

Striving for Sustainability

Across Ohio and the Midwest, Kent State University has been a sustainability leader, utilizing solar Power Purchase Agreements (PPAs) to achieve predictable operating costs and sourcing local, green energy. In 2012, the university installed its first solar array on the roof of the Field House at its Kent Campus. Aggressive energy conservation projects at all campuses, a Johnson Controls Building Automation System with alarms and strict equipment scheduling, a Combined Heat and Power (CHP) plan and reverse auction electric procurement round out the university's efforts. From 2012 to 2019, its solar energy capacity had grown to 4.25 megawatts-DC across seven of its campuses, as well as the College of Podiatric Medicine in Independence, Ohio. **These systems provide enough electricity to power 798 homes every year,** offsetting more than 45,000 tons of CO₂, the same amount that almost 5,000 acres of U.S. forests offset in the same amount of time.



Powering and Empowering

Why is Kent State going "all-in" on solar? "Kent State is committed to being good stewards of our infrastructure," says Doug Pearson, Kent State's associate vice president for facilities planning and operations. **"The solar installations provide us budget stability in a volatile energy market."**

Kent State's campuses have become incredible resources for any student or business wanting to learn about embracing sustainability in everyday life. Not only does clean energy supply a substantial portion of its Regional Campuses' electricity, it has implemented many energy-efficiency measures such as sensors to adjust lights and ventilation. Kent State also encourages its students and staff to incorporate energy-conserving behaviors—like unplugging appliances when not in use—into their daily routines. Additionally, native perennials have been planted around ground-mounted solar panels, which support bees and other pollinating insects, as well as reduces water runoff. Establishing the native perennials is still underway at most of the array sites.

The Path Forward Continues

And it's not done improving its energy portfolio! Kent State worked with Melink Solar and OnSite Partners to install another 7.2 megawatts-DC of ground mount solar array at its Kent Campus in Kent, Ohio. **This will elevate the Kent State total solar capacity to over 11.4 megawatts-DC.** Similar to previous projects, this solar array will be funded via a PPA where OnSite Partners owns and maintains the system and sells

the electricity it generates to Kent State. And just like other solar systems it has installed over the last decade, once the PPA period is over, Kent State can buy out the system or renegotiate the PPA.

This latest project began for Kent State in 2019. An RFP was created by the Office of the University Architect, and several valid proposals were received. A detailed vetting process began using in-house and external project experts to arrive at the final decision for the best partner for the 30-year PPA. Unfortunately, the COVID-19 pandemic and the associated supply chain challenges delayed progress. There were also challenges due to some wetland areas and a natural gas transmission line. The total array is split into two large sites, one in the city of Kent and one in Brimfield Township, bisected by state Route 261. The distance for the solar array electric conductors to the behind-the-meter Kent State connection was also quite a distance, using directional boring experts.

These complexities required including a 1.5 MW battery bank (able to power close to 200 homes), installed by Melink Solar, to help make the project economically viable for Kent State. The battery charge/discharge is controlled by a third party following a signal from the PJM grid operator. This allows Kent State to gain potential revenue from PJM grid Synchronous Reserve and Frequency Response (Reg D) programs, helping to offset the relatively higher cost per kWh of the complex solar array system. OnSite Partners retained the Solar Renewable Energy Credits to help reduce the cost per kWh for Kent State. While other universities in Ohio have incorporated solar power into their campuses, **this system will be one of the first with battery storage**, which allows for even more energy independence.

Seth Parker, CEO of Melink Solar, comments on how important it is to collaborate with universities on these types of projects: "We love working with educational organizations because **the solar systems not only save money for the school, but double as a source of education and inspiration** for the younger generations. We were thrilled to work with Kent State University for the fourth time to design and build the largest solar array on its campus."

Low-growing prairie grasses will be planted between the rows and native pollinators will be planted around the perimeter of the array. The array and battery storage system began operation in June of 2025.



*Solar prairie ground mount system
at Kent State's Trumbull Campus*

ABOUT MELINK SOLAR

Melink Solar is based out of Cincinnati, Ohio, and empowers leaders to kick-start their sustainability journeys. Melink Solar works with Midwest businesses and organizations of all sizes to evaluate and implement onsite solar with roof mounts, ground mounts and parking canopies. Melink Solar's goal is to help owners turn sunshine into savings and reduce carbon emissions. Since 2008, Melink Solar has designed and built over 300 MW of commercial and utility scale solar.

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