

College of the Future
Ohlone College Newark Center

Environmental Savings Report

SOLAR

ENERGY



OHLONE
COLLEGE
NEWARK

Center for
Health Sciences
& Technology



Ohlone College to install largest solar panel array in Silicon Valley!

Ohlone College will install the largest solar power collection system in the Silicon Valley, a 569 kWp solar array using the most efficient solar panels available on the market today, the SunPower 220 modules from PowerLight. The flat panel system covers 38,000 square feet of the roof on the two-story “all green” facility being constructed on the satellite campus site in Newark, California.

Ohlone’s plans for construction and building operation will qualify the building for a LEED Gold rating from the U.S. Green Building Council for high-performance sustainable buildings, for strategies such as sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. The building design will preserve environmental resources and save hundreds of thousands of dollars in operational costs. Truly, Ohlone is building the College of the Future.

The **Ohlone College Newark Center** solar array...

...will provide **energy savings** equal to:

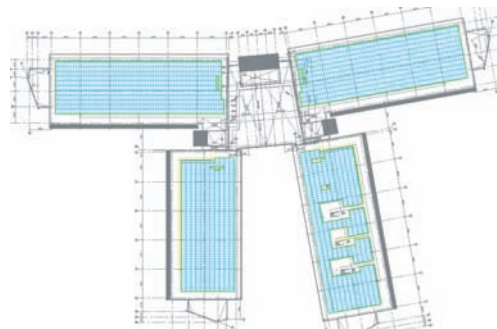
Oil:	40,900 barrels per year
Coal:	19 million pounds per year
Natural Gas:	236 million cubic feet per year

...will improve **air quality** by removing:

Smog:	7,000 lbs. NOx per year
Acid Rain:	6,000 lbs. SO2 per year
Global Warming:	9 million lbs. CO2 per year

... which is **equivalent** to:

Removing:	900 cars per day from the road
Planting:	1,400 acres of trees
Power for:	500 homes per day



Ohlone College Newark Center for Health Sciences and Technology uses 38,000 ft² of roof space and maximum efficiency modules resulting in a **569 kWp DC** system.

Technical Summary of Ohlone College Solar Array

System Peak/DC Rating

569 kWp

Maximum Reduction in Demand

454 kWac

Approximate Square Footage of Arrays

38,000 ft²

Projected Annual Output

686,833 kWh

kWp: Kilowatt-peak, a measure of the peak output of a photovoltaic system; the maximum possible output of a solar generator operating under standard conditions.

kWac: A rating of the AC electricity generating capacity of a system. An inverter is needed to change the direct current (DC) power from the solar panels into alternating current (AC) electricity to power electrical devices and to be compatible with the electric grid.

kWh: Abbreviation for kilowatt-hour. 1 kWh = 1000 watts over a period of one hour, equivalent to the amount of energy needed to increase the temperature of 100 liters of water by 10° C.

Ohlone College Policy on Sustainability

In 2005, the Ohlone Community College District approved a policy to adopt principles of sustainability, stating that the District is committed to the following:

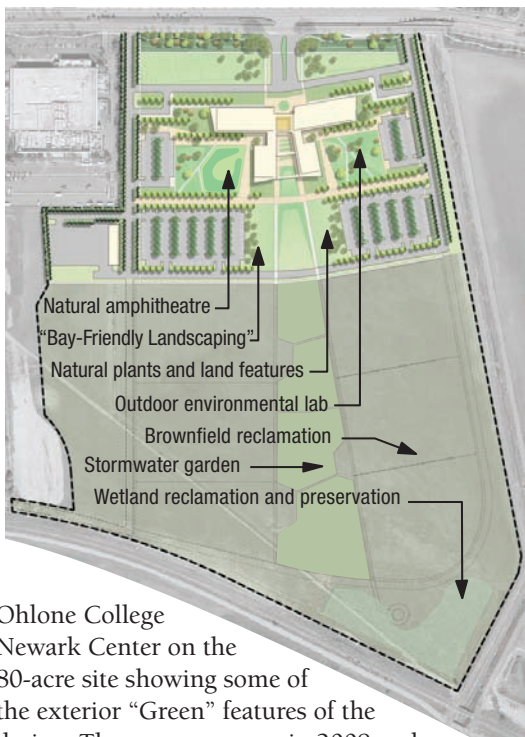
- 1) Conserving natural resources and avoiding negative long-term environmental effects;
- 2) Maximizing environmental quality, use of renewable resources, energy efficiency and energy use;
- 3) Facilitating use of alternate forms of transportation, fuels, and systems;
and
- 4) Designing all major new building and renovation projects to meet nationally recognized standards for environmental design.

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Ohlone College
 Newark Center on the
 80-acre site showing some of
 the exterior “Green” features of the
 design. The campus opens in 2008 and
 will accommodate our health, sciences, and
 technology programs with the latest equipment
 and modern laboratories all housed in
 environmentally sustainable buildings.

*A World of Cultures
 United in Learning*



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