



CHROMASUN

Chromasun and SCU Unveil Largest Rooftop Concentrating Solar Thermal System in California

60 Chromasun MCT collectors will *generate an estimated 6,727 therms of energy for water heating and offset 34 tons of CO₂*

SAN JOSE, Calif.—April 12, 2011— Industrial rooftop solar solutions company Chromasun and its partners today activated a 60-collector solar thermal system at Santa Clara University (SCU) to heat water efficiently and reduce carbon emissions. The system is the largest rooftop concentrating solar thermal installation built to date in California and the largest solar thermal project yet completed under the California Solar Initiative-Thermal (CSI-T) program.

“Rooftop high-temperature solar thermal systems harvest more usable solar energy than is possible with conventional PV or thermal technologies. This means larger reductions in building energy consumption and a significant savings in utility bills,” said Peter Le Lievre, founder and CEO of Chromasun. “This installation demonstrates how the Chromasun MCT flat panel collector can deliver economic and environmental value to owners of commercial buildings seeking clean energy solutions to their heating, cooling and hot water needs. It’s simple, reliable and – with the new California rebates – affordable.”

The Chromasun MCT panels will produce an estimated 6,727 therms of energy annually and heat water to 200 degrees Fahrenheit for Benson Memorial Center’s dining services. Heating water with solar energy rather than with natural gas will reduce the building’s water-heating bills by as much as 70 percent and offset 34 tons of CO₂, equivalent to the total emissions produced annually by 6.6 automobiles. The system will help SCU reach its goal of becoming climate neutral by the end of 2015.

“With its 25-year lifespan and six-year payback period, the Chromasun solar thermal system is an excellent capital investment,” said Joe Sugg, Assistant Vice President of University Operations at SCU. “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. We’ll also own the system when the lease is up.”

Chromasun is applying for a CSI-T rebate on behalf of SCU. Initial calculations show a CSI-T rebate value of approximately \$86,240. The CSI-T program allocates \$358.3 million in rebates for solar thermal installations and is widely considered an excellent model for other solar rebate programs across the U.S. Both Chromasun and SunWater Solar, the Richmond, California-based solar thermal integrator that installed the MCT collectors, contributed to the development of the CSI-T rebate program.

“This is an exciting addition to California’s portfolio of renewable energy projects, and a tremendous example of how policy can be used to foster growth and innovation,” said Sue Kateley, executive director of California Solar Energy Industries Association. “The CSI-T program is an important tool that in partnership with compelling solar thermal technologies like these from Chromasun will help pave the way towards an affordable clean energy future.”

In addition to SunWater Solar’s role in installing the Chromasun MCT modules, construction management company Gordon Prill and mechanical contractor Therma installed most other components of the SCU system, including copper piping and collector mounts.

“As California’s leading solar thermal integrator, SunWater Solar has worked with nearly every type of collector under the sun,” said Justin Weil, president of SunWater Solar. “What impresses us most about the MCT collectors are their aesthetics, their versatility and their ease of installation. The MCT is visually stunning, is ideal for commercial-scale solar heating and cooling applications, and has an ingenious mounting system that ensures even large-scale systems go in quickly and easily.”

The lightweight, low-profile Chromasun MCT module is a utility-scale flat-plate solar thermal collector packaged for rooftop deployment that utilizes solar energy for commercial and industrial cooling, space heating and hot water needs. By achieving a concentration of 25 times the sun, the collector can generate temperatures of up to 400 degrees Fahrenheit, allowing it to efficiently boil water and transfer energy to the building even as the sun is setting. The entire optical system is enclosed within a sealed canopy to protect against the elements. The MCT has no external moving parts and is mounted on the same racking systems as conventional flat panel solar thermal collectors, enabling easy installation and exceptional rooftop efficiency.

The collectors are manufactured at a Chromasun facility in San Jose, California. The workforce at this facility includes former New United Motor Manufacturing, Inc. (NUMMI) autoworkers that were re-trained as solar manufacturing experts after the NUMMI facility closed and put back to work building Chromasun modules. “We are proud to represent a new wave of cleantech companies that is helping America train and lead the Green Revolution,” continued Le Lievre.

About Chromasun

Founded in 2008, Chromasun is a leading developer and manufacturer of rooftop friendly high performance solar solutions. Chromasun’s unique MCT HT solar collector provides high grade thermal energy but in a familiar flat panel format with no external moving parts. The MCT HT is designed to drive high performance air-conditioning absorption chillers and other industrial process heat applications directly from sunlight. It is the most space efficient solar technology available and can produce more energy per unit of roof area than any competing technology. As a leader in the space, the Chromasun team of engineers and professionals have decades of experience in utility scale solar, air-conditioning engineering, product development and manufacturing.

To learn more about Chromasun and the MCT system, please visit <http://www.chromasun.com>.

About Santa Clara University

Santa Clara University, a comprehensive Jesuit, Catholic university located 40 miles south of San Francisco in California's Silicon Valley, offers its more than 8,800 students rigorous undergraduate curricula in arts and sciences, business, theology, and engineering, plus master's and law degrees and engineering Ph.D.s. Distinguished nationally by one of the highest graduation rates among all U.S. master's universities, California's oldest operating higher-education institution demonstrates faith-inspired values of ethics and social justice. For more information, see www.scu.edu.

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 is 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. For more information, please visit www.sunwatersolar.com.

###