

A REVIEW OF RENEWABLE ENERGY TECHNOLOGIES FOR SUSTAINABLE DEVELOPMENT: CASE STUDY-SOUTH AFRICA

Hagreaves Kumba^{1*} and Oludolapo Akanni Olanrewaju²

^{1*}Department of Industrial Engineering
Durban University of Technology, South Africa
hagreaves3@gmail.com

²Department of Industrial Engineering
Durban University of Technology, South Africa
OludolapoO@dut.ac.za

ABSTRACT

The judicious use of energy in South Africa is a key to sustainable development however the rising demand of energy has started to affect the existing power generation plants. South Africa must move towards a more sustainable energy future, addressing the imminent energy crisis in the country, also to mitigate issues of carbon dioxide emissions and climate change by providing clean energy to the society. Unfortunately, South Africa is lagging in the adoption of new energy technologies. Population growth versus energy use has become a problem and the societies have started to overwhelm the existing energy sources resulting in lack of energy hence poor sustainable development. This paper chronicles renewable energy technologies in South Africa and investigates the barriers to the implementation. The article will provide a detailed analysis of the existing energy sector in South Africa and a forecast for demand growth in other renewable energy technologies. An extensive review is presented which addresses current energy use and feasibility of new energy technologies. A review of some articles was also used to find the links between local economic development and employment creation through renewable energy resources provision.

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* Corresponding author

