



## California State University San Marcos

ACHIEVING CAMPUS SUSTAINABILITY OBJECTIVES WITH  
CLEAN, AFFORDABLE ONSITE ENERGY

California State University, San Marcos has over 17,000 students located on a 304 acre site in San Marcos, California. This facility is part of the California State University System. The University consumes approximately 14 million kilowatt hours of electricity with 27,000 MMBtu's of natural gas.

BioFuels Energy, LLC (BFE), an energy developer, has installed (2) Doosan PureCell fuel cells at the University to provide approximately 7 million kilowatt hours of electricity representing 50% of the University's usage along with providing free heat from the fuel cells or heating and cooling. BFE's fuel cell system is estimated to save the University in excess \$100,000/year in combined electricity and natural gas savings.

## PROJECT OVERVIEW

### EQUIPMENT

PureCell® Model 440 combined heat and power solution

### INSTALLED

880 KW - December 2015

### LOCATION

San Marcos, California

### PROVIDES

- Continuous power for electrical needs
- Heat recovery for space heating, cooling processes and domestic hot water.

*"We believe it is our responsibility to continually look for the most efficient and innovative ways we can operate our campus...Fuel cells represent a significant step toward achieving our aggressive sustainability goals, plus they offset electricity costs and ensure continued growth while we remain one of the most energy-efficient universities in the state."*

Lindsey Rowell  
Director of Energy  
California State University San Marcos

### Yearly Environmental Benefits (compared to traditional energy sources)

- CO2 saved: 2.2 million lbs., NOx saved: 6,600 lbs.
- H2O saved: 2.8 million gallons \*



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