

Profiles in American Solar Manufacturing

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Introduction

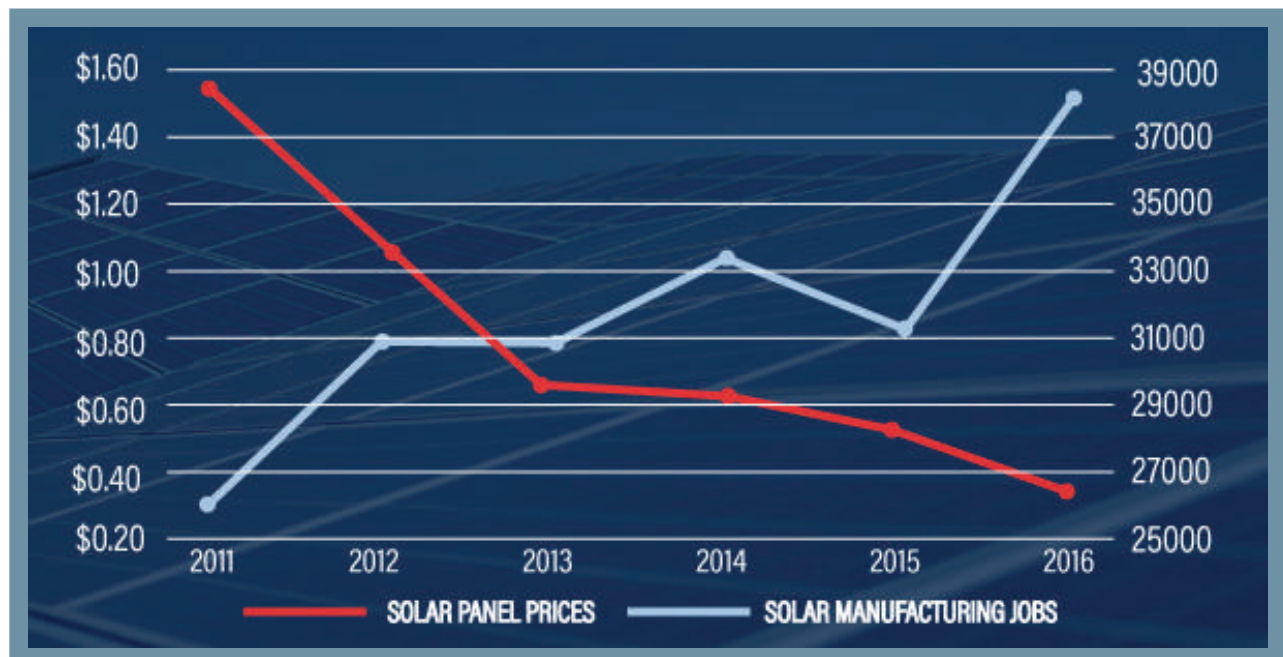
American solar manufacturing is a diverse economic powerhouse that employs 38,000 workers.

There are more than 600 facilities in the United States that manufacture for the solar industry. The products these companies make include steel and polysilicon, inverters and trackers, cabling and combiner boxes, and cells and panels. They also fabricate racking and mounting systems and they are innovating every step of the way.

If the International Trade Commission approves Suniva's remedy, much of the manufacturers profiled here will be severely injured and the number of jobs potentially lost will be many times those temporarily gained by the petitioners.

The companies mentioned here are owned by Americans and overseas investors, but they all have one thing in common, they have found a way to compete in the marketplace, through innovation, efficiency and good business decisions.

Solar Panel Prices vs Solar Manufacturing Jobs



Graph courtesy of Cypress Creek Renewables

Fronius

Portage, Indiana
100 employees

Fronius USA opened its doors in 2002 and is making a significant contribution to the American solar market. With its headquarters centrally located in the Midwest, and other satellite offices throughout the USA, Fronius is positioned as one of America's leading solar inverter makers and provides American jobs in solar technical support, warehouse and assembly, service and sales.

This company has thrived because of innovation. It started exploring the solar business in the mid-1990s and has grown from there.

“It's very important for us to support U.S. jobs and manufacturing,” said Wolfgang Niedrist, CEO of Fronius USA. “We will continue to research and value the possibility to continue that trend with other products in the future.”

The company added more than 30 solar employees and full production and testing lines, incorporating the latest in quality and lean production technologies. The production equipment for the new line was sourced locally from US suppliers, as a strong commitment to quality and the U.S. market.

On the trade case, Fronius stressed the impacts of higher prices on the economy.

“We at Fronius as a manufacturer in the solar industry vehemently oppose the case due to its impact on the industry,” the company said in a statement. “The case will likely increase prices for solar adoption as a whole thus hinder the growth of the industry.”

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Image courtesy of Fronius



Image courtesy of Fronius

Attala Steel

Kosciusko, Mississippi
100 employees

The slogan at Attala Steel is 100% Made, Melted and Manufactured in the U.S. And that's exactly what they are doing in this Mississippi town of 6,000 people. Among the community's largest employers, Attala Steel's fortunes are tied directly to the success of the solar industry, said company president and CEO Billy Atwood.



Image courtesy of Attala Steel

The company buys American steel and produces steel i-beams for mounting and racking systems for close to a dozen American racking, engineering, procurement and construction companies. Attala does everything from reheating the steel, to shaping it precisely to customer specification to dipping it in the galvanizing tank of zinc, which gives it its protective coating.

Billy says the trade case could represent an existential threat to his company. “As the solar industry goes, so goes my company,” said Atwood, whose family has lived in this town for 200 years, and who is one of the first generation of nonfarmers in the family. “If the solar industry goes down by 30 percent, I go down by 30 percent. It’s a direct reflex. Ninety percent of my business is in the solar industry.”



Image courtesy of Attala Steel

“If the solar industry goes down by 30 percent, I go down by 30 percent. It’s a direct reflex.” - Billy Atwood, President and CEO of Attala Steel

Schletter

Shelby, North Carolina

200 employees

Schletter manufactures quality solar mounting systems for utility-scale, commercial, and residential PV applications. From Schletter Inc.'s headquarters in Shelby, NC, the company houses state-of-the-art machinery capable of a high level of production capacities. Based in Germany, Schletter set up operation in the U.S. in 2008 with only four people. Now they employ 200 in Shelby.

Rural Shelby, NC with a population of 20,000 was a town that was decimated when the textiles industry left NC, and it is going through something of a revival, thanks to companies such as Schletter.



Rusty Schmit
President and CEO of Schletter

“They had a downtown area that was pretty bleak,” said Rusty Schmit, president and CEO of Schletter. “And now it’s being revitalized.”

Schmit said several companies have built new facilities in town since Schletter moved in and the downtown is now bustling with restaurants and new stores.

The company sources as many inputs from U.S. manufacturers as possible. They are buying about 60 million pounds of American steel in 2017, up from 45 million pounds the year before.

“If you overlap our jobs, with the processing plant and steel mill jobs related to our industry, and those jobs can circle out in the supply chain layers and layers, the jobs affected by our industry are significant,” Schmit said. “It’s hard to quantify exactly what this trade case could do, but I could see this cutting our business by half at least, so that would cost us 100 jobs or more.”

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Images courtesy of Schletter

RBI SOLAR

Cincinnati, Ohio

**325 employees in solar, including
65 in manufacturing and 140 in the installation crews**

RBI Solar, a Gibraltar Industries company, is a leading turn-key solar mounting solutions supplier in the United States. As a single-source provider, the company designs, engineers, manufactures and installs efficient PV racking systems. The company tailors its racking systems for each site and sources all of its steel in the United States.



Image courtesy of RBI Solar

“We are a publicly owned company but we have an entrepreneurial type business,” said Bill Vietas, RBI Solar’s President. “We are a Midwest manufacturer that works hard to execute and that learns as we grow.”

Vietas says he is opposed to the trade case and says solar modules in the US are not competitive because of their own missteps. “If it was close, I would think differently but the reason why modules have come down in price so much is because other countries have done a better job of innovating.”

“We are not putting ourselves in a leadership position on renewable energy,” Vietas said. “You can’t put a tariff on modules and then kill an industry that is doing great things for the environment as well as for jobs.”

Vietas predicted that with a price floor of 78 cents a watt, as requested by Suniva, he would lose between a third and a half of his work force.

“You can’t put a tariff on modules and then kill an industry that is doing great things for the environment as well as for jobs.”- Bill Vietas, RBI Solar’s President



Images courtesy of RBI Solar

SOLECTRIA

Lawrence, Massachusetts
170 U.S. solar employees

Solectria Renewables, LLC was established in January 2005 with corporate offices (including manufacturing and design of its three-phase central inverters) in Lawrence, Mass. It was a spinoff from Solectria Corporation, an electric and hybrid vehicle company which was founded by Anita and James Worden in 1989, to focus solely on the development and sales of grid-tied photovoltaic (PV) inverters.

Now called Yaskawa - Solectria Solar after being acquired by Yaskawa America, Inc. in 2014, the company's products include 3.8 to 750 kW inverters, string combiners and web-based monitoring for all size solar systems. Solectria rolls out a new inverter in the Fall of 2017.

Company CEO James Worden is opposed to the Section 201 petition, saying he thinks it's an abomination that two companies can bring down the U.S. solar market for several years.

"As a country we cannot just put 100 percent tariffs on the import of solar panels from around the world, with solar modules going from 40 cents to 80 cents per watt", Mr. Worden said. "Essentially you are building a dome around the United States and cannot import modules from anywhere else. It is going to be very damaging to the progress of the solar industry: it will result in cancellation of innumerable solar projects as investors pull out of their deals and there will be a loss of thousands of well-paying jobs.

Of the impact on his own company, Mr. Worden said, "If the costs of solar goes way up, there will be fewer solar installation projects and the number of inverters bought from Solectria will decrease significantly. If it goes down by 20 to 30 percent, this will be devastating to Solectria."

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Image courtesy of SOLECTRIA

QUICK MOUNT PV

Walnut Creek, California
85 employees

Founded in 2006, Quick Mount PV is a U.S.-based manufacturer recognized for innovation and industry leading business practices. The Walnut Creek, Calif., company has grown over the past decade to become a thriving example of a ‘new’ generation of clean U.S. based manufacturers.

Quick Mount PV utilizes sustainable manufacturing processes and employs a modern blue collar work force, many coming from workforce development programs. Its high level of employee retention demonstrates these jobs are valued by their workers.

Not only does Quick Mount PV provide good paying jobs, but they also source an overwhelming majority of parts and materials from a U.S. based supply chain stretching from California, through the Southeastern states, into the Midwest and beyond. Quick Mount PV takes great pride in its “Made in America” products, considered by many industry professionals to be the gold standard in the industry.

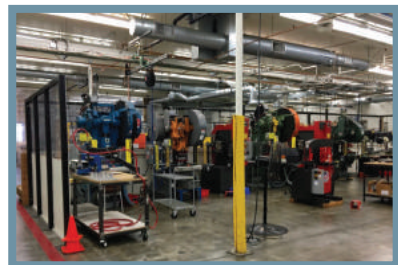
Quick Mount was founded on the principle that the mounting system is just as critical to the success of a solar installation as the modules and inverters, said Claudia Wentworth, Quick Mount PV CEO. Since 2006, Quick Mount PV has advanced rooftop solar through its innovative, high-quality waterproof mounting systems.

Ms. Wentworth called the trade case “a serious threat to the American solar industry.”

“Manufacturing in solar encompasses much more than just PV modules,” Wentworth said. “In 2016, The Solar Foundation’s Annual Job Census reported there were 38,000 US manufacturing jobs in the PV industry, with less than 2000 of those jobs being in PV module manufacturing.”

The Solar Energy Industries Association has projected the proposed tariffs would cost the US more than one third of all solar jobs. This means 88,000 jobs would be lost, including more than 10,000 in the solar manufacturing sector.

“This economic pain would extend beyond the ‘solar’ workforce, impacting companies in the industrial sector that supply Quick Mount PV and other US manufacturers with parts and materials from around the U.S.,” Wentworth said. “We respectfully request the ITC reject this proposed tariff to avoid serious economic injury to the U.S. solar manufacturing sector and beyond.”



Images courtesy of Quick Mount PV

Game Change Solar

New York, New York

100 full and part-time employees

GameChange Solar manufactures the steel racking for roof and ground mount systems as well as trackers for ground mount solar farms. And the steel comes mostly from steel mills in Pennsylvania, Indiana, and Ohio before being fabricated into racking at factories in Alabama, Tennessee, Minnesota, Kansas, Utah, New Jersey, Indiana, Ohio and other states. This is truly an American manufacturing success story.

GameChange has used 300 million pounds of American made steel through this year. The companies in the manufacturing sector of GameChange's supply chain alone employ 44,000 Americans with 2,950 in the solar sector.

Solar manufacturing is the fastest growing employment sector in the country over the last five years with jobs surging by 58%. This is due to the rapidly dropping costs of solar power which created a surge in demand for the American-made equipment that goes into building solar farms.

CEO Andrew Worden said the surging growth in homegrown American manufacturing is threatened by the Section 201 trade petition. "These two failed foreign owned companies, after surviving only from U.S. government subsidies, are now asking for the U.S. government to step in and set the price of solar panels at more than double the current market price," Worden said, "The jobs we support across the Midwest steel belt and into the deep South are at risk due to these failed foreign companies' petition for a government bailout."



Image courtesy of Game Change Solar

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DuPont

Wilmington, Delaware

46,000 global employees

500 U.S. employees

DuPont, through its global workforce of 46,000, has been bringing world-class science and engineering to the global marketplace in the form of innovative products, materials, and services since 1802.

DuPont is the leading supplier of specialty materials to the solar energy industry. Since 1975 more than half of the world's 900 million installed solar panels contain DuPont materials. These materials are manufactured at plant sites in Kentucky, New York, North Carolina, Ohio, and Puerto Rico and are supported by research and development facilities in Delaware. DuPont's portfolio, including DuPont™ Solamet® photovoltaic metallization pastes and DuPont™ Tedlar® polyvinyl fluoride films, is the established benchmark of the industry.

DuPont's solar energy capabilities extend from materials to modules, including fundamental photovoltaic (PV) materials science in addition to cell and module manufacturing, processing, and testing. These capabilities are driven by approximately 500 U.S.-based employees that support DuPont's global PV business initiatives. Beyond being a supplier, DuPont is also a PV system owner and PV electricity user, with PV systems in use at DuPont sites around the world.

DuPont supports free and fair trade and a strong and sustainable solar industry that continues to create more skilled jobs. DuPont strongly opposes Suniva's Section 201 petition requesting relief from crystalline silicon photovoltaic (CSPV) cells and modules imported into the United States from around the world.

Chuck Xu, global business director, DuPont Photovoltaics and Advanced Materials recently stated, "This action and requested relief will double the price of imported CSPV modules and negatively impact the competitiveness and sustainability of the U.S. solar market causing an estimated loss of 88,000 U.S. jobs. DuPont is an active member of the Solar Energy Industries Association (SEIA) and supports SEIA's work to oppose the Section 201 petition. DuPont urges policy makers to resolve this matter without damaging the U.S. solar industry and the jobs it provides."

“ This action and requested relief will double the price of imported CSPV modules and negatively impact the competitiveness and sustainability of the U.S. solar market causing an estimated loss of 88,000 U.S. jobs.” - Chuck Xu, global business director, DuPont Photovoltaics and Advanced Materials



Image courtesy of DuPont

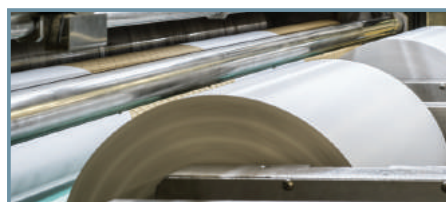


Image courtesy of DuPont

GroundWork Renewables

Sand City, California

35 employees

GroundWork is proud of our role in accelerating solar adoption through our meteorological (MET) equipment and services. Over six gigawatts of solar plants across North America have used GroundWork's high-quality ground irradiance and MET data.

Founded with four people, GroundWork is now 35 strong with staff in California, Utah, Idaho and Vermont and a network of skilled local technicians throughout the U.S. maintaining our fleet.



Image courtesy of GroundWork Renewables

In 2015, we formally opened a manufacturing facility in Los Angeles County that supplies solar projects throughout the United States and exports to Mexico, Canada, Central and South America. “We have a skilled workforce and use local suppliers and machine shops in the San Fernando Valley,” said Ann Gaglioti, CEO of GroundWork. “Los Angeles is a vibrant metropolis with motivated and diverse talent.”

GroundWork is a Women-Owned Business, and was recently chosen as one of 20 small business to receive a JPMorgan Chase & Company Mission Main Street Grant®. GroundWork is also one of eight members of the World Bank Group Roster of solar measurement firms. We are honored to lend our expertise to the solar radiation measurement community.

“The United States is now leading the global market in solar innovation and design. This is our strength as a nation: innovation and design. This includes not only panels but also the balance of system: inverters, trackers, monitoring equipment and software. The ITC should reject the Suniva trade case as it threatens to isolate the U.S. industry. This is already creating uncertainty and risk which subsequently slows investment, growth and hiring.” says Gaglioti.



Image courtesy of GroundWork Renewables

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