

Review

A Review of Energy Communities in Sub-Saharan Africa as a Transition Pathway to Energy Democracy

Amollo Ambole ^{1,*}, Kweku Koranteng ², Peris Njoroge ¹ and Douglas Logedi Luhangala ¹

¹ Institute of Climate Change and Adaptation, University of Nairobi, 30197-00100 Nairobi, Kenya; perisnjoroge764@gmail.com (P.N.); douglaslogedi@gmail.com (D.L.L.)

² School of Public Leadership, Stellenbosch University, Stellenbosch 7602, South Africa; kweku.koranteng@gmail.com

* Correspondence: lambole@uonbi.ac.ke

Abstract: Energy communities have received considerable attention in the Global North, especially in Europe, due to their potential for achieving sustainable energy transitions. In Sub-Saharan Africa (SSA), energy communities have received less attention partly due to the nascent energy systems in many emerging SSA states. In this paper, we argue that these nascent energy systems offer an opportunity to co-create energy communities that can tackle the energy access challenges faced by most SSA countries. To understand how such energy communities are realised in the sub-region, we undertake a systematic review of research on energy communities in 46 SSA countries. Our findings show that only a few energy projects exhibit the conventional characteristics of energy communities; In most of these projects, local communities are inadequately resourced to institute and manage their own projects. We thus look to stakeholder engagement approaches to propose co-design as a strategy for strengthening energy communities in SSA. We further embed our co-design proposal in energy democracy thinking to argue that energy communities can be a pathway towards equity and energy justice in SSA. We conclude that energy communities can indeed contribute to improving energy access in Africa, but they need an enabling policy environment to foster their growth and sustainability.

Keywords: energy communities; energy democracy; stakeholder engagement; Sub-Saharan Africa; transitions



Citation: Ambole, A.; Koranteng, K.; Njoroge, P.; Luhangala, D.L. A Review of Energy Communities in Sub-Saharan Africa as a Transition Pathway to Energy Democracy. *Sustainability* **2021**, *13*, 2128. <https://doi.org/10.3390/su13042128>

Received: 5 November 2020

Accepted: 4 January 2021

Published: 17 February 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

1.1. Energy Communities and Energy Transitions

Access to clean, affordable, and sustainable energy is a requirement for developing low-emission economies that can support resilient communities [1]. Local communities are now seen as a conduit for developing these low-emission economies through decentralised production and consumption of renewable energy. As such, proponents of the sustainability narrative are pushing for democratic governance systems that gives local communities greater participation and decision-making roles in energy production [1,2]. These shifts in energy governance are happening mostly in the Global North, especially in Europe, where communities are empowered to mobilise resources and engage multiple stakeholders to exploit alternative energy pathways [3–5]. These alternative approaches are largely driven by the normative goals to reduce the carbon emissions resulting from the high use of non-renewables in the Global North [6–8]. However, in the Global South, especially in SSA, the energy transition conversation is simultaneously advocating for a switch to low-carbon economies, while increasing energy access to the millions of energy-poor citizens [9,10].

Recent studies on energy communities are characterized by distinct renewable community energy projects that have received considerable attention in countries such as the United Kingdom, Netherlands, and Germany [11,12]. For example, in Germany, approximately 22% of the installed renewable electricity capacity is owned by sustainable energy