Abstract

The widespread usage of clean and sustainable energy sources is leading to a significant transformation of the world's energy systems. Over-reliance on only the national grid energy system has made institutions fail to sustain energy systems. The council is only connected to the national grid electricity supply system, with diesel generators as the only alternative, which is unhealthy and unsafe. Surprisingly, even with such alternatives, power shortages have persisted despite government efforts to provide a solution to the shortages by installing numerous off-grid systems. Due to such a situation, the council would construct a sustainable energy system as a remedy. Thus, the purpose of this study was to establish critical success factors influencing the implementation of a sustainable energy system at the Inter-University Council of East Africa (IUCEA) Head Quarters, Kampala-Uganda. A cross-sectional survey design was used; a sample size of 84 participants was selected. Questionnaire survey and interview methods were utilized. The study found that the most significant (p < 0.05) critical factors in the implementation of sustainable energy in institutions are; the use of innovative technologies and infrastructure, the use of efficient zero emissions for heating and cooling, integration of renewable energy use in the existing buildings, building and renovating in an energy-efficient way, integrating regional energy systems, improving energy efficiency in the buildings, enhanced zero emission power technologies, energy efficient equipment in place and stakeholder empowerment in energy management. This study concludes that institutions like; the Inter-University Council of East Africa (IUCEA) need to clearly state policies and actions of energy management. The roles and responsibilities of each member have to be clearly stated while capturing the activities involved in energy conservation, energy security and energy efficiency.