

First-ever US roadmap for CIGS solar technologies

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The U.S. Photovoltaic Manufacturing Consortium (PVMC), an industry-led collaboration headquartered at SUNY's College of Nanoscale Science and Engineering (CNSE) in New York that is designed to accelerate next-generation solar photovoltaic (PV) technologies, has released the first-ever U.S. CIGS PV Roadmap reports.

"Photovoltaics and especially thin-film PV are again at a tipping point," said Larry Kazmerski, co-chair of the U.S. CIGS PV Roadmap. "We want PV to be a substantial part of the world's energy portfolio and our efforts with this roadmap are aimed to help make CIGS [thin films](#) a significant part of that solar success."

"In building on the [innovation strategy](#) of Governor Andrew Cuomo that is establishing New York as a hub for solar energy technologies and companies, we engaged over 75 partner firms and 100 industry experts to develop a 10-year projection in the first-ever U.S. CIGS PV roadmap," said Dr. Pradeep Halder, PVMC Chief Operating and Technology Officer and CNSE Vice President for Clean Energy Programs. "This blueprint identifies the critical challenges for CIGS PV manufacturing, applications for sustainable innovation, and technical developments that will serve our members and stakeholders, and enable a competitive U.S. solar industry amid the [global marketplace](#)."

Spearheaded by SEMATECH and CNSE as part of the U.S. Department of Energy's (DOE) SunShot Initiative, PVMC is targeting a reduction in the total installed cost of [solar energy systems](#) by 75 percent over the

next decade. The CIGS PV Roadmap aims to provide a congruent plan for the national CIGS industry, including module and systems manufacturers, suppliers, and end-users, that will identify common challenges and define the areas of technical developments needed to sustain and advance a competitive U.S. photovoltaic industry.

The annual roadmap entitled "2013 U.S. CIGS PV Roadmap Reports," identifies the technology challenges to attain projected module cost and performance targets over the next 10 years. The various reports, based on the latest industry analysis, advance the effort for achieving the SunShot initiative target.

The roadmap addresses six focus areas relevant to the entire industry, including roll-to-roll, rigid glass, metrology, modules and packaging, substrates and materials, and reliability/certification/test. Each section outlines the current status and critical challenges for each technology, discusses the role of industry standards for CIGS, and potential areas of innovation for the pre-competitive domain.

As the primary sponsor of the effort, PVMC provides the resources for managing and coordinating the roadmap activities. Members of the CIGS PV Roadmap represent all areas of the PV industry, including module producers and integrators, equipment suppliers, materials and metrology tools, end-users, and the research community.

On July 11, during the Third Annual U.S. CIGS PV Roadmap Public Forum held during Intersolar North America 2013, roadmap working group leaders will present summaries of these reports and announce plans for a revised 2014 roadmap. The Forum, sponsored by PVMC and hosted by SEMI, will encourage public debate and invite new members to join the various teams to develop the next assortment of reports.

To download the U.S. CIGS PV Roadmap reports, please visit

www.uspvmc.org/roadmap/roadmap_reports.html.

For more information about the Third Annual U.S. CIGS PV Roadmap Public Forum, visit www.uspvmc.org/events_PVMC.html.

Provided by College of Nanoscale Science and Engineering

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