

Bright Solar Futures

Sponsorship Opportunities for Frankford High School Solar Lab



Bright Solar Futures is Pennsylvania's first vocational high school program in solar energy, and the first three-year program of its kind in the nation. Frankford High School will host the new Career and Technical Education (CTE) program starting in Fall 2020 with the first class of 10th grade students. The Philadelphia Energy Authority is seeking sponsorship to support the buildout of the new solar lab at Frankford High School.

Bright Solar Futures will prepare students for jobs in the solar, energy efficiency, and electrical industries. From 10th through 12th grade, participants will receive 1,080 hours of instruction in solar installation, design, and sales, as well as energy efficiency, electrical basics and construction safety. Participants will be connected to opportunities for paid summer internships and employment upon graduation.

Funding required: \$150,000

Purpose: Buildout of new Solar Lab at Frankford High School

Deadline: May 15, 2020

Contribution Level	Lead sponsor \$100,000+	Leader \$50,000	Associate \$25,000	Donor \$10,000
Naming rights for Solar Lab	^			
Named as lead sponsor in Solar Curriculum Toolkit	~	√		
Big check event with City of Philadelphia leadership	✓	√		
Logo on PEA website and promotional materials	✓	√	✓	
Name on PEA website and promotional materials	✓	√	√	✓



About the Frankford HS Solar Lab

The Frankford HS Solar Lab will provide participants with the opportunity to apply their learning in a hands-on and project-based learning environment. The Solar Lab will be outfitted with training equipment tailored to each of the major areas of the curriculum.

- Solar Installation. Bright Solar Futures participants will have the skills and tools to complete a solar installation from start to finish inside of the Solar Lab. A mock roof will simulate the experience of installing solar on a pitched rooftop and an outdoor space will be used to practice installing the ground-mounted racking. Participants will practice installing roof flashings, racking, and solar modules and conduit in both settings.
- Solar Design and Sales. Bright Solar Futures participants will take solar modules and testing
 equipment outside to conduct a shading analysis and estimate system production.
 Participants will use computer software to design an installation and evaluate project
 economics.
- **Electricity Basics.** Participants will practice installing wiring and connecting an inverter to an electrical panel in the Lab. The lab will also contain a training cart equipped with standard household appliances for exercise about a home's energy load.
- Building Auditing and Weatherization. Participants will practice conducting a home energy
 audit using a blower door in a mini-house. They will demonstrate their skills by weatherizing
 the home with air sealing, insulation, and energy efficient windows and doors. The Lab will
 also contain a plumbing mock-up for learning about water efficiency.
- **Construction Safety.** Participants will practice all tasks in the course while wearing Personal Protective Equipment, including harnesses, helmets, and air masks.

Background

The Philadelphia Energy Authority (PEA) is an independent municipal authority created in 2010 to advance clean and affordable energy goals for the City. PEA has facilitated over \$100 million in clean energy projects in Philadelphia since 2017, creating more than over 1,000 jobs. PEA's \$1 billion Philadelphia Energy Campaign, launched in 2016 with the leadership of City Council President Darrell Clarke, will create 10,000 jobs by 2026 through implementation of clean energy and energy efficiency projects.

PEA is committed to preparing Philadelphia's young people to fill these new positions and partnered with the School District of Philadelphia (SDP) to start training high school students for solar jobs. PEA delivered introductory solar training to 70 students and placed 17 students into internships in the clean energy sector since 2017. In October 2018, PEA was selected for a \$1.25 million award from the U.S. Department of Energy to establish Bright Solar Futures as one of the nation's first solar energy programs for CTE students.

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