The Deal
VOICE OF THE DEAL ECONOMY
VOL. 5 NO. 30 OCTOBER 8—OCTOBER 14 2007

DUE DILIGENCE

ALTERNATIVE LIFESTYLE

THREE YEARS AGO, MERRIMAN CURHAN FORD & CO. WAS ONE OF THE FIRST INVESTMENT BANKS TO MAKE A MAJOR PUSH INTO ALTERNATIVE ENERGY. CO-FOUNDER GREG CURHAN TALKS ABOUT WHY, WHAT'S HOT, WHAT'S NOT AND WHERE THE FUTURE LIES

BY CLAIRE POOLE

In 2004, two years after it was founded, San Francisco investment banking boutique **Merriman Curhan Ford & Co.** made a bold move: Besides following and lining up financing for technology, telecommunications and healthcare companies, the firm would add "next generation energy" companies.

It was a smart move. Alternative energy is now hot and next-generation energy makes up a quarter of the firm's business and half its investment banking business in the first half.

Merriman was co-manager of instrument maker **Luna Innovations Inc.**'s $21 million initial public offering and synthetic fuel maker **Rentech Inc.**'s $62.6 million follow-on offering last year, and has done financings for solar company **Energy Conversion Devices Inc.** and clean-water provider **Pico Holdings Inc.** Since 2004, it's worked on $1 billion in financings in the area.

The company also provides research on 16 companies, from fuel cell makers (**Quantum Fuel Systems Technologies Worldwide Inc.**) to solar companies (**Evergreen Solar Inc.**) to alternative fuel developers (**Environmental Power Corp.**) to storage companies (**Altair Nanotechnologies Inc.**). It even launched a Next-Generation Energy index of 30 companies.

Greg Curhan, the firm's 45-year-old co-founder, engineered the move. He recently spoke to The Deal's Claire Poole about what's hot and what's not.

The Deal: *Why did your firm get into this?*

Greg Curhan: A few years back, we tried to identify sectors that would grow faster than the rest of the economy. Some of the companies that had been founded in the 1980s and 1990s were starting to gain some traction, even before oil went up to $60 or $70 a barrel. We focused on solar and started writing research on those companies. We did fundraising, including for an energy company that was making batteries related to hybrid vehicles [**Ener1 Inc.**, which raised $20 million]. That positive feedback got us interested. Brion Tanous, who was covering data storage, had a background in electrical engineering and worked on the hydrogen fuel cell on the space shuttle. We directed his research to next-generation energy.

So what's hot?

Solar continues to be very strong and has the largest market capitalization. Driving it is a combination of subsidies and Moore's Law. The more of them you make, the more investment dollars you need to make them; the more technology you have, the cheaper they become. That industry has a long way to go. We're seeing a lot of concentrated and thermal solar. There are a lot of investment dollars, but it's still in the low to mid-20% efficiency rate. There are a lot of gains to be had to improve those efficiency rates. It's all process and miniaturization. I'm confident it will happen.

What else is hot?
Another area is energy storage. There are a lot of interesting technologies that produce clean energy from solar, wind, geothermal and even tides, tapping oceans and rivers to generate energy. The automotive industry is working to capture and reduce energy when you're braking. If you don't use the energy simultaneously, you need a way to store it. The more alternative energy technologies that come to play in energy infrastructure will help. How do I create the energy cost-effectively, and how do I store it cost-effectively? This is mostly in the realm of batteries, but there are a lot of technologies that are being worked on and a lot of investment money.

Fuel cells were hot and then they weren't. What have we learned?
Fuel cells were conceptually hot but never actually hot. The fuel cell industry raised much more money than revenue that was produced. There's no lesson to be learned. It cost a million dollars to build a car with a hydrogen fuel cell. They just weren't economic.

So what's driving the latest wave?
There's a finite oil and gas supply. You've got energy prices the highest they've ever been. A significant part of this carbon is located in politically undesirable or not stable areas, so there's a big national security issue. Finally, you've got a move toward a global clean environment. There's demand for energy that comes from clean resources that are sustainable. So with a little help from the government to nudge them along, you have alternative fuel sources, and they don't cost more to use. That's the driver, and that's our bet. We think the next quarter century will be about what drives global growth. We think this has a long tail and is a high-growth area. You're going to see lots of extra investment and institutions grab onto this.

So what's not hot?
The subsector that's out of favor is biofuels, ethanol specifically. It probably has the most notoriety. There's been a lot of demand for feedstocks, like corn, the price of which has skyrocketed. When Bush talked about federal mandates, farmers devoted more acreage to grow corn, and it created a huge boom in ethanol. Those stocks have done poorly because there's not much barrier to entry and supply is not there. So the economics of ethanol plants are not as attractive today as a year ago. The self-correcting market theory says if you produce too much ethanol or the cost gets too high, people won't buy it and corn prices will drop.

What about cellulosic ethanol?
It doesn't depend on corn, but the technology is not widely used and is more expensive. The cost will come down, but can it attract investment dollars? Some have moved to biodiesel, using soybean oil, and some are talking about butane and butanol. The Achilles heel in biofuels is that it's made from something you have to grow.

What companies have tanked?
Hydrogen fuel cells. Your best returns have been in solar, wind, energy storage, stuff in which either feedstock is free, like sun and wind, or based on process technology.

Do you believe subsidies are still needed?
I do. But I'm a believer in free markets. You let the market work or subsidize everybody. People say that if you take away the subsidies for solar, you wouldn't make money. Take away all the tax breaks for oil and gas companies, that's more than what the government is spending on solar.

What are future technologies?
There's lots of inefficiency in the way we use electricity. If electricity distribution were more efficient, we'd have huge gains. There are software and hardware companies working on that. The U.S. is the Saudi Arabia of coal, so we have to figure out how to turn coal into a clean-burning fuel by liquefying it or changing the plants that are burning it. There's a lot of investment in that going on now. There's a lot of technology being applied to electrification of automobiles and buses, and a lot of that has to do with storage. We see the beginning of the food chain, venture capitalists investing, some fail, some drop out. This is where the next **Apple** or **Google** comes from.

Do you drive a hybrid?
I do not. The only one that saves you money is the Prius, and I'm not in the market for a car that small because I have three kids. I'm waiting for the electrics to come out. I have a 3.5-kilowatt solar panel on the roof of my house. When I bought it, I expected an eight-year payback. The price of electricity has gone up 50% in California, so the payback is now five years. It should last 30 years. California has terrific rebates. ■

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The Deal
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The Deal (ISSN 1545-9878) is published weekly except biweekly in January, July, August and December by The Deal, LLC.