



# POWERMARKET

As the cost of producing solar energy continues to decrease, going solar becomes increasingly appealing to homeowners and businesses as a way to reduce both their electricity bills and environmental impact. Unfortunately, a large percentage of the population cannot install rooftop solar panels on their home or business for various reasons. Many people live or work in urban areas with insufficient rooftop space, rent their home or business, or cannot afford the upfront installation costs. Community solar remedies these problems and allows greater access to the benefits of solar. As a product it was invented in Colorado about seven years ago and allows customers to subscribe to a local solar farm in their area and receive the benefits of solar without installing any solar equipment on their property.

## FACTS

### PHASE III SUCCESS

PowerMarket achieved a total of over \$5.0M in sales in the years 2018 and 2019 while working on a DOE Phase II SBIR project.

### IMPACT

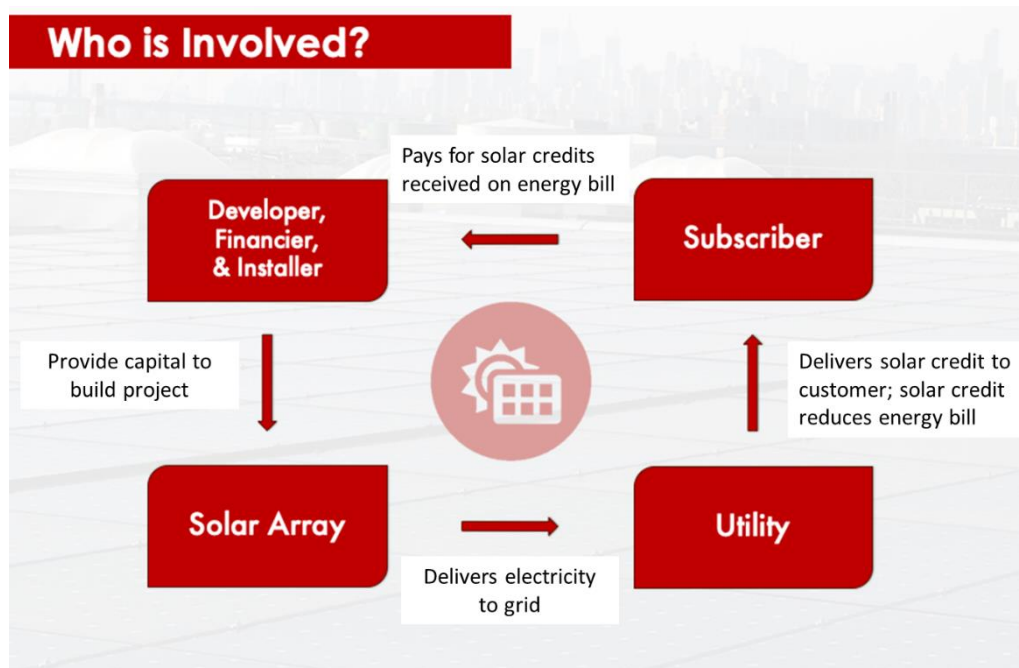
PowerMarket's Open Energy Platform™ allows utilities, energy retailers, and solar developers to offer clean energy services like community solar to their customers efficiently and at scale.

### DOE PROGRAM/OFFICE

Energy Efficiency and Renewable Energy (EERE), Solar Energy Technology Office (SETO).

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The idea is to democratize the use of solar energy so that anybody can take advantage of electric power from the sun. This is a great concept, but the current lack of community solar software infrastructure makes it challenging to manage and integrate the different processes involved in managing a community solar portfolio. The industry has many moving parts: the makers of the solar panels and power inverters, the construction companies that build the arrays, the capital partners who finance the projects and the ongoing operation and maintenance, not to mention billing and customer management. Before PowerMarket received the DOE SBIR award, there were limited technical solutions available, and they tended to stand alone rather than integrate the above-mentioned industry participants, who are required to make community solar a reality. The lack of solutions has restricted the ability of utilities, energy retailers and solar developers to offer community solar, which in turn has kept customers from being able to subscribe and receive the benefits of shared solar.



PowerMarket’s software platform can be thought of as the glue that connects the customer, the utility, and the solar developer, thereby creating a cohesive community solar product.

With support from a Phase II SBIR grant that ended in July 2019, PowerMarket, previously known as ProjectEconomics, has developed a software platform that allows current and new entities in community solar to seamlessly work together with scalable programs, which will significantly expand access to shared solar.

PowerMarket is a startup located in New York City and its product can best be described as a turn-key community solar service. The service consists of providing and managing a subscription to a large commercial scale solar array, which typically consists of 5 or 15 solar panels. Because the service model is community distributed generation, the customer doesn’t have to install solar panels or other equipment, which can carry a significant upfront capital cost.

Once the solar arrays are constructed, PowerMarket finds residential and small business customers who want to subscribe to the project and receive the electricity output from the array, which might vary depending on the home or business energy usage. That solar energy is then credited towards the client’s utility bill, which results both a in lower utility bill and a lower carbon footprint.

“Dealing with utilities can be particularly challenging” says Mr. Dahnke, “because utility companies are new to community solar and although they are necessary partners for executing community solar, they

do not have a monetary incentive to implement the shared solar model.” However, many states have mandates that require a specified percentage of electricity sold by utilities to come from renewable sources, a fact that encourages the development of community solar.

One of the problems that PowerMarket has been able to solve with its software technology is the ability to integrate its Open Energy Platform™ into existing IT enterprise infrastructures, which allows larger clients to get better value from those infrastructure investments. This is achieved by wrapping the community solar platform with an Application Program Interface (API), creating a middleware architecture that connects to existing Customer Information System (CIS) and enterprise systems. This allows utilities and energy retailers to incorporate solar program data into their existing Customer Relationship Management (CRM), Enterprise Resource Planning (ERP) and billing infrastructures. By using APIs, middleware and web-services PowerMarket connects the customer, the utility and the solar developer, creating a cohesive community solar product.

Powermarket was founded by Mr. Dahnke in 2014 following three years of working within the utility industry. Having a software background, Mr. Dahnke recognized the need for a software platform to support clean energy programs like community solar. Soon after founding PowerMarket, Mr.Dahnke was able to win the support of a clean energy accelerator in the state of New York. After achieving market traction in the form of a few early utility customers, the company was awarded a Department of Energy’s SBIR Phase I and subsequent Phase II grant which extended from 2016 to 2019. “The SBIR funding was enough to gain additional market traction and become a rather profitable company” explains Mr. Dahnke. PowerMarket is a great example of a fast-growing startup, whose success is partly attributable to the clear market need the company is addressing and to the customers’ pain points the company is successfully relieving. Another important factor is the company’s competent team, which is knowledgeable in software engineering, finance and energy policy. PowerMarket started as a one-person small business and today employs 12 full-time employees.

According to Mr. Dahnke, “the SBIR award was invaluable for PowerMarket to conduct critical R&D and commercialization efforts for two main reasons: 1) the award was large enough to make meaningful investments in technology and personnel, and 2) the program’s structure provided helpful management from the DOE Solar Office in the form of milestones and monthly reports, which helped the company be diligent and stay on track.”

Although PowerMarket just ended their Phase II award, the company has already earned significant commercial traction. PowerMarket earned revenues of \$1.5M in sales in 2018, and approximately \$3.5M in 2019, making PowerMarket one of the fastest growing startups within the DOE SBIR program. As Mr. Dahnke explains, PowerMarket’s rapid success is tied to the founders’ choice of targeting an industry, community solar, which is experiencing significant growth and is expected to expand further in the future. Accordingly, PowerMarket’s business plan focuses on staying the course and continuing to participate in the expanding market as opposed to looking for new clean energy service opportunities and the associated private investment that might go along with that. “We don’t need additional growth capital because we’re executing efficiently and we’re growing as our market grows, which in the case of solar is nearly exponential.”, says Mr. Dahnke.