

2030 - 300GW



# Renewable energy contribution to future skills and job creation in Kenya



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



Rural Electrification and Renewable  
Energy Corporation

# 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, the 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 women's 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.



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