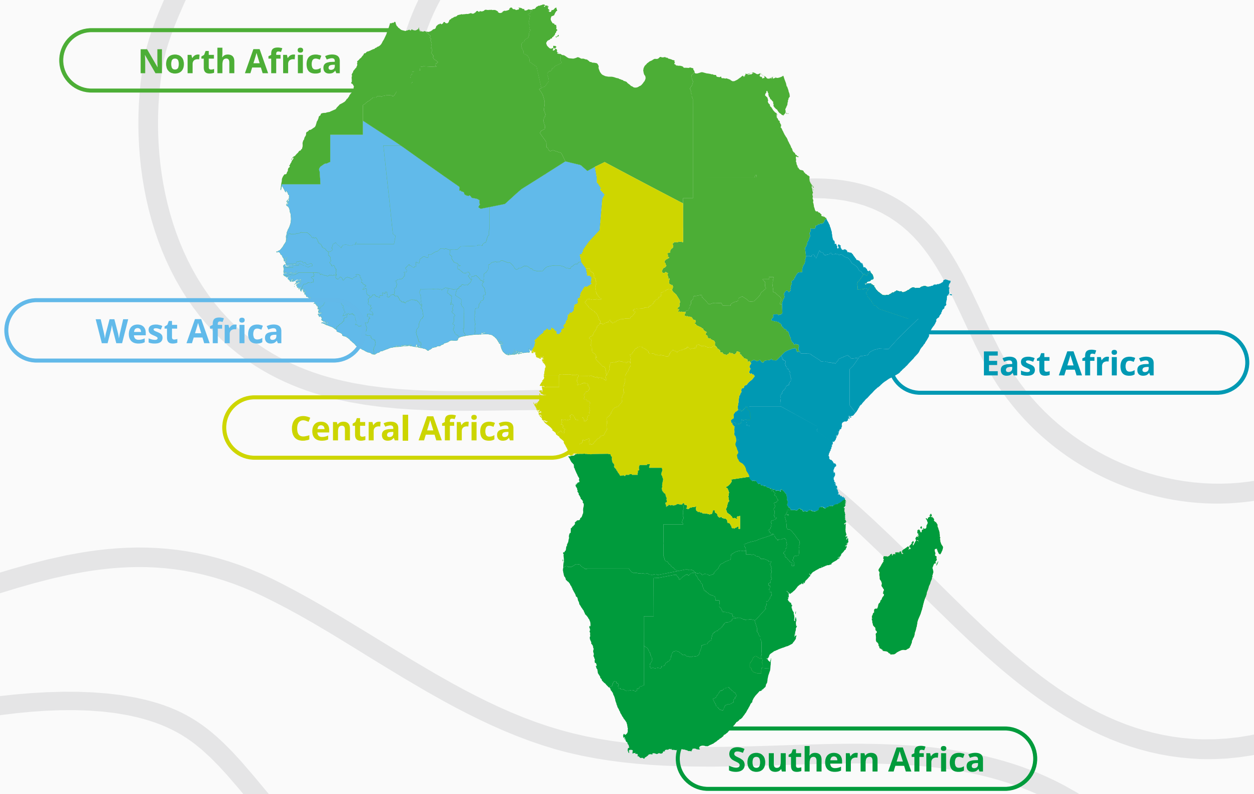
Africa Construction Trends Report

2021

MAKING AN IMPACT THAT MATTERS since 1845

Contents


North Africa
West Africa
Central Africa
East Africa
Southern Africa

Foreword

As the newly appointed Industrial Products and Construction (IP&C) leader for Deloitte Africa, I am excited to share with you the 10th edition of Deloitte Africa's annual *Africa Construction Trends* report. Over the past decade, our report has tracked infrastructure and capital projects (I&CP) activity across Africa. This activity has included monitoring continental, regional and sectoral trends of I&CP projects of at least US$50m in value that had broken ground but had not yet been commissioned by 1 June that year.

Since the report was first launched, the number and value of projects have increased, tracking Africa's growth story. Project activity peaked at 482 projects in 2018, while this year's edition includes 462 projects. The value of projects tracked over the history of the report peaked in 2021 at US$521bn – almost US$300bn more than the value of projects recorded in 2013. Energy & Power and Transport projects, have consistently been key contributors to the sectoral mix of projects underway, with the Real Estate sector – most prominently Commercial Real Estate – emerging as a critical sector in recent years.

Over the years of tracking project activity across Africa's five key regions, Southern Africa's position as the leading region for infrastructure development of projects above US$50m has been challenged on numerous occasions. For example, West Africa challenged Southern Africa's number one position both by number and value of projects in 2016. East Africa's high growth and economic development saw the region lead by number of projects annually over the 2018-20 period, accounting for 30.6% of projects in 2020. North Africa recorded the largest project share by value in 2018. In this edition, West Africa is, for the first time since 2016, leading by number and value of projects.

The report has analysed who owns, who funds and who builds these projects. Predominant owners have consistently been Governments across the continent. African Governments have also consistently been the top funders, with international development finance institutions (DFIs) and African DFIs as important financiers too. The share of projects funded by China notably increased, peaking in 2019, when China funded one out of every five projects (20.4%) – falling short of the share of projects funded by African Governments (22.8%).

With China increasing its activity in the number of projects being built (from about one in every 10 projects to one in three in 2018 and moderating to about one in four in this edition), Private Domestic firms have also increased their share of projects being built, constructing on average one in four projects across the continent since 2016.

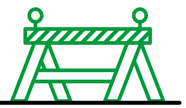
While Deloitte's analysis has tracked some of the most significant projects on the continent – some of which, such as the Grand Ethiopian Renaissance Dam in Ethiopia, were successfully concluded in budget and on time – tracking projects under construction each year also underscores the challenges of complex, multi-billion-dollar projects that African countries are betting on to overcome structural or supply-side constraints to growth in key economic hubs. Delays or non-completion of these complex projects can be the Achilles' heel to further unlocking the developmental potential of countries and regions across Africa. Cases in point are the Kusile Coal-Fired Power Station and Bagamoyo Mega Port both of which have been delayed.

Although excluded in this edition, our annual analysis in recent years has been contextualised and 'brought to life' through a macroeconomic outlook and spending trends, as well as thematic research that looked to unpack and shed light on topical issues in Africa's I&CP landscape. For example, in 2017 we examined the importance of planning and preparation in delivering infrastructure projects to avoid cost and time overruns and their application to African mega projects. The 2018 edition zoomed in on China's infrastructure play in Africa, whereas in 2019, we focussed on digital adoption in capital projects given the business case and benefits of digital transformation. The onset of the COVID-19 pandemic in 2020 focussed on resilience and managing supply chain risk and disruption.

Deloitte teams have advised on many of the world's most extensive and most complex infrastructure and capital projects. Our teams also work with clients across the industry to build businesses fit for the future. In this light, **operational transformation** is crucial for engineering and construction companies due to the challenging productivity gains and narrow operating margins, which have seen several priorities surface on construction companies' agendas. Some of these priorities include **competitive dynamics** with a focus on operating margin improvement; **innovation** where new materials, standardisation, and the application of digital and advanced technologies are potential industry disruptors; **compliance** practices within the industry and transparency across the board; and **sustainability**, which is becoming a requirement and firms must be able to introduce improvements cost-effectively.

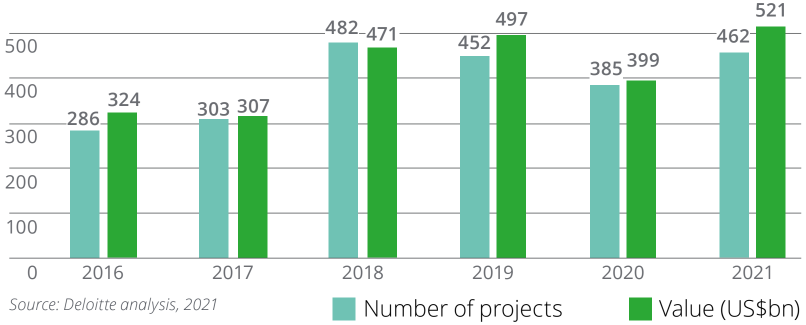
As we reflect on the research done over the past decade, we continue to welcome your thoughts and considerations on this report. We trust you enjoy the succinct analysis that follows.

Alex Moir
IP&C Lead | Deloitte Africa



Africa construction in focus

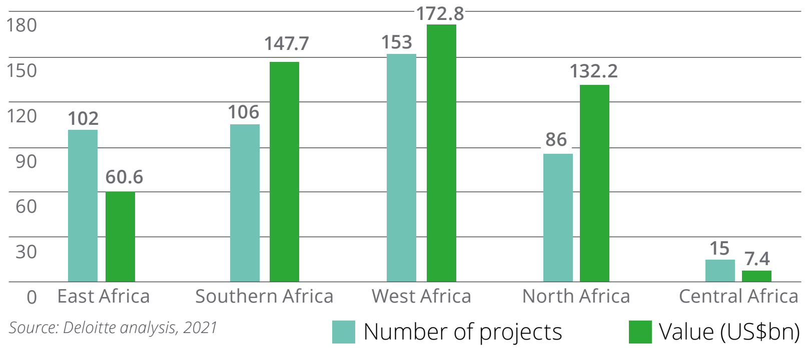
Continental statistics



Source: Deloitte analysis, 2021

Deloitte Africa's 2021 edition of the *Africa Construction Trends* report covers 462 projects with a total project value of US$521bn. The number of projects in 2021 increased by 20%, from 385 projects in 2020. The total value of projects under construction increased by 30.7%. The African continent saw several projects breaking ground, including mega projects in certain parts of the continent.

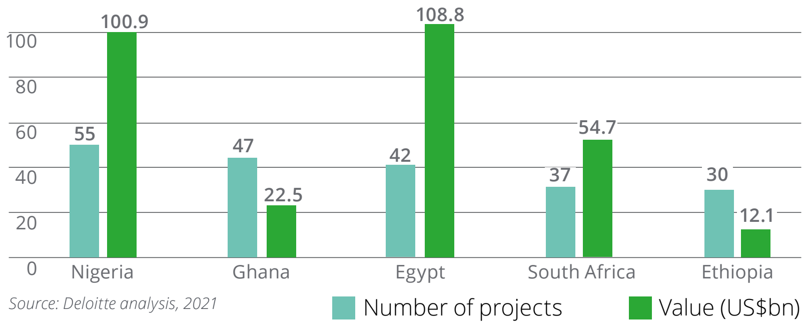
Regional analysis



Source: Deloitte analysis, 2021

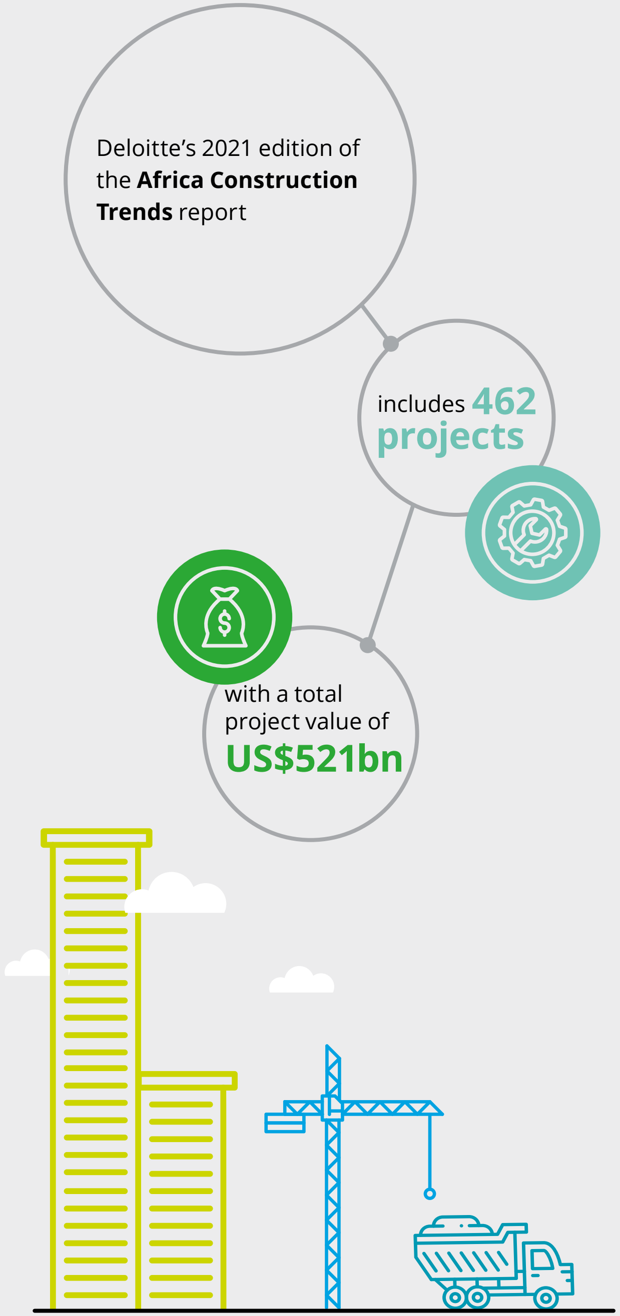
West Africa recorded the highest number of projects on the continent (153 projects), followed by Southern Africa with 106 projects. East Africa came third with 102 projects. In value terms, West Africa registered US$172.8bn, while Southern Africa and North Africa recorded US$147.7bn and US$132.2bn, respectively.

Top 5 ccountries by number of projects



Source: Deloitte analysis, 2021

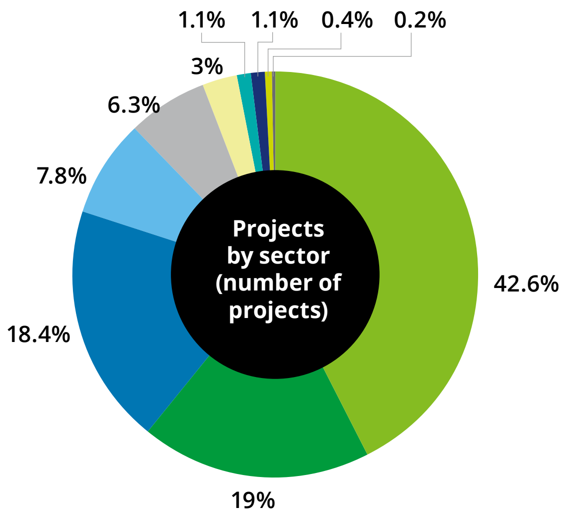
Two West African countries reflect in the top five countries by number of projects. Nigeria had the highest number of projects under construction (55), followed by Ghana with 47 projects. Egypt recorded the highest value of projects (US$108.8bn). Nigeria came second with a total project value of US$100.9bn, with the country mainly investing in Transport projects.



Share of projects by number (%)

Projects by sector	Number of projects	Share of projects by number (%)	Change in number of projects from 2020	Value of projects (US$bn)	Share of projects by value (%)	Change in value of projects from 2020 (US$bn)
Transport	197	42.6%	37	121.4	23.3%	31.65
Energy & Power	88	19%	4	98.6	18.9%	7.96
Real Estate	85	18.4%	12	232.7	44.7%	89.86
Water	36	7.8%	10	17.7	3.4%	11.08
Shipping & Ports	29	6.3%	6	34.9	6.7%	4.42
Healthcare	14	3%	8	1.9	0.4%	1.15
Oil & Gas	5	1.1%	-1	11	2.1%	-25.10
Social Development	5	1.1%	0	0.9	0.2%	0.12
Education	2	0.4%	1	1.4	0.3%	1.03
Mining	1	0.2%	0	0.096	0.0%	0.00

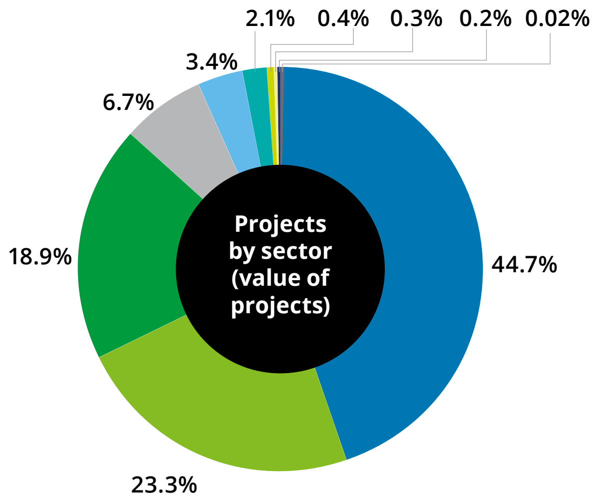
Source: Deloitte analysis, 2021
Share of projects by number and value may not total to 100% due to rounding.



Source: Deloitte analysis, 2021
May not total to 100% due to rounding.

Sector

- Transport
- Energy & Power
- Real Estate
- Water
- Shipping & Ports
- Healthcare
- Oil & Gas
- Social Development
- Education
- Mining



Source: Deloitte analysis, 2021
May not total to 100% due to rounding.

Sector

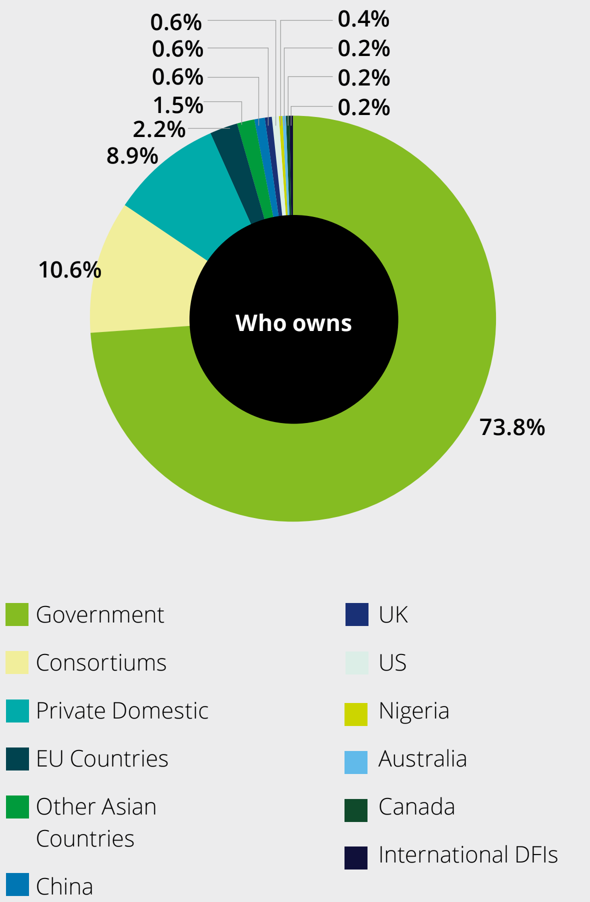
- Real Estate
- Transport
- Energy & Power
- Shipping & Ports
- Water
- Oil & Gas
- Education
- Healthcare
- Social Development
- Mining

Real Estate	Number of projects	Value of projects (US$bn)
Commercial Construction	46	121.7
Industrial Construction	26	106.6
Residential Construction	11	4
Culture	2	0.311

Source: Deloitte analysis, 2021

In the sectoral breakdown, the Transport sector recorded the highest number of projects at 197 (or 42.6% of total projects). The Energy & Power sector registered 88 projects (19%), while the Real Estate sector increased to 85 projects (18.4%) under construction.

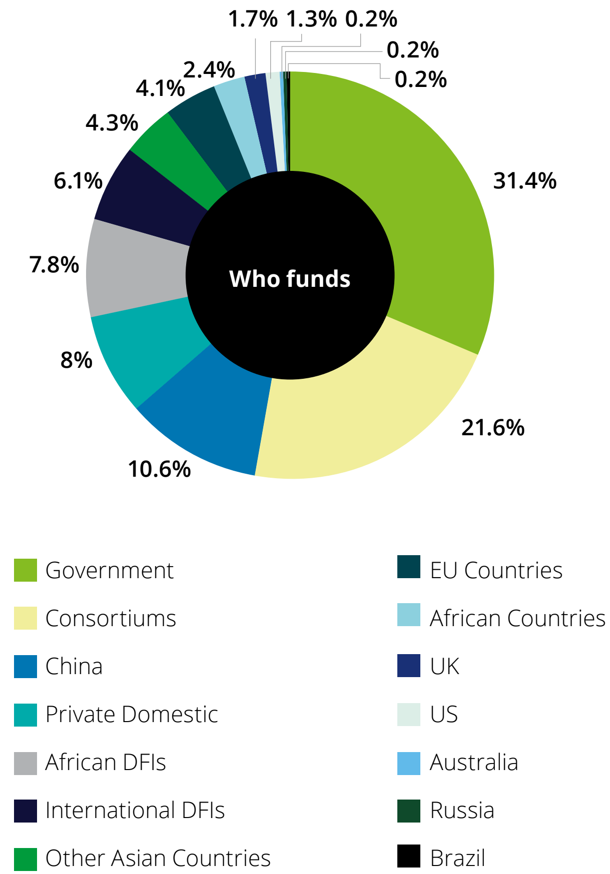
In value terms, the Real Estate sector again recorded the highest value of projects, contributing 44.7% (US$232.7bn) of the total value of projects in Africa. The Transport sector accounted for 23.3% of the value of projects (US$121.4bn), while the Energy & Power sector accounted for 18.9% (US$98.6bn) of the total value of projects.



May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

African Governments own the largest share of the projects (73.8%) under study. Most of these are in the Transport sector. Consortiums own 10.6% of the projects under construction, while Private Domestic firms own 8.9%.

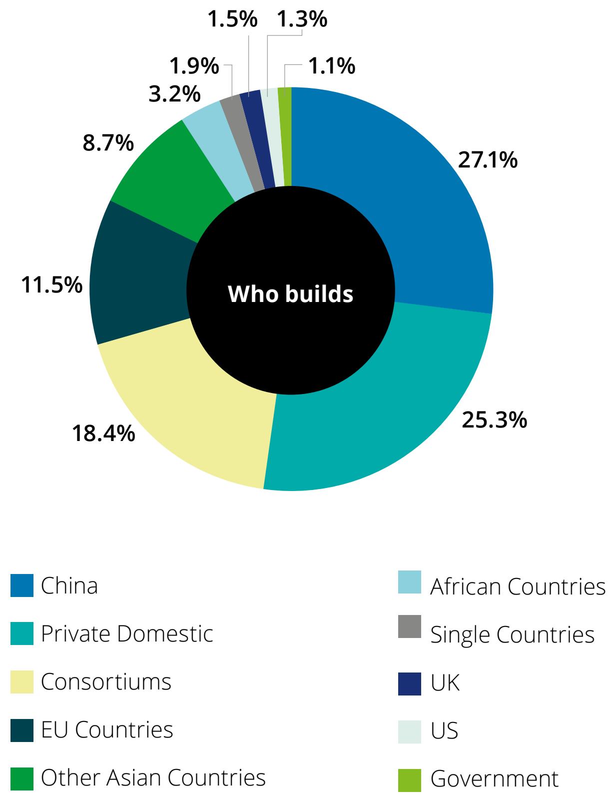
EU Countries include France, Italy and the Netherlands.
Other Asian Countries include Bahrain, Israel, Kuwait, Macau, Singapore and the UAE.



May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

Governments funded 31.4% of the projects under construction. Consortiums recorded a funding share of 21.6%, while China funded 10.6% of the projects.

EU Countries include Austria, Finland, France, Germany and Portugal.
Other Asian Countries include Bahrain, India, Japan, Korea, Kuwait, Macau, Oman, Qatar, Saudi Arabia, South Korea and the UAE.
African Countries include Benin, Côte d'Ivoire, Ethiopia, Ghana, Mauritania, Nigeria, South Africa and Tunisia.



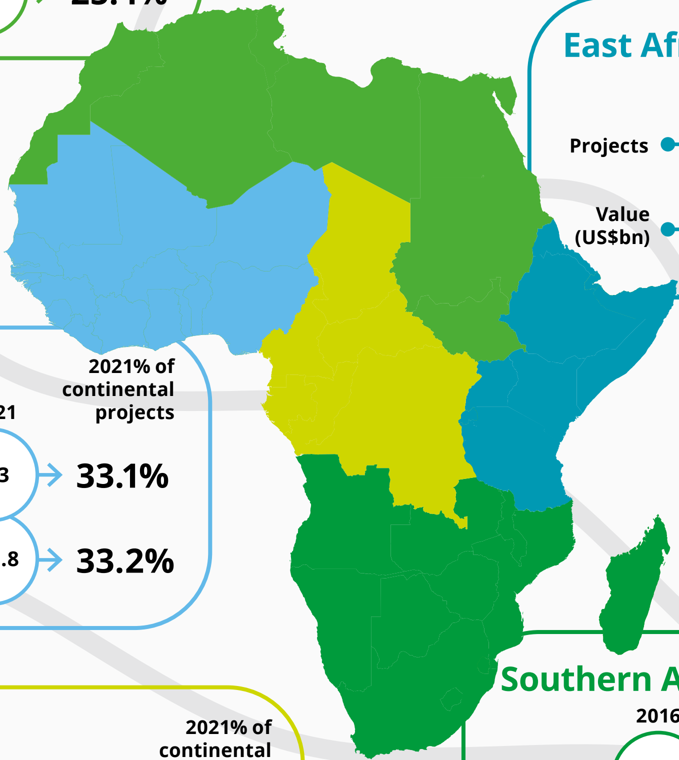
May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

China continues to play a significant role in building Africa's infrastructure projects. Although the country's building share dropped from 31.4% in 2020 to 27.1% in 2021, the country remains the largest builder on the continent. Private Domestic firms recorded a building share of 25.3%, while Consortiums accounted for 18.4% of the building share.

EU Countries include Austria, Denmark, France, Germany, Greece, Italy, the Netherlands, Portugal, Spain and Sweden.
Other Asian Countries include India, Israel, Japan, Korea, Kuwait, Lebanon, Macau, Singapore, South Korea, Turkey and the UAE.
African Countries include Benin, Burkina Faso, Côte d'Ivoire, Egypt, Ghana and South Africa.
Single Countries include Australia, Brazil, Canada, Russia and Ukraine.

North Africa

	2016	2017	2018	2019	2020	2021	2021% of continental projects
Projects	42	40	109	87	71	86	18.6%
Value (US$bn)	76.1	77.1	148.3	144.8	111	132.2	25.4%



East Africa

	2016	2017	2018	2019	2020	2021	2021% of continental projects
Projects	43	71	139	182	118	102	22.1%
Value (US$bn)	27	32.6	87.1	146	77.7	60.6	11.6%

West Africa

	2016	2017	2018	2019	2020	2021	2021% of continental projects
Projects	92	79	105	75	76	153	33.1%
Value (US$bn)	119.8	98.3	82.9	80.9	79	172.8	33.2%

Central Africa

	2016	2017	2018	2019	2020	2021	2021% of continental projects
Projects	24	20	26	16	18	15	3.3%
Value (US$bn)	7	9.8	26.9	6.5	6.4	7.4	1.4%

Southern Africa

	2016	2017	2018	2019	2020	2021	2021% of continental projects
Projects	85	93	103	92	102	106	22.9%
Value (US$bn)	93.5	89.7	125.4	118.2	124.5	147.7	28.4%

Regional construction in focus

East Africa

The East African region comprises Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Seychelles, Somalia, Tanzania and Uganda.

	2016	2017	2018	2019	2020	2021	2021% of continental projects
Projects	43	71	139	182	118	102	22.1%
Value (US$bn)	27	32.6	87.1	146	77.7	60.6	11.6%

The number of infrastructure projects in East Africa declined in 2021 by 13.6%, with 102 projects under construction, compared to 118 recorded projects in 2020.

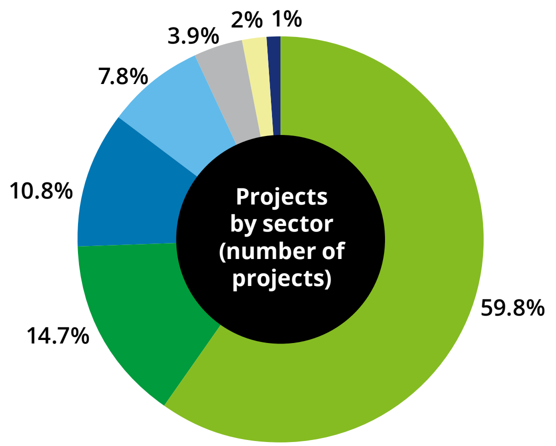
A marginal decline is evident in the total value of construction projects from US$77.7bn in 2020, down to US$60.6bn in 2021. The drop in the number and value of projects is attributed to several big projects being completed in the past year, including the Kenya-Uganda-Rwanda-South Sudan rail project (US$9.8bn) and the Lamu project in Kenya (US$5bn). The two big projects were both completed in Kenya, which is in line with the Kenyan government's goal to boost and complete infrastructure projects.

In East Africa, Ethiopia recorded 30 projects, the highest number of construction projects in the region. Kenya had 25 projects, followed by Uganda with 21 and Tanzania with 19 projects. As was the case for 2020, although Tanzania recorded a lower number of projects than other East African countries, the country contributed the highest value of projects. In 2021, Tanzania contributed 54% (US$32.9bn) of the value of projects under construction. Four of the top 10 projects in the East African region were being constructed in Tanzania. The second-largest contributor was Ethiopia with a share of 20% (US$12.1bn), followed by Kenya at 13% (US$8.1bn).

Share of projects by number (%)

Projects by sector	2016	2017	2018	2019	2020	2021
Energy & Power	26	23	18	22	25	15
Transport	47	52	45	38	56	60
Real Estate	11	14	17	21	8	11
Water	/	6	6	6	5	8
Mining	/	/	4	4	/	/
Oil & Gas	2	1	1	1	/	/
Shipping & Ports	9	3	7	6	5	4
Social Development	/	/	/	/	1	1
TMT	/	/	/	/	/	/
Healthcare	5	/	2	1	1	2
Education	/	1	/	/	/	/
Other	/	/	/	2	/	/

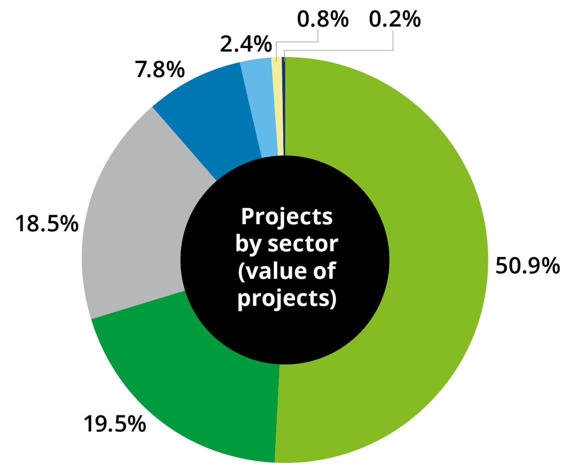
Source: Deloitte analysis, 2021
May not total to 100% due to rounding.



Source: Deloitte analysis, 2021
May not total to 100% due to rounding.

Sector

- Transport
- Energy & Power
- Real Estate
- Water
- Social Development
- Healthcare
- Social Development



Source: Deloitte analysis, 2021
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Sector

- Transport
- Energy & Power
- Shipping & Ports
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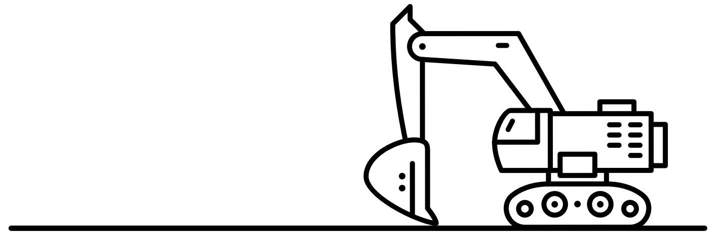
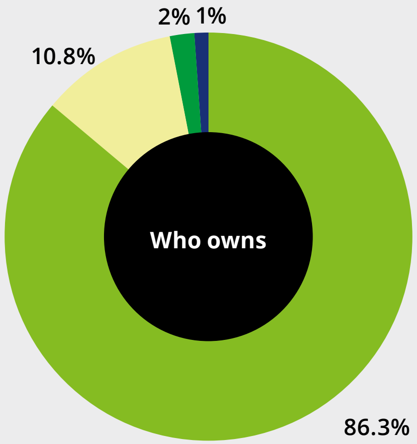
- Water
- Healthcare
- Social Development



The largest number of projects under construction was in the Transport sector with 61 projects (59.8%). Energy & Power and Real Estate recorded 15 projects (14.7%) and 11 projects (10.8%), respectively.

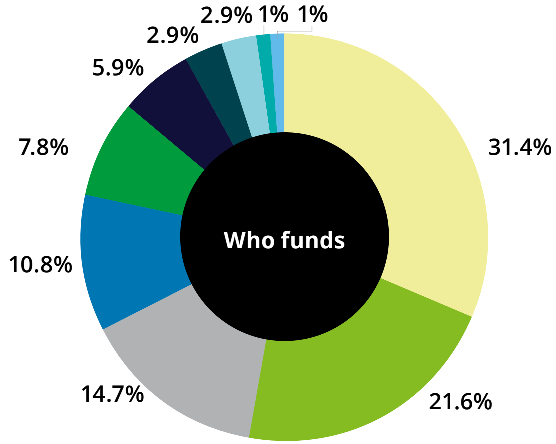
In value terms, the Transport sector continues to be a top contributor to infrastructure projects in East Africa. With slightly lower figures reported compared with 2020, the sector accounted for 50.9% of East Africa's total projects. Energy & Power and Shipping & Ports sectors followed with a share of 19.5% (US$11.8bn) and 18.5% (US$11.2bn), respectively. This finding is in line with the region's goal of addressing structural transformation by allocating more resources to infrastructure connectivity, particularly in the Transport and Energy & Power sectors.



- Government
- Consortiums
- Private Domestic
- UK

May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

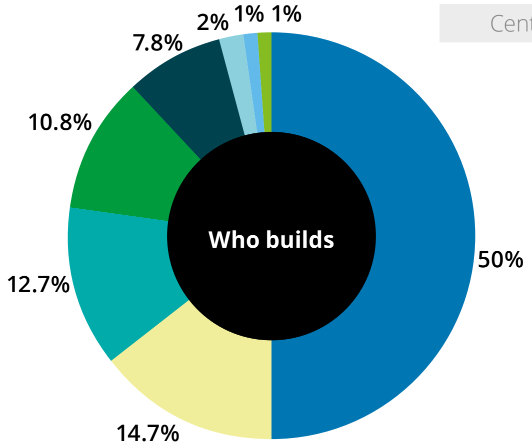
Governments continue to own most of the infrastructure projects being built across East Africa. Government ownership marginally increased from 83.1% in 2020 to 86.3% in 2021. Consortiums owned 10.8% and Private Domestic firms owned a small portion of 2%.



- Consortiums
- Government
- African DFIs
- China
- Other Asian Countries
- International DFIs
- EU Countries
- Other African Countries
- Private Domestic
- Brazil

May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

This study noted a general decline in infrastructure financing across the region in 2021. Over the period of the study, infrastructure projects in East Africa continued to be primarily financed by Consortiums (31.4%), followed by Government (21.6%) and African DFIs (14.7%). China remained a key partner contributing to infrastructure projects in the region with a share of 10.8%.



- China
- Consortiums
- Private Domestic
- Other Asian Countries
- EU Countries
- Other African Countries
- Brazil
- Government

May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

Once again, China was also the biggest builder in the East African market, making up 50% of the construction projects in the region. Consortiums held a building share of 14.7%, while Private Domestic firms stood at 12.7%. Other Asian Countries (aside from China) accounted for 10.8%, with Japan and Turkey as notable builders from Asian markets.

Other Asian Countries include Japan, Korea, Oman, Saudi Arabia and South Korea.
EU Countries include Finland, Italy and Portugal.

Other Asian Countries include India, Israel, Japan, Korea, South Korea and Turkey.
EU Countries include Austria, France, Germany, Italy, Portugal and Spain.

Top 10 Projects (by value)

Country	Project	Sector	US$bn
Tanzania	Bagamoyo Mega Port		10
Tanzania	Tanzania - Rwanda - Burundi Railway Project		7.6
Tanzania	Dar es Salaam - Mwanza Standard Gauge Railway Line		7.5
Tanzania	Stiegler's Gorge/Rufiji Hydropower Project		3.6
Ethiopia	Awash - Mekele Railway Project		3.2
Ethiopia	Koysha Hydropower Dam Project		2.8
Tanzania	Liganga Iron and Steel Complex		1.8
Uganda	Karuma Hydropower Plant		1.7
Rwanda	Bugesera International Airport Project		1.3
Kenya	Sodo (Ethiopia) - Suswa (Kenya) HVDC Project		1.3

Source: Deloitte analysis, 2021

Sector
- Transport
- Energy & Power
- Real Estate: Industrial Construction

In line with the region's infrastructure goals, East Africa's top 10 projects were mainly in the Transport sector with five projects. Tanzania recorded five projects – the East African country with the most projects in the top 10. The top 10 projects were worth US$40.7bn, contributing 67.2% of the total value of the region's projects.

Southern Africa

The Southern African region comprises Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe.

	2016	2017	2018	2019	2020	2021	2021% of continental projects
Projects	85	93	103	92	102	106	22.9%
Value (US$bn)	93.5	89.7	125.4	118.2	124.5	147.7	28.4%

Southern Africa recorded 106 projects, an increase of 3.9% from 2020. The total value of projects increased by 18.6%, reaching US$147.7bn.

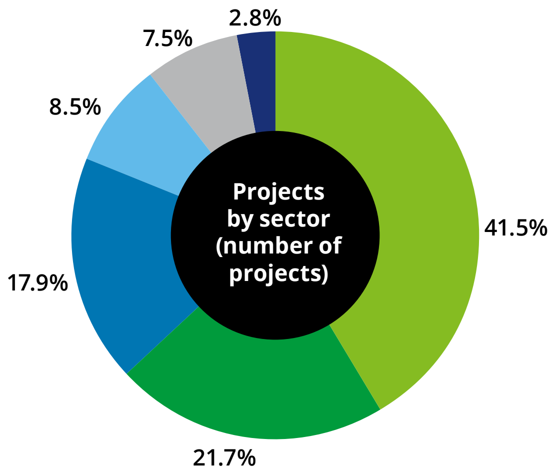
South Africa recorded 37 projects (34.9%), the highest number of projects in the region. Mozambique had 16 projects (15.1%), followed by Zambia with 14 projects (13.2%) and Angola with 10 projects (9.4%). South Africa also registered the highest share in value terms, accounting for 37% (US$54.7bn) of the total value of projects. Mozambique followed with a share of 33.2% (US$49.1bn) and Angola with a share of 14.1% (US$20.8bn).

In terms of sectoral breakdown, the Transport sector recorded 44 projects (41.5%), the largest number of projects in the region. The Energy & Power sector came second, recording 23 projects (21.7%) under construction, followed closely by the Real Estate sector with 19 projects (17.9%).

Share of projects by number (%)

Projects by sector	2016	2017	2018	2019	2020	2021
Energy & Power	25	25	11	12	22	22
Transport	20	23	32	26	33	41
Real Estate	31	29	25	22	19	19
Water	7	5	9	11	11	8
Mining	5	4	9	13	/	/
Oil & Gas	5	5	2	/	3	/
Shipping & Ports	7	8	10	10	8	8
Social Development	/	/	2	3	4	3
TMT	/	/	/	/	/	/
Healthcare	1	1	1	1	1	/
Education	/	/	/	/	/	/
Agriculture	/	/	/	/	/	/
Mixed Use	/	/	/	/	/	/

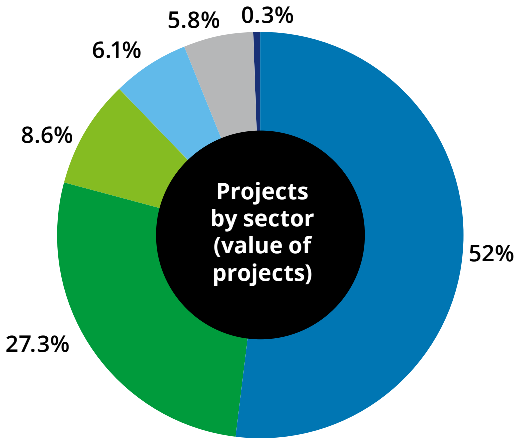
Source: Deloitte analysis, 2021
May not total to 100% due to rounding.



Source: Deloitte analysis, 2021
May not total to 100% due to rounding.

Sector

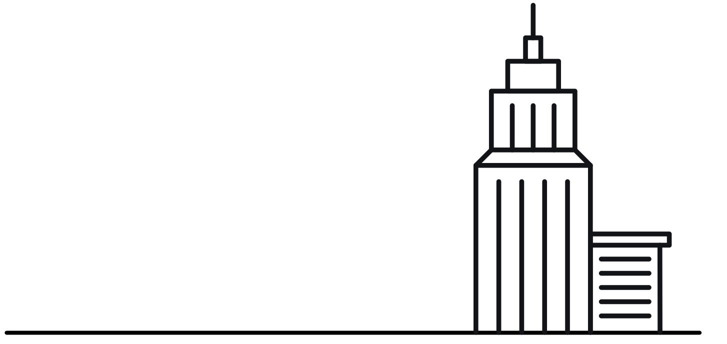
- Transport
- Energy & Power
- Real Estate
- Water
- Shipping & Ports
- Social Development



Source: Deloitte analysis, 2021
May not total to 100% due to rounding.

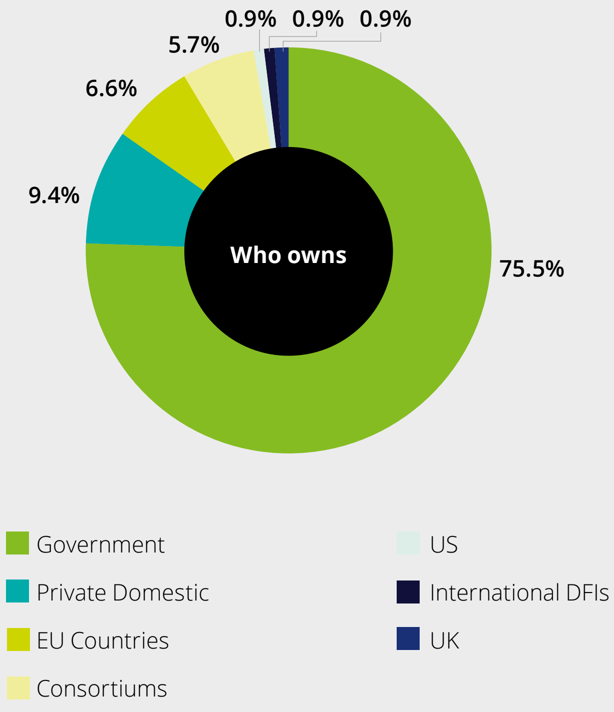
Sector

- Real Estate
- Energy & Power
- Transport
- Water
- Shipping & Ports
- Social Development



In value terms, the Real Estate sector recorded 52% (US$76.7bn). The high value of projects in the Real Estate sector was fuelled by investments in some mega projects in Mozambique and South Africa.

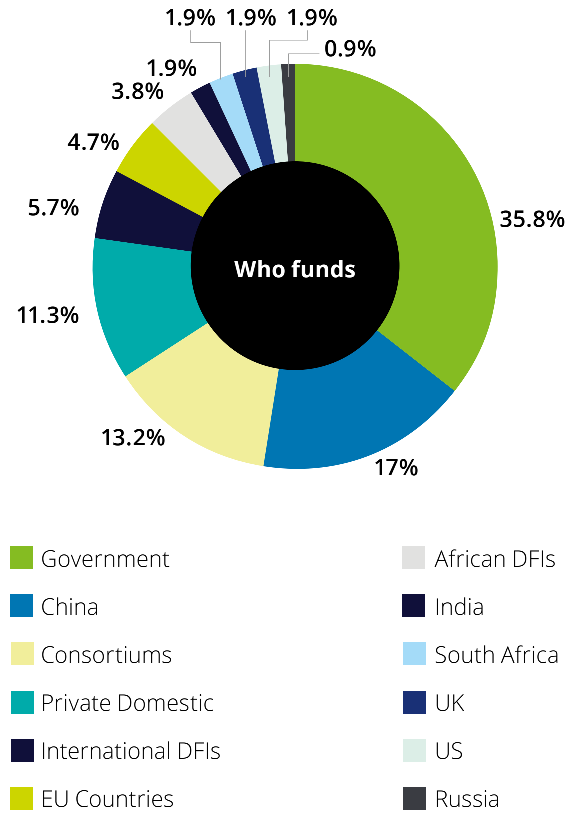
Energy & Power accounted for 27.3% (US$40.3bn) of the projects underway. Despite the Transport sector having recorded the most projects, the sector came third in value terms, contributing 8.6% (US$12.6bn).



May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

The majority of the projects in Southern Africa over the period were Government-owned (75.5%). Private Domestic firms in Southern Africa owned 9.4% of the projects, while EU Countries owned 6.6% of the projects.

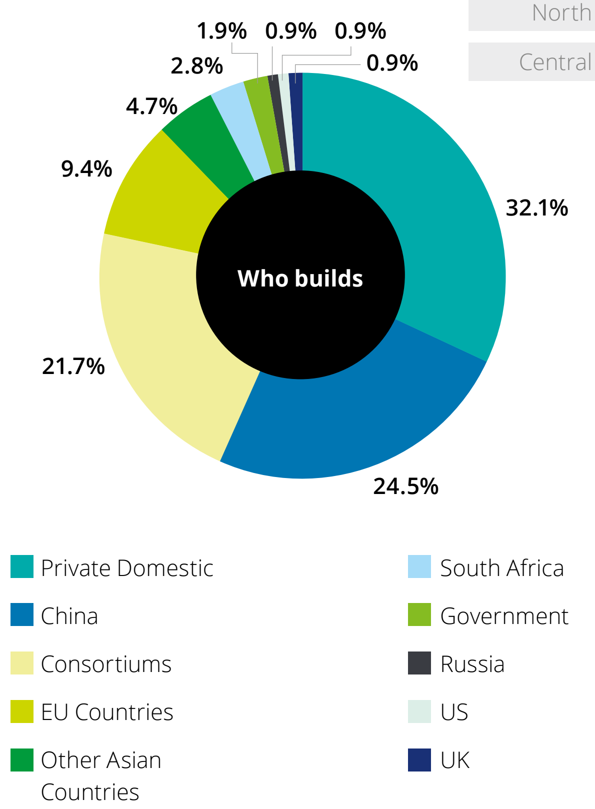
EU Countries include France and Italy.



May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

Southern African Governments also held the largest funding share of 35.8%. The majority of the projects funded by Government were in the Transport sector, while a few (seven projects) were in the Energy & Power sector. China funded 17% of the projects under study, while Consortiums accounted for a funding share of 13.2% and Private Domestic firms 11.3%.

EU Countries include Italy and Portugal.



May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

Private Domestic firms built 32.1% of the projects in the region. China continued its hold on building Southern African projects, recording a building share of 24.5%. Consortiums were responsible for building 21.7% of the projects in the region.

EU Countries include France, Germany, Italy, Portugal and Spain.
Other Asian Countries include India, Israel and Japan.

Top 10 Projects (by value)

Country	Project	Sector	US$bn
Mozambique	Rovuma LNG Project		30
South Africa	Kusile Coal-Fired Power Plant		15.2
Angola	Namibe Refinery Project		12
Mozambique	Coral South Floating LNG Project		8
South Africa	Waterfall City Development		6.8
South Africa	Baywest City Precinct		6
South Africa	Steyn City Development		4.7
Angola	Caculo Cabaca Hydropower Project		4.5
South Africa	Roggeveld Wind Project		4.4
Namibia	SADC Gateway, Port of Walvis Bay		4.3

Source: Deloitte analysis, 2021

Sector

- Transport
- Energy & Power
- Real Estate: Industrial Construction
- Real Estate: Commercial Construction

The top 10 projects in Southern Africa were worth US$95.9bn, accounting for 65% of the projects in the region.

West Africa

West Africa includes Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, the Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone and Togo.

	2016	2017	2018	2019	2020	2021	2021% of continental projects
Projects	92	79	105	75	76	153	33.1%
Value (US$bn)	119.8	98.3	82.8	80.9	79	172.8	33.2%

West Africa recorded a total of 153 projects worth US$172.8bn. The value of projects in West Africa rose significantly, primarily fuelled by increased investments in new mega projects in the region (Ogidigben Gas Revolution Industrial Park in Nigeria and the Simandou-Conakry Iron Ore Rail Line in Guinea).

Nigeria recorded 55 projects (36%), the highest number of projects in West Africa. Nigeria has dedicated its infrastructure investments to Transport projects, particularly roads and bridges.

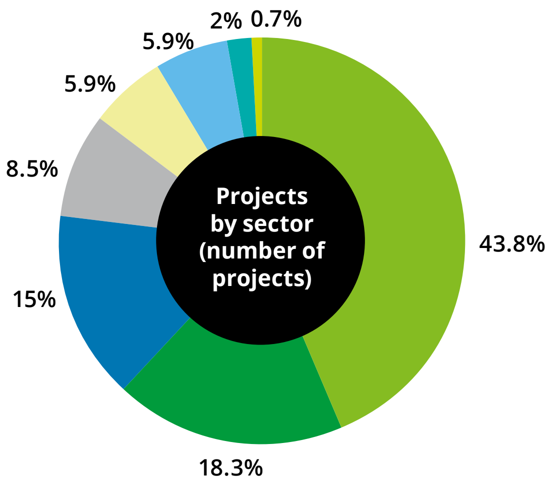
Ghana had 47 projects in progress, accounting for 31% of the region's overall projects. Côte d'Ivoire registered 15 projects, holding a 10% share of the region's capital projects. In value terms, Nigeria accounted for 58% (US$100.9bn) of the region's total value of projects, followed by Ghana with a share of 13% (US$22.5bn). Guinea contributed the third-largest share in value, at 11% (US$19bn), on account of the country's major transport project, the Simandou-Conakry Iron Ore Rail Line, worth US$14bn.

The sectoral breakdown of projects saw the Transport sector surging ahead with 67 projects (share of 43.8%). The Energy & Power sector recorded 28 projects (18.3%), followed by the Real Estate sector with 23 projects (15%) in progress. The majority of the transport projects in West Africa were roads and bridges, while most projects in the Real Estate sector recorded were commercial construction projects.

Share of projects by number (%)

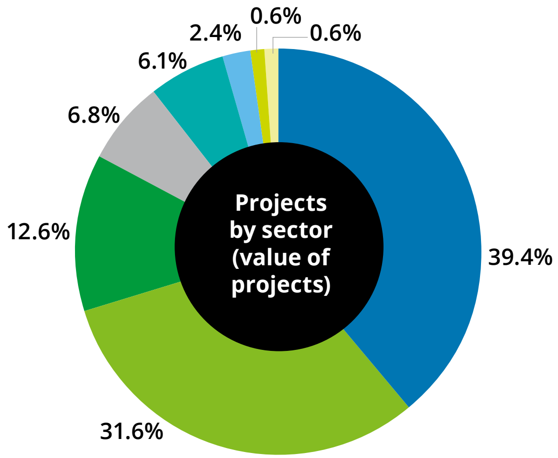
Projects by sector	2016	2017	2018	2019	2020	2021
Transport	34	43	50	44	50	44
Energy & Power	18	13	11	20	22	18
Real Estate	22	19	17	16	17	15
Shipping & Ports	12	11	9	8	8	8
Oil & Gas	3	3	1	3	1	2
Water	2	4	5	/	1	6
Mining	2	4	3	7	/	/
Social Development	1	1	1	/	/	/
Healthcare	3	3	4	3	/	6
Education	2	/	/	/	/	1
Other	/	/	/	/	/	/

Source: Deloitte analysis, 2021
May not total to 100% due to rounding.



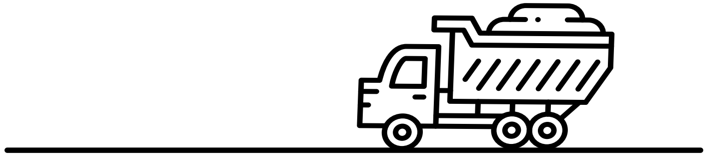
Source: Deloitte analysis, 2021
May not total to 100% due to rounding.

Sector
- Transport
- Energy & Power
- Real Estate
- Shipping & Ports
- Healthcare
- Water
- Oil & Gas
- Education

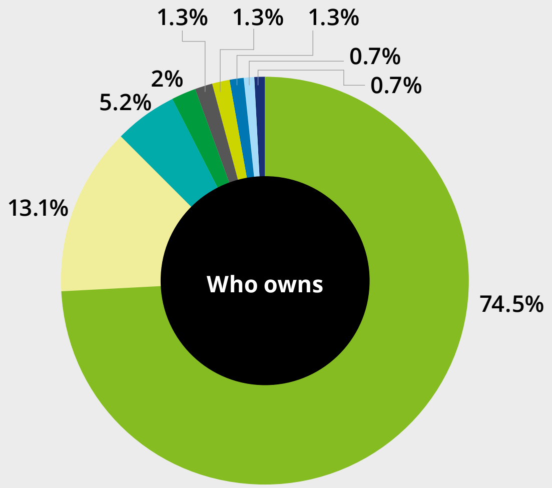


Source: Deloitte analysis, 2021
May not total to 100% due to rounding.

Sector
- Real Estate
- Transport
- Energy & Power
- Shipping & Ports
- Oil & Gas
- Water
- Education
- Healthcare



While the Transport sector recorded the largest number of projects, the Real Estate sector noted the highest value of projects, holding a share of 39.4% (US$68bn). The Transport sector accounted for 31.6% (US$54.6bn) of the total value of projects in West Africa, followed by the Energy & Power sector with 12.6% (US$21.7bn).

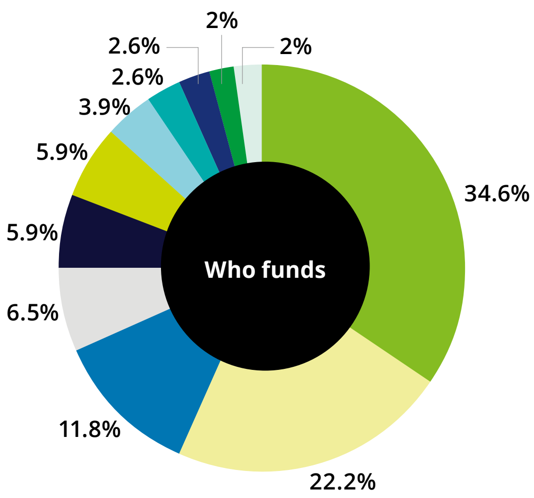


Government
Consortiums
Private Domestic
Other Asian Countries
Nigeria
EU Countries
China
Canada
UK

May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

Government owned 74.5% of the projects, most of these in the Transport sector. Consortiums owned 13.1% of projects underway, while Private Domestic firms owned only 5.2% of the projects.

EU Countries include France and the Netherlands.
Other Asian Countries include Israel, Macau and Singapore.

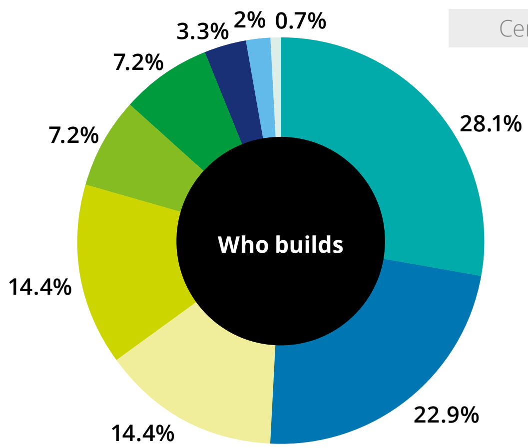


Government
Consortiums
China
African DFIs
International DFIs
EU Countries
Other African Countries
Private Domestic
UK
Other Asian Countries
US

May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

Funding in West Africa was largely dominated by Government, funding 34.6% of the projects in the region. Consortiums registered a funding share of 22.2%, followed by China which funded 11.8% of the projects under study.

EU Countries include Austria, France, Germany and Italy.
Other African Countries include Benin, Côte d'Ivoire, Ghana, Mauritania, Nigeria and Tunisia.
Other Asian Countries include India, Kuwait and Macau.



Private Domestic
China
Consortiums
EU Countries
Other African Countries
Other Asian Countries
UK
Brazil
US

May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

The majority of the projects were built by Private Domestic firms, with a share of 28.1%. China was the largest single country builder, with a building share of 22.9%. Consortiums and EU Countries each built 14.4% of the projects, while Other African Countries, particularly other companies from West Africa, built 7.2%.

EU Countries include Denmark, France, Germany, Italy, Monaco, Netherlands, Portugal, Spain and Sweden.
Other African Countries include Benin, Burkina Faso, Côte d'Ivoire and Ghana.
Other Asian Countries include India, Japan, Lebanon, Macau, Singapore, and Turkey.

Top 10 Projects (by value)

Country	Project	Sector	US$bn
Nigeria	Ogidigben Gas Revolution Industrial Park		20
Nigeria	Centenary City		18.7
Nigeria	Dangote Refinery		14
Guinea	Simandou - Conakry Iron Ore Rail Line		14
Benin	Agadem Rift Basin (Niger) - Port Seme (Benin) Crude Oil Pipeline Project		7
Nigeria	Eko Atlantic		6
Nigeria	Mambilla Hydropower Project		5.8
Ghana	Ada Estuary Tidal Power Plant		5.7
Guinea	Alumina Refinery		3
Togo	Sogakope (Ghana) - Lome (Togo) Trans Boundary Water Supply Project		2.9

Source: Deloitte analysis, 2021

Sector

- Transport
- Energy & Power
- Water
- Oil & Gas
- Real Estate: Industrial Construction
- Real Estate: Commercial Construction

The most valuable project in West Africa was the Ogidigben Gas Revolution Industrial Park in Nigeria, worth US$20bn. The top 10 projects in the region were worth US$97.2bn, accounting for 56.2% of the region's overall project value. Nigeria recorded five projects, the highest number of projects in the top 10.

North Africa

North Africa – made up of Algeria, Egypt, Libya, Morocco, South Sudan, Sudan, Tunisia and Western Sahara – recorded 86 projects, valued at US$132.2bn.

	2016	2017	2018	2019	2020	2021	2021% of continental projects
Projects	42	40	109	87	71	86	18.6%
Value (US$bn)	76.1	77.1	148.3	144.3	111	132.2	25.4%

The number of projects in North Africa increased by 21.1%, from 71 projects in 2020 and the value of projects increased by 19.1%.

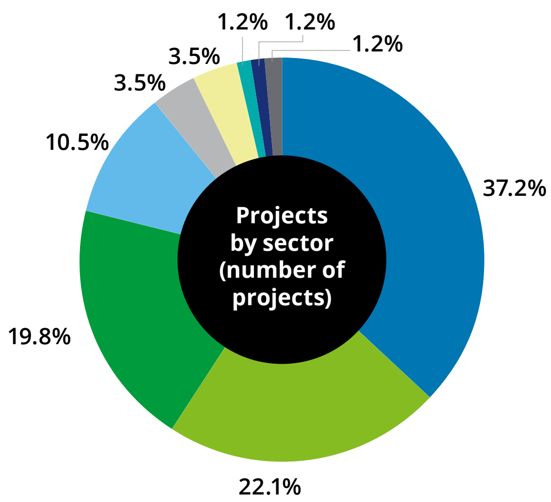
Egypt continued to lead the total value of projects, holding a significant share of projects (82% or US$108.8bn). The high value of projects in Egypt was fuelled mainly by the country's investments in mega projects, such as the New Capital City Project and the FourWinds Coal-Fired Power Plant. Morocco accounted for 7% of the region's project value, followed by Algeria with 5%.

In terms of the number of projects in the region, Egypt recorded 42 projects (49%) under construction. Morocco came second with 25 projects (29%), followed by Algeria with nine projects (10%).

Share of projects by number (%)

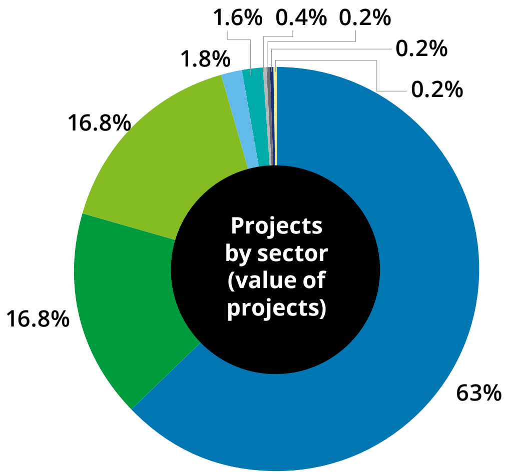
Projects by sector	2016	2017	2018	2019	2020	2021
Energy & Power	10	12	16	17	14	20
Transport	43	28	30	25	24	22
Real Estate	26	33	34	32	41	37
Water	5	5	3	3	10	11
Mining	/	/	4	1	1	1
Oil & Gas	12	12	3	5	1	1
Shipping & Ports	5	10	6	13	4	4
Social Development	/	/	/	/	/	1
Healthcare	/	/	4	3	4	4
Education	/	/	1	/	/	/
Other	/	/	/	/	/	/

Source: Deloitte analysis, 2021
May not total to 100% due to rounding.



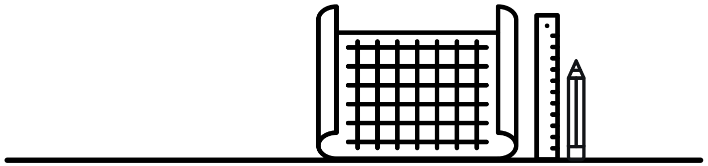
Source: Deloitte analysis, 2021
May not total to 100% due to rounding.

Sector
- Real Estate
- Transport
- Energy & Power
- Water
- Shipping & Ports
- Healthcare
- Oil & Gas
- Social Development
- Mining



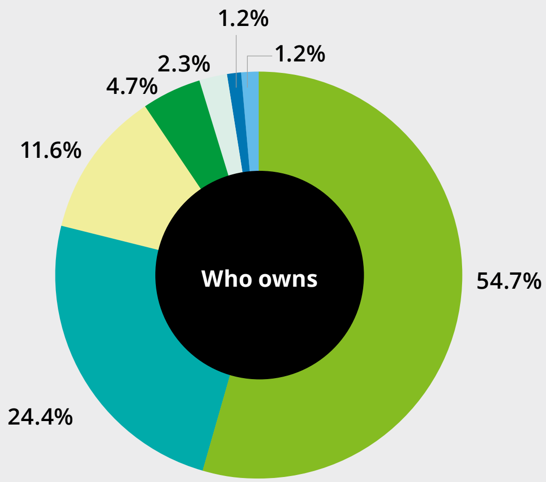
Source: Deloitte analysis, 2021
May not total to 100% due to rounding.

Sector
- Real Estate
- Energy & Power
- Transport
- Water
- Oil & Gas
- Shipping & Ports
- Mining
- Social Development
- Healthcare



North Africa has invested heavily in Real Estate projects. While the Real Estate sector declined in 2021 to 32 projects (37.2% of the region's projects) from 41 projects in 2020, the sector nonetheless recorded the highest number of projects in the region. The Transport sector recorded 19 projects (22.1%), down from 24 projects in 2020. The Energy & Power sector recorded 17 projects (19.8%), up from 14 projects registered in 2020, mainly owing to the region's increasing efforts towards its clean energy transition.

The Real Estate sector accounted for 63% (US$83.3bn) of the total value of projects underway. Energy & Power held a share of 16.8% (US$22.3bn) of project value, followed by the Transport sector with 16% (US$21.1bn).

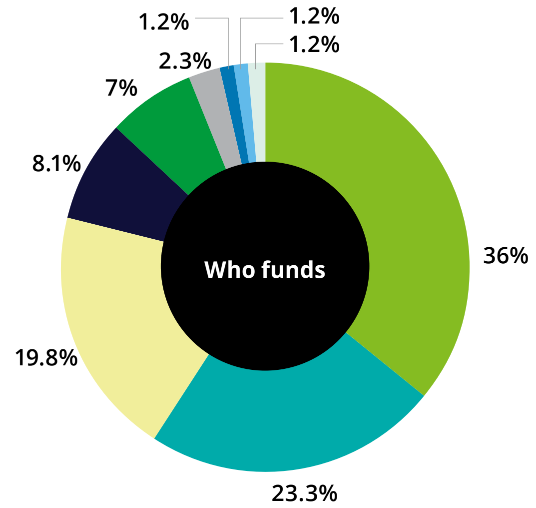


- Government
- Private Domestic
- Consortiums
- Other Asian Ccountries
- US
- China
- Australia

May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

Government ownership dropped from 62% in 2020, to 54.7% in 2021. Nonetheless, Government continued to own most projects in the region. Private Domestic firms owned 24.4% of the projects underway, while Consortiums owned 11.6%.

Other Asian Countries include Bahrain, Kuwait and the UAE.

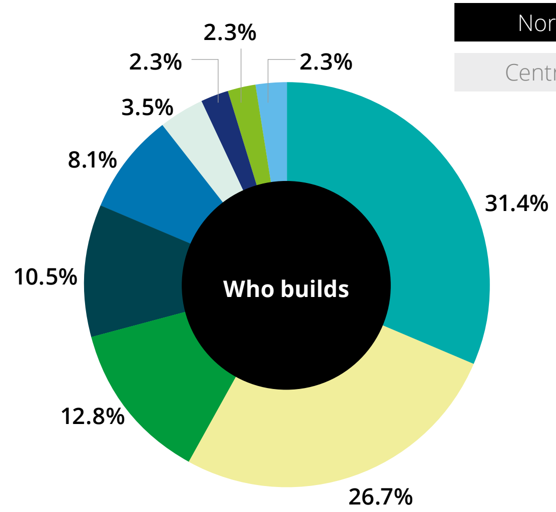


- Government
- Private Domestic
- Consortiums
- International DFIs
- Other Asian Countries
- African DFIs
- China
- Australia
- US

May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

North African Governments continued to be the largest funders of projects in the region, holding a funding share of 36%. Private Domestic firms funded 23.3% of projects under study, while Consortiums stood at 19.8%.

Other Asian Countries include Bahrain, Korea, Kuwait, Qatar and the UAE.



- Private Domestic
- Consortiums
- Other Asian Countries
- EU Countries
- China
- US
- UK
- Government
- Australia

May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

Private Domestic companies accounted for the region's largest share of construction activity, constructing 31.4% of projects under study. Consortiums recorded a building share of 26.7%, while EU Countries accounted for 10.5%, followed by China with 8.1%.

Other Asian Countries include Japan, Kuwait, South Korea, Turkey and the UAE.

Top 10 Projects (by value)

Country	Project	Sector	US$bn
Egypt	New Capital City (Administrative Centre) Project	Real Estate: Commercial Construction	58.0
Egypt	FourWinds Coal Fired Power Plant	Energy & Power	11.0
Egypt	Cairo Metro Line 3 Project	Transport	5.8
Egypt	East Cairo - New Administrative City Monorail Project	Transport	4.5
Egypt	King Salman Bridge (Saudi - Egypt Causeway)	Transport	4.5
Tunisia	Tunis Financial Harbour (TFH) Project	Real Estate: Commercial Construction	3.0
Egypt	Samalout Thermal Power Plant	Energy & Power	2.9
Egypt	Assiut Refinery Upgrading Project - Hydrocracking Complex	Real Estate: Industrial Construction	2.5
Egypt	Midor Refinery Expansion Project	Real Estate: Industrial Construction	2.3
Morocco	Noor Midelt Solar Power Complex	Energy & Power	2.3

Source: Deloitte analysis, 2021

Sector

- Transport
- Energy & Power
- Real Estate: Industrial Construction
- Real Estate: Commercial Construction

Egypt's New Administrative Capital City Project worth US$58bn is still in progress, remaining the most valuable project in North Africa. Egypt has invested heavily in mega projects. With eight projects, the country recorded the most projects in the top 10.

The top 10 projects in the region, worth US$96.8bn, contributed 73.2% of the region's overall project value.

Central Africa

The Central African region is made up of Cameroon, the Central African Republic (CAR), Chad, the Democratic Republic of the Congo (DRC), Equatorial Guinea, Gabon, Congo-Brazzaville (the Republic of the Congo) and São Tomé and Príncipe.

	2016	2017	2018	2019	2020	2021	2021% of continental projects
Projects	24	20	26	16	18	15	3.3%
Value (US$bn)	7	9.8	26.9	6.5	6.4	7.4	1.4%

Central Africa recorded 15 projects worth US$7.4bn. The total number of projects dropped by 16.7% from 2020 to 2021, while the value of projects increased by 15.6%. The increase in value of projects was due to increased investments in large infrastructure projects within the Transport sector, such as the Kribi Deep Sea Port and the Transgabonaise Highway Project (two of the top 10 projects in Central Africa).

Cameroon recorded eight projects (53.3%), while the DRC had four projects (26.7%). In value terms, Cameroon had the highest share of 63.4% (US$4.7bn). The DRC recorded a share of 16% (US$1.2bn), closely followed by Gabon with a share of 13.4% (US$1bn).

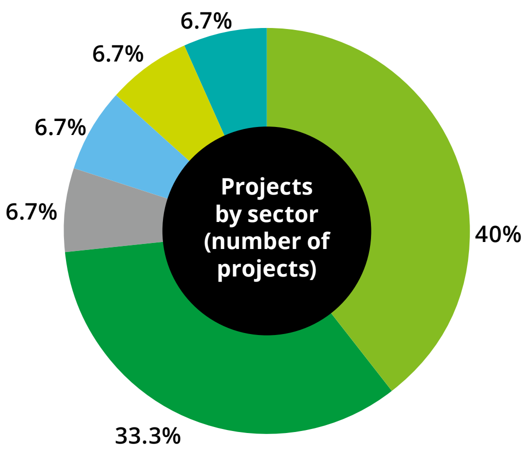
The Transport sector registered six projects (40%), followed by the Energy & Power sector with five projects (33.3%).

Share of projects by number (%)

Projects by sector	2016	2017	2018	2019	2020	2021
Energy & Power	29	20	4	6	33	33
Transport	42	30	19	19	28	40
Real Estate	8	15	19	25	17	/
Water	4	/	4	/	6	7
Mining	8	15	38	25	/	/
Oil & Gas	/	/	4	/	6	7
Shipping & Ports	4	10	4	6	/	7
Social Development	4	5	/	6	6	/
Education	/	5	4	6	6	7
Healthcare	/	/	4	6	6	/

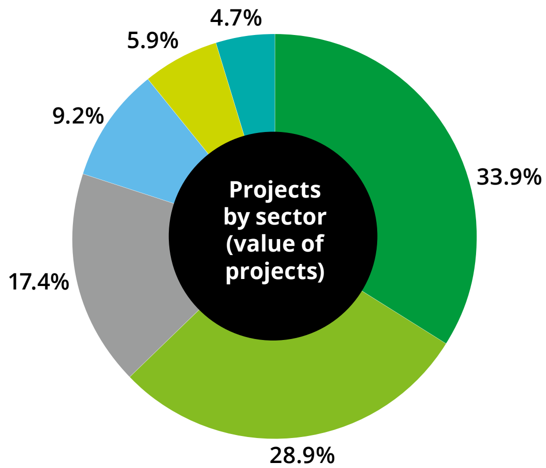
Source: Deloitte analysis, 2021
May not total to 100% due to rounding.

East Africa
Southern Africa
West Africa
North Africa
Central Africa



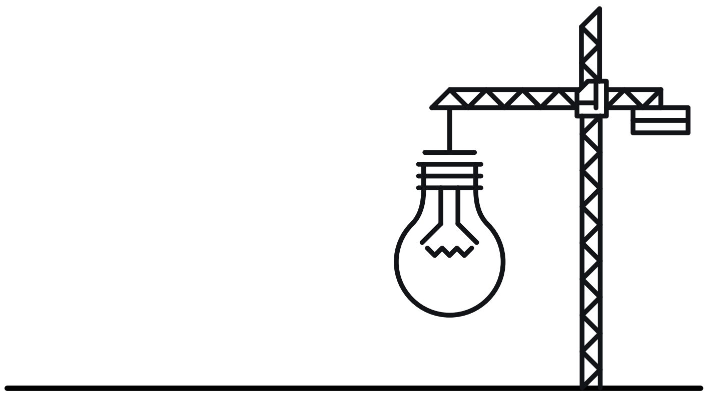
Source: Deloitte analysis, 2021
May not total to 100% due to rounding.

Sector
- Transport
- Energy & Power
- Shipping & Ports
- Water
- Education
- Oil & Gas



Source: Deloitte analysis, 2021
May not total to 100% due to rounding.

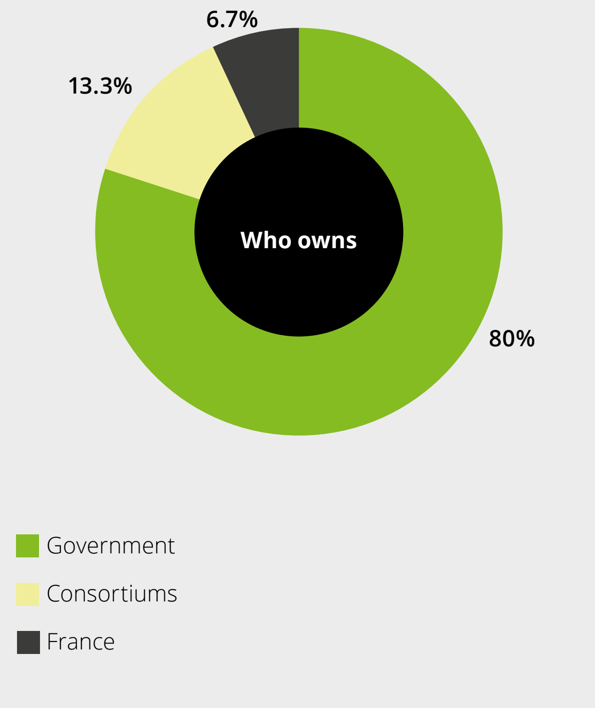
Sector
- Energy & Power
- Transport
- Shipping & Ports
- Water
- Education
- Oil & Gas



Over the past year, Central Africa has invested intensively in roads and bridges, as well as power plants.

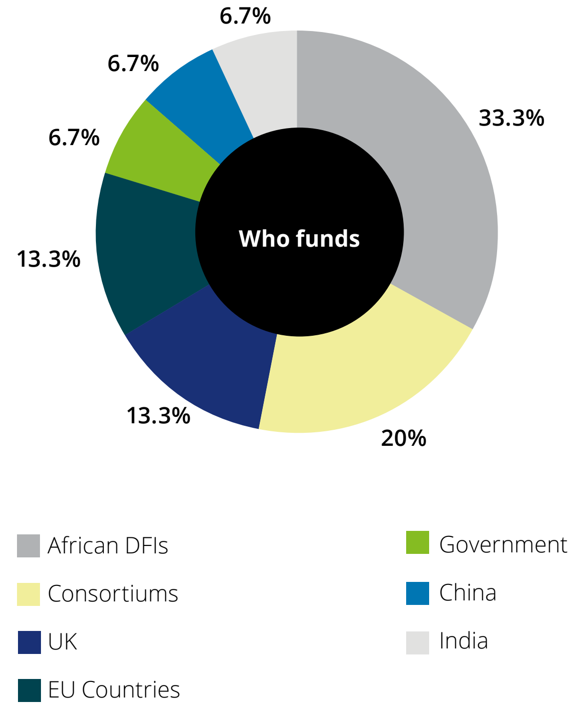
The Energy & Power sector accounted for a share of 33.9% (US$2.5bn) in value terms, while the Transport sector accounted for 28.9% (US$2.1bn) and Shipping & Ports 17.4% (US$1.3bn).

East Africa
Southern Africa
West Africa
North Africa
Central Africa



May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

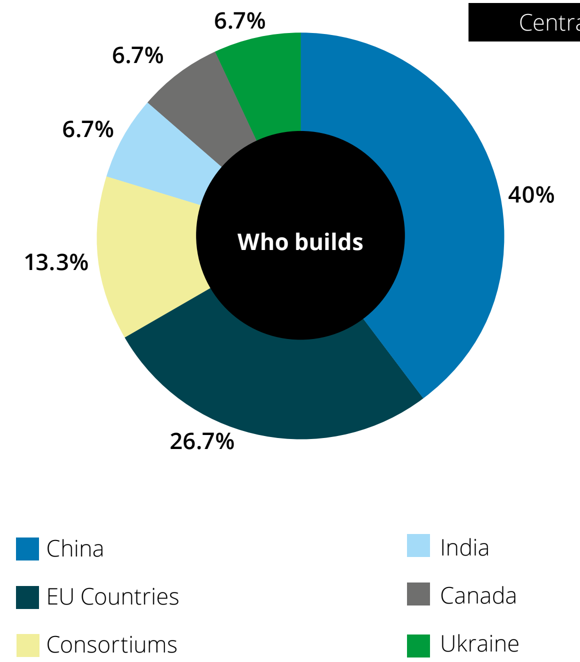
In 2021, Central African Governments owned 80% of the region's projects underway. Consortiums owned 13.3% of all projects, while France recorded ownership of 6.7% of the projects.



May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

African DFIs were responsible for funding 33.3% of the projects in Central Africa, followed by Consortiums with a funding share of 20%. The UK and EU Countries (France and Italy) accounted for a funding share of 13.3%, respectively, as China secured a share of 6.7%.

EU Countries include France and Italy.



May not total to 100% due to rounding.
Source: Deloitte analysis, 2021

China's presence in building Central African projects continued. The country recorded the largest building share in Central Africa at 40%. EU Countries (France, Italy and Spain) built 26.7% of the projects in the region, followed by Consortiums, with a share of 13.3%. According to this study, Private Domestic firms had no building share in Central Africa.

EU Countries include France, Italy and Spain.

Top 10 Projects (by value)

Country	Project	Sector	US$bn
Cameroon	Nachtigal Falls Hydroelectric Plant	Energy & Power	1.4
Cameroon	Kribi Deep Sea Port	Transport	1.3
Gabon	Transgabonaise Highway Project	Transport	1.0
Cameroon	Yaounde Drinking Water Production Plant	Energy & Power	0.69
DRC	Busanga Hydropower Station	Energy & Power	0.66
Cameroon	RN15 Batchenga - Ntui Road Upgrade Project	Transport	0.65
Congo-Brazzaville	University of Denis Sassou-N Guesso	Social Development	0.44
Cameroon	Limbe-Douala-Edea-Yaounde Hydrocarbon Pipeline Project	Energy & Power	0.35
DRC	Katende Hydropower Plant	Energy & Power	0.28
Cameroon	Ebolowa - Kribi Road Project	Transport	0.23

Source: Deloitte analysis, 2021

Sector

- Transport
- Energy & Power
- Social Development

The Nachtigal Falls Hydroelectric Plant (expected to be Cameroon's biggest hydroelectric dam) was recorded as the largest project by value in Central Africa (US$1.4bn). The top 10 projects combined amount to US$6.9bn, accounting for 93.2% of the region's overall project value. Cameroon registered the largest number of projects (six projects) in the top 10 – with projects mainly in the Energy & Power and Transport sectors.

Methodology

The annual Deloitte *Africa Construction Trends* report monitors the infrastructure projects under construction in Africa. Projects that qualify for inclusion are required to be valued at over US$50m. Projects must have broken ground, but not yet been commissioned by 1 June 2021. The analysis of construction trends thus focuses on projects that are physically under construction, with construction crews on-site at the annual cut-off date (1 June annually). The successive annual reports track the value of construction projects underway as at 1 June of each year, so the numbers should not be read as reflecting the total value of projects constructed during a 12-month period. In this edition, we tracked projects from a continental and regional perspective, dissecting the sectoral analysis, project ownership, project funder, and project builder landscape.

Categorisation of regions covered in this report followed that of the African Development Bank (AfDB). Data collected was limited to publicly available information and informed the *Africa Construction Trends* report 2021 dataset.
All graphics displayed in this report, unless otherwise indicated, are based on this dataset.

Definitions:

- **African DFIs** – Development Finance Institutions headquartered in Africa, such as the AfDB, Trade and the Development Bank (TDB), and the Development Bank of Southern Africa (DBSA)
- **Consortiums** – two or more construction companies or governments holding an equal split of a project's ownership, building activities, or funding activities
- **Government** – Governments or government departments within the African continent
- **International DFIs** – Development Finance Institutions headquartered outside of Africa, such as the World Bank, International Monetary Fund (IMF), International Finance Corporation (IFC), Japan International Cooperation Agency (JICA), and United States Agency for International Development (USAID)
- **Private Domestic firm** – an African construction firm or financial institution headquartered in the same African country where it is constructing or funding a project
- **Single Countries** – countries that could not be grouped together according to common or shared geography. These countries do not make up a significant portion of project ownership/funding/building activities on their own and have thus been grouped under this title.


Angola

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