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Addressing cleantech

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By Carolyn Murphy

After a record year for investment in clean technologies, the sector may have enjoyed another boost Tuesday, Jan. 23, during President Bush's State of the Union address.

But the question remains whether the president's comments regarding alternate energy will fuel investment in the rapidly growing sector, or simply acknowledge recent funding activity ... and election results.

The president laid out aggressive plans to reduce gasoline usage by 20% by 2017 and proposed doing so in part through a "mandatory Fuels Standard," to boost renewable and alternative fuels by up to 35 billion gallons, what he called a fivefold increase over current targets in his address before Congress.

"I think both are important," said Menlo Park, Calif.-based Khosla Ventures' Samir Kaul, calling the fuels standard goal doable. He said corn produced about 5 billion gallons of ethanol in 2006, and that advances in cellulosic technologies producing ethanol from biomass, or the nonfood portion of renewable feedstocks, could perform at similar levels within five or six years.

"It's pretty clear that there are a lot of different technologies that are converting cellulose to ethanol," Kaul said. "They're starting to scale up. You're going to see at least three or four different companies have pilot scale plants in the United States in 2007, which are making a couple million gallons or so of ethanol from cellulose."

One Khosla-backed startup focused on converting cellulose to ethanol is Cambridge, Mass.-based Mascoma Corp. The company unveiled a \$30 million round of funding led by General Catalyst Partners in November that included a host of new investors as well as Series A backers, Khosla and Flagship Ventures.

Kaul's firm is the venture outfit of Sun Microsystems Inc. co-founder Vinod Khosla, and one of the most active cleantech investors. The firm took part in the largest venture capital funding for 2006 — a \$200 million infusion for Goshen, Calif., ethanol

technology company Cilion Inc., alongside California grain milling company Western Milling.

The financing was one of many sizable rounds that drove cleantech investments to a record high in 2006 — companies channeled \$2.9 billion, a 78% jump from the \$1.6 billion invested in 2005, according to data from the Cleantech Venture Network LLC released earlier this month.

To date, Khosla has made more than 20 investments in cleantech, about a dozen in biofuels, and sees more than 12 plans on average every week, Kaul said. He thinks the number of proposals will only increase and that the president's remarks will continue to drive the trend.

"When the president makes a speech like that and sets those kinds of targets, you can be pretty comfortable that there is a big market and there will be a lot of demand for the product if you can get there," he said.

The president's mention of alternative as well as renewable fuels, Kaul said, leaves open biodiesel and gas-to-liquid contributing to that 35 billion gallon mark. "The only way that we're going to get there is to have these kinds of goals and vision put forward because it will incent people to make investments," he said.

Dan Pullman, a vice president and energy banker with Boston investment bank McNamee Lawrence & Co. LLC, said there are two camps: the pessimists who believe the goals the president outlined aren't credible, that while gasoline as a fuel may come down, there won't be total fuel reduction; and the optimists, who see it as extremely important to have government support behind energy policy because it's not an issue a few VCs can solve themselves.

"There's so many broad-based population, government regulation and policy issues that all need to align to really effect change," Pullman said. "The big positive change that people see is that the president understands that he had to change his tune — where he was not a supporter of change and now is a supporter of change — so while his specific goals and guidelines may be unrealistic, it's critically important that the government is supportive of a very progressive plan toward alternative fuels, renewable fuels, efficiency and carbon management."

But the issue of government subsidies is where things get murky, he said. Debate stems from whether subsidy-oriented policies should be in place, like they are for ethanol, or whether companies should be wholly focused on creating opportunities to cut cost independent from government. The venture community, he said, is generally biased toward whether something will really be a low-cost technology in five to 10 years and competitive with oil. So investment will continue.

"Everyone's not going to be right, but we're nowhere near a cleantech bubble right now," he said.

The president's outline of the initiative Tuesday could have been for political reasons as much as about the issues.

"I think the new Congress is a big part of it," Pullman said. "I think it's also a very popular message for the president to be stating right now. ... I don't think his policy will go through, but I think the message comes out: He's made a change; he's made it because of the bipartisan approach."

Kaul offered: "The war in Iraq hasn't gone quite according to plan so I think the need for energy independence has become more front and center, and this is clearly a way to do that. I think that global warming and environmental concerns have also become more front and center."