

**UNIVERSITY OF CENTRAL FLORIDA**  
***PV Manufacturing Data Base and Florida Applications***

**PI:** David Block, Robert Reedy

**Description:** The overall goal of this project is to assist in the stimulation of the development of a photovoltaic (PV) manufacturing industry in Florida. The project objective is to conduct a review of the national and international PV manufacturing data for the purposes of establishing industry practices and an industry data base. The data base will then be available to assist Florida in establishing PV manufacturing firm(s).

**Budget:** \$81,120

**Universities:** UCF/FSEC

### **Progress Summary**

This project has established a data base for assisting in the establishment of PV manufacturing facilities in Florida. The following information has been determined:

#### **Worldwide Statistics**

- In 2008, the worldwide PV industry produced 6,941 M2 and experienced its strongest growth – an increase of 87%.
- Europe leads in world production with 1909 M2 at 27.5%, closely followed by China with 1848 Mw at 26%.
- The U.S. only accounts for 412 Mw or 5.9%.
- The U.S. installed 6.4% of world installations in 2008.
- The U.S. has only one manufacturer in the top 15 world companies – First Solar is at number 2.

#### **U.S. Statistics**

- The top seven U.S. manufacturers supply 96% of the U.S. total.
- The two largest U.S. producers use thin film technologies and these producers account for 65% of the U.S.'s capacity – First Solar and United Solar.
- For the seven U.S. manufacturers, 2 are located in Arizona, and one each in Maryland, Massachusetts, Michigan and New Mexico.
- California leads in PV installations with 178.7 Mw or 62% of the U.S. total followed by New Jersey with 22.5 Mw or 8% of total.
- Because of four installations completed or started in 2009, Florida is now ranked second in installations. Thus, in six months, Florida went from last to second in the U.S.

## **Key Florida Results**

- Two PV installations by FPL in DeSoto County (25 Mw) and south of Kennedy Space Center (1.1 Mw) are now completed and in operation.
- 140 M2 of Florida PV installations are now in planning for the next 5 years – GRU, FMEA, OUC, and Lakeland.
- Three PV manufacturers now have or have proposed Florida locations – Advanced Solar Photonics, Mustang Vacuum Systems, and Blue Sky Solar.
- Willard and Kelsey withdrew Florida as a possible location and stayed in Ohio.
- Spire of Boston has established an equipment manufacturing plant in St. Petersburg, FL

Update: The database will be updated once the manufacturing date for 2009 is published.