

Renewable-energy stocks

Eventually they will reward investors, but the wait can be trying

By Anne Pappmehl



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The Kyoto accord came into effect a couple of weeks ago, and in its 2005 budget the federal government has earmarked \$5 billion over the next five years for environmental improvement and greenhouse-gas reduction.

There is speculation that the Martin government is trying to put an economic spin on the matter, by pointing out that benefits will not only accrue to the environment but to the economy, making Canada a leader in energy-efficient and renewable technologies.

Investment in green-energy technologies can have heavy profit potential, but also carry a lot of risk. Ironically, one promising bet is a company in a country that rejected the accord — the United States.

It's called **U.S. Geothermal Inc.** (GTH-TSX/VEN, \$0.90, 604-484-3031, www.usgeothermal.com), and it trades in on a Canadian exchange. Geothermal energy is naturally occurring and renewable, and while not as familiar as wind and solar power, it is the only renewable consistent enough to be used as base-load (continuously run) capacity.

Next to natural gas, geothermal has the highest reliability rate and can produce energy about 97 per cent of the time.

Geothermal energy is recovered from the Earth's interior, and geothermal heat can appear in various forms: hot springs, volcanoes, geysers and underground reservoirs. The heat energy that is close to the Earth's surface can be used as energy. In the U.S., geothermal energy production is a \$1.5-billion-a-year in-

dustry, and that country is also the largest supplier and end-user of this form of power.

U.S. Geothermal Inc. owns 75 per cent of the Raft River, Idaho, geothermal power plant. A growing population and economy in the Pacific

Northwest should spur demand for additional energy. Phase 1 of the project is expected to produce 15 megawatts of power by 2006. Phase 2 will double that to 30 MW in 2003. Eventually, the plan for the site is to produce at a capacity of 90 MW by around 2017.

John McIlveen, an analyst with Dundee Securities, recently initiated coverage on the company. He rates it a "market outperform" but with a high-risk ranking. In his November 2004 report, he lists a 12-month target price of \$1.91.

"For these sorts of companies that are not producing any electricity as yet, and therefore no cash flows, you really have to look at what their 20-year net present value is," says McIlveen.

"We start with the geothermal consultants' reports (Geothermex) and examine the company on a cost basis, and on the revenue side we talk to the local utilities or users of electricity and find out the prices and put together a 20-year cash-flow model, which we have discounted at 10 per cent to come up with our net asset value per share."

Building momentum

While each phase of the project is dependent on the success of the previous one — hence the risk factor — Mr. McIlveen points out a number of positive signs. Regarding Kyoto and the quest for "greener" energy, "even the non-signatories like the U.S. still have

local targets, which vary state by state, but certainly all jurisdictions want more green power, so there is going to be momentum for many years to come."

As far as geothermal projects go, "this one is in a zone where there are already some active power producers in geothermal. And, the power lines run right next door, so you don't have any big, expensive transmission line to get to the local grid, and the reservoir depth is fairly shallow, a fraction of what some other companies might have to go through to access the resource. That comes out less expensively for the company."

About six months ago, I wrote about a company called **VRB Power Systems** (VRB: TSXV, \$0.87, 604-697-8820 www.vrbpower.com). The company produces a large-scale industrial battery that is suitable for storing energy at commercial sites and utilities. The Vanadium Redox Battery (VRB) battery can store energy from both traditional sources like oil, natural gas and hydroelectric power and from alternatives such as solar and wind.

In fact, the technology is particularly applicable in the area of renewable-energy storage. Why? One of the problems with wind and solar, for instance, is that the power they generate is intermittent. You can't power a wind turbine on a non-windy day or gather solar power at night.

The Vanadium Redox Battery can store energy from these renewable sources when they are active and release it later when required. This way, the energy produced doesn't get wasted. Also, unlike traditional storage batteries such as lead, zinc and cadmium, the Vanadium Redox Battery is not toxic, never wears out and produces no emissions.

When I last wrote about the company, it had no analyst coverage and the stock was around 60 cents per share. Since then, it has climbed past the \$1 mark and is now back at around 90 cents per share. Analyst Russell Stanley of Loewen, Ondaatje, McCutcheon, has initiated coverage of it with a "speculative buy" recommendation and a 12-month target price of \$1.75.

After peaking at \$200 a share in 1999, **Ballard Power Systems** (BLD-TSX, \$7.02, 604-454-0900, www.ballard.com) is trading slightly above \$7. The stock recently took a major hit from institutional investors.

Though the company announced with its 2004 results last month that it has made significant progress towards its goal of commercializing its fuel-cell technology, the timeline of 2010 is just too far away for most institutional investors.

Most analysts covering the company have a "hold" recommendation on the stock. If the company does ultimately commercialize successfully, it's possible the stock will rally again. The Ballard story underscores how risk and alternative energy seem almost synonymous, owing to the fact that for many of them, commercial success is some day in the distant future.

The trouble is, while most investors understand that we save and invest for a longer-term goal — not many are willing to take their chances on something so new. On the other hand, if Ballard finally pulls off the commercialization and you're holding the stock, you might find yourself feeling awfully smug.

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