



GameChange Solar is an American solar tracker and fixed tilt manufacturer based in New York. With the main mission of “Repowering the Planet by reducing solar power production costs”, has grown exponentially from the beginning and in only 4 years, it has managed to reach 10 GW sales, placing the company among Top 3 in the USA and Top 10 globally.

GameChange Solar started in Solar business with big investments in our CEO’s own IPP, and it was clearly shown that the cost and efficiency for the installations could have a big potential of improvement. That’s the origin of GameChange designing its own fix structure and Trackers, focusing on maximizing energy production and reducing cost of installation.

Nowadays, both cost of equipment and cost installation are crucial to reduce CAPEX and OPEX and minimize LCOE. To get a competitive Project and get a good IRR, every cent counts.

That’s why GameChange Solar focus is on optimizing the design of the fix structures and trackers to reduce the cost in production without compromising quality and warranties in addition to improve installation design and components to reduce timing and installation manpower during the EPC works.

GameChange Solar most important contribution aligned with investors and developer’s interest to get higher IRR of their investment in the project.



The company's exponential growth is mainly thanks to the following 7 main differentiators:

1) Very robust tracker design using high strength steel, supporting winds up to 175 miles/hour (250 Km/hour), and avoiding galloping effect by stowing position at 35-45 degrees.

Galloping effect is produced by continuous vibration of modules fixed at the structure when stowing at 0 degrees, entering into resonance and increasing oscillations finally blowing the panels out of the tracker, as seen in several damaged projects few months ago. Stowing at 35-45 degrees requires strongly reinforcing the posts.

The prestigious company CPP has been providing continuous feedback on results about the Aeroelastic calculations from Wind Tunnel Solar Test studies conducted to GameChange Solar Genius Tracker both 1 Portrait (1P) and 2 Portrait (2P), very popular now with Bifacial modules.

2) Focused on Single-line Trackers, covering maximum space of lay-out, optimizing coverage ratio and production output. One of the most important goals for developers, promoters and investors, is to maximize Solar Production in terms of KWh/Year to be turned into \$/Year and the highest possible IRR.

One of the main advantages for the tracker is to optimize the land coverage, getting the most of lay-out limitations of the site of the Photovoltaic Project and assuring every single square meter has modules installed to produce energy.

3) Use of Artificial Intelligence to maximize generation with company's own algorithms used in GameChange property features TopoSmart, SmartStow and WeatherSmart.

TopoSmart is an in-house developed software that analyzes the topography and comes out with a 3D lay-out design. It gives exactly the different needed lengths of piles depending on the topography, to overcome high slopes, high pics or low valleys, substantially reducing the need of move of ground and civil works. It ends reducing positively the total cost of the EPC.

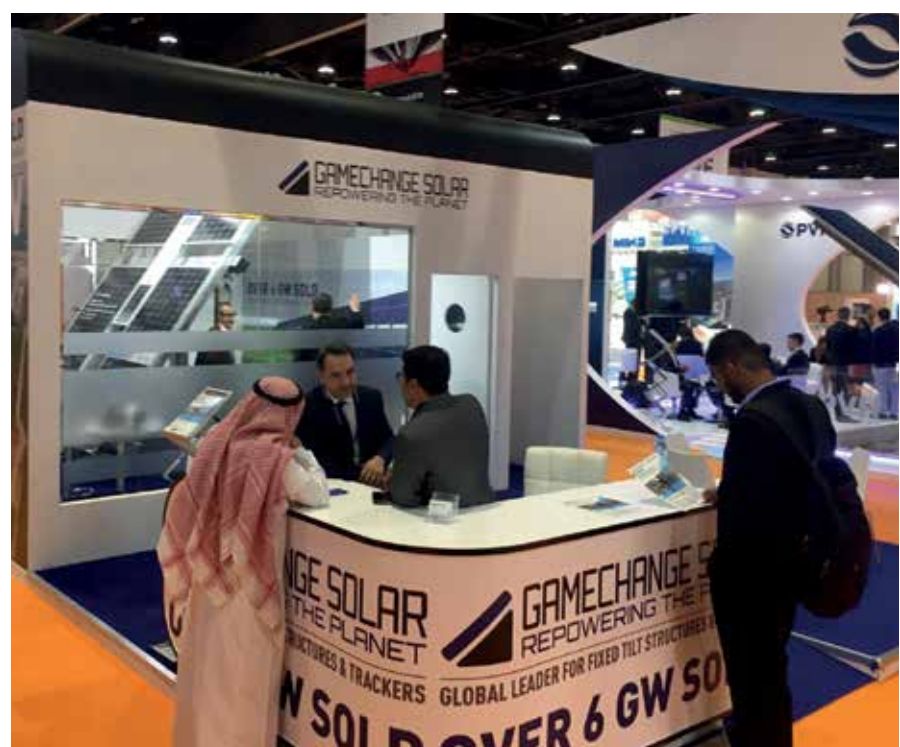
SmartStow calculated via sophisticated algorithms, determines the absolute necessary moment to drive the Tracker to stow position, depending on measurement of winds, differentiating between a dangerous constant strong wind versus just a sudden gust of wind. Assuring therefore the maximum time the modules are facing the sun in their right position every time of the day.

WeatherSmart concept is similar to StowSmart, but taking into account cloudy moments during the day. On a fully cloudy day, the tracker will be sent to 0 degrees position to absorb maximum indirect radiation, however if there are only sporadic time of clouds, the tracker "intelligently" will decide to stay following the sun rather than moving to flat position. GameChange Solar also has available Snow and Flood Stow for sites that require so. A sensor calculates the distance to the ground, which decreases when there is presence of an important level of snow or a water flood, so the tracker can avoid the full tilt angle, preventing damage.

4) Very easy and fast to Install, reducing substantially EPC cost of installation. Most parts come pre-assembled from factory and there's no need for special tools during installation. GameChange Solar's SpeedClamp™, for 1P configurations, is the fastest mounting solution in the industry.

After the increase of Energy Production, GameChange Solar's second important goal is to reduce LCOE as much as possible, improving design to make it faster to assemble and install on the site and also providing as much as preassembled parts as possible.

5) Cost efficient and fastest to install fixed tilt solutions For projects and sites that are better suited for Fixed tilt, GameChange Solar has created the most cost effective solutions: MaxSpan-X™ Post driven systems, for regular soil sites, and Pour-In-Place™ Ballasted Ground System, to allow the installation at sites where the complicated soil makes pile driving costs impossible to assume. Both products designs follow the same philosophy of their Genius Tracker™ System, this is robust design, adaptability, cost efficiency and fast installation with Twistclamp, preassembly and integrated hardware.





As module prices approach \$.15/watt in the coming years, highly packed fixed tilt for over 90% GCR as alternative for higher total MWH production on land constrained and extremely undulating sites will begin to make lot of sense.

6) Besides production made in USA, GameChange Solar, in November 2019, inaugurated its factory in Wuxi (China) as part of its own investment, becoming one of the most competitive manufacturers in the world. Installed Capacity in China is over 12 GW annually with state-of-the-art brand new equipment. Together with this new factory, GameChange can reach annually a capacity of over 20 GW. From Wuxi's factory in China, they provide production globally, in every needed geography outside of the USA.

GameChange Solar have clients such as NextEra, Moss, Cupertino... and outside the USA, we have signed contracts with Total, Sterling&Wilson, Acciona, Tata, PowerChina, IBOX Energy,... and have been qualified recently by Fotowatio, ENEL, Risen, Repsol, SolarCentury, BP Lightsource, OPDE and Canadian Solar, among others.

7) Another important advantage from GameChange is the tight relationship with steel suppliers. The company obtained really competitive prices for raw material thanks to the large economies of scale jointly with the long term relationship, as GameChange Solar founder and CEO, Andrew Worden, was trading and dealing with steel companies with Barron Capital family office previously to start investing in his own IPPs and later in GameChange Racking.

8) The high level of know-how and high experienced employees with over twenty years of dedication to PV Solar technology led by successful and proven department's leaders in Engineering, Business Development, Sales and Customer Service give definitely the needed trust to GameChange's high demanding clients.

Arturo Herrero joined GameChange Solar, a leader in the photovoltaic solar tracker industry, as the chief commercial development officer last year (2019). In the past five years, Arturo has worked directly in a consulting company that provides consulting services to leading companies in Europe, Latin America, Asia and Africa, as the managing director. Prior to this, Arturo also served as Chief Strategy Officer of Jinko Solar and Chief Marketing Officer of Trina Solar, and led the two companies to achieve great results in 2010 and 2016, respectively, and became a global market leader. In addition, Arturo also helped the two companies successfully complete the listing in 2006 and 2010, respectively becoming the world's first and second largest solar photovoltaic module manufacturer. He was born in Barcelona, has lived abroad since 2006, and currently lives in Switzerland. He was hired as the chief business development officer of GameChange Solar, hoping to help the company achieve further expansion in overseas markets, and strive to become the top three tracker manufacturer, and complete the listing within 3-4 years.

Geographical Focus

United States has been the #1 market for solar trackers during the forecast accounting for one third of installations. 8.5 GW of solar trackers are estimated to have been shipped from H2 2019 to mid-April 2020 only in the United States. Array technologies was the #1 supplier of centralized tracker technology. NEXTracker was #1 supplier of distributed tracker technology. In the USA, GameChange Solar, with main headquarters in Manhattan, New York, is currently Top #3 in the US market.

Besides the USA, Spain, Australia, Brazil, Mexico and UAE are expected to be the most attractive markets for solar trackers in the next coming 5 years.

The global PV tracker market increased by over 42% in revenues up to \$2.8 billion in 2019, according to IHS latest report.

Global PV tracker market reached \$2.8 billion in 2019 equivalent to 32GW of solar trackers estimated to have been shipped.

The company, in its great expectations of growing internationally, for the moment, has opened offices and hired representatives in Switzerland, Spain, Argentina, India and China, besides USA.

GameChange Solar's goal internationally is to reach Top#3 global position in next coming years.

Despite Covid-19 impact, with the slow down in the financial markets and in the economy in general, they are optimistic about their renewable energy sector and they see the commitment from private and institutional investors and even more support from governments, in most of the countries, that are seeing in this Industry a way to boost back the economy and the employment occupation.

www.gamechangesolar.com

GameChange Solar is an American manufacturer of solar trackers and fixed mounts, headquartered in New York. The company's mission is to reduce the cost of solar energy and provide new energy for the earth. The company has achieved a qualitative leap in recent years, and the company ranks among the top three in the United States and the top ten in the world.

GameChange Solar officially entered the solar business with its huge investment in the company's CEO's own IPP. Because of this opportunity, it was discovered that the installation process can greatly improve installation efficiency and save costs. This also led Game Change to choose to design its own fixing and tracking brackets, and hope to reduce installation costs and increase power generation through this innovation.