

## Enhancement of the output of solar panels by means of reflectors

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The electricity output from a solar panel permanently fixed to a structure is below its rated output most of the time. In this study, the effectiveness of using reflectors in order to harness the full potential electricity output from the solar panel was investigated.

Tests were done using variety of materials commonly available in the market. These include aluminum sheets, tin foils, aluminum foils, reflecting foils used in roof insulation, plane glass and plane mirrors. The effectiveness of the reflectors were evaluated taking into consideration of the cost, durability in an outdoor environment and the deterioration of reflectivity.

The results of the comparison of materials show that the plane glass mirror is the best reflector in terms of the enhancement of the output and durability. The backside of the mirror should be sealed to protect it from rain damage.

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