

In Hot Water

Cinco Solar distributes, designs, and manufactures solar-powered water-heating systems

HOLLIS FITCH KNOWS THE ENERGY BIZ: he spent the first seventeen years of his career in the oil industry. A few years ago, while working as a project manager on an offshore oil platform in Singapore, he began researching an alternative energy source.

"I don't know why, but I clicked on the Internet to look up solar power," he says. "I was fascinated to see what had happened in the fifteen years since I had last [researched the topic]."

He started collecting information in a folder—taking note of the best solar panels, inverters, and water heaters—because he wanted to build a solar-powered home for himself in the San Antonio area. Fitch realized there was potential to turn his research into a business, and in 2007, he founded Cinco Solar.

In just three years, the firm has engineered three of the nation's largest evacuated-tube-solar water-heating systems. Fitch says that evacuated-tube collectors, which transfer solar energy into hot water, are a largely underappreciated component of the solar-thermal industry—though approximately \$35 billion a year is spent on making hot water.

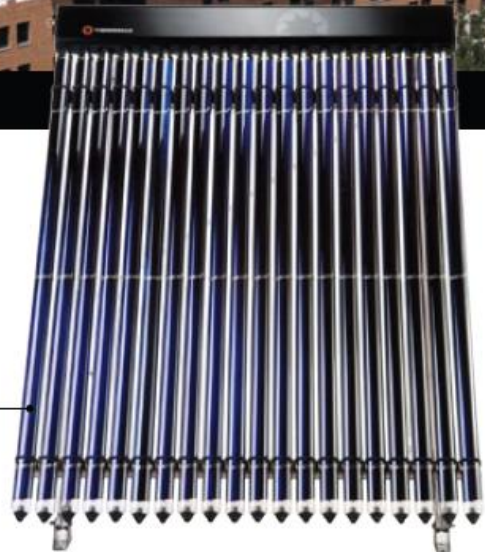
"People don't realize that the single largest consumer of energy is commercial buildings, and it's because of the hot-water needs rather than electrical needs," he says.

Since its inception, Cinco Solar and its twelve employees have had many triumphs, starting with its first project, the Army Residence Community in San Antonio, which was the recipient of the City of San Antonio's prestigious Bill Sinkin Solar Technology Award. The success of that project gave the company the experience to bid on their next project, the Bexar County Adult Detention Center, which in turn enabled them to bid on (and win) another project: the Norman Hackerman science-building at the University of Texas. Cinco Solar's installations are supplying up to 80 percent of the hot-water demand for these facilities. Fitch attributes some of Cinco's success to Bexar County. "Another county might not have chosen to spend a million dollars on a solar system for their jail," he says, adding that people don't give San Antonio enough credit for its green initiatives.

These three projects were enough to gain the attention of Kingspan Renewables, a Portadown, Ireland-based firm known for producing award-win-

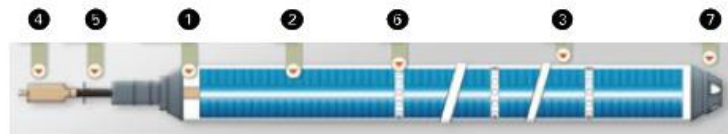


IT'S VERSATILE
Cinco distributes Kingspan Thermomax evacuated heat pipe tubes; lightweight and modular, they can be installed on almost any building.



HOW IT WORKS: Thermomax CS-40

The Kingspan Thermomax CS-40 solar collector is a "dry" heat pipe (1), containing evaporator fluid and condensate, which is attached to the back of an absorber plate (2) within an evacuated glass tube (3). Vapor rises to the condenser bulb (4) at the top of the heat pipe and the condenser bulb releases the latent heat of evaporation into the manifold, passing through a flexible connector (5). Due to the dry manifold connection, the CS-40 evacuated tubes can be replaced without the need to drain the solar system. The absorber support clips (6) and end support (7) secure the technology.



ning Thermomax solar-thermal-evacuated tubes. In April, Fitch flew to Ireland to ink a deal; Cinco Solar is now the primary commercial distributor of Kingspan solar-thermal collectors in the US. It's a huge deal for Cinco Solar. "We're going from being a fairly big local player to a national one," says Fitch. The company spent much of fall 2010 training and introducing the product around the country.

And though distribution accounts for 50 percent of the business (design and installation accounts for 40 percent, and manufacturing accounts for the rest), the Kingspan deal hasn't kept Cinco Solar from growing in all areas. "We've been designing and bidding on other projects, as well," Fitch says. "Most of the focus is on large, institutional-type projects." The firm has been working with the military on a number of military base projects, and projects on a few American embassies around the world.

"[There has been] a huge change over the past ten years in the public's awareness of solar [possibilities]," Fitch says. "I'm very optimistic and encouraged by the response we've gotten." —CAROLYN DORANT

At a Glance

LOCATION:
San Antonio, TX
FOUNDED:
2007
EMPLOYEES:
12
SPECIALTY:
Evacuated-tube-solar
water-heating systems