

## San Bernardino Valley College - Career Pathways 2 Building

CMAA Sustainability Project Spotlight submitted by: Farrah Farzaneh, Director, San Bernardino Community College

### Project Team

- » **OWNER:** San Bernardino Valley College - San Bernardino Community College District
- » **AE:** [DLR Group](#)
- » **OWNER'S REPRESENTATIVE:** AECOM

### Project Statistics

- » **USE:** CTE - Aeronautics and Allied Health
- » **SIZE:** 65,000 gross square feet
- » **CONSTRUCTION VALUE:** \$57,000,000
- » **CERTIFICATION(S):** LEED Gold (BD+C, v4)
- » **PROJECT WEBSITE:** <https://sbccd.edu/district-services/facilities-planning-construction/sustainability/projects/documents/2024-10-02-flyer-updates/sbvc-career-pathways-2-building-11-14-24.pdf>



### What is the most exciting sustainable feature of your project?

Energy Use Intensity: To meet the operational ZNE goal, the pEUI is reduced to 34 Kbtu/sf/yr for Allied Health and 33 Kbtu/sf/yr for Aeronautics using passive and active energy conservation measures. Also, about 108% of the estimated energy consumption of the two buildings is planned to be offset using 270 KW DC renewable solar PV system spanning over the parking lot in between the two buildings and a total of 136 KW renewable solar PV system on the building rooftops.

## What was the biggest challenge your team faced and how did you overcome it?

The climate in San Bernardino is a story of extremes and the Aeronautics Building has large doors to the outside. Maintaining temperature controls is critical and one element that helped with this was the introduction of large ceiling mounted fans in the hangar space to allow for more uniform airflow for the building.

## What was the most interesting sustainable feature that didn't make it into the final project?

Most sustainable features that were desired are in the design. The one item that if most difficult to get included just due to the use of these educational facilities is demand response . It is often difficult to provide this in facilities that have such high use on a college campus.

The project is targeting Net-Zero Energy, LEED Gold, and Envision Sustainable certifications. Some sustainability strategies are:

- » Project is poised to save an estimated \$150,000 in annual energy costs
- » Project will avoid 614 metric tons of carbon
- » High-performing building envelope and cool roofs and walls
- » Design maximizes ventilation, reduces solar heat gain, and gains the best use of daylighting
- » High efficiency heating and cooling systems
- » Targets a 15% reduction in light power density from Title 24-2019 requirements
- » 270 KW DC solar PV system spanning over the parking lot
- » 136 KW DC solar PV system on the building rooftops



Hangar Interior - Aeronautics



Exterior Allied Health



Interior Learning Stair - Allied Health

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## About the Project

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CMAA has created the Sustainability Project Spotlight as a regular focus given to member projects nationwide that are building the way to a better future.

This Sustainability Project Spotlight focuses on the [Career Pathways 2 Building](#) at San Bernardino Valley College. San Bernardino Valley College is a public community college and is located in San Bernardino, California. Through its Career Pathways 2 facility targeting completion in 2027, San Bernardino Valley College will create a state-of-the-art educational facility with flexible laboratories, collaborative spaces for student-faculty interaction, supplemental instruction areas, and offices that promotes a safe and sustainable environment.

*The CMAA Sustainability Subcommittee is actively seeking to spotlight your projects! Please email us at [communications@cmaanet.org](mailto:communications@cmaanet.org) with a project name and person to contact.*

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