



Benson Center (Santa Clara University)

Solar Thermal Case Study: Domestic Hot Water System

SUNWATER
SOLAR



System At A Glance	
Location	Santa Clara, Calif.
Building	Benson Center
Collectors	60 Chromasun MCT
Total Collector Area	2,682 square feet
Solar Pump Station	Custom built
Collector Loop Capacity	300 gallons
Hot Water Load	2,880 GPD (peak)
Therms Offset (1 Year)	6,727 (estimated)
Carbon Offset (1 Year)	6.6 cars off the road
CSI-T Rebate Value	US\$86,240 (estimated)

Project Overview

SunWater Solar contracted with Chromasun to install 60 Micro-Concentrator collectors at Santa Clara University's (SCU) Benson Center. The system generates hot water for use in the Benson Center cafeteria, which serves up to 1,200 meals per day. The system will help SCU reach its goal of becoming climate neutral by the end of 2015.

Client Overview

The heart of campus life for SCU students, the Benson Center offers food service venues, conference rooms, campus bookstore, post office, credit union, and student and administrative offices.

Client Perspective

"With its 25-year lifespan and six-year payback period, the Chromasun solar thermal system is an excellent capital investment. Energy security was another major driver of our decision to undertake this project. Per the terms of our ten-year leasing agreement, we will pay a fixed price for the energy the system produces, shielding the university from natural gas price volatility."

- Joe Sugg, Assistant Vice President of University Operations at SCU

Points of Interest

In addition to the Benson Center system, SunWater Solar also installed three MCT collectors for a solar cooling system at the SCU Solar Decathlon House. The Chromasun MCT module is a utility-scale solar thermal collector ideal for commercial-scale solar heating and cooling applications.

About SunWater Solar

SunWater Solar is a solar thermal integrator that manages the design and installation of commercial solar thermal systems, which lower utility bills, reduce greenhouse gas emissions and help clients meet sustainability requirements. With extensive project management experience in domestic hot water heating, process heating and solar cooling, SunWater Solar staff are among the solar thermal industry's top professionals. Founded in 2007 and based in Richmond, California, SunWater Solar serves clients in a variety of industries and focuses exclusively on solar thermal technology. 11-04a



Rear view of MCT collectors & piping at the Benson Center



SunWater Solar installers bring MCT collectors to the roof