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Investors

Just in Case

As big oil companies begin to invest in new energy technologies, some skeptics wonder what they're up to

By RUSSELL GOLD

Got a good idea for a renewable energy technology? Perhaps a new way to convert the sun or waves or plants into fuel? Chances are, there's a venture capitalist willing to help see whether the idea works.

What you might not expect is that the seed money might come from an oil company -- one of the very firms whose products dominate the market you hope to crack.

In a quiet trend, oil companies have begun creating internal venture-capital funds to invest in new energy technologies. While venture capital has always been about seeking long-term returns, the more short-term goal in this case is to get an inside look at the new ideas that could one day play a meaningful role in the global energy picture. Oil companies are swimming in cash and may be at or near a global peak-production level. Add to this the growing possibility that nations could impose a carbon tax on fossil-fuel consumption, and alternative fuels could become more competitive.

Big Oil's interest in renewable energy isn't without its detractors. Some suspect that the companies want to acquire -- and stifle -- new technologies that emerge to compete against fossil fuel.

Some big companies themselves, notably Exxon Mobil Corp., call it a waste of money. "We're not a venture-capital company," Exxon Chairman and Chief Executive Officer Rex Tillerson said earlier this year in an interview with The Wall Street Journal. "There is lots of venture capital available out there going into these areas. ... Just to be a portfolio investor makes no sense to us."

Early Investor

Not everyone agrees. One of the earliest to embrace venture capital has been Chevron Corp., whose San Ramon, Calif., headquarters is just up the road from Silicon Valley, a hub for venture-capital firms. The second-largest U.S. oil company started Chevron Technology Ventures in 1999, although many of its earliest investments focused on information tech. (It was an early backer of e-mail security company IronPort Systems Inc., for example, which helped Chevron cut down on spam its employees were receiving. Then, Cisco Systems Inc.

acquired the company last year for $830 million, yielding a tidy profit for Chevron.)

Lately, Chevron has increased the share of its venture funds going into renewable energy to 33% from 18%. It has provided seed capital for BrightSource Energy Inc., an Oakland, Calif., company that turns solar energy into steam, and Southwest Wind Power, a Flagstaff, Ariz.-based company that builds small-scale wind turbines that can be placed on top of light poles.

Trond Unneland, managing executive of Chevron Technology Ventures, says demand for energy in the future will be greater than oil and natural gas can meet. "We believe we need energy from every source: oil and gas, geothermal, solar," Mr. Unneland says. "They don't compete" with one another, he adds.

In one of its earlier moves, Chevron Technology Ventures in 2002 invested in Codexis Inc., a Redwood City, Calif., company that develops catalysts for the pharmaceutical and biofuels industries. One of this company's most promising research avenues is working on a way to turn biomass into transportation fuel -- a focus that puts the company squarely in the midst of the emerging renewable-energy industry.

Shell's Game

Indeed, Codexis also boasts Royal Dutch Shell PLC as an early financier. Shell in 2006 launched a collaborative deal to help Codexis speed up its research in renewable fuels. Shell has since purchased more than $33 million in Codexis preferred stock, in addition to a $20 million initial investment, and agreed to pay the salaries of an unspecified number of Codexis researchers.

Now, if a commercial discovery is made, Shell has the right to market the new biofuels through its global distribution network, according to Codexis filings with the U.S. Securities and Exchange Commission. In April, Codexis filed for an initial public offering but withdrew it earlier this month, citing adverse market conditions. Codexis turned down a request for an interview; Shell also declined to comment on its investment.

Shell has made similar investments in other plant-to-fuel companies, including Virent Energy Systems Inc. of Madison, Wis. Shell hasn't taken an equity stake in Virent, but it funds "a large portion of our product development," says Virent Chief Executive Officer Eric Apfelbach.

In return, Shell gets a front-row seat for Virent's ongoing research and what Mr. Apfelbach calls "preferences" when it comes time to commercialize the fuels it develops.

Virent's Plans

Virent hopes to have a commercial-scale plant producing gasoline from plant sugars in 2012. At that point, the company hopes Shell will step in and help it handle distribution logistics.

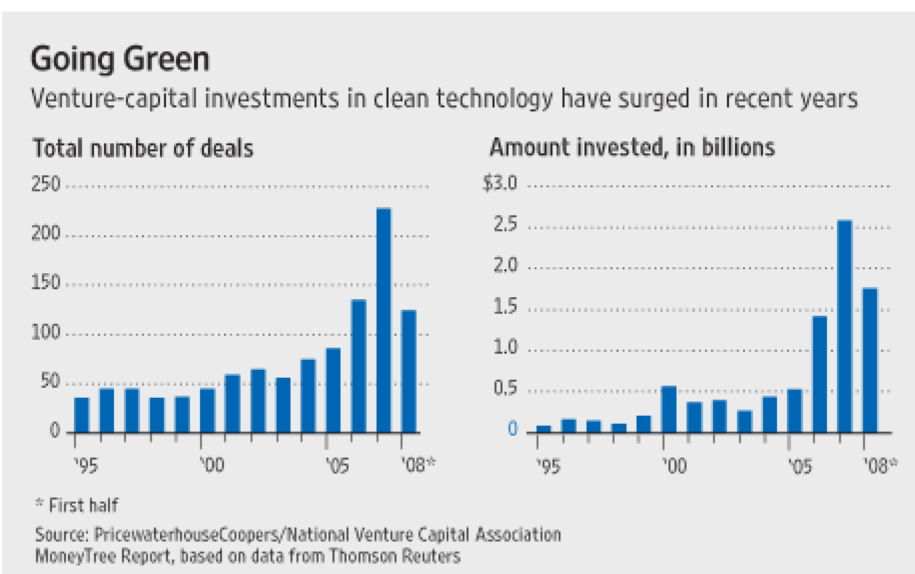
"We never plan on being a seller of gasoline," Mr. Apfelbach says. Why compete with Shell, he asks, when it has decades of experience distributing transportation fuel.

Many venture capitalists believe that the oil companies are entering an alternative-energy industry that is ready to take off.

"There has been a systemic underinvestment," says Ira Ehrenpreis, general partner of Palo Alto, Calif.-based Technology Partners, a venture-capital firm that focuses on environmentally friendly energy and life-science companies. "This is akin to technology investing 20 or 30 years ago. There is just a greenfield opportunity and it's largely the result of under-innovation in this area."

Recently, the field has started to get crowded as high energy prices and looming mandates to cut carbon emissions have created fertile conditions for technology innovation. Through the first six months of 2008, the National Venture Capital Association tallied $1.8 billion in "clean-tech" investments -- primarily innovations to conserve energy, protect the environment or eliminate harmful waste -- a 76% increase from the same period a year earlier and a nearly fifteenfold increase from five years ago.

"There has been a fundamental change in the past couple years," says Mark Heesen, president of the Arlington, Va.-based association. "Oil companies are starting to realize that these smaller entrepreneurial companies can help them at the end of the day."



'Green-Washing'

Still, the oil companies are investing relatively small amounts compared with their current gargantuan profits. This has left them open to the charge that their venture-capital activities are a form of "green-washing" -- an effort to green up the image of a company that produces a lot of fossil fuels.

"If it gets labeled 'green-wash,' there is not much we can do about that," says Gerry Protti, an executive vice president of EnCana Corp. in charge of the company's venture-capital fund. Calgary-based EnCana, one of the largest North American gas producers, isn't investing in renewable energy in order to diversify its business, Mr. Protti says. "We are doing it as a social investment and supporting innovation."

EnCana has provided seed capital to Clean Current Power Systems Inc., a Vancouver company hoping to harness the power of tides to produce electricity. EnCana made a $3 million investment, enough to pay for Clean Current's first turbine installation, a small, 65-kilowatt unit off the British Columbia coast. It worked, and the company hopes to soon install a much larger, 2.2-megawatt turbine farm in the Bay of Fundy, between Nova Scotia and New Brunswick on Canada's east coast. If this larger technology test is successful, Chief Executive Office Glen B. Darou says he hopes to either take the company public or be acquired by a larger energy company.

Social Responsibility

Mr. Darou says EnCana certainly benefits from its association with clean tidal power. "There is a certainly amount of public relations to it, but I honestly think there is a good deal of social responsibility," he says.

Regardless of their motivation, oil companies appear to be smart investors. After all, the companies have a deep understanding of energy economics and how to operate on a commercial, not laboratory, scale. Chevron, for one, doesn't disclose its returns from its venture fund and says much of the reward for it is getting access to new technologies.

But Mr. Unneland, head of Chevron Technology Ventures, says its investments are doing quite well. "We have had an excellent performance," he says. "We're in the top quartile of VC funds and we're proud of delivering strategic and financial returns."

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