance*

The Lafayette Solar Gardens consist of two 500 kilowatt solar arrays located in Lafayette, Colorado. These projects were the result of a cooperative effort between Community Energy and the City of Lafayette. Within this program, Xcel Energy purchases the total generated output of the facility as well as the renewable energy credits.

Lafayette Solar is unique in that the capacity of the project is allocated to off-site participants. These participants are assigned a portion of the project based on their electricity usage and receive a monthly bill credit from Xcel related to the performance of the system. Off-site participants include several City of Lafayette facilities, local businesses, and individual households. A portion of the project is designated to low-income residents who will receive the outputted energy at no cost. The 1 Megawatt solar gardens have produced \$1.2 million in energy improvements, which will result in a significant energy cost savings to the city.

The Lafayette Solar Gardens have been online since December 2013.

Antonito Solar Garden – 500 kW (DC), Antonito, CO



Distinguishing Features

- *Part of Xcel Energy's performance-based Solar*Rewards Community Program*
- *In-house design and finance*

The Antonito Solar Garden is a 500 kilowatt solar array located in Antonito, Colorado. This project was the result of a cooperative effort between Community Energy and the Town of Antonito. Within this program, Xcel Energy purchases the total generated output of the facility as well as the renewable energy credits.

Antonito Solar utilizes the same community solar model as the Lafayette projects. Off-site participants include several Town of Antonito facilities, local businesses, and individual households. A portion of the project is designated to low-income residents who receive the outputted energy at no cost.

The Antonito Solar Garden has been online since November 2014.

San Luis Solar Garden – 1.2 MW (AC), San Luis Valley, CO



Distinguishing Features

- *Part of Xcel Energy's performance-based Solar*Rewards Community Program*

San Luis is a 1.2 MW solar array located in the San Luis Valley of Colorado. A portion of this project is designated to low-income residents who receive their portion of the outputted energy as a full donation.

San Luis has been online since 2017.

Lafayette Horizon Solar – 1,56 MW (AC), Antonito, CO



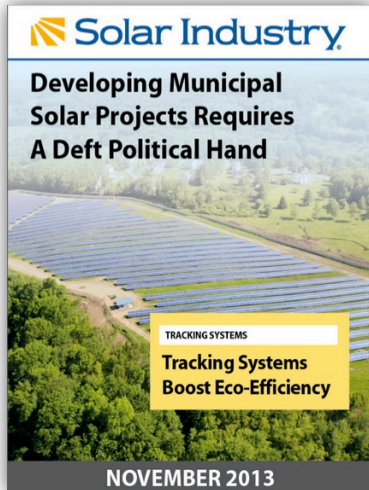
Distinguishing Features

- *Part of Xcel Energy's performance-based Solar*Rewards Community Program*
- *Located in Lafayette, CO on City-owned land*

Community Energy partnered with the City of Lafayette, a strong supporter of our community solar program, to bring a second community solar opportunity to Lafayette, CO. A portion of this project is designated to low-income residents who receive their portion of the outputted energy as a full donation.

Lafayette Horizon Solar achieved commercial operation in 2019.

Sterling Solar – 2.5 MW (DC), Sterling, MA



Distinguishing Features

- *Cover of Solar Industry Magazine, November 2013: “Developing Municipal Solar Projects Requires A Deft Political Hand” (See last page of appendix for article)*
- *Supplies energy to Sterling Municipal Light Department*
- *Payment in Lieu of Taxes (PILOT) - Annual payments to Town of Sterling*
- *Educational Program*

Sterling Solar, located in the Town of Sterling, Massachusetts, consists of two 1.25 Megawatt solar projects with a total capacity of 2.5 Megawatts (DC).

The total generation of the projects is purchased by Sterling Municipal Light Department (SMLD) through a long-term power purchase agreement. SMLD hand-picked Community Energy out of 30 potential candidates to develop the projects for the town. Development of the Sterling Solar projects was heavily influenced by the town and its residents as CES sought their input on how to best integrate the project into the community. Consequently, a custom landscaping buffer was designed and implemented on the perimeter of the solar array, which complements the rural surroundings of the facility.

In cooperation with the Town of Sterling and SMLD, a solar energy based educational initiative was developed featuring components like an informational display kiosk that includes real time energy production data for the solar array. The display is located at the landowner’s nearby business, Davis Farmland, a popular family destination.

Sterling Solar has been online since January 2013.



Clarkson Solar – 2 MW (AC), Potsdam, NY



Distinguishing Features

- *Won a performance-based incentive through the NY-Sun Competitive PV Program administered by the New York State Energy Research and Development Authority (NYSERDA)*
- *Designed for extreme weather and snow conditions*
- *Adjacent to a municipal airport*
- *Energy supplied to Clarkson University under a long-term power purchase agreement*

The 2 MW Clarkson Solar project is on land owned by Clarkson University. The site is located adjacent to a municipal airport, which required a detailed glare analysis to be performed.

Clarkson University purchased the power produced by the facility through a long-term, fixed-rate contract which will act as a hedge to future rising energy costs.

Clarkson Solar has been online since late 2014.



Elizabethtown College Solar – 2 MW (AC), Elizabethtown, PA



Example of agricultural style fencing

Distinguishing Features

- *Sited on land owned by Elizabethtown College who is also purchasing the output from the project over a 20-year power purchase agreement*
- *The project is enabled by a grant issued by the Pennsylvania Economic Development Association (PEDA)*
- *Surrounded by an agricultural style fence to better integrate the project with the surrounding community*

The 2 MW (AC) Elizabethtown College Solar project utilizes a fixed-tilt racking system and is expected to produce around 3,300 Megawatt-hours annually. The power is delivered to Elizabethtown College, who also hosts the site.

Elizabethtown College Solar has been online since early 2016.

Temple University Solar – 63 kW (DC), Philadelphia, PA



Distinguishing Features

- *SRECs are purchased by 1,600 of Community Energy’s residential customers*
- *First and largest project at a college or university in Philadelphia*
- *The project was built in Pennsylvania at a time when SRECs were priced at \$15/MWh when little (if any) other solar was being built*
- *The project is owned and operated by Community Energy*

The Temple University Solar project, built on the roof of Edberg-Olson Hall (Temple’s football practice facility), was enabled through the support of Community Energy’s residential customer base. This customer driven project, which is the first and largest photovoltaic system built at college or university in Philadelphia, was built at a time when Pennsylvania SREC values were such that no other developers were able to build solar. The project is owned and operated by Community Energy.

Temple University Solar has been online since January 2013.



Eastern University Solar – 56 kW (DC), Delaware County, PA



Distinguishing Features

- *Pilot project for Eastern University*
- *One of the first PA Sunshine Energy Rebate program projects*
- *Power sold to Eastern University through a 20-year energy-only power purchase agreement*

The Eastern University Solar project is a 56 kW (DC) system mounted on the roof of the Eagle Learning Center in St. David's, PA. It was not only a pilot project for the University but also one of the first to take part in the PA Sunshine Energy Rebate program. The solar system was financed through a 20-year power purchase agreement with Eastern University, in which the university purchases the power at a locked-in rate, insulating them from rising energy costs. Community Energy owns and operates the project.

Eastern University Solar has been online since 2009.

Smith College Solar – 28 kW (DC), Northampton, MA



Distinguishing Features

- *Seamlessly integrated into the modern architecture of the campus center*
- *Part of the Massachusetts Commonwealth Solar Rebate program*
- *Power sold to Smith College through a 20-year power purchase agreement*

The Smith College project is a 28 kW system installed on the rooftop of the College's Campus Center in Northampton, MA. This was a pilot project for the university which was enabled through the MA Commonwealth Solar Rebate program. The energy is purchased by Smith College at a fixed rate through a 20-year power purchase agreement. Under the agreement, Community Energy owns and operates the system, allowing the College to take advantage of the renewable power without funding the purchase of the system up front.

Smith College Solar has been online since 2009.



COMMUNITY
ENERGY[®]

Our Team

Leadership Team

Brent Beerley – CEO

Brent Beerley is Chief Executive Officer of Community Energy. Brent has 22 years of experience in the renewable energy industry in project off-take, public policy and development. Beerley was part of the original management team that built Community Energy prior to the sale to Iberdrola Renewables in 2006. At Iberdrola, he led origination efforts as a Managing Director. He has led the negotiation and execution of about 1,800 megawatts of wind and solar transactions with utilities, corporations, IPPs, and banks. Prior to Community Energy, Beerley worked for the U.S Department of Energy's Wind Energy and Distributed Energy programs and has a degree in Integrated Science and Technology from James Madison University.

Joel Thomas – President

Joel is President of Community Energy, leading solar development across the country and managing day-to-day operations. Joel has secured PPA's in excess of 300 MW, and led the financial closing of more than 500 MW of projects as well as 100 MWh of Battery Energy Storage Systems. Joel also serves as professor of the practice at the University of North Carolina Kenan-Flagler, teaching Renewable Energy Project Development and Finance in Kenan-Flagler's MBA program. Prior to Community Energy, Joel co-founded and served as the Executive Director of Nourish International, which supports the visions of young leaders committed to creating community impact. Joel holds a BS in Biology from UNC-Chapel Hill and an MBA from UNC Kenan-Flagler.

Molly Arbes – Vice President and Corporate Controller

Molly Arbes is Vice President and Corporate Controller and has been with Community Energy since 2002. Molly is responsible for all aspects of accounting and finance including the strategic tax planning required in the expanding field of Renewable Energy Development. Her role in coordinating the Accounting team around complex financial transactions has led to continued success for the company. Prior to joining CEI, Molly was the Director of Finance for the Greater Philadelphia Chamber of Commerce and has years of experience in public accounting specializing in mid-sized entrepreneurial businesses. Molly has a B.S. in Accounting from Mount Saint Mary's University, a Masters of Taxation from Villanova and is a Certified Public Accountant.

Emily Burks – Executive Vice President and General Counsel

Emily Burks is Executive Vice President and General Counsel and has been with Community Energy since 2010. In her role, Emily leads the project finance team which is accountable for the company's near-term revenue and manages the overall legal needs of the Company. During her tenure, she has overseen the sale and financing of over 93 projects totaling over 2.1 GW of solar projects and \$350M in development fee revenue. Prior to joining the company, Emily worked at several law firms in Los Angeles, San Francisco, Colorado, and Maine. Emily has a B.A. in Psychology from Cornell University and a J.D. from the UCLA School of Law. She is licensed to practice law in California, Colorado, and Maine.

Jay Carlis – Executive Vice President

Jay Carlis co-manages solar project and business development for Community Energy Solar in the Eastern US with a focus on origination. He led the execution of Community Energy's 180MW of PPAs with Amazon Web Services. Jay has been with Community Energy for over ten years and has over fifteen years' experience in the clean energy and environmental fields. Jay served two terms as President of the Renewable Energy Markets Association. He has an MBA in Marketing and Sustainable Enterprise from the Kenan-Flagler Business School at UNC-Chapel Hill and a BA in Sociology from Haverford College.

Dave Krupp – Vice President

Dave Krupp is Vice President for Community Energy. He leads the company's New Markets and Strategy team which is responsible for project targeting and acquisition efforts throughout the U.S. Dave joined Community Energy in 2010 and has directly led the development of solar projects ranging from 2 MW through 140 MW, through all stages of development, from strategic targeting and site acquisition through financial close and notice to proceed on construction. Prior to joining Community Energy he developed commercial real estate, with a focus on energy efficient and environmentally responsible practices. Dave is a LEED accredited professional (Leadership in Energy and Environmental Design) and has a degree from Carnegie Mellon in Information Systems with minors in Business and Architecture.

Michael Wolset – Vice President, People and Culture

Michael Wolset joined Community Energy in April 2021 as the Vice President, People and Culture. Michael is responsible for driving a remarkable experience for the candidate and employee lifecycle at Community Energy, including talent acquisition, total rewards, performance management, talent development, and diversity and inclusion. Prior to joining Community Energy, Michael spent 9 years at Billtrust, where he helped lead the Talent function through growth from 130 to over 600 employees, while transitioning from a private to public company through the SPAC process. Michael earned his B.S. in Business Management from West Chester University and M.S. in Instructional Technology from Saint Joseph's University.

Board Members

R. Brent Alderfer – Co-Founder of Community Energy

Brent Beerley – CEO of Community Energy

Phil Deutch – Partner at NGP Energy Capital Management, L.L.C. (NGP)

Mark Farber – Co-Founder of Cedar Energy Investors

Dave Kirkpatrick – Managing Director and Co-Founder of SJF Ventures

Judy McElroy – Chief Executive Officer of Fractal Energy Storage Consultants (Fractal)

Bruce Usher – Professor of professional practice at the Columbia Business School



Amazon Web Services Signs Long-Term Solar Power Purchase Agreement with Community Energy

Amazon Web Services Announces New Renewable Energy Project in Virginia

Amazon Solar Farm US East Will Be Virginia's Largest Solar Farm, Expected to Produce Approximately 170,000 MWh of Energy Annually

June 10, 2015 08:39 AM Eastern Daylight Time

SEATTLE--(BUSINESS WIRE)--Amazon Web Services, Inc. (AWS), an Amazon.com company (NASDAQ:AMZN), today announced that it has teamed with Community Energy, Inc. to support the construction and operation of an 80 megawatt (MW) solar farm in Accomack County, Virginia, called Amazon Solar Farm US East. This new solar farm is expected to start generating approximately 170,000 megawatt hours (MWh) of solar power annually as early as October 2016 – or the equivalent of that used by approximately 15,000 US homes¹ in a year. Amazon Solar Farm US East will be the largest solar farm in the state of Virginia, with all energy generated delivered into the electrical grids that supply both current and future AWS Cloud datacenters. For more information, go to <http://aws.amazon.com/about-aws/sustainable-energy/>.

“We continue to make significant progress towards our long-term commitment to power the global AWS infrastructure with 100 percent renewable energy”

In November 2014, AWS shared its long-term commitment to achieve 100 percent renewable energy usage for the global AWS infrastructure footprint. As of April 2015, AWS announced that approximately 25 percent² of the power consumed by its global infrastructure comes from renewable energy sources with an interim goal of increasing that percentage to at least 40 percent by the end of 2016. The Power Purchase Agreement (PPA) for Amazon Solar Farm US East follows a similar PPA for Amazon Wind Farm (Fowler Ridge) in Benton County, Indiana, that was announced in January 2015 and is expected to generate approximately 500,000 MWh of wind power annually. Both represent key steps toward meeting these goals.

“We continue to make significant progress towards our long-term commitment to power the global AWS infrastructure with 100 percent renewable energy,” said Jerry Hunter, Vice President of Infrastructure at Amazon Web Services. “Amazon Solar Farm US East – the second PPA that will serve both existing and planned AWS datacenters in the central and eastern US – has the added benefit of working to increase the availability of renewable energy in the Commonwealth of Virginia.”

Virginia Governor Terry McAuliffe commented, “Amazon’s new solar project will create good jobs on the Eastern Shore and generate more clean, renewable energy to fuel the new Virginia economy. I look forward to working with Amazon and Accomack to get this project online as we continue our efforts to make Virginia a global leader in the renewable energy sector.”

Community Energy is a pioneer in developing renewable energy with a long history in solar and wind energy. Community’s CEO, Brent Alderfer, said, “We are pleased to work with Amazon Web Services to build the largest solar farm in Virginia and one of the largest east of the Mississippi. This project, which wouldn’t have

been possible without AWS' leadership, helps accelerate the commercialization and deployment of solar photovoltaic (PV) technologies at scale in Virginia."

About Amazon Web Services

Launched in 2006, Amazon Web Services offers a robust, fully featured technology infrastructure platform in the cloud comprised of a broad set of compute, storage, database, analytics, application, and deployment services from datacenter locations in the U.S., Australia, Brazil, China, Germany, Ireland, Japan, and Singapore. More than a million customers, including fast-growing startups, large enterprises, and government agencies across 190 countries, rely on AWS services to innovate quickly, lower IT costs and scale applications globally. To learn more about AWS, visit <http://aws.amazon.com>.

About Amazon

Amazon.com opened on the World Wide Web in July 1995. The company is guided by four principles: customer obsession rather than competitor focus, passion for invention, commitment to operational excellence, and long-term thinking. Customer reviews, 1-Click shopping, personalized recommendations, Prime, Fulfillment by Amazon, AWS, Kindle Direct Publishing, Kindle, Fire phone, Fire tablets, and Fire TV are some of the products and services pioneered by Amazon.

1 In 2012, the average annual electricity consumption for a U.S. residential utility customer was 10,837 kWh, an average of 903 kilowatt-hours (kWh) per month. <http://www.eia.gov/tools/faqs/faq.cfm?id=97&t=3>

2 AWS considers this to mean electric power generated from naturally replenished resources, which are delivered into the electrical grids that supply our datacenters.

Contacts

Amazon.com, Inc.
Media Hotline, 206-266-7180
www.amazon.com/pr



Community Energy's 120 MW Comanche Solar Project Provides Bulk of Solar Power in Approved Xcel Energy Resource Plan

When completed, Comanche Solar would be the largest solar project east of the Rockies

March 04, 2014 11:11 AM Eastern Standard Time

BOULDER, Colo.--([BUSINESS WIRE](#))--Community Energy announced today that its Comanche Solar project will supply 120 megawatts of solar generation to Xcel Energy comprising the largest part of a 170 megawatt portfolio of solar generation approved by the Colorado Public Utilities Commission in December, 2013.

Upon completion, the Comanche Solar project would be the largest solar generating facility in Colorado, the largest east of the Rocky Mountains, and one of the largest in the US. When it's placed in service, the project also has the potential to more than double Xcel Energy's current 87 MW of purchases from large central station solar plants.

The Comanche Solar project will ultimately be comprised of more than 450,000 mono-crystalline PV modules utilizing a single-axis tracking technology. The tracking technology will follow the sun as it rises in the east and sets in the west, producing power during Xcel Energy's peak demand periods and generally providing a nice match to daily summer air conditioning loads. In total, the project will generate enough power for more than 31,000 homes in its first year. Over the course of the project's 25 year life, it will produce more than 6 billion kilowatt hours of clean solar energy and is expected to reduce CO2 emissions by approximately 3.5 million tons.

"We believe strongly that solar is for everyone and it is clear that many of our customers and fellow Colorado citizens share our passion for solar energy. This large-scale generating facility provides the advantage of renewable energy at a price that is right"

"This project is part of our vision begun in 2010 to bring utility scale solar at a competitive price to Front Range Colorado," said Eric Blank, President of Community Energy Solar, LLC. "We were drawn to Pueblo County and the Comanche sub-station as a great combination of high solar insolation, a welcoming community with open land, and a strong interconnection point with existing infrastructure close to Front Range load centers."

The Solar project will be located near Xcel Energy's Comanche Generating Station, about 2 miles southeast of Pueblo, CO, on approximately 900 acres of under-utilized grazing land surrounded by existing and future industrial land. The site is gently sloping and will require minimal grading to prepare it for the solar installation. The project is anticipated to become operational mid-summer 2016.

“The solar array that will be constructed by Community Energy is a huge win for our community,” Pueblo County Economic Development Director Chris Markuson said. “This project demonstrates that renewable energy is ready for prime-time, and Pueblo County is perfectly positioned to be the center of utility-scale renewable energy production in Colorado. The clean energy produced by solar arrays in Pueblo is both profitable and sustainable, while reducing our dependence on fossil fuels. This project is a tremendous 'shot in the arm' for our local economy, and we're thrilled to be partners in this exciting venture.”

Community Energy recently began the final development permitting process for the Comanche Solar project through Pueblo County. The choice of project equipment and financing has been committed and will be announced at the time the power purchase agreement with Xcel Energy is executed, currently expected in mid-2014.

“We believe strongly that solar is for everyone and it is clear that many of our customers and fellow Colorado citizens share our passion for solar energy. This large-scale generating facility provides the advantage of renewable energy at a price that is right,” said David Eves president and CEO of Public Service Company of Colorado. “Solar energy is a part of our future, and we want to make sure that solar energy policy encourages the development of solar technology.”

About Community Energy

Since its inception in 1999, Community Energy has led the development and construction of more than 800 MW of wind and solar generating facilities. Community Energy has used a pioneering mix of utility off-take approaches, renewable energy marketing programs, new financing structures, development expertise, and public funding and policy support to accelerate the deployment of renewable energy technologies at scale. With offices in Boulder, Colorado and headquarters in Radnor, PA, Community Energy has a strong presence in both western and eastern renewable energy markets. For more information about Community Energy, please visit www.communityenergysolar.com.

About Xcel Energy

Xcel Energy is a major US electricity and natural gas company with regulated operations in eight Western and Midwestern states. Xcel Energy provides a comprehensive portfolio of energy-related products and services to

3.4 million electricity customers and 1.9 million natural gas customers through its regulated operating companies. For more information about Xcel Energy, please visit www.xcelenergy.com.

Contacts

Community Energy

Eric Blank

Xcel Energy

Gabriel Romero, 303-294-2300



COMMUNITY ENERGY DELIVERS ITS SECOND 100 PLUS MEGAWATT SOLAR PROJECT

June 2, 2015

FOR IMMEDIATE RELEASE

Utility Scale Solar Gains Ground Outside of California As Community Energy Delivers Large-Scale Solar Projects

RADNOR, PA – Community Energy announced today that it had delivered its second 100-plus megawatt solar project for construction, with the acquisition by Southern Company subsidiary Southern Power of its 103 megawatt (MW AC) Butler solar facility in Georgia. The Butler Project will supply solar generation to Southern Company subsidiary Georgia Power under a 30-year power purchase agreement. Georgia Power will have the option to keep or sell the RECs, for the benefit of its customers or renewable energy programs.

Community Energy also originated and developed the 120 megawatt Comanche Solar Project in Colorado, which will supply solar generation to Xcel Energy under a 25-year purchase agreement approved by the Colorado Public Utilities Commission.

Community Energy has a pipeline of large solar projects in the East, Midwest and Rocky Mountain regions, a significant number of which are on track for completion before the end of 2016. First brought on line by California utilities, large-scale solar projects are now proving economic in other regions of the country. With a track record over the last decade in wind development, Community Energy launched its large-scale solar development effort in 2010.

“By developing projects on optimum solar sites with advanced tracking technology, we’ve been able to make solar energy a cost-effective choice for utilities and large energy users in multiple regions outside California,” said Brent Alderfer, President of Community Energy, Inc. “By building solar at scale we reduce costs, increase efficiencies and deliver significant environmental benefit.”

Each large solar project is ultimately comprised of more than 400,000 PV modules utilizing single-axis tracking technology to follow the sun as it rises in the east and sets in the west. That combination produces power during peak demand periods matching daily summer air conditioning loads.

In general each 100 MW project will generate enough power for more than 25,000 homes in its first year. Over the course of the project’s 25 year life, it will produce more than 5 billion kilowatt hours of clean solar energy.

“We are pleased to be part of a new era in solar generation,” Mr. Alderfer concluded.

**Contacts:**

Brent Alderfer, Community Energy, Inc.

About Community Energy

Since its inception in 1999, Community Energy has led the development and construction of more than 1,000 MW of wind and solar generating facilities. Community Energy has used a pioneering mix of utility off-take approaches, renewable energy marketing programs, new financing structures, development expertise, and public funding and policy support to accelerate the deployment of renewable energy technologies at scale. With offices in Boulder, Colorado and headquarters in Radnor, PA, Community Energy has a strong presence in both western and eastern renewable energy markets. For more information about Community Energy, please visit www.communityenergysolar.com.

Solar Industry

Developing Municipal Solar Projects Requires A Deft Political Hand

Many local governments are interested in solar power; however, dealing with their processes is a challenge.

■ Michael Puttré

Solar projects for municipal customers are typically on a similar scale as those for commercial enterprises but come with their own sets of rules. Developers seeking to serve this active and growing market must master a rigorous and often long procedure-driven process. Moreover, this process is by definition under intense and even skeptical public scrutiny because such projects are



One of two 1 MW solar projects Community Energy developed for the Town of Sterling, Mass. Photo courtesy of Community Energy

financed by taxes and bonds.

Successful developers of solar projects for municipal customers report that preparing their own organizations for the effort is essential to play, let alone score winning bids and profitable outcomes. Such efforts include acquiring in-house expertise in public works that are specific to the style of county, city or town government involved. Securing local partners and project champions are also vital for successfully navigating the rules of the game.

"There are pros and cons to working with municipal customers," says Joe Harrison, senior project developer in the Boston office of San Diego-based Borrego Solar Systems. "The private sector is able to move quicker when they make a decision.

On the other hand, the private sector is not obligated to follow through. You are always one phone call away from having the customer go with someone else."

Engage the political process

Borrego Solar pursues municipal solar customers because their requirements tend to fall within what the company describes as its "sweet spot" of 1 MW to 10 MW. Harrison notes that the customer base here consists of Fortune 1,000 companies, colleges and municipalities. "These are big users motivated to do the right thing for the community," he says.

Of that group of large commercial-scale customers, the municipal solar

market is also incredibly diverse.

"It is important to note that a municipal customer may be a stand-alone authority that supplies energy to a city of 100,000 plus half a dozen surrounding towns, or a small department in a town of 3,000 residents," says Tom Tuffey, vice president of Radnor, Pa.-based Community Energy Solar LLC. "The former will have a full staff with departmental coordination and reporting structure, while the latter has one principal and a board to keep informed."

Tuffey says large local governments, such as counties and cities, will likely use a full-blown request for proposals (RFP) process, while smaller entities, such as towns, may have an abbreviated process. In either case, he says, the customers are knowledgeable and committed, although specific knowledge of the ins and outs of solar projects might be outside their experience. Also, when a local government begins mulling over a possible solar project, everybody knows about it, and the customer soon has a lot to sort through.

"In some cases, we have had municipalities with up to 40 solar developers that have approached them," Tuffey says. "Municipal customers have all expressed the challenge of choosing the right partner in a technology new to them."

According to Ryan Work, business development manager at REC Solar, to a large degree, solar power projects are not so dissimilar from other infrastructure improvements. Most of the work translates well. There are structural engineers, electrical engineers, and structures and connections have to follow codes. However, solar project definition does not necessarily come naturally to municipalities, although this is changing. Many municipalities are adopting solar bylaws as an overlay to land management and zoning.

"We can help with some of the project definition but don't want to mess with the bidding process," Work says.

In October, REC Solar completed the installation of a 1 MW solar energy system for the Ventura County Todd Road Jail facility in California. Work says this project proved to be an excellent case study for appreciating the nuances of developing solar for a municipal customer. The law in California required multiple bid responses from qualified firms, which

were selected as part of a request for qualification (RFQ) process.

In the case of the \$4 million Todd Road Jail project, the RFQ phase drew applications from about 30 firms. The top five qualified firms were then invited to respond to an RFP.

Work says REC Solar had the resources to put together a feasibility study of the proposed project on its own dime as part of its qualification submission. For its part, the county hired a third-party engineering consulting firm, AECOM, to develop its evaluation scorecard and produce a feasibility study of its own. The firm also managed the qualification process and helped evaluate and inter-

pret qualification proposals. "The customer had a good level of sophistication," Work says. "The \$4 million represented a large chunk of the Ventura County budget."

Hurry up and wait

Borrego Solar's Harrison says he encountered many of the unique aspects of dealing with municipalities as customers in developing a 2.7 MW project for the City of Beverly, Mass. The array is on a private site, but the city is purchasing the net metering credits. Harrison says the approval

process involved five city council meetings, three subcommittees and two public meetings.

"We had sort of thought we would receive approval at the first meeting," he says.

Paul Mikos, executive vice president of sales and marketing at Huntington Beach, Calif.-based PsomasFMG, says in a commercial project, a CEO or general manager can make a quick business decision, usually motivated by the economics of the project. This is not the case with municipalities, even when the economics are clear.

"You would think that a financially strapped municipality would make a quicker decision, but they are very risk averse and need to have committees review everything," Mikos says.

Understanding the specific dynamics of different forms of local government and then developing an appreciation of the personalities involved are perhaps the most challenging aspects of dealing with municipalities as customers. Is it an election year? What else does the government have on its plate? Har-



REC Solar developed this 1 MW PV installation for a jail facility in Ventura County, Calif. Photo courtesy of REC Solar

ison says local governments have a tendency to want to continue matters to the next meeting and give the residents a chance to have their say.

Harrison says the key to establishing a successful relationship with a municipality as a customer is appreciating that some of the frustrations are necessary and even laudable by-products of representative government. That said, there are ways of managing this process.

"We have made a concerted effort to bring in experts in this area," he says, adding Borrego Solar has two civil engineers on staff in Massachusetts who have long track records of projects in the commonwealth. "We always partner with a local civil engineering firm."

Also invaluable is an advocate or champion within the government who takes the role of guiding the solar development project through the process.

"You always need a champion to push for your project," Mikos says. "That champion can come from almost any department but must believe in the project and have the political pop to keep it moving up the chain."

Solar in the public interest

Cost, not surprisingly, hovers over everything. Harrison says negotiating power purchase agreements with municipal customers, which generally retain outside counsel for the purpose, has been among the most intense he has ever been involved with.

Community Energy's Tuffey says understanding the financial incentive structure of a given municipality is an important aspect for developing solar projects in the public sector.

"Some form of incentive is pretty much a must in most of the markets where we've had success," Tuffey says. In Massachusetts and New Jersey, he says a strong solar renewable energy credits market has been key. In Indiana, it has been a feed-in tariff. In New York and Pennsylvania, it has been grants and performance incentives. In North Carolina, it has been an additional state investment tax credit and a solid off-take tariff. "All of these help the economics such that the municipality gets an attractive long-term price at a discount to their long-term energy price forecast."

Despite all of the rigors of dealing with municipalities, solar developers with experience in this sector see tremendous opportunities for growth. ☀