

“CPV ALSO PROMISES BETTER LAND USE, FASTER ENERGY PAYBACK, AND AN OPTIMIZED CRADLE-TO-CRADLE FOOTPRINT.”

SolFocus CPV systems use a shallow mirrored dish about the diameter of a pie pan to reflect sunlight onto a smaller mirror roughly half the size of a business card. The mirror shoots light directly into a small highly efficient solar cell at 650 times concentration. Like a giant treetop, these cells are sprawled out and held up on a dual axis tracker that follows the earth's rotation from sunup to sundown.

According to Gary D. Conley, chairman of SolFocus: “CPV technology uses no water to operate and serves multiple purposes – a covering for shade crops in the desert, a shaded parking lot, or an electric vehicle powering station.”

Other concentrating solar methods such as solar thermal or CSP uses water to create steam that turns a turbine to create electricity; it is estimated that such systems consume as much water as do coal plants, about 850 gallons per megawatt hour.

Conley comments that “many of those coal plants are being cancelled, not because of the pollution factor, but because of water usage. For that same reason CSP projects in the desert are delayed in permitting and may be cancelled, as well.”

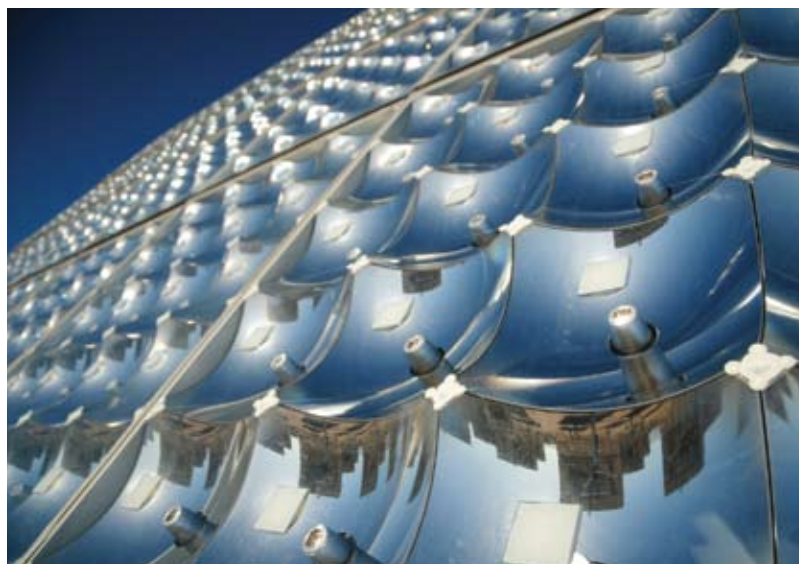
While the dollar per Watt for CPV may be higher today than traditional technology, in the important category of cost of energy – cents per kWh – CPV is already a lower-cost solution than traditional solar technologies in rich solar regions.

CPV also promises better land use, faster energy payback, and an optimized cradle-to-cradle footprint. Such an investment in reliable solar energy could level the battlefield in 2013, the anticipated year of the carbon tax war between brown (polluting) and green (clean) industries.

The Obama Administration seeks to pass a cap and trade bill, also known as the pollution reduction bill. This law will slap new taxes on companies considered to be heavy polluters. However, the blow will ricochet back to the consumer on necessities like electricity, gasoline, transportation and food.

“We think putting a price on carbon is an excellent step in forcing a level playing field which takes into account the true cost of various energy sources, not for the U.S. only but to the global community,” said Nancy Hartsoch, vice president of sales and marketing at SolFocus. “If we put the right price on carbon we can advance renewable energy, achieve our RPS standards faster, and make renewable energy mainstream energy.”

Still, while man tames the earth and its resources to suit their desire



for ease and comfort, the fight over very limited clean energy to offset the volume of man-made pollutants continues. In the end, one carbon credit may become weightier than a brick of gold.

But the proposed cap and trade legislation before Congress has yet to stick a price on carbon, or define a trustworthy measurement device. The bill does guarantee the collection of taxes from high polluters to fund cleaner energy projects. There is no guarantee however, that those taxes would be spent on getting cleaner energy to your power socket.

In a not so divisive manner, utility providers charge customers a premium on their monthly bills for renewable energy investments. According to the California Energy Commission, in 2008 only

“Will cap and trade score any positive points for the environment itself or merely fan the fire on global warming?”

10 percent of electricity used in the state came from renewable sources, and less than one percent came from solar energy.

With Executive Order, S-14-08 signed by Governor Arnold Schwarzenegger in November of 2009, a call for 33 percent renewable energy sources by 2020 was established. Clearly, the state is aggressively ramping up its clean energy portfolio – to more than one percent. The California Solar Initiative (CSI), for example, pays out a performance-based incentive depending on the type and scale of the system.

For instance, on May 25th, under the blazing sun, SolFocus powered up a one megawatt CPV solar installation at Victor Valley College, Victorville. The tree-like sprawling photovoltaic arrays across six acres of parched California desert offers much needed clean solar energy

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