

# Case Study: Pre-assembly Reshapes Utility-Scale Solar Construction

*PV Hardware USA's pioneering approach reduces field complexity, simplifies on-site execution and improves installation efficiency*

HOUSTON , TX, UNITED STATES, May 15, 2026 /EINPresswire.com/ -- Since 2023, PV Hardware USA, [a global provider of solar tracking and foundations solutions](#), has been

leading the industry through the implementation of its pre-assembly approach across commercial solar projects, helping reduce on-site components, streamline field work and support more efficient project delivery. As the only company currently offering full pre-assembly rather than partial solutions, PVH USA continues to lead the industry in rethinking how solar projects are executed in the field.

“

Pre-assembly is about control as much as it is about efficiency ... we are able to reduce variability in the field, minimize risk and give EPC teams a more predictable path to project completion”

*Rodolfo Bitar, VP Business Development*

The company's approach has already demonstrated measurable impact, including requiring 70 percent fewer on-site components and up to 44 percent less installation time in selected applications. These improvements directly address one of the most persistent challenges in utility-scale solar: execution risk at the project site. To download a full case study on how pre-assembly improves installation efficiency, visit the [PVH website](#).

“Pre-assembly is about control as much as it is about efficiency,” said Rodolfo Bitar, VP Business Development, PVH USA. “By shifting critical assembly steps into a controlled manufacturing environment, we are able to reduce variability in the field, minimize risk and give EPC teams a more predictable path to project completion.”

Why pre-assembly matters

In utility-scale solar, execution risk does not stem solely from engineering or procurement. It is



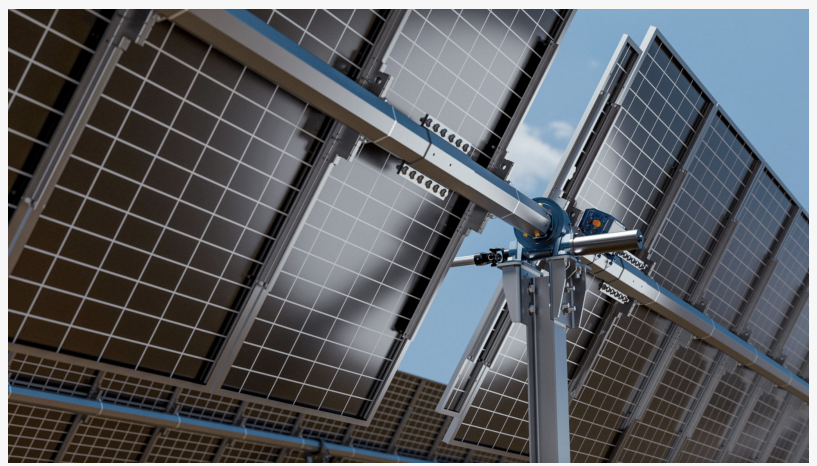
often driven by what happens on site each day. The number of components handled, the complexity of assembly steps and the potential for human error all play a role in project outcomes. Pre-assembly addresses these challenges by simplifying what happens in the field.

A pre-assembled solar tracker transforms the installation model before materials even arrive on site. Instead of shipping multiple loose components that must be assembled under field conditions, key subassemblies are prepared in advance and delivered as installation-ready units. This reduces the workload for field crews and creates a more streamlined execution process.

“We pioneered full pre-assembly because we saw a clear opportunity to improve how projects are built,” Bitar said. “Our goal was to remove unnecessary complexity from the field and create a system that supports faster, more reliable installation at scale.”

#### Benefits for EPC teams

For EPC teams, the advantages are immediate and practical. Pre-assembly reduces installation steps, enabling faster construction timelines and minimizing disruptions caused by missing parts or assembly errors. It also reduces dependence on large field crews by lowering manual assembly requirements, an increasingly important factor as labor availability tightens and costs rise.



PVH USA engineers work hand-in-hand with manufacturing to highly optimize our production and create exact configurations, opening the way for a whole higher level of innovation.

In addition, pre-assembly enhances quality and predictability. Completing complex assemblies in a controlled environment reduces the likelihood of installation errors, material damage and inconsistencies between crews. The result is a more standardized and reliable construction process.



As solar projects grow in size and complexity, modular design and pre-assembly are becoming essential tools for improving execution. Systems designed with pre-assembly in mind can simplify logistics, reduce on-site handling and support more efficient installation planning.

For more information or to schedule an interview, please contact: Heidi Bethel at 775-338-8420 or [heidi@themaverickpr.com](mailto:heidi@themaverickpr.com).

#### About PV Hardware

At PV Hardware (PVH), we provide cutting-edge solar tracking solutions designed to maximize performance and adaptability. Our portfolio includes single-axis trackers in single-row and dual-row configurations, seamlessly integrated with advanced control systems to optimize efficiency and minimize energy loss across a wide range of solar projects.

As a fully integrated manufacturer, we design, produce, and supply our own trackers, ensuring complete control over the value chain. This allows us to tailor solutions to the specific needs of any project, adapting to diverse terrains, soil conditions, and climates while providing fast, reliable service without third-party dependencies.

With over 40 GW of solar trackers supplied worldwide, PVH operates from advanced manufacturing facilities in Spain, Saudi Arabia, and the USA. Our new manufacturing headquarters in the USA further strengthens our ability to meet the growing demand for locally sourced solutions with unmatched efficiency. Committed to innovation, quality, and sustainability, PVH continues to drive the global transition to renewable energy.

###

Heidi Bethel  
PV Hardware

+1 775-338-8420

[email us here](#)

Visit us on social media:

[LinkedIn](#)

---

This press release can be viewed online at: <https://www.einpresswire.com/article/912942364>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2026 Newsmatics Inc. All Right Reserved.