

# Techno-Commercial Analysis of Subsidized Domestic 3kW Solar Generation Plant

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**Abstract:** *This study analyses the techno-commercial feasibility of installing a 3-kilowatt-peak (kWp) photovoltaic (PV) system in two different places in Indore. In this paper we have calculated Generation, Payback time, Savings, effect of degradation in efficiency of Solar Panels. Our results show that the 3-kWp PV system can generate 100% of electricity consumed by a typical residential household in Indore with average of 300 sunny days. The payback period of this system would be approximately 3-4 years. The PV systems with 3 kWp capacity is the most feasible solution to generate enough amount of electricity for most households in Indore city.*

**Keywords:** Techno-Commercial, Domestic, Solar Generation, Payback Period.

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