



Office of ENERGY EFFICIENCY
& RENEWABLE ENERGY

SOLAR ENERGY TECHNOLOGIES OFFICE

Philadelphia Energy Authority

Bright Solar Futures

Principle Investigator: Laura Rigell
Business Manager: Emily Schapira

Role of Team Members

Awardee: Philadelphia Energy Authority

- **Emily Schapira**, *Executive Director, provides strategic oversight*
- **Laura Rigell**, *Solar Manager, program and partner management*
- **Joe Wilson**, *Solar Training Fellow, coordinate implementation*

Subrecipients:

- **Solar States:** *solar instruction, curriculum development*
- **Energy Coordinating Agency:** *building science instruction, curriculum development*
- **Philadelphia Education Fund:** *professional development, curriculum development*
- **YouthBuild Philly:** *recruitment, curriculum development*

Philadelphia Energy Campaign

- **\$1 billion investment over 10 years in energy efficiency and clean energy projects, leveraging public and private dollars**
 - 10,000 jobs
 - 25,000 households
 - 2,500 small businesses
- **First 2 years:**
 - \$130+ million in active projects
 - Nearly 1000 jobs
 - \$750M+ pipeline
 - Self-funding projects



energy as a tool for impact

ECONOMIC development

Projects that move the needle on carbon reduction are bringing established companies, investors and entrepreneurs to the city.

CREATING jobs

Statewide, the number of clean energy jobs already outpaces the number of fossil fuel jobs.

ALLEVIATING poverty

Reducing the energy burden for Philadelphians means homes that are safe, warm, healthy and affordable for the long term.

IMPROVING public health

In public buildings, schools, homes and businesses, clean and efficient energy is a vehicle for improving the health of our communities.



Philadelphia Energy Campaign Programs

1. Schools

- Energy Performance Contracting Pilot & Round 1
- Solar Pilot
- Solar Installer Training

2. LMI Residential

- Multi-family Affordable Housing Efficiency Pilots
- City Council Housing Preservation Initiative
- Philadelphia Housing Authority EPC
- Solarize Philly and Special Financing Pilot
- Water/Sewer Line Protection Program

3. Small Business

- Corner Stores, Restaurants, Auto Mechanics & Laundromats Energy Efficiency Pilot

4. Other

- Flat Rock Dam Hydro partnership (PEA, PWD)
- Commercial Solar & Microgrid development
- Scaled Financing (Philadelphia Green Bank)
- Commercial Property Assessed Clean Energy (CPACE)

Largest single Solarize campaign in the U.S.



Contracts Signed as of
Today

363



Contracted Solar
Capacity

1.6 MW



\$ Invested in Philly's
Clean Energy Economy

**\$5.8
million**



Households Signed up

4,237



Direct Jobs Created

52

“Find Your Power” 2017 - 2018

- Funded by Green Futures, PECO, Siemens, and U.S. Department of Energy
- Solar installation, energy efficiency, construction safety, and job readiness
- 100-120 hour curriculum
- 52 students trained since 2017



Photo credit: Jordan Baumgarten

Project Objectives

Training underserved youth for solar jobs to have the impact of:

- 1) filling the industry gap with qualified, diverse candidates
- 2) providing young people with a pathway to a quality job

Objective 1: Establish three-year Program of Study in Solar Energy in partnership with the School District of Philadelphia

Objective 2: Pilot curriculum for 100+ School District of Philadelphia Career Technical Education Students and Opportunity Youth

Objective 3: Secure funding to continue training beyond this Award

Project Implementation – Target Population

Career and Technical Education Students

- 10th- 12th grade
- Selected from host school population

Opportunity Youth

- Formerly out-of-school or out-of-work young adults age 16-26
- Graduates of Powercorps PHL
- Targeting graduates of YouthBuild Philly

Project Implementation – Training Cohorts

Career and Technical Education Intro Courses

- July - August 2019 [120 hrs, paid]
- Oct 2019 – May 2020 [200 hrs, academic year]

Career and Technical Education Program of Study

- Sept 2020 – June 2023 [1,080 hrs, academic year]
- Sept 2021 – June 2024 [1,080 hrs, academic year]
- Sept 2022 – June 2025 [1,080 hrs, academic year]

Opportunity Youth Intensive Courses

- Dec 2019 – May 2020 [680 hrs, paid]
- Dec 2020 – May 2021 [680 hrs, paid]
- Dec 2021 – May 2022 [680 hrs, paid]

Project Implementation – Training Content

Focus of training

- Solar installation
- Solar sales
- Solar design
- Building science

Type of training

- Classroom
- Lab
- Internships

Project Results

Industry Engagement & Job Placement

- Occupation Advisory Committee
- Internship hosts

Evaluation

- Engaged independent Evaluator (Actus Policy Research)

Sustainability Plan

- Secure Program of Study approval from PA Department of Education
- Raise other funding for continuation of Opportunity Youth Program

What does Success Look like?

Bright Solar Futures establishes nation's first Program of Study in Solar Energy for Career and Technical Education students.



Photo credit: Solar States

Project Outcomes

- Enroll 100+ students in solar training
- Place 50+ students in internships, employment or further training

Project Impact and Sustainability

- Unlock state funding for Program of Study, which will be accessible for any district in PA that wants to offer the Bright Solar Futures curriculum