## ECOWAS and the prevalence of energy-inefficient lighting technologies: Any hope of achieving SDG 7.3?

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## Abstract

A region-adaptive hierarchical framework for realizing Sustainable Development Goal 7.3 is proposed in this paper, using Nigeria as a case study for strategy adoption and adaptation. In 2013, the Economic Community of West African States (ECOWAS) rolled out strategic plans to phase out incandescent lamps by 2020, as a critical component essential to realizing the SDG 7 by 2030. However, at the expiration of the 2020 deadline, this ambition has not materialized. Current regulatory indicators for sustainable energy shared by the World Bank and the International Energy Agency (IEA) indicated poor-to-average performances among member states, which suggests the need to adopt ingenious strategies to increase electricity access and accelerate energy efficiency by 2030. In this paper, we systematically reviewed literatures on past campaigns in ECOWAS member states and inferentially call for a revisit of the campaign to phase out incandescent bulbs as a critical component for achieving energy efficiency. The paper also pinpoints some domain factors that are militating against the realization of SDG 7 in Nigeria. We proposed an all-inclusive top-down hierarchical framework which involve all relevant stakeholders (national, state and local governments, delineated wards in local governments, street representatives and household heads), civil society organizations, and educational institutions, for convergence, efficient collaboration, synergy and achievement of goals.

Keywords: ECOWAS, energy efficiency, incandescent light bulb, Nigeria, SDG7