Solar fab2farm(TM) Model Offers a Blueprint for Affordable Clean Energy and Local Economic Development

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SANTA CLARA, Calif.--(BUSINESS WIRE)--Sep. 10, 2009-- To help meet the world's critical need for renewable energy, Applied Materials, Inc. has developed an innovative fab2farm ™ business model for solar deployment designed to bring cost-effective, utility-scale solar photovoltaic (PV) power generation capability to local areas and stimulate economic development. The fab2farm model represents a complete regional ecosystem, bringing together communities, utilities and solar panel manufacturers to drive down the cost of solar electricity, create green jobs, and spur local economic activity -- while delivering a supply of clean energy for decades to come.

Key to the fab2farm model is a locally-sited solar panel factory built by a solar module manufacturer using Applied's revolutionary SunFab™ thin film production line. The SunFab line produces the world's largest and most powerful solar PV panels, which are optimally suited for utility-owned solar farms. Since electricity generation is sited for distribution near load centers, a solar farm can be quickly deployed without the need for extensive, costly transmission lines. This utility-scale solar farm would not only generate cost-competitive, clean, renewable energy for the community, it can help the utility avoid up to 170,000 metric tons of CO_2 emissions per year.

"Applied's fab2farm model unlocks a low-risk, cost-effective opportunity to integrate solar PV electricity into a community's energy portfolio," said John Antone, vice president, Energy and Environmental Solutions, Applied Materials. "This approach enables a significant share of solar PV investment dollars to remain in the community, in contrast to fossil fuel based power generation sources. It would create a regional economic engine generating a steady supply of skilled jobs and a path to achieving the lowest installed solar energy cost."

The Applied SunFab production line, a cornerstone of the fab2farm model, is designed to produce 80MW of solar panels per year or enough to power 35,000 homes during peak energy use hours. Applied estimates that this factory could generate more than 2,500 jobs and account for $400-$500 million of local economic activity per year.

"Optimized for utility-scale applications, Applied's SunFab line produces the world's most powerful thin film modules with approximately six times the output of conventional glass solar panels," said Dr. Randhir Thakur, senior vice president and general manager of Applied's Display and SunFab Solar Products Group. "With an installed cost of less than $4.00/watt, SunFab panels cost less per unit area to manufacture and fully install than conventional glass panels. Over time, manufacturing efficiencies are expected to reduce these costs even further – while the price of electricity from conventional sources is forecast to continually rise."

To quantify the energy, economic and environmental impact the fab2farm model can have on your own community, visit http://fab2farm.appliedmaterials.com.

Applied Materials, Inc. (Nasdaq:AMAT) is the global leader in Nanomanufacturing Technology™ solutions with a broad portfolio of innovative equipment, service and software products for the fabrication of semiconductor chips, flat panel displays, solar photovoltaic cells, flexible electronics and energy efficient glass. At Applied Materials, we apply Nanomanufacturing Technology to improve the way people live. Learn more at www.appliedmaterials.com.

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