



EVENT MEMO

September 4, 2009 – Fremont, California Breaking ground on Solyndra's 240 MW Thin-Film Manufacturing Facility

Not for release –

Contains procurement-sensitive information about selected companies

"It's not enough to just rescue the economy, we have to rebuild it better – and that work begins with giving American manufacturers the resources to produce the clean, green energy technology that will be the foundation of our 21st century economy"

Vice-President Biden, August 14 2009

I. Event Headline

Today, we are finalizing a \$535 million loan guarantee to Solyndra, helping this pioneering company break ground on a solar panel manufacturing plant in Fremont, California. The Solyndra announcement highlights the key goals of the Recovery Act: we are not simply rebuilding the economy, but, in the Vice-President's word's, "making it better."

Solyndra's facility proves that we will reduce our greenhouse gas emissions while creating good green jobs that put Americans back to work. The facility, Fab2, will have the capacity to produce 230 MW of thin-film solar panels every year – enough to power 430,000 homes with clean, renewable electricity.¹ Solyndra plans to expand Fab2 into a 500MW facility and, over the factory's lifetime, produce up to 15GW of solar panels – enough to avoid 300 million metric tons of carbon dioxide.² At the same time, Solyndra estimates the new factory will create 3,000 construction jobs, and eventually employ 1,000 full-time high-tech workers.³ More American workers will install Solyndra's solar panels on rooftops around the country.

In a rapidly growing global solar industry, these loans are helping American manufacturers regain a leading position. Americans invented the modern solar panel and, as late as 1995, produced nearly half the solar panels made in the world. Since then, countries like China have grown and innovated faster, while our market share has fallen to less than 10 percent. Astonishingly, Solyndra's 230MW factory is equivalent to a third of last year's solar manufacturing capacity.⁴ This young company already boasts a \$2B backlog for its state-of-the-art solar panels, which are attracting both domestic and global customers.

The loan underscores the government's role in competitive and high growth clean energy industries. Solyndra is the first of many competitive DOE loans, helping America's best and brightest companies grow at a time private markets are less willing to take risks on innovative technologies. Government dollars are financing a portion of Solyndra's project, and giving private investors the confidence to fund an additional \$198 million in equity. [Could mention

¹ EIA estimates the average US home consumes 936 kWh a year; assuming 20% capacity factor

² Solyndra estimate over Fab 2's lifetime. More conservative estimate is 270,000 T CO₂ avoided per year from 230MW.

³ The CEA \$92,000 per job method would result in nearly 8,000 jobs for the full \$733B project.

³ Navigant estimates US PV manufacturing capacity was 678 MW in 2008.

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DOE grants help fund the even riskier early stage R&D] Together, public and private dollars are supporting technologies that make clean solar energy cheaper. Through these and other investments, we are making “clean energy,” in the President’s words, “become the profitable kind of energy.”

II. Program and Company Description

- ◆ Solyndra is the first loan guarantee awarded by the DOE Loan Guarantee Program Office, created by Title XVII of the Energy Policy Act of 2005
- ◆ DOE houses three loan programs that will leverage over \$100B of clean energy investment
 - The 1703 program targets advanced technologies in renewables, efficiency transmission, nuclear, and advanced coal
 - The 1705 program, created by the Recovery Act, targets commercial renewable energy generation, transmission, and innovative biofuels projects
 - The Advanced Technology Vehicle Manufacturing Program (ATVM) supports up to \$25 billion loans to fuel efficient cars and component makers
- ◆ In addition to the loan programs, the Recovery Act supports solar power through
 - Cash grants that offset 30% of the cost of new solar generating equipment
 - \$2.4B in manufacturing tax credits
 - \$51.5 million for new R&D projects at national labs, companies, and universities.
 - \$10M for the Solar America Cities program, supporting innovative urban efforts to deploy solar
- ◆ Based in northern California, Solyndra designs and manufactures solar PV systems targeting the approximately 30 billion square feet of commercial real estate space in the United States. Solyndra aims to build low cost solar panels that produce more energy per square foot than their competitors. Because Solyndra’s thin-film solar panels are cylindrical, their 360 degree surface can capture more sunlight than a traditional flat panel. Solyndra lightweight panels are also designed to save customers significantly on installation and maintenance.
- ◆ Solyndra claims to have a \$2B backlog in contracts. Its customers include Long-term contracts with [REDACTED] Special partnering agreements with [REDACTED]

III. Talking points

Making clean energy affordable - We are not simply growing an industry, but helping “clean energy become,” in the President’s words, “the profitable kind of energy.” Solyndra’s compelling technology aims to produce more solar energy at lower cost than its competitors. DOE solar programs aims for “grid parity,” meaning energy from the sun will cost the same as traditional fossil fuel energy.



Good green jobs – Solyndra estimates its new facility will create 3,000 construction and 1,000 full time jobs. Many of these high tech jobs will employ highly skilled workers to innovate new solar technologies and operate the most complex equipment in Solyndra’s fabrication facility. Additionally, the equipment Solyndra produces will employ American workers to install solar PV systems on rooftops around the country.

Supporting the whole value chain -- By supporting groundbreaking R&D, manufacturing, and market penetration and adoption – the federal government is pursuing a holistic strategy to support a competitive US solar industry. Programs target:

- R&D: The DOE’s Technology Pathway Partnerships projects and Supply Chain and Cross-cutting Technologies programs target groundbreaking research. Small pioneering companies are encouraged to pursue potentially disruptive technologies.
- Market adoption: Federal tax incentives help offset up to 30 percent of the cost of new solar equipment, helping make solar more affordable to customers today. In addition, the DOE’s SETP Market Transformation aims to build consumer awareness, innovative financing, simpler permitting, and a workforce ready to for a robust solar industry. The Solar America Cities program is a comprehensive city-wide approach to increase to use of solar energy.
- Manufacturing: The DOE Loan Guarantee Program is the flagship vehicle to support manufacturing of solar equipment. In addition, DOE is planning programs to better coordinate the research and workforce of a robust solar industry. This is similar to the successful SEMATECH program to coordinate development of the American semiconductor industry.

IV. Quotes on clean energy and green manufacturing

“But to truly transform our economy, protect our security, and save our planet from the ravages of climate change, we need to ultimately make clean, renewable energy the profitable kind of energy.”
- President Obama, first address to Congress

“There’s no longer a question about whether the jobs in industries of the 21st Century will be centered around clean renewable energy. The only question is which country will create these jobs and these industries and I want that country to be the United States of America”
- President Obama, June 25 2009

“It’s not enough to just rescue the economy, we have to rebuild it better – and that work begins with giving American manufacturers the resources to produce the clean, green energy technology that will be the foundation of our 21st century economy”
- Vice-President Biden, August 14 2009

V. Notes for event

The Vice President or Secretary could highlight a worker laid off by the semiconductor industry, but rehired by Solyndra



- ◆ Solyndra is likely employing recently laid off workers from the semiconductor industry – companies like Applied Materials recently laid off workers in the Bay Area.

The Secretary could mention the DOE's proposed solar manufacturing consortium

- ◆ The Solar Program's SETP PV Manufacturing program will release a Request for Information on next week. The initiative aims to create a robust U.S. PV manufacturing technology, infrastructure and supply chain base, by helping coordinate American companies, universities, and labs. It is modeled after the semiconductor industry's successful SEMATECH consortium.

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