

Power Struggles in SSA

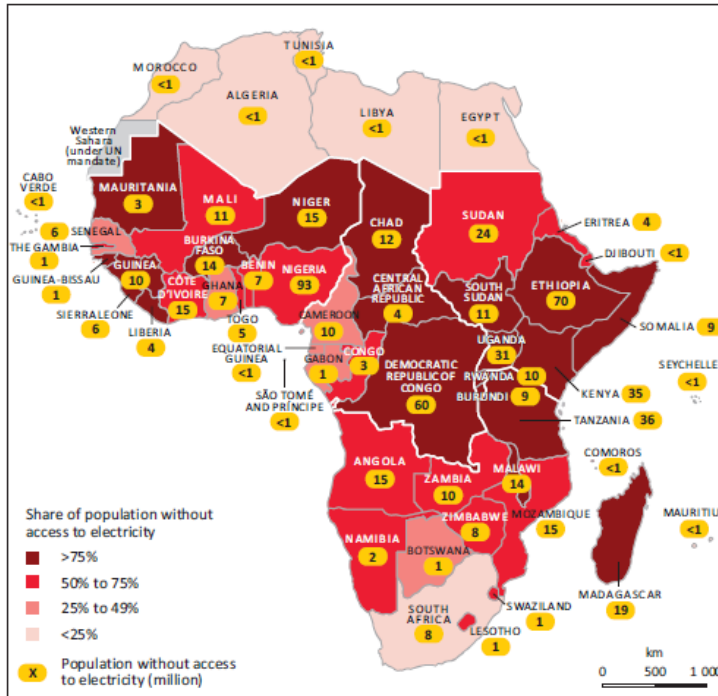
Challenges of Electricity Provision in Sub Saharan Africa

Lex Huurdeman, Senior Gas Specialist, World Bank Group

Bruegel event 'Fostering Energy Access in Sub-Saharan Africa: What Role for Europe?'
Brussels, October 5, 2017

Why is power supply such a persistent question in Africa?

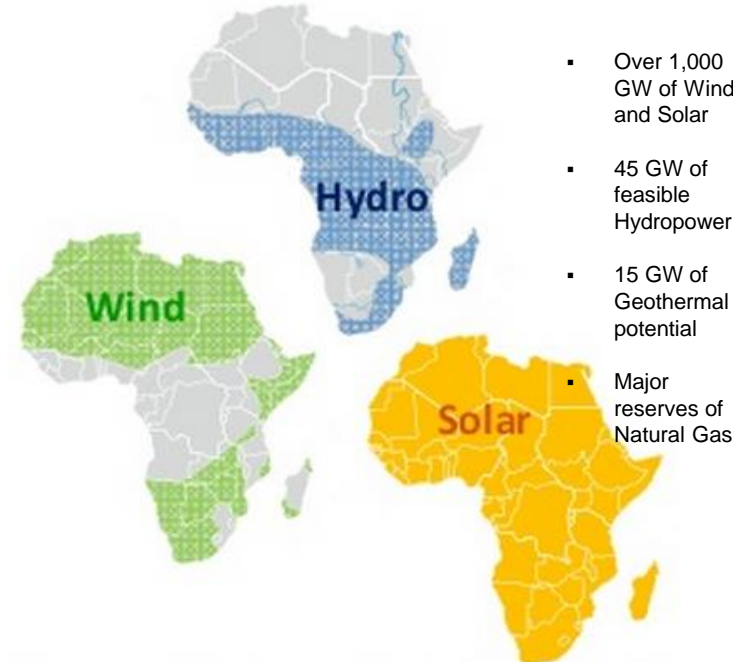
- **600m** people and **10m SMEs** have no access
- Energy not keeping up with GDP growth



This map is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Source: EU and World Bank Estimates

- **Abundant low carbon, low cost** energy resources
- But **high cost thermal generation** dominates



Source: Africa Energy Outlook and World Bank Estimates

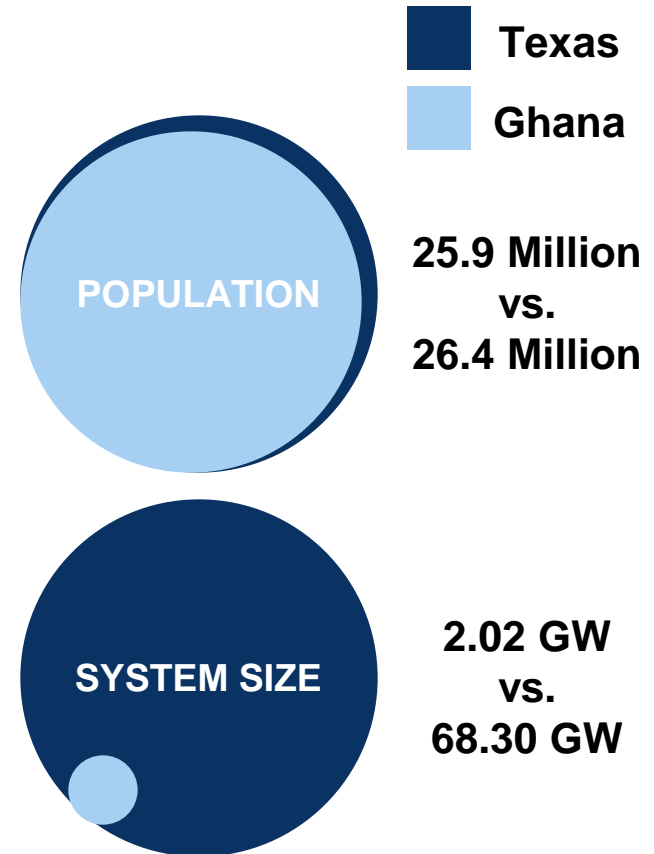
Our client countries in SSA have to contend with a number of structural factors...

Small systems prevent significant economies of scale:

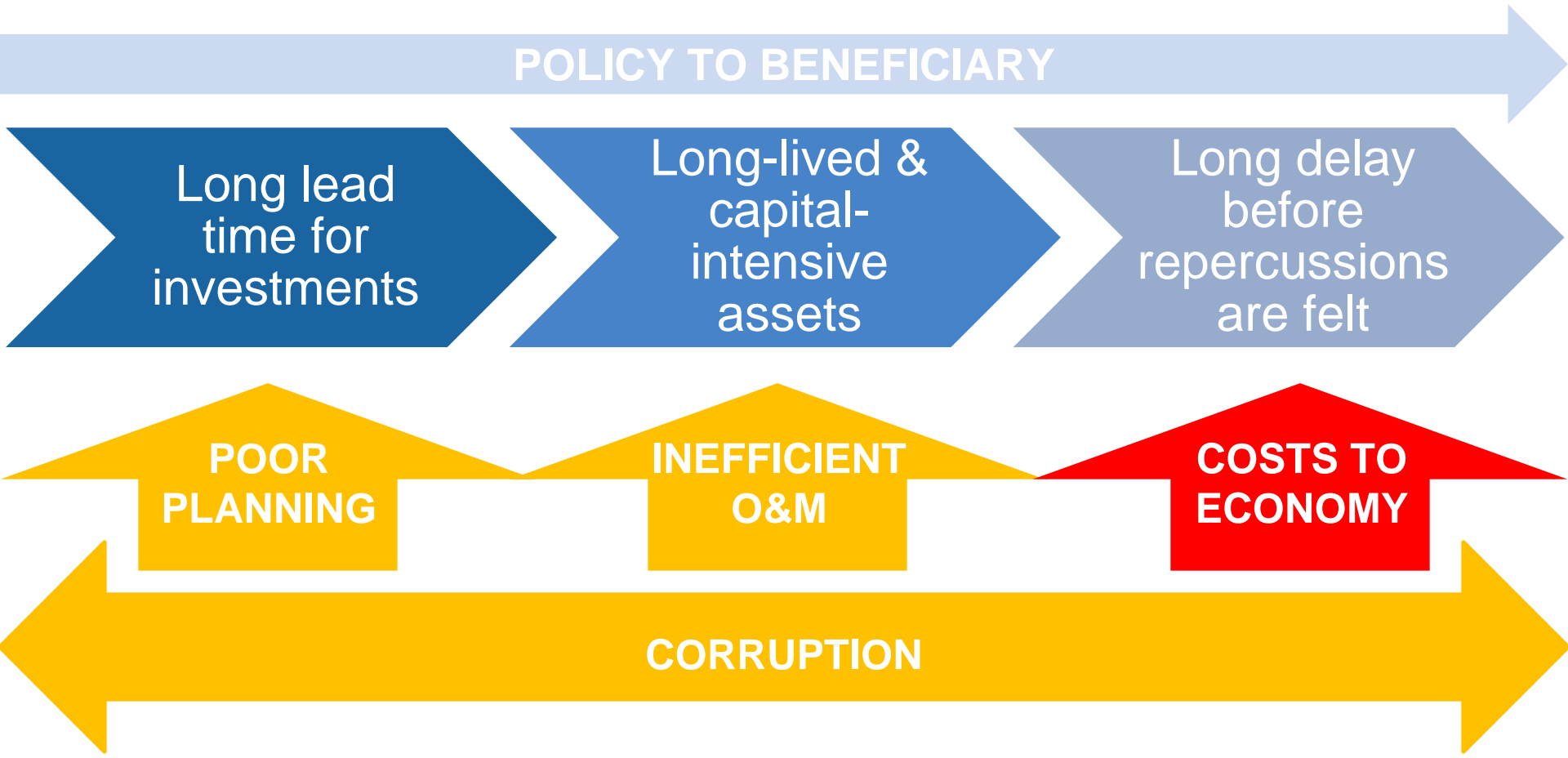
- Generation across same and different technologies
- Transmission & Distribution
- Access to energy resources

Other well-known barriers to growth:

- Landlocked countries
- Low population density



... but are also exhibit poor sector governance and inefficiency



An Integrated Approach along the Value Chain

Generation

Reduced cost of production (low carbon, low cost generation)

Scale-up Energy Supply

- *Crowding in private sector financing*
- *Main area for one WBG approach*
- *Project preparation*

Transmission

Regional integration (regional power pool development)

Power Pool Development

- *Building institutions: TA for power pools*
- *Building infrastructure : Financing, TA, convening power*

Distribution and access

Reducing cost (sector reform, tariff, improving efficiency)

Scale-up Energy Access

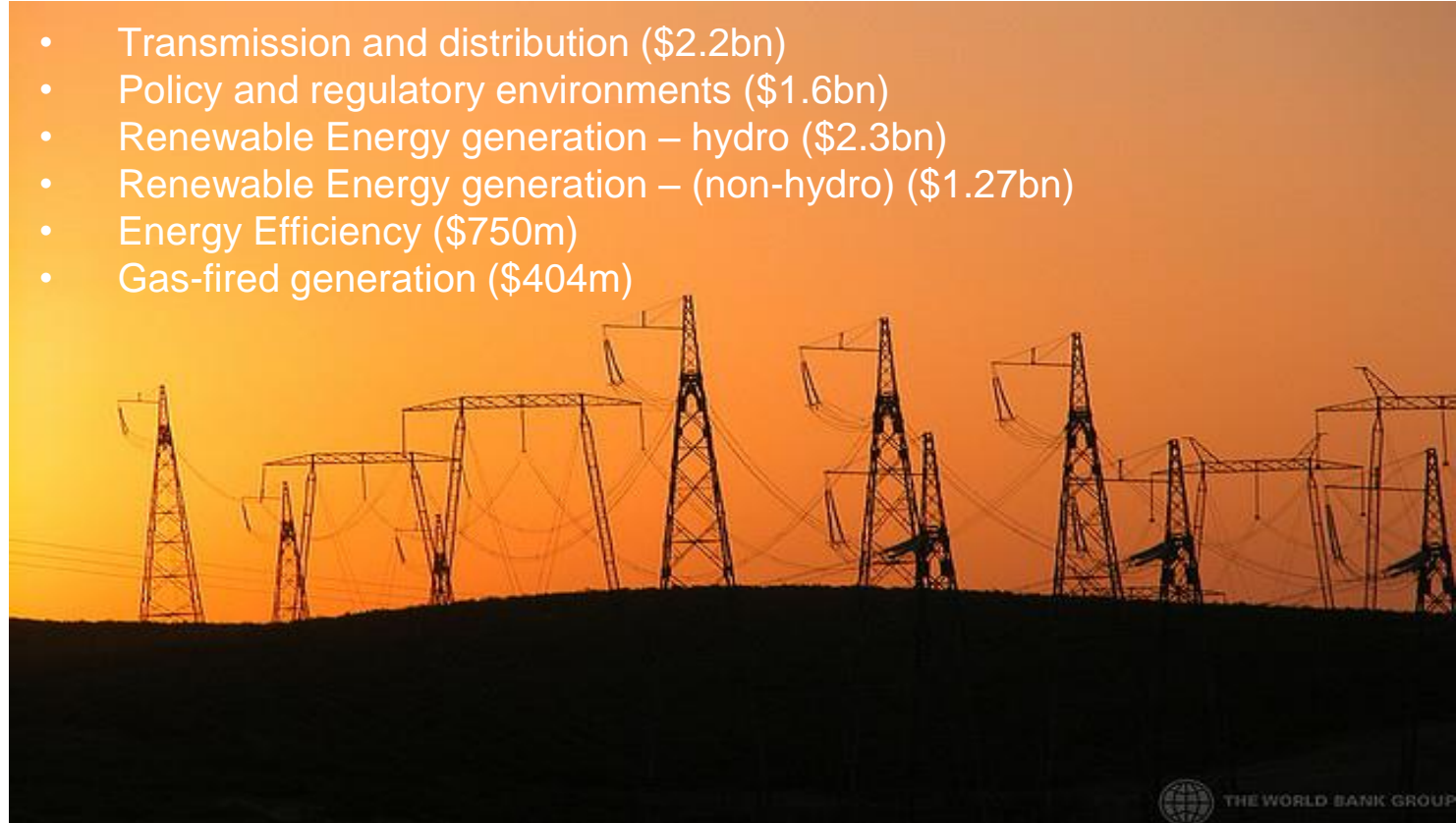
- *UN SE4All Goal - Universal Access for All by 2030*
- *Utility support*
- *Off-grid, mini-grid*

Knowledge and Partnerships

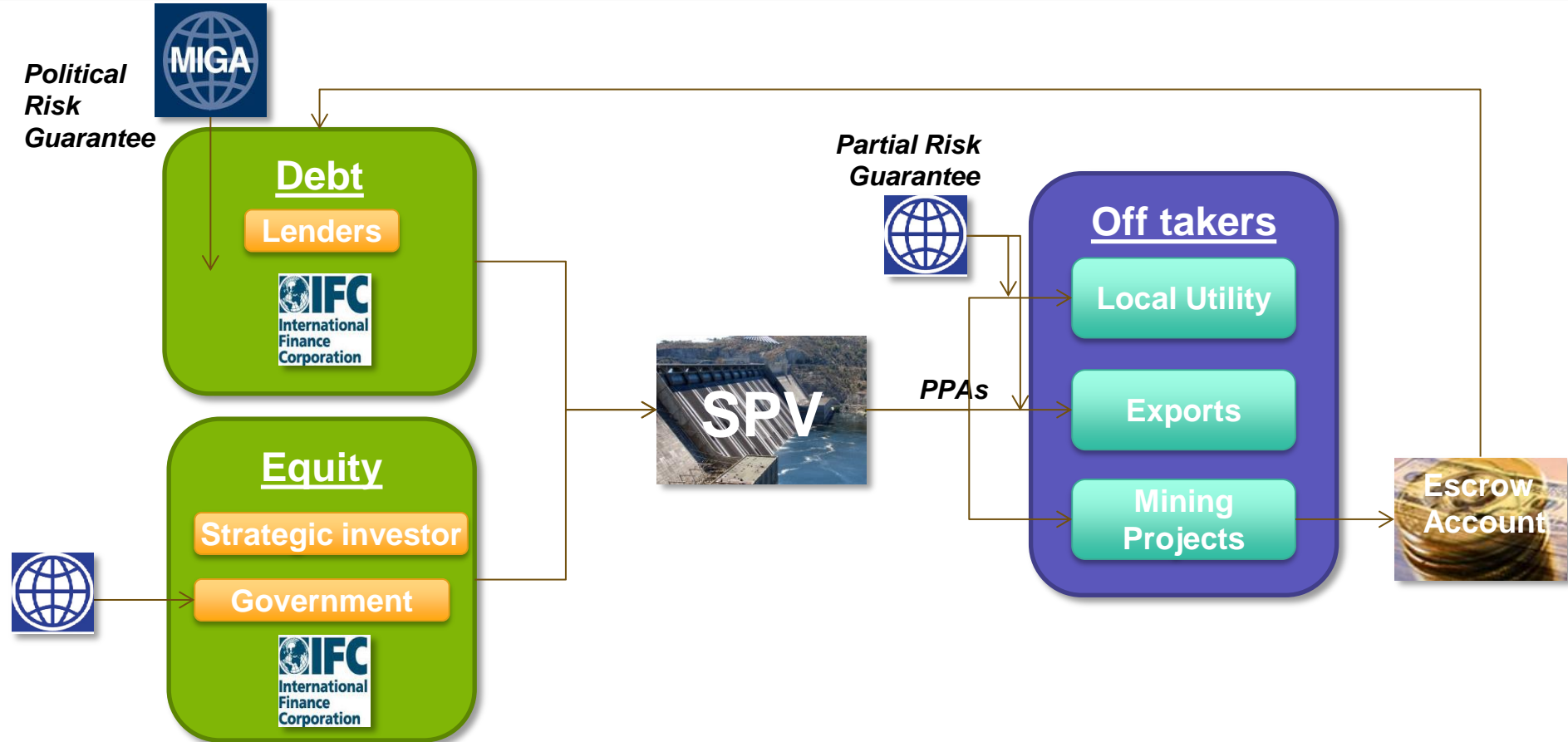
Leverage our limited resources and expand south to south cooperation

What the World Bank financed in FY14

- Transmission and distribution (\$2.2bn)
- Policy and regulatory environments (\$1.6bn)
- Renewable Energy generation – hydro (\$2.3bn)
- Renewable Energy generation – (non-hydro) (\$1.27bn)
- Energy Efficiency (\$750m)
- Gas-fired generation (\$404m)



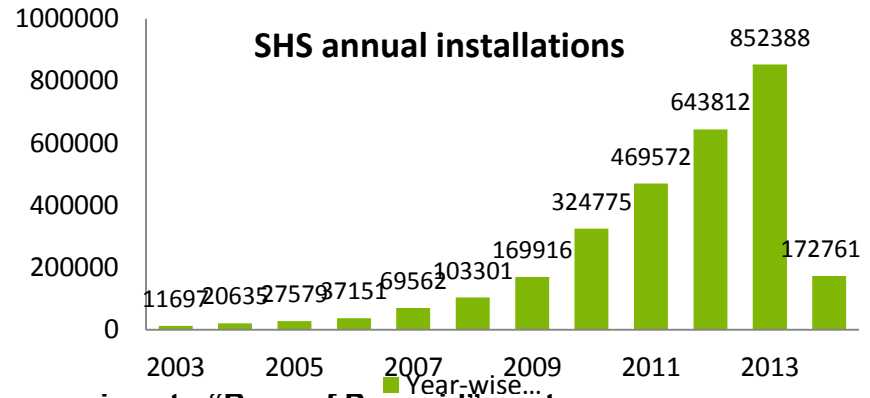
Private sector investment in Generation: Financing and risk mitigation instruments



Scaling up off-grid solutions: success stories, but access to finance a barrier to growth

WBG has engaged with governments and private sector to accelerate access to off-grid energy services

Bangladesh – the largest national off-grid electrification program



Lighting Africa/Asia – leveraging market to deliver services to “Base of Pyramid” customers

Lighting Global - total verified good quality products in service millions

