Penn State: Powered by the Sun

70 megawatts of solar power, one of the largest solar projects in Pennsylvania

An innovative project carefully designed to be a model in maximizing the sustainability of utility-scale solar
Partnership details

- The project is 100% financed, built, maintained and operated by Lightsource bp – one of the largest utility-scale solar developers and operators in the world with over 3.8 gigawatts of solar developed worldwide and over 1 gigawatt developed in the US.

- The Pennsylvania State University, a multicampus, land-grant, public research university that educates students from around the world, is purchasing all the electricity, under a 25 year agreement with Lightsource bp, saving over $14 million through solar’s lower costs for electricity and giving Penn State long-term budget certainty.

Maximizing the benefits of solar

Penn State and Lightsource bp have formed a partnership designed to be a model in maximizing the sustainability of utility-scale solar.

- **A "smart from the start" approach**
  Mapping tool from The Nature Conservancy was used to confirm the project sites are not located on high value biodiversity areas and corridors that are critical for species to adapt and respond to climate change.

- **Careful planning to minimize impacts & maximize benefits**
  The solar facilities were constructed in a regenerative fashion – steps were taken not only to minimize the effect to the ecosystem on the land but also to improve soil health, foster biodiversity, and create wildlife habitat.

- **Student involvement – a living laboratory**
  Along with internships for Penn State students at Lightsource bp, the solar array serves as a living lab to enable students to gain real-world experience in designing utility-scale solar projects that help conserve the environment.

For more information email sustainability@psu.edu
Local impact

Lightsource bp takes great pride in engaging with local communities, not just during solar planning and development, but throughout the 25+ year lifetime of our solar farms. They are focused on championing local economies and ecosystems, to truly become a home-grown asset that communities can be proud of.

Revenue for landowners
The project is primarily on land leased by Lightsource bp from local landowners, providing families with a new source of reliable revenue for 25-30 years.

Job creation & economic development
The project will help grow the Pennsylvania solar market and expertise in solar energy, employing over 250 people in construction, operations, maintenance and asset management.

A healthier environment
The solar energy produced by the project will lower greenhouse gas emissions by 57,000 metric tons of carbon dioxide each year, the equivalent of removing 12,100 fuel burning cars off the road each year.

Community engagement & collaboration
Penn State and Lightsource bp are planning community outreach and community and University engagement, during project development and operations, including community open houses and site tours.

Clean, local energy
The project supports Pennsylvania’s Alternative Energy Portfolio Standard (AEPs), which mandates a certain percentage of electricity be generated by solar photovoltaics, helping to diversify the Commonwealth’s energy portfolio and increase security with locally generated power.

Enhanced biodiversity and agriculture
- The Penn State solar farm will be relatively undisturbed for decades once constructed, providing a haven for species-rich grass, herbs, wildflowers, butterflies, bumblebees and other wildlife.
- With native, pollinator-friendly seeding, the project can help boost crop yields and provide pollen for invertebrates (bees).
- The solar farm will be co-located with agriculture for additional income streams; small livestock grazing is common with Lightsource bp’s solar farms.
Penn State is one of the largest and most esteemed U.S. universities, educating nearly 100,000 students on 24 campuses across the Commonwealth and online at Penn State’s World Campus. In February 2019, Lightsource bp and Penn State announced the development of 70 megawatts of offsite solar energy, enabling Penn State to achieve its goal of a 35% GHG reduction by 2020 while saving the University millions of dollars on electricity and providing long-term budget certainty.

**Project capacity:**
53.5 megawatts (AC) / 70 megawatts (DC)

**Electricity production:**
102,000 megawatt-hours per year, 25% of the University’s state-wide annual electricity demand

**Owner and operator:**
Lightsource bp

**Power purchaser:**
Penn State, which will also receive in-state Solar Renewable Energy Credits (SRECs) from the project

**Total project investment:**
$75 million by Lightsource bp

**Total size:**
150,000 solar panels installed across three locations, encompassing approximately 500 acres of land

**Contract:**
25-year power purchase agreement (PPA)

**Project completion date:**
September 2020

**Location:**
Franklin County, Pennsylvania, north of Penn State Mont Alto