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## Demand and supply site approaches for energy conversion from macadamia nut shells waste and castor cake.

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The increasing macadamia production in the Southern Africa and the need to leverage on existing indigenous plants like castor seeds for medicinal applications have led to the production on high amount of processing and agricultural wastes. A significant increase in demand for alternate energy sources (renewable electricity, biofuel and gas etc..) has stressed on the negative environmental impact caused by the conventional fossil fuel sources (coal, petroleum, and natural gas). Observed negative impacts on the environment of producing energy from waste should be minimised for an optimum environmental preservation. Demand site approach or/and supply site approach would be the employed strategy tools to ensure an optimum balance between producing the required energy and minimising the unwanted waste. Collected data from secondary sources and conducted experiment work will be discussed while the minimisation of the generated waste as the maximisation of energy produced will be ensured.

#### Apply to be<br> considered for a student <br> &nbsp; award (Yes / No)?

No

#### Level for award<br>&nbsp;(Hons, MSc, <br> &nbsp; PhD, N/A)?

N/A

### Main supervisor (name and email)<br>and his / her institution

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

Full

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