

# Solar PV tree design: A review

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## ABSTRACT

Sunlight is often deemed as the only abundant and truly “free” energy resource. Among all the different techniques available to harness solar energy, the most popular and mature technology is the photovoltaic conversion of sunlight into electricity. Despite its merits, solar PV technology has issues with the land requirement (especially in urban areas), capture efficiency and public perception (due to the absence of pleasing aesthetics). The concept of a solar tree is capable of addressing these problems effectively with elegance. In this paper an attempt is made to review the components of the solar tree and its design. The various commercial designs are also discussed along with applications of the solar tree. The paper also addresses the challenges involved with this technology and suggests future research direction.

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