This is the third edition of our annual Deloitte African Construction Trends report. Our report this year highlights how capital intensive infrastructure development is progressing on the continent. We also track project updates and flag trends that require attention by project owners, funders and builders.

Our research reflects the rumbling of cement mixers on large capital project construction, enabling major economic and social development across the continent. All of the regions exhibit an intense focus on Transportation as well as Energy and Power.

Despite facing challenges such as declining oil prices, with exploration phases and feasibility studies underway, the Oil and Gas sector is idling. The fact is simply this; Africa is en route to a brighter future.
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Africa construction trends

2014 / 2013
Value in US$ (Million)

Project landscape
- Energy & Power: 75%
- Transport: 25%

Project landscape
- Energy & Power: 44%
- Transport: 24%

Project landscape
- Energy & Power: 37%
- Transport: 9%

Project landscape
- Energy & Power: 37%
- Mining: 2%

Project landscape
- Energy & Power: 39%
- Transport: 5%

Project landscape
- Energy & Power: 35%
- Oil & Gas: 5%

Project landscape
- Energy & Power: 34%
- Mining: 4%

Project landscape
- Energy & Power: 33%
- Water: 5%

Project landscape
- Energy & Power: 32%
- TMT: 3%

Project landscape
- Energy & Power: 31%
- Education: 1%

Project landscape
- Energy & Power: 30%
- Agriculture: 1%
It is a well-quoted fact that over the past five years, according to the 2014 IMF World Economic Outlook, six of the ten fastest growing economies globally were in Africa. It is forecasted that seven of the ten highest growth economies in the coming five years will be in Africa. However, to achieve this and to continue building on this momentum, accelerated infrastructure growth is imperative, specifically infrastructure growth that facilitates manufacturing and intra-African trade.

Energy, which is vital to support manufacturing growth, continues to be a key sector in the developing African infrastructure story. But investment and construction activity in transport has also come through strongly this year. This sector has eclipsed energy as the key sector seeing construction activity on the continent in 2014 and revealing significant investment in rail and ports. This reflects the continued economic growth on the continent, as ports and rail provide the backbone for intra-African and global trade, through facilitating the efficient movement of goods and commodities.

The prioritisation of the African integration agenda is a further key trend, which notably ties in with the rail and port activity being seen. Large rail and port projects tend not to be country specific, but rather regional in nature. Port structures support a large regional hinterland, while rail provides the feeder network in and out of the port for both neighbouring countries and the host country. The LAPSSET project in northern Kenya is a great example of this. On the power side too, regional initiatives are becoming increasingly important, with projects such as the six country Inga 3 hydropower project being fast-tracked, and regional inter-connector grids appearing on Deloitte’s database for the first time.

Africa’s rapidly growing middle class continues to drive demand for sustainable social infrastructure. Added to that, growth is being fuelled by continued investment in natural resources and agriculture. Overall, we see the opportunities surpassing the challenges facing our continent. Africa is our home and between 2013 and 2014 alone it was a home that exhibited a 46.2% growth in mega project construction value.

**André Pottas**
Partner, Infrastructure & Capital Projects
Advisory Leader: Africa
"Despite a sometimes uncertain regulatory environment in parts of Africa, companies cannot ignore the substantial growth prospects that the continent offers. Africa is expected to grow by 5.3% in 2014 and 5.7% in 2015, with Sub-Saharan Africa forecast to grow by 6.1% in 2014 and 5.8% in 2015. African growth will be driven by increased output in the natural resources sector, underpinning rising fiscal expenditure, especially in infrastructure projects and an expected increase in Africa’s trade and investment which also ties with emerging and developing economies. Rising income and urbanisation are supporting growth in domestic demand, which is helping to decrease the exposure to external economic shocks and increase diversification into service sectors such as construction, financial services and telecommunications, which will create a more solid growth profile and contribute to continued economic expansion."

Source: So Nigeria is the largest economy in Africa Now what? (Deloitte)
Methodology

Deloitte Southern Africa produces the African Construction Trends Report annually in collaboration with our African member firms. The sampling basis requires that to be included in the report, infrastructure construction projects are valued at over US$50 million and that they had broken ground, but not been commissioned, as at 1 June 2014. Such projects are included on the Deloitte database, which is used to produce the report.

The report therefore focuses on projects that are physically under construction, with construction crews on-site at the annual cut-off date. For clarity, a project that commenced construction at 30 June 2013 but which was completed and commissioned on, say, 30 April 2014 would thus not reflect on the 2014 database as it was not still under construction at 1 June 2014.

The report thus tracks the value of construction projects underway at 1 June of each year, and the numbers should not be read as reflecting the total value of projects constructed during a twelve month period.

This year 257 projects qualified for inclusion, in comparison to the 322 projects collected in 2013. While the number of projects dropped, the total value of projects under construction increased to US$ 325 828 million in 2014 from US$ 222 767 million in 2013. To enable us to draw year-on-year comparisons, Deloitte once again segmented the report into a continent-wide analysis, followed by regional sections. Categorisation of regions followed that of the African Development Bank and data collected was limited to publicly available information.
African infrastructure
En route to a brighter future

Investment by value of mega projects under construction in Africa grew by 46.2% in 2014, climbing a significant US$103 billion, from US$222 billion in 2013 to US$326 billion in 2014.

In terms of the number of projects, a total of 257 matched our collection criteria. Although this means that 65 less projects featured this year, the average project value rose from $689 million in 2013 to $1.27 billion in 2014, an increase of 84%. There were a number of new projects on which construction began in 2014, which has increased the overall average value of the total projects collected. In 2013 only 16% of the projects where above US$1 billion in value, whereas in 2014 27% of the total projects collected were above the US$1 billion mark in value, a 11% jump. The smaller projects ranging between US$50 million to US$100 million saw a decline from 2013 (39%) to 22% in 2014, a 17% decline in value contribution of smaller scale projects.

We also saw 180 new projects of the 257 collected, that came on stream in 2014 (ie that commenced construction post 1 June 2013). Conversely, 245 projects that were under construction at 1 June 2013, the cutoff date for inclusion in last year’s report, had completed construction and been commissioned at this year’s cutoff date, thus dropping off on the database.

Africa continues to be a magnet for Foreign Direct Investment (FDI) and intra-African capital inflows. With a 76% completion rate of projects collected from our previous report, expectations remain high for infrastructure to provide the developing continent with much needed market expansion.

Regional spread
Southern Africa was at the forefront in terms of construction activity with 46% of the total projects by number. The value of total projects in the region came in at US$145 billion. West Africa overtook East Africa in terms of the number and value of projects. With 26% of the total number of projects valued at US$75 billion, the much spoken about economic growth potential in West Africa was reflected in the underlying numbers. East Africa saw a slight decline in its number of projects.

Total project value rose significantly in Southern, West and Central Africa in 2014; Southern by US$ 62 billion, West by US$25 billion, and Central by US$18 billion. Although only home to 5% of African mega construction projects (by number of projects), Central Africa’s project value climbed significantly to an impressive US$33 billion from US$15 billion in 2013, this jump was highly influenced by the three new transport projects collected in 2014 totalling US$20.5 billion. North Africa accounts for only 3% of total projects on the continent (by number of projects) but the project value came in at US$9 billion, also showing an increase from US$7 billion in 2013.

Sectoral spread
Considering project value per sector, Transport motored ahead while Energy and Power featured just one percentage point behind it. The share of Transport sector projects rose by 9% year-on-year. In particular, significant investment is being ploughed into rail and ports, while there is a push to integrate development in such a way as to enable sustainable regional growth. There are a number of Oil and Gas projects in the preparation phase, which do not appear in our numbers as they are not yet under construction. As a result, this sector is expected to move up the rankings in the coming three to five years. Water and waste management presented a sector needing more investment, as it will play a critical role in the near to medium, and long-term future of the continent and world at large.

Ownership spread
Government ownership has declined while private domestic ownership improved, with new players such as Australia, the United Arab Emirates and India now owning projects. This is an encouraging trend, reflecting the increased interest in Africa amongst foreign investors and fund managers and also the improved political and economic stability on the continent as a whole.

Ten percent of projects were structured as Public Private Partnerships (PPPs), an increase from four percent the prior year. This is also encouraging, as we believe that significant private sector participation alongside government is required to enable Africa to close the infrastructure gap.
**Funding spread**

International DFIs (Development Finance Institutions) continued to fund the majority of the projects, while new investors including Israel (Private companies), UAE (Public owned funds/organisations) and Australia (Private companies) emerged. The level of government funding increased by a significant 15%, while foreign institutions showed reduced appetite for funding this year, with a 9% drop-off in this investor category. It is too early to pinpoint potential reasons behind such a change, which contradicts the increased direct private sector participation we are seeing, but we will monitor this metric closely in the 2015 report to understand whether it was an anomaly or whether it points to an emerging trend.

**Construction spread**

The United States and Brazil saw a decline in the building share of projects. Private domestic firms led the pack, with no change in European firms. The increased market-share for private domestic firms is particularly encouraging, and points to the increased maturity and capacity of the local construction sector. Chinese construction companies also saw an increase in construction activity, followed by Government and intra-Africa firms. We have been expecting to see increased Chinese construction market share for some time, but this is the first year that it has reflected in the numbers.

**New project landscape**

180 new construction projects came onto our database this year, with the greatest number of newly commenced projects falling in the Transport sector across the five regions. Southern and West Africa both saw new initiatives coming on stream across eight sectors, reflecting the relative size and maturity of the South African and Nigerian economies. Energy and Power dominated the Southern Africa mix at 52% of the total number of new projects under construction, which can largely be attributed to the influx of renewable energy independent power producer (REIPP) projects under construction. Comparatively, Transport (32%) and Energy & Power (24%) combined reached a similar share of the number of new projects in West Africa. Interestingly, West Africa featured new Water (10%) projects, while additional Oil and Gas (10%) also saw significant new projects emerge.
The infrastructure story in Southern Africa continued to dominate large scale development on the continent. The growing depth of the market reflected its growing maturity, and the growing interest of foreign players and investors in Africa is evident from the number of new categories this year across all three metrics.

With investment of close to US$145 billion being channelled through 119 mega-projects in Southern Africa, the region continues to account for the bulk of Africa’s construction load. South Africa had half the number of projects in the region. Mozambique followed with 15% and Angola with 13%. The region saw an increase in the number of categories in terms of project ownership, with countries such as Australia and India entering the project ownership database this year.
**Regional review**

**Southern Africa**

*Sectoral spread*

Construction in Southern Africa spanned multiple sectors. The number of Energy and Power projects increased by 13% year-on-year. 46% of the total number of projects featured in this sector. This was largely due to the Renewable Energy Independent Power Producers Programme (REIPP) in South Africa, which saw at least 63 renewable energy projects emerge through a bidding process. Renewable Energy projects (Photo Voltaic, Concentrated Solar Power, Wind and Small Hydro-electric) are expected to integrate into the energy grid through the programme. This progressive investment into clean energy will put the region in a good position for future energy trade.

In a similar upward move, the number of Transport projects rose by 6%, up to 24%.

Mining projects featured at 10% of the total number of projects, decreasing from 19% in 2013. Mining companies and governments across the continent are at the sharp end of investor, labour, mining community and media scrutiny, at least in part because of the Marikana tragedy. Over the past twelve months we have seen mining companies seeking to restructure their African interests through either changes in investment intent or seeking to ring fence African assets into separate entities to realise more value in those assets or their broader portfolio.

Real Estate projects came in at 7% (compared to 17% in 2013), while 2% of activity took place in Oil and Gas. Also at 2%, Telecommunications featured this year through the Seacom Undersea Broadband Cable in South Africa and the construction and launch of a domestic satellite in Angola. Within Real Estate in 2013, Angola had the most number of projects, followed by South Africa. This year, these projects where driven by South African and Zimbabwe featured.

Of the Southern African projects, 5% were in the Water sector including the Lesotho Highlands 2 project, with significant extensions being planned over the next few years. These will go a long way to bolster water infrastructure needs, particularly if supplemented by smaller municipal water and sewerage treatment plant refurbishments, for which there is a pressing need.

A challenge impacting the expected acceleration in the pace of construction activity stems from the drawn-out planning and procurement processes often associated with complex mega-projects. For example, while the South African Government has committed to US$70.7 billion for an infrastructure plan to be rolled out over the next three years, this market has seen increasing levels of frustration from construction contractors, with order books not being as full as they should be. This is largely due to protracted strategic planning, pre-feasibility, feasibility and procurement phases.

The Namibian market was a stable contributor to Southern Africa’s strategic importance as a logistics gateway to the continent. Angola continued to drive its developmental agenda forward and Mozambique has come to the fore as a market for serious consideration for large infrastructure investors and construction companies due to its Natural Gas and other commodity reserves.

*Ownership spread*

The Southern African market exhibits the greatest maturity on the continent as evidenced by the balance between public and private ownership of projects compared with the other regions on the continent, where government ownership still overwhelmingly dominates. Although remaining ahead of other categories, government ownership declined by 15% year-on-year. Private Domestic entities owned 29% of projects, an increase of 14%. Both European and Intra-African ownership lay at 9% and 7% respectively, a decrease of 6% for European ownership and a 6% increase in Intra-African ownership, which is encouraging to see, while International DFIs owned 6%, the first time they have reflected in the ownership category on the database.

*Funding spread*

Government funded 29% of Southern African projects, a 22% increase from 2013. Private Domestic entities funded 24% of the total number of projects, with International DFIs funding at 14% and African DFIs, 8%. Governmental funding increased significantly due to public sector funding of Eskom power stations and Transnet’s rolling stock and locomotives procurement.

*Construction spread*

Private Domestic firms forged ahead in infrastructure building whereas in 2013, European and US construction companies led this with 28% of the total number of projects. This year government accounted for construction of 18%, a 17% increase from 2013. Europe and US similarly accounted for 18% of projects, down 10% on last year. China was building just 5% of the large-scale developments in the region, a 3% decline from 2013, preceded by Intra-African entities at 8%. Comparatively, Chinese construction activity featured in 31% of East African projects (2013: 19%), while playing a role in 12% of West African and 11% of Central African projects.
Rise of the Africa Super Power

Sustainable new energy is the cornerstone of future sustainable socio-economic growth for Africa. This is best articulated by UN Secretary General Ban Ki-moon who said: “Energy is the golden thread that connects economic growth, increases social equity, and provides an environment that allows the world to thrive.”

As a conglomerate of emerging markets fraught with an immediate need to bolster Energy and Power infrastructure, Africa has the potential to prove the validity of this. In fact, according to the UN Environment Programme (2012), the continent recorded the largest growth in renewable energy, with Africa’s investment in renewables marking an increase of 228% in 2012, to US$12 billion.

Some of the standout African countries with a focus on renewable energy are Angola, Kenya, Sierra Leone, South Africa and Uganda. This year, 65% of Energy and Power projects (by number of projects under construction) on the continent were renewable energy projects.

South Africa has attracted nearly US$10 billion in renewables investment for the next two years. According to the Climatescope 2014 report and index, the country is “ranked third, after China and Brazil, in a new country-by-country assessment of 55 renewable-energy markets in Africa, Asia, Latin America and the Caribbean”. (Engineering News, 28 October 2014)

The report claims that clean-energy investments in developing countries outpaced those in developed countries, proposing a calculation that “the installed base in developing countries has more than doubled in the past five years to 142 GW, which is slightly above the total installed capacity of France.”

Solar accounted for the largest share of clean-energy investment to date, with US$6.7 billion of US$9.4 billion having been invested into this energy source in South Africa since 2006. Also ranked in the top 10 within the Climatescope 2014 report and index, Uganda has diversified its renewable energy mix by increasing the amount of renewable energy in the pipeline by 60% (UNEP, 2012).

Despite having massive oil reserves, renewables are firmly on the Angolan energy infrastructure agenda. The country will be adding 400MW of renewables, comprising 200MW in wind generated and 200MW in solar generated power to its energy mix. The Angolan government is funding this boost in energy grid capacity, looking particularly to provide rural areas with reliable and sustainable access to power.

Moving west, Ghana has notable renewable projects under construction, with a 50MW plant that is backed by the Norway Credit Agency. Ghana is also looking to finance a 260MW open cycle gas turbine in the Tema District. In Sierra Leone, the government in partnership with the International Monetary Fund has set aside US$15 million for solar power generation investment. East Africa’s Kenya is in the driver seat of African geothermal energy generation, an energy source which is expected to generate 30% of the country’s additional power over the next 20 years (UNEP, 2012).

“Sub-Saharan Africa starts to unlock its vast renewable energy resources, with almost half of the growth in electricity generation to 2040 coming from renewables. African countries more generally are endowed with abundant renewable energy potential, which they can harness so that, by 2040, renewables provide more than 40% of all power generation capacity in the region, varying in scale from large hydropower dams to mini- and off-grid solutions in more remote areas.”

Source: Africa Energy Outlook 2014
The United Nations General Assembly unanimously declared the decade 2014-2024 as the Decade of Sustainable Energy for All, underscoring the importance of energy issues for sustainable development and for the elaboration of the post-2015 development agenda. Energy is the golden thread that connects economic growth, increased social equity, and an environment that allows the world to thrive. At a time when 1.2 billion people worldwide lack access to electricity, when 2.8 billion people do not have clean and safe cooking facilities, and when a shift to sustainable energy use is imperative to protect the Earth’s climate, no less than a worldwide effort is required to achieve sustainable energy for all. Sustainable energy provides new opportunities for growth. It enables businesses to grow, generates jobs, and creates new markets.”

**Sustainable Energy for All**

Critical capital market development
Bankable projects in the clean energy sector are critical if it is to offer a fast-track solution to energy generation. But in Africa, the regulatory environment presents a major challenge to integration of renewable energy onto existing energy grids. Political risk cover needs to be in place to underpin private investment. The biggest challenge that investors face is putting Power Purchase Agreements in place, which fixes the prices and the price increase regime for the power purchased by government, certainty that the government can and will meet the terms and pricing in the agreement is a critical project risk.

Capital market development is critical to grant renewable technology development and large-scale projects access to investment, from both a debt lending perspective and equity market perspective. In effect, new capital markets need to be developed for technologies that are scalable. These markets need to be developed for projects with the potential to rapidly realise energy generation cost/KW post installation that lies well below on-grid averages.

On a continent where generation and transmission networks have been under invested in, renewable energy projects, specifically B2B hybrid solutions present a strong business case. As a result of the ability to control energy costs and gain access to an uninterrupted power supply, shareholder value will far outweigh upfront capital expenditure.
Unsolicited bids
Project positioning and fast tracking

The Unsolicited Bid in the form of private sector conceptualisation, packaging and lobbying of government can fast track project initiation. Encouragement for unsolicited bids is tied to innovation, cost and time efficiencies, and the private funding that these bring to certain sought after sectors. Innovation, affordability, alignment with strategic objectives, public interest and value for money are critical bid drivers. Unsolicited Bids are, however, viewed with mixed emotions by governments, some encouraging them while others actively avoid them. The challenge all governments face is to ensure that a good idea or project can be evaluated and procured in a fair and transparent manner and thus avoid the perception of underhand dealings and biased awards, ensuring that the government gets a good deal. In South Africa one of the most notable unsolicited bids was the N4 toll road from Gauteng to Maputo.
High growth zone

SADC member country Mozambique is a budding growth story of investment in the region. Noted in 2014 by Deutsche Bank as “one of three of the main foreign investment destinations in Africa” a report by the investment bank stated that over the next few years, the country is expected to be home to infrastructure projects worth an estimated US$32 billion.

According to this report data, Mozambique has 18 large infrastructure development projects valued at more than US$24 billion under construction. Of these, only 5.5% fall within the country’s current economic backbone of Agriculture. 50% are in Energy and Power and 45% are Transport projects. All of these are underway with the medium to long-term vision to better integrate infrastructure to create an economically viable commercial system.

Mozambique operates as the gateway to and from the ocean for a number of landlocked African countries (Zimbabwe, Zambia and Malawi). As such, its infrastructure development is integral to the story of landlocked Southern and East African countries, which increasingly rely on its development.

50% of the projects are owned by the Public sector while 44% have Private sector ownership and 6% are structured as Public Private Partnerships.

Over the last two years Mozambique has attracted US$5 billion in foreign investment, the equivalent of a third of its GDP, for development of natural gas reserves, coal as well as needed roads, railways and port facilities. Naturally then, its developmental focus falls on Natural Gas and Coal, together with investment into an integrated transportation system.

With total coal reserves of 20 billion tons, Mozambique could become the biggest coal producer in Africa. Its natural gas discoveries, which through capital gains taxes have already provided income of US$1.3 billion for the state, put it in a position to become one of the main exporters of natural gas in 2020. According to the World Bank, commercial exploration of its coal and gas deposits could more than double its wealth.

Critically, Mozambique has a global investment landscape. Multinationals and the Mozambique Government are its two major stakeholders. For example, Brazilian multinational company Vale has invested US$6.5 billion in a terminal and 900 kilometres of railway to link its coal mine in Moatize to the deep water port of Nacala.

And the growth opportunity for Mozambique lies beyond pure reliance on coal and natural gas reserves. It hinges extensively on going beyond resource-based investment to building systemic infrastructure that stretches throughout its value chain. The building of new airports and expansion of existing ones, together with investment into ports and roads present critical logistics development, while social development alongside this is an imperative not to be overlooked.

Mozambique is undoubtedly a market warranting close observation, as it continues en route to becoming a sustained high growth zone.
Regional review
West Africa

Similarly to Southern Africa there is a growing depth in the West African market. This reflects growing maturity in this region’s infrastructure story of burgeoning investment, activity and tenacity, with project owners, funders and builders hard at work navigating through and around the challenges faced by projects of this scale.

West Africa exhibited a strong level of growth with the total value of projects under construction increasing from US$50 billion to US$75 billion year-on-year, although there was no change in the number of projects qualifying for the report this year. Although the region still accounts for just half of the level of investment in Southern Africa, it is starting to close the gap, consistent with Nigeria’s new title as the biggest economy in Africa.
Regional integration is firmly in stakeholders’ sights, with promotion of “infrastructure development to support a competitive business environment, sustained development and cooperation in the region” committed to in the Regional Strategic Plan (2011-2015). Although projects of this nature take time and in West Africa, energy supply and backlogs can still present constraints, initiatives such as rail and port developments are enabling the region to make significant inroads.

In Francophone countries such as Senegal, Guinea and Togo the West African Development Bank has identified 17 major infrastructure projects ranging from highways to ports, which require funding. Transactions moving forward on the transport front include the Eastern Railway Line and Boaakra Dry Port. In Ghana, priority projects include road development between Accra and Tema as well as Accra and Takoradi, and the expansion of the Tema and Takoradi ports.

This year the Anglophone countries’ capacity building was led by National PPP Programmes in Nigeria and Ghana, which are largely being funded by the World Bank. With funding secured, it could take a year or two before these projects break ground. Despite a particularly difficult economic year, Ghana focused on projects in the Transport and Energy & Power sectors, with the likes of a 111km energy generation gas pipeline from Atuabo to Aboadze beginning to materialise.

Ghanaian retail too delivered a construction coup during this reporting period, when the biggest mall in West Africa known as the West Hills Mall opened. However, it is ultimately transport infrastructure that has put West Africa solidly en route to a brighter infrastructure future.

Within the context of infrastructure development, while nothing has fundamentally changed in the industry and growth has not suddenly surged, the scale of opportunity on offer is more apparent. Whereas South Africa was previously the choice market in Africa for scalable operations, Nigeria now has a more attractive profile, offering scale and strong growth.

Yet the country faces some lofty hurdles if it is to realise its required infrastructure developments. For one, South Africa has significantly more value in projects under construction or development than Nigeria does, showing that while a market may have scale and growth, it also needs a stable business environment, which Nigeria struggles with.

Reforms and development plans implemented under President Goodluck Jonathan are beginning to take effect, with the privatisation of the state-run Power Holding Company of Nigeria virtually complete and an increasing number of Public Private Partnerships (PPPs) entering the market. There is significant activity underway in Lagos, which accounts for more than 60% of non-oil GDP and is the commercial nerve center of Nigeria.

Some of the more noteworthy moves in the country have been the breaking ground on a second Niger Bridge, which could boost the Nigerian construction industry, improving East-West trade and progressing the nascent PPP model. The finalisation of an agreement between the Dangote Group and 12 banks for a loan of US$3.3 billion to build a greenfield refinery and petrochemicals complex in the south of Nigeria, cannot be discounted.

Though it is the Transport sector that will be one of the strongest sources of growth for the Nigerian construction industry over the medium term. Chinese companies dominate the development of the transport network, particularly in the rail and airport sub-sectors. Two projects that demonstrate such dominance are the US$1.49 billion Lagos to Ibadan railway contract, which has been awarded to China Civil Engineering Construction Corporation (CCECC), and the Olokola Deepwater port project, awarded to the China Ocean Shipping Group. Other noteworthy projects are the Bonga NW Project, Eko Atlantic City, Lagos Light Rail, Abuja Light Rail in the Federal Capital Territory and Abuja Centenary City.
Sectoral spread
With 26% of the total number of large construction projects across the continent, the region featured a cross section of developments across a number of different sectors. This cross section of sectoral activity shows the region’s relative economic maturity. Consistent with the continent as a whole, the transport sector exhibited good growth, accounting for an additional 6% of projects compared to the prior year. Projects in three new sectors were also recorded, namely Retail, Manufacturing and TMT. This reflects the growth in economies such as Nigeria, in which Private Sector projects, rather than just large social infrastructure projects are coming into the mix.

Ownership spread
Although project ownership was predominantly government-led, this ownership category declined by 11%. Private Domestic firms and European and US firms both owned 18% of projects respectively, reflecting the growth in the local economy and the increasing attractiveness of West Africa, and especially Nigeria, as an investment destination. African DFI and International DFI ownership ratios came in at 5% each and China owned 3% of projects, as did the United States and the rest of North America. China and Development Finance Institutions, in particular emerged as new owners of projects in the region.

Funding spread
The West African funding environment saw Israel, South Africa and the United Arab Emirates enter the equation for the first time. Intra-African firms funded 17% of projects, rising from 3% in 2013. Another rise in funding commitment was seen by government, whose commitment increased from 1% to 14%. At 9% of total funding provision, investment from China rose modestly while funding from International firms remained static. Private Domestic entities funded 9% of projects and the European and United States, 23%. Again, the diversity of funders reflects the relative maturity of the market in West Africa.

Construction spread
European and United States construction companies built most of the projects in West Africa over the past two years while government activity increased by 7%. Private firms maintained the same level of project construction. This year, Australia, Israel and the United Arab Emirates featured as new projects builders in the region, reflecting increased interest in the region as an investment destination for multinational construction firms.
Country focus
Nigeria

Forcados-Yokri project and Southern Swamp project
US$4 bn

OML 58 Nigeria Pipeline Upgrade Project
US$3 bn

National Transmission Grid
US$3.5 bn

Hydropower plant
US$3.2 bn

Roads
US$2.1 bn

Azura-Edo Independent Power Plant
US$1 bn

Thermal power plant
US$1 bn

Airports
US$683 million

Industry split
2014
39%
17%
17%
15%
11%
1%

Water
Energy & Power
Oil & Gas
Transport
Real Estate
Manufacturing

North Africa
North Africa
Central Africa
East Africa
Southern Africa
West Africa

Bonga South West project
US$12 bn

Lagos Free Trade Zone Port
US$6 bn

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US$12 bn

Lagos Free Trade Zone Port
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Airports
US$683 million
The infrastructure construction trend in East Africa is somewhat clouded this year, as our discussions with industry leaders in the region show that they remain positive about the infrastructure development potential, in stark contrast to our data gathered for this report, which reflects a fairly marked decline in large capital projects construction activity over the past year. The number of mega construction projects in East Africa declined by 55% from the prior year, as discussed above. Our view is that while there has been a dip in current activity, there are a large number of significant projects in the planning phase that have not yet reached financial close and are thus not yet reflecting in the statistics of projects under construction.
Transport projects grew by 17% while Energy and Power remained static at 37% in terms of the total number of projects under construction in the region. Kenya held the most projects followed by Uganda and Ethiopia. Tanzania had just 7% and Rwanda 4% of the total East African projects. Interestingly, the United Arab Emirates and International DFIs emerged as new project owners, and the Japanese featured as builders for the first time in this annual report.

**Sectoral spread**
With 59% of the share of projects, Transport dominated the East Africa sector mix, while 37% of projects were focused on Energy and Power capacity development. In comparison with 2013 and as noted above, the share of Transport projects increased by 17%. Milestones reached in key transportation projects included breaking ground on the Nairobi to Mombasa rail project; Tanzania refurbishing the Dar es Salaam to Issaka rail link; airport expansion projects across the region; and port expansion planning.

Road development is an intensive focus in the region, with significant projects underway to address inter-city highways and a number of PPP projects planned to come to market over the next 18 months, such as the 2nd Nyali Bridge PPP project. Kenya is also in the process of developing an annuity finance project for a 10 000 km road development and maintenance programme. In Uganda, capital raising of US$8 billion for a standard gauge railway is in process within the Nairobi Mombasa Railway.

A year ago the government in Kenya announced its intent to add 5 000MW to the energy grid, which has resulted in three mega projects being put out to tender. Of these, the 960MW Lamu coal fired power station was cleared through the court cases on 15th January 2015. On a more positive note, Kenya commissioned the largest geothermal plant in the world in 2014 and Ethiopia, too, has an exciting Power sector story developing which includes a large hydro power plant, as well as a gas power plant that aims to add 12 000MW to the national power grid. Such developments will allow Kenya to retire some of the thermal plants.

The Oil and Gas boom in the region continued, despite this not yet manifesting in mega projects breaking ground. Within this sector alone, it is estimated that between US$60 billion to US$70 billion needs to be invested in infrastructure. Also in East Africa, significant Retail development is underway, particularly projects such as the Two Rivers and Garden City.

**Ownership spread**
Government owned 59% of the projects in the region. This was followed by ownership by Private Domestic firms, which rose in prominence this year. Intra-African entities owned just 8% of projects and International DFIs 2%.

**Funding spread**
International DFIs funded the most projects in the region, increasing from 24% to 37% this year. At 17%, governmental funding rose substantially from 4% in 2013. Africa DFIs (16%) climbed marginally from 11%.

China funded 16% of projects while the United Arab Emirates became a new funder in East African mega construction projects, similar to West Africa.

**Construction spread**
Construction activity in East Africa showed good diversification, evidencing a mature and competitive industry. China was responsible for building the most projects, up to 31% from 19% in 2013. This points to a growing Chinese presence in the construction sector. Thirty-eight per cent of projects were built by jointly funded entities. Government was building 13%, showing a significant rise from 1% last year. Japan and the United Arab Emirates entered the building equation in this region for the first time, showing a similar trend to West Africa.
Kenya’s geothermal energy edge

In Kenya, where under 15% of the population has access to grid electricity, the country’s geothermal energy generation prospects and project pipeline puts it firmly on the radar as a progressive energy nation. It has the vision and means to harness this source of clean and more reliable energy for the benefit of over 44 million Kenyans.

Kenya is, in fact “considered to be one of the most exciting geothermal prospects in the world.” In an article by The Guardian, geothermal is painted to as being “the darling of on-grid solutions” for the country and according to the Geothermal Energy Association, the country “will become the world leader if its planned projects are completed on time.”

The country’s primary geothermal zone is the Kenya Rift Valley. The Kenyan Ministry of Energy 2013-2016 investment prospectus notes that the country’s geothermal generation currently makes up just under 250MW of the total electricity production of roughly 1650MW. Hydroelectric comprises the largest proportion of generation, at around 800MW, followed by thermal at around 600MW.

The government of Kenya has ambitious, yet realistic objectives in its race to bolster the national grid through geothermal energy. It plans on drilling and developing 620 geothermal wells, and with a target to produce 5,000MW by 2030. The World Bank (that has invested over US$400 million into Kenyan geothermal energy) estimates that the energy generated from the East African Rift Valley could power 150 million homes.

This is doable for two reasons. Firstly, purely in light of resource availability and secondly, building on the existing basis of geothermal based energy, which currently accounts for around 15% of Kenyan power. The country is after all one of the largest producers of geothermal energy in terms of percentage of total power production.

To expand its geothermal energy generation base, fourteen sites across the Great Rift Valley have been identified for development. In a further move to optimise its geothermal energy resources, Kenya invited bids for the construction of two new power plants in 2014. These new plants, with a capacity of 60MW, are expected to be complete around the end of 2015.

In 2014, Kenya launched the world’s largest single turbine geothermal power plant, which will add 140MW to the national electricity grid. This project could reduce the cost of energy across the country by 50%.
The infrastructure story in Central Africa showcases a massive drive in Transport development, particularly in rail.

Construction of mega projects in Central Africa accounted for US$33.2 billion in total project value, which is being invested in 13 projects. Fifty-four percent of projects in the region were located in Cameroon and 15% in the DR Congo. The balance of the countries each had slightly under 8% of the share of projects by number.
Despite there being a purposeful drive to boost infrastructure integration across Central Africa, many projects have not yet broken ground. The region remains notable in that it is a potential hydropower hub on the continent, if the ambitious six country Inga 3 dam and hydropower plant can be brought to fruition. It also holds significant potential for infrastructure strength due to its commodities and agricultural resources.

**Sectoral spread**
With 60% of the region’s projects by number, Transport took over the lead from Energy and Power, which had been in the fast lane with 35% of the number of projects in 2013. This year 27% of the projects fell within Energy and Power. Last year, Transport projects comprised just 18% of the Central African project landscape.

The share of Real Estate projects fell from 12% to 6%, although one of the major Real Estate developments underway is a marina in Gabon. The share of Mining projects by number dropped a massive 22%, from 29% to 7%. As indicated within the African Construction analysis above, mining companies and governments across the continent are at the sharp end of investor, labour, mining community and media scrutiny. While 6% of the projects in 2013 fell within Water, this year the region saw no water projects.

**Funding spread**
Project funding was dominated by International DFIs which backed 27% of Central African projects. Africa DFIs in the form of African Development Banks, such as the West African Development Bank and governmental funding, each supported 20% of projects. Down by 11% this year, China funded only 6% of mega construction projects.

**Ownership spread**
Governments own the bulk of projects (80%), followed by single figure percentages in terms of the share of project ownership for Europe, Australian and Private Domestic entities.

**Construction spread**
French construction companies including Vinci, Bouygues and Eissage were active builders in the region, while the Chinese remained equally active. European and US firms were building a dominant 71% of projects. The balance involved single figure percentages between government, China, Australia and the US, as well as Private Domestic firms.
Regional review
North Africa

Industry splits

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2013</th>
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</thead>
<tbody>
<tr>
<td>Energy &amp; Power</td>
<td>75%</td>
<td>59%</td>
</tr>
<tr>
<td>Transport</td>
<td>25%</td>
<td>14%</td>
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The infrastructure story in North Africa remained worlds apart from the dynamics of other African regions, with a significant decline in the number of projects under construction qualifying for this report, attributable to the recent and in some cases ongoing significant political upheavals in the region.
The number of North African projects declined from 22 to just 8 this year, albeit that we saw a higher total project value of US$9.1 billion compared with 2013 project values of US$6.7 billion. Tunisia, Algeria and Libya held two projects (25%) each, while Morocco and Egypt each featured one project (13%).

Algeria presented a complicated political status quo, and despite major projects being halted, the country featured one of the largest projects in Africa, namely the building of the biggest mosque on the continent. Morocco continued to see forward motion in infrastructure development, although no new mega construction projects were initiated in this country during this period.

**Sectoral spread**

Energy and Power dominated the industry analysis with 75% of projects by number, while Transport brought up the balance of 25%. Projects previously captured in the Real Estate, Water and Mining sectors during 2013 no longer featured.

**Ownership spread**

Private Domestic firms held the reins of 50% of projects while governments owned 37% and the US, 13%.

**Funding spread**

With 37% of the share of projects (by number), government led project funding. International DFIs and the United States each funded 25%, followed by Private Domestic entities at 13%. There was a marked withdrawal by Foreign Institutions and African DFIs in project funding, possibly due to the volatile security and political situation in parts of the region.

**Construction spread**

Private Domestic firms were building half of the number of projects, while European and US firms were responsible for 50% of North African projects. Private domestic firms were responsible for the full 50% balance of construction activity. There was a marked withdrawal of Intra-African and Chinese firms in the construction of infrastructure in the region.

**Regional review**

**North Africa**

- Tunisia, Algeria and Libya held two projects (25%) each.
- Morocco and Egypt each featured one project (13%).
- Algeria presented a complicated political status quo.
- Morocco continued to see forward motion in infrastructure development.

**Sectoral spread**

- Energy and Power dominated with 75% of projects by number.
- Transport brought up the balance of 25%.

**Ownership spread**

- Private Domestic firms held 50% of projects.
- Governments owned 37%.
- The US owned 13%.

**Funding spread**

- Government funded 37% (by number).
- International DFIs funded 25%.
- The United States funded 25%.
- Private Domestic entities funded 13%.

**Construction spread**

- Private Domestic firms were responsible for half of the projects.
- European and US firms were responsible for 50%.
- Intra-African and Chinese firms withdrew from construction activity.

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*Note: The text is a summary of the regional review for North Africa, focusing on project numbers, values, sectors, and ownership patterns.*
Africa’s bright tomorrow
The African Construction Trends report confirms continued, intensive construction activity. The journey may not be high speed but it is unfolding at a steady pace. And while one region has shown a shift in total value of projects that have broken ground (East Africa), there has been good performance overall across regions.

Most of the regions except West Africa have shown a decline in total number of projects collected. But while there may be fewer projects this year but there is a larger total investment value, which is driving project progress. We have also seen interesting new players in project construction and ownership emerge this year. No doubt, there are, and will be learnings, good and bad, needing to be taken on board. We are optimistic that work in critical sectors such as Transport and Energy and Power is evident, and it is mega projects such as these that have the power to ensure a bright tomorrow for Africa.
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