

Key Issues and Current International Activities in the Field of Solar Resource Assessment

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Abstract

The field of Solar Resource Assessment has evolved over the past two decades from simply producing site-specific data bases and maps of the spatial distribution of the solar resource to support siting decisions. Now, with the growth of solar energy technologies worldwide, the solar resource community needs to be able to develop comprehensive and accurate information on high frequency as well as long term temporal characteristics of the resource at any given location, and the ability to predict these resource characteristics into the future. This talk summarizes results from several major ongoing international solar resource assessment programs, such as the International Energy Agency's "Solar Resource Assessment and Forecasting" Task, the World Bank ESMAP Resource Mapping program, and the IRENA Global Atlas. The talk will summarize the critical issues and R&D priorities for developing solar resource data and expertise in managing the growth of large-scale solar penetrations into our energy system.