

# BRIEF ON RE PROGRAMMES STATUS AND REFITS IN TANZANIA.

For International seminar on Global Renewable Energy Support Programme focusing on Globally funded feed in Tariffs.

> March 30<sup>th</sup> to 1<sup>st</sup> April, 2015. Estomih. Sawe

### RE PROGRAMS IN TANZANIA



- Tanzania has population of 45milion. Electrification rate is low at 20%, and in rural areas where 80% of its population leave only 8% are electrified. More than 80% of its energy is from unsustainable biomass resources.
- The country is endowed with diverse forms of renewable energy resources, ranging from biomass and hydropower to geothermal, solar, and wind.
- As such the country has high potential of utilizing renewable energy sources to increase energy access especially in rural areas. Yet, only about 5% of its electricity is from Renewable energy, if hydro is not considered

#### CONSTRAINTS ON RENEWABLE ENERGY DEVELOPMENT



### Institutional, Regulatory, and Legal

- Inadequate data and power planning tools to integrate renewable options;
- Policy and regulatory framework for renewable energy incomplete;
- Lack of incentive to develop mini-grid projects due to uncertainty of when the grid expansion reaches the project area;
- Unregulated biomass resource extraction from forests.

### **Knowledge and Capacity**

Limited local capacity in undertaking feasibility studies, detailed design, and construction of renewable energy power plants;

- Lack of sound forest resource information and sustainable harvesting plans;
- Lack of awareness to consumers on standards and technology choices.

#### **Economic and Financial**

- High capital cost for renewable energy projects;
- Scarcity of equity financing;
- Off-taker, resource, and currency risks for renewable energy projects;
- Un-affordability of electricity in some rural areas.

## RE POLICY, STRATEGY& PROGRAMMES

- Energy policy review is ongoing, inputs sought from key stakeholders.
- RE policy formulation TOR in place seeking finance and consultant.
- RE strategy with targets to follow, however electrification target was set at 75% by 2035 from current about 20%,
- Biomass energy strategy (BEST) in place, policy to follow.
- Legal and regulatory framework to be improved.
- Institutional framework MEM, REA, lack local level presence. A number of private and NGOs, but lack capacity at all levels and financing.

### RE programmes



- Tanzania is one of the pilot countries that were selected to prepare scaling up renewable Energy programme (SREP) Investment Plans in October 2012.
- SREP, Investment plan is in place focusing on Geothermal, mini grid and off grid solutions.
- On going REA supported mini grids and Isolated solutions.
- NGOs and SMEs as SPPs eligible 100kw to 10MW, several, initiatives, coordination could be improved.
- SE4ALL, currently, Action agenda and investment prospectus on preparation.

### **REFITS**



 New REFITS, was endorsed by the regulatory authority (EWURA), only last week to replace the previous REFIT which was based only on micro hydro.

 REFITS are now technology specific and cost reflective for projects up to 10MW,



### REFIT IN US\$/kWh

Size	Tanzania REFIT	Tanzania previous SP
MW		
<u>Microhydro</u>		
<0.1	<mark>.151</mark>	0.088-0.117
0.1-0.25	.130	0.088-0.117
0.25-2	<mark>.111</mark>	0.088-0.117
2-5	.094	0.088-0.117
5-10	<mark>.080</mark>	0.088-0.117
<u>Biomass</u>		
0.5-5	.181-154	0.088-0.117
5-10	.138	0.088-0.117
<u>Solar</u>		
<0.1	<mark>.511</mark>	0.088-0.117
0.1-0.25	<mark>.474</mark>	0.088-0.117
0.25-2	.429	0.088-0.117
2-5	<mark>.355</mark>	0.088-0.117
5-10	.324	0.088-0.117
Wind		
<0.1	.251	0.088-0.117
0.1-0.25	<mark>.210</mark>	0.088-0.117
0.25-2	.180	0.088-0.117
2-5	.159	0.088-0.117
5-10	.140	0.088-0.117



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