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Feasibility study of acquiring a photovoltaic system at Tshwane University of Technology, Arcadia Campus

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Power system across the world is in transition from centralized to distributed systems. In South Africa, the life time cost of residential and commercial Photovoltaic (PV) systems is less than the country's grid power today. In this study, therefore, the feasibility of acquiring a PV asset at Tshwane University of Technology (TUT) Arcadia campus was conducted. For this, the assessment of the energy consumption of a building as well as the solar potential was done by using PVSyst commercial software. The anticipated energy generation, return on investment, and benefits of using solar energy was determined. A summary of the impact of integrating PV system into campus grid will be presented. The spin-off of this exercise will be the stimulation of the PV research and development at the institution. It is anticipated that the facility will be used for future training of students to assist the growing PV industry in South Africa.

Apply to be considered for a student award (Yes / No)?

No

Level for award (Hons, MSc, PhD, N/A)?

N/A

Would you like to submit a short paper for the Conference Proceedings (Yes / No)?

Yes

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