



The strategic business model

We are creating sustainable energy and sustainable economics. This is accomplished by reinventing both the solar manufacturing and distribution model as well as the solar panel itself.

There are two parts to an invention that can affect sizeable economic outcomes – the invention itself that can create value in a particular sector, and the way that invention is monetized and deployed. How and where technology intellectual property is deployed is the right of the inventor and has measurable and dramatic economic consequences. That choice can enrich or impoverish cities, states and nations. Over the last several decades, in the U.S., it has become standard business practice to sell inventions to venture capitalists who, in turn, monetize the invention overseas with cheap labor and permissive environmental regulations. This practice extracts jobs and economic opportunity from our cities and states, and directs profits to disinterested shareholders of multinational corporations – not our local communities. It has now become obvious to even the most casual observer that the practice of removing jobs, manufacturing, and technology deployment from the U.S. has impoverished thousands of cities across our country.

The silicon solar cell was invented in the U.S. We manufactured solar cells and solar panels. Today, there are no solar cells, solar glass or 50% of all the other solar panel components made in America. 94% of all solar panels distributed in the U.S. today come from overseas <https://www.eia.gov/todayinenergy/detail.php?id=44816> . Renewable energy is a national strategic priority and provides a growing and vital contribution to America's national security. It is economically unsustainable to continue to import billions of solar panels from overseas. Solar panel manufacturing is the perfect industry to bring back home.

We are building not only a solar module assembly factory, but a workforce development factory, and GDP expansion engine driving all possible, compounding economic value into the hyper-local economy.

First, we are deploying a blended non-profit/for-profit business deployment model that is designed from the ground up to capture all possible economic benefits from the entire value chain inside a local community, city, or tribe. The value chain: local non-profit ownership of the factory, located in the heart of an underserved community that creates millions of dollars of product (panels) and hundreds of manufacturing, construction and management jobs and then using local, tax-advantaged, for-profit financing to sell energy contracts to anchor businesses that create an annuity income stream over 20 years. In this way, the profits derived from the entire value stack can be recirculated back into the local economy in the form of community solar projects that deliver free energy to low-income families that, in turn, spend their utility savings dollars in the local economy on essential spending needs. Locating the entire value chain inside a local economy stops economic leakage and creates an economic virtuous cycle where every dollar of value gained is recirculated locally. This has a 7 times multiplier effect on local economic GDP expansion – for every dollar spent on this initiative, it will expand the local economy by 7 times over a 15 yr period.

We employ all the basic principles of community wealth-building:

1. Labor matters as much as capital
2. Local, broad-based ownership matters
3. Active democratic ownership & participation matter
4. Multipliers matter
5. Localizing investment (banking) matters
6. Collaboration matters
7. Place really matters

2. Second, the technical invention itself solves several fundamental problems in solar panel design that has throttled the industry since the invention of the silicon solar cell. The patented technology allows for a radical simplification of the panel design and manufacturing process while utilizing industry standard materials. Our panels, hand-built in locally owned micro-factories, produce more power, last longer, can never develop hot-spots, can operate in the shade, and can outperform conventional panels in cloudy weather. This technology combined with our distribution model allows us to compete with the top global competitors in the marketplace.

Briefly describe the purpose and benefits of the Locally Grown Power factory network.

The overall distribution model has two levels.

The Factory

The hyper-local level, where the factory is designed to be injected into the heart of an underserved community, run by a local nonprofit, creating manufacturing and construction jobs, attracting local for-profit investors, and recirculating the profits gained from energy sales to local anchor businesses back into the community in the form of community solar projects from which the energy benefits are directed to low-income families. This creates a complete virtuous cycle, where economic leakage is minimized (not sending capital out of the community to buy solar panels from Asia, hire labor, or seek outside financing), and where all profits are reinvested locally in annuity generating community solar projects which relieve our LMI households of utility expenses. This effectively raises their disposable income that will then also get spent in the local economy on essential spending needs. This is a multi-level strategy to maximize economic expansionary effects in targeted communities – those with the most need, so we can address issues of justice and equity. It is also a solid and scalable strategy to rebuild our economy from the ground up.

The Network

The second, macro, level of the model is to align the micro-factory unit to the nationwide, Locally Grown Power factory network. The creation of a micro-factory network solves the problem of billion dollar, million sq ft mega factories that are centralized, top heavy, slow to change, and siphon profits from the local economy because they are owned by multi-national corporations. The Locally Grown Power factory network is also a non-profit organization, run by non-profit board, and can never be rolled up and sold. The value of all patents and processes deployed in the network accrue to the members of the network. Currently, that includes to patents issued, six patents pending and several more in the near future. The network is designed specifically to corporative vs competitive, regenerative vs extractive, local vs global, distributed vs centralized, resilient vs encumbered, and focused on grassroots equity and justice vs trickle-down. Each factory is under agreement to provide mutual aid to other factories with regard to technology, processes, and order fulfillment. And the entire network can take advantage of centralized supply chain procurement and shipping that achieves the same economies of scale as a mega factory, because that is exactly what the network is – distributed, massively parallel, inter-connected, mega factory located in not one, but hundreds of communities across the country that most need the jobs and economic opportunities.