



Innovative Approaches in current World Bank Energy Portfolio for African Countries

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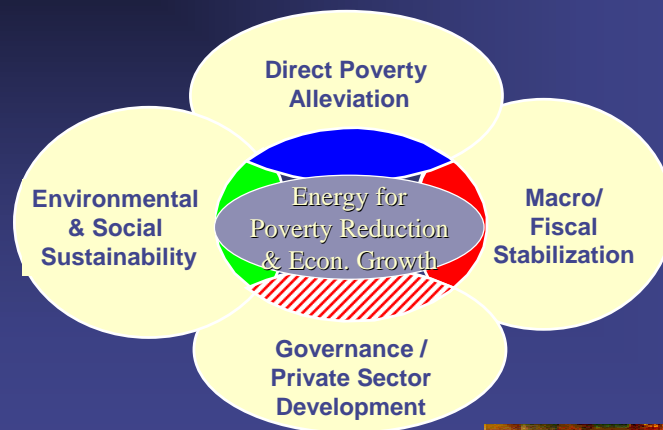
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Outline of Presentation

- The World Bank's Strategic Response to the Challenge of Delivering Energy Services
 - The Challenge for Africa
 - The Africa Strategy
 - Learning from Experience and New Concepts
 - Illustration Electricity Services in Rural Areas in Senegal
 - Working with Partners
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The WBG's Energy Business Strategy Framework

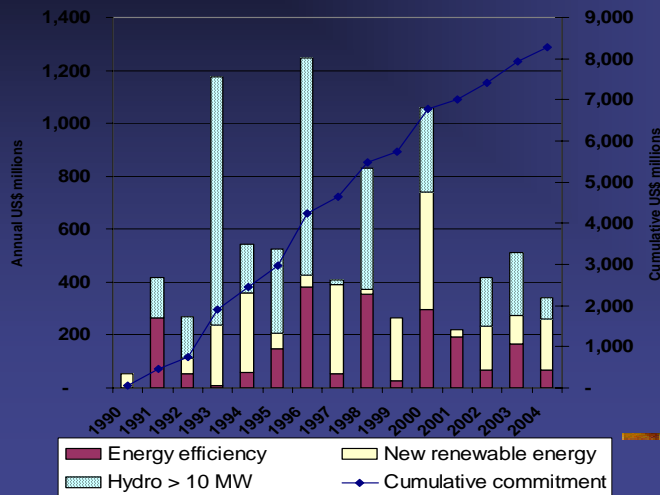


Renewable Energy: The WBG Commitments

- Integrate renewable energy and efficiency into key country assistance planning
- Commit to an average 20%/year growth of our new renewable energy and efficiency investments over the next 5 years. We are also committed to scale up our support for large hydropower
- Commit to building up our corporate resources – staff and knowledge
- Commit to strengthening our partnerships with the global community
- Report on our performance annually

WBG Renewable Energy Highlights

WBG Renewable Energy and Energy Efficiency Commitments, 1990–2004



- One of the largest financiers of RE and EE in developing countries among the IFIs
- Over \$8.2 billion in commitments since 1990 in 220 projects in 70 countries.

Africa: The Challenge



500+ million Africans live without electricity

- Biomass will remain important energy source for the foreseeable future.
 - increased urban woodfuel & charcoal use results in unsustainable cutting
 - woodfuel use is both an urban energy problem, and a rural socio-economic and environmental one
- Lack of Modern Energy hurts livelihoods, social services and SMEs; constrains development of productive services

Typical African Setting

Under current policy & institutional conditions:

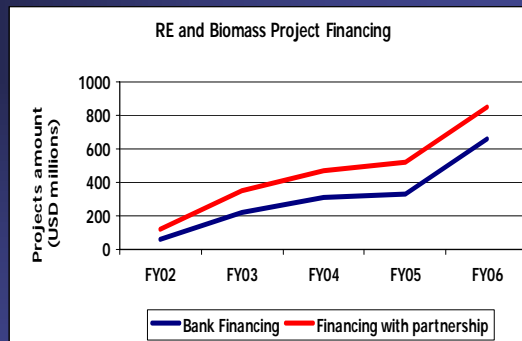
- Weak utilities – *poor financial and operational performance; progressive decapitalization*
- Weak financial sector – *constrains access to capital*
- Lack of credible & capable private sector
- Very low cash income levels, hence affordability constraints
- Policy and economic constraints on moving up energy ladder in rural areas

Business as usual will not work Electricity as marker of challenge

Country	Population Households (million)	Coverage (%) (million)	Annual connection rate	Number of years to scale up coverage under current pace
Ghana	19	35%	20,000	100+
	3.2	1.1		
Malawi	10	4%	5,000	2000
	2.5			
Nigeria	120+	36%	30,000	230+
	18	6.5		
Tanzania	35	10%	20,000	275+
	6	0.5		
Uganda	23	10%	5,000	840
	4.7	0.5		
Zimbabwe	12	20%	30,000	600
	2.5	0.48		

Energy is back on the Bank agenda

- Remove absorptive capacity constraints with local partners
- Mobilize local entrepreneurship
- Mobilize co-financing for sectorwide projects



We are now developing 3 to 4 new projects a year in Africa

The Africa Strategy

- Facilitate energy inclusion in PRSP and outcomes-based CAS
- Include in PRSCs and other programmatic lending instruments
 - More emphasis on analytical work to inform interventions
 - SILs to be used as platforms to prepare institutions and policies
- Leverage cross-sectoral linkages to achieve country-level outcomes
- Actively promote cooperation with Development Partners to scale up both programs and impact
- Develop more robust measures/indicators of outputs on country results
- Integrate full range of Bank-Group instruments and approaches (e.g. IFC, GEF, MIGA, PCF, private sector development, subsidy funds, PRG, Municipal Fund, Credit Support Facility, etc.)

Learning from Experience & Innovative Approaches

- Through ESMAP (*the Energy Sector Management Assistance Program*) capitalizing on global knowledge on rural electrification (*grid and off-grid, & on institutional and financing options...*) what works what does not work, pilot projects (*e.g. in the Philippines, to link energy services to productive applications.*)
- Through RPTES and AFFREI, have built up knowledge on biomass and rural electrification based on multi-sector demand assessments
- Through GVEP multi-sector multi-stakeholder workshops, pushed the envelope further

Key Lessons Learned



- Private sector WILL “come to the party”
- Strong Government Commitment is key
- Systematic, clear & transparent approach preferred by private sector
- Flexibility and innovative thinking needed in creating incentives
- System seems to be working:
 - RE Board approved subsidy
 - Regulator approved tariffs
- Carbon finance (PCF) an incentive for transaction

Africa Outcome Clusters

Outcome Cluster	Outputs
Household Level Outcomes (cooking, heating, lighting, TV, etc.)	<ul style="list-style-type: none"> ■ Urban & Rural biomass programs ■ Petroleum and other liquid fuels programs ■ Rural Electricity Services Diffusion programs (<i>households</i>)
Community Level Outcomes (health, education, potable water, telecom, etc.)	<ul style="list-style-type: none"> ■ Cross sectoral energy support ■ Rural Electricity Services Diffusion programs (<i>Institutional users</i>)
Growth and Economic Level Outcomes (commercial, Industrial)	<ul style="list-style-type: none"> ■ Transmission and distribution investments ■ Power generation investments ■ Performance improvement programs ■ Regional energy integration programs

Critical role of Policy Framework & Underlying Analytical Work

Example

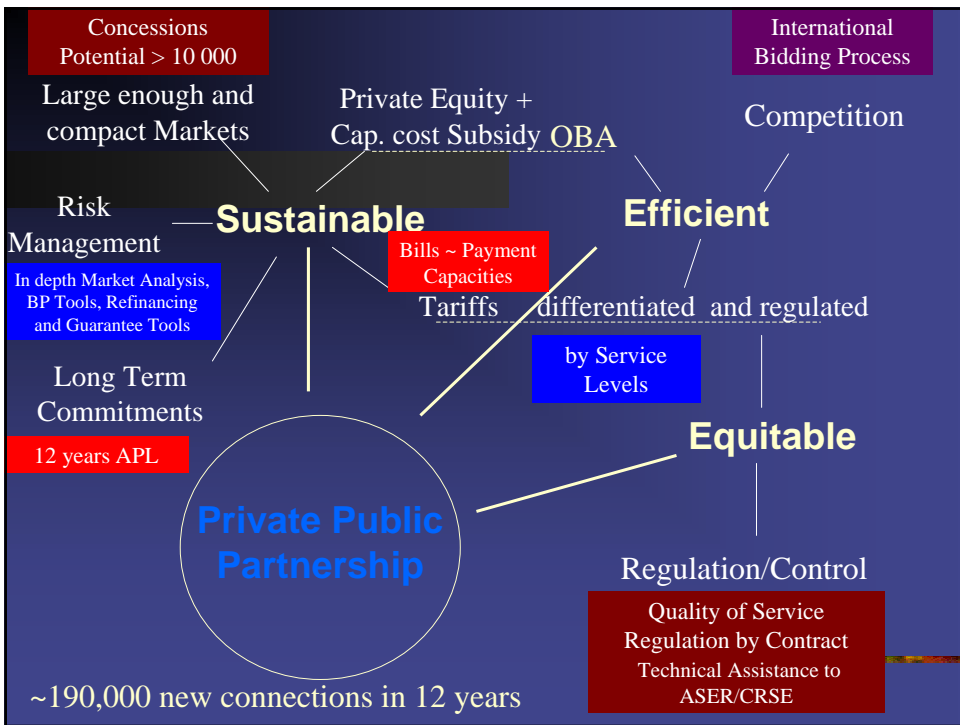
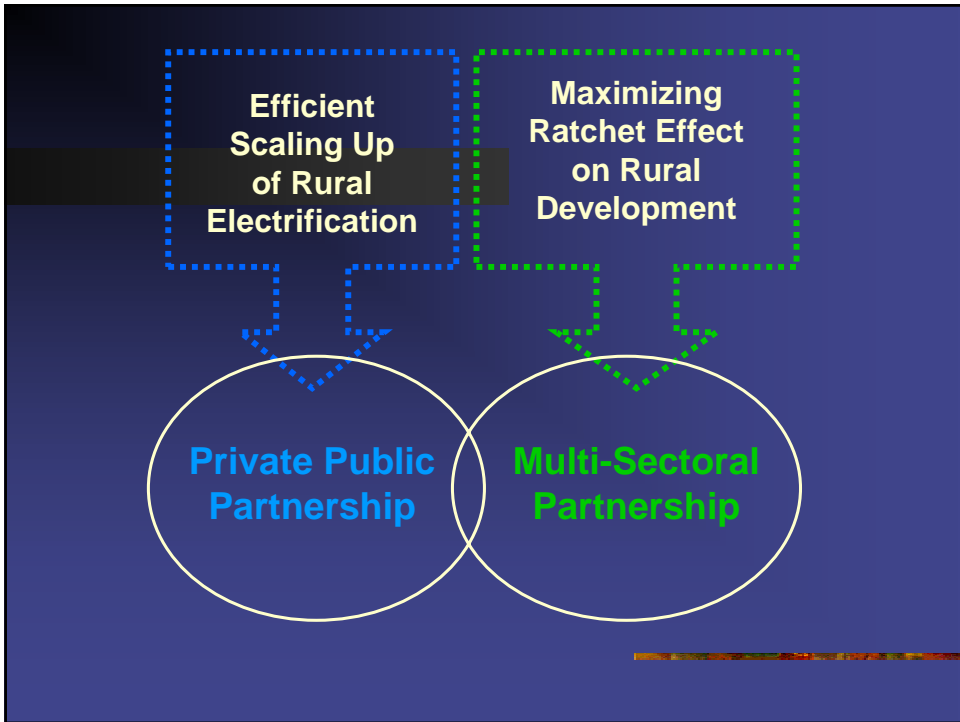
The Electricity Services for Rural Areas Project (WB, ADB, KFW)

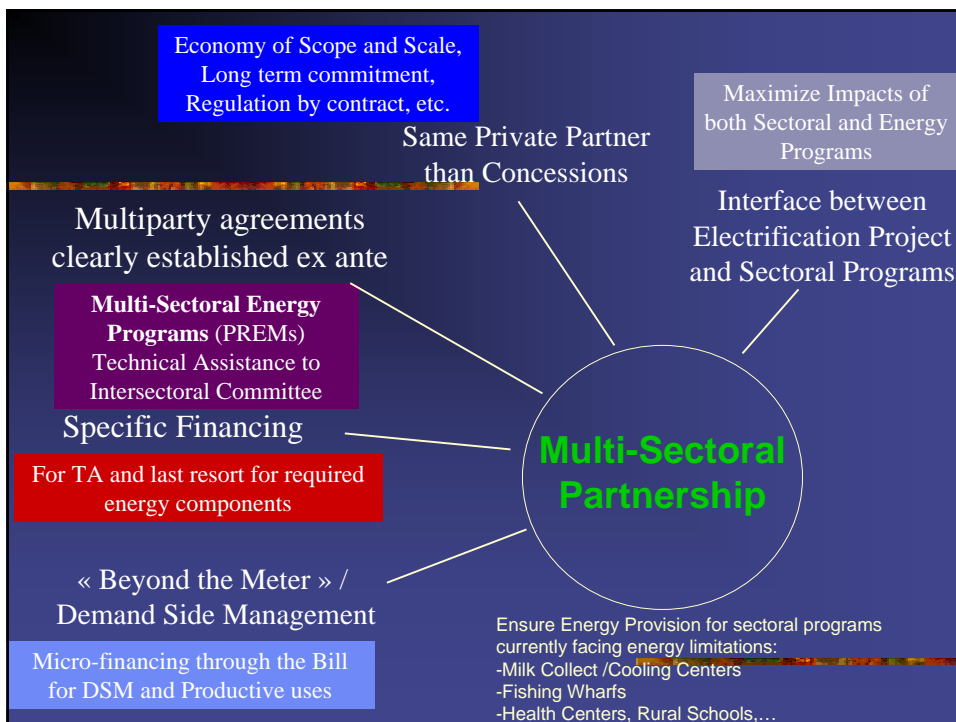
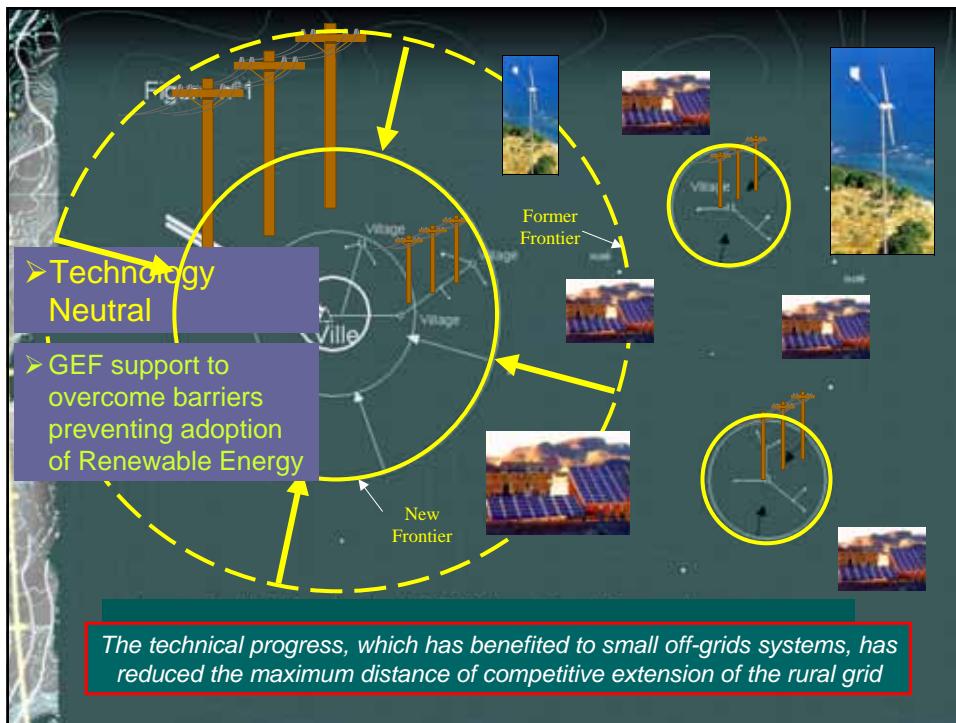
- Mono-technology (Grid)
+ higher cost in rural areas
- Unsustainable unique Tariff
- Prohibitive up front Connection Fee
- Limited Capacity of Public Monopoly

Low
Geographical
Coverage
9 %

- Sectoral Compartmentalization
- « Before the Meter » only

Very Limited
Impact





Working in Partnership



Energy Sector Management Assistance Program



Asia Sustainable and Alternative Energy Program (ASTAE)



IFC-Netherlands Carbon Facility (INCaF)



World Bank Carbon Finance Business



Global Gas Flaring Reduction Initiative

Global Village Energy Partnership (GVEP)

Africa Energy Trust Fund (APTESI)

Thank You