

Advanced Energy Job Stimulus Program

A key component of Ohio's program to create new jobs and encourage economic development, the \$150 million Advanced Energy Job Stimulus Program is designed to support new technology projects on a fast track toward commercialization. As part of the \$1.57 billion job stimulus package signed into law by Governor Ted Strickland in June 2008, the goal of the program is to employ Ohio workers in the advanced energy jobs of the future. The \$150 million advanced energy funding (over three years) seeks to increase the development, production and use of advanced energy technologies in the state, and is divided into two parts:

- \$66 million for clean coal technology projects administered through OAQDA's Ohio Coal Development Office (OCDO) (reviewed by staff, outside reviewers and the Technical Advisory Committee and approved by OAQDA); and
- \$84 million for non-coal-related projects in three \$28 million annual appropriations administered by OAQDA (reviewed by staff and outside reviewers, the Development Finance Advisory Council, approved by OAQDA and brought before Controlling Board for final approval).

**Project Name:**

Xunlight – Amorphous Silicon Thin Film PV Cell Production

Project Location:

Toledo, Ohio (Lucas County)

Applicant Information:

Xunlight Corporation is a venture-backed advanced technology company that specializes in the development of high-performance, flexible and lightweight solar modules. Founded in 2002, Xunlight was established to commercialize solar technology developed by one of its co-founders at his University of Toledo Thin Film Silicon Photovoltaic Laboratory. The amorphous silicon solar modules produced by Xunlight are safe, highly efficient and can be used in a variety of ways. Their flexibility and light weight allows their implementation in small-to large-scale energy generation strategies for numerous applications.

Project Description:

Xunlight Corporation is poised to participate in the solar power generation industry as a manufacturer of amorphous silicon thin-film photovoltaic modules. The company has completed development of the necessary production processes for its technology and is now in the process of expanding from its 2 megawatt pilot production line to a 25 megawatt commercial production lines. Xunlight already has served several customers who have signed either definitive supply agreements or letters of intent for the purchase of photovoltaic (PV) modules. Xunlight's primary customers consist of integrated PV installers, commercial roofing companies and photovoltaic distributors.



Xunlight co-founders Dr. Xunming Deng (left) and Dr. Liwei Xu, holding the company's flexible, lightweight XR-36 solar module.



Xunlight's coated amorphous silicon solar cell material off of the front-end production line.

Funding Request (adjusted): \$20 million

Approved Funding: \$4,060,000 loan over five years; \$250,000 of the original principal balance will be forgiven if job commitment is met within three years

Total Project Investment: \$14,060,000

Use of Stimulus Program Funds: To further develop solar technology and expand manufacturing capacity

Jobs Created: 181 new full-time jobs

Jobs Retained: 43 jobs retained

Type of Jobs Created: Business professionals, engineers, scientists, machine builders, electricians, operators, skilled labor

Qualifying Technology Categories: Solar, Energy Efficiency

Product to be Manufactured: Amorphous silicon thin-film photovoltaic modules

Industry Sector Customers: Photovoltaic installers, commercial roofing companies, photovoltaic distributors

Industry Sector Suppliers: Metals, specialized industrial glasses, specialized polymers, machinery, manufacturing



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