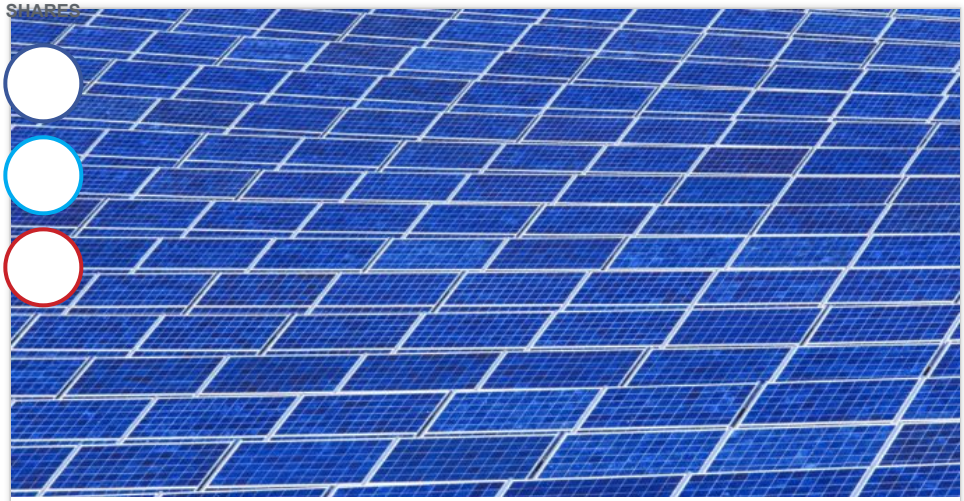
Solar Power Nerd

Camping Decoration Garden At Home Outdoors Solar Devices

Solar Lights

Home ▸ Knowledge ▸
10 Top Solar Panel Manufacturers Worldwide [Updated 2020]

5
SHARES



# 10 Top Solar Panel Manufacturers Worldwide [Updated 2020]

By contributor Knowledge

5

**Follow Us On Social Media**

What are you lookin

It's not surprising that the business of 'harvesting' solar energy is growing exponentially when the metrics of its growth in the past few years are considered.

Especially in the emerging market of China, which currently is the most profitable market for solar energy and has cities in which solar energy is already cheaper than grid electricity.

Most of this electricity is produced by newer and more modern solar panels that are both more efficient and less hazardous for the environment.



There are always new metals and other materials that can more efficiently turn sunlight into DC electricity and, eventually, into the standard AC electricity most electronics use.

With these two facts in mind, all that is left to be asked is: Which companies are the largest Solar Panel Manufacturers in the world?

Luckily for you, my dear reader, I present to you ten of the most prominent players in the manufacturing industry as of the current year, 2020, of course.

## JS Solar

Opening the list, we have a relatively new enterprise, JS Solar, founded in 2007 and whose Headquarters are located in the city of Wuxi, in the Jiangsu province at the South East side of China.

JS Solar offers service in the engineering and manufacturing side of the solar panel industry.

Producing not only solar panels, but also state of the art solar cells, which offer an excellent 22% efficiency rate per cell, and the company itself is focused on improving the efficiency of electric generation.

The company offers a wide variety of panel options ranging from their Standard Series–very adaptable, high output series with plenty of certifications to their smart series, which provides plenty of functionality options for the panels to be optimized to your individual needs.

For instance, their JS345-360M Solar Panel is a highly efficient system with up to 18.7% efficiency rate and a power range of 345-360Wp.



It's also highly durable with its frame, made with an luminum alloy and resistance to ammonia and salt ists to make it sustainable even in farm and beach nvironments, respectively.

S Solar products are sold worldwide, and the company currently has distributors in Chile, Mexico, and even the middle-east.

## Trina Solar

The second company on our list, Trina Solar, is also a Chinese-based company founded in 1997 and with Headquarters in Changzhou, southern China.

Trina focuses on smart energy solutions.

Allowing for a more straightforward way to seamlessly access the operational data of the Panels from a distance using the most modern Cloud Infrastructure and with that solving many of the hardware integration and security problems associated with them.

In their repertoire, they have panels such as the DUOMAX M PLUS — a highly effective PV Panel with 18.8% of efficiency, and a range of 280-310Wp in 60 Cell modules.

## Jinko Solar

It's impossible to make a list of this nature without mentioning Jinko Solar, which is currently the most significant Solar Panel Manufacturer in the world, having shipped 11.4GW worth of PV panels in 2018 alone.

The Chinese company, headquartered in Shanghai, started out in 2006 as a solar wafer manufacturer and slowly grew to build the entire modules.



The company also has an incredible worldwide presence with sales teams everywhere from Colombia, passing through Greece and Bulgaria, all the way to Japan, and with subsidiaries in the US, Germany, and Japan.

Among other countries, it's primarily the most profitable solar energy manufacturer and distributor in the world.

Their model focuses on massive production of durable panels, like the Eagle 72, which has a power output of as much as 340Wp in a 72 polycrystalline cell module and glass texturing so that it has excellent performance even in low-light environments.

You could say that Jinko is the modern photovoltaics equivalent to what Ford was to cars back in its day, a significant producer of good-quality products with a substantial presence in the market that won't be easily surpassed.

## Seraphim Energy Group

Perhaps the youngest company in the list, and another Chinese corporation, Seraphim has been around making a name for itself since it was branded as 'Seraphim Solar System Co.' in 2011.

As a company, Seraphim focuses on the production of high quality, highly resistant solar panels for plenty of applications.

They're not limited to just residential or commercial uses, and their panels have consistently ranked first in the PHOTON Laboratory test for Performance Ratio.



The company has in stock many different types of panels, ranging from their standard panels to a new series of smart panels, which include services such as real-time monitoring and smart installation.

I would like to recommend from their list of innovative products the Eclipse Series of panels.

These panels are made of smaller overlapping cells with an efficiency of up to 18.8% in a relatively smaller size, which can, in turn, make entire systems generate more power in the same space as other panels.

## Must Solar

Yet again, another Chinese company, founded in the technologic city of Shenzhen in 1998 and with its current Headquarters in Hong Kong, Must Solar is a company dedicated to Power Inverters, Solar Power, VRLA Battery development, manufacturer, sales and after-services.

Out of all the companies in this list, Must Solar is the

one that offers the widest variety of products besides Solar Panels.

Selling power inverters, solar batteries, monitoring products, and everything you will ever need to maintain or even boost the power of your panels.

As for the panels themselves, they're pretty good tier being mostly monocrystalline with an average efficiency of about 18.3%, the peak power of about 250 to 300Wp in 60 top 72 cells, respectively.

This specifications are on par with industry standards yet, the company itself offers many more things in the form of compliments, periphery, and other services that it definitely deserved mention on this list, after all the panels are important, but they're just a part of larger systems, and when looking at it that way, this company offers more than enough.



## Canadian Solar

Even though the market of Solar Energy has a majority of its share in China, there are some companies willing to invest in a cleaner future.

On the contrary, ever since its foundation in Ontario, Canada, in the year 2001, Canadian Solar has been one of the essential Solar Energy companies in the world.

More than just a manufacturer, this company made a name for itself by developing and constructing Solar Power plants all over the world, in countries like Japan, China, Brazil, India, and even Namibia.

Their manufacturing model, more than being divided by an array of series like most of the companies

named before, consists of plenty of high-performance models designed with a specific characteristic in mind.

For instance, there are the Ku Modules designed with high efficiency in mind, with up to 18.65% efficiency and 370Wp of maximum power.

We recommend HiKu for those who are looking to generate the highest amount of power possible, with up to 415Wp of maximum power, considerably more than any other Module I've seen while researching for this article.

## SunPower Corporation

The SunPower Corporation is the American representative of the list.



Founded in 1985, and with its HQ in San Jose, California, SunPower is the oldest solar energy corporation in this list.

They're the largest provider of solar energy in all of the United States.

Their main goal is to be as inclusive as possible, studying the specific needs of each client and making a plan that fits its size and budget, making it the best option for pretty much everyone.

The SunPower Corporation has panels in almost every field, from residences to business, from schools to agriculture, the American government and military even use their panels.

This wide range of expertise and experience over the decades has given this particular company the development advantage, being the manufacturer of the powerful A-Series Home Solar Panels, which was

the first model of Panels in the world to reach 400Wp power output with as much as 22.3% efficiency.

But even their older Panels have crazy numbers, all of them reaching at least 20% efficiency and more than 340Wp, except for the oldest P-Series although it still reaches a power output of 380 to 400Wp but with an average of 18% efficiency.

## Suntech

We go back to China for this spot on the list.

It's founded in 2001 in the city of Wuxi, China, where its HQ is located.



The company was founded with a heavy emphasis on research and development of new solar tech.

Suntech is one of the most widespread solar manufacturers that currently exists, having four main branches in Australia, Hong Kong, South Africa, and the United Arab Emirates, and plenty of business footprints all over the world.

It has manufacturing plants mostly in Asia where it has its most significant presence, followed by Europe, having one plant in Germany.

This company also has a wide variety of high-performing modules that have different sizes, which allows for a lot of versatility in implementation.

For example, the lightweight HiSpec series weights just about 9.2 kilograms (or about 2.20 pounds), making it the best option for residential or overcharged rooftops.

You also have the Standard Module that offers a high

19.6% efficiency rate and weak light performance, perfect for commercial or industrial buildings.

## Panasonic

Let's not forget that before China took over the PV market, it was Japan, the one country that was giving the United States competition in this regard.

That being said, Asian corporations tend to be either hyper-specialized or incredibly massive in size and scope, and Japanese corporations are no exception.

Yes, Panasonic, the same company that manufactures electronics such as cameras, phones, and air conditioners, is up there in the green energy market.



While they do not offer a lot on the various field, the Panasonic Solar Panels are some of the most reliable systems out there.

If we look at the 330N HIT Series, we will notice their highly efficient 96-cell panels with a 19.7% module efficiency and a considerably lower temperature coefficient rating of -0.258% per degree Celsius, meaning that these panels produce energy on the warmest days.

To put that metric into perspective, all panels mentioned before average a -0.4% per degree Celsius.

This measure is essential because, unlike what many people may think, if the temperature rises too much, the energy that the panels produce will start to shrink.

So mainly, Panasonic has created some of the most reliable panels out there being just slightly affected by

temperature, and that is a noteworthy feat.

## Sharp Corporation

Last but not least is the Sharp Corporation, founded in 1912.

Sharp is another Japanese electronics corporation and is one of the oldest companies to invest in solar energy itself, having started the development of solar cells in 1959.

It may not be a name as recognizable as Panasonic or Samsung.

Still, the sheer magnitude of this company is jaw-dropping with electronics manufacturing centers in every continent and hundreds of other centers in Japan itself.



Sharp has Panels of every type, and whether they're mono or polycrystalline, regular or high-power, they're still at the vanguard of Panel manufacturing.

They just recently achieving the most considerable cell conversion efficiency of 44.4% per cell, and we're sure to keep hearing from them.

# Final Thoughts

As we have seen, there are lots of companies dedicated to the art of developing and manufacturing solar panels, and with the business become more profitable each year, we're sure to be hearing from them for a long time.

A noticeable trend is that Chinese enterprises not only hold the largest market share, but they're also by far the most specialized when it comes to solar energy

the most specialized when it comes to solar energy, having more options for more people available at the lower costs.

In truth, it seems like a matter of time before solar energy starts to replace regular grid energy, at least in this region of the world.

We'll just keep hoping that they continue with their breakthroughs throughout the next decade.



## Related Posts