Small scale rooftop solar PV systems for rural electrification in India

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ABSTRACT
Small scale rooftop solar PV systems are becoming more convenient forms of energy providers for the houses located in the rural villages. This is due to the advantages, abundant availability of solar energy, and favorable rural electrification polices in India. But still India has not achieved the 100% rural electrification and the reason for it might be technical, social, or financial. Hence, this paper presents the possibilities of equipping solar PV systems for rural community house by providing the PV plant design as per the electrical load, roof area required, energy performance, and cost aspects. Benefits of using solar energy that transforms the rural life into light were also highlighted.

KEYWORDS:
Solar energy, Solar photovoltaic system, small scale rooftop solar, rural electrification status, RE in India.