

## Here comes the sun

*A global solar company in Branford lowers energy costs while greening the environment*

By Lisa Reisman  
Special to ShoreView

**A**nxious about rising oil and electricity bills? Unhappy about our national oil addiction? Concerned about the effects of climate change?

Steve Elkin, CEO of Apricus, Inc., has the answer. Go solar. The U.S. imports oil — and lots of it — in large part from Iraq, Venezuela, Chad and other nations with which our government is not on particularly amicable terms. Coupled with the reality of global warming, there's a new urgency to reduce our reliance on fossil fuels for energy production by using other forms of renewable energy.

Solar energy is the cleanest and most inexhaustible of all known energy sources, said Elkin. Until recently, the sun's energy, although plentiful, has been hard to harness directly. Until now.

Apricus, Inc., an Australian-Chinese joint venture, which has just established U.S. operations in Branford, is one of a handful of companies in the renewable-energy industry that has revolutionized solar technology.

According to Elkin, the establishment of United States headquarters is in response to high demand for Apricus products in the U.S. and Latin America, where regional sales are expected to triple this year. The 2,500-square-foot office space in Branford, which Apricus will soon open, will initially be staffed by six people. Elkin expects the business to develop into a major operation with the potential for 150 to 200 manufacturing jobs.

Committed to developing efficient and affordable alternative energy solutions for homes and businesses, Apricus manufactures, among other products, the solar collector, a rooftop device comprised of glass tubes that absorbs thermal energy from the sun and converts it directly into usable electricity and heat.

The Ray-Smith family of Milbridge, Maine, featured on *Extreme Makeover: Home Edition* in January 2008, are recent beneficiaries. The popular primetime show challenges builders and remodelers to bring homes back to life with products that are not only innovative but also the pinnacle in their field.

For the current season the show has highlighted "green" products that provide the biggest returns, best aesthetic appeal, and easiest installation for the speedy seven-day remodel projects.

An Apricus solar collector was among the show's choices, the latest in a recent slew of honors. The company was voted among the top 10 green manufacturers in the world by the Sustainable Energy Industry Association.

Its solar thermal tank also dominated the Solar Decathlon, sponsored by the Department of Energy, which brings together 18 teams of elite college and university students from around the globe to design, build, and operate the most attractive and energy-efficient solar-powered home.

The reason for such acclaim? Instead of the traditional flat

panel collector, Apricus uses solar tubes—specifically, rows of parallel glass cylinders coated with a special surface designed to trap the sunlight.

The cylindrical model takes advantage of the sun all day, not just, as with the flat panel collector, when it's directly overhead. And the heat is absorbed so efficiently and the glass so well-insulated that the Apricus collector performs in overcast conditions as well as in cold temperatures.

"Think of the benefits of a thermos flask and greenhouse rolled in one," said Peter Lowenthal of 360jmg, a communications firm specializing in renewable energy in Washington, D.C.

In the past, the technology was too expensive to compete with flat solar panels. With facilities in China, the company can now manufacture the tubes and heat pipes cheaper than anywhere else, bringing the \$5,000 to \$6,000 price tag in line with that of flat panels. And that's before the federal and state tax credits kick in.

Indeed, it was as a result of a new tax credit for solar-energy usage from the Bush administration, coupled with soaring energy costs, that the United States is quickly becoming Apricus' largest market. Apricus Solar Company, based in Nanjing, shipped nearly four times as many containers of equipment to the U.S. last year than the year before.

Then there are the environmental returns. Installing just one Apricus solar thermal collector can reduce carbon-dioxide levels as much as planting more than 200 trees. Add to that a long-term reduction in energy bills: the Ray-Smith family, featured on *Extreme Makeover*, will be saving about \$350 a year in their century-old home. Apricus even looks after the environment by using primarily recyclable materials, and that's right down to the packaging, which is made up of recycled cardboard.

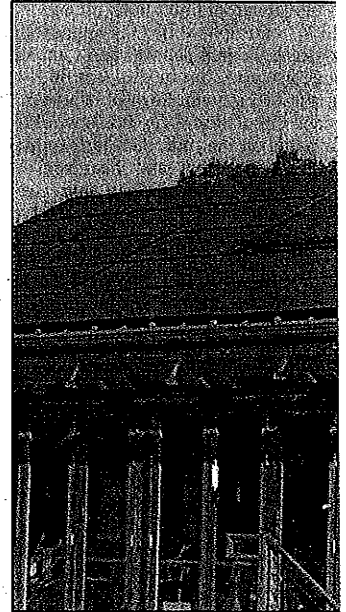
"People are understanding more and more about the benefits of energy independence in terms of both world economics and environmental impact," said Michael Trahan, executive director of Solar Connecticut, Inc., a nonprofit organization dedicated to promoting the use of solar energy and informing Connecticut's citizens about solar power.

"It takes each one of us to do something, and installing a solar thermal system is something any property owner can do."

According to Elkin, the use of solar power is a no-brainer. We have 40 to 80 years left of oil, coal, and gas resources, and all are polluting.

Nuclear power is prohibitively expensive. Making ethanol from corn requires more fossil energy than ethanol fuel actually contains, and won't significantly reduce our oil imports. As for solar energy, "we're not running out anytime soon — unless you think two billion years is soon."

The only downside to the use of solar power? "Oil companies and the big utilities will make less money," said Elkin.



Apricus, Inc., an Australian-Chinese joint venture in Branford, is one of a handful of companies specializing in solar technology.