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CSIR's single axis tracking solar PV plant performance analysis

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ABSTRACT:

South Africa faces a two-fold energy challenge where it struggles to meet its electricity demand, while being one of the largest emitters of greenhouse gases in Africa. This sparks the urgent need for expert intervention, with focus placed on expanding the energy system in order to meet demand while becoming less carbon intensive. This paper describes CSIR's initiative in addressing these concerns. This is achieved by making the campus energy autonomous by supplying power from solar, wind and biogas. This paper focuses on performance analysis of the first solar PV plant to be implemented on campus.