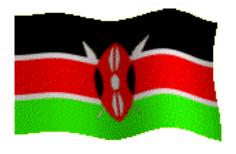
# Kenya's Renewable Energy Policy in Support of the Minigrids

### Reaching Universal Energy Access in Ghana by 2020

and

5th Mini Grid Action Learning Event and Summit21st March, 2018



### Mission & Vision



#### To facilitate provision of:

- ✓ clean,
- ✓ sustainable,
- **✓** affordable,
- **√** competitive and
- **✓** secure energy

for national development while protecting the environment ...

### Vision

... affordable, competitive quality energy

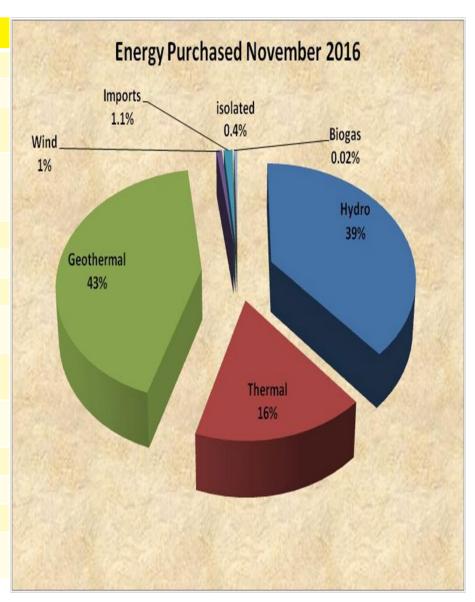
for all Kenyans ...

### Mandate of RE Directorate

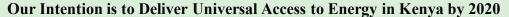
- formulation and review of RE Policy;
- Promotion and development of RE Technologies, EE&C
- Feed-in-Tariff policy formulation and review;
- Development of technical & energy performance standards, energy rating labels and regulations in collaboration with Kenya Bureau of Standards and other statutory organizations;
- Feasibility studies on renewable energy, energy efficiency & conservation projects; and
- Mobilization of funding for renewable energy, energy efficiency & conservation projects.

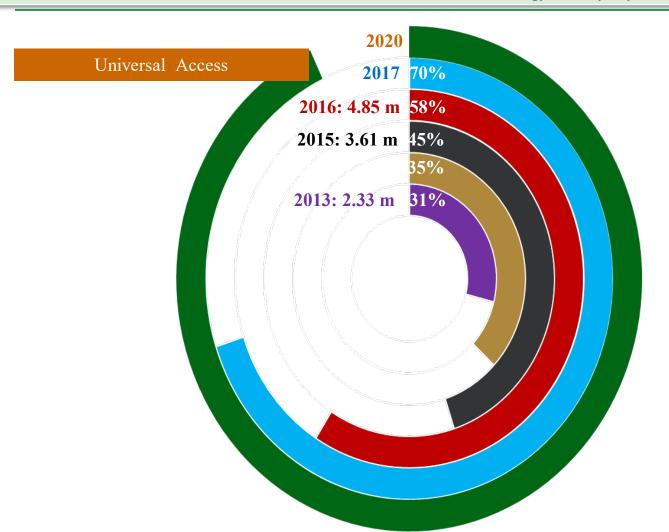
#### CURRENT GENERATION CAPACITY

|                            | Installed MW | Effective MW |
|----------------------------|--------------|--------------|
| Hydro                      | 818.7        | 797.9        |
| Geothermal                 | 672.9        | 636.9        |
| Thermal (MSD)              | 716.3        | 690.1        |
| Temporary<br>Thermal (HSD) | 0.00         | 0.00         |
| Thermal ( GT)              | 60.0         | 55.0         |
| Wind                       | 25.5         | 25.5         |
| Cogeneration               | 26           | 21.5         |
| Biogas/Biomass             | 2            | 2            |
| Interconnected<br>System   | 2,321        | 2,229        |
| Off grid thermal           | 23.18        | 18.2         |
| Off grid wind              | 0.55         | 0.20         |
| Off grid solar             | 0.569        | 0.569        |
| Imports                    | 0.000        | 0.0          |
| Total Capacity<br>MW       | 2,347        | 2,248.7      |



#### Electricity Access Growth: Customer Numbers





| Year | Population size "Million" |
|------|---------------------------|
| 2013 | 41.8                      |
| 2014 | 43.0                      |
| 2015 | 44.2                      |
| 2016 | 45.7                      |
| 2017 | 46.3                      |
| 2020 | 52.0                      |

Current connected: 6.5 million, > 71%

### Current Energy Policy & Regulatory Framework

- Sessional Paper No. 4 of 2004 on Energy;
- Energy Act, 2019;
- Feed-in-Tariff Policy 2012
- Kenya Electricity Investment Prospectus
- SE4All Investment Prospectus
- SREP

### Mini grids in Kenya

- In 2018 developed the Kenya National Electrification Strategy (KNES)
  - \* Grid Densification and intensification
  - \* Mini Grids
  - \* Stand Alone systems
- Off-grid renewable energy solutions will be key to achieve universal access to electricity.
- Private sector involvement will accelerate growth in mini-grid deployment.

6/24/2019

### Why Develop and promote Mini-Grids?

- Increase the rate of Electrification
- Involvement of private sector
  - \* Innovation
  - \* Private funds
- Use of locally available natural resources (solar and wind)
- Easily scalable as population increases or other sues come up

6/24/2019

### RE Policies, Regulations and Standards

- Feed -in-Tariff Policy, formulated in 2008 revised in 2010 and 2012. Currently under review
- Currently working in transitioning from FIT Policy to Renewable Energy Auction
- Solar PV regulations, 2012
- Energy Management Regulations, 2012
- Improved Cook stoves standards, 2014
- Domestic biogas standards, 2015
- Small hydro power standards Under development

### At the Moment:

- Energy Act assented by the President in March 2019.
- Launched the KNES in December 2018
- It is intended that renewable energy will play an increasingly important role in mini-grids.

### At the Moment:

- Mini-grids are only playing a relatively minor role in supplying electricity to Kenyan households.
- Currently 21 mini-grid stations are in operation.
- Projected investments Off-grid electrification: investments in mini-grids, solar home systems and institutional solar PV systems (KESIP, 2016)

## Example of current mini grids initiative: KOSAP Project

- Component 1: Mini-grids for Community Facilities, Enterprises, and Households
- Component 2: Standalone Solar Systems, and Clean Cooking Solutions for Households
- Component 3: Standalone Solar Systems and Solar Water Pumps for Community Facilities
- Component 4: Implementation Support and Capacity Building





### Thank you

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