The Power Africa Initiative and NARUC’s Role

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Power Africa

- June 2013, Cape Town, South Africa, President Obama announced Power Africa — an initiative to increase the number of people with access to power in sub-Saharan Africa
Power Africa Goals - increase electricity access

- add more than 30,000 megawatts (MW) of cleaner, more efficient electricity generation capacity
- add 60 million new home and business connections throughout all of sub-Saharan Africa.
POWER AFRICA COUNTRIES

Kenya, Tanzania, Ethiopia, Nigeria, Ghana, and Liberia have set ambitious goals for electric power generation and have agreed to important utility and energy sector reforms.

- **Ethiopia**: 23%
- **Ghana**: 72%
- **Kenya**: 18%
- **Liberia**: 2%
- **Nigeria**: 45%
- **Tanzania**: 18%

600 million people lack access to electricity
U.S. Government Agencies

- USAID provides targeted technical assistance to advance specific development objectives; provides program management support to Power Africa
  - Transaction Advisors in all six Power Africa countries
  - Provides technical assistance to support Mission-led energy initiatives in Power Africa countries
NARUC’s Role under Power Africa

• Provide capacity building for national and regional regulators to enhance regulatory functions and frameworks
• Advance regional dialogue on energy issues to enable infrastructure investments
• Coordinate with technical assistance, transaction advisors, USAID, State Department, and others as relevant

West African partners discuss generation outputs of a wind farm with operators in Cape Verde.
NARUC’s Projects in Africa

ENSURE Cooperative Agreement under USAID

• Ongoing:
  – Nigeria Regulatory Partnership (2008-present)
  – Tanzania Regulatory Partnership (2013-present)
  – Ethiopia Regulatory Partnership (2014-present)
  – East Africa Regional Regulatory Partnership (2014-present)
  – Tariff Training (under development)

• Concluded:
  – West Africa Regional Partnership (2011-2014)
Nigeria

- Rapid economic growth: 6% annually
- Population growing by 176% to reach 440 million by 2050
- Power consumption growth: 9% - 10% annually for next decade
- Electric Power Sector Reform Act of 2005 (EPSRA 2005)
- Privatization efforts ongoing. Replacing vertically integrated monopoly
- Metered customers only 50%
- Two-thirds of all electricity generated by off-grid, private generators
Nigeria Electricity Regulatory Partnership

- Partnership launched in 2008
- Recent Results:
  - Dec 2013: Uniform System of Accounts (USoA)
  - Feb 2015: Transitional Electricity Market (TEM)
  - Legislation pending on EE
- Goals in 2015:
  - EE in tariff
  - Reliability and service quality
  - Consumer education and outreach

Commissioner Roberti (RI) discusses building energy efficiency programs with Nigeria Electricity Regulatory Commission (NERC) staff.
Tanzania

- Phasing out high cost emergency power plants
- Improve access to electricity
- Increase generation capacity to 2,780 MW (new gas and off-grid renewable)
- Increased natural gas reserves discovered
- Natural Gas Policy in 2013
- Natural Gas Act forthcoming

Tanzania Energy Regulatory Partnership

- Partnership focused on renewable energy and natural gas
- FY14 Results:
  - REFIT Peer Review August 2014
  - Input Draft Natural Gas Act (through ICC)
- FY15 Goals:
  - Support for Natural Gas Regulation Framework

ICC Bureau Chief of Public Utilities Gene Beyer explains the Illinois natural gas transmission and distribution pipeline system to EWURA staff
Ethiopia

- Interconnection rates only 25%
- Demand expected to grow by 30% per year
- Growth and Transformation Plan (GTP)
  - Expansion from 2,000Mws to 8,000Mws
  - 132,000 kms of new distribution lines
  - Increase number of customers from 2 to 4 million by 2015
- 2013 Ethiopia Energy Proclamation
- Inadequate infrastructure and maintenance causing bottlenecks

Current Generation Input Mix

- 17% Thermal
- 82% Hydroelectric

Current installed generating capacity

- 23% Connectivity to electricity
- 2,186 MW
- 5% Rural access to electricity
- 3¢ Residential tariff rate

Ethiopia Regulatory Partnership

- Partnership launch-December 2014
- FY15 Goals:
  - Support EEA with tariff design & review processes, cost allocation, uniform system of accounts, public communication strategies
  - Enhance its regulatory frameworks to encourage private investment
  - Establish regulatory procedures to support energy efficiency
  - Strengthen institutional governance

Chairman Kenney, Director Belyaneh Gizaw & Director Hailu Assefa shake hands at the launch of the Ethiopia partnership
East Africa Regional Regulatory Partnership

- Partnership Launch - October 2014, Dar Es Salaam, Tanzania
- Current Partners:
  - Ethiopia
  - Kenya
  - Tanzania
  - Independent Regulatory Board (IRB) of the Eastern Africa Power Pool (EAPP)
- FY15 anticipated new partners:
  - Burundi
  - Rwanda
  - Uganda

Commissioner Reeves (AR) discusses challenges to development of a regional market in East Africa with partners
Partnership Goals

• Recommendations on *Proposed Principles for Long Term Wheeling Service* and mutual understanding of regional challenges and priorities
• Recommendations on regional harmonization of cost-allocation of wheeling charges
• Consensus-driven reliability standards for regional trade by regulators
• Regulatory dialogue on regional market development and necessary market rules
• Enhance the IRB as an institution and increase its credibility as a regional regulatory body
West Africa Energy Regulatory Partnership (2011-2014)

Results

• Regional input through three workshops into developing *Principles of Regulating Clean Energy in the ECOWAS Region*

• Development of set of recommendations for inclusion in the ECOWAS National Renewable Energy Action Plans (NREAP) and Policies (NREP)

The draft *Principles* have filled a big gap in our understanding of the regulatory framework to be in place to facilitate investments in clean energy within the ECOWAS region. “-Alagi B. Gaye, ERERA Council Member (Economist)
The Gambia Clean Energy Partnership (2011-2014)

Results

- Diversification of generation resources in The Gambia
- Collaboration on Renewable Energy Law and Feed-in Tariff
- Development of Licensing Framework
- Renewable Energy Fund created
- Consumer Protection Advocacy Group established
- Net-Metering Pilot Project
- Interconnection Standards developed

Sompo Ceesay, Deputy Director of Electricity, PURA alongside NARUC members Sara Kamins, Supervisor, Customer Generation Programs, California Public Utilities Commission and Dr. James P. Griffin, Director of Policy and Research, Hawaii Public Utilities Commission, discuss the Renewable Energy Fund during the USAID/PURA/NARUC National Forum: Policy for Small Scale Renewable Energy in 2014.