U.S. Photovoltaic Manufacturing Consortium

The Department of Energy's SunShot Initiative is focused on reducing the cost of solar energy and driving to grid parity by 2020, advancing large-scale US solar manufacturing, boosting American competitiveness, and driving national deployment of solar energy. To help achieve these objectives, the DOE has recently chartered SEMATECH to form an industry-led consortium, PVMC, to help address the industry's key challenges. Based on the successful SEMATECH model which transformed the way the semiconductor industry works and collaborates, PVMC is dedicated to accelerating the development, commercialization, and manufacturing of next-generation solar photovoltaic (PV) systems.

PVMC's goal is to increase the performance and speed the implementation of PV technologies - especially copper indium gallium selenide (CIGS) thin film technologies - while improving manufacturing processes and driving down costs. Key components of PVMC include:

- **Collaborative R&D programs** to address common, pre-competitive infrastructure needs in CIGS technology and manufacturing
- **Advanced Manufacturing Development Facilities** to speed development and scale-up of CIGS materials, processes, equipment, facilities, and products
- **CIGS roadmap and standards** to align and streamline industry research, development, and manufacturing
- **cSi metrology and new wafering methodologies**
- **Support to the industry** in testing and reliability, balance of system, technology commercialization, and workforce development
- **Providing a collaborative U.S. platform** for industry, universities, national labs, and DOE partners to share challenges, solutions, and drive commercialization of next generations PV technologies.

With leadership from SEMATECH, the College of Nanoscale Science and Engineering (CNSE) of the University at Albany, University of Central Florida, DOE, and support and participation from over 80 companies and organizations from throughout the solar community (including UT Austin, UT San Antonio, and UT Arlington), and $300 million in projected state, federal, and industry funding, PVMC is well positioned to provide significant, positive and sustainable impact on the growth of the U.S. PV industry.