



PennState

sustainability
INSTITUTE

Solar Design for Pittsburgh Non-Profits

sustainable
communities
collaborative 

Semester/Year: Spring 2019

Community Partner:



Community: Pittsburgh Region

Class: EGEE 437

College: Earth & Mineral Sciences

Faculty: Jeffrey Brownson,
Paulo Soares (TA)

SCC projects provide excellent opportunities for students to test their knowledge in real-world situations. In the spring of 2019, regular class partner, EGEE 437 collaborated with PA Solar, a non-profit organization based in Pittsburgh with the mission to maximize the number of people, businesses, communities and organizations who experience the benefits of solar energy in Pennsylvania. The class evaluated seven non-profit organizations in the Pittsburgh area who were interested in exploring solar installations as part of the GET SOLAR grant program. SCC facilitated field trips that allowed students not only to become familiar with the sites and their individual limitations and opportunities, but also with the organizations, their missions, and infrastructure. Beyond the technical understanding of complex design issues presented at each locations, students learned about local needs, resources, or lack thereof that the non-profit partners experience and hope to address, including food security, education, health and mental health issues, workers' rights and global humanitarian needs and mechanisms for support.



One of the student groups in EGEE 437 worked on the design for Global Links, an organization that provides surplus medical equipment to international partners in need. Global Links became the first cohort of the PA Solar Center's initiative to install a 10,000 sqft rooftop solar array. While the built design was created and executed by the contractor, student learning and understanding of the process that made the installation possible was significant. The new 63.2 kilowatt array will generate 82% of energy currently being used by the organizations, an equivalent of energy to power 6.4 homes per year for the next 25 years.

11 SUSTAINABLE CITIES AND COMMUNITIES



13 CLIMATE ACTION



8 DECENT WORK AND ECONOMIC GROWTH



7 AFFORDABLE AND CLEAN ENERGY



12 RESPONSIBLE CONSUMPTION AND PRODUCTION





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