

MAXIMIZING SOLAR MINI GRIDS FOR DEVELOPMENT



by



Community Research
and Development Centre (CREDC)



Project Approach/ Solutions

SDG 7 targets achieving access to clean, affordable and sustainable energy for all by 2030



The current population of Nigeria is 228,742,002 as of Thursday, June 6, 2024, based on the Worldometer elaboration of the latest United Nations data



Utility companies in Nigeria are having difficulties generating sufficient electricity to meet ever growing energy demand for households and businesses



Many depend on the use of fossil fuel powered generators to generate energy leading to emission of greenhouse gases



Nigeria is blessed with abundant renewable energy resources. The country is located within the sunshine belt, close to the Equator



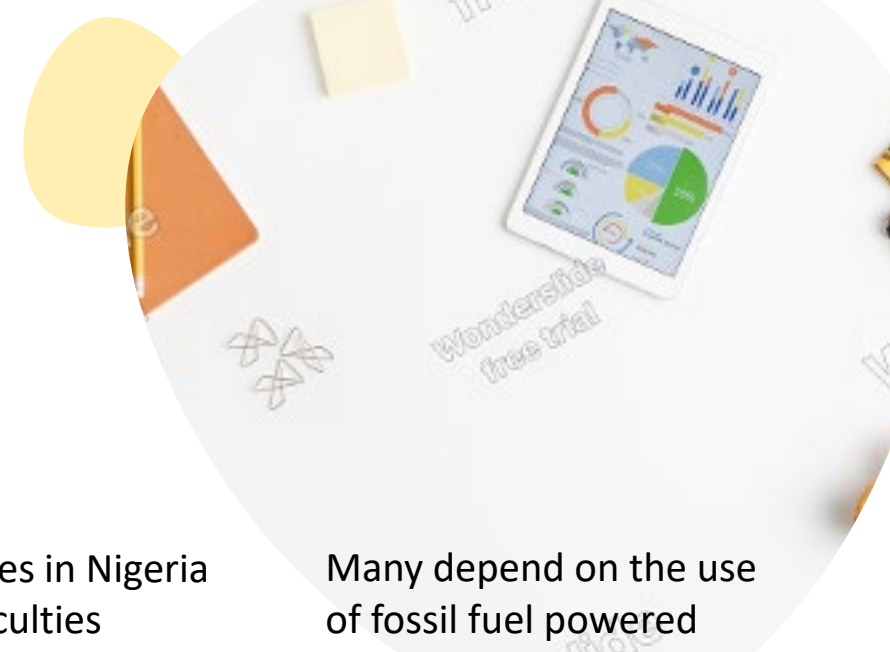
To reduce greenhouse gas emissions into the atmosphere resulting from self-help energy generation and at the same time improve the socio-economic status ...



Potential end users are educated on how best to achieve energy efficiency and a select few trained on maintaining the grid facility



Climate change is mitigated as greenhouse gas emissions from fossil fuel powered generators are reduced and the socio-economic status of end users is improved as ...



IMPACT KEY RESULTS



Lower costs of granting energy access in remote locations. (Umon Island Scenario)



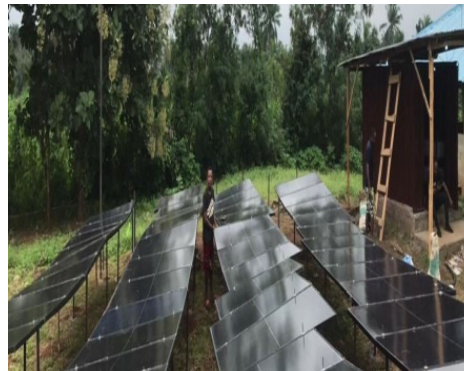
Improved community services (schools, health centers, religious buildings) with clean, sustainable energy access



Capacity building of endusers cutting across men, women and youths as regards energy efficient best practices



Federal govt educates policymakers, leaders, and residents on mini grid regulations



LESSONS LEARNT



Build up knowledge and make information about mini-grids available and accessible at local level



Training dedicated local team of semi skilled technicians who are indigenes for mini-grid operations and maintenance



The ability of rural customers to pay for electricity is most times lower. This poses challenges to the developer's ability to maintain and operate ...



Mini grids may be cleaner sources of energy but not cheaper sources for rural or semi rural underserved or unserved communities



No matter the business model developed, there need to be room for non profit model if SDG 7 Access to clean and affordable energy target is ...

RECOMMENDATIONS / POLICY ACTIONS



Third tier level (local government) participation/ involvement should be encouraged more in granting energy access using solar PV mini grid for rural underserved or unserved communities



Regulations enacted and enforced on proper disposal of solar panels, batteries, inverters etc



More training/capacity building for policy makers and stake holders on the provisions of mini grid regulations in Nigeria as a solution to solving our energy issues

