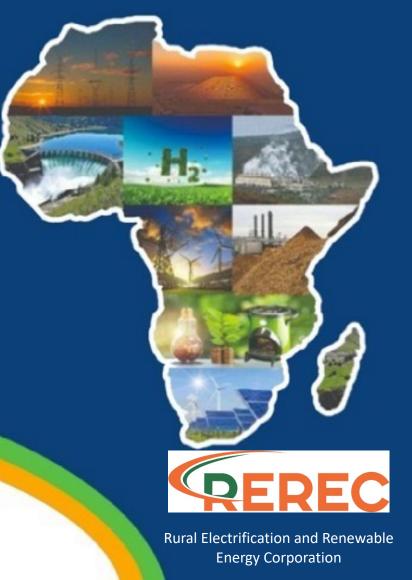
2030 - 300GW



Renewable energy contribution to future skills and job creation in Kenya

Presented by: Fred Ishugah General Manager, Renewable Energy Research & Development Directorate



Introduction



- Rural Electrification and Renewable Energy Corporation (REREC) has a broader mandate of spearheading Kenya's renewable energy drive and implementation of rural electrification projects provided under the Energy act 2019.
- The corporation focuses on promotion and development of renewable energy technologies to spur sustainable economic and social development.
- The corporation focusses to deliver renewable energy products and services to underserved; often challenging commercially to extend grid or deliver energy services due to population density, movement culture of communities, etc.

Projects portfolio of RE solutions



- ✓ Solar for Schools
 - ➤ Electrification of public Primary (over 4700) & Secondary Schools (over 50).
 - Aims to promote digital learning programs in off-grid areas.
- ✓ Street lighting and High Masts GOK / Equalization / Matching funds.
 - > This aims to improve security and spur local economic activities.
- ✓ Mini-grids stations GOK / KEMP / KOSAP
 - ✓ Developed 26 mini-grids in different counties across the country, this has boosted the economic growth of the communities there.
 - ✓ Diesel power stations (20) / hybridization
- ✓ 54.6 MW Garissa solar power plant
 - ✓ The Garissa Solar Plant is the largest grid connected solar power plant in East & Central Africa
 - ✓ Currently this project is contributing about 2% of the national energy mix.
- ✓ Small Wind Power Generation systems and biogas digesters for schools
 - ✓ Pilot projects to showcase use of locally available renewable energy resources
- ✓ Solar water pumping KOSAP

50MW Garissa Solar Power Plant



• Generated power is evacuated to the national grid, Contributing to 2% of the power generation in Kenya





Solar Mini-Grids

• REREC has implemented 26 no 60 kW Solar minigrid plants in off-grid counties of Wajir, Turkana, Marsabit, Mandera and Garissa.



Energy Centres



There are 16 Energy Centres in the Country with expectation to establish 31 new Energy Centres. The Energy Centre supports in:

- Promotion, development, adoption and wider use of renewable sources of energy.
- Demonstration, training and technical support on the application of various renewable energy technologies and energy conservation techniques.
- Dissemination of information on renewable energy through extension.
- Undertaking periodical customer satisfaction surveys.
- Undertaking applied research and development.

Renewable Energy Research



In order to fulfil its mandate, the Corporation conducts three types of research in renewable energy:-

- 1. Resource assessment
- 2. Renewable energy technologies/Innovations
- 3. Renewable energy adoption/penetration levels

Impact of REREC Projects

- Opening up of off-grid areas for business, tourism, communication, employment opportunities among others
- Improvement of education standards
- Improvement of health facilities
- Enhanced communication
- Enabled mechanised farming for enhanced food security
- Enabled employment opportunities
- Enhanced security





Renewable energy sector in Kenya



- In kenya, RE sector has created more than 144,000 direct workers between the years of 2019 2021
- With accelerated deployment of RE, the Country has witnessed a spur in economic growth with many opportunities for human welfare.
- There has been improvement in womens' direct employment with their numbers doubling.
- The country has provided an enabling environment for acceleration of RE including sufficient market capacity, training & education that assist in building skilled & versatile workforce

Renewable Energy & Employment



- Kenya has seen an increase in the deployment of renewable energy ranging from public to private sector creating employment opportunities
- In Kenya, 43% of the jobs in Renewable Energy are skilled.
- This has been enabled by the increase in number of institutions offering Renewable Energy Courses, providing skilled workforce for the growing industry.
- The government has also put in place certifications for the various technologies to ensure the RE service providers are well equipped.

Renewable Energy & Employment cont...1



- In addition to this, the government provides a 1 year internship program to most graduates providing them a practical learning opportunity, REREC partakes in this initiative creating a large pool of well trained graduates in the Renewable Energy Sector
- REREC projects have empowered women, youth and persons with disability through the Access to Government Procurement Opportunities (AGPO) where REREC sets 30% of its procurement spent every financial year towards this cause.
- This has encouraged many youth & women to venture into the RE sector
- REREC also promotes local RE sector in the open tendering process of RE projects, increasing employment opportunities for local contractors

Renewable Energy & Employment cont...2

- With the increased uptake of Renewable Energy, the Country has seen continued increase in employment opportunities ranging from engineers to solar technicians
- The market industry has also increased with RE equipment/materials being readily availed to public in the remote areas, this has been enabled by various government incentives such as RE equipment being non VATable
- As the RE industry continues to grow, the Country continues to produce more skilled personell through provision of education opportunities at all levels within our institutions of higher learning.



Opportunities in Renewable Energy Sector

- Need for up skilling in matters sales, installation & after sales services
- Increase Local capacity in manufacture and installation of renewable energy technologies



Conclusion

- The future for Renewable Energy is quite promising, the increased uptake of the technology creates a wide pool of employment opportunities.
- The continued availability of the Renewable Energy courses within the country has provided skilled workforce for the already existing market.
- The government continues to provide an enabling environment for the Renewable Energy sector.





Rural Electrification and Renewable Energy Corporation