WORLD BANK GROUP INFRASTRUCTURE ACTION PLAN

AFRICA REGION

World Bank Group
Infrastructure Strategy Update FY2012-2015

Access Indicators

Energy	
Electrification rate (% of population with access)[1]	30.5
Delay in obtaining electrical connection (days)[2]	31.2
Water and Sanitation	
Improved water source (% of population with access)[3]	59.7
Improved sanitation (% of population with access)[3]	31.3
Delay in obtaining water connection (days)[2]	29.4
ICT	
Internet users (per 100 people)[4]	8.8
Population covered by mobile cellular network (%)[4]	56
Delay in obtaining a mainline telephone connection (days)[2]	30.7
Transport	
Motor vehicles (per 1,000 people)[3]	34.2
Firms identifying transportation as a major constraint in doing business (%)[2]	27.1

Source: [1]International Energy Agency 2010
[2]Enterprise Firm Surveys, Enterprise Analysis Unit
[3]World Development Indicators
[4]Little Data Book on ICT

1. INFRASTRUCTURE ISSUES

Highly heterogeneous region

- **Low income countries (LICs):** Senegal, Uganda
  – Enormous efforts in infrastructure development in recent years.
  – Heavily dependent on external finance for infrastructure.
- **Middle income countries (MICs):** Cape Verde, South Africa
  – Best positioned to meet infrastructure needs.
  – Stronger asset maintenance, institutional efficiency and larger urban populations facilitate network rollout.
- **Resource rich countries:** Nigeria, Zambia
  – Generating (or soon to be generating) substantial resource royalties for investment.
  – Experiencing serious governance challenges in converting investments into infrastructure assets.
- **Fragile states:** Côte d'Ivoire, Democratic Republic of Congo
  – Facing a particularly daunting post-conflict infrastructure reconstruction agenda.

Regional infrastructure agenda

Africa's infrastructure agenda is inherently regional due to large number of economies under US$10 billion GDP (31), landlocked countries (15) and trans-boundary rivers (60 basins), as well as an uneven distribution of energy resources and load centers.

- Economic and political interests are not always aligned in development of regional infrastructure and implementation is highly complex.
- There exists a large concentration of poverty: poverty rates rose on average by 4.2 percent in Africa during the 2008-09 crisis period, although the impact in rural areas may have been even higher.
- There are major access needs: Africa needs 7,000 MW of new power generation capacity each year, but has been installing only 1,000 MW in recent years; less than 5 percent of agricultural land is irrigated, less than 10 percent of hydropower potential has been tapped and only 58 percent of Africans have access to a clean water source.
- Exceptionally rapid rates of urbanization are leaving cities struggling to keep pace with burgeoning infrastructure demands.

- Infrastructure services can easily cost twice as much as in other developing regions due to lack of scale economies and limited competition; power costs on average US$0.14 per kilowatt-hour.

Climate change and disaster vulnerability

- AFR has made little contribution to global carbon emissions (4 percent of global greenhouse gas emissions), however suffers high vulnerability to climate change impacts (e.g., weather-dependent rural livelihoods).
- Natural disasters are common (e.g., droughts in Niger, cyclones in Madagascar and floods in Mozambique) and increasingly widespread.

Governance

- The public sector suffers from weak capacity in fragile states. The region has a large number of Fragile and Conflict-Affected States (FCSs), 20 of the World Bank's 33.
- Political instability affects the region (e.g., contested elections in Kenya, Zimbabwe and Côte d'Ivoire; coups and nondemocratic transfers of power in Guinea, Mauritania, Niger and Madagascar).

Infrastructure investment and the private sector

- Historically, some 40 percent of the region's infrastructure investment has come from the public sector and a further 40 percent from the private sector. Donors and non-OECD partners have contributed the balance in roughly equal shares. Private finance has remained largely confined to the ICT sector, although there is some willingness to invest in power plants and container terminals.
- The region's infrastructure funding gap has been estimated at US$31 billion per year, with additional systemic inefficiencies draining some US$17 billion a year. This infrastructure deficit cuts per capita growth rates by 2 percentage points annually and there is significant scope for infrastructure policy and institutional reform.
- China has become a major partner supporting infrastructure development, particularly in some of the resource rich countries.

2. ACHIEVEMENTS AND LESSONS LEARNED, FY08-11

- Bank lending for regional infrastructure projects averaged US$600 million annually over the FY08-FY11 period, which is close to 80 percent of Africa's overall regional lending for that period. The associated projects are contributing some 7,000 kilometers of regional fiber optic backbone and some 2,000 kilometers each of regional power transmission and regional trunk road networks.
- As part of the green growth agenda, the Bank has had some success in tapping climate funds for infrastructure development, though mainly for smaller scale interventions. There have been over US$750 million of commitments for renewable energy and urban transport projects in Nigeria, Kenya and Ethiopia.
- The Group has pushed the envelope on the PPP agenda. Examples include 2 joint IDA-IFC rural electrification PPPs in Senegal, shared fiber-optic cable systems in East and West Africa and power generation in Botswana. The IFC Infrastructure Advisory Services were also active, with 10 active and closed mandates, including (i) projects with significant fiscal and development impact – Liberia Power and Kenya Telecoms; and (ii) a major port concession, supported by Millennium Challenge Corporation funding in Benin.
- Emphasis on governance and institutional reform has grown, with Bank projects blending investments with institutional, regulatory and administrative reforms. Bank teams are engaged in supporting high-level dialogue on governance and accountability in the Democratic Republic of Congo, assisting with catalytic reforms in Cameroon's Customs Directorate and advising on transparent oil and gas revenue legislation in Ghana. Analytical and advisory work on the value chain of extractive industries is influencing policy dialogue in Angola, Democratic Republic of Congo, Nigeria and Niger.
- The Africa Infrastructure Country Diagnostic (AICD) created a global knowledge base on Africa's infrastructure sectors.

World Bank Group Infrastructure Commitments

	FY11	FY08
WBG Infrastructure Commitments (US$ billion)	3.3	3.0
World Bank Infrastructure Commitments (US$ billion)	3.0	2.6
IFC Infrastructure Commitments (US$ billion)	0.3	0.1
MIGA Infrastructure Commitments (US$ billion)	0.03	0.2
Total private sector investment enabled by IFC (US$ billion)	9.5	

Source: SAP Business Warehouse, MIGA, IFC

Lessons Learned

- The private sector share of total infrastructure spending is far lower in Africa than in other regions and extra effort is needed to leverage private capital.
- Regional projects face much larger implementation challenges than national ones: preparation time is significantly longer, disbursement ratios are slower and the percentage of commitments at risk is twice as high. Going forward, the region must adjust allotted time and expertise for brokering and implementing regional projects.
- IDA financing should be complemented by partnership and coalitions, especially with African institutions and actors (e.g., Nigeria's gas to power; Rwanda Energy Access SWAp; Bujagali hydropower; Democratic Republic of Congo's Multimodal Transport project and the Dakar Toll Road) to deliver greater impact.
- Good governance and improved operational and regulatory capacity are critical for sustainable access, services and financial viability.
- High quality of project preparation and execution is needed to ensure success in PPPs and deliver sustainable outcomes.

3. ACTION PLAN, FY12-15

CORE ENGAGEMENT

What will constitute the core engagement in infrastructure?

The Bank's infrastructure interventions are grounded in the broader Africa Region Strategy of 2011, based on two central pillars of "competitiveness & employment" and "vulnerability & resilience", building on a cross-cutting foundation of "governance & public sector capacity." In addition, the region has adopted a selectivity approach, which aims at focusing on a smaller number of high impact interventions.

- **Unmet access needs:** continue to focus on expanding access to infrastructure services in both urban and rural areas, including: electrification, meeting MDG targets in water and sanitation and improving rural road accessibility.
- **Sustainable transport:** focus on improving connectivity between key economic nodes, enhancing support to regional integration and trade/transport facilitation, promoting PPPs and leveraging funding, tackling urban mobility bottlenecks and mainstreaming social accountability in transport projects while supporting capacity building for sustainable results.
- **Sustainable energy:** accelerate scale-up of regional power generation and transmission capacity (target: 8GW of new generation capacity by 2015); complement supply expansion with demand-side management and energy efficiency programs.
- **Broadband infrastructure:** focus on completing the regional fiber optic network so that all landlocked countries have access to at least one submarine cable; provide public subsidies to users rather than to service providers where necessary; stimulate transformational applications of available bandwidth to applications including banking, education, medicine and public administration.
- **Water resources:** focus on regional capacity building for River Basin Organizations to assist them in developing consensual basin-wide investment plans, key focus basins are the Niger, Nile, Senegal and Zambezi.
- **Disaster risk management:** mainstream disaster risks into country strategies and operations; develop national Disaster Risk Management programs in 9 priority countries.

What will the region do to secure more/efficient public sector financing for infrastructure?

- **Public Expenditure Reviews (PER):** offer on a demand-driven basis. Use of spatial analysis to provide guidance on the prioritization of infrastructure investments is a growing area of work.
- **Leveraging finance of other partners:** use strong track record to continue partnering with other multilateral and bilateral donors, notably the African Development Bank. In recent years, every US$1 of IDA resources for Africa's infrastructure has leveraged US$3 of donor co-finance. Non-OECD financiers are increasingly partnering with IDA, most notably the Arab development banks, while exploring possible parallel co-finance with the China Exim Bank.
- **Cost recovery and targeted subsidies:** promote cost recovery pricing of key services such as power and water to ensure sustainability and possible extension to unserved populations and apply limited subsidies on a targeted basis.

TRANSFORMATIONAL ENGAGEMENT

Where are the new opportunities for "transformational" engagements?

- **Regional:** The region has a very strong pipeline of regional infrastructure projects, many of them aiming to address critical missing links and bottlenecks in the regional transport, power transmission and fiber optic networks. The new Regional Integration Assistance Strategy for Africa sets the framework for these interventions. A number of these projects have attracted the interest of the G20. In the power sector, a number of key cross-border transmission projects in West Africa (Côte d'Ivoire-Liberia-Sierra Leone-Guinea interconnector), East Africa (Ethiopia-Kenya interconnector) and Southern Africa (Mozambique and Zambia) will allow countries to benefit from more abundant and lower cost power in neighboring states. Efforts in transport will be selectively targeted at three major regional ports (Douala, Mombasa and Tema) and their associated hinterland road corridors into Central, East and West Africa respectively. In southern Africa, the region is contributing a number of projects to the high priority North-South Corridor. For ICT, the region will invest in the completion of the Central Africa Backbone and make connection to the submarine cable possible for a number of small West African countries.

- **Broader development:** The region will work on supporting projects that have the potential to unlock broader development benefits. A preeminent example is the development of the Inga hydropower site, which, when fully developed, will be the world's largest hydropower site (40GW), leading to a huge expansion in the availability of low cost power on the continent with major ripple effects for the competitiveness of Africa's productive sector.
- **Green growth:** Opportunities for green infrastructure exist in Africa's vast unexploited renewable energy resources (hydro-power and geothermal), as well as in its substantial volumes of flared gas. The region has a strong pipeline of hydropower projects – with schemes identified in Benin, Burundi, Cameroon, Ethiopia, Guinea, Liberia, Niger, Sierra Leone, Tanzania – that will help put these countries and their surrounding neighbors on a greener development path. Investments are also being made in the development of Kenya's geothermal potential. The energy agenda will also look beyond power to sustainable biomass supply and use.
- **Co-benefits:** Two important areas where the region is pursuing co-benefits are city level engagements and multi-purpose water resource development. The region's urban practice is in the midst of a paradigm shift from piecemeal infrastructure projects to city level engagements that look at governance, financing and service delivery as an integrated system, often with a multi-sectoral approach. These kinds of engagements are being pursued in Kenya, Mozambique, South Africa and Tanzania. The region's water resource practice is also strongly committed to multi-purpose development of water resources that takes into account the full range of potential water uses in urban supply, hydropower, irrigated agriculture, navigation, fisheries and others. Extensive analytical work on this issue is paving the way for engagements of this kind on the Niger, Nile and Zambezi.

What will the Bank do to build client capacity to support transformational engagement?

- **IDA grants to regional organizations to build capacity for regional projects.** Regional projects face significant capacity constraints that hold back their implementation. New rules allow grant financing for building capacity in regional organizations to support regional project development and operations.
- **Capacity development and training for national and citywide programs of urban slum upgrading,** land use planning, street addressing and municipal finance, pertaining to a range of municipal infrastructure and service delivery challenges (WBI).

INFRASTRUCTURE FINANCING

What will the Bank do to improve the investment climate?

- The Bank is developing a new breed of operations— the Growth Poles Projects—to help African countries deploy a critical mass of reforms, infrastructure investments and skills building for the appropriate environment to foster industrial investment. Such projects are being implemented or prepared in Cameroon, the Democratic Republic of Congo, The Gambia, Madagascar and Mozambique.
- The Bank will also work on reforming labor and land regulation, as well as deploying new approaches to improve the business environment, such as the regulatory "guillotine," which, combined with regulatory impact assessment, is a way to reduce the stock and flow of business regulations.

What will the Group do to help client countries attract more private sector financing?

- The region will work more closely with IFC and other actors to increase leverage with private capital. From IFC, 20-25 projects are expected annually over FY12-14 for IFC own account volumes of US$500-600 million, with an additional US$300-400 million anticipated in mobilization.
- Africa's resource rich countries is working to break out of the enclave model through strategic development of resource corridors, leveraging major infrastructure investments from mining companies and other resource concessionaires. The Group can facilitate, as for example in Guinea and Liberia.

- The Bank plans to scale-up the "Lighting Africa" program to reach 80 million people by 2020. The program has harnessed private sector initiative to increase availability and reduce cost of decentralized solar lighting solutions for Africa's rural areas.

Where are the opportunities for public-private partnerships?

- Considerable potential exists in gas-fired and geothermal power generation, as well as port development. Through the recently Board-approved special initiative for infrastructure, IFC will focus on creating PPPs jointly with IDA, look to support the second generation of PPI in power sector and help further extractives-related transport initiatives. In addition, IFC will pursue opportunities in improved delivery of services and payments through the ICT sector. IFC Advisory services will, wherever possible, take a programmatic approach to develop PPP project pipelines, as for example in Nigeria and East Africa.
- On-going reforms to the World Bank's guarantee instrument, including the expansion of partial credit and partial risk guarantee instruments to IDA countries, constitute a mainstreaming of innovative practice already underway in the region and will help to facilitate the structuring of viable PPPs, particularly for Africa's energy sector.

What are the opportunities to tap into "green financing"?

- Clean Technology Fund has three projects in the pipeline for South Africa, including the Energy Efficiency Program, the Sustainable Energy Acceleration Program and the Eskom Renewable Support Project, with $300 million in CTF going to IFC and the Bank and over US$1.1 billion leveraged from the public and private sector. In addition, the CTF Trust Fund Committee has endorsed an investment plan for Nigeria and moving forward is contingent upon the availability of funds beyond what is planned for in the current pipeline.
- Three countries have been selected to be part of the Strategic Climate Fund's Program for scaling up Renewable Energy in LICs (SREP), to pilot the viability of low carbon development pathways in the energy sector. Mali, Ethiopia and Kenya can expect to receive between US$25-50 million as part of the program.
- There is a potential to link climate finance to Africa's energy access agenda, particularly if large hydro projects were to become eligible for climate finance. The Bank will build client capacity for access green financing through: i) the Mitigation Action Implementation Network; ii) the Regional Carbon Forum; and iii) carbon finance support for Dar es Salaam (WBI).

What will the Bank do to tap into knowledge and financing of private foundations, think tanks and others?

- The Region is defining a strategy for closer partnership with think tanks in Africa, of which there has been a recent upsurge.

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