

**T**his is Africa's time." To hear that now from the private sector is a credit to both the new generation of leaders in Africa and to the entrepreneurial drive of people and businesses across that diverse continent.

To hear it in my lifetime, after a boyhood selling sweets and newspapers in my hometown of Kirkcaldy to raise money for Oxfam's freedom from hunger campaign, is a measure of how globalisation has already succeeded in lifting millions of people out of poverty. I believe progressive globalisation has the potential to do even more, and this report helps to show how.

Africa is different, and often in ways that help businesses to succeed. Indeed, it's easier to do business in Africa than in many of the consensus high-growth areas.

Businesses looking to invest in India and China had my full support for the 13 years that I was in government. I also saw how difficult it could be for them to get access, to get ownership of assets, to set up their own plants, to simply sell their goods. Today, Botswana, Tunisia, Rwanda, Ghana, Namibia and Zambia all offer a more favourable entrepreneurial environment than China.

Portfolio investors should take notice, too. In our world of the "new normal," with low returns in the West, pension funds will have to invest in areas like Africa to make sure they can generate the returns their savers require. Indeed, some funds' flows into India and China are already at levels that are prompting macro-prudential constraints.

In investments for infrastructure, Africa also stands out; its political leaders' commitment is clear, thanks to their creation of the African Action Plan, which will lead to the Programme for Infrastructure Development in Africa.

African countries have, rightly, been anointed some of this century's Global Growth Generators—the countries that will thrive in our globally integrated economy and achieve the greatest gains in living standards. The roadmap is being drawn, the invitations have been sent, and investors that miss out on this will regret the neglected opportunity of this decade.

I would like to thank GBHealth for their support in this endeavour, and also Dalberg Global Development Advisors for their expertise and advice.



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# Investment Opportunities in African Infrastructure

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## Introduction

At last, this is Africa's time.

By virtually any metric important to economic development, African countries are making stunning progress. Between 2000 and 2009, real GDP growth in sub-Saharan Africa outpaced that of most other regions of the world.<sup>1</sup> A number of African countries—among them Angola, Ethiopia, Mozambique and Rwanda—saw inflation-adjusted growth rates that were higher than India, Russia or Brazil.

African economies are not only growing but also becoming more favorable environments for businesses and investors. The World Bank rates Mauritius a better place to do business than Germany, and South Africa ranks above Chile. Botswana, Tunisia, Rwanda, Ghana, Namibia and Zambia all offer a more favorable entrepreneurial environment than China, according to the Bank's surveys.<sup>2</sup> Meanwhile, economic freedom—the ability to work, earn, invest and spend without interference from the state—has improved markedly over the past 10 to 15 years in Angola, Burkina Faso, Cape Verde, Ethiopia, Guinea-Bissau, Madagascar, Mozambique and Nigeria.<sup>3</sup>

The skills and capacities of the African people are improving as well. In some African countries, school enrollment is rising at the fastest rates in the world. Life expectancies are increasing thanks to improving health systems and control of epidemics.<sup>4</sup> There is still room for improvement in both areas, but the gains of recent years suggest that Africans will be more productive workers and more powerful consumers in the decades to come. Already, a professional class is developing that will be a strong anchor for growth.

Investing in Africa has the potential both to generate returns and to create beneficial long-term relationships. Companies whose brands gain the trust of African households will find an ever-larger market as incomes increase. By the same token, companies that gain the trust of African governments and businesses will find more demand for long-term projects as tax revenue and profits pile up.

Africa's own companies are underlining this potential as they expand at an accelerating pace across the continent.<sup>5</sup> The time to join them is now.

### Case Study 1: Public-private partnership (PPP) for the construction of the Dakar Toll Road in Senegal

The signing of West Africa's first PPP toll road investment in November 2010 is a landmark for PPPs in the region. The 25 km road project in Senegal is worth US\$ 340 million; investors include the International Finance Corporation (IFC), the African Development Bank (AfDB), the Senegalese bank CBAO and the West African Development Bank. The presence of CBAO in the partnership (a first for a commercial bank in Senegal) demonstrates domestic private investors' increasing interest in the infrastructure sector. The toll road will greatly improve businesses' access to markets and is expected to cut the average commute to or from Dakar from two hours to less than 30 minutes. Investor payback will come through toll collection, with an anticipated financial rate of return of 20 percent.

Sources: [www.ifc.org](http://www.ifc.org); [www.afdb.org](http://www.afdb.org)

### Case Study 2: The East Africa Marine System (TEAMS)

After experiencing delays in the implementation of the Eastern African Submarine Cable System (EASSy)—a network of fiber optic cables that connects 21 African countries—the Government of Kenya moved forward with its own undersea cable under a PPP arrangement. The construction of the US\$ 82 million East Africa Marine System (TEAMS) cable linking Kenya to the United Arab Emirates (UAE) was completed in June 2009, reducing the cost of bandwidth by 94 percent. TEAMS (Kenya) Ltd has 85 percent ownership of the cable, and Etisalat of the UAE holds the remaining 15 percent. Eleven private company groupings make up the majority ownership of TEAMS (Kenya) Ltd, with the Government of Kenya holding only a 20 percent share. Through the sale of bandwidth to private operators in Kenya and neighboring countries, TEAMS' shareholders can expect to receive an estimated rate of return of 33 percent over less than three years.

Sources: [www.infrastructureafrica.org](http://www.infrastructureafrica.org); [www.businessdailyafrica.com](http://www.businessdailyafrica.com)

## Why infrastructure?

One of the most promising areas for investing in Africa's boom is infrastructure. Economic growth on the continent is increasing demand for energy, water, sanitation, transport and information and communications technology (ICT). For instance, power generation capacity—currently 68,000 megawatts in sub-Saharan Africa—will need to grow by more than 7,000 megawatts a year to keep pace with demand.<sup>6</sup> Markets for ICT services are also expanding rapidly; broadband services, for example, are expected to increase from 0.04 lines per 100 inhabitants in 2006 to 2.54 lines in 2015.<sup>7</sup> Improved infrastructure will set the stage for further growth on the continent, creating large markets and investment opportunities. According to the World Bank, addressing Africa's infrastructure gap could add two percentage points to its rate of GDP growth.<sup>8</sup>

Africa's growth is already creating new business opportunities in the infrastructure sector. For private companies, infrastructure will be worth US\$ 200 billion in annual revenue by 2020.<sup>9</sup> Returns on foreign investment in African infrastructure are higher than in any other developing region; African independent power projects (IPPs), for example, have earned their investors internal rates of return of up to 25 percent, compared with 15 percent in Latin America and 12 percent in Eastern Europe.<sup>10</sup> Investments in cross-border power transmission have

exceptionally high returns, typically paying for themselves in less than a year.<sup>11</sup>

Improving Africa's infrastructure is also critical to the region's long-term social and economic development, including achieving the Millennium Development Goals (MDGs). Across the continent, health centers struggle to function without electricity, and the lack of safe and convenient water supplies facilitates the spread of disease. According to the World Health Organization, improved sanitation and drinking water could reduce diarrheal diseases by nearly 90 percent.<sup>12</sup>

Building infrastructure can help to boost employment as well. For instance, the private equity firm Actis estimates that its investment in a toll route between South Africa and Mozambique helped to create 13,000 jobs.<sup>13</sup> A World Bank review of projects in Latin America and the Caribbean suggests that the short-term potential of infrastructure capital investment projects to generate employment (both directly and indirectly) could be 40,000 jobs per US\$ 1 billion.<sup>14</sup>

Private companies may see investing in Africa as a gamble, but the risks are often more perception than reality. Moody's analyzed the performance of 20 years of project finance loans (accounting for about 45 percent of all projects financed since 1983) and found that only one project out of 92 in Africa had defaulted.<sup>15</sup>

**Across sectors, infrastructure investments average returns of 15 to 20 percent.**

## Specific opportunities in the infrastructure sector

African governments are increasingly recognizing the importance of the private sector for the provision of infrastructure. Many have made serious efforts to create the right legislative, regulatory and institutional environment for private investors to come on board. And a number of compelling projects have already moved from the conceptual to the fundraising stage.

The Government of Kenya, for example, is spearheading the Lamu—South Sudan—Ethiopia Transport Corridor (estimated value: US\$ 22 billion).<sup>16</sup> This project includes the construction of a port in Lamu, Kenya and a rail line and highway linking Ethiopia, South Sudan and Rwanda to the port; it will be one of the biggest regional integration initiatives in East Africa. China has already shown interest in financing the construction of the port, and an investor conference is being planned in India to encourage additional investors to come on board.<sup>17,18</sup> Simulations suggest that rehabilitating the infrastructure of East Africa's northern corridor would yield a total rate of return of at least 20 percent.<sup>19</sup>

In nearby Burundi, Rwanda and Tanzania, governments are ready to partner with private companies to fund the construction of the East African railway, estimated to cost between US\$ 3.5 and 5.1 billion.<sup>20</sup>

A feasibility study completed in December 2008 estimated the project's rate of return at around 30 percent.<sup>21</sup>

At a broader level, the African Action Plan 2010-2015, developed by the African Union (AU) and the New Partnership for Africa's Development (NEPAD), showcases 80 flagship programs and projects for economic integration in Africa. Among these, the AU has given priority to seven infrastructure projects.<sup>22</sup> One is the Nigeria-Algeria gas pipeline. Nigeria's gas reserves are the seventh largest in the world,<sup>23</sup> and the planned 4,128 km pipeline will send Nigerian gas to Europe through Niger and Algeria. The project is estimated to cost between US\$ 13 billion and US\$ 20 billion, and Russia's Gazprom, India's GAIL, France's Total, Italy's Eni S.p.A and Royal Dutch Shell have all expressed interest in participating.<sup>24</sup> After some earlier delays, the project is back on track.

The AU priority projects offer different balances of risk and reward. Estimates from the African Development Bank suggest that companies participating in infrastructure investments in Africa can earn commercial rates of return from 5 to 10 percent in the water sector, 17 to 25 percent in the power sector and 25 to 30 percent in telecoms.<sup>25</sup> Across sectors, infrastructure investments average returns of between 15 and 20 percent,<sup>26</sup> though sessions at the recent World Economic Forum on Africa 2011 heard mention of even

### Case Study 3: Actis Infrastructure Fund

Actis, a private equity fund manager, has a long history of investing in emerging market infrastructure. Its most recent fund—Actis Infrastructure II—focuses on power and transport assets with 45 percent of the US\$ 750 million fund to be invested in Africa. The previous Actis Infrastructure Fund, established in 2003, also invested substantially across Africa. Investments included the acquisition of Globeleq, a power generation operating company with natural gas power plants in Côte d'Ivoire and Tanzania. The Fund's investments were exited in 2007 through strategic asset sales to third parties realizing an rate of return of 23.3 percent for investors over four years.

Sources: [www.act.is](http://www.act.is);  
[www.africancapitalmarketsnews.com](http://www.africancapitalmarketsnews.com);  
[www.azitoenergie.com](http://www.azitoenergie.com);  
[www.globeleq.com](http://www.globeleq.com)

### Case Study 4: Investment Climate Reforms in Zambia

The Government of Zambia has made significant efforts to improve its investment climate. These include the establishment of the Zambia Development Agency in 2006, the creation of a PPP Unit and the Triangle of Hope initiative, which is modelled on the Malaysian development experience and sponsored by the Government of Japan. In addition, Zambia has undertaken key reforms that make it easier for the private sector to do business. These include liberalization of interest rates, abolition of exchange rate controls, 100 percent repatriation of profits, and free entry investment in virtually all sectors of the economy. As a result Zambia's ranking on the Doing Business Index has moved up 24 places from 2009 to 2011 and its FDI inward stock increased to US\$ 10 billion in 2010 up from US\$ 5.4 billion in 2005.

Sources: [www.oecd.org](http://www.oecd.org);  
[www.unctad.org](http://www.unctad.org)

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Infrastructure could be worth US\$ 200 billion in annual revenue by 2020.

higher returns—up to 40 percent in the power sector and 80 percent in roads.<sup>27</sup>

Competition for these rewards is increasing. Though Western Europe is still the leading investor in Africa, companies from China, India and Malaysia are also active investors and operators in infrastructure projects across the continent. FDI projects by Asia-Pacific countries in Africa increased by 11 percent in 2010,<sup>28</sup> and projects from Indian companies increased by 74 percent in 2010, mainly in telecoms. Africans themselves are also optimistic about the opportunities the continent has to offer; intra-African investment into new FDI projects showed a 21 percent compound annual growth rate between 2003 and 2010.<sup>29</sup>

## A continuously improving environment

African infrastructure presents profitable business opportunities that offer both economic and social impact—not only for investors seeking financial returns, but also for construction firms and infrastructure network operators in search of new business. Indeed, there are opportunities in every sub-sector, and the environment for investing is continually improving.

Governments in Africa are taking steps to improve the investment climate and attract new pools of investment. They have taken the lead in reforming legislation and creating structures for low-risk, profitable investment partnerships. They are also working together to lower the barriers that prevent working across their borders.

Meanwhile, partners such as development finance institutions and donor organizations are helping to structure deals and investment funds. The African Development Bank, for example, teamed up with investors to generate up to US\$ 450 million to finance a Pan-African Infrastructure Development Fund. The Bank contributed US\$ 50 million to the fund and US\$ 1 million to its management.<sup>30</sup> Development partners are also ready to finance technical assistance, provide guarantee instruments to mitigate risk and take on some of the upfront costs of early-stage project development.

As investors and multinationals get involved, they, too, will play a pivotal role in Africa's development. They will not only provide capital and improve efficiency in utilities; they will also bring their experience, management expertise and technological know-how to Africa's infrastructure sector. These extra benefits will contribute to faster growth in the long term, and eventually create even more opportunities to invest.

Investing in Africa offers a wealth of potential. With governments implementing reforms to improve the investment climate and development partners ready to shoulder some of the risk, this is an opportune time for the private sector to increase its participation in Africa's economic growth. African infrastructure offers private investors, financial institutions, construction firms and network operators a window of opportunity to earn an attractive return while making a long-term impact that will yield even more social and economic benefits in the future.

<sup>1</sup> World Bank (2011) World Development Indicators

<sup>2</sup> World Bank (2011) 'Doing Business 2011: Making a Difference for Entrepreneurs'

<sup>3</sup> Heritage Foundation (1995-2011) 'Index of Economic Freedom'

<sup>4</sup> United Nations Development Program (2011) 'Human Development Index Trends' (via [hdr.undp.org](http://hdr.undp.org))

<sup>5</sup> Dalberg Global Development Advisors and Initiative for Global Development (2011) 'Pioneers on the Frontier: Sub-Saharan Africa's Multinational Corporations'

<sup>6</sup> Briceno-Garmendia C and Foster V (2010) 'Africa's Infrastructure – A Time for Transformation'

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

<sup>9</sup> McKinsey Global Institute (2010) 'Lions on the move – the progress and potential of African Economies'

<sup>10</sup> PEI (2011) 'Infrastructure Investor Africa – An Intelligence Report'

<sup>11</sup> Briceno-Garmendia C and Foster V (2010) 'Africa's Infrastructure – A Time for Transformation'

<sup>12</sup> WHO (2010) 'UN-Water Global Annual Assessment of Sanitation and Drinking Water (GLAAS) Report'

<sup>13</sup> Actis News (May 2006). 'Actis takes the next exit from the N4 toll road'

<sup>14</sup> Tuck L et al (2009) 'Crisis in LAC: Infrastructure Investment and the Potential for Employment Generation'

<sup>15</sup> Moody's Investor Service (2010) 'Default and Recovery Rates for Project Finance Bank Loans, 1983-2008'

<sup>16</sup> 'Trade between China and Africa at US\$ 115 billion a year' 11 February 2011, article in Kenya's Daily Nation ([www.nation.co.ke](http://www.nation.co.ke))

<sup>17</sup> 'Trade between China and Africa at US\$ 115 billion a year' 11 February 2011, article in Kenya's Daily Nation ([www.nation.co.ke](http://www.nation.co.ke))

<sup>18</sup> 'Kalonzo woos investors in Gujarat state' 30 April 2011, article in Kenya's Daily Nation ([www.nation.co.ke](http://www.nation.co.ke))

<sup>19</sup> Briceno-Garmendia C and Foster V (2010) 'Africa's Infrastructure – A Time for Transformation'

<sup>20</sup> 'Rwanda to benefit from EA railway' 20 March 2011, article in Rwanda's New Times ([www.newtimes.co.rw](http://www.newtimes.co.rw))

<sup>21</sup> Presentation made by the Rwandan Minister of Infrastructure (2010) 'Public Private Partnerships for Infrastructure Development' (accessed from [www.rdb.rw](http://www.rdb.rw))

<sup>22</sup> 'AU Summit identifies key priority infrastructure projects' 1 February 2011, article on AfDB website ([www.afdb.org](http://www.afdb.org))

<sup>23</sup> US Energy Information Administration ([www.eia.doe.gov](http://www.eia.doe.gov))

<sup>24</sup> 'Nigeria, Algeria Resume Talks on Trans-Saharan Gas Pipeline Project' 9 March 2011, article in the Guardian Nigeria ([www.nguardiannews.com](http://www.nguardiannews.com))

<sup>25</sup> Kauffman C (2008) 'Engaging the Private Sector in African Infrastructure – NEPAD/OECD Africa Investment Initiative'

<sup>26</sup> Based on estimates from a presentation by the Pan African Infrastructure Development (PAID) Fund (2007) 'Presentation to the NEPAD Projects Conference' (accessed from [www.thedti.gov.za](http://www.thedti.gov.za)) and by Actis (2010) 'Partnerships and Finance for Infrastructure' (accessed from [www.cbglobal.com](http://www.cbglobal.com))

<sup>27</sup> 'Infrastructure – the Trillion Dollar Opportunity' (4 – 6 May 2011) (<http://www.weforum.org/sessions/summary/infrastructure-trillion-dollar-opportunity>)

<sup>28</sup> fDi Intelligence (2011) 'Manufacturing makes a comeback: FDI Global Outlook Report 2011'

<sup>29</sup> Ernst & Young (2011) 'Africa Attractiveness Survey – It's Time for Africa'

<sup>30</sup> 'Pan African Infrastructure Development Fund (PAIDF) - AfDB Group Proposes US\$ 50 Million Investment in PAIDF' (accessed from [www.afdb.org](http://www.afdb.org))