



Nth Power and Fraunhofer Center for Sustainable Energy Systems Release Report on Innovating for Better Buildings

SAN FRANCISCO, California -- November 2nd, 2009 -- Nth Power, LLC, the veteran cleantech venture capital firm, and the Fraunhofer Center for Sustainable Energy Systems (CSE) released a detailed report on the massive market opportunities for innovation within the US building construction industry. The detailed report gives a comprehensive description of the market dynamics creating the opportunities and explains the contrarian view that the current residential and commercial market meltdowns are a positive 'springboard for innovation.' The report also includes a guide for entrepreneurs interested in pursuing these large, yet challenging opportunities, as well as an overview of some exciting emerging technologies. The white paper is freely available on both the Nth Power and Fraunhofer CSE websites.

"'Innovating for Better Buildings' represents an integrated look at the building technology space from both a practical investor's point of view and an applied technological perspective. I think the result is a thoughtful assessment of the technologies and how they can impact new building construction today, making a convincing, market-driven case for deploying new building technology solutions," said Nolan Browne, Managing Director of the CSE.

Nth Power and Fraunhofer believe that today there is a 'perfect storm' of forces within the US building construction industry leading to a revolutionary shift in attitude towards innovation. These forces are encouraging more stakeholder collaboration, better technology integration, and improved construction approaches that will enable cost effective, high-performance building technologies to be deployed on a massive scale. The authors believe that the recent market downturn is accelerating these changes. As construction slows down, those involved within the construction process have more time to respond to the growing demand for better performing buildings by focusing on better practices and technologies. "For the first time in the industry's history, stakeholders are differentiating themselves by working more collaboratively to better embrace innovation," said Brian Walsh, co-author and Senior Associate at Nth Power.

"We have been investing in what we call Better Buildings for many years and feel that the market dynamics are very compelling from a venture capital perspective," said Bryant Tong, Managing Director of Nth Power. "Even though the timing is good, there still can be many difficulties in the commercialization and disruption process, given the complexity of the industry's decision making process. We felt a need to share our views, filters and experiences as a guide for entrepreneurs," said Tong.

The report provides a historical perspective of the industry's broken innovation process that has consistently produced buildings that are severe energy wasters. As a consequence, today's US residential and commercial buildings are responsible for more greenhouse gas emissions than

every country except for China and the US itself. The good news is that much of this waste can be eliminated with readily available technologies and best practices. "The industry's newfound appetite for high-performance buildings together with the wide portfolio of emerging technologies makes this an exciting time for builders and entrepreneurs," said Bryan Urban, co-author and Project Manager at the Fraunhofer CSE.

Underperforming or poorly integrated subsystems are a major source of inefficiency in buildings - if all but one system is efficient, a building can still perform terribly. Moving away from a component view to a whole-systems view is critical. Co-author Sebastian Herkel, of the German-based Fraunhofer Institute for Solar Energy Systems, brings perspectives from deep experience demonstrating highly integrated, innovative technology in real buildings - a key step toward developing acceptance in this risk-averse industry.

Christine Ervin, the first president & CEO of the U.S. Green Building Council and former U.S. Assistant Secretary of Energy, had this to say: "If innovation is the single most important ingredient for accelerating a vibrant sustainable economy-and it is-here is the analysis for unlocking what innovation means for the U.S. building industry. Nth Power and the Fraunhofer Institute provide a first-of-its-kind, venture capital perspective on how to capitalize on the sweep of 'better building' opportunities looming right here, right now."

Major construction companies are now recognizing and embracing these changes. Gino J. Gemignani, Jr., Sr. Vice President of the Whiting-Turner Contracting Company says: "'Innovating for Better Buildings' is an excellent report on the status of the U.S. Building Industry with a focus on the dramatic and exciting changes to come. The paper is an informative and comprehensive review of the building industry in the United States with a compelling argument for radical changes in the design, construction, and maintenance of American buildings. If you are part of that industry, this white paper is a 'must read!'"

The authors hope that this report stimulates discussion and furthers innovation activities within the industry.

About Nth Power

Nth Power, LLC (www.nthpower.com) is a venture capital firm based in San Francisco and is the first and most experienced venture capital firm funding promising startup companies in the Cleantech space. With \$420 million under management in four funds and an investment record that begins in 1997, Nth Power is widely known and well regarded as the driving force behind many of the most successful Cleantech companies. The firm's leading history in Cleantech-related venture capital is the result of a deep network of entrepreneurs, universities and research institutions, unmatched corporate relationships and the backing of institutional capital. Nth Power has a concerted effort to be the leading investor within Better Buildings. For more information, contact Bryant Tong, Managing Director, and Brian Walsh, Senior Associate, at betterbuildings@nthpower.com.

About the Fraunhofer Center for Sustainable Energy Systems

The Fraunhofer Center for Sustainable Energy Systems (CSE) is one of Fraunhofer USA's six applied research laboratories. Fraunhofer USA, an American 501(c)3 non-profit research organization, operates labs in sustainable energy, biotechnology, computer security, manufacturing innovation, laser technology, and industrial coatings. The CSE is dedicated to serving the research needs of the sustainable energy industry, helping both established industry players and newcomers alike to move clean energy technologies from the laboratory to the production line. The center, established with grants from the Massachusetts Technology Collaborative, National Grid and other private donors specializes in solar technologies, building efficiency technologies and systems, and energy device prototyping.



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