



New company brings new options to solar energy market

By **DREW KERR**, dkerr@poststar.com | Posted: Monday, March 8, 2010 10:32 pm

NORTHUMBERLAND -- The owner of a solar-energy company that is setting up shop in Saratoga County wants residents to know that the sun can be used for more than producing electricity.

While typically associated with renewable energy, solar panels can also be used to harness warmth from the sun to provide radiant heat and to warm water as part of so-called solar-thermal systems.

The technology has been around for years and is commonly deployed in other parts of the world, but it remains relatively rare in the United States, where emphasis and incentives are more often put on solar-electric systems.

Generally speaking, solar-thermal systems use solar panels to capture heat and warm coils that run through a storage tank that supplies water for showers, washing machines and other household needs.

The water can also be piped through tubes that run beneath floors to provide radiant heat.

"Right now, this is kind of an after-thought technology," Terry Moag, president of The Radiant Store, said last week during a visit to a home he recently outfitted in Northumberland. "We're driving the demand right now, advocating and creating interest in the product."

Moag is hoping he'll have a lot less convincing to do in the future.

Officials with the New York State Energy Research and Development Authority announced late last month that Moag's five-year-old company would get space this spring in the Saratoga Technology and Energy Park, which NYSERDA owns and operates in Malta.

The move will allow the firm's six employees to transition from a primarily field-based operation built around cell phones to a central location with more than 700 square feet of storage space.

NYSERDA officials are also looking to add solar-thermal systems to the authority's incentive program, which would allow residents to get reimbursements for part of the costs of installing the technology, just like incentives offered for solar-electric systems.

The state already offers a tax credit for up to 25 percent of the solar-thermal systems' costs, but direct payments through NYSERDA could prove more attractive, officials aid.

The incentives would be paid for through fees assessed to residents through utility bills and could be available as early as this year, said Jim Reis, who manages NYSERDA's residential energy affordability program.

"You never know what's going to happen, but I would say people should start looking now because once these incentives become available, we're going to get a lot of calls, and who knows how long it may last," he said.

Such incentives have been shown to produce results.

Moag said his company installed more than 80 solar-thermal systems last year, a 160 percent jump from the year before, largely because of a federal program that created a tax credit that covers up to 30 percent of the systems' costs.

Industry officials say they anticipate further growth this year, as more residents and builders take note of the government help and recognize the technology's potential to reduce the use of fossil fuel.

Exactly how much consumers can save on utility bills depends on the size of the home and the amount of water used, among other factors.

But hot water typically accounts for around 30 percent of a building's utility bill and comprises the third-largest use of energy in a typical home, after air conditioning and heating, according to the U.S. Department of Energy.

And the Solar Energy Industries Association, a national trade group, suggests the average cost of the systems is no more than \$8,000, and that money can be recovered within three to six years.

"It's the most cost-efficient solar technology out there today," said Reis, of NYSERDA.

It's also a relatively simple installation process. Retrofitting a home with a solar-thermal boiler can take as little as two days, officials said.

"It's a simple plumbing job; that's all it really is," said Monique Harris, director of communications for the Solar Energy Industries Association, a national trade group. "The solar collectors are the only added element."

All this is giving hope to Moag, whose company is still moving into its new Malta home.

"I think solar-thermal, finally, is going to have its day," he said. "The need may not seem apparent or imminent, but I think it will become more so, and that forward-thinking people will realize that."

From the The Business Review:

http://www.bizjournals.com/albany/morning_call/2011/02/revenue-doubles-for-the-radiant-store.html

Revenue doubles for The Radiant Store

The Business Review - by Robin K. Cooper

Date: Thursday, February 10, 2011, 6:25am EST



- Robin K. Cooper
- Reporter
- Email: rcooper@bizjournals.com

The Radiant Store, an early-stage solar-thermal panel installer, saw revenue double to \$1.3 million last year.

The number of employees also grew from a half dozen to 12 after President **Terry Moag** spent several months organizing the company into divisions—solar, building efficiency and heating and air conditioning.

Moag said he expects revenue will grow to \$5 million in the next two years.

This week, The Radiant Store was awarded a \$180,000 grant from the New York State Energy Research and Development Authority to train solar-thermal installers and monitor the performance of the technology and help develop a market for it.

The company, which started in 2005, moved its operations last year from Kinderhook in Columbia County into the state-owned Saratoga Technology + Energy Park in Malta in Saratoga County.

"I've been able to take advantage of a lot of opportunities that are available to anybody in this market," Moag said.

A separate NYSERDA grant helped him reorganize and focus his company last year.

Moag said that grant gave him access to NYSERDA entrepreneur-in-residence, **Paul Burton**, former vice president of operations at Ducommun AeroStructures New York Inc. (formerly DynaBil Industries Inc.), in Coxsackie.

Burton was instrumental in preparing The Radiant Store to compete in the solar-thermal industry that has not developed as fast in the United States as it has in Europe, Moag said.

The \$180,000 NYSERDA grant will help Moag train staff and spend more time trying to create a market for solar-thermal combination heating systems throughout the northeast.

The company also has seen an uptick in business this year due to a new \$25 million state program that provides grants to homeowners who replace electric water heaters with solar systems.

Moag said that program took effect in January and he already has seven applications. For jobs that cost \$10,000, Moag said, the grant program, plus state and federal tax credits can reduce the total price to about \$1,500.

Saratoga Technology + Energy Park® Adds The Radiant Store, Inc. to Its Growing Tenant List

The Radiant Store Inc., an installer of solar thermal hot water systems that provide energy efficient, carbon-neutral solutions to home owners and businesses seeking to reduce fossil fuel consumption, has located at the New York State Energy Research and Development Authority's (NYSERDA) Saratoga Technology + Energy Park® (STEP®) in Malta, NYSEDA today announced.

"The Radiant Store is a perfect fit for STEP, which provides an environment to help clean energy and environmental technology companies to build and grow," said Francis J. Murray, Jr., President and CEO of NYSEDA. "NYSEDA welcomes The Radiant Store to STEP and looks to its continued success. Its work to deploy more environmentally sustainable technologies will help New York meet the ambitious energy reduction goals set by Governor David Paterson."

"STEP is fertile ground for renewable technology companies like The Radiant Store to grow," said Terry Moag, President of The Radiant Store, Inc. "Between the TEC-SMART facility and the resources NYSEDA brings to the table, STEP is uniquely qualified to meet the needs of clean tech companies."

Solar thermal heating systems can significantly reduce the energy costs and environmental impact of hot water heating for residences and businesses. A solar hot water system consists of a series of solar panel-like collectors installed on a roof that utilize the sun's energy to heat a liquid that is pumped into an insulated hot water tank to heat up hot water. The heated water is immediately available for use or stored until hot water is needed. Federal and state tax incentives are available to help offset the purchase and installation costs for these systems.

The Radiant Store, Inc. is located at STEP's 10 Hermes Road building, which also is home to Auterra, Inc., an advanced materials manufacturing and development company. Other companies located at STEP include GLOBALFOUNDRIES, Lockheed Martin, and the Building Performance Institute, among others.

STEP is also home to TEC-SMART, the Training and Education Center for Semiconductor Manufacturing and Alternative and Renewable Technologies, which opened its doors this past January. A \$13.5 million partnership between NYSEDA and Hudson Valley Community College, TEC-SMART features more than a dozen smart classrooms and advanced laboratories that will be used to train the workforce in green technologies, including semiconductor manufacturing, photovoltaics, home energy efficiency, geothermal, alternative fuels, and wind energy.

For more information, visit www.nyserda.org



The Radiant Store, Inc

Terry Moag - President

well to solar electric systems and offer a return on investment that is superior to any other solar technology.

SM: What separates your company from other retail solar stores?

TM: For one thing, we are not a retail store. The name "The Radiant Store" really is a play on words as we are storing radiant energy with our products. We are a full-service supplier and installer of solar thermal systems. Because every solar system design is different depending on the site, the mechanical systems and other important considerations, our approach has been consultative and comprehensive when it comes to recommending a solar solution that is right for a customer. Tailored solutions are the norm in this business. I think our value proposition to a customer is that we have the knowledge and the experience to design, install, and service the optimum solar system for each person's situation.

SM: When starting your company you had to overcome many obstacles. What was your greatest obstacle and what inspired you to carry forward your mission statement?

TM: There were several. For one, we did not have a market back in 2005 for integrated solar thermal systems. It was just not something the United States was doing to any meaningful degree. So bootstrapping in an underdeveloped market was not easy. Aside from that there are the challenges of being a start up: capital, eighty-hour work weeks ... the usual stuff.

SM: How did you wind up at the Saratoga Technology + Energy Park®(STEP®) in Malta?

TM: I was looking to grow the business. STEP offered an opportunity to join a diversified group of clean-technology businesses, and I thought my presence here would help. And it did—in the past year since I arrived at STEP, business has doubled from \$600,000 to \$1.3 million.

SM: What energy efficiency return on investment can your company provide for your customers?

TM: We typically find that investment in a solar thermal system will pay for itself in three to five years and produce positive cash flow for up to thirty years. Contrasted with solar electric, which has paybacks in the ten to twelve-year range, it is really favorable. Systems generally price in after incentives between three and five thousand dollars, which makes them affordable for the average homeowner.

SM: With oil and gas prices rising, what is the best recommendation you can make for your customers?

TM: We are a company that approaches energy efficiency in a comprehensive way. Normally we recommend conducting an energy audit to get a baseline on how you can improve your home's energy efficiency. The New York State Energy Research and Development Authority (NYSERDA) offers a variety of incentives to homeowners looking to go green as well as reduce their carbon footprint overall. Sometimes insulating is all that is required, sometimes renewable energy makes sense, or maybe a high efficiency boiler or furnace is the right choice. The main thing is to get a professional to evaluate the situation and give you the facts so you can make an informed decision.

Success Magazine: When did you open The Radiant Store, Inc? What inspired you to open your own solar energy company?

Terry Moag: In 2005 I felt like the market was ready for an applied technology solar thermal company. I was in a unique position because I had the knowledge and an opportunity to partner with a European company looking to expand in the US. What really inspired me was being on the cutting edge of a new technology. I was at a point where I needed to feel challenged and had become disillusioned with the lack of leadership in the states when it comes to an energy policy. I felt like I could make a positive difference on a local level.

SM: Terry, what is the focus of the products and services of The Radiant Store, Inc?

TM: The Radiant Store is a solar thermal installer. Photovoltaic solar, which creates electricity, collects a fraction of the electromagnetic light spectrum and converts that energy to electricity. But our solar-thermal systems collect solar energy in a broader light spectrum, and the panels produce heat that is used for everyday things like hot water preparation, radiant heating, or pool heating. It is roughly seven times more efficient than making electricity with solar. On a global level, solar thermal has been far more widely embraced.

Our products compare favorably in price as

Radiant Store

10 Hermes Rd. | Malta, NY 12020 | PH: 899-2791

www.TheRadiantStoreInc.com