

Solar tracker innovations driving customer success

GameChange Solar, the third-largest solar tracker company in the US and fourth-largest globally in 2023, attributes its success to innovation and customer-centric approaches. PES heard from President & COO Phillip Vyhanek about the company's strategy so far, and how it's not stopped yet on its global adventure, with plans for new factories, training, and service centers in various regions.

PES: Welcome back to PES Phillip. It's been a busy time for GameChange recently hasn't it, with unprecedented growth in 2023 that places you as the third largest tracker company in the US and the 4th largest globally. What factors do you think account for this?

Phillip Vyhanek: There are several reasons for the high growth of GameChange. We bring a lot of value to our customers in very specific ways. Our commitment to continuous innovation is a key driver of our success. Since our establishment in 2012, we have consistently introduced groundbreaking advancements to our fixed tilt and Genius Tracker products.

We actively seek input from our customers to ensure our products meet their evolving needs, and we are dedicated to solving their challenges, not just building products. A prime example of this is our tracker's exceptional resilience in extreme weather conditions.

We strive to lower the levelised cost of energy (LCOE) for our customers through a reduction in up-front hardware costs, lower long-term O&M costs, project management software to manage installation costs, streamlining the installation with some of the highest amounts of preassembled components, as well as industry-leading smart tracking algorithms that optimise the production of the site.

At GameChange, we prioritise customer service as the cornerstone of our strategy. We don't view our business as a series of transactions, but rather as a long-term investment in our customers and partners.

PES: Does this strong position impact your strategies for further growth moving forward? How easy do you think it will be to maintain this trajectory?

PV: We focus on the basics and work to bring value to our customers every day in everything we do. Our customers and solar owners are always at the center of our strategy. We focus on execution and adding value. We think about the product, and the way we service our customers through training, build sequencing, best-in-class logistics, and commissioning is why we gain more market share.

PES: Amid this international expansion, how important is localisation, for instance with training, service centers, and factories in the regions you are operating in?

PV: As we expand globally, like our new factories in Brazil and Saudi Arabia, as well as training and service centers in South Africa, India, Spain, Brazil, and Australia, our goal is to have local companies working with our local staff. It demonstrates our commitment to our global regions.

We are invested where we are doing business. We speak the language; we understand local business practices, and we know the players. That builds trust and value for our customers. We don't believe we can be successful globally without a local presence in each of our key markets.

Solar development is in new regions, territories and countries; as such the construction workforce is often new and requires regular training and support.

PES: Are there challenges though, with establishing local infrastructure in new regions? Is it possible to overcome these?

PV: There is always a challenge and that is what makes each day so interesting at GameChange. As our name suggests, we are not doing it the same old way. If we are going to repower the planet, we need to be creative and supportive. Our mission is to help develop solar professionals in each of the



Phillip Vyhanek

regions we enter. We have been incredibly successful in recruiting small, extremely talented teams locally.

We are very fortunate to have a management team that has deep international roots and experience and understands the value of investing in our global business systems and design approach. It is this underlying architecture, along with our local talent, that has allowed us to grow internationally both rapidly and smoothly.

PES: Presumably having experienced local staff who understand the local renewable energy landscape is important?

PV: Undeniably, this is the case. We seek out experienced regional experts who understand the industry's unique regional aspects. The world is made up of diverse communities with different needs and business practices.

Ultimately, it's our people who are doing business and communicating with our

customers. There are nuances in doing business regionally that US-only-based staff would miss. We have to make it easy for our customers to do business with us, or they won't want to.

PES: As a business GameChange is extremely customer-centric and service-oriented. How do you ensure you remain aligned with your mission while meeting customer needs?

PV: Our overarching mission is to repower the planet with clean solar energy, which we are extremely passionate about. We are doing our part by providing innovative, quality products while trying to reduce the overall cost of energy and simplifying the installation process.

Meeting our customers' needs is essential to our mission, so alignment is easy. I know this sounds corny, but we truly like our customers, and listening, learning, and partnering with them is in our DNA. I am often disappointed with customer service in my life outside Solar, and GameChange would never want our customers to experience that level of ambivalence.

PES: Is this what sets you apart from the competition, in your opinion?

PV: From what we hear from our customers, yes, it does set us apart. It's something we emphasize constantly within our organisation. Collaboration with our customers is the top line of our strategy. We are continually striving to break down barriers from planning, engineering, and site support to the construction of solar projects that stand the test of time. It's behind everything we do.

PES: Your products have lower O&M costs, with 40-year maintenance-free design of your drive systems, giving you a competitive advantage too. Tell us more about that.

PV: Yes, our Genius Tracker drive system design, the key to which is its self-contained linear actuator, eliminates the need for any greasing throughout its design life. In the accelerated lifecycle testing, the results demonstrate the potential for decades of reliable performance, which results in reduced O&M costs and a lower levelised cost of energy for our customers.

PES: There is a strong focus on streamlining the installation process too isn't there? How do your solar trackers compare to alternatives in terms of labour intensity for installation?

PV: We do put a lot of focus on streamlining the installation process. Not just with the products themselves, but with the entire end-to-end process. We really value our relationships with the EPC companies that build our systems in the field. For example, we recently validated through a third-party



time study that our Genius Tracker 1P system requires 28% less labor to construct than the average of three market-relevant 1P tracker products.

Our design is straightforward; we deliver the majority of parts fully assembled, improving efficiency. We have also pioneered our Production Delivery System (PDS) which provides unmatched material visibility and build sequencing, again improving the EPC's efficiency.

PES: Why do you think this is? Is it due to the systems and streamlined processes you have in place?

PV: Yes, it's a combination of things. The key things noted in that study were our factory pre-assembly, lower part count,

simplified logistics, our SpeedClamp™ system provides for module installation with only two bolts per module, including the attachment of the module clamp itself, our drive system being easier to install, and our two-piece post-top tube system making for faster and easier installation.

PES: It would be good to hear more about the SpeedClamp™ system and how it streamlines the installation process too, if we may?

PV: The SpeedClamp is essentially a simplified module rail system. It's a proprietary design that we developed for our Genius Trackers that can dramatically improve tracker installation speed. SpeedClamps secure directly onto the module frame, with a two-bolt per module installation.

The SpeedClamp acts as the spacing jig between modules so the modules are properly positioned and no pre-positioning is required. They are easily tightened by two nuts accessible from the bottom.

This system removes at least four torqued connections per module. Imagine a large solar project with a million solar modules, removing four million bolts has a big impact on the time and cost of installation. Feedback from our installers is that they love working with it.

PES: Safety and reliability are paramount too of course. How do you prioritise these, especially in areas prone to high winds like Florida and the Gulf Coast?

PV: Safety and reliability are extremely important and must always be a priority to stay in this business for the long term.



We have a long history of designing and testing for quality and safety, starting with certifications to UL 2703 and UL 3703 standards, extensive aeroelastic wind tunnel testing, and innovative stow strategies that maximise power production while minimising the probability of damage.

GameChange has installed 5.2 GW of tracker and fixed-tilt projects in high windspeed areas of Florida and the Gulf Coast. These sites have already experienced meaningful wind events, including Hurricane Ian in 2022, a category 4 storm with 150 mph winds and a massive storm surge. One week after the storm, 99.95% of Genius Tracker tables deployed in the region were fully operational, withstanding some of the highest wind speeds on record in the region.

PES: Looking to the future finally then, what can we expect to see next from GameChange?

PV: Expect GameChange to commit to continuous improvement and focus on flawless execution. Although we are in the renewable energy business that is not enough. It matters how we conduct our business, treat our people, and support our communities.

GameChange has fully committed to reducing our own environmental footprint, improving the health and safety of our employees and customers, as well improving our diversity and inclusion. We have published a comprehensive ESG strategy of what we have already accomplished and what we are committing to do. As part of our localisation efforts, in the USA we have demonstrated projects with greater than 80% domestic content validated by one of the big 4 national audit firms and will do more.

In the end, we want our people to be proud of the work they do, our customers should want to do business with us, and our neighbors should be glad they live near a GameChange site or facility.