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Cleantechs' lab space charters new real estate territory

By Jackie Noblett

Real estate is abundant in this economic downturn, but the perfect space to grow a cleantech company? That's proving to be a bit more difficult, according to those looking for space in the industry.

The problem with finding a home for a cleantech company is that — unlike biotechnology companies or more traditional tech firms, such as software — the space needs for companies tackling energy issues vary widely depending on what a company is trying to do.

Many alternative energy firms are finding it easiest to locate a large commercial building in the suburbs and then spend precious capital making it their own.

"The nice thing about the Boston area is, there are a lot of big boxes," says Craig Lund, director of business development for 1366 Technologies Inc., a Lexington company developing more efficient solar panels. "The question is, what do you need to do to retrofit them to meet your needs?"

The specific requirements for the shell of a cleantech lab are nothing extravagant: large power, heating and cooling throughput; some wet lab or cleanroom capabilities; and in some cases, hazardous-materials handling and storage. Within that shell, however, it gets far more specialized.

"The generalities about cleantech companies don't actually translate into their real estate needs being general. What they really need for the most part is a blank space with a usable and adaptable infrastructure," said **Marc Margulies**, founding principal of Boston architecture firm **Margulies Perruzzi Architects**, who designed the interior for Nuvera Fuel Cell Inc.'s headquarters and production facility in Billerica.

Yet finding the right mix of those desires in relatively small space can be difficult, especially inside Boston or Cambridge which has a great deal of biological lab space but limited quantities of other lab facilities.

"It's getting more difficult to find quality spaces at a good price," particularly spaces less than 15,000-square-feet, said Dan Cordeau, an executive vice president at real estate firm Jones Lang LaSalle.



1366 Technologies' Craig Lund said his company had to retrofit a facility for its needs. 1366 was one of the cleantech companies that didn't fit a standard lab space model.

Cordeau said while some companies that have strong credit can broker a good deal that includes significant allowances for interior retrofits, many startups do not have the purchasing power to front those upgrades.

1366 did much of its early-stage lab work at MIT under the watch of professor Ely Sachs, a 1366 co-founder, before venturing out into its own 25,000-square-foot space in October 2008 after receiving a \$12.4 million Series A round of funding in March. That financial support made the move possible.

"It's harder to justify that upfront investment on a facility until you have a glimmer that the technology is going to work out," Lund said.

The choice to locate in Lexington was based on the community's interest in housing a solar company as well as the type of lease they could negotiate. Indeed, many clean tech firms are finding the suburbs have the best mix of industrial facilities, location and price knowing that the space will need some work.

In the design of Nuvera's headquarters, Margulies had to incorporate separate facilities for office, lab research and small-scale production of the company's hydrogen fuel cells and recharging stations into a building that hadn't been designed to host all three. When it broke ground in 2006, Nuvera estimated it would spend about \$15 million renovating the space to its needs, which included over 50,000-square-feet of light manufacturing space. It completed the move a year later.

"There wasn't really much in the space that they were able to use right away," Margulies said.

Some cleantech companies, such as ones in the biofuels space, have needs quite similar to biotechs. Therefore, finding space for large-scale research and development has been relatively easy.

When Qteros Inc. left its small space in Hadley and moved into its 25,000-square-foot headquarters and research lab in Marlborough eight months ago, company executives were more focused on being closer to Boston than on the building itself. Yet finding an area amenable to the company's next step — a pilot biofuels manufacturing facility — is a bit more complicated. The plant Qteros hopes to build in western Massachusetts would have a similar footprint to its Westborough headquarters, but the site selection and permitting processes are much more complicated, said William Frey, CEO of the cellulosic ethanol developer.

"What we're doing is part bioprocessing and part fermentation, so our requirements are not dissimilar to any other bioprocessing company. It really came down to where are the facilities that had wet lab space as well as location," said Frey.

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