

[QESST3-E-SolarPavilion_KIS]

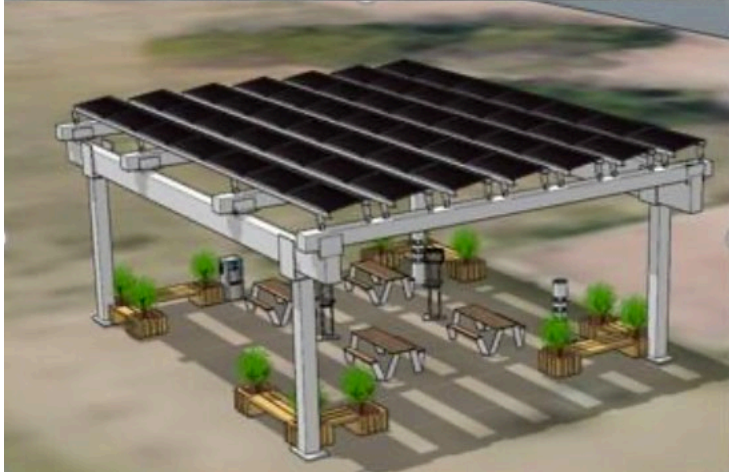
Youth Scholars' Solar4Students Solar Pavilion Proposal Accepted

Outcome/accomplishment: A team of five Youth Scholars supported by the National Science Foundation (NSF)-funded Quantum Energy and Sustainable Solar Technologies (QESST) Engineering Research Center (ERC) collaborated with the Alhambra Elementary School District (AESD) and community members to design and install a Student Solar Pavilion at Barcelona Elementary School, a K-8 campus in Glendale, AZ. QESST is headquartered at Arizona State University (ASU).

Impact/benefits: Solar4Students is motivated to bring clean energy to underserved communities. The Solar Pavilion project aims to offer a safe place where elementary-school students underrepresented in STEM can gather under the shade and learn about sustainability. The outdoor learning space features outdoor billboards, water stations, and a garden. The Solar Pavilion project helps to meet QESST's goal of stimulating interest in science and engineering education by using renewable energy as an inspirational example that challenges students' intellectual growth and technical skill, and allows students to develop creative solutions to solve important societal problems.

Explanation/ background: In January 2021, the Solar4Students team presented a donation of \$3,100.00 to the AESD School Board. The team had won a first place prize from the Wells Fargo Community Innovation Award program and also pursued a GoFundMe campaign to raise funds for the project. AESD is working with local partners to install the solar pavilion, which includes 48 photovoltaic (PV) panels in a 22 by 25 foot, 5.5 kilowatt (kW) system. A curriculum based on sustainability is also in development. Minority-owned industry partner ADM Group provided support for the project's design drawings as well as engineering guidance.

Members of Solar4Students included: Alyssa Cortez, Diego Ruiz Quiroz, Andrea Estrada, Luis Fregoso, and Jawed Nur. The Youth Scholars partnered with many QESST faculty, students, and industry and community partners to realize the Solar Pavilion project over their four years in high school. The Solar4Students members and project were featured in an interview broadcast on FOX XTRA News. A video presentation of the project is available on [YouTube](#).



The QESST Youth Scholars team, Solar4Students (top); the Solar Pavilion and outdoor learning space design for Barcelona Elementary School (bottom). (Credit: QESST)