

**THE DEPARTMENT OF ENERGY**  
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**DOE Offers Support for Innovative Manufacturing Plant That Will Produce  
High Quality Solar Silicon at Low Cost**

*Project to Create Significant Solar Manufacturing Efficiencies and is  
Expected to Generate Over 2,000 Jobs*

**Washington D.C.** – U.S. Energy Secretary Steven Chu today announced the offer of a conditional commitment for a \$275 million loan guarantee to Calisolar Inc. to commercialize its innovative solar silicon manufacturing process. Calisolar’s innovative process should produce silicon for use in solar cells at less than half the cost of traditional polysilicon purification processes, which will reduce the overall cost of solar modules and panels. At full production, the manufacturing plant is expected to produce 16,000 metric tons (MT) of solar silicon annually, equivalent to more than two gigawatts of solar power generation per year. The project will be built in three phases of 5,333 MT capacity each, and is expected to be located in a former General Motors stamping plant in Ontario, Richland County, Ohio. Calisolar estimates that the facility will generate, at its peak, nearly 1,100 permanent jobs and up to 1,000 construction jobs.

“This innovative manufacturing process offers significant competitive advantages that will help the US to out-innovate and out-compete our global competitors,” said Secretary Chu. “This project is part of our commitment to supporting important innovations that create jobs, strengthen our manufacturing base and position the nation as a global solar leader.”

The project will manufacture solar silicon from lower-cost metallurgical grade silicon feedstock that is then upgraded using Calisolar’s proprietary silicon purification process. The company’s unique process uses significantly less energy to produce solar silicon that performs as well as polysilicon products made from more expensive and energy-intensive traditional processes, with capital equipment and construction costs approximately 1/6<sup>th</sup> that of traditional polysilicon plants.

Calisolar is helping achieve the goals of the SunShot Initiative by lowering the cost of their solar cells through the use of less pure silicon, the raw material for solar cells. Their vertically integrated process, from raw materials processing all the way through solar cell production, uses lower cost (50 percent less expensive) lower quality materials while maintaining high efficiency devices. This work was supported by the Department through funding for UC Berkeley and through \$3 million from the PV Incubator Program, which leveraged \$6.6 million in private industry cost share and was run through the National Renewable Energy Laboratory (NREL).

The Department of Energy's Loan Programs Office administers three separate programs: the Title XVII Section 1703 and Section 1705 loan guarantee programs, and the Advanced Technology Vehicle Manufacturing (ATVM) loan program. The loan guarantee programs support the deployment of commercial technologies along with innovative technologies that avoid, reduce, or sequester greenhouse gas emissions, while ATVM supports the development of advanced vehicle technologies. Under all three programs, DOE has issued loans, loan guarantees or offered conditional commitments for loan guarantees totaling over \$33 billion to support 34 clean energy projects across the U.S. DOE has also issued conditional commitments or loan guarantees to support numerous other projects, including four of the world's largest solar generation facilities, two geothermal projects, the world's largest wind farm and the nation's first new nuclear power plant in three decades. For more information, please visit <http://www.lpo.energy.gov>.

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