



AFRICAN DEVELOPMENT
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Energising Women's Economic Empowerment through Energy

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GENDER AND ENERGY IN AFDB



- Ongoing 164 projects in energy, USD\$ 11 billion investments
- Gender is crosscutting across sectors, energy included
- Guidelines for gender mainstreaming gender in energy being developed,
- In 2015, 11% of Projects rated highly satisfactory on gender;
- 44% as satisfactory;
- 33% as unsatisfactory
- 11% highly unsatisfactory.



KENYA – MENENGAI GEOTHERMAL DEVELOPMENT PROJECT



- 84% of the population does not have energy access where Geothermal potential is among the greatest in the world
- Menengai geothermal steam field development project will exploit a portion of this potential
- Provide power to about 500,000 households and 300,000 businesses.
- The project was approved in 2011 and is expected to be completed in 2016,
- \$0.5 billion



Kenya – Menengai Geothermal Development Project



- 30% government procurement preference for youth, women and persons with disabilities,
- 30% requirement aims to enhance women’s participation in fields traditionally dominated by men.
- \$3M allocated in capacity building- higher education where 30% women
- 912 skilled jobs to be created with 30% women
- 300 unskilled jobs with 30% women
- 60 trainees (30% women)
- Girls enrollment in school as an indicator
- Increased revenues available to 500,000 households and 300,000 micro and small enterprises





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Menengai at glance

Angola Power Sector Reform

- \$1 Billion Policy Based Operation (PBO), 2014
- Provide technical support for the government as it goes about a much-needed overhaul of its utilities and service provision.
- Restructuring the energy sector and improving its regulatory environment;
- Fostering private-sector investment in energy sector;
- Enhancing transparency & efficiency in public financial management
 - 30% board/senior mgmt. of utilities as women
 - 2400 women to receive professional training in energy
- Improve regulatory environment
- Accelerate rural access since 70% lives in poverty
- Ensure value for money on procurement



Angola Power Sector Reform

Adaption of The National Gender policy to Energy Sector to improve indicators in the following:

- (i) Access to basic social services;
- (ii) Access to resources and opportunities;
- (iii) Participation and representation in public and political life
- (iv) Domestic violence and; (v) Family and Community.

Sector guidelines for mainstreaming gender in line ministries including energy is ongoing

Expand access to electricity at affordable costs for the local population, particularly for the very poor who are concentrated in rural areas and make up 45.2% of the entire population out of which 72% are living in poverty

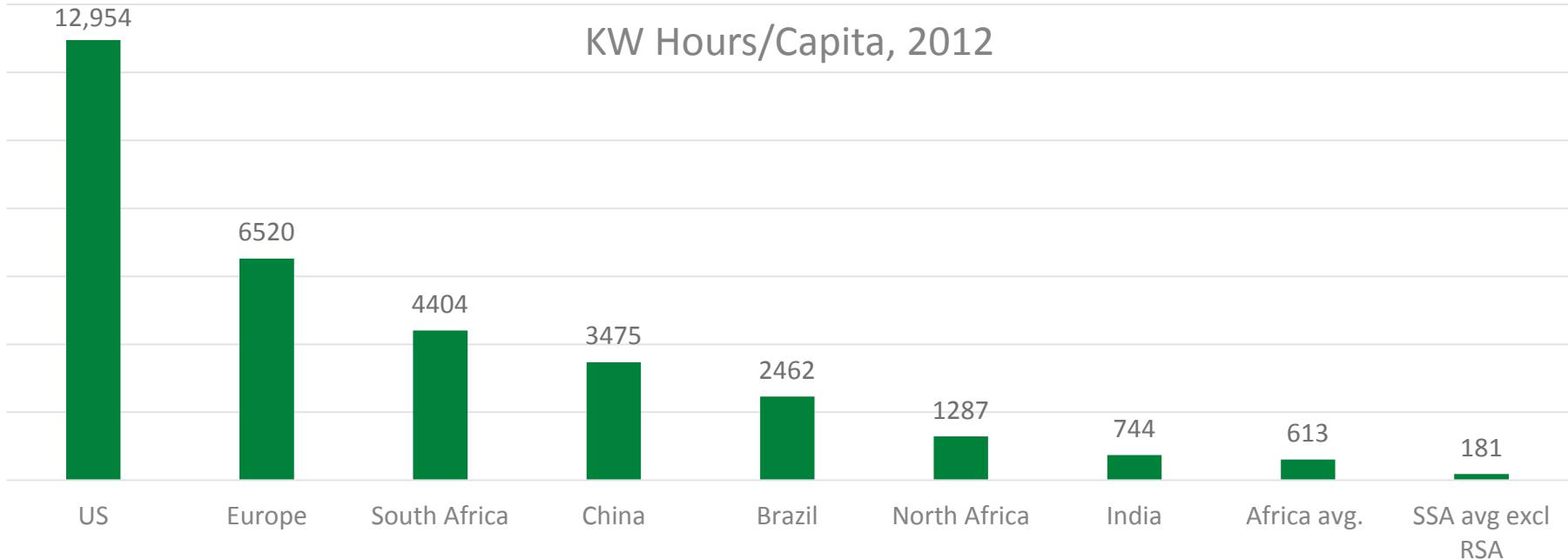


AFRICAN CHALLENGES

- Myriad of issues; health, education, indoor pollution.
- Costs Africa about 2.4% in GDP loss annually.
- Regional disparities



KW Hours/Capita, 2012



- High Cost of energy: consumption per capita in Sub-Saharan Africa is at 181 kWh PA, compared to 6,500 kWh in Europe and 13,000 kWh in the United States.
- Africa is rich in energy resources (well over 10 TW solar potential, 350 GW hydroelectric potential, 110 GW wind potential, 15 GW of geothermal potential).
- This does not even include coal and gas, which can still provide some of its cheapest electricity



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Partnerships

- Sustainable Energy for All (SE4All) Africa Hub, partnership with the African Union (host)
- African Energy Leaders Group (AELG) (secretariat)
- Programme for Infrastructure Development in Africa (PIDA), (architect & financier for the PIDA Priority Action Plan)
- New Africa Renewable Energy Initiative, (implementation role)
- ELECTRIFI, PowerAfrica, KOAFEC, Japan-Africa

Common Goals

- Raising aspirations to solve Africa's energy challenges
- Establishing a Transformative Partnership on Energy for Africa
- Mobilizing domestic and international capital for innovative financing in Africa's Energy sector
- Supporting African countries in strengthening energy policy, regulation and sector governance
- Increasing the African Development Bank's investments in energy and climate financing






New Deal on Energy 2014

- Increase **on-grid generation** to add 160 GW of new capacity by 2025
- Increase **on-grid transmission** and grid connections that will create 130 million new connections by 2025, 160 per cent more than today
- Increase **off-grid generation** to add 75 million connections by 2025, 20 times what we have today
- Increase access to **clean cooking energy** for around 130 million households through \$4.2 billion.

- Ensure policy consistency and coherence
- Affirmative action for women in different entry points
- ESW on pertinent issues on affordability, renewable energy, entrepreneurship, policy effects, smartness, youth employment, STEM
- Support Gender Mainstreaming throughout the project cycle
- Focus on the Clean Cooking and BoP Financing Facility
- Training and Capacity Development internally and in region

Three Key Aspirations: Universal Access by 2025 implies the equivalent of ~810 power plants, ~90 "Kenya Power" and ~300 "M-Kopa" projects



	Aspiration 1: On grid generation	Aspiration 2: On grid connections	Aspiration 3: Off grid generation
Inspiration	 <p>Cost efficient power plants, such as :</p> <ul style="list-style-type: none"> Gas (Takoradi – Ghana) Hydro (Kidatu - Tanzania) 	 <p>National power utility company in Kenya</p>	 <p>Off grid solar solution in East Africa</p>
Achievement	<p>200 MW Nominal capacity for a typical plant</p>	<p>1,400,000 Urban household connections</p>	<p>250,000 Rural household connections</p>
	<p>x ~810</p> <p>=</p>	<p>x ~93</p> <p>=</p>	<p>x ~300</p> <p>=</p>
Aspiration	<p>~162 GW To supply 130 Mn households and many industries</p>	<p>~130 Million New grid connected households</p>	<p>~75 Million New off-grid households</p>

In Asia, very high ambitions have been fulfilled in record time



On grid generation



- GDP: **USD5,724 billion**
- Population: **1,364 million**
- GDP/capita: **3,866**

China's 5 year plan for Energy targeting 300 GW between 2011 and 2015

Ambitions

On grid connections



- GDP: **USD98 billion**
- Population: **91 million**
- GDP/capita: **USD1,078**

Vietnam's 5th Power Development Master Plan (2000–10) targeting 90% electrification by 2010

Achievements

~50 GW per year installed

4 GW of coal fired plants commissioned per month

3 million rural grid connections in 6 years

By the end of 2005, 90% electrification attained

Off grid generation



- GDP: **USD119 billion**
- Population: **159 million**
- GDP/capita: **USD748**

Bangladesh's target to install 6 million solar home systems by 2016

2 million home systems in 3 years

Already covered by November 2014

What would Africa need to do by 2025?

3 years of China's installation

~26 x Vietnam connections

~10 x Bangladesh's installations

There are several flagship programmes the Bank can champion to drive the mission of achieving universal access



PRELIMINARY

Themes		Flagship programmes for the Bank	
1	Set up enabling policy environment	IPP auction Programme	Champion the development of a harmonized IPP auction programme based on country resources, to launch across multiple markets within the next 12-18 months
2	Enable utilities for success	Power Utility transformation Programme	Develop a comprehensive programme to support performance improvement on reduction in technical, commercial and collection losses. As well as restructuring through corporatization, or privatization mechanisms
3	Dramatically increase number of bankable projects	Project Support Facility	Develop a funding and advisory facility for pre-project development to increase pipeline of bankable projects; this could include concessional or equity funding, as well as a matching mechanism to incentivize funding by others.
4	Increase finance for a larger capital pool for new projects	Funding catalyst programme	Set in motion the processes needed to increase the availability and use of blended finance to increase capital pool available for new projects
5	Fund bottom of the pyramid energy access programmes	Bottom of the Pyramid Financing Facility	Launch a large scale, low interest debt fund to create micro-financing availability for energy access solutions
		Mobile payment programme	Launch major programme in conjunction with two to three trans-African cell phone companies to build "Pay-Go" model that can be rolled out wherever there are cell phones
6	Accelerate megaprojects and regional integration	Regional projects acceleration program	Identify three major regional projects, with significant transmission focus, and double down to build their bankability and ensure projects can be launched within the next 6-12 months, including the development of a regionally based PPA framework that facilitates purchase of power from multiple utilities
7	Roll out waves of country-wide turnarounds	Country-wide turnarounds	Launch country wide programmes in 2 countries within the next 6 months, and an additional 3 within the next 12 months, with selection of the countries based on guidelines to be developed

CONCLUSION



- The AfDB is committed to light and power Africa; and to promote gender equality & empower women;
- PRST ND Taskforce on Energy has been put in place with focus on promoting the access to energy for the bottom of the pyramid and access to clean and efficient cooking solutions.

