

PROJECT FACT SHEET

Solar Farm Project

SOLAR FARM

The Solar Farm increases renewable electricity generation on campus and helps meet sustainability goals outlined in the Illinois Climate Action Plan (iCAP) icap.sustainability.illinois.edu, campus' plan for mitigating climate change.

The Solar Farm is rated at 5.87 megawatt DC/ 4.68 megawatt AC. It achieved 99.1 percent of design efficiency its first year, producing 7.284 million kilowatt-hours (kWh). This represents nearly two percent of the electrical demand for the Urbana-Champaign campus.

PROJECT SPECIFICS

- A 10-year power purchase agreement with Phoenix Solar South Farms, LLC, which will design, build, operate, and maintain the Solar Farm
- A 10-year land lease agreement of \$1 per year
- Delivering all electricity produced by the farm to the campus grid
- University ownership of all renewable energy certificates and carbon credits

PROJECT LOCATION

The farm is located on 20.8 acres immediately south side of Windsor Road between First Street and the railroad tracks. (See map below)

ARRAY DETAILS

System size (kwp dc): 5,873.28
Module type: crystalline
Module wattage: 310/315
Module dimensions (in): 39.1 x 77
Modules per string: 19
Total strings: 1,008
Total modules: 18,867
Module tilt (deg): 20
Module orientation: 3-up landscape
Inverter type: Power-One 1,560 kW AC
Total inverters: 3
Array azimuth (deg): 180
Ground coverage ratio (%): 60

PROJECT LEAD

Kent Reifsteck, Director
Utilities & Energy Services, F&S

PROJECT CONTACT

Morgan White
Associate Director for Sustainability, F&S

FOR MORE INFORMATION

Real-time performance data is available at go.illinois.edu/solar

Tours are offered on the first Friday of the month between 2 and 4 p.m.
Register at go.illinois.edu/solartour

Updated: 10/4/17 • fscustomerrelations@illinois.edu • www.fs.illinois.edu



PROJECT TIMELINE

Request for Proposal Publication:
February 2012

Board of Trustees Approval:
November 2012

State Approval of Award:
March 2014

State Approval of Agreements:
December 2014

Commercial Operation Date:
December 11, 2015

University Ownership: 2025



MEDIA CONTACT

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Solar Farm FAQs

SOLAR FARM FREQUENTLY ASKED QUESTIONS

How much will the project cost?

The total cost of the project is estimated at \$15.5M over 20 years, which represents a \$5.3M premium for clean energy. The Student Sustainability Committee provided \$1.05M and the Campus Utilities Budget provided \$4.25M.

What is the lifespan for the type of panels used at the solar farm?

These panels are warranted for 20 years. Solar energy researchers on campus estimate that the panels will continue to collect energy for up to 40 years.

Who uses the power from the Solar Farm?

All of the electricity generated by the Solar Farm is used by the Urbana-Champaign campus. The university also owns the renewable energy certificates and carbon credits from the farm.

Are there any risks or dangers living near a solar farm? Will the panels be any kind of nuisance?

No. Solar photovoltaic panels are one of the least intrusive and cleanest ways to generate electricity. Their height is lower than the average cornstalk. The panels' dark coating maximizes light absorption and efficiency. Because light is not lost through reflection, the surrounding air temperature is not affected. Additionally, site traffic is limited to monthly tours and grounds maintenance by the contractor.

What measures have been taken to protect the herons and other wildlife that visit or live on the property?

The university completed an Ecological Compliance Assessment Tool review request through the Illinois Environmental Protection Agency prior to constructing the Solar Farm. It uses recognized best management practices to protect native and migratory species on the property. The university meets or exceeds state and federal laws regarding wildlife habitat on the site, including providing milkweed and other pollinator-friendly plants on the east section of the property.

How is the Solar Farm performing?

Here are the results from the farm's first year of operation, December 11, 2015, through December 10, 2016:

Percent of Design Output: 99.1%

Total Energy Generated: 7,283,212 kWh

Carbon Emissions Reduced: 6,010 metric tons

Power Purchase Agreement Cost: \$1,427,510