SOLAR TECHNOLOGY

IMPLEMENTATION MODEL IN THE PHILIPPINES

A Dissertation

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MARLUNA L. URUBIO

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ABSTRACT

This study investigated the performance of existing solar photovoltaic installations in the country in terms of functionality, reliability, efficiency, maintainability and safety. The purpose is to identify the technical factors, socio-cultural factors, economic factors and political factors which greatly influence the performance of these installations.

Results of this study revealed that there are no significant differences in the performance of solar photovoltaic installations in the 19 barangays in Region 6 in terms of functionality, reliability, maintainability and safety, as an alternative source of energy. However, efficiency was found to have significant differences between and amongst the different solar photovoltaic installations.

This study concludes that a solar photovoltaic installation has big potential in a community with the following factors: an environment of peace and order, proper solar photovoltaic technology orientation, sufficient funding for maintenance and operation, and available local technical expert. With these findings, a decision model for implementing solar photovoltaic technology was formulated.

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