Can Kenya supply energy with 100% renewable sources?

Access to new resource related to solving human and social problems added to PMWL



Resource provided by Daisy Ogutu

28 February 2020 – Kisumu, Kenya – Access to a new resource has been added to the PM World Library (PMWL) related to solving global human and social problems. The new resource is titled "Can Kenya supply energy with 100% renewable sources?" by Eliud Kiprop, Nicholas Maundu and Kenichi Matsui (2018) and can be found online on Researchgate.

Kenya's vision 2030 identifies energy and electricity as key elements of sustained economic growth and transformation. According to the report, a substantial proportion of renewable energy resources remain unexploited. Energy demand is rising fast in Kenya as a result of rapid population and economic growth. The energy sector faces frequent power outages, low access in the rural areas and over-reliance on imported fossil fuels for power generation. The current energy policy emphasizes fossil fuels, but Kenya's vision 2030 aims to enhance renewable energy generation and supply. Thus, the Kenya National Climate Change Action calls for investment in a low carbon climate resilient pathway.

The report states that, Kenya is endowed with hydro, geothermal, wind, solar and biomass sources of energy. Geothermal, hydro and wind sources in Kenya are estimated to contribute up to 10,000MW, 4,750MW and 30,000MW respectively. The promotion and adoption of renewable energy can expedite the government's action plan of providing universal access to electric power by 2020. In so doing, the country can lead other African countries in green energy policies. The report findings are that the proportion of geothermal capacity increased from 14.8% in 2013 to 28.5% in 2017 which significantly reduced dependence on hydropower plants. According to the government's energy plan, the contribution of biomass in Kenya's future energy mix will be less than 1%. The focus is thus on hydropower, geothermal, wind and solar energy sources. Kenya has only harnessed a small fraction of the renewable sources of energy even though it has sufficient sources to meet the entire power demand projected for 2030 and beyond.

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For PMWL Post

Kiprop, E., Maundu, N., and Matsui, K. (2018): *Can Kenya supply energy with 100% renewable sources?* A conference paper published on researchgate in November 2018. Available online at https://www.researchgate.net/publication/328925970 Can Kenya Supply Energy With 100 Ren ewable_Sources/link/5dcb5f7ca6fdcc575043fdcd/download (Ogutu)

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