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Insight of fundamental solar power in India

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Abstract : It is well said that, "Necessity drives the technology". Many research works have been experimented on conventional alternatives of solar energy, which can prove to be a better, friendly and cost-effective option for the environment. The solar technologies hold significant promise for the present and the future generation of the world, and particularly for India, which has a high solar insolation of 4.5–5 kWh/meter²/day as per the data collected from The Ministry of New and Renewable Energy, Government of India, for about 300 sunny days per year, as cited in Wikipedia. Being commercially viable and technologically mature, solar products have existed on earth for many years. However, the market share of solar energy fails to fulfill expectations of people. Hence, keeping in mind the way a customer thinks while buying a product, it can be said that if cost of solar products is minimized, along with the uninterrupted maintenance services offered by companies, the willingness of people to opt for solar products would have been more. However, this is not the case in the present. Hence, to provide a clear picture of basic solar technological knowledge, a detailed view has been provided in this piece of research review work.

Keywords: Solar cells, modules, HOMER software, solar insolation.

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