

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 2, Issue 3, December 2022

Solar Panel Heat Emission and its Environmental Impact

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Abstract: As the world increasingly turns to solar energy as a viable solution to combat climate change, the environmental consequences of solar panel heat emission demand attention. This paper evaluates the implications of heat emission from solar panels, including localized warming, reduced efficiency, and heightened water consumption in solar thermal systems. Examining various mitigation strategies such as the use of reflective panels, elevated installation, vegetation incorporation, and water-efficient cooling systems, this study underscores the significance of managing the environmental impacts of solar panel heat emission. It emphasizes the need for further research on the local climate and air quality effects, the repercussions for flora and fauna, and the advancement of efficient and sustainable cooling systems. By elucidating the multifaceted impacts and proposing effective mitigation measures, this research contributes to the sustainable deployment of solar energy, promoting its continued role as an eco-friendly energy source in the fight against climate change.

Keywords: solar energy

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