

country is a major constraint. Considering the increasing awareness of the environmental pollution orchestrated by the excessive combustion of fossil fuels, it is desirable for Nigeria to begin the transition to sustainable renewable energy. The current research and development initiatives with respect to bioelectricity programs and investment are highly insufficient.

Therefore, aggressive policy and financial support mechanisms including the required cutting-edge technological sustainability assessment must be established. In addition, prolific life cycle and exergy assessment should be more closely examined for the long-term viability of bioelectricity in support of the nation's growing economy. To encourage investment in the biomass energy generation industry, the technological deficiencies must be addressed from a wider angle. In order to develop technical knowledge based on reliable advanced technology and lower the initial and ongoing costs of biomass energy plants, stakeholders' active participation in the bioenergy program is especially important. It is necessary to intensify biomass research activities being conducted by several institutions and special measures must be taken to lower the expenses associated the overall cost of bioelectricity in the country.

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