

SAIL-backed cleantech startups to secure \$3B in government funds

May 26, 2009 - Exclusive By Emma Ritch, Cleantech Group

VCs are changing their roles as the government becomes a big factor in determining which cleantech startups succeed, says Tom Cain, a partner at SAIL Venture Partners.

Cleantech investors are adapting to a new reality, says Tom Cain, a partner at [SAIL Venture Partners](#).

The changes go far beyond the immediate impact of the economic crisis. Venture capitalists are finding that they're now being asked to guide the placement of massive amounts of new capital coming from the U.S. and local governments, Cain said.

SAIL dove headfirst into the space. The investment firm's portfolio companies in the cleantech sector are in the process of securing \$3 billion in government grants and loan guarantees to commercialize their technologies.

The lessons can also be applied across the globe as governments seek to place \$400 billion of economic stimulus allocations in clean technologies such as renewable energy, improved electric grids and cleaner cars (see [Cleantech investment drops but stimulus funds soar in 1Q09](#)).

Cain shared the details of SAIL's success with the Cleantech Group:



Tom Cain says VCs should create partnerships with governments to guide stimulus spending.

VC investment was down across the board in 1Q09, but less so in cleantech (see [More deals, fewer dollars for cleantech in '09?](#)). How has the economic downturn changed venture capital for cleantech in particular?

It has crushed venture capital investing because firms now have to reserve 4X to 5X their initial investment for follow-on support versus the traditional 2X. This takes half the available money away from new investment. On the other hand, we are flooded with investing opportunities at reasonable valuations as all other forms of capital have become scarce. It is the best possible time to invest and gain extraordinary returns for LPs (see [VCs evolve role in cleantech](#)).

Why are the investment mechanisms different for cleantech?

Cleantech typically requires factories. This means capital requirements and time frames are much greater than typical IT, pharm, and nanotech. Two of our companies are starting the construction of factories costing over \$1 billion each. Cleantech has become a social and governmental priority world-wide, and thus funding through federal, state and local programs is a huge competitive element.

Those cleantech companies that can gain access to governmental funding have a capital efficiency advantage to over those without that can make all the difference in ultimate success.

So how do state and federal governments decide between companies to award the grants and loans?

They define logical programs with great detail due diligence. But in the end, they are ill-equipped to make such a determination, and their track records are usually pretty bad. When highly paid, career VCs with enormous resources can't seem to do better than two out of 10 investments working out, how are governments suppose to do better?

I think they have two choices: One is a shotgun approach, spreading meaningful money to all credible applicants. Two is to align with some professional investors in the sector and follow their lead. This alignment needs to be formal and continuing—based on trust, teamwork and results.

What's the role of startup companies in this decision making process?

Startups simply don't have the time or resources to work through government bureaucracy and typical strings attached. Well-intentioned government programs can exhaust startups and, in fact, kill them. So VCs have the opportunity to play a critical role in bridging government programs with breakthrough startups the economy needs. SAIL has been fortunate in that its portfolio companies are poised to receive almost \$3 billion in various government support programs.

You're talking about the creation of a new role for cleantech VCs to play in their portfolio companies?

Yes. It is a new kind of VC organization that makes partnership with government a core competency and asset. Risk taking and government agencies simply don't go together. Yet this is what is being attempted. Perhaps looking back, it will be determined as a waste of time, but at SAIL we are betting otherwise.

How did SAIL help its companies secure those government dollars?

Each is a different story. In one case, a joint venture was formed with a respected Fortune 100 company that had the resources to work through the processes. In another case, the startup called the local university and hired grant writers. In a third case, SAIL used its advisers and internal staff to make the applications. With federal applications you typically need a state to advocate with legislators confirming the importance of federal funding.

Has SAIL acted alone in helping them, or have other VC firms that you work with begun doing the same?

We know that some of our brethren are also working hard, but Obama acted so fast, I think it took everyone by surprise and many are still in denial. It appears **Rockport** is doing a good job helping their companies (see **Solyndra nabs \$535M DOE loan guarantee for 500 MW factory**).

Can you tell me about the companies that are securing government dollars?

Dow Kokam has secured government support for building 2 gigawatts of lithium ion batteries focused on vehicles (see **Stealthy Khosla-backed battery startup driving economic makeover?**). **Xtreme Power** is on the path of 3 gigawatts of bi-polar lead acid batteries focused on utilities (see **Finding new frontiers in energy investing**). Flex Energy has thermal oxidizers front ending micro turbines to convert ultralow methane concentrations into electricity. **Enerpulse** has a revolutionary new sparkplug that dramatically increases fuel economy without any changes to the engine. **SNTech** an direct replacement electric motor for the nations 1.2 billion annual motors used by HVAC and white goods, saving half the electricity used currently. **Oryxe Energy** has CARB- (California Air Resources Board) and TCEQ- (Texas Commission on Environmental Quality) approved low cost fuel additives that dramatically reduce pollution in engines and improve efficiency in utility and refinery burners.

How much have they raised from the government, versus private investors? What form did the money come in?

Two forms: Grants and guarantees. The grants total several hundred million and the guarantees are in the billions.

What is about these companies that's driving the government support? What do Kokam and Xtreme have in common, other than batteries?

Actually very little. There are several giant battery markets and we don't believe any single chemistry can deliver the performance and economics to prevail in more than one. Automotive markets are very sensitive to weight, energy density and safety; while utility markets are more sensitive to efficiency, cost, and long life. Kokam is a technology we found in Korea while Xtreme was in Kyle, Texas. Both are technologies that have been continually worked on for over a decade and have revenues in the millions.

How are the availability of the government funds changing the cleantech sector?

If you compete with other cleantech companies that have government grants and loan programs, you're at a disadvantage. It's a warning if you don't do this, even if you're the better company, it could cause you to be noncompetitive. Government is going to be a big determinant which startups become the winners; this is very different.

So the downside is that the best companies may not get funded because the government doesn't necessarily have the time or expertise to investigate all the options?

Exactly. Government time and expertise can only back so many. If there are 35 battery companies, the DOE can only back and evaluate maybe seven. The rest are at a significant disadvantage. If they really have a better solution, they may be advised to be acquired by one of those who secured the funding.

What kind of time frame are these decisions being made in? The next year?

So, by the end of summer I think you will see most announcements from the first wave of Obama money being decided. People need to do this now. In six months the decisions will be made. In many cases the checks will be sent by the end of September. There is likely to be further programs, but politics is an uncertain business. You never know.

Some of the announcements have been for loan guarantees, while others have been for grants. Which is more valuable from a company and investor perspective?

They go hand in hand, and they both have a function. Grants smaller than loan guarantees but nondilutive and don't have to be paid back, so it's the least expensive form of equity that entrepreneurs will ever have. Rules have changed to that grant money can now be used as the equity portion of loan guarantee programs. The loan guarantee programs under Bush administration were focused on repayment while those of Obama are on economic stimulus. Very different drivers. It is important to understand the nature of the program being applied for as those reviewing the applications agenda's are critical.

Have you seen government investment like this before?

At the end of World War II, the US did this in Japan and Germany. We did it again after the Korea war in South Korea. My guess is that we are in the middle of such in Iraq. The lead government in cleantech is certainly Germany. They have been at this for almost a decade, trying to catalyze their country away from dependence on imported oil. Now you see governments proactive everywhere. Israel, Korea, India, Brazil, China, Japan, Canada and even Mexico are all be proactive. This is both amazing an wonderful.

When successful, the very balance of power in the world will change as peoples may no longer be so highly differentiated by energy cost and availability.