

# Powering Europe's distributed energy transition

Kevin Ying, General Manager of International Sales, Distribution Business Center, Sineng Electric, discusses the company's evolving distributed solar and storage business in Europe.

**PES:** Welcome to PES Solar, Kevin. It's great to catch up with you. For this interview, we'd like to focus primarily on Sineng Electric's distributed business. Firstly, can you share how this side of the company evolved in recent years, particularly across residential and C&I applications in Europe?

**Kevin Ying:** Recently, Sineng's distributed business in Europe has evolved from initial market entry into a more structured and localized operation. We have expanded across both residential and C&I segments, strengthening our presence through closer partnerships with local distributors and installers.

Our offering has also matured from standalone PV products to more integrated solar-plus-storage solutions, better aligned with evolving market demand.

**PES:** Europe is a highly competitive and fast evolving market for distributed solar and storage. How is the business positioning itself in the region, and what do you see as the company's key strengths in this segment?

**KY:** Sineng is driven by technology and is a reliable partner in the European distributed energy market. Our strengths lie in proven engineering capabilities, strong product reliability, and a comprehensive portfolio covering both PV and storage.

This is further supported by our global track record: the business has been recognized as a BloombergNEF Tier 1 power inverter manufacturer, ranking No. 4 globally in PV inverter shipments in 2023 and 2024, and No. 5 in energy storage PCS shipments in 2024.

We also emphasize adaptability, ensuring our solutions meet diverse grid codes and customer requirements across Europe.

**PES:** Your portfolio now spans both PV inverters and energy storage solutions. From a technology perspective, which products and

solutions are currently most important within your distributed offering, and how are they shaping the systems you are delivering today?

**KY:** In the European market, PV and hybrid inverters and residential all-in-one solar-plus-storage systems are currently the most relevant solutions within our distributed portfolio. This is driven by increasing demand for energy independence, rising electricity prices and the need for integrated, easy-to-deploy systems.

Technologically, these solutions are enabling more intelligent energy management, higher self-consumption rates and greater system flexibility, shaping a new generation of distributed energy systems that are both user-centric and grid-responsive.

**PES:** Solar installations are increasingly being designed with storage in mind from the outset. How is this shift influencing the way your solutions are being developed for residential and commercial applications?

**KY:** This is fundamentally changing how systems are designed, with storage now considered a core component rather than an add-on. We are developing solutions with integrated and storage-first designs, such as DC-coupled systems and modular designs, to optimize overall system efficiency and lifecycle performance.

Greater emphasis is also being placed on intelligent energy management, enabling users to optimize self-consumption, respond to dynamic pricing and enhance energy resilience in both residential and C&I applications.

**PES:** Performance is always a key consideration in this market. When developing products for the distributed segment, which aspects of system performance most strongly guide your engineering priorities?





**KY:** Efficiency, intelligent energy management, and system stability are key priorities in our product development. In the European context, particular focus is placed on advanced charge and discharge strategies and optimized consumption patterns, enabling users to maximize self-consumption and respond to dynamic electricity pricing.

We also emphasize simplified installation and seamless grid-to-off-grid switching, ensuring both ease of deployment and uninterrupted power supply under diverse operating conditions.

**PES:** Reliability is just as important as performance for installers and asset owners. Could you share some insight into the design philosophy and testing processes that underpin the long-term dependability of your solutions?

**KY:** Reliability is embedded in our design through strict engineering standards and comprehensive testing. Our systems undergo rigorous validation, including safety, environmental and lifecycle testing, to ensure long-term durability.

In addition, we adopt high-quality, high-specification components, such as advanced battery cells, to further enhance system stability and consistent performance in real-world applications.

**PES:** Energy storage is rapidly gaining traction across distributed applications. From your perspective, what factors are making storage an increasingly compelling addition to residential and C&I installations?

**KY:** In Europe, several structural factors are accelerating the adoption of energy storage, including high and volatile electricity prices,

reduced feed-in tariffs and increasing grid constraints. This is driving a shift toward maximizing self-consumption and improving energy cost predictability for both residential and C&I users.

In addition, storage is becoming essential for enhancing energy resilience and enabling participation in emerging flexibility and grid services markets.

**PES:** Ease of installation and commissioning can make a significant difference for installers working to tight project schedules. How have you approached system design to simplify deployment in the field?

**KY:** We address this by focusing on highly integrated system designs that significantly reduce installation steps and on-site complexity. Our all-in-one solutions eliminate the need for extensive wiring and component matching, while plug-and-play designs streamline commissioning.

In parallel, digital tools and monitoring platforms enable faster setup, remote diagnostics and more efficient long-term system management for installers.

**PES:** Europe is a highly fragmented market, with different regulations, installer expectations and customer needs across countries. How is Sineng adapting its distributed business to better support local markets and partners on the ground?

**KY:** We meet this complexity through a combination of localized product adaptation and advanced energy management capabilities.

A key focus is our ability to respond to dynamic electricity pricing, which is becoming increasingly common across European



Kevin Ying

markets. Our systems are designed with intelligent charge and discharge strategies, enabling users to optimize energy usage based on time-of-use tariffs and maximize self-consumption. This allows both residential and C&I customers to reduce energy costs while improving overall system efficiency.

We also work closely with local partners to ensure our solutions align with national grid codes and installation practices. By combining flexible technology with strong local collaboration, we are able to better support diverse market needs across Europe.

**PES:** Finally, looking ahead, which areas of innovation, product development or market opportunity are you most excited about as Sineng continues to expand its distributed business in Europe?

**KY:** In the future, we foresee a strong momentum in hybrid PV-plus-storage systems that are increasingly designed to interact more actively with the grid. In Europe, this goes beyond traditional self-consumption, with systems evolving toward support roles enabled by technologies such as grid-forming capabilities, advanced energy management systems and virtual power plant (VPP) integration. These innovations will enable distributed assets to participate in flexibility markets and provide additional value streams.

We see growing demand for smarter energy orchestration at the household and C&I level, including the integration of flexible loads such as heat pumps and EV chargers. This requires more intelligent control of generation, storage and consumption to optimize both cost and energy efficiency under dynamic pricing schemes.

Overall, we expect continued growth in both residential and C&I storage, driven by the need for flexibility, resilience and smarter energy use. As the energy transition accelerates, distributed systems will play an increasingly active role in supporting grid stability and enabling a more decentralized energy landscape.

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