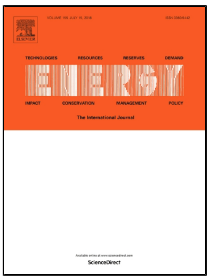
Accepted Manuscript



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PII:	S0360-5442(18)31260-X
DOI:	10.1016/j.energy.2018.06.195
Reference:	EGY 13237
To appear in:	*Energy*
Received Date:	29 January 2018
Accepted Date:	27 June 2018

Please cite this article as: Samuel Asumadu Sarkodie, Philip Kofi Adom, Determinants of Energy Consumption in Kenya: A NIPALS Approach, *Energy* (2018), doi: 10.1016/j.energy.2018.06.195

Determinants of Energy Consumption in Kenya: A NIPALS Approach

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Abstract

This study examines the drivers of aggregate energy consumption, fossil fuel and electricity consumption in Kenya using the nonlinear iterative partial least squares (NIPALS) method. The results show the importance of price, population density, urbanization, and renewable energies from hydro sources in promoting energy demand reductions. On the contrary, higher income and climate change are likely to cause a backfire in energy consumption. Though population growth increases the consumption of other energy types, it shows opposite effect on electricity consumption, which is possibly explained as a substitution to other energy types in the presence of a fragile electrical system. These results have important implications for the design of energy conservation and efficiency policies in Kenya.

Keywords: Energy consumption; Fossil fuel; Electricity; NIPALS; Kenya

JEL Classification : Q470; Q560; Q430