

San Jose Mercury News: Venture Capital Insider by Matt Marshall

www.mercurynews.com/mld/mercurynews/business/11956577.htm
[\[print\] Cars that run on overnight charge catch valley VC's eye](#)
By Matt Marshall Wed, Jun. 22, 2005

With oil prices hitting new highs, venture capitalists are considering a kind of car you can plug into your home power outlet at night. And one person they'll be hearing from soon is Palo Alto's Felix Kramer.

The Toyota Prius and its ilk are in high demand -- with engines that run on gasoline and electricity.

But with a plug-in, you can do away with gasoline almost entirely. You can get a car that charges overnight so you drive it 10 miles each way to work on batteries alone. And if you need to drive it more, you can rely on a cleaner fuel blend, say, 80 percent ethanol -- made from corn or sugar -- and 20 percent gasoline.

With the U.S. Senate's move this week to add new tax credits for gas-electric hybrid cars in its version of national energy legislation, the plug-in car may also get new impetus.

"I'm looking very actively to play," said Marty Lagod, a venture capitalist at Firelake Capital in Palo Alto, who wants to invest, but also wants a plug-in car himself.

Though Silicon Valley sometimes has gotten a bad rap for not excelling at clean tech, it turns out the region is a hotbed of plug-in innovation.

The Electric Power Research Institute in Palo Alto, for example, has helped develop plug-in hybrid conversions for the Dodge Sprinter van, to be tested as early as this fall. And Andrew Frank, a professor at the University of California-Davis, has built several such vehicles with his students.

But some say it's time to build real businesses. And that's where Kramer comes in.

We met Monday with Kramer, founder of CalCars, a Palo Alto non-profit where he and engineer Ron Gremban developed a plug-in conversion of the Prius. They've gotten it up to a 100 miles per gallon, compared with the 45 mpg maximum driving a normal Prius.

When Kramer pulled up to a restaurant in his Prius on Lytton Avenue Monday, the only parking space available was behind another Prius. They're that popular.

Kramer is about to start looking for venture capital for a plug-in, he said. So far, he said, he's been content to let others do the business.

For example, he approached Greg Hanssen, of EnergyCS in southern California last year, with a crude conversion. Hanssen launched a start-up called E-Drive Systems, which soon plans to sell conversion kits for the Prius. He is looking for angel investors, too.

The problem is that E-Drive's conversions will cost \$10,000 and \$15,000, which will leave most people out in the cold, Kramer said. "It's for movie stars," he said, predicting they'll sell only 100 to 1,000 vehicles.

Kramer thinks he can sell 10,000 to 100,000 vehicles, and at \$750 a car in possible carbon credits, he thinks there's a promising market.

The easiest option, he said, would be to have a major automaker sign on, especially Toyota. With its economies of scale, Toyota should be able to get the cost down to about \$3,000 -- enough for consumers to afford. They might even be able to save money over the life of the car, he said. But Toyota, one of the world's largest automakers, hardly feels any urgency to

embrace a plug-in car: "The situation is evolving," said Cindy Knight, a Toyota spokeswoman in Southern California. "We're studying the matter, and keeping a careful eye on the projects happening around California."

The refusal to commit is why Kramer is considering Ford Motor, which has expressed interest in clean technology, and also some other Asian automakers.

Ideally, though, he'd set up a company that could be a qualified vehicle modifier (QVM), which would be accepted by an automaker as an official partner, and operate under the automaker's warranty. If he has a separate company, that takes away the risk for automakers, he said.

For that, though, he needs plenty of capital. VCs may balk: If the car is at all successful, what's stopping Toyota or others from building their own? Whether or not he pulls it off, the hum of regional experimentation is a good sign. Silicon Valley can no longer be considered a slacker in clean tech.

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www.siliconbeat.com/entries/2005/06/22/vcs_checking_out_plug_in_hybrids_other_cleantech.html

[\[blog\] VCs checking out plug-in hybrids, other cleantech](#)

Posted by Matt Marshall on June 22, 2005 09:43 AM

Here's our VCInsider column in the Mercury News today about action in Silicon Valley surrounding plug-in hybrid electric vehicles. <snip>

The story mentions a few local players in plug-in hybrid area, but focuses mainly on CalCars, a non-profit in Palo Alto. There, founder Felix Kramer says it's time to start a real business -- and will be approaching venture capitalists. And with oil prices hitting new highs, VCs like Palo Alto's Marty Lagod will be eager to look over the business plan.

By the way, the CalCars site is a good resource of information, as they've been pretty open so far. As usual, we didn't have space in the "dead-tree" edition to explore many other issues, such as the debate among environmentalists about whether refueling a car on the electric grid is really such a good thing (the grid relies partly on dirty coal), and the cost of producing ethanol, and of transporting it, and so on. There are many such challenges. (We'll note, though, than on the question of the dirty grid, most environmentalists concede that it is at least cleaner than burning gasoline, and getting even cleaner over time). We also didn't get room to discuss the nuances of Kramer's strategy, which includes selling to large municipal and corporate fleets.

[\[blog\] Response posted by Felix Kramer June 26:](#)

Here's one clarification about Matt Marshall's original story in the Mercury News. The appeal of the Prius conversions that EDrive Systems (<http://www.edrivesystems.com>) will offer in 2006 could easily exceed initial estimates.

Especially in the past few weeks, as the awareness and excitement about plug-in hybrids has continued to grow, many people from around the country and the world have been contacting CalCars. Many are not celebrities or entrepreneurs. And they're saying they'd give almost anything to get the cleanest unlimited range vehicle on the planet. They're comparing the EDrive Priuses with well-engineered luxury cars that cost far more but don't have this advanced technology -- and they know what they'd choose.

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IF THIS ISN'T FOR YOU, SEND IT ON TO ENTREPRENEURS YOU KNOW

CalCars Seeks Entrepreneurs for a Unique Environmental Opportunity

The California Cars Initiative is spinning off a for-profit company for an ambitious effort that could transform the energy/transportation sector.

We're looking for well-connected serial entrepreneurs, motivated as we are both by a desire to find solutions to environmental crises and by the joy of creating new ventures. We offer you the chance to use all your experience, skills and savvy to avoid the catastrophes of oil addiction and climate change.

BACKGROUND: CalCars was founded in 2002 to promote advanced automotive technologies. Our technical achievements include conversion of a Toyota hybrid into a 100+MPG PRIUS+. Our advocacy and promotion, in partnership with other industry leaders, have broken through misconceptions to build excitement and acceptance around previously little-known plug-in or gas-optional hybrids (PHEVs or GO-HEVs).

Now in centers of industry, media hubs, and local, state and national government, word is spreading about the potential of GO-HEVs on electricity+ethanol to get 500 MPG (gasoline). Existing technology can respond to energy insecurity and global warming -- and revive sagging auto companies with a platform and technology applicable to most future cars.

The next big challenge is to commercialize and mass-produce vehicles that benefit both their owners and all of society. We see a way.

So far, the CalCars has inspired the creation of EDrive Systems, an independent for-profit

company providing aftermarket Prius conversions in 2006. We're making sure these eye-opening cars have the most impact.

Next CalCars sees a larger opportunity in future demand from public and private fleets and individuals for 10,000-100,000 GO-HEVs. To supply that market, we're creating a new company that will partner with a major auto maker as a Qualified Vehicle Modifier (QVM). Our team will define, engineer and produce GO-HEV versions of hybrid cars and SUVs.

Our network has visionaries, tech whizzes, early adopters -- and their corporate, government and civic allies. Our volunteers, advisors and supporters have solid visions and plans -- and the flexibility to reshape them with new ideas and energy. Great minds from Silicon Valley, Southern California, Sacramento, Washington, Detroit and around the world see the opportunity and are willing to invest their time and money with us. Our media visibility and marketing momentum fuel this quick start.

DO YOU FIT THE PROFILE? We're looking for successful entrepreneurs and businesspeople for our management team and as advisors. We seek people who've pulled together business plans, teams and investors and have built companies. Chemistry with our working group and a passion for solutions that benefit the planet also count. (We're also looking for people with experience in the automotive industry and the supply chain.) Come along for the ride of your life!

July 5, 2005 posted at calcars.org/jobs.html



Tempted? DON'T JUST THINK ABOUT IT! Look at calcars.org and tell us about yourself. Contact CalCars' Founder Felix Kramer fkramer@calcars.org 650.520.5555