

Call for Action: Boosting Energy Access for Africa

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Energy Rich –Energy Poor? Major Disparities & Inequities:
is this sustainable?





Africa's Major Energy Challenges

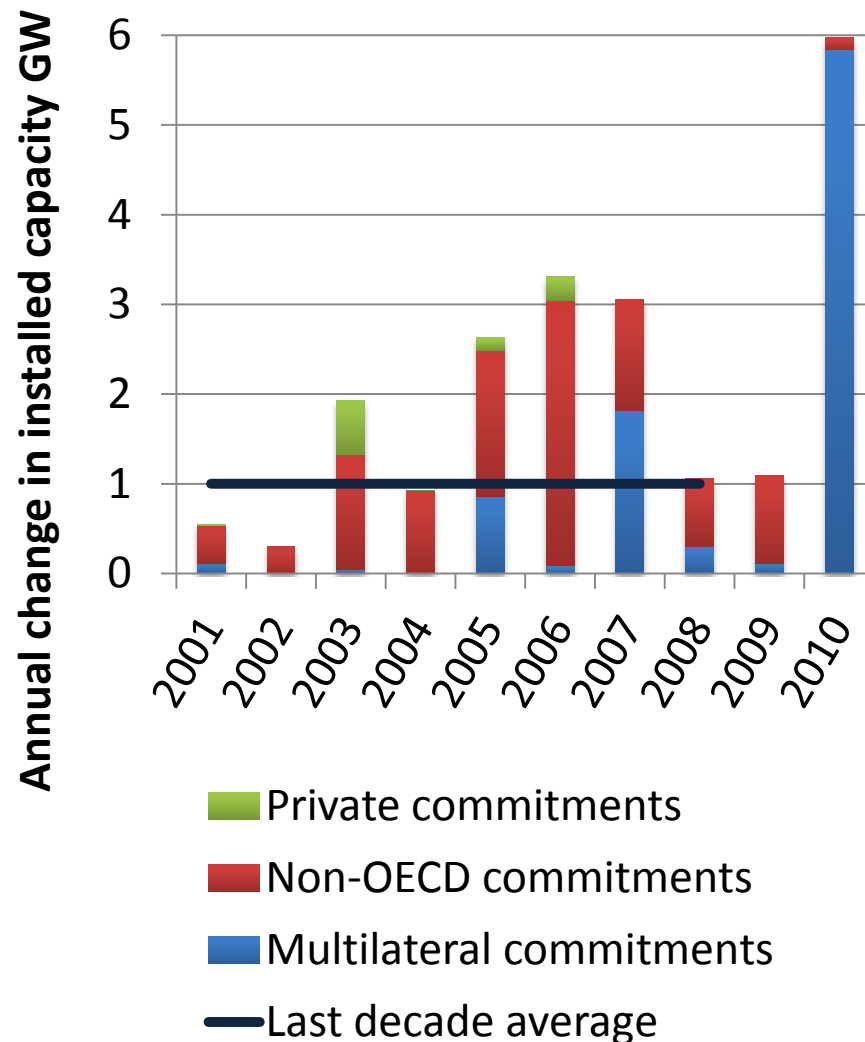
- Total installed generation capacity at 78 GW (2008)
- Only 31% of the population with access to electricity
- Universal electrification is more than 50 years away
- Outside RSA, consumption is around 1% of OECD levels
- 82% of households relying on solid biomass for cooking
- 30 countries face regular interruption of services
- 6% of turnover in formal sector (16% in the informal) lost because of interruptions
- SOEs inefficiencies costing 0.8 % of Africa's GDP

Possible Scenarios for Africa's Energy Future

	Today	Africa in 2020: Business as Usual	Africa in 2020: Concerted Action
Installed capacity (GW)	78	81	100
Power consumption (kWh pc pa excl. RSA)	124	164	235
Electrification (% pop)	30	34	49
Cost of power (US cents/kWh)	18	18	10
Hydro power (% consumption)	36	36	48
Power traded (% consumption)	16	16	40

Africa's Power Sector at a Turning Point

- Historically, 1 GW/yr of new power generation
- Recent commitments of 3 GW/yr of new generation projects
- Moving forward: 6-7 GW/yr and some 20,000 kms of regional transmission underway



30 GW of New Capacity: A Target for the Next Decade?

	Under Construction	To Be Prepared	Total
World Bank	8.0	4.0	12.0
Other Multilaterals	1.4	4.0	5.4
Emerging financiers	4.8	4.0	8.8
Private sector	1.4	3.0	4.4
TOTAL (GW)	15.6	15.0	30.6

Major IPP Potential: 4 GW Realizable in the Next 5-7 Years

Country	IPPs to Date (GW)	IPP Potential (GW)	Technologies
South Africa	0.6	4.8	Coal
Nigeria	1.3	2	Gas
Botswana	0	1.2	Coal
Kenya	0.2	1	Geothermal, oil
Mozambique	0	0.8	Coal
Ghana	0.01	0.8	Gas
Namibia	0	0.7	Coal, Gas
Angola	0.01	0.6	Gas, oil
Tanzania	0.1	0.5	Gas, coal
Cote d'Ivoire	0.3	0.3	Gas
Uganda	0.2	0.3	Gas, oil
South Sudan	0	0.3	Gas, Oil
Others	0.2	0.3	Gas, coal
GRAND TOTAL	2.9	13.6	

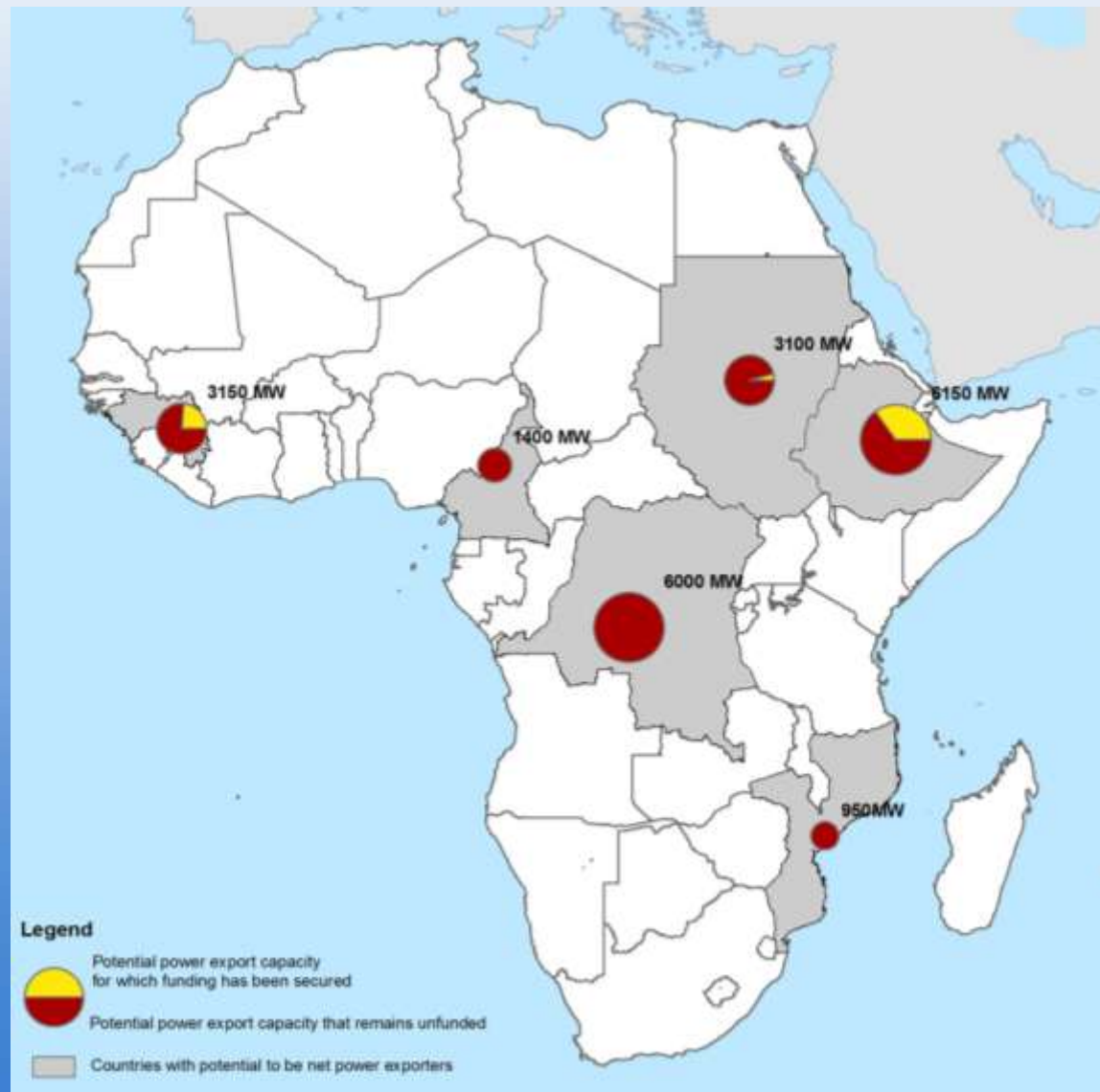
Developing Bankable Projects Requires a lot of Investment

	Overall project costs (US\$ m)	Cost of project preparation (US\$ m)	%
Implemented			
Bujagali	780	15	2%
Nam Theun 2	1,400	124	9%
Under Preparation			
Inga 3	8,000	>>100	>>1%
Cahora Bassa North Bank	2,000	60	3%

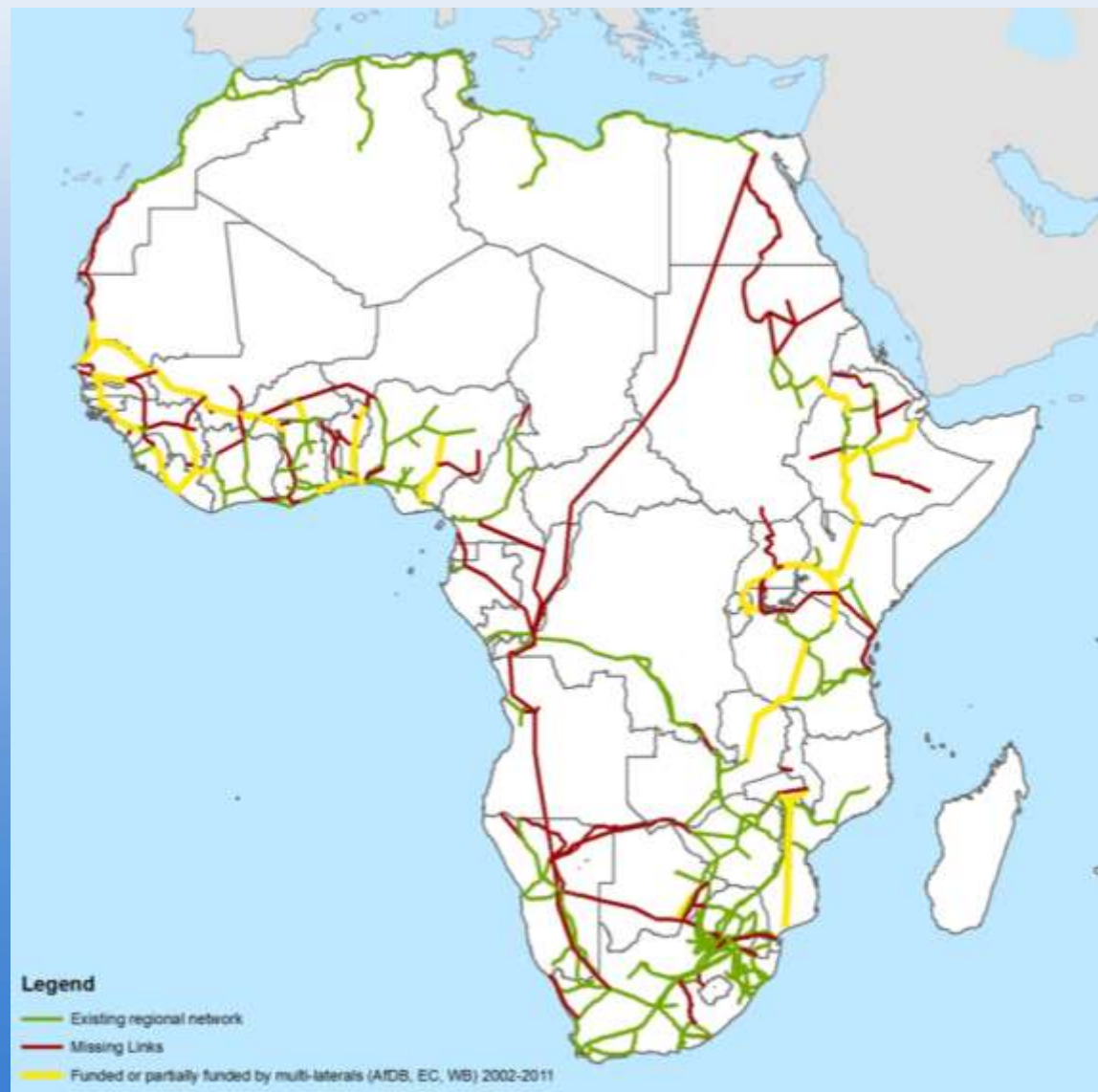
Power Trade Brings Large Financial, Economic, & Environmental Savings

Power Pool	Savings in			Return on trade (%)
	Spending needs (US\$ bn pa)	Long-run power cost (USc/kWh)	CO ₂ emissions (mn tons pa)	
CAPP	0.2	2	4	22
EAPP/NB	1.0	<1	20	20
SAPP	1.0	1	41	168
WAPP	0.5	1	5	33
Total	2.7		70	

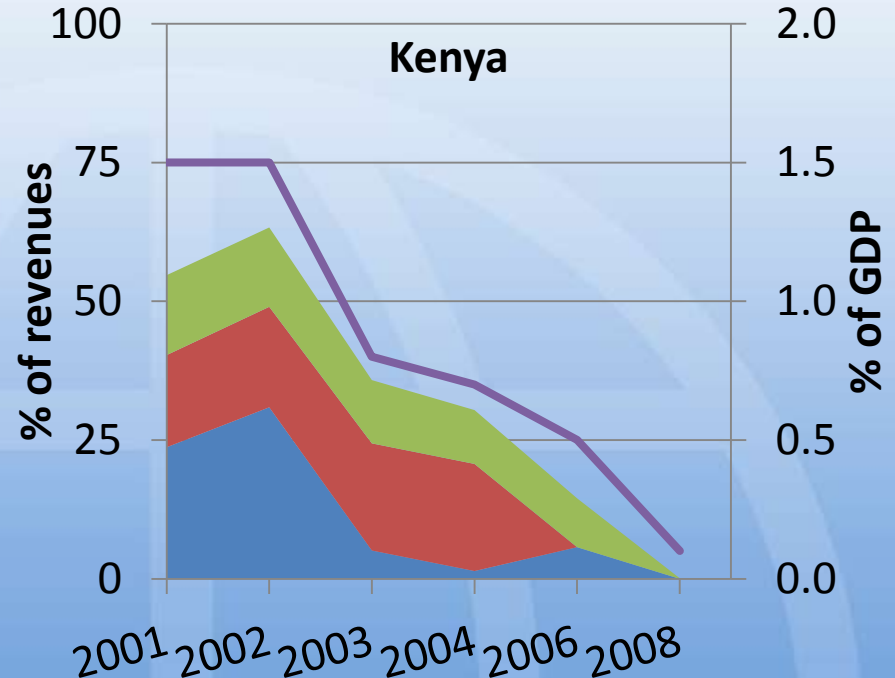
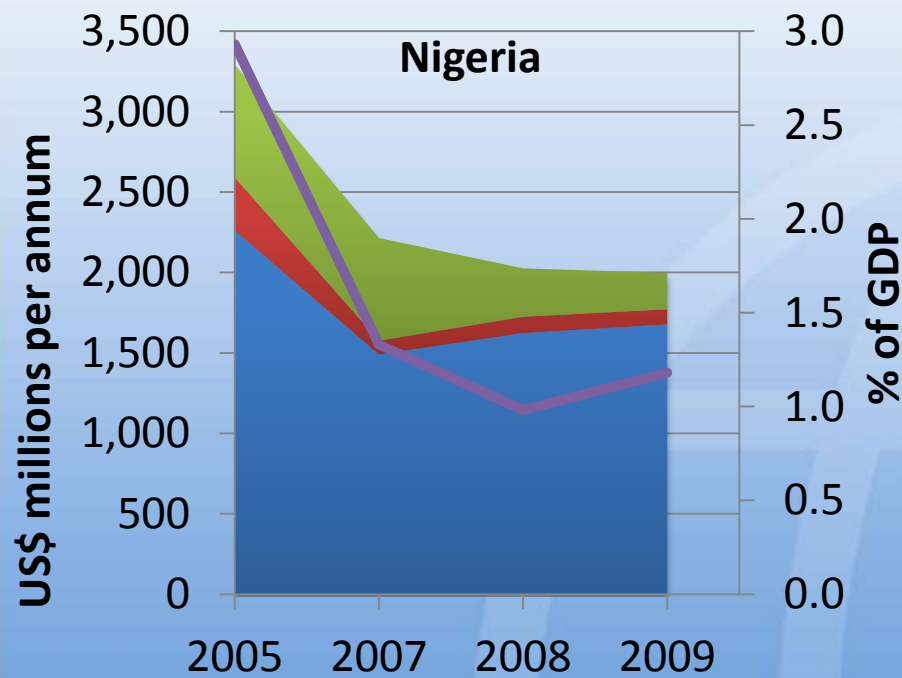
Unrealized Power Export Capacity



Missing Transmission Links



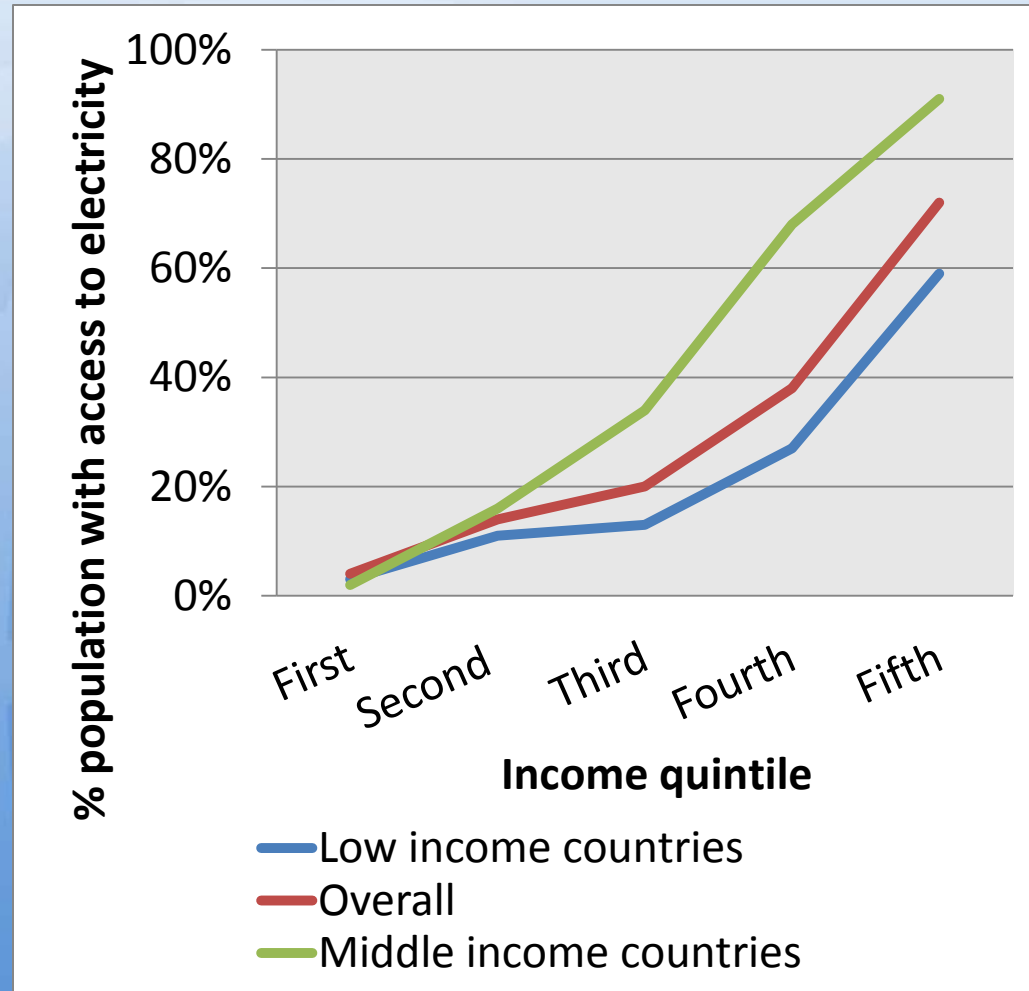
The energy sector is also a macro issue



1.3% GDP saved annually in **Kenya** and **1.7% GDP** in **Nigeria** thanks to power tariff increases and utility reforms strengthening revenue collection

Subsidies typically do not reach the poor

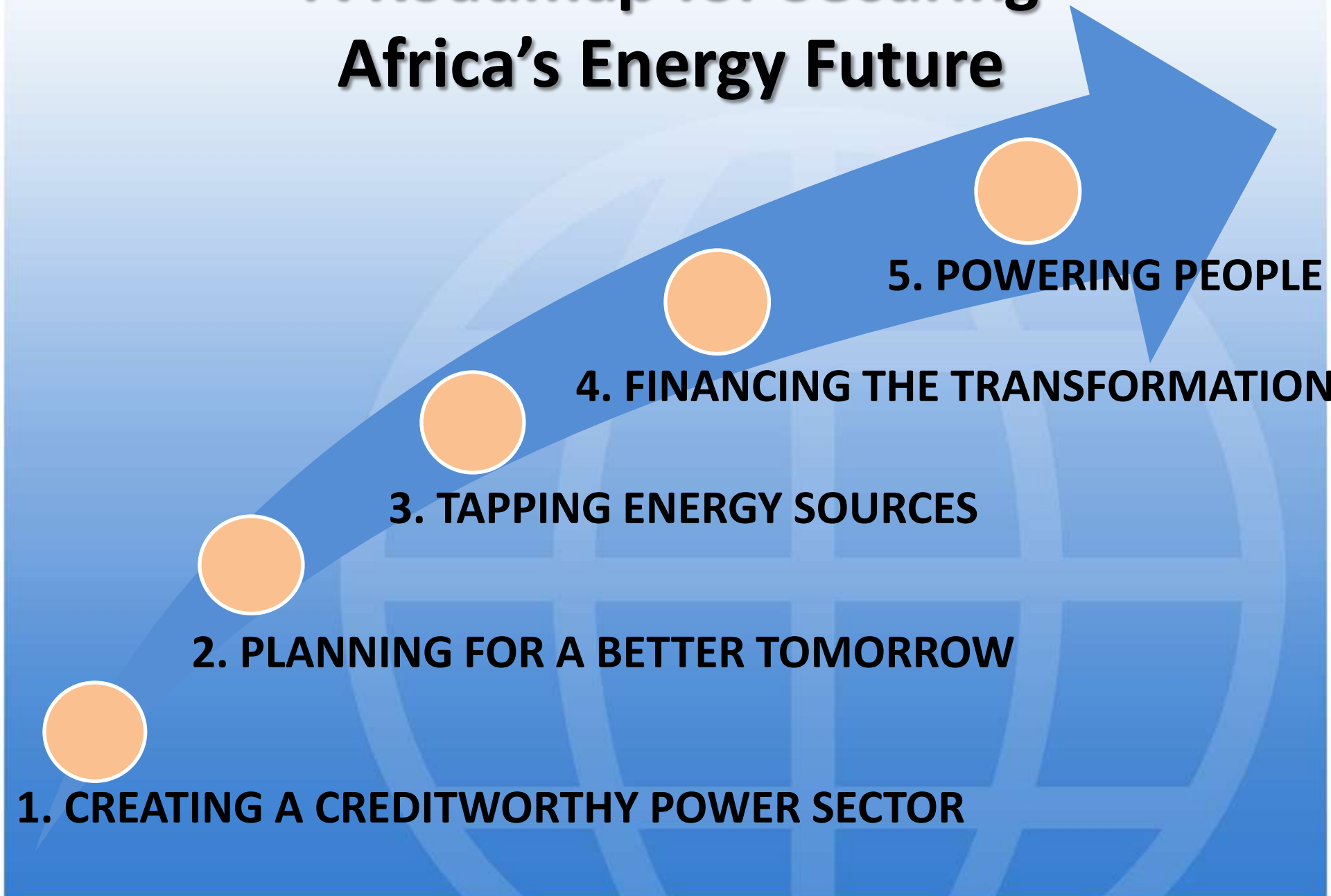
- Power subsidies absorb US\$2bn per year (0.4% GDP)
- Most poor lack access to electricity and don't benefit from subsidies
- Cost recovery tariffs affordable to more affluent connected groups





Financing & Implementation

A Roadmap for Securing Africa's Energy Future



All Stakeholders Have a Key Role to Play

Stakeholders	Role
National Governments	Work together to lobby global support and the push needed for large projects; convene peers in their sub-regions to champion specific projects. 'Get their house in order' to prepare for investment and set examples of good investment climate
Power Utilities	Adopt good practice and governance to improve performance, achieve financial viability and establish creditworthiness
Regional institutions (AUC, RECs, Power Pools)	Lead project selection and development, seek and forge public and private partnerships to finance and execute projects
Multilateral institutions and Bilateral partners	Provide technical assistance for capacity building, facilitate political understandings and partnerships and credit enhancement/financial leverage
Private sector	Open to re-engagement in African power projects
Other global players (G20, Climate Funds, ICA)	Assist in creating political support and confidence building, secure investors and underwrite risk perception issues



Thank You!



ANNEX

Power Generation: World Bank Funding

Through End IDA15

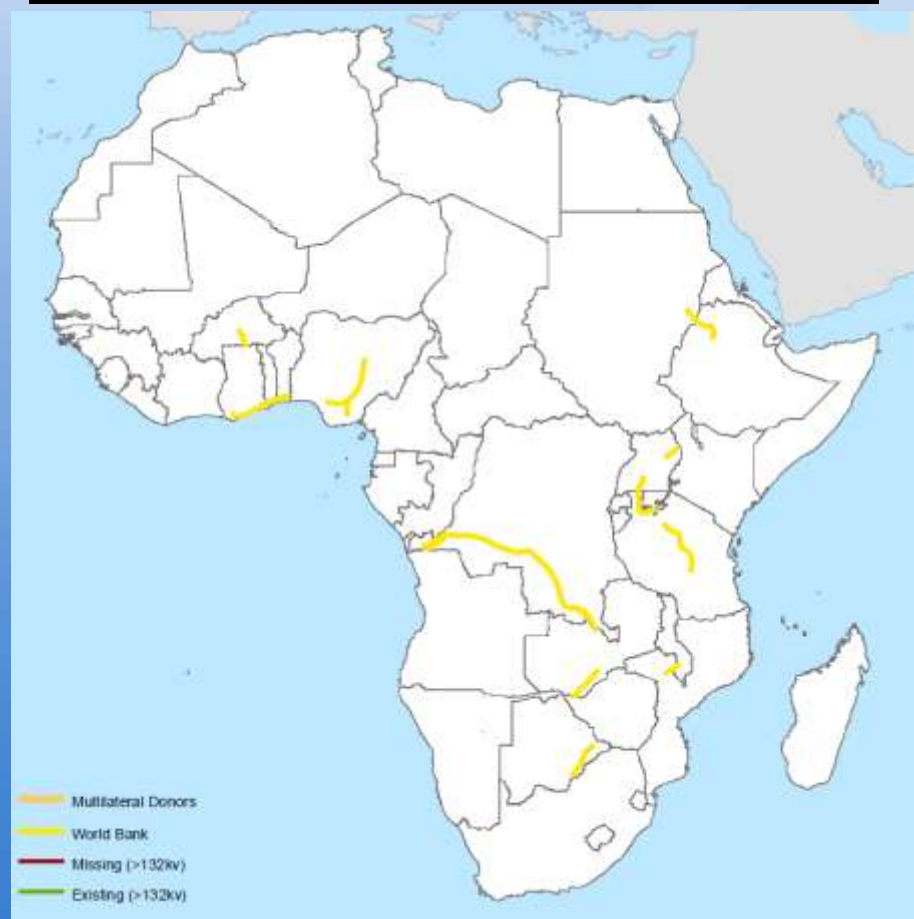


Future Pipeline

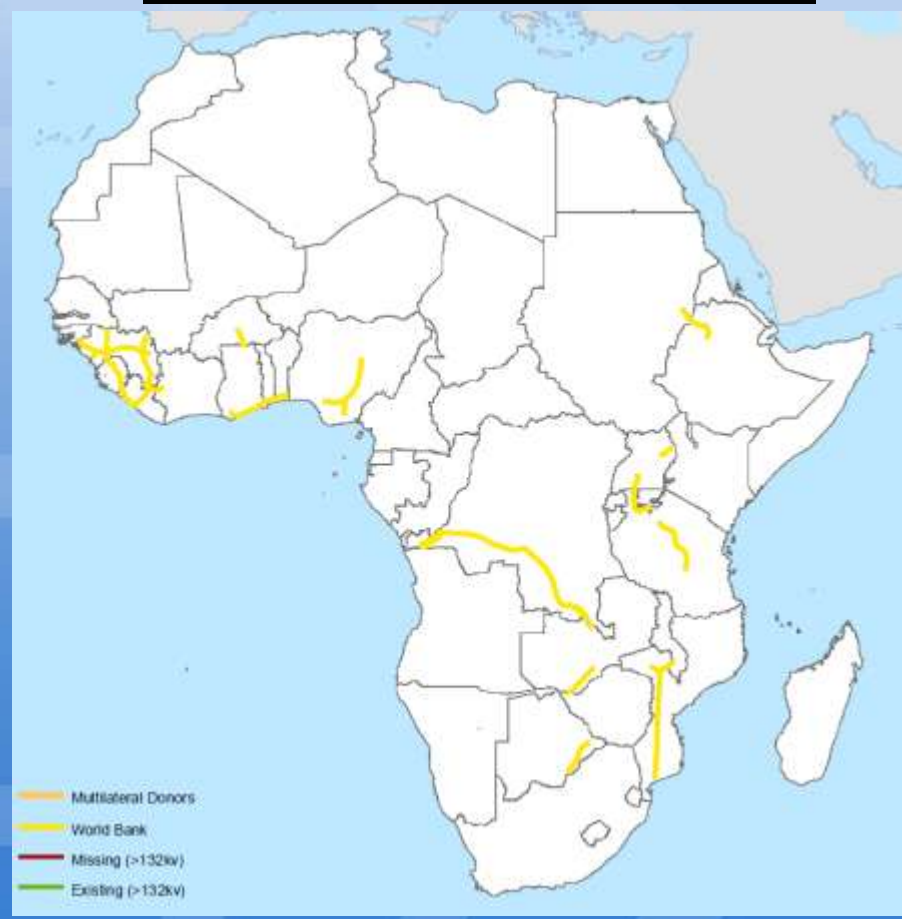


Power Transmission: World Bank Funding

Through End IDA15



Future Pipeline



Overview of WBG Engagement

Project	Nature of Involvement
Inga	Already involved in rehabilitation of Inga 1 & 2 Working jointly with AfDB on further development of Inga site
WAPP Souapiti	IDA funding planned for CLSG Project (including Souapiti) with Board date of 2012
Rift Valley Geothermal	Board approved \$120m IDA for Olkaria I and IV Project FY11 IDA involvement proposed in Menagai Project