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Abstract

Off-grid solar systems provide clean and affordable energy. Adoption of off-grid solar energy is becoming increasingly popular in Kenya as a source of renewable energy, with an estimated 6 million people now using off-grid solar power systems. However, the rising off-grid solar systems technology uptake comes with a growing amount of solar e-waste, which can have harmful environmental and health effects if not managed properly. Current data on the exact amount of solar e-waste being generated in Kenya is unavailable and this amount will continue to rise with the expiry of many of these off-grid solar systems lifespans. This study through stakeholder’s workshop engagement and document analysis approaches, established that the country has robust general waste policy, legal and institutional framework but there is no specific policies and regulations on off grid-solar electronic waste management, just like it is the case in many developing countries. In addition, there is a lack of awareness on hazardous nature of off-grid solar systems e-waste to both consumers and institutions of governance. Furthermore, there is little enforcement of the general regulations in addition to inadequate management infrastructures. This calls for development of effective off-grid solar e-waste management policies and regulations within the backdrop of the rising uptake of off-grid solar energy systems in Kenya.


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