

Community Solar Solutions and Facility Developer



Paul Spencer
CEO & Founder
Clean Energy Collective

Tim Braun
(970) 618-0080
tbraun@b2inc.net

CEOCFO: *Mr. Spencer, would you tell us the concept at Clean Energy Collective?*

Mr. Spencer: The concept is essentially to allow 100% accessibility to solar by residents as well as businesses. To do that we decouple the solar from the home or site and put it in a community facility and allow all participants within the local utility to participate within that community's facility. Why that matters is there are only about 20% of residents in the United States that can actually put solar onsite because of a variety of impediments, including things like shading so they might not have good solar exposure; 40% of the country actually rents instead of owns. It might be multi-family housing in a city like New York, where 2,000 people live in one building and there is not a big enough roof. All those types of factors prevent accessibility to solar, so we are here to open that accessibility to 100% of electricity ratepayers by putting in shared facilities with thousands of panels as opposed to a similar amount of individual systems.

CEOCFO: *Should everybody want solar these days?*

Mr. Spencer: Not everyone technically, but certainly a good portion of the country has expressed they want solar. The latest stat I see is that nine out of 10 people think solar is a good idea. That does not mean that it is accessible to them. One of our goals is to make it physically accessible and financially accessible by bringing the price point down. By building larger facilities that take advantage of economies of scale, we can bring the price down for individuals as well as allow them to buy in smaller, bite-sized pieces. For example, you cannot call a solar company and install one panel on your roof. It is not even feasible. Conversely, you can buy one panel in a community solar array for as little as \$200 or \$300. We actually provide accessibility to low-income families that may only be able to own one panel at a time. Should they be interested? Absolutely they should. Not only has solar always been a good environmental investment, but it has now become a very good financial investment as well. That makes for a strong synergy for customers, to be able to not only invest in their environment but also invest in their wallet or checkbook and be able to create a better future for themselves and their kids.

CEOCFO: *How long have you been doing this type of project?*

Mr. Spencer: Clean Energy Collective was the first company in the country to figure out how to do community solar six years ago. We did our first facility with Holy Cross Energy, a rural cooperative in western Colorado. It was only 328 panels, purchased by 19 individuals. It sold by word-of-mouth before we even announced what we were doing. Fast-forward to today, where we are getting ready to build our fourth facility for Holy Cross Energy that will encompass about 6,000 solar panels. Our third facility for Holy Cross Energy was turned on about four months ago, which was also just over 6,000 solar panels and it was sold out before we turned it on.

Clean Energy Collective now partners with 21 utilities across 10 different states literally from coast to coast. This includes Avista Energy in Washington State, Green Mountain Power in Vermont, and with many utilities in between. Our portfolio includes about 90 projects that are either operating or under development, representing about 100 megawatts of shared capacity. We are approaching almost half a million solar panels that we have put in place. Our latest example is with Fort Collins Utilities, a municipal utility in Fort Collins, Colorado. That project is 600 kilowatts and has been sold-out for many months. It was actually 90% sold-out before we even broke ground on the project. These things go so quickly, there is lots of excitement, and it entails the entire community's involvement to make it a reality.

CEOCFO: *Would you tell us about the logistics from start to finish?*

Mr. Spencer: It sounds simple enough, but the logistics are difficult. We build a central community solar array with thousands of panels. People subscribe or buy individual panels in the facility and then receive credit for the power produced on their utility bill, the same as if a system was sitting on their roof. The reality of making that happen is quite difficult, which is why there are not many companies in community solar space. It is also why most others do not partner with utilities, it is very complex to structure correctly. There are several reasons for this. The first is the underlying technology. I am not talking about solar technology, but the technology to measure the power produced from a facility that might be 50 miles from my home and accurately credit me directly on my utility bill as though that facility was on my property. That is a proprietary technology that we designed, called RemoteMeter™, that integrates with the utility building system to insert bill credits directly on a customer's bill without the utility having to lift a finger. That is difficult to come up with and it is something where we have excelled. A second area that adds to the complexity of community solar that are not apparent at first blush are the tax treatment, or tax credit, and how you are going to make use of the investment tax credit (ITC) that is currently available in the U.S. today. Those tax credits were not written with community solar in mind and community solar did not exist when they wrote the tax credits. You have to be clever and creative in figuring out how to comply with tax credit requirements to provide this type of solution. The third area and arguably one of the hardest is security loss. When you put solar on your roof, you do not have to worry about that system being regulated as a stock or bond by the Securities Exchange Commission. However, when you put a thousand people into a solar array of 10,000+ panels in a community location, you have to be hyper aware of how you structure that to not be a regulated security, to not be a regulated investment, and to comply with those rules while complying with the tax rules and so forth. That becomes difficult, and consequently we are the only model that I know of that actually offers that pure ownership to the consumer, one that the consumer wants.

“Community solar allows the utility and consumers to benefit mutually in a partnership.”- Paul Spencer

CEOCFO: *What gave you the confidence in the beginning that you could do all of this?*

Mr. Spencer: I have built 10 companies in the last 25 years in a variety of industries, starting out on the technical side with software companies and engineering companies, migrating to real estate, financial trading, and then to green building and now power. I have always been one to gravitate towards solutions that needed to be developed. I identify a need and then work to figure out that problem and provide a solution. All of the companies I built were mostly cutting-edge, doing something new in some way. Clean Energy Collective was one of those.

My realization came about a dozen years ago when my wife and I built our own off-grid home, giving us our first understanding of what it means to actually be sustainable and generate as much power as we consumed. Coming out of that we realized a few important things. The first was that solar was very expensive and, at that time, made no financial sense whatsoever. We paid five times as much for our solar system as it would cost today. That was only 12 years ago. The second realization was that if we expected home solar systems to be a viable solution for every American or person in the world to adopt, it couldn't be so complicated. I was attracted to that aspect of it because as an electrical engineer I had the aptitude and the experience to be able to really work with the solar system and understand how to make it operate properly. I knew that if the average American had to do this it was not a comprehensive solution. That got me thinking about how to create a solution that was easier and more affordable for people. The third was my realization that even if they wanted to, not everybody could have solar on location because they were site limited. In New York City, for example, we did a study for then Mayor Bloomberg and found that if money was no object only 2.4% of all NYC residents could have solar on site.

That led me to believe that I had two problems to solve. One, we have to make this easy and accessible, and two, we have to make it a good financial investment. At the time, I was a partner and CEO of a company called Bonsai Communities, where we were designing a Net-Zero community that was going to produce as much power as it consumes. Our strategy to do that was simplistic: we were just going to put solar on every house in this new community. Our plans were foiled, though, because there was about a hundred-foot tall canopy of cottonwood trees along the Roaring Fork River that ran through the property and shaded about a third of the neighborhood. Using NASA radiation mapping, we saw that it made no sense to put solar on a third of these roofs because there was too much shading.

Then it clicked for me that we should pull all the solar off all the roofs and consolidate them into an open parcel we had in the middle of the development. I talked to Holy Cross Energy, the local utility, and they said it was a crazy idea but if we could figure out how to actually do this and make the billing and other things work then they would let us do it. That was music to my ears as far as being a problem solver, the opportunity to figure out something. The project ultimately was not

developed because the market dropped in 2008 and the real estate market fell out. It gave me the notion, though, that if I could do this for my house and we can figure out how to do it for a neighborhood, why not just do it for the whole utility. I went back them and pitched the concept of building a bigger array and allowing all 52,000 of your customers spread across hundreds of square miles to be able to participate in that array. They had the exact same response; if we could figure out how to do it they would support us. A year later, we had our first shared solar facility up and now six years later we are working on approaching a hundred facilities with hundreds of millions of dollars and thousands of customers.

CEOCFO: *Are people coming to you these days to engage in projects?*

Mr. Spencer: Yes. We spent a large portion of the last six years explaining what community solar is and why it makes sense and why it is important. Community solar allows the utility and consumers to benefit mutually in a partnership. The majority of the industry now at least understands what community solar is and is gravitating towards it. We are at the point now where people are driven to our door. We have more community solar installed than all the other developing countries.

CEOCFO: *Why is now a good time for Clean Energy Collective?*

Mr. Spencer: There is the understanding that community solar is the best idea for the future. It is the highest area of solar growth in the country, and we need solutions to be able to make renewables a reality. That is why it finally made sense to launch and that has created an enormous uptake of the number of developers, utilities, financiers, etc. coming to us to partner and use that solution with Clean Energy Collective.

CEOCFO: *What is your business model?*

Mr. Spencer: Besides the licensing, we have two primary types of products. The first is we sell panels to consumers through the notion of turnkey community solar solutions. We build the facilities, we operate them, and we market and sell them to consumers and customers. As we sell a panel, we sell it for a price that has a margin built into it compared to what it would cost to build it. We operate the array long-term. In our second product model, while everything is the same except for we do not actually sell the panels; we do more what I would call “rent” the panels. We have people subscribe to them on a month-to-month basis. So, some people want to buy enough panels to power their house, they spend \$10,000 to do that, and then they have no utility bill. It is different with a subscription, where instead of making upfront contributions they pay a \$100 a month and save on their utility bill. That model is a different income stream to us in that it is a continual monthly income stream for an extended period of 20 to 40 years. Both have their pros and cons. One is more upfront cash and one is cash over an extended period.

CEOCFO: *Why is Clean Energy Collective an exceptional company?*

Mr. Spencer: Clean Energy Collective is an exceptional company because it is not only innovative in its approach to creating a solution that has not existed before, but more so in its ability to execute on that innovation and drive solar adoption throughout the country and throughout the world. We actually get customers and utilities together in a symbiotic relationship that allows us to build more clean energy, whether solar, wind, hydro or micro hydro, thermal electric. We are not only able to figure out that equation, but are also successful in propagating it.

CEOCFO: *Final thoughts?*

Mr. Spencer: I think it is important to note that at the basis of Clean Energy Collective’s solutions from day one is a partnership with the utility and the existing electrical grid and power providers. The reason I think that is unique and so important is that nearly all of the solar providers, particularly rooftop solar providers, have aligned against utilities as opposed to working with them to create a solution that works for the utility, its stakeholders, and its customers. We were unique in actually going to utilities and sitting down with them and partnering with them on a solar solution that would be owned by their customers as opposed to picking one side or the other. That is an approach that I believe in the long-term because it does satisfy both constituents as opposed to one or the other.

Interview conducted by: Lynn Fosse, Senior Editor, CEOCFO Magazine

For more information visit: www.easycleanenergy.com

