SAM for India: A Tool for Understanding Solar Deployment Barriers and Costs (SEI-2)

A joint India-U.S. research consortium funded under the *Joint Clean Energy Research & Development Center (JCERDC)*

Scientific Achievement:

SAM for India builds on the existing, well-known System Advisor Model (SAM) platform and provides a practical financial modeling tool for the Indian context. The model and corresponding introductory webinar are publicly available—a resource both within and outside of the SERIIUS consortium, with dozens of model downloads and webinar views to date.
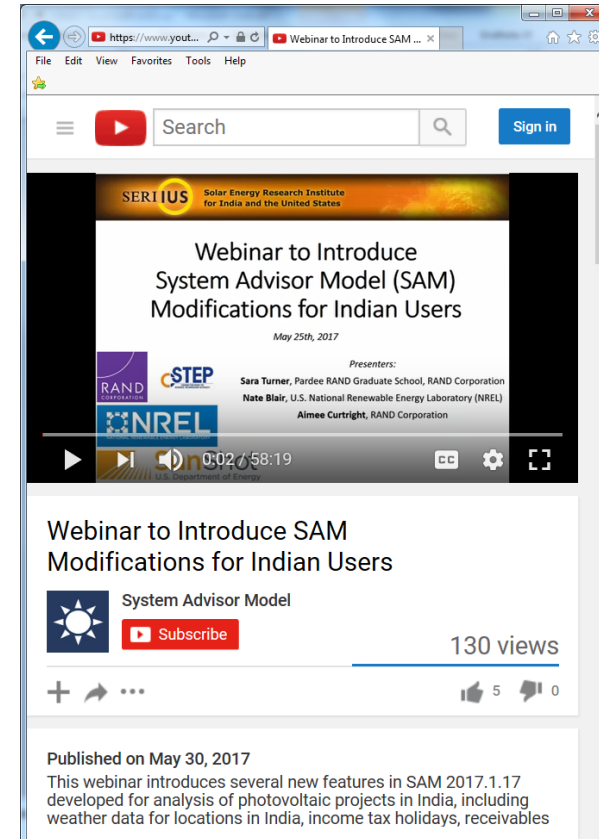
Significance and Impact:

SAM for India enables researchers, policymakers, and solar project developers in India to understand site-specific costs for solar technology deployment. The tool can now be used to model tradeoffs in R&D investments, technology choices, and policy scenarios.

Research Details:

RAND, NREL, and CSTEP each contributed in distinct ways:
- Initial scoping and research made possible by MAGEEP fellowship, received by RAND graduate student S. Turner, and CSTEP host in India.
- RAND and CSTEP provided substance and context for model calibration, including extensive interviews with stakeholders in India by RAND. Key modifications were made to financial assumptions in SAM.
- NREL's SAM platform enabled rapid progress and deployment, and NREL staff provided technical expertise in modeling.

Screenshot of SAM for India Webinar on YouTube. As of Aug. 2017, 130 users had viewed webinar, and dozens attended live webinar in May 2017.

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