INTERVIEW: University of Illinois Facilities head talks campus solar and future procurement plans

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University of Illinois at Urbana-Champaign Solar Farm 2.0

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By Colt Shaw

A new on-site solar farm under construction on the Urbana-Champaign campus of the University of Illinois will represent more than 5% of the campus' electricity and surpass the school's short-term goals.

The new 12.1 MW array, Solar Farm 2.0, will sit on 54 acres of school land and produce 20,000 MWh of power a year.

Campus leaders have pledged to have the school reach a "net zero carbon" status by 2050 at the latest, said Morgan White, Associate Director of Facilities & Services for Sustainability, in an interview with *New Project Media*.

The school began writing the Illinois Climate Action Plan, or ICAP, in 2010. Since then, they have set out goals for the short term.

"One of the specific interim objectives from the 2015 version of the Illinois Climate Action Plan is to produce at least 25,000 MWh per year of solar power on campus property/behind the meter by 2025," White said.

The campus released an RFP in 2017 seeking a project with a capacity of 18,000 MWh, to hit its interim goal early.

This project, expected to be operational in January, puts them over the goal by 2,000 MWh.

"We're gonna surpass our goal," White said. "And we have other goals. We want to do more clean energy. So this will get us the on-campus solar solution but we're also looking at 'how do we buy more clean energy in the future and what else can we do on campus, like geothermal, for example."

Sol Systems is developing the project and has entered into a 20 year PPA and land lease with the school, according to a release. Inovateus Solar is handling engineering and construction on the project, which will consist of more than 31,000 bifacial PV modules The school has paid USD 20m for the project, but expects to save some USD 300,000 in its first year of operation compared to purchasing on the MISO market.

Jeff Miller, the senior director of business development for Sol Customer Solutions — a joint venture with Capital Dynamics that will finance, own and operate Solar Farm 2.0 — believes the project is cutting edge.

"To deliver a project that features bifacial modules on single-axis trackers and a native pollinator habitat is a unique opportunity and is a model for the industry," Miller said in the release.

An agreement for wind power brings the campus' total renewable capacity to about 52,000 MWh, or about 13% of the total electricity used, White said.

The project was designed in the spring and got approval since then for construction and connection to the campus grid, she said. It will feature "pollinator supported planting" under the arrays. Those will be installed in April.

The campus group that initially proposed a second solar farm on campus to meet the school's goals was a "green team" composed of two faculty members, two staff members and two students, bringing together operational and educational viewpoints, she said. The campus made the sustainability commitments it did, White said, in part because universities are "the ones who are educating the future leaders of the world."

"It's really important that we show that this can be done and that we integrate with our students and get them involved in this," White said. "We have a lot of student projects that are tied to renewable energy, we have several ... classes that use the solar farms or our building-located installations as part of their coursework. ... So there's a really robust connection with the students."