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Geothermal energy stocks should recover steam if government support lasts

By Sean Silcoff
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Few industries have escaped the credit crunch, as access to borrowed funds has become severely curtailed. But one sector that should bounce back relatively quickly when conditions loosen is geothermal energy. That's because the heavy government support in the U.S. for the business of tapping the earth's molten core for power make it a safer bet, even in a prolonged downturn, than other industries. That is, as long as lawmakers remain interested in promoting alternative energy if oil prices stay low.

"The fundamentals will still be intact" once credit eases, said John McIlveen, research director with Jacob & Co. Securities, a Toronto boutique investment bank specializing in renewables. Meanwhile, stock prices of companies in the sector make them "outrageous bargains," he said.

The Toronto Stock Exchange and TSX Venture Exchange are home to five North American public pure-play geothermal companies – Nevada Geothermal Power Inc., Polaris Geothermal Inc., Sierra Geothermal Power Corp., Western GeoPower Corp. and U.S. Geothermal Inc. Their stocks have taken severe beatings: they are down anywhere from 65 per cent to 85 per cent from their 2008 highs. Even the stock of Reno, Nev.-based Ormat Technologies Inc. – a U.S.-listed company with functioning power plants in the U.S., Central America and Kenya that earned $22-million (U.S.) on $150-million in revenues in the first half of the year and pays a dividend – is down more than half from its peak.

The Canadian-listed stocks are similar to oil and gas and mining prospectors, except they are looking for steam: underground reservoirs of water warmed by the earth's core, with enough heat and pressure to produce dozens of megawatts of energy at ground level. They spend about $3-million to $5-million per drilled well to prove they have enough power-generating capability to justify building a plant, at a cost of about $4-million/mw. Plants typically generate up to 50 megawatts.

There is much appetite for geothermal energy. "This is one of the sectors shaping up to be quite important for energy," said Clarus Securities analyst Carolina Vargas. "I'm quite bullish on the sector."

For one, geothermal is the cleanest and most dependable form of energy: Plants produce almost no carbon emissions, drawing from an always available power source, unlike intermittently productive wind and solar energy generators. Operational plants produce energy for 4 cents (Canadian) to 6 cents per kilowatt hour, comparable to coal, biomass and wind plants.

But the industry has depended on help from governments. The U.S. Congress this month extended a tax incentive scheme to lower the cost of building and operating geothermal plants. The U.S. Department of the Interior last week proposed devoting 190-million acres of federal land – equal to two Californias – to geothermal energy development in 12 western states. Dozens of U.S. states, led by California, have mandated that minimal amounts of power must come from renewable sources. Meanwhile, both U.S. presidential candidates are promoting greater use of alternative energy.

With geothermal plants producing just 0.3 per cent of the United States' energy, the earth's core is the limit for developers. Of the five Canadian listed companies, "all of them have great development pipelines that should keep them busy for years," said Mr. McIlveen. "They have proven and probable resources."

The issue now is financing construction. That requires money. In this market, companies that haven't already secured finances are faring poorly, as investors shift their attention from earnings potential to balance sheets and cash flows. Hence the crash in stocks of geothermal companies, which are seeking financing for their plants, and have fallen twice as far as the TSX index. "If you're in the market now trying to finance a project it's going to delay you," said Mr. McIlveen.

Typically, once developers prove they have enough geothermal power generating capability, they line up 20-year power purchase agreements with utilities, then financing from investors.

Here's where things get tricky. Under the U.S. tax credit, developers can entice investors in a geothermal plant to front project costs by buying the facility under construction through a special-purpose vehicle and writing off the losses against their income using the tax credits. After 10 years, once the projects are built, operating and yielding production tax credits, ownership flips back to the developers.

But you need large, income-earning investors to buy into this scheme. To date, they have largely consisted of giant U.S. financial companies, such as Morgan Stanley, GE Financial Services and the now bankrupt Lehman Brothers. Since they're obviously strained, this source of funds has withered; A GE executive this month told Dow Jones the company couldn't commit to any new tax-monetization investing in renewable projects. "Has the number of production tax credit buyers diminished? Absolutely," said Jacob & Co. chief executive Sasha Jacob.

That doesn't mean financing has dried up entirely. Ms. Vargas said in a note utilities could invest directly in new projects, and Mr. McIlveen said there could be others "sitting on cash with U.S. taxes to shield," such as Canadian life insurers. Even pension funds, which pay no tax, could serve as straight debt investors without benefiting from tax credits, he added.

But investors in this climate will require greater certainty. So developers must drill enough holes to secure up to 50 per cent of capacity, up from 30 per cent to 35 per cent before, said Mr. Jacob. That could amount to up to $20-million in additional upfront costs, which, though onerous, "is not the end of the world," he said. Borrowing costs will also increase, which won't necessarily hurt returns if developers raise enough equity, Ms. Vargas said. She added companies in advanced stages of development, such as U.S. Geothermal, should have an easier time obtaining financing.

So the two big questions remain: When does the credit crisis end (answer: who knows?), and, Will tax credits continue? U.S. law makers lost interest in funding alternative energy schemes a generation ago when oil prices eased. There's no guarantee the same thing couldn't happen again if the economy dampens oil prices and strains public finances.

But if global warming and energy security remain top issues in the United States, then this modest collection of Canadian-listed power-generating penny stocks could grow into steady, profitable investments with real value. "Banks and investors should eventually come around," said Mr. McIlveen. "After food and housing what do you want next? Power."

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