

# The African Development Bank Group Chief Economist Complex



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## Additionality of Development Finance Institutions (DFIs) in Upstream Oil and Gas in Africa

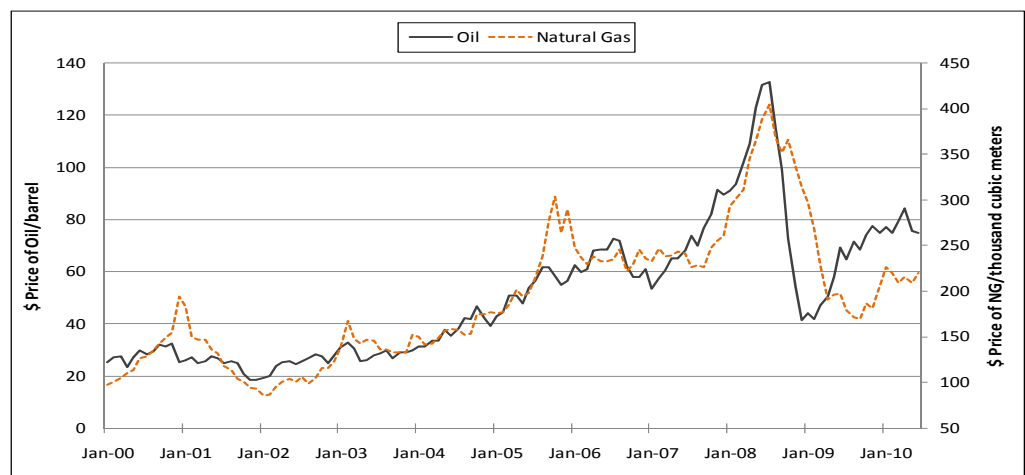
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### 1. Introduction: A Changing Landscape

The landscape of oil and gas production in Africa is changing. Spurred by a positive price outlook (see Figure 1), oil fields in three new producers, Ghana, Niger and Uganda, are expected on-stream by the end of 2011. Another cohort of new producers, including Kenya, Liberia, Mozambique, Sierra Leone and Tanzania, is thought to be not too far behind (see Table A1).

**Figure 1: Crude Oil and Natural Gas Prices (Monthly Averages), Jan 2000 – Jun 2010**



Source: IMF Primary Commodity Prices, 2010

Africa is expected to increase its share of global oil production from 12 to 15 percent by 2015 (see Figure 2). This is in follow up to the decade between 1999 and 2008 when oil production on the continent grew faster than in any other region in the world (Roelofsen and Sheng, 2010).

The picture is similar for natural gas. Over the period from 2007 to 2035, growth in natural gas production in Africa is expected to be second only to that of the Middle East (International Energy Outlook 2010).

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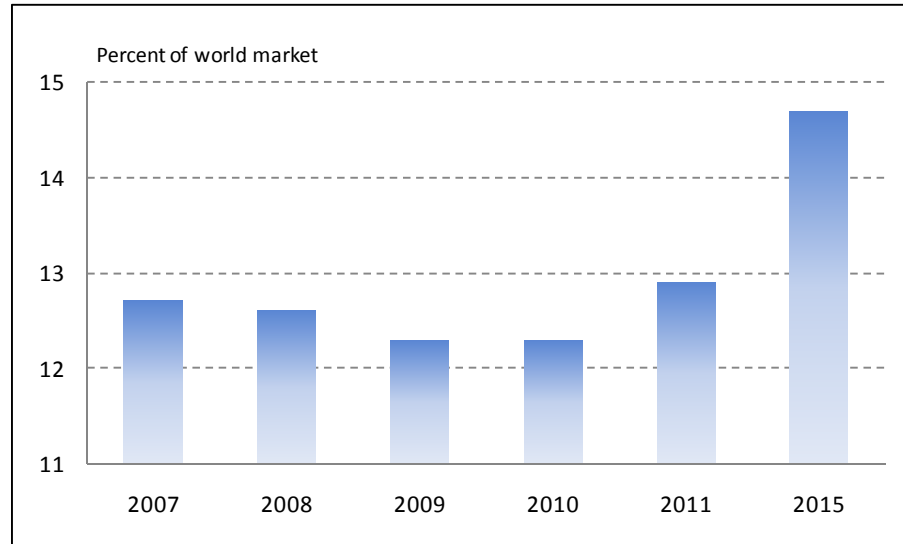
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As the oil and gas sector evolves and grows in Africa, Development Finance Institutions (DFIs), notably the African Development Bank (AfDB), must weigh choices about how to deploy limited resources and remain relevant.

This brief offers recommendations for DFIs to strengthen the process of early identification of opportunities and country needs in upstream oil and gas in Africa and maximize additionality in the sector at both transaction and policy levels<sup>1</sup>.

Figure 2: Distribution of African Imports among the Major Blocs (1994-2009)



Source: Valdmanis, 2009

The recommendations outlined here are based on research which focuses primarily on the upstream phase of the oil and gas sector (Wetherill, 2010)<sup>2</sup>. For new producer countries, this phase is the gateway to consolidating best practices early, laying the foundation for prudent use of resource revenues and harnessing the sector as an engine for broad-based growth. Smart and targeted DFI engagement at this stage can thus help to revise upward the growth horizons of new producer countries.

## 2. Financial Additionality

Overall financing to the sector is massive and DFIs will remain a small piece of the big picture. Of twenty-two upstream projects in Africa surveyed from the period between 2007 and 2010, DFIs participated in eight, contributing USD 890 million out of more than USD 16.5 billion (Wetherill, 2010).

A detailed breakdown of funding to the Jubilee Field in Ghana in 2009 further illustrates this dynamic (see Figure 3).

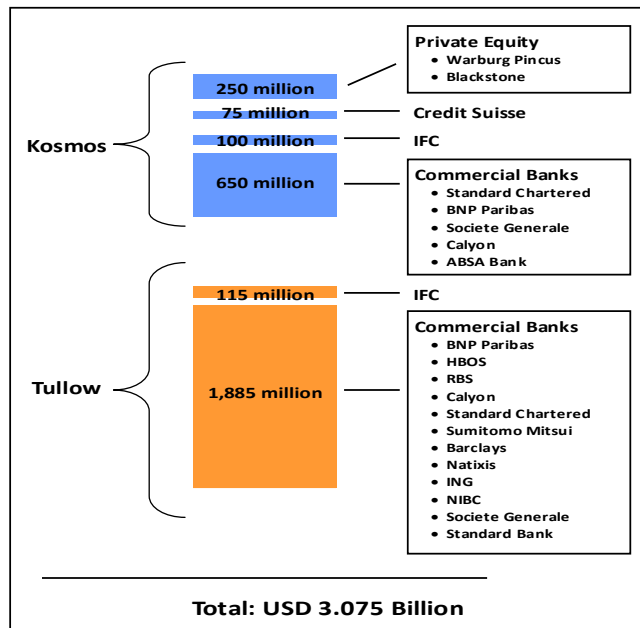
In response, DFIs should identify and focus on niche segments of the upstream market with the potential for strong development impact. This calls for a proactive, strategic and critical approach to deal selection, and, by extension, foregoing some opportunities.

This brief highlights two investment tracks for maximizing the impact of DFI financing (see Figure 4). One track consists of investing in projects in emerging producer countries with nascent and untested oil and gas sectors. The other pursues investments in projects led by indigenous or independent firms.

<sup>1</sup>The term, *additionality*, is an explicit reference to the African Development Bank’s (AfDB) framework for ex-ante Additionality and Development Outcome Assessment (ADOA) of its private sector operations, an AfDB-piloted program which serves as a decision tool for project selection. The ADOA framework, developed through the AfDB’s Development Research Department, serves to evaluate the additionality of DFIs in transactions, i.e. what DFIs bring or contribute which other purely commercial lenders do not.

<sup>2</sup>Upstream is defined as exploration, development and production, midstream as storage and transportation and downstream as processing and refining.

Figure 3: Jubilee Financing Breakdown 2009



Source: Multiple (Thomson Reuters, IFC, Credit Suisse, Kosmos Energy), 2010

### 2.1. Emerging Producers

Transactions in emerging producer countries carry relatively more risk and uncertainty than transactions in more established producers around the continent. DFIs should specifically be engaging with this emerging group to play a catalytic role in launching a new industry.

At a practical level, this means dedicating staff resources to monitoring developments in the sector, building visibility and brand recognition within the industry as well as with relevant ministries and national oil companies (NOCs).

It means occupying a strategic position at the center of the oil and gas “nature-wealth-power” framework (African Development Bank, 2007: 144), cultivating relationships and putting ‘boots on the ground’ to build trust and source prospective deals in the early phases of discoveries when governments and companies are first establishing working partnerships.

### 2.2. Indigenous Firms and Independents

In many cases, it is the small, agile, growth-oriented indigenous and independent firms that are pioneering new discoveries. They have demonstrated a willingness to take on more risk than the majors, and their discoveries, as in the cases of Ghana and Uganda, can change the outlook for a country. DFIs should promote this segment of the industry by targeting transactions sponsored by ‘homegrown’ firms as well as independents.

Taken together, the two tracks provide a taxonomy for narrowing and selecting from among the pool of potential projects in upstream oil and gas in Africa. They are intended as indicative operational guidelines for actively monitoring developments in the upstream sector and targeting opportunities early. Adhering to this strategy would entail ensuring, as a condition for moving forward, that potential projects fall in one or both tracks. However, it is also understood that DFIs may have additionality outside the two suggested investment tracks when market events or other circumstances cause investor appetite in the sector to decrease.

Figure 4: Recommended Upstream Oil and Gas Investment Tracks

	Majors/Non-regional NOCs	Indigenous and Independent Firms	Regional NOCs
Established Producers	✗	✓	✗
Emerging Producers	✓	✓	✓

### 3.High Quality Development Results

As new countries on the continent prepare to enter the sector for the first time, there is an imperative to absorb lessons learned from around the continent and beyond and ‘get it right’ on development outcomes linked to oil and gas revenues.

The direction a country takes is very much determined by decisions at all levels from the policy and legislative framework down to the immediate and practical considerations embedded in individual transactions. DFIs are positioned to engage in both policy and transactions to promote high quality results for host countries and communities in three areas: policy and governance; local content; and social and environmental standards.

#### 3.1. Policy and Governance

At the policy level, DFIs should be working in concert to maximize knowledge transfer and other complementarities and engaging with new and emerging producers early and often to assist countries in establishing a smart, enforceable policy environment for sector growth.

DFIs have the convening power and the knowledge base to bring together all stakeholders in discussion of the impact of oil and gas revenues. The value of such consultation during the very nascent stages of policy development is self evident and can feed into sound resource management as well as prudent use of revenues.

At the same time, the reality of business and government is that policy development and transactions are often moving forward in parallel. At the transaction level, DFIs should be mobilizing the internal will to deploy robust inter-departmental teams, which can effectively straddle the resource interface between private industry, communities and government.

A DFI presence at both policy and transaction levels can help to establish a critical flow of information and a positive feedback loop between policy and transactions, such that policy decisions are informed by practical challenges at transaction level and vice versa.

#### 3.2. Local Content

Governments are recognizing that local content and business linkages in the oil and gas sector have long been a missed opportunity to extend the impact of the sector into diversified manufacturing and production.

Nigeria established specific targets for local content as part of its 2010 Petroleum Industry Bill (PIB), a landmark effort to overhaul its oil and gas sector (Offshore Technology, 2010). From stipulating that 65 percent of divers for offshore facilities be Nigerian to 60 percent of steel ropes be made by local firms, the legislation marks a major shift in policy toward increased local participation and ownership of the industry (Onuah, 2010).

In an innovative effort to harness profits from the oil and gas sector as an engine for financial sector development, the PIB also “requires multinational firms to keep at least 10 percent of their profits in local accounts” (Onuah, 2010). Supplying banks with capital is a means of improving the lending environment for businesses operating outside the oil and gas sector and constrained by limited access to finance. Thus the local content bill promotes local content, production and entrepreneurship well beyond the natural resources value chain and aims to use the sector as a driver of broad-based growth, innovation and expansion.

At the policy level, DFIs should be adding value by sharing legislative lessons and models among regional countries but also by leading on designing new policy. As knowledge centers, DFIs are well positioned to stimulate debate, guide governments and push for even more innovative policy solutions such as tax incentives for multinational firms to deposit even higher proportions of profits in long term local accounts (Ndikumana, L. (2010) email, 29 July).

DFIs should also focus on ensuring that policy initiatives move at a reasoned and realistic pace, stimulating local content while remaining internationally competitive and attractive to foreign investment. Targets for local content participation are only effective in so much as they are realistic, and a challenge for Nigeria and other countries will be to mobilize local resources to meet the new quotas without undermining the continuity of industry operations (Onuah, 2010).

At the transaction level, DFIs should be promoting the growth of world class, ‘homegrown’ support industries and services. Technical assistance from DFIs delivered in parallel with project finance is a proven tool for stimulating job creation, enhancing local capacity and improving business competitiveness.

### 3.3. Social and Environmental Standards

It is widely acknowledged that the sector poses significant risks to the social and environmental landscape. The environmental degradation, social upheaval, disaffection and violence in the Niger Delta region in Nigeria and the recent BP spill in the Gulf of Mexico are two reminders of the importance of constant vigilance and monitoring. While by no means a panacea to the risks and potential ravages of the sector, a DFI presence in transactions adds an additional element of rigor to social and environmental standards, checks and compliance mechanisms.

### 4. Way Forward

This brief advocates a set of tools and considerations to guide and maximize DFI engagement in policy and transactions in the upstream oil and gas in Africa and points to a re-thinking of DFI strategy in the sector. Staying relevant in oil and gas entails a long term approach to working with governments and companies to ensure high quality delivery of solutions, strategies and financing.

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It requires a strategic approach to upstream project selection and allocation of resources and a vision for incorporating midstream and downstream components into the portfolio. It requires coordinated engagement by DFIs with governments early and often on policy issues to ensure smart and effective policy decisions and prudent revenue management. It also calls for the internal will to mobilize the cross-disciplinary and inter-departmental processes necessary to deploy the full range of DFI tools and promote an oil and gas sector in Africa which truly serves as an engine for broad-based growth, job creation and development.

A number of spin off knowledge products can also be imagined to advance this process:

- A follow up note to consider whether the same recommended investment tracks are relevant to DFI engagement in the downstream sector;
- Country briefs to address emerging producers in more detail;
- A brief to focus on oil and gas rich fragile states;
- A pure investment guide for the sector to explore the forms that DFI financing could take. Concentrating on regional integration, for example, might lead to South-South technology and human capacity transfer by linking NOCs in established producers with NOCs or indigenous firms in emerging producers;
- A joint strategy note by DFIs exploring how to maximize complementarities in the sector.

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Appendix Table A1: Crude oil reserves and production by established and emerging producers

<b>Established Oil Producers</b>	<b>Crude Oil Reserves (billion barrels)</b>	<b>2008 (crude oil production, million barrels per day)</b>	<b>2015 (projected production, million barrels per day)</b>
Algeria	12.2	2.2	2.6
Angola	9.0	2.0	2.4
Cameroon	0.2	0.1	0.08 <sup>1</sup>
Chad	1.5	0.1	0.1
Congo (Brazzaville)	1.6	0.2	0.3
DRC	0.2	0.02	0.02 <sup>1</sup>
Cote d'Ivoire	0.1	0.06	0.6
Egypt	3.7	0.6	0.5 <sup>1</sup>
Equatorial Guinea	1.1	0.4	0.4
Gabon	2.0	0.25	0.2
Libya	43.6	1.9	1.7
Mauritania	0.1	0.01	0.01
Nigeria	36.2	2.2	2.8
Sudan	5.0	0.5	0.5
Tunisia	0.4	0.1	0.1 <sup>1</sup>
<b>Total</b>	<b>116.90</b>	<b>10.64</b>	<b>12.30</b>

Sources: US EIA (International Energy Outlook 2010) unless otherwise noted; <sup>1</sup> Reuters estimates

<b>Emerging/Potential Oil Producers</b>	<b>Est. Reserves (billion barrels)</b>	<b>2008 (production, million barrels per day)</b>	<b>2015 (projected production, million barrels per day)</b>
Ghana	3.2 <sup>1</sup>	-	0.2
Kenya	1.5 <sup>2</sup>	-	No estimate avail.
Liberia	No estimate avail.	-	0.2
Mozambique	3.0 <sup>3</sup>	-	No estimate avail.
Niger	0.3 <sup>4</sup>	-	0.02
Sao Tome and Principe	1.0 <sup>5</sup>	-	No estimate avail.
Sierra Leone	No estimate avail.	-	0.2
Somalia	4.0 <sup>2</sup>	-	No estimate avail.
Tanzania	No estimate avail.	-	0.1
Uganda	2.0 <sup>6</sup>	-	0.13
<b>Total</b>	<b>15.00</b>	<b>-</b>	<b>0.85</b>
<b>Total (both groups)</b>	<b>131.90</b>	<b>-</b>	<b>13.15</b>

Sources: Reuters estimates unless otherwise noted; <sup>1</sup> Credit Suisse; <sup>2</sup> Lion Energy; <sup>3</sup> allAfrica.com; <sup>4</sup> Financial Times; <sup>5</sup> multiple sources estimate 1 billion plus barrel reserves; <sup>6</sup> Tullow Oil