



Infrastructure Financing Trends in Africa – 2017



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ICA REPORT – 2017
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***Infrastructure Financing Trends in Africa – 2017* is the Infrastructure Consortium for Africa’s (ICA’s) annual report on how financial resources are being mobilised to facilitate the development of the continent’s transport, water and sanitation, energy and ICT sectors.**

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About the ICA



The Infrastructure Consortium for Africa (ICA) was launched at the G8 Gleneagles summit in 2005. The membership is the G8 countries, the Republic of South Africa, the World Bank Group (WBG), the African Development Bank Group (AfDB), the European Commission (EC), the European Investment Bank (EIB) and the Development Bank of Southern Africa (DBSA).

African institutions such as the African Union (AU), the New Partnership for Africa's Development (NEPAD) and the Regional Economic Communities (RECs) all participate as observers in the meetings of the consortium. AfDB has hosted the Secretariat of the ICA since its inception in 2006.

At the May 2011 Annual meeting of the Consortium, the decision was made to enlarge ICA membership from G8 to G20. In November 2013,

South Africa joined the ICA as the first G20 country non-G8, and first African country member of the ICA.

The ICA is a major initiative to accelerate progress to meet the urgent infrastructure needs of Africa in support of economic growth and development. It addresses both national and regional constraints to infrastructure development with an emphasis on regional infrastructure, recognising the challenges at this scale.

The Consortium is intended to make its members more effective at supporting infrastructure by pooling efforts in selected areas such as information sharing, project development and good practices.

Although ICA is not a financing agency, the consortium acts as a platform to broker more financing of infrastructure projects and programmes in Africa. The main

objectives of the ICA can be broadly defined as follows:

- Increase the amount of finance going to sustainable infrastructure in Africa from public and private sources;
- Facilitate greater co-operation between members of ICA and other important sources of finance including African stakeholders, China, India, Arab Funds and the private sector;
- Highlight and help remove policy and technical blockages and progress;
- Increase knowledge of the sector through monitoring and reporting on the key trends and developments.

Increasingly, the ICA is working to improve the co-ordination of activities among members, and with other significant sources of infrastructure finance, including China, India, Arab and Islamic financiers, African regional development banks and the private sector.

We have the pleasure of presenting to you the ninth edition of the ICA annual report, *Infrastructure Financing Trends in Africa, 2017*. Over the years the report has become an important document for presenting in a consistent manner how finance is being mobilised to develop infrastructure across the energy, ICT, transport, and water and sanitation sectors. It also identifies emerging trends on how resources are mobilised effectively to accelerate Africa's infrastructure development.

One of the important issues addressed in this year's report is the amount African states spend on infrastructure. Such spending is analysed not only at a national level, but also at a subnational level – where it can be identified that spending has not been accounted for in federal or national budgets. It is important to note that more work is required to develop methodologies that adequately capture spending by state institutions and subnational governments and ensure that double counting is avoided.

Another persistent issue is Africa's infrastructure financing gap and it is encouraging to see ICA's own research on financing trends contributing to this debate. This year's report examines the extent to which the lack of investment in infrastructure is a matter of limited bankable projects relative to the availability of financial resources. Stakeholders interviewed for this report suggest that there are enough funds for Africa's infrastructure development. The challenge, however, is creating more bankable projects. Other stakeholders maintain the financing gap remains for bankable projects.

Africa is embarking on a journey to create a continental free trade area that must fully embrace the need to develop its infrastructure. The African Continental Free Trade Area has the potential to transform the continent. But infrastructure is needed to ensure deeper and broader regional integration, add value to its resources and catalyse growth in intra-African trade. This is particularly important if Africa is to realise its potential in sectors where growth prospects are brightest, such as agriculture and food, industry and services. Regional infrastructure projects must play a key role in promoting equitable and sustainable growth.

This report highlights some notable achievements in Africa's infrastructure sector. It shows how regional infrastructure projects can have the continental impact needed for a fully functioning free trade area. A good example is the Zambia-Tanzania-Kenya Interconnector project which is one of the Programme for Infrastructure Development in Africa Priority Action Plan projects and programmes. Beyond the regional benefits, the project will connect the southern and eastern African power pools and enhance inter-regional electricity trading by interconnecting the two pools' grids. The project is expected to create the largest power pool on the

continent and will be an essential component of the North-South (Cape to Cairo) power transmission corridor.

Mobilising funds for infrastructure is critical, and this report shows a high level of interest in new types of funding. In particular, the report recognises the demand for blended finance, in which concessional finance seeks to leverage non-concessional finance. *Infrastructure Financing Trends in Africa, 2017* also reports for the second year that organisations are increasingly deploying development capital. This is important because it is not a grant, rather it creates an asset for the investor and can provide modest financial returns alongside significant development impacts.

This year's report provides examples of how finance has been mobilised for bankable projects likely to have a significant development impact. One example is the Benban solar park project in Egypt, which shows how a mixture of public and private sector finance can be mobilised by establishing sound institutional arrangements to produce 23 bankable projects.

Challenges for Africa's infrastructure remain. More bankable projects will be needed to both attract new and retain existing financiers to help close Africa's infrastructure financing gap. We hope that more institutions will join the cohort of financiers who address the challenges involved, from project preparation to capacity building, and see opportunities and benefits in financing Africa's infrastructure.

It is encouraging to see that new financing techniques are being developed. The challenge is to continue expanding the range of financial instruments available and integrating offerings such as blended finance and development capital with conventional instruments such as grants and loans that will continue to play a role in infrastructure financing.

We hope this report will help broaden the range of stakeholders and increase the range of financing techniques used in Africa's infrastructure development. We also hope *Infrastructure Financing Trends in Africa, 2017* will help stakeholders address the challenge of establishing sound institutional arrangements that provide the right conditions for public and private sector actors to participate in the development of projects. Finally, we hope this report will help mobilise more finance for Africa's infrastructure development.

Pierre Guislain, Vice President, Private sector, industry and infrastructure, AfDB

Amadou Oumarou, Director Infrastructure and Urban development, AfDB

Mike Salawou, Manager Infrastructure Partnerships and ICA Coordinator

Definitions and Acronyms

Budget Data

Budget allocations: Total approved government budget for the respective item.

Total infrastructure budget: Sum of energy, water and sanitation, transport, and ICT budget allocations. Where available, significant multi-sector or other infrastructure allocations are indicated separately.

ICA Members

AfDB, DBSA, EC, EIB, G7 countries and Russia, Republic of South Africa and the World Bank Group. In 2011 all G20 countries were invited to join the ICA. The AU Commission, NEPAD Secretariat and Regional Economic Communities participate as observers at ICA meetings.

Infrastructure

Total infrastructure budget: Sum of energy, water and sanitation, transport, ICT, and multi-sector infrastructure budget allocations.

Hard infrastructure: Physical infrastructure.

Soft infrastructure: Measures to support or accompany the production of physical infrastructure outputs, including research, enabling legislation, project preparation and capacity building.

Project preparation: The undertaking of all project preparation cycles or development activities necessary to take an infrastructure project from identification through concept design to financial close. This

includes feasibility testing and financial and legal structuring, as well as raising capital.

Funding

Commitments: Direct funds approved in a given year to projects over their lifetime.

Disbursements: Money outflow going to infrastructure projects during a given year.

ODA – official development Assistance: Grant or loan with public concessional modalities administered by donor government agencies.

Non ODA: Non-concessional funding from public or private sources.

Regional project: Projects with direct beneficiaries in more than one country. These can either be cross-border projects or other regional integration projects involving a minimum of two countries or national projects.

Location

North Africa: Algeria, Egypt, Libya, Mauritania, Morocco, Tunisia.

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

Central Africa: Burundi, Cameroon, Central African Republic (CAR), Chad, Congo, Democratic Republic of Congo (DRC), Equatorial Guinea, Gabon, Rwanda, São Tomé and Príncipe (STP).

East Africa: Djibouti, Eritrea,

Ethiopia, Kenya, Seychelles, Somalia, South Sudan, Sudan, Tanzania, Uganda.

Southern Africa excluding RSA:

Angola, Botswana, Comoros, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Swaziland, Zambia, Zimbabwe.

RSA: Republic of South Africa.

Regional Development Banks

Central African States Development Bank (CASDB), DBSA (an ICA member), EBID, EADB, West African Development Bank (BOAD).

Sector

Transport: Airports, ports, rail, road.

Energy: Generation, transmission and distribution of electricity and gas (including pipelines, and associated infrastructure).

Water and sanitation: Sanitation, irrigation, (trans-boundary) water resource infrastructure, water supply, waste (solid & liquid) treatment and management.

ICT: Information and communication technology, including broadband, mobile network, satellite.

Multi-sector: Not sector-specific or cross-cutting projects. This could include implementation of a PPP unit or capacity building programmes.

Unallocated: Commitments which cover multiple ICA sectors but which are unable to be accurately allocated.

Acronyms

ACG – Arab Co-ordination Group

ADFD – Abu Dhabi Fund for Development

AfCFTA – Africa Continental Free Trade Area

AFD – Agence Française de Développement

AfDB – African Development Bank

AFESD – Arab Fund for Economic and Social Development

AfIF – EU-Africa Investment Facility

AICS – Italian Development Cooperation Agency

AIP – EU's Africa Infrastructure Platform

AKFED – Aga Khan Fund for Economic Development

AU – African Union

BADEA – Banque Arabe pour le Développement Economique en Afrique

BMZ – Germany's Federal Ministry of Economic Cooperation and Development

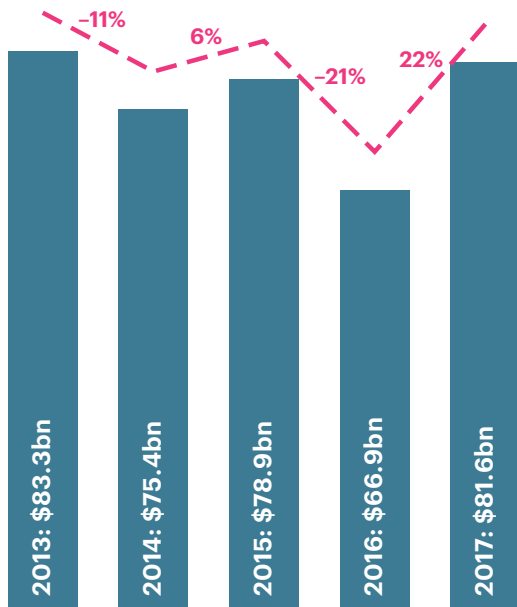
BOAD – Banque Oueste Africaine de Développement	G20 – Argentina, Australia, Brazil, Canada, China, EU, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, Turkey, UK and US	OFID – OPEC Fund for International Development
CADFund – China-Africa Development Fund	G8 – Canada, France, Germany, Italy, Japan, Russia, UK and US	OMVG – Organisation pour la Mise en Valeur du Fleuve Gambie
CDP – Italy’s Cassa Depositi e Prestiti	GFI – Global Financial Integrity	PIDA – Programme for Infrastructure Development in Africa
CGC – China Geo-Engineering Corporation	GIZ – Deutsche Gesellschaft für Internationale Zusammenarbeit	PIDA/PAP – PIDA Priority Action Plan
CGGC – China Gezhouba Group Corporation	HFO – heavy fuel oil	PPA – power purchase agreement
COIDIC – China Overseas Infrastructure Development and Investment Corporation	ICA – Infrastructure Consortium for Africa	PPDF – SADC Project Preparation and Development Facility
Comesa – Common Market for Eastern and Southern Africa	ICD – Islamic Corporation for the Development of the Private Sector	PPI – World Bank’s Private Participation in Infrastructure
CRBC – China Road and Bridge corporation	IDA – International Development Association	PPP – public-private partnerships
CSP – concentrated solar power	IDB – Islamic Development Bank	PV – photovoltaic
DBSA – Development Bank of Southern Africa	IFC – International Finance Corporation	rAREH – responsAbiity Renewable Energy Holding
DEG – Deutsche Investitions- und Entwicklungsgesellschaft	IFU – Denmark’s DFI	RBD – regional development bank
DFI – Development finance institutions	IPP – independent power producer	REC – Regional Economic Community
DFIC –Development Finance Institute Canada	JBIC – Japan Bank for International Co-operation	REIPPP – South Africa’s Renewable Energy Independent Power Producer Procurement programme
DFID – UK’s Department for International Development	JICA – Japan International Co-operation Agency	RIPDM – SADC Regional Infrastructure Development Master Plan
DRC – Democratic Republic of Congo	KFAED – Kuwait Fund for Arab Economic Development	RPP – regional Power Pool
EAC – East African Community	KfW – Germany’s development bank	RSA – Republic of South Africa
EAIF – Emerging Africa Infrastructure Fund	LPG – liquefied petroleum gas	SADC – Southern African Development Community
EAPP – Eastern Africa Power Pool	MAECI – Italy’s Ministry of Foreign Affairs and International Co-operation	SBM – State Bank of Mauritius
EBID – Ecowas Bank for Investment and Development	MCC – US’ Millenium Challenge Corporation	SFD – Saudi Fund for Development
EBRD – European Bank for Reconstruction and Development	MENA – Middle East and North Africa	SGR – standard gauge railway
EC – European Commission	MIGA – Multilateral Investment Guarantee Agency	SNCFT – Société Nationale des Chemins de Fer Tunisiens
Ecowas – Economic Community of West African States	NDB – BRICS’ New Development Bank	TDB – Trade and Development Bank
EDC – Canada’s Export Development Corporation	NEPAD – New Partnership for Africa’s Development	TTA – DFID Tripartite Trust Account
EGAS – Egyptian Natural Gas Holding Company	NEPAD-IPPF – NEPAD Infrastructure Project Preparation Facility	UNECA – United Nations Economic Commission for Africa
EIB – European Investment Bank	NIPP – National Integrated Power Project	WBG – World Bank Group
ENH – Mozambique’s Empresa Nacional de Hidrocarbonetos	NPCA – NEPAD Planning and Co-ordinating Agency	YMI – Yapi Merkezi Insaat ve Sanayi
EU – European Union	ODA – official development assistance	ZPC – Zimbabwe Power Company
EU-AITF – EU-Africa Infrastructure Trust Fund	OECD – Organisation for Economic Co-operation and Development	ZTK – Zambia-Tanzania-Kenya power transmission interconnector
FMO – Netherlands’ DFI	OeEB – Austria’s development bank	

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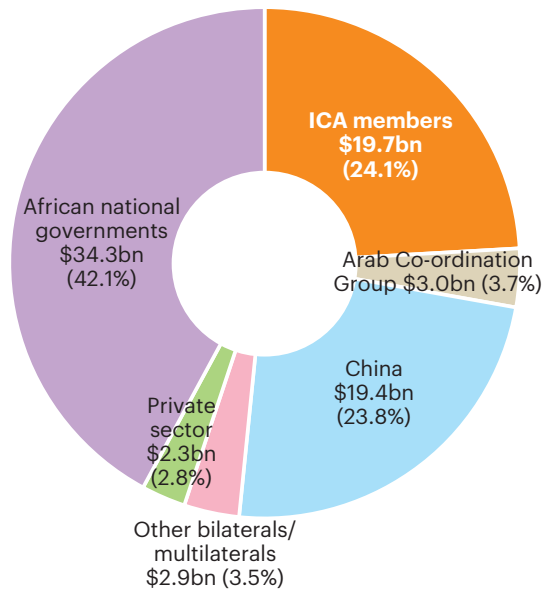
1. The Big Picture 2017

Total funding reached \$81.6bn in 2017

Funding increased by 22%



It came from



And these sectors



Transport \$34.0bn (41.7%)



Water \$13.2bn (16.2%)



Energy \$24.8bn (30.4%)



ICT \$2.3bn (2.8%)

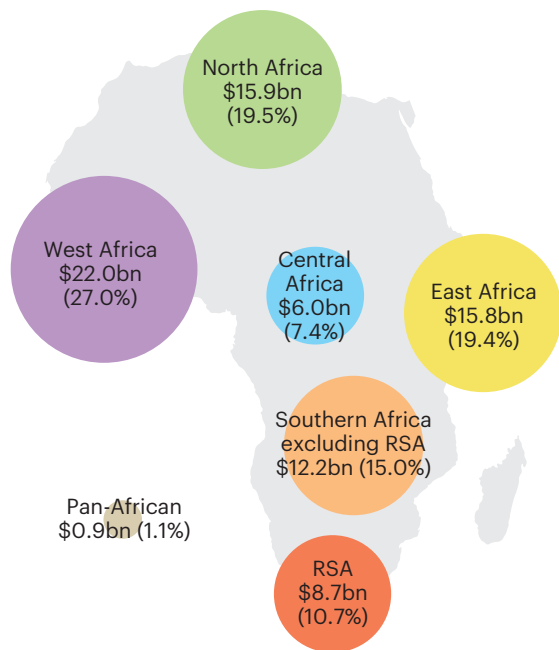


Multi-sector \$5.1bn (6.3%)



Unallocated \$2.2bn (2.7%)

Went to these regions



1.1 Key Messages and Findings

Overall commitments to Africa's infrastructure from all sources increased to \$81.6bn in 2017 from \$66.9bn in 2016¹. Though fewer ICA members reported data this year than in the past, this is the highest level of directly comparable commitments reported since 2010.

Factors driving the higher commitments include a \$13bn increase in identified Chinese investments from \$6.4bn to \$19.4bn, and a \$3.7bn increase in African national and subnational government spending from \$30.7bn to \$34.4bn.

According to the World Bank's Private Participation in Infrastructure (PPI) Project Database, the value of projects with private sector participation reaching financial close in 2017 totalled \$5.2bn, an increase from the \$3.6bn reported in 2016. Of this, \$2.3bn (44.8%) was privately financed.

Commitments from ICA members to Programme for Infrastructure Development in Africa Priority Action Plan (PIDA/PAP) projects amounted to \$2.8bn, one-third higher than the \$2.1bn committed to PIDA from all sources in 2016.

ICA members committed \$19.7bn to African infrastructure projects

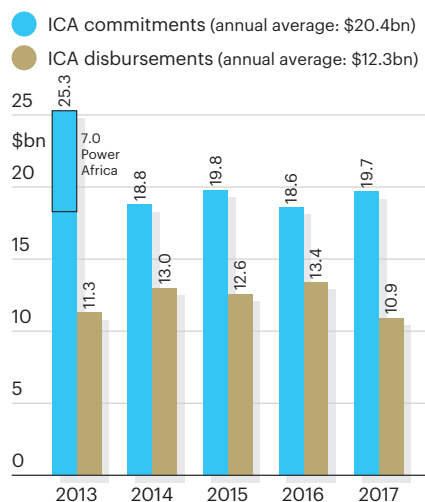


Figure 1
ICA members' commitments and disbursements, 2013-2017

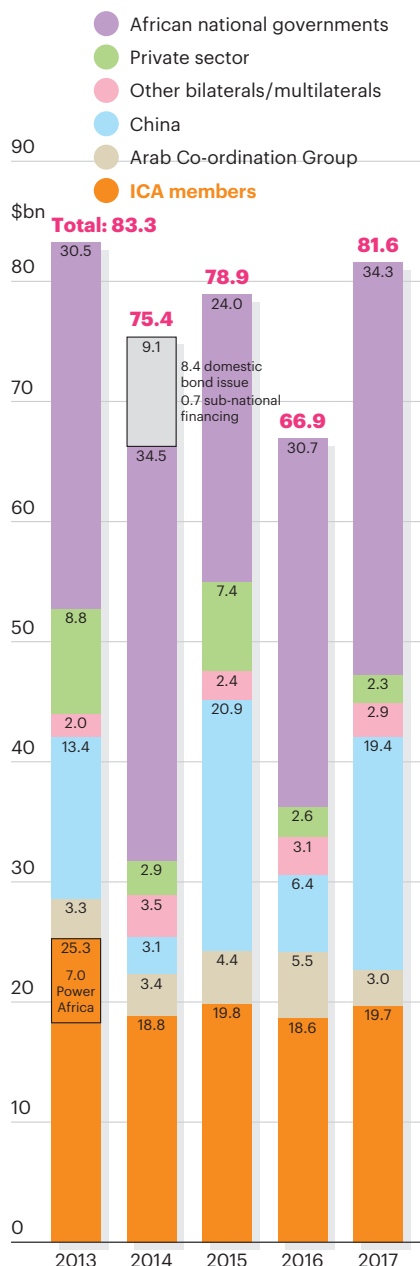


Figure 2
Infrastructure commitment trends by source, 2013-2017

in 2017, an increase of 5% from the \$18.6bn reported in 2016. This represents one of the highest commitments since the ICA began collecting data in 2010, only slightly below the 2015 high of \$19.8bn.

African state spending on infrastructure, which for the first time includes subnational state spending, increased from \$30.7bn in 2016 to \$34.4bn in 2017. Data for 2016 have

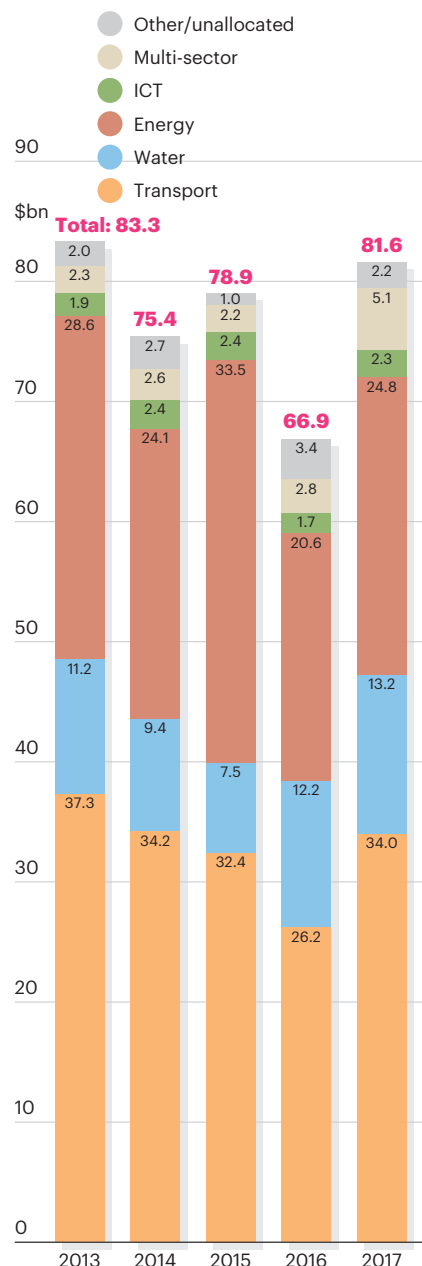


Figure 3
Infrastructure commitment trends by sector, 2013-2017

been adjusted to include identified subnational spending.

Commitments from non-ICA member bilaterals and multilaterals (excluding China) to African infrastructure projects reached \$5.8bn in 2017. Of this, the Arab Coordination Group (ACG) committed \$3bn compared with the \$3.8bn and \$4.4m recorded in 2016 and 2015, respectively.

India committed just over \$700m to infrastructure projects in 2017, the highest level since 2013. However, this is down from the high amount of \$1.2bn committed in 2016. Identified commitments made by South Korea in 2017 stood at \$10m compared with \$432m in 2016, but this was a significantly high figure compared with previous years.

With commitments of \$34bn, the transport sector continued to be the largest beneficiary of infrastructure commitments in 2017 by a significant margin. Financing of transport infrastructure was equal to 41.7% of all funding. As with previous years, most of the \$20.1bn was provided by African national or subnational governments. The energy sector, which recorded \$24.8bn of investments in 2017, accounted for 30.4% of the total. The water sector accounted for \$13.2bn (16.2%), followed by multi-sector investments, which registered \$5.1bn (6.3%).

Official development assistance (ODA) financing accounted for 62% of all ICA member commitments and non-ODA financing accounted for 25%. ICA members were unable to provide data on the remaining 13%. About two-thirds of member disbursements in 2017 were from ODA sources, with the remaining third being non-ODA.

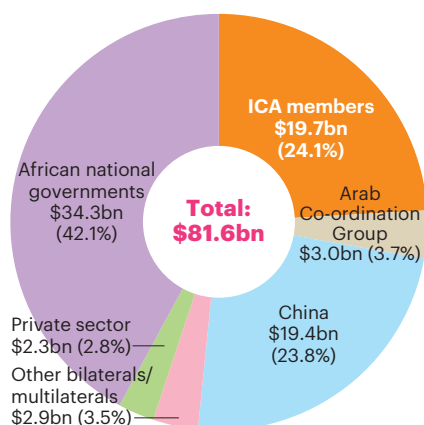


Figure 4
Total infrastructure financing in 2017 by source

Soft infrastructure commitments declined to \$1.5bn in 2017 from \$1.7bn in the previous year. Although this is higher than the \$1.3bn reported in 2015, it remains below the \$2.3bn and \$1.8bn reported in 2014 and 2013, respectively. ICA member commitments made to project preparation fell from \$245m in 2016 to \$120m in 2017. After recovering to \$1.4bn in 2016, soft infrastructure disbursements declined to \$717m.

ICA members disbursed \$10.9bn in 2017, below the 2011-2016 average which ranges between \$11.4bn-13.4bn. Consistent with reporting in previous years, the majority of disbursements in 2017 were directed towards the energy sector (44%).

Recent estimates by the AfDB published in its *African Economic Outlook, 2018* suggest that Africa's annual infrastructure financing requirements amount to \$130bn-\$170bn with a gap in the range of \$68bn-\$108bn.

Data analysed for Infrastructure Financing Trends in Africa, 2017 suggests a slightly narrower financing gap than that in the African Economic Outlook, 2018. The latter is based on total commitments of \$62.5bn as stated in *Infrastructure Financing Trends in Africa, 2016*. Given that commitments reported in 2016 were the lowest in

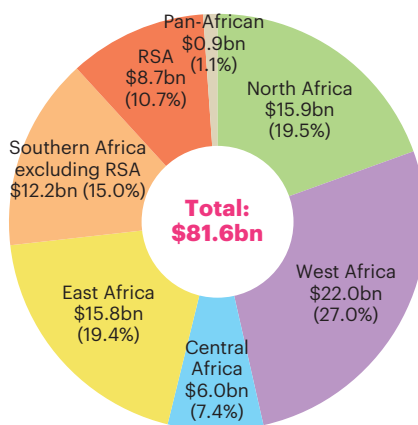


Figure 5
Total infrastructure financing in 2016 by region

recent years, this is likely to underestimate the average annual amount committed to Africa's infrastructure over recent years. Analysis in this report shows average commitments over the last six years of \$77bn, suggesting an **annual financing gap over the period 2012-17 in the \$53bn-\$93bn range.**

The infrastructure financing gap is certainly wider in some sectors than others. In this regard, the water sector is a source of concern, with an 81-84% shortfall in its annual financing requirement. But the transport sector is short of its financing requirement by only 8%. This gap is considered very low.

Public and private stakeholders consulted in the preparation of this report said the main reasons for Africa's infrastructure deficit centre not on a lack of funds but a lack of bankable projects. As noted in previous years, countries with sound institutional arrangements are attracting public and private sector finance. Subsectors attracting investment include renewable energy generation, ports and maritime activities and mobile telephony. ■

¹ Due to new data, the 2016 figure of \$62.5bn has been restated in this report as \$66.9bn.

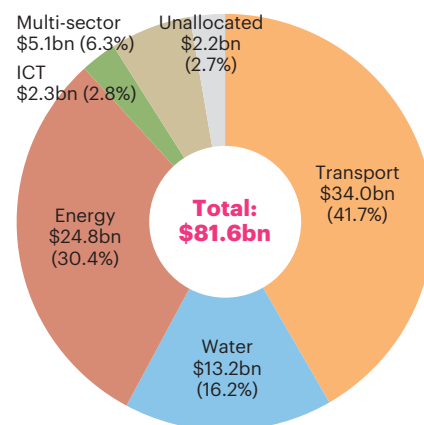


Figure 6
Total infrastructure financing in 2017 by sector

2. Financing Trends

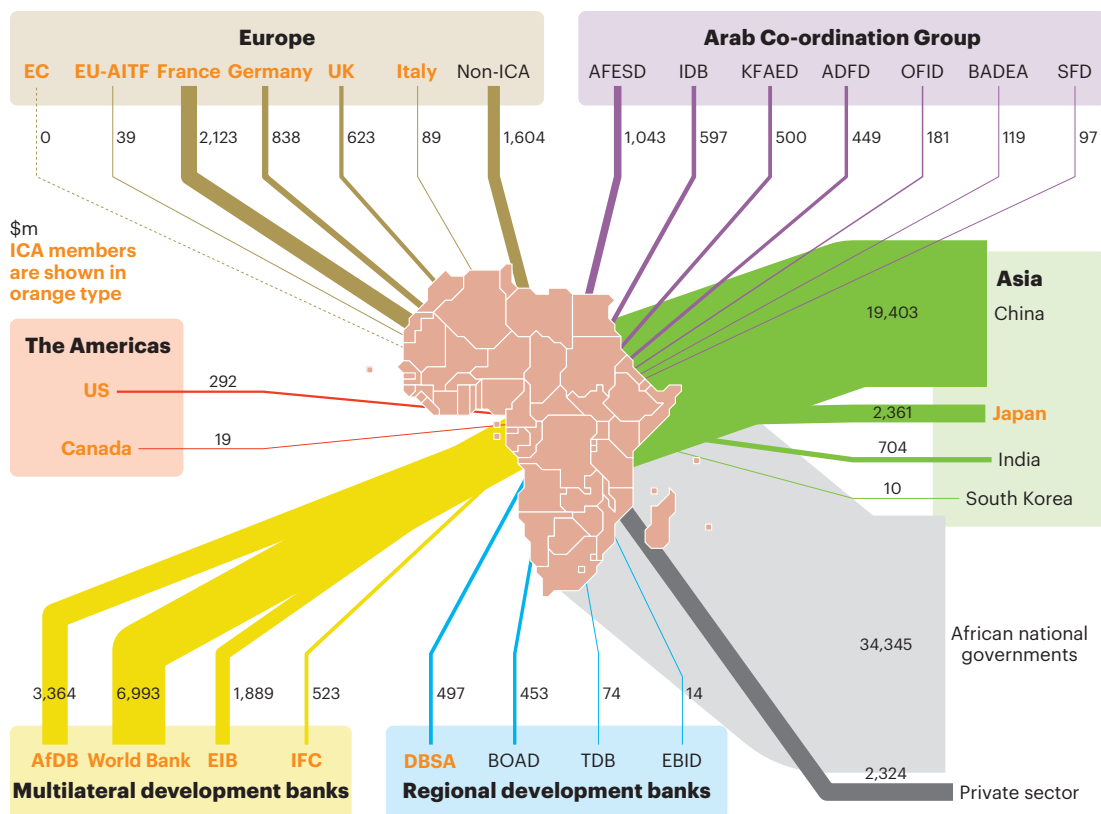


Figure 7
Reported and identified financing flows into Africa's infrastructure, 2017

2.1 Who is Financing Africa's Infrastructure

A total of \$81.6bn was committed to Africa's infrastructure development in 2017. The corresponding commitment for 2016 was \$66.9bn. The difference of \$14.7bn, equivalent to a 22% rise, was largely due to a \$13bn increase in reported Chinese investments from \$6.4bn to \$19.4bn, and a \$3.7bn increase in African national and some sub-national government spending from \$30.7bn to \$34.4bn.

African state spending on infrastructure, which for the first time in this report includes subnational state spending where it can be identified, increased from \$30.7bn in 2016 to \$34.4bn in 2017. Data for 2016 have been adjusted to include identified subnational spending.

ICA members committed \$19.7bn in 2017, up from \$18.6bn in 2016. Excluding the exceptional Power Africa

contribution of \$7bn to 2013 figures, this is the highest figure reported by ICA members since 2010 when commitments of \$29.1bn were reported. For 2017, no data were received from the EC for *Infrastructure Financing Trends in Africa*. In the previous three years the EC committed an annual average of \$822m to Africa's infrastructure development.

Chinese funding appears to be back in a big way, but the amounts of identified funding from China vary substantially from year to year. The \$19.4bn of Chinese funding in 2017 is similar to the \$20.9bn announced in 2015. However, it is substantially higher than the \$6.4bn and \$3.1bn reported in 2016 and 2014, respectively.

Contributions from non-ICA bilaterals and multilaterals apart from China decreased from around \$3.1bn in 2016 to \$2.9bn in 2017. The main reason for

this decline is lower investments from India.

The upward trend of ACG commitments in recent years appears to be declining. For example, commitments from the Arab funds dropped from \$5.5bn in 2016 to \$3bn in 2017. Commitments from non-ICA European development finance institutions (DFIs) and multilaterals increased significantly from \$393m in 2016 to \$1.6bn in 2017. In 2017, private sector funding as reported on the World Bank's Private Participation in Infrastructure Project Database reached a low of \$2.3bn.

The New Development Bank (NDB), the multilateral development bank established by the BRICS states, reported no commitments to Africa in 2017. Africa50, the infrastructure investment platform established by AfDB, indicated that it would invest \$8m in the Egyptian energy sector. ■

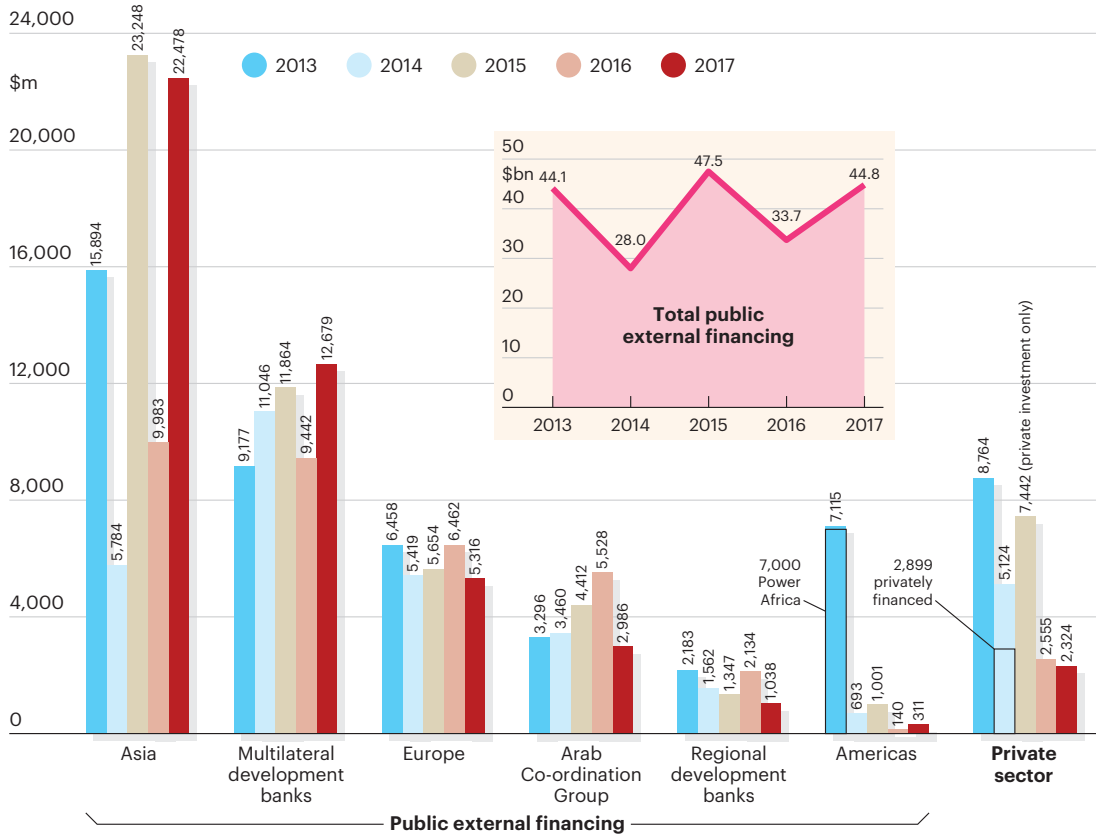


Figure 8
Sources of finance 2017, public external and private

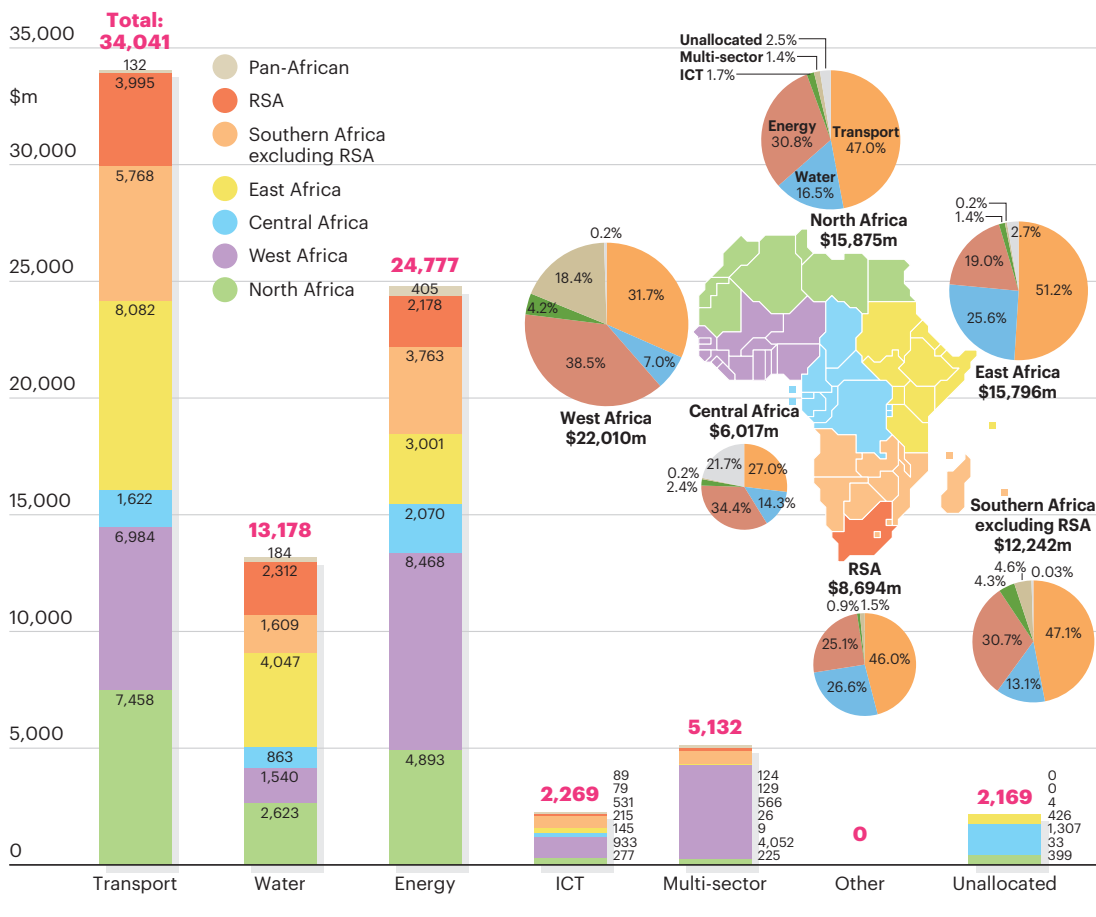


Figure 9
Total 2017 infrastructure commitments by sector and region

2.2 Financing Trends by Sector

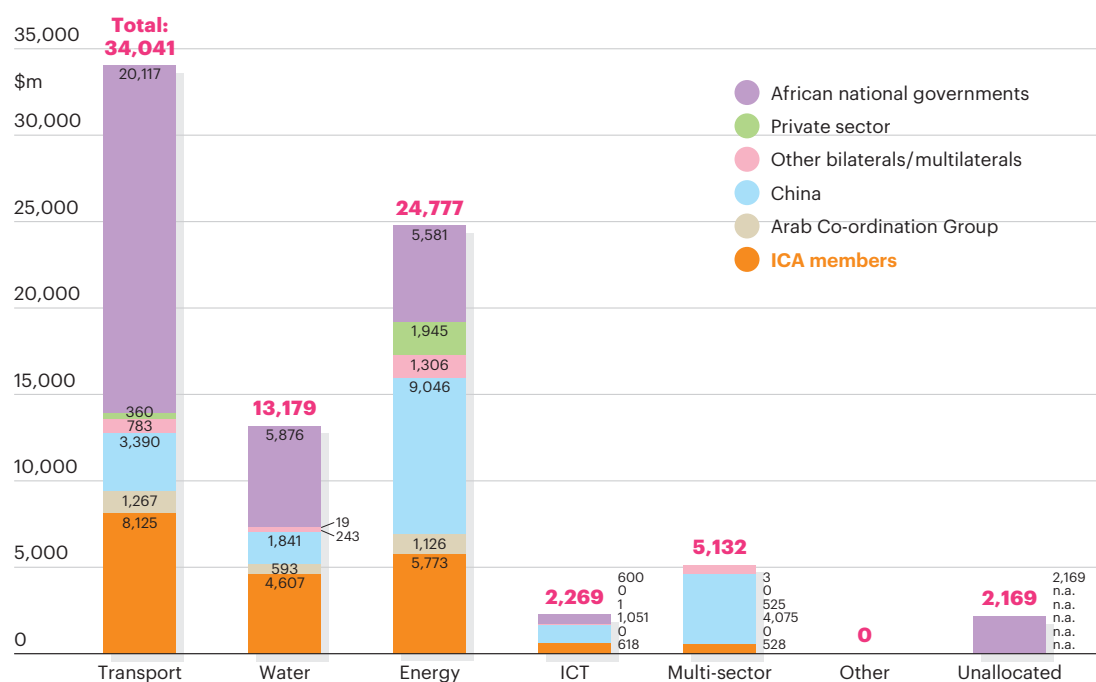


Figure 10
Total 2017
infrastructure
commitments by
sector and source

Commitments from all sources to all sectors were higher in 2017 than they were in 2016. Transport sector commitments increased the most from \$26.2bn in 2016 to \$34bn in 2017. This represents a 30% increase. Over the same period commitments to energy were up by 20%, from \$20.6bn to \$24.8bn. The corresponding increase in commitments to ICT was 37%, from \$1.7bn in 2016 to \$2.3bn in 2017. An 8% rise in commitments to the water sector from \$12.2bn in 2016 to \$13.2bn in 2017 was the lowest of all the sectors.

Transport

For the transport sector, commitments of \$34bn in 2017 are more than the six-year annual average of \$32.4bn. Commitments to this sector peaked in 2013 when China announced approximately two-thirds of all investments, including \$3.75bn to finance the construction of the Mombasa-Nairobi railway in Kenya, and \$3.3bn towards the construction of a railway linking the Ethiopian capital Addis Ababa with Djibouti's port-capital on the Red Sea. In 2017, Chinese investments in the sector were \$3.4bn compared to \$1bn in 2016.

ICA members' commitments to the transport sector peaked at \$8.1bn in 2017. The previous high was in 2010 when members committed \$6.9bn to the sector. The annual eight-year average of ICA members' transport commitments in the 2010-2017 period now stands at \$5.6bn.

African state spending on transport reached \$20.1bn in 2017, up by 23% from \$16.3bn in 2016. However there were wide regional variations. For example, transport spending in both East and Southern Africa increased by a little more than 50%.

Water

Overall commitments to the water sector from all sources increased by 8% from \$12.2bn in 2016 to \$13.2bn in 2017. It is important to note that there are wide regional differences in the changes in these commitments. In this regard, East Africa recorded the highest increase with spending rising by 64% from \$2.4bn in 2016 to \$4bn in 2017. There was little change in spending in South Africa, North Africa and Central Africa. Between 2016 and 2017, water sector spending declined by 28% in West Africa and by 14% in Southern Africa.

In 2017, ICA members' water sector commitments amounted to \$4.6bn, slightly less than the \$4.7bn reported in 2016. Members' average annual commitments from 2010 to 2017 now amount to \$4.1bn. ICA members reported water sector commitments of \$3.2bn in 2015 compared with the \$3.4bn in 2014 – substantially less than commitments of \$5bn and \$4.7bn in 2013 and 2012, respectively.

In 2017 China committed \$1.8bn, of which \$1.5bn is for the construction of the Gerbi Dam in Ethiopia to provide water to Addis Ababa.

African state spending in the water sector declined by 3% from \$6.1bn in 2016 to \$5.9bn in 2017. In the same period, Central African state allocations declined by 67%, from \$379m to \$123m. In Southern and North Africa spending declined by 28% and 16%, respectively. The only region that saw substantially increased state allocations was West Africa. Its spending increased by 29%, from \$496m in 2016 to \$641m in 2017.

Energy

Overall commitments from all sources to energy increased by 20%, from \$20.6bn in 2016 to \$24.8bn in 2017.

During the same period, Southern Africa energy commitments in Southern Africa increased by 137%, from \$1.6bn in 2016 to \$3.8bn in 2017. Between 2016 and 2017, North and West Africa increased their energy sector funding by about 50% each. For Central Africa, the corresponding rise in energy commitments was 14%. On the other hand, in South Africa commitments to the energy sector decreased by 4%. Commitments to the energy sector in East Africa declined substantially, by 42%.

ICA member commitments to energy declined from \$7.7bn in 2016 to 5.8bn in 2017, the lowest level since 2013 when \$5.7bn of commitments were reported. Members' annual commitments over the eight-years from 2010 to 2017 averaged \$7.5bn. Energy commitments from members peaked in 2010, due to large commitments to North Africa and the Eskom Investment Support Project for South Africa.

African state budget allocations to the energy sector increased by 26%, from \$4.4bn in 2016 to \$5.6bn in 2017. The highest increase was in Southern Africa where allocations doubled from \$1.1bn in 2016 to \$2.2bn in 2017. Allocations remained reasonably steady in West and East Africa and South Africa. In Central Africa, energy sector allocations declined by 9%.

ICT

ICT commitments increased by 37%, from \$1.7bn in 2016 to \$2.3bn in 2017. The commitments in 2014 and 2015 were \$2.3bn and \$2.5bn, respectively.

ICA member commitments in 2017 amounted to \$618m, up from \$417m in 2016. This is close to the amount of \$600m reported in 2015. Over the last eight years and after falling to very low levels in 2011 and 2012, average annual ICA member commitments to ICT infrastructure stand at \$392m.

Between 2012 and 2016, Chinese average annual funding of ICT infrastructure amounted to just \$339m. In 2017, China announced ICT investments of \$1.1bn. African state spending on ICT declined by 33% to \$600m in 2017 compared with \$894m in 2016. Spending by Central and Southern African governments declined by 70% and 89%, respectively. East Africa allocated 159% more to ICT in 2017 than it did in 2016 while North and West Africa reported increases in budget allocations of 70% and 25%, respectively. During this period, South Africa reported an 11% increase in ICT allocations. ■

Figure 11

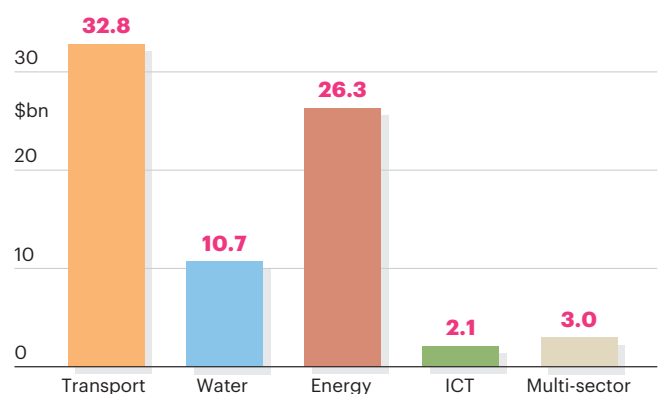
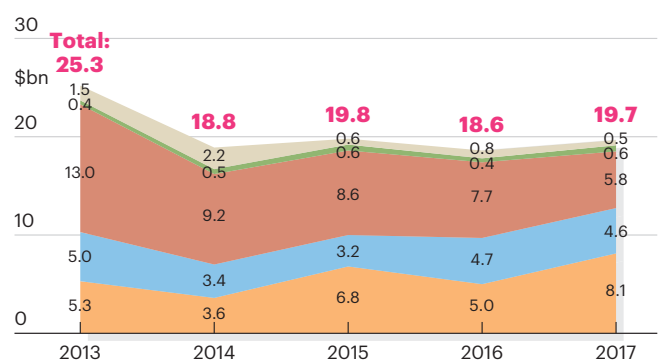
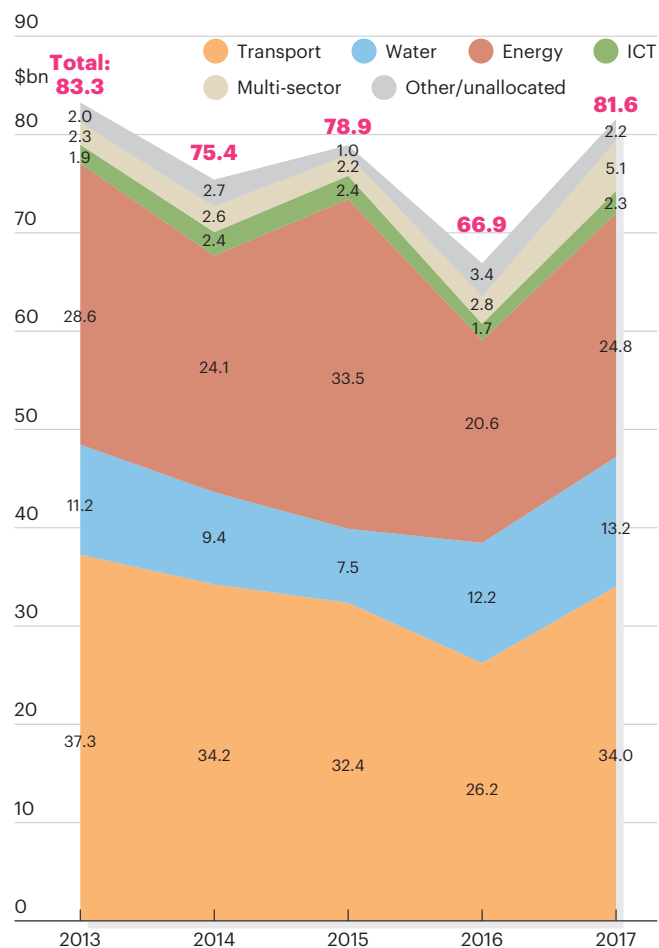
Total infrastructure financing by sector, 2013-2017

Figure 12

ICA member commitments by sector, 2013-2017 (middle)

Figure 13

Average annual total infrastructure financing by sector, 2013-2017 (bottom)



2.3 Financing Trends by Region

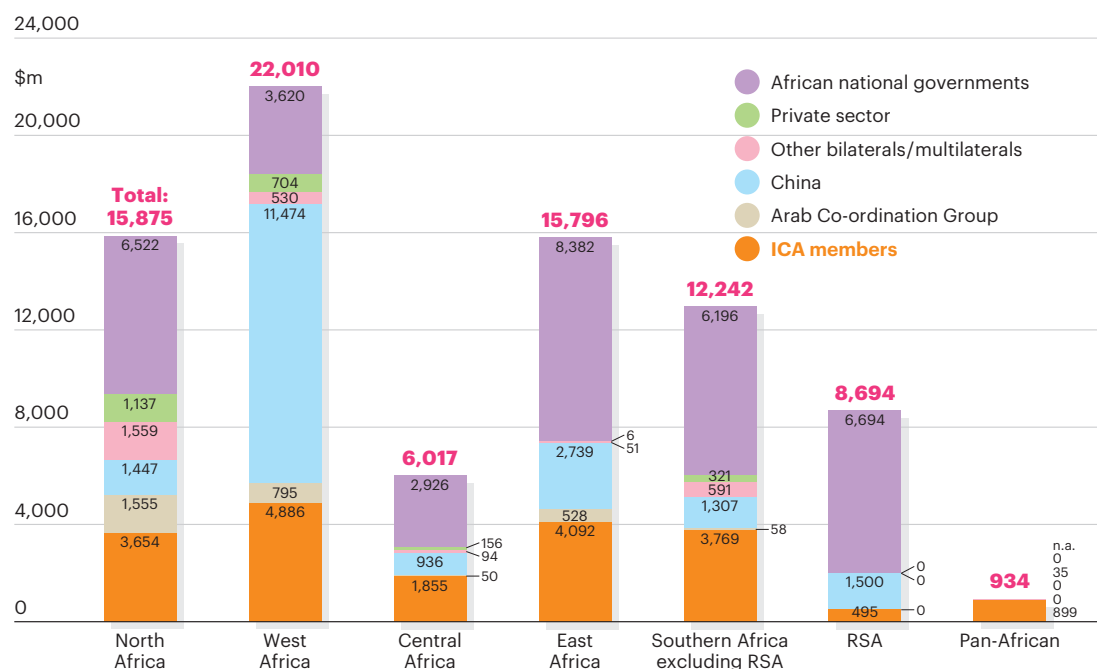


Figure 14
Total 2017 infrastructure commitments by region and source

Of the \$81.6bn total financing commitments from all sources to all infrastructure sectors in 2017, West Africa accounted for \$22bn, North Africa \$15.9bn, East Africa \$15.8bn, Southern Africa \$12.2bn, South Africa \$8.7bn and Central Africa \$6bn. Intraregional and pan-African commitments totalled \$934m.

Central Africa is a concern because it witnessed a decline in funding from \$7.9bn in 2016 to \$6bn in 2017. Funding for the region had been on an upward trend reaching \$8.3bn in 2014 but falling to \$4.9bn in 2015. The decline is attributed mainly to reduced budget allocations by the region's federal governments.

West Africa had the highest commitments in 2017 of \$22bn, about 27% of all infrastructure investments in Africa. The region's leading position is largely due to Chinese funding of 11.5bn (\$2.3bn in 2016), of which \$5.8bn is for the 3,050MW Mambilla hydroelectric power project in Nigeria. ICA member funding for the region amounted to \$4.9bn (\$4.6bn in 2016). Both state funding and ACG

commitments to West Africa were substantially reduced. State funding fell from \$4.9bn in 2016 to \$3.6bn in 2017. ACG commitments declined from \$1.5bn to \$795m in the same period.

West Africa has also experienced a significant decline in private sector investment to just \$704m in 2017. In 2013 private investments of \$5.4bn were reported. The private sector invested \$1.3bn in 2015 and \$1.5bn in 2016.

East Africa reported commitments of \$15.8bn in 2017, 23% higher than the \$12.9bn reported in the previous year but substantially lower than the five-year high of \$23.7bn reported in 2013 when Chinese funding of major railway projects in Kenya and Ethiopia were announced. Funding from China amounted to \$9.3bn in 2013 whereas in 2017 the Chinese announced financing of \$4.5bn.

State spending in East Africa at \$8.4bn is the highest in the last five years during which budget allocations have amounted to between \$5.6-7.3bn. ICA members' funding of \$4bn is a

little lower than the five-year annual average of \$4.4bn.

With commitments of \$15.9bn, North Africa reported the highest level of commitments since 2014 when it received commitments of \$23.2bn. Average annual commitments over the last four years amount to \$16.1bn. Investments in 2017 were bolstered by strong private sector interest backed by DFI support for the Benban solar project in Egypt. State spending of \$6.5bn in 2017 was the most the region has committed in the last five years.

Southern Africa's commitments for 2017 of \$12.2bn is almost double the \$6.5bn reported in the previous year. But 2016 was a year with exceptionally low commitments. From 2013 to 2015 commitments averaged \$15.4bn. Over the past five years, state funding has declined considerably in the region, from \$12bn in 2013 to \$6.2bn in 2017, although the latest figure is an increase on the \$4.7bn reported in 2016. ICA members' commitments of \$3.8bn to the region in 2017 are the strongest in the last five years over which the

average annual amount committed is \$2.3bn. ICA members' commitments amounted to \$1.4bn in 2016.

In the Republic of South Africa commitments to infrastructure amounted to \$8.7bn. This amount is about the same as the \$8.6bn committed in 2016. However, South Africa's infrastructure spending is variable compared with other regions of Africa. The main reason is that it is significantly buoyed by private sector investment in years when it holds successful Renewable Energy Independent Power Producer Procurement (REIPPP) programme auctions. Over the last five years, South Africa has recorded investments as low as \$4.9bn in 2014 which was followed by \$11.7bn in 2015. The country has also attracted significant amounts of Chinese funding (\$2.2bn in 2015 for example) which in most countries tends to cause a spike in commitments, for instance its above-mentioned multi-billion dollar funding of Kenyan and Ethiopian railways, Ethiopia's Gerbi dam and Nigeria's Mambilla power plant. ■

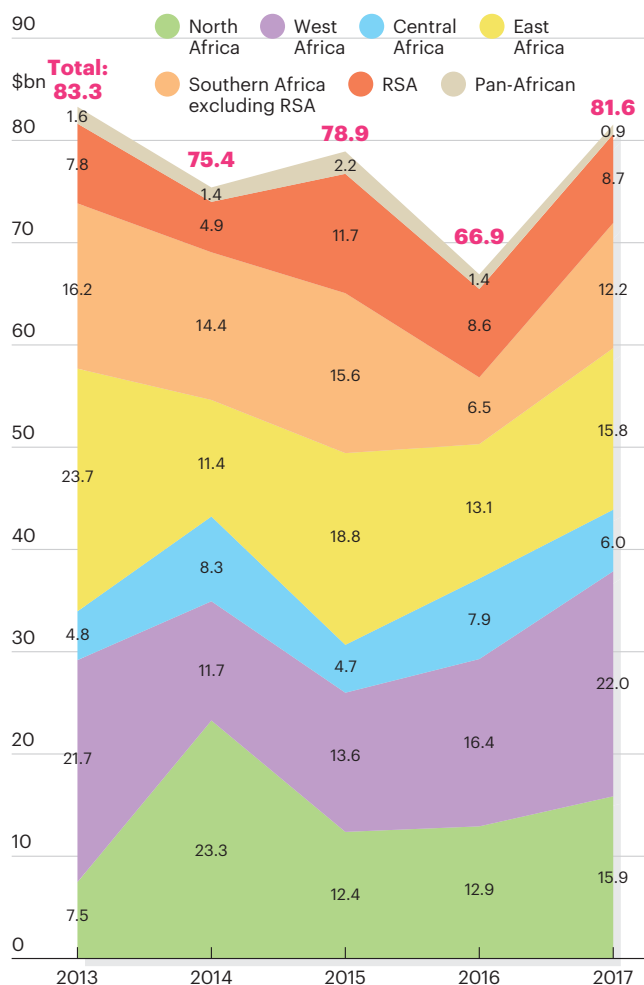


Figure 15
Total infrastructure financing by region, 2013-2017

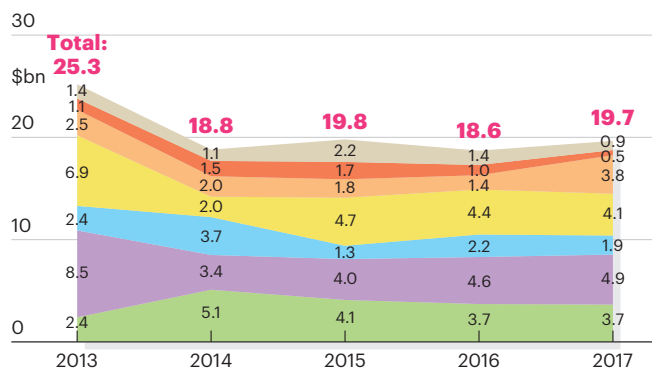


Figure 16
ICA member commitments by region, 2013-2017

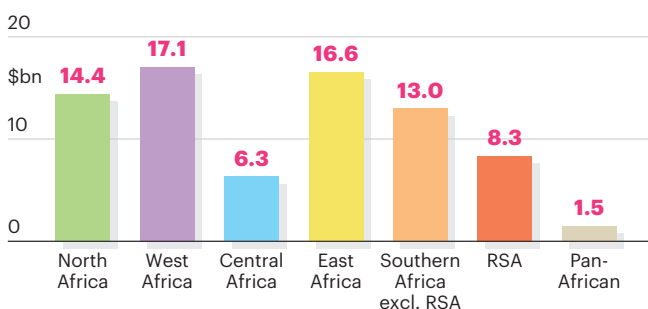


Figure 17
Average annual total infrastructure financing by region, 2013-2017

3. Strategic Trends



3.1 Overview

This chapter looks at the infrastructure financing gap, which is defined as the difference between the amount needed to develop Africa's infrastructure and the amount actually invested in infrastructure development

Recent estimates have suggested the gap ranges from \$68bn to \$108bn¹ (see page 21). As a result, closing this gap has, for many years, been given a high priority in many African countries.

The objective of this chapter is to shed light on the magnitude of Africa's infrastructure financing gap, which can in part be attributed to a shortage of bankable projects rather than a lack of funds for investment.

Effective institutional arrangements are needed to expand the number and variety of sources of investment for the infrastructure sector. In this regard, countries that have created conducive political, regulatory and legislative environments have attracted investors. However, fluctuations in levels of financing per sector in the past few years suggest that Africa's infrastructure development is uneven.

The RECs and Regional Power Pools (RPPs) are playing key roles in facilitating the development of infrastructure. This is the case with their support for PIDA/PAP. As expected, these regional bodies also focus on their own regions. The

analysis in this chapter deals with the financing needs and actual amounts committed to two RECs.

It is important to note that infrastructure development that spreads evenly across the continent is more important than ever if the anticipated African Continental Free Trade Area (AfCFTA) is to be successfully established.

Africa's RECs and RPPs are demonstrating a continental impact. For example, as discussed in this chapter, regional projects such as the Zambia-Tanzania-Kenya Interconnector have a high potential to contribute to the development of the continent's infrastructure. ■

¹ AfDB's African Economic Outlook, 2018

3.2 Infrastructure Financing Gap

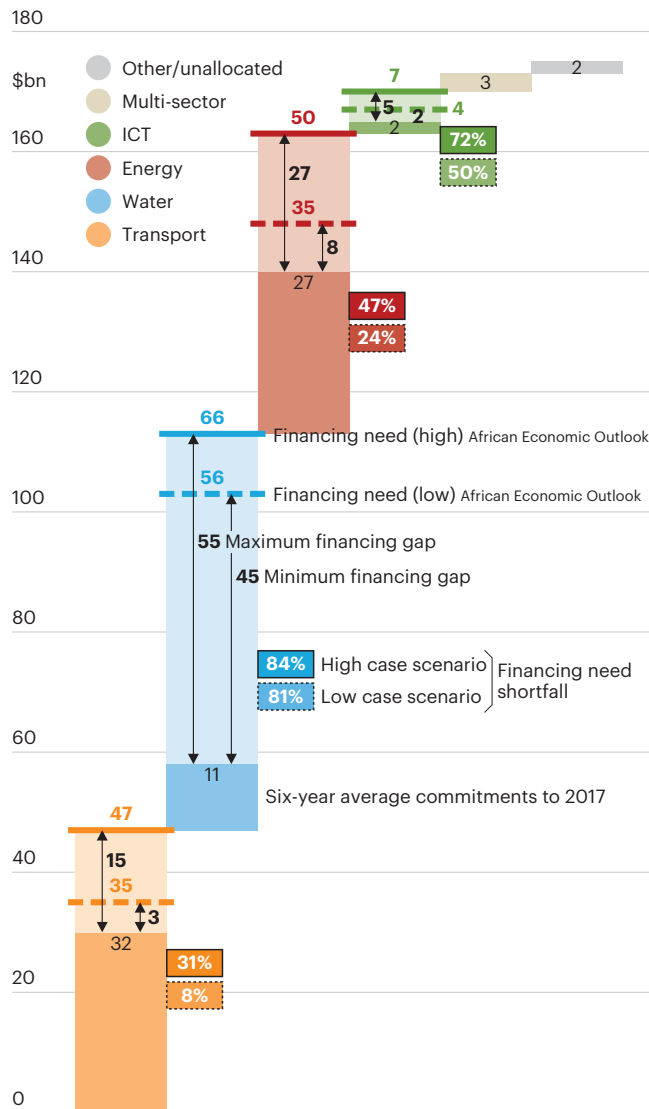


Figure 18
Infrastructure financing needs by sector, according to AfDB's African Economic Outlook, 2018

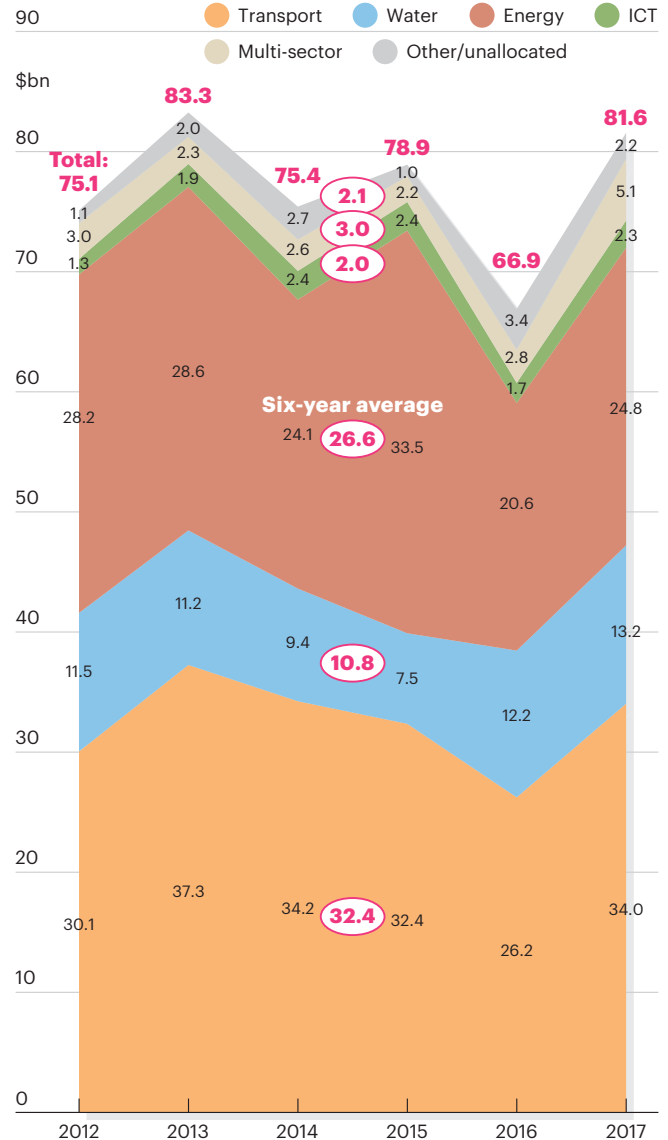


Figure 19
Average annual commitments by sector 2012-2017 (based on ICA research and annual reports)

Recent estimates by the AfDB published in its *African Economic Outlook, 2018* reveal that Africa's annual infrastructure requirements amount to \$130bn-\$170bn with a financing gap in the range of \$68bn-\$108bn. That figure is higher than the financial gap of \$93bn which was presented in 2010 in a World Bank publication, *Africa's Infrastructure: A Time for Transformation*.

However, the AfDB's recent estimates correspond closely with an estimate provided in *Africa's Infrastructure*

Deficit: Closing the Gap, a background paper presented at the Africa Emerging Markets Forum in Abidjan in March 2017. The paper commissioned by Japan International Co-operation Agency (JICA) supposed that 5-6% of GDP should be spent on infrastructure, suggesting spending of \$120bn is required against actual expenditure of \$84bn, a figure derived from *Infrastructure Financing Trends in Africa, 2015*. The JICA commissioned paper highlighted that current annual spending needs are estimated to be \$120bn. The same paper advocates stakeholders creating

conducive investment conditions for private sector financing, both from direct investors and from institutional investors who manage pension funds and insurance assets.

The financing needs by sectors which are derived from the estimates in the AfDB's *African Economic Outlook, 2018* are presented in *Figure 18*, above.

However, *Figure 19* shows average commitments based on ICA data for the last six years to 2017 of \$77bn. It therefore suggests a slightly narrower

Infrastructure Financing Gap

Infrastructure Financing Needs by Sector							
(\$bn unless otherwise indicated)	Financing Need (Low)*	Financing Need (High)*	Six Year Average Commitments to 2017**	Minimum Financing Gap	Maximum Financing Gap	% Financing Need Shortfall (Low case scenario)	% Financing Need Shortfall (High case scenario)
Transport	35	47	32	3	15	8%	31%
Water	56	66	11	45	55	81%	84%
Energy	35	50	27	8	23	24%	47%
ICT	4	7	2	2	5	50%	72%
Multi-sector	-	-	3	-3	-3	-	-
Other	-	-	0	0	0	-	-
Unallocated	-	-	2	-2	-2	-	-
Total	130	170	77	53	93	41%	55%

* African Economic Outlook ** Infrastructure Financing Trends in Africa, 2017

financing gap than that provided in *African Economic Outlook, 2018* which uses the figure of commitments from all sources of \$62.5bn from *Infrastructure Financing Trends in Africa, 2016*. Commitments in 2016 were the lowest in recent years. *Figure 18* therefore suggests an annual financing gap over 2012-17 in the \$53bn-\$93bn range.

It is clear from the table above that the infrastructure financing gap is wider in some sectors than others. In this regard, the water sector faces challenges in terms of filling the financial gap. This is because of the fact that it is 81-84% short of its annual financing requirement. On the other hand, given its annual financing need of \$35bn, the transport sector is just 8% short of its financing requirement, which is relatively negligible.

The recapitulation in *Figure 19* of sector trends reported in *Infrastructure Financing Trends in Africa, 2017*¹ over the 2012-17 period shows there has been no marked change in sector trends over recent years. However, there have been significant spikes, mostly as a result of a few large commitments from a variety of sources. Commitments in 2014 were boosted by one of the largest ever, the \$8.4bn raised via investment certificates sold to Egyptian citizens for the Suez Canal expansion. In 2013 the private sector committed a large amount of \$4.6bn, mostly to two Nigerian transport projects –the Onne

Port expansion (\$2.9bn) and Lekki Deep Seaport (\$1.5bn). Transport commitments in 2013 were boosted by China's \$3.75bn towards the Mombasa-Nairobi railway and \$3.3bn towards the rail link between Ethiopia's capital, Addis Ababa and Djibouti's port-capital on the Red Sea. Energy sector commitments in 2015 were boosted by China's \$4.3bn to the Caculo Cabaço hydro project in Angola and in 2010 by \$12.9bn from ICA members targeted power projects in North Africa and South Africa. The REIPPP programme introduced in South Africa in 2011 attracted \$20.5bn in its first four years, more than independent power producers invested in the rest of Sub-Saharan Africa over the past 25 years².

Effective Institutional Arrangements

Interpreting Africa's infrastructure financing gap should go beyond stating funding shortfalls. Stakeholders interviewed for *Infrastructure Financing Trends in Africa, 2017* confirm that the financing gap is not necessarily a product of a lack of funds and suggest that funds for Africa's infrastructure development are available. The challenge, however, is finding bankable projects.

¹ Due to the availability of new data, the 2016 figure has been restated as \$66.9bn in *Infrastructure Financing Trends in Africa, 2017* from the \$62.5bn reported in *Infrastructure Financing Trends in Africa, 2016*.

² The South African Renewable Energy Independent Power Producer Procurement Programme: A review and lessons learned, Anton Eberhard & Raine Naude, 2016

Lucy Heintz, head of renewables at growth market private equity investor, Actis, notes elsewhere in this report that there are now several successful private energy investments across the continent (*see page 66*). She points to countries where independent power producer frameworks are well understood with an increasing amount of installed private capacity now include Senegal, Ghana, Kenya, Mozambique, Senegal and South Africa.

If more countries presented effective institutional arrangements then the prospects for more investments would most likely improve. In his foreword to the *African Economic Outlook, 2018* AfDB Group President Akinwumi Adesina sums up what is needed:

"To take advantage of the great potential for infrastructure development, governments will have to put in place effective institutional arrangements to manage the complex tasks of project planning, design, coordination, implementation, and regulation," he said. Adesina suggests that governments should also focus on the soft side of infrastructure development, by addressing policy and regulatory issues and training teams to develop financing packages.

Commitments from All Sources, Six Year Trend (\$bn)							
	2012	2013	2014	2015	2016	2017	Average
Transport	30.06	37.26	34.24	32.36	26.24	34.04	32
Water	11.53	11.20	9.38	7.54	12.22	13.18	11
Energy	28.18	28.60	24.06	33.52	20.62	24.78	27
ICT	1.30	1.91	2.39	2.38	1.66	2.27	2
Multi-sector	2.97	2.26	2.61	2.15	2.77	5.13	3
Other	0	0	0	0	0.48	0	0.1
Unallocated	1.07	2.03	2.74	0.97	2.91	2.17	2
Total	75.11	83.26	75.42	78.92	66.90*	81.57	

¹As restated in *Infrastructure Financing Trends in Africa, 2017*

Private sector finance is available for projects presenting conducive political, regulatory and legislative environments. This is the experience in several countries, notably in the ports, energy and telecoms sectors.

A conducive environment has been created in South Africa's REIPPP programme to attract private sector investment in the energy sector. It has developed a sound procurement policy and the government has shown its ability to manage an effective bidding process that stimulates competitive bidding.

Egypt has also demonstrated how innovative financing solutions can work with \$8.4bn Suez Canal funding via investment certificates bought by Egyptian citizens in 2014. In 2017, Cairo again showed how to create conducive investment conditions for public and private investors in renewables with the Benban Solar Park, which raised \$1.98bn, of which \$513m was private investment (see page 67).

Types and Sources of Finance

Increasingly sophisticated applications of financing techniques are extending the range of financing instruments available and enabling investors to step into gaps not filled by conventional funders.

New funders broadening the pool of funds can also help. In its report

entitled *African Economic Outlook, 2018*, the AfDB points out that institutional investors such as insurance companies, pension funds, and sovereign wealth funds have more than \$100trn in assets under management globally. A fraction of the excess global savings and low-yield resources would be enough to fill Africa's financing gap and finance infrastructure projects. Again, effective institutional arrangements would be preconditions for these types of investors.

Another source that has the potential to close the financing gap are found in illicit financial flows. According to the Organisation for Economic Co-operation and Development (OECD) report entitled *Illicit Financial Flows, the Economy of illicit trade in West Africa* (February, 2018), such flows cost African countries at least \$50bn every year, more than the total sum of development aid the continent receives. Estimates by the high-level panel of the United Nations Economic Commission for Africa (UNECA), indicate that illicit flows – often the result of undervalued resource exports or failure to collect taxes – have been increasing since the start of the century, when they stood at less than \$20bn. A joint report by the AfDB and US-based research and advocacy group Global Financial Integrity (GFI) entitled *Illicit Financial Flows and the Problem of Net Resource Transfers from Africa: 1980–2009* also

found that cumulative illicit outflows from the continent over the 30-year period ranged from \$1.2trn-1.4trn.

If governments captured revenue currently lost through illicit financial flows, it would bolster their funds for investments in infrastructure. The AfDB/GFI report states that addressing illicit financial flows can benefit the development of infrastructure directly by providing additional funds. It also recognises that the reduction in illicit financial flows would create a more attractive environment for investors in infrastructure. In addition, the report states that policies aimed at boosting recorded inward transfers generally involve measures that improve a country's business climate, ranging from political and economic stability to specific business-friendly measures.

In its report *Base erosion and profit shifting in Africa: reforms to facilitate improved taxation of multinational enterprises* UNECA says that illicit financial flows hamper the development of infrastructure. The report covers exploitation by multinational enterprises of unsynchronised tax rules that have not kept pace with modern business models thus eroding the tax bases of African countries and shift profits to low-tax jurisdictions. The report concludes “the result is reduced government tax revenue and a critical underfunding of public investment and infrastructure that could help to promote economic growth”. ■

3.3 Intra-African Free Trade



The March 2018 agreement to establish the African Continental Free Trade Area is a landmark moment in the continent's ambition to boost intra-African trade and spur on economic development. However, policy makers are keen to point out that improvements in infrastructure are vital to achieving these goals.

Africa has long strived to increase trade cooperation through a variety of initiatives that have included the creation of RECs and inter-regional free trade zones. But the 21 March signing of the African Continental Free Trade Agreement at the extraordinary Summit of the Assembly of the AU in Kigali is expected to have a transformative effect on the continent.

The AfCFTA initiative is intended to create a single continental market for goods and services, with the free movement of investment. AfCFTA also allows the free movement of business people – leading to the establishment of a continental customs union.

With the implementation of AfCFTA – which will come into force once the parliaments of 22 of the 49 signatories ratify the agreement – Africa will emulate many of the objectives and features that underpinned the European Union (EU)'s creation.

A 2012 study by UNECA suggests that intra-African trade could increase by as much as 52.3% by 2022, compared with a 2010 baseline scenario, as a result of a continental free trade area. This forecast assumed a predicted AfCFTA formation in 2017 and the full implementation of scenarios in 2022.

A report prepared by UNECA Economic Affairs Officers, Simon Mevel and Stephen Karingi, entitled *Deepening Regional Integration in Africa: A Computable General Equilibrium Assessment of the Establishment of a Continental Free Trade Area followed by a Continental Customs Union* indicates that growth in intra-African trade would be driven by increased exchanges within the continent in three sectors: agriculture and food, industry and services.

However, the UNECA report notes that poor infrastructure, particularly in the transport sector, is a constraint on intra-African trade growth in these key sectors.

Several policymakers have underlined this point, suggesting that the success of AfCFTA is dependent on Africa's ability to create and sustain the infrastructure needed for goods to flow freely across the continent.

During an AfCFTA-themed round-table at UNECA's Conference of African Ministers of Finance,

Planning and Economic Development in May 2018, the session chairperson Senegalese Finance Minister Amadou Ba acknowledged that there was political will for integration but that investment in infrastructure would need to be given priority.

Association of Nigerian Traders president Ken Ukaoha noted that transport links may prevent intra-African trade from taking off in the way that AfCFTA envisages.

Successfully cultivating intra-African trade may be contingent on translating this enthusiasm for a new free trade area into tangible improvements to roads, railways and airports. This requires closing the infrastructure financing gap by enabling more bankable projects to widen the availability of funds.

Whether AfCFTA can build on the success achieved by some of the existing RECs, and overcome challenges that have disappointed past efforts, may be determined by whether investors can match rising ambitions with concrete investments to develop the continent's infrastructure.

Nevertheless, the signing of the AfCFTA agreement highlights the need for African and international investors alike to help the continent achieve its goals of economic prosperity and sustainability. ■

3.4 ZTK Interconnector

Regional Cooperation, Continental Impact

Regional Economic Communities and Regional Power Pools play catalytic roles in the development of not only regional projects but also in connecting Africa's regions with each other.

In general, bringing African countries together to fully leverage and add value to Africa's resources and capabilities is critical for the continent. Therefore, continental connectivity of Africa's infrastructure will be an essential foundation for the development of AfCFTA.

The RECs and RPPs are already playing key roles in facilitating projects in another continental vision, the PIDA Priority Action Plan and several projects could be highlighted to show that progress towards integrated African infrastructure is being made.

Regional Action

One PIDA/PAP project with a continental impact advancing apace is the Zambia-Tanzania-Kenya (ZTK) power transmission interconnector project. It provides a good example of a project that must be executed by several domestic and regional actors that will ultimately have a continental impact. ZTK is also supported by DFIs, including AfDB, EIB, JICA and World Bank.

Participating regional organisations in ZTK include the East African Community (EAC, lead REC), Common Market for Eastern and Southern Africa (Comesa, participating REC), Eastern Africa Power Pool (EAPP, sectoral organisation), NEPAD Planning and Coordinating Agency (NPCA, continental co-ordinator), Southern African Development Community (SADC, participating REC) as well as the national organisations that must

view the project in regional and continental contexts.

Continental Impact

The three RECs involved in the project also see the ZTK from a wider, continental perspective. The SADC region's electricity sector is not fully integrated because Angola, Malawi and Tanzania are not connected to the regional power grid. This means that any new generation capacity installed in any of the three countries cannot be realised by the nine other SAPP members – Botswana, Democratic Republic of Congo (DRC), eSwatini

(formerly Swaziland), Lesotho, Mozambique, Namibia, South Africa, Zambia and Zimbabwe. Conversely, capacity installed in the larger group of countries is not realised by Angola, Malawi and Tanzania. The ZTK will help remedy this regional situation.

Beyond the regional benefits, ZTK will connect SAPP and EAPP and will enhance inter-regional electricity trading by interconnecting the EAPP and SAPP grids. This will create the largest power pool on the continent and will be an essential component of the North-South (Cape to Cairo) power transmission corridor. ■

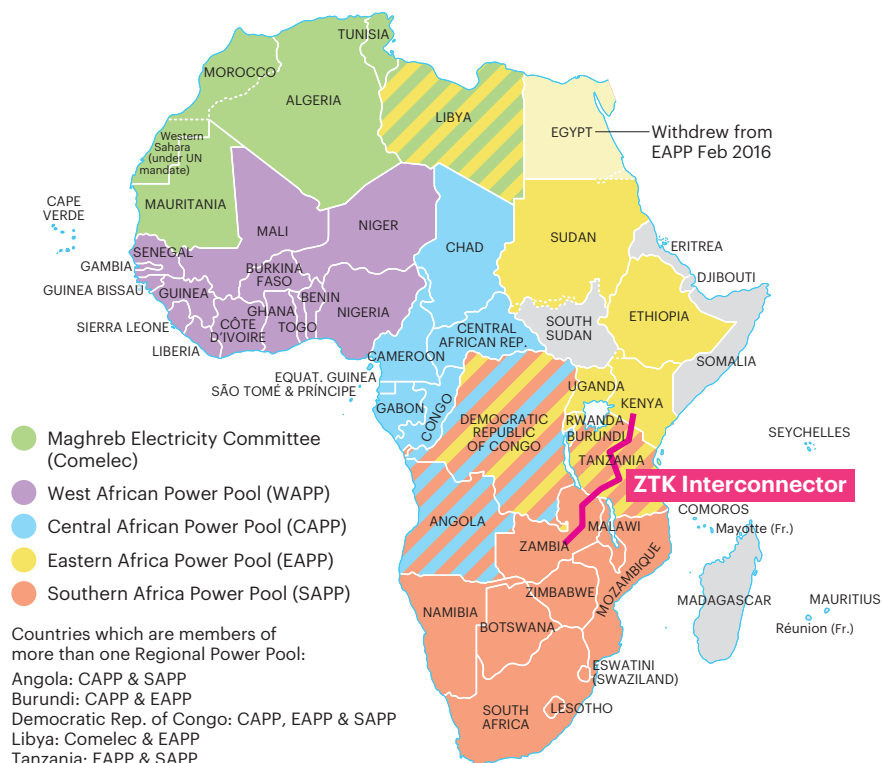


Figure 20
ZTK Interconnector and regional power pools

3.5 Regional Economic Communities and Power Pools

Regional Economic Communities and Regional Power Pools that have provided data for the first time for *Infrastructure Financing Trends in Africa, 2017* are the East African Community, Economic Community of Central African States, Southern African Development Community and the Southern African Power Pool. This section compares the infrastructure spending requirements of two of the RECs – East African Community and Southern African Development Community – with the ICA’s data on commitments. Direct comparisons between the RECs’ and ICA data cannot be drawn but the data provide indicators of the magnitude of the financing gaps in different sectors and areas.

East African Community

In its paper entitled Heads Of State Priority Infrastructure Projects Implementation Progress And Status Updates, the EAC states that it has identified 286 priority infrastructure projects and programmes that will require an investment amounting to \$78.7bn over the next 10 years to 2028 and beyond. Amongst these are 17 large-scale and high-impact regional integration projects and programmes with an estimated financing need of \$61.2bn. Excluding two \$4bn projects that fall outside the ICA’s definition of infrastructure, this gives the EAC a financing need of \$53.2bn for these 17 projects. Some of these financing needs have been met, and some projects or parts of larger projects have been completed.

Commitments for the six EAC countries from all sources according to

ICA data amounted to \$10.3bn in 2017 and \$9.89bn in 2016, figures that excludes commitments made to a region rather than a specific country.

The EAC is making progress with its project portfolio according to analysis presented by the community’s Infrastructure Directorate. It says a total of 24 projects out of 40 projects at concept stage in 2014 moved to various stages of preparation and implementation while 14 projects were completed between November 2014 and November 2017 as indicated in the table below. A total of 12 projects obtained financing while 55 are under construction and the tendering process is ongoing for 42 projects.

But the EAC recognises that project preparation and implementation remain the main challenges



hampering a faster delivery of infrastructure projects. The persistent challenges include financial and capacity constraints. Many projects (146) are under different stages of the preparatory phase and require funding to move them to next phases. The implementation status by stages of development for the priority projects as of November 2017 is as indicated in *Figure 21*, below.

Nevertheless, the EAC Secretariat is pressing on to create more or better regional infrastructure. For instance, it is packaging to bankability 36 shortlisted infrastructure projects based on their relative attractiveness for private and public sector investment. This process is expected to lead to the development of a Corridor Development Investment Plan and a marketing plan to develop and implement projects in the transport, energy, transboundary water and ICT sectors. According to David Niyonsenga, EAC’s Infrastructure Expert, “once the packaging is completed, those projects will be presented for pre-market sounding to leverage the interest of investors. ■

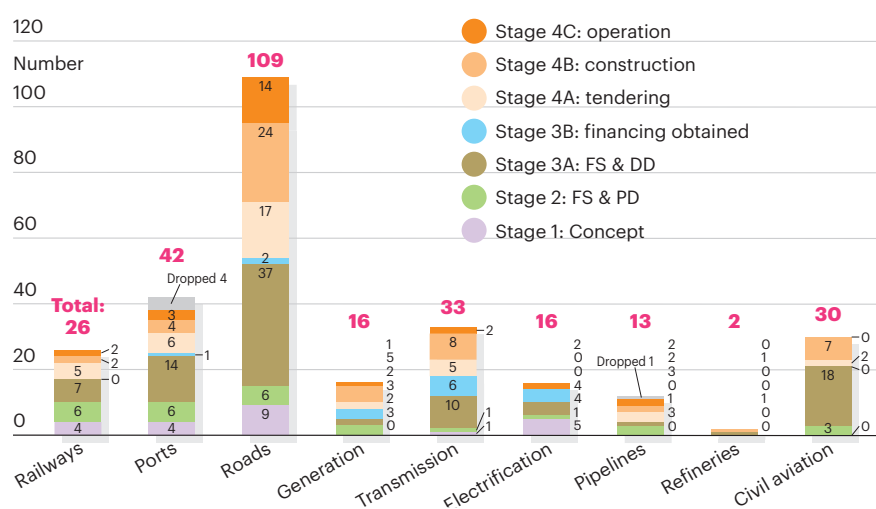


Figure 21 Implementation status of EAC priority projects, Nov 2017

Source: Heads Of State Priority Infrastructure Projects Implementation Progress And Status Updates, paper prepared by the EAC Infrastructure Directorate, February 2018

EAC Projects Completed (Nov 2014–Nov 2017)

Phase I: Construction of the Mombasa–Nairobi Standard Gauge Railway line (472km)

Construction of the Musoma (Makutano)–Sirari/Isebania road (83km)

Construction of the Makebuko–Butaganzwa road (21km)

Upgrading the secondary access road Kifuru – Kinyerezi – Stakishari (Banana)

Upgrading of the Mbezi Shule–SamakiWabichi (Mbezi Beach/TangiBovu) road.

Upgrading of the Kawawa Roundabout–Msimbazi–Twiga (Jangwani) road (2.7km)

Upgrading of the Kigogo–TabataDampo road (1.6km)

Upgrading of the Kibamba–Kisopwa road (Kibamba–Mloganzila section; 4 km)

Construction of road between Simiyu/Mara border–Musoma road (85.5km)

Construction of the Mugina–Nyanza Lac Road (45km)

Mombasa Port Strengthening: 2nd Container Terminal – (Kipevu West): Phase I

Development of Lake Nyasa Ports: Ndumbi Ports

Construction of the Sinendet to Kisumu 10-inch diameter pipeline (120km)

Mtwara-Kilwa/Somanga-Dar es Salaam gas pipeline

Southern African Development Community

Infrastructure was a central focus for the SADC in its high profile 2018 meeting that brought together the leaders of member states and senior representatives from all 16 countries in the community.

Promoting Infrastructure Development and Youth Empowerment for Sustainable Development was the theme chosen for the community's August 2018 Summit of Heads of State and Government and SADC Council of Ministers meetings, in Windhoek, Namibia. The theme builds on the focus of the past four SADC summits, which addressed industrial development issues.

The summit discussed progress towards implementation of the SADC Regional Infrastructure Development Master Plan (RIDMP), which is pivotal to the socio-economic growth of the region, including the industrialisation agenda. The RIDMP is the region's strategy for the development of integrated regional infrastructure to meet projected demand by 2027.

The RIDMP specifies funding needs of \$63.8bn for selected infrastructure projects only for the period 2012-17 in a short-term action plan. That figure suggests an annual funding need of \$12.8bn. In comparison, ICA data records total commitments for SADC member states (excluding regional commitments) of \$20.7bn in 2017 and

\$10.7bn in 2016, the wide difference being the result of more infrastructure spending, often substantially more, in every single member state in 2017 compared with 2016.

The RIDMP contains longer term 15-year financial needs forecasts for the period 2012-27. For projects and programmes identified in the plan, the SADC forecasts a financial requirement of \$176bn for energy and \$100bn for transport projects.

That equates to an average annual requirement of \$11.7bn for the energy sector. This compares with ICA data that shows total commitments from all sources for the energy sector to SADC member states (excluding regional commitments) of \$6.3bn in 2017 and \$3.1bn in 2016.

The RIDMP suggests the average transport sector financial requirement to meet the needs of the plan is \$6.6bn. This compares with ICA data that shows total commitments from all sources for the transport sector in SADC member states (excluding regional commitments) of \$9.1bn in 2017 and \$4.8bn in 2016.

South Africa's President Cyril Ramaphosa made clear in keynote address to the Windhoek summit as SADC outgoing chairperson that a pipeline of bankable projects is key to infrastructure development, and



why infrastructure development is essential for the region's industrial strategy.

"The ability of SADC countries to establish a competitive industrial sector and promote greater industrial linkages has been hindered by the lack of infrastructure in areas such as energy, transport and communications," he said.

Regional cooperation in the development of infrastructure will lower transaction costs, enhance regional markets and make production and exports more competitive. Investment in infrastructure must therefore be a central priority. Through our joint efforts, the region has now established a healthy pipeline of bankable projects, which we now need to see through to completion," Ramaphosa concluded. ■

4. ICA Member Financing

4.1 Overview

In 2017, ICA members committed \$19.7bn to Africa's infrastructure, an increase of 5% from the \$18.6bn recorded in 2016. This represents one of the highest commitment amounts since the ICA began collecting data in 2010, and is marginally below the 2015 high of \$19.84bn.

Actual commitments are likely to be even higher given that the EC, which has historically committed over \$1bn on average per year between 2012 and 2016, had not supplied data for 2017 at the time of publication.

In 2017, there was a significant shift in commitments by sector compared to previous years (see Figure 22). For example, for the first time since 2011, ICA members provided more financing for transport infrastructure than the energy sector. Commitments to the transport sector, which amounted to \$8.1bn, increased by 63% from the previous year. It also represented 41% of all funding by ICA members. Commitments to the ICT sector were \$620m, almost double the amount of commitments for 2016.

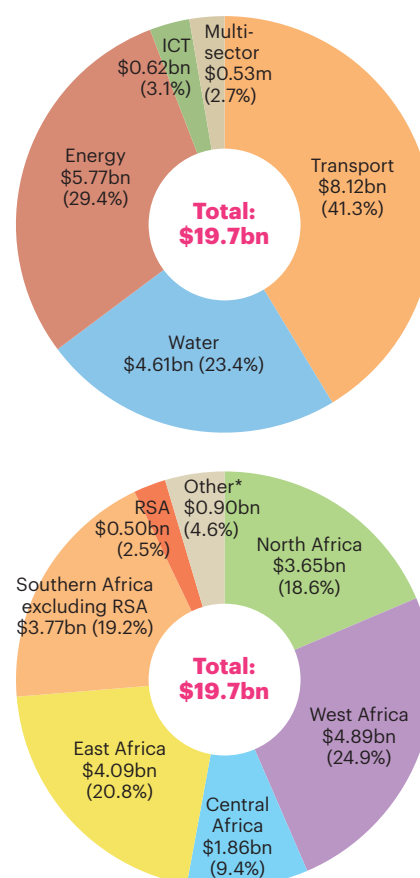
The \$4.8bn of financing for water and sanitation projects remained consistent with the \$4.6bn reported the previous year. However, the \$5.7bn in financing of energy infrastructure represented a 25% fall from the \$7.7bn committed in 2016. This continues the gradual decline seen since the 2014 high of \$9.2bn. ICA

member funding for multi-sector activities also declined by almost 40% from \$836m in 2016 to \$528m in 2017.

Commitments by region show a balanced picture. For example, in 2017 North, West, East and Southern (excluding South Africa) Africa received around 20-25% of ICA member financing (see Figure 23). This is consistent with the corresponding amounts for 2016. However, Southern Africa's (excluding South Africa) share has more than doubled, reaching a high of \$3.8bn.

Commitments to infrastructure projects in South Africa continue to decline. In this regard, commitments declined from \$966m in 2016 to \$495m in 2017. Commitments to infrastructure in Central Africa declined from \$2.2bn in 2016 to \$1.9bn in 2017, thus indicating a declining trend in the past few years.

In 2017, \$10.9bn was disbursed by ICA members. This amount is below those reported in 2011-16 of between \$11.4-13.4bn. Consistent with commitments reported in previous years, the majority of disbursements in 2017 were directed towards the energy sector (44%). The regional breakdown of members' disbursements in 2017 was also consistent with those for 2016. However, Southern Africa saw a decline in disbursements from \$1.5bn in 2016 to \$815m in 2017.



*Including Pan-African, regional and unallocated

Figures 22 and 23
ICA members' 2017 commitments by sector (top), ICA members' 2017 commitments by region (bottom)

The significant gap in commitments compared to lower levels of disbursements is not unusual. This is often a reflection of de-commitments whereby projects or financing do not go ahead, and which have not historically been reported or recorded in the *Infrastructure Financing*

ICA Members' 2017 Commitments Matrix (\$m)						
	Transport	Water	Energy	ICT	Multi-sector	Total Commitments
North Africa	732.4	1,048.2	1,584.0	104.8	184.7	3,654.1
West Africa	2,227.8	803.5	1,648.9	182.6	23.7	4,886.4
Central Africa	574.9	359.9	852.8	58.1	9.5	1,855.2
East Africa	1,779.6	1,491.2	719.6	75.5	25.9	4,091.8
Southern Africa	2,389.5	716.0	525.1	107.1	30.9	3,768.5
RSA	288.4	5.9	71.2	0.2	129.4	495.1
Other	132.1	182.4	371.7	89.2	124.1	899.4
Total Commitments	8,124.7	4,607.0	5,773.2	617.6	528.1	19,650.6

ICA Members' 2017 Disbursements Matrix (\$m) - not including CDC						
	Transport	Water	Energy	ICT	Multi-sector	Total Disbursements
North Africa	803.1	477.5	1,493.2	34.2	116.3	2,924.3
West Africa	659.9	593.3	772.5	137.6	14.6	2,177.9
Central Africa	345.7	226.1	318.8	45.4	79.1	1,015.1
East Africa	874.6	526.2	635.5	69.0	42.8	2,148.1
Southern Africa	265.4	260.0	203.0	36.6	49.8	814.7
RSA	3.7	3.7	1,267.5	7.1	288.0	1,570.0
Other	86.6	43.8	76.8	54.3	35.4	297.0
Total Disbursements	3,039.1	2,130.6	4,767.2	384.1	626.1	10,947.1

Trends in Africa series. Other reasons for disbursements being lower than commitments include projects being completed at a lower cost than originally expected and slow project preparation processes that lead to unexpected delays in disbursements. In some cases, commitments to funds were not subsequently reported as disbursements by ICA members but instead appear as private sector spending.

In terms of funding types, again, there has been a rise in the amount of loans issued to infrastructure projects. On the other hand, grants have declined, albeit only slightly. Commitments employing blended funding remain consistent at around \$2bn. Meanwhile, equity investments fell by nearly half to \$159m.

In 2017, the share of ODA and non-

ODA financing changed significantly. In previous years the share was roughly even. However, in 2017 ODA financing accounted for 62% of all commitments and non-ODA financing account for just 25%. ICA members are unable to provide data on the remaining 13%. Around two-thirds of disbursements in 2017 were ODA, with the remaining third being for non-ODA.

Soft infrastructure commitments declined to \$1.5bn in 2017. Although this is higher than the \$1.3bn reported in 2015, it remains below the \$2.3bn and \$1.8bn reported in 2014 and 2013, respectively. ICA member commitments made to project preparation fell from \$245m in 2016 to \$120m in 2017.

After recovering to \$1.4bn in 2016, soft infrastructure disbursements declined to \$717m.

Support for regional operations increased from \$1.9bn in 2016 to \$3.1bn, representing 16% of all 2017 commitments. This continues the trend of regional commitments varying widely from between \$1.8bn to \$4.5bn over the past six years. ■

Multilaterals and Bilaterals

In 2017, multilaterals committed \$12.8bn to Africa's infrastructure sectors, accounting for 65% of all members' funding. Commitments made by bilaterals of \$6.3bn accounted for the remaining 35%.

Multilaterals' share of total ICA member financing was 58% in 2016 and 69% in 2015.

It is however important to note that bilaterals make financial contributions to multilateral development banks, including ICA members such as the AfDB, EIB and WBG. ■

4.2 Types of Funding

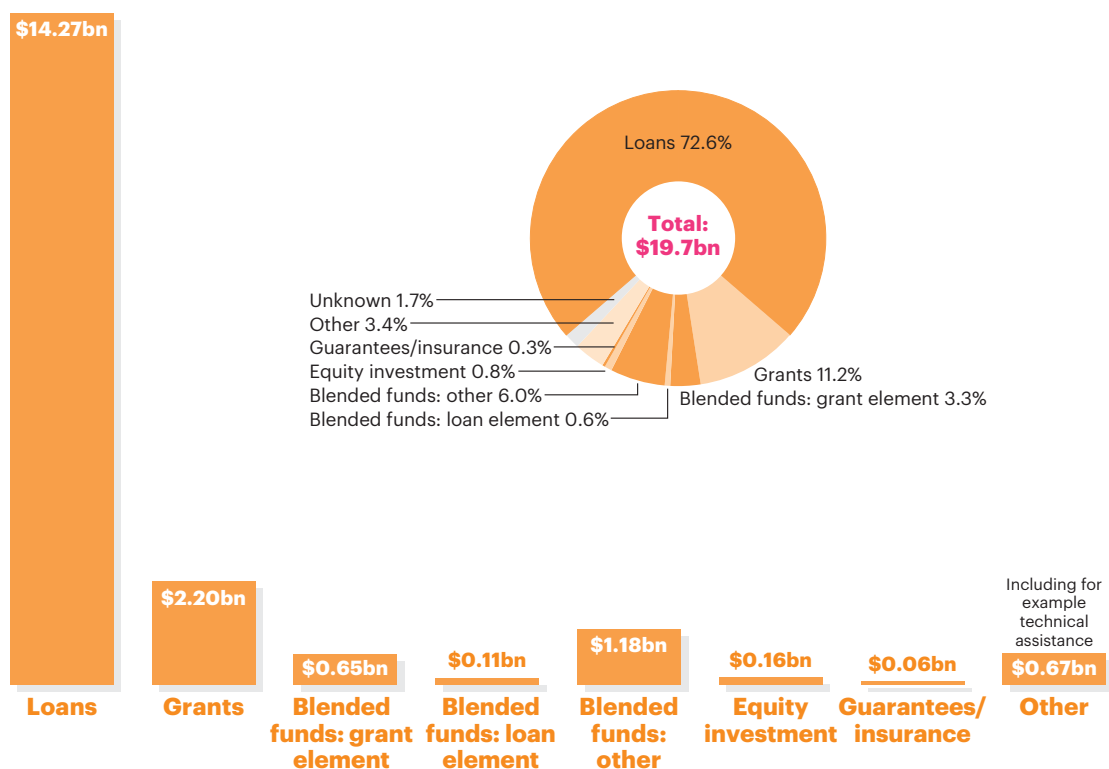


Figure 24
ICA members' 2017 commitments by type of funding

As with previous years, almost three-quarters (74%) of commitments made by ICA members comprised loan funding while grants accounted for 11%. Blended funds remain a popular mechanism, with \$2bn (10%) in commitments combining a mixture of loans, grants and/or equity (see Figure 24). The remaining 5% of funding is represented by guarantees, insurance, equity investments or other financing instruments.

A number of significant loans were made across all infrastructure sectors in 2017. JICA has provided a \$401m ODA loan for the Toamasina Port Development Project in Madagascar. The objective of this project is to expand Madagascar's largest port. The AfDB and France's Agence Française de Développement (AFD) have issued loans of \$240m and \$167m, respectively for the first phase of the Midelt 800MW solar complex project in Morocco. In addition, the AFD lent \$167m for the second phase

of the Lake Victoria Water and Sanitation Project (WATSAN II) in Uganda.

Of the total project level data provided by ICA members, loans to the transport sector totalled \$3.39bn in 2017. Notable transport projects benefiting from ICA member loans include the Dakar-Diamniadio Segment of the Dakar-Diamniadio-AIBD Regional Express Train Project in Senegal (AfDB – \$204m), Côte d'Ivoire's Route du Nord road (AFD – \$134m), and the second line of the Casablanca tramway in Morocco (EIB – \$67m).

Projects benefitting from the \$1.6bn of loans to the energy sector reported by members included the 420MW Nachtigal hydroelectric independent power plant in Cameroon (AfDB – \$167m) which aims to increase the availability of reliable, renewable energy power throughout the country; Zambia's Scaling Solar power procurement programme (EIB – \$11.8m) which will help achieve low

cost electricity; and the second phase of the Tobene independent power project in Senegal (International Finance Corporation (IFC) – \$8.2m) which will expand the 96MW HFO-fired plant by 19MW. The expansion of Tobene, which is estimated to cost \$36.7m, is already under construction as of August 2018.

ICA members provided project level data on \$1.69bn of ICT loans issued during 2017.

The Sfax Sea Water Desalination Plant Construction Project in Tunisia has benefitted from a \$325m ODA loan from JICA. The plant will provide 100,000 cubic metres per day of high quality drinking water to the 600,000 people living in the Sfax metropolitan area in central Tunisia which experienced a water shortage in early 2017.

Grants totalling \$1.3bn were reported by members, including a \$122m grant from the EU's Africa Infrastructure Platform (AIP – formerly Africa Infra-

structure Fund), via the EIB, for the modernisation of the road network in Madagascar; and \$51.5m from JICA for the South Bypass Improvement Project which will be used to repair the south-east section of the 7km bypass road from Boulevard des Tansoba in Burkina Faso's capital, Ouagadougou. The bypass road is expected to increase daily freight volume from 4,500 to 6,900 tonnes.

For the 35 projects that attracted blended funds in 2017, the AfDB contributed \$973m. WBG committed \$581m in blended funds while the

commitments from France, Germany's KfW, and DBSA were \$272m, \$113m, and \$5.5m, respectively.

Of total commitments made in blended funds, \$783m was directed towards regional projects. AfDB committed grants for several components of PIDA/PAP projects, including \$298m for the Cameroon-Chad Power Interconnection Project, and \$155m for the Nigeria-Niger-Burkina Faso-Benin Power Interconnection Project.

A number of equity investments were made by ICA members into

infrastructure focused companies during 2017. IFC reported \$50m of equity investments in Actis Fund 4, a fund managed by UK private equity firm Actis Capital which will support ICT and multi-sector projects. The financing is part of a larger \$100m injection into Actis Fund 4, \$65m of which is from IFC's own account and the remaining \$35m from IFC Asset Management Company. EIB also approved an equity investment of up to \$50m into the power-focused fund of US private equity firm Denham Capital, the largest proportion of which will be targeted at Africa. ■

Projects Financed in 2017

ICA members provide finance to projects and programmes in four sectors: transport, water, energy and ICT. The following projects are selected to provide examples of members' activities in each of those sectors.

Great North Road – Zambia

EIB – \$122m (loan), AIF – \$76.5m (grant)

The EIB provided a \$122m concessional loan and AIF a \$76.5m grant (via EIB) to Zambia's Ministry of Finance to upgrade the Great North Road (T2). The objective of the project is to widen and upgrade 372km of road between Mpika and Nakonde. The upgraded road is expected to enhance safety, shorten travel time, and reduce bottlenecks. In addition, given that it is a key national road which connects Zambia to neighbouring Tanzania and Zimbabwe, the upgraded road is expected to facilitate intra-African trade. The T2 loan also covers the rehabilitation of about 50km of feeder roads, support for a number of unspecified complementary initiatives in the area, and the provision of technical assistance.

Addis Ababa Power Supply Improvement Project – Ethiopia

AfDB – \$99.6m

In November 2017, the AfDB approved \$99.6m in blended finance for the Addis Ababa Power Supply Improvement Project in Ethiopia. A \$83.6m African Development Fund (ADF) loan was supplemented by a \$14.2m ADF grant to help finance the rehabilitation and construction of 545km of medium-voltage lines, replace and install 582 distribution transformer and 13 primary substations, upgrade nine high-voltage substations and construct 3.8km of 132kV double-circuit overhead lines. The project, which is expected to be completed by end-2020, is designed to alleviate existing or future constraints involving electricity infrastructure and address the connection backlog of an estimated 432,000 customers.

Bamako Drinking Water and Sanitation System – Mali

EIB – \$56m

In June 2017 the EIB signed a €50m (\$56m) loan for a drinking water and sanitation system in the Malian capital Bamako. The loan, which supports the Millennium Development Goals-aligned Water and Sanitation Programme of the government, addresses the ever-increasing water access needs of a rapidly increasing population. The project will double water capacity from 144,000 to 288,000 cubic metres per day by 2021. Overall, 2.5m people will benefit from the new sanitation system. Of these, 560,000 people will have access to drinking water in the very near future.

'Digital Tunisia 2020' National Strategic Plan – Tunisia

AfDB – \$81.7m

In October 2017, AfDB approved an \$81.7m loan to finance the Tunisian government's €135m (\$150m) 'Digital Tunisia 2020' National Strategic Plan. The project will be implemented between 2018 and 2020. In general, it will strengthen public services through the use of digital platforms on a grand scale. The activities include the implementation of online administrative and sectoral information services and the development of a digital ID system and a data exchange platform. The programme covers a wide geographical area and will reduce the current regional disparities significantly. Once implemented, Digital Tunisia 2020 will help create a climate of open government and provide impetus to the digital economy, providing much-needed job opportunities for young graduates.

4.3 Hard vs Soft Infrastructure

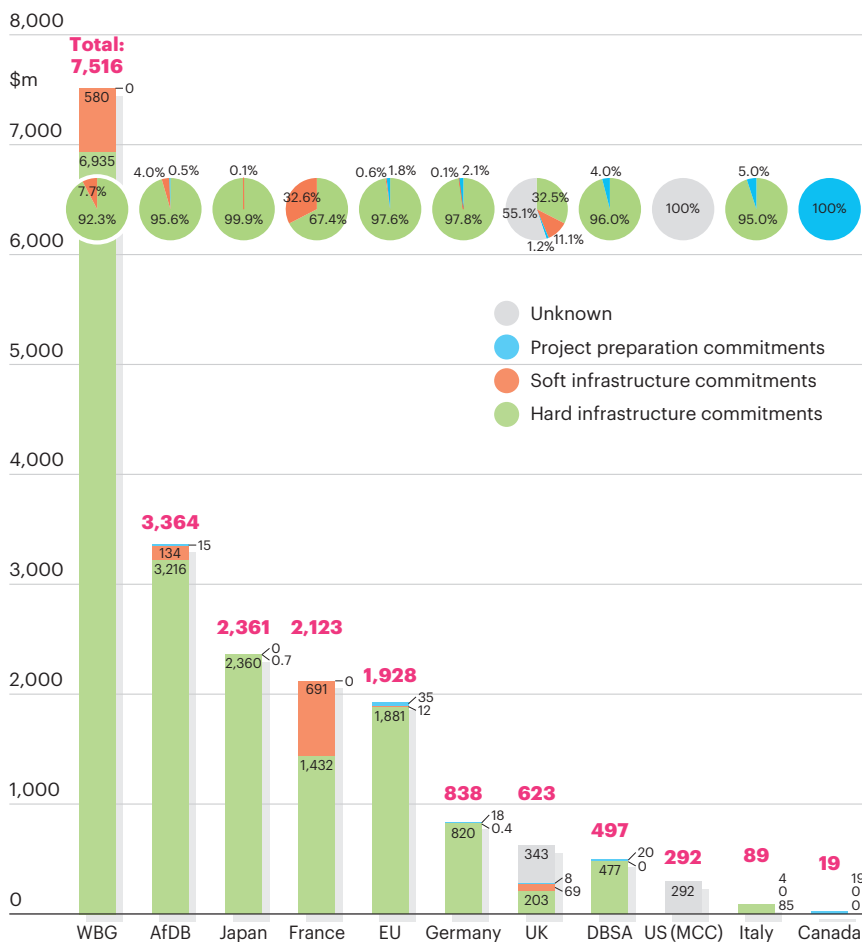


Figure 25
ICA members' 2017 hard/soft/project preparation infrastructure commitments

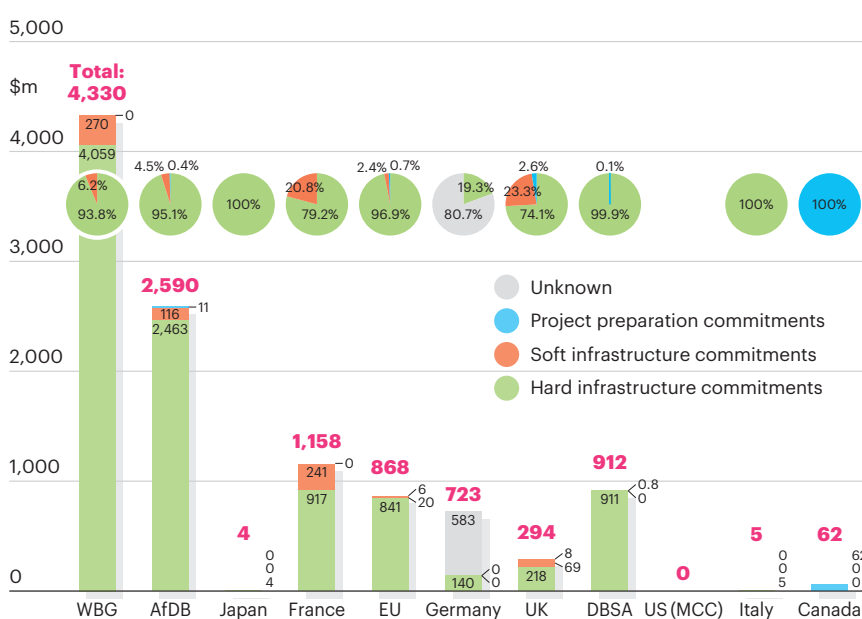


Figure 26
ICA members' 2017 hard/soft/project preparation infrastructure disbursements

ICA members reported soft infrastructure commitments of \$1.5bn in 2017. In 2016, the commitments amounted to \$1.7bn.

While this amount is more than the \$1.3bn reported in 2015, it is lower than the amount of \$2.3bn for 2014. Soft infrastructure as a proportion of total commitments in 2017 stood at 7.8%, which is consistent with the proportion for the previous year.

Project preparation commitments of \$120m accounted for about 0.6% of total commitments. While this is lower than the \$245m reported in 2016, it is broadly consistent with the historical trend. Project preparation disbursements stood at \$88m in 2017, which represents just under 1% of the total. Again this was around half of the figure reported in 2016.

In 2017, soft infrastructure disbursements amounted to \$717m, or 72% of total disbursements. This is about half the \$1.4bn reported in 2016 and significantly below the \$3.1bn disbursed in 2014. It should be noted that soft infrastructure financing figures prior to 2015 included project preparation data. Project preparation disbursements, however, are relatively small, so this change in data reporting has not altered the overall trend in soft infrastructure disbursements significantly.

ICA members provided project level data on 69 soft infrastructure disbursements across regions and sectors, the largest of which was the \$167m disbursement by AFD of a loan for the Egyptian power sector.

An additional 69 projects totalling \$838m of soft commitments were reported by ICA members in 2017. Notable commitments in 2017 include \$187.5m by AFD for Nigeria's Lagos Strategic Transport Master Plan, and \$35m by AfDB for the Kapchorwa-Suam-Kitale and Eldoret Bypass Roads Project in East Africa. ■

4.4 Trends in Commitments & Disbursements

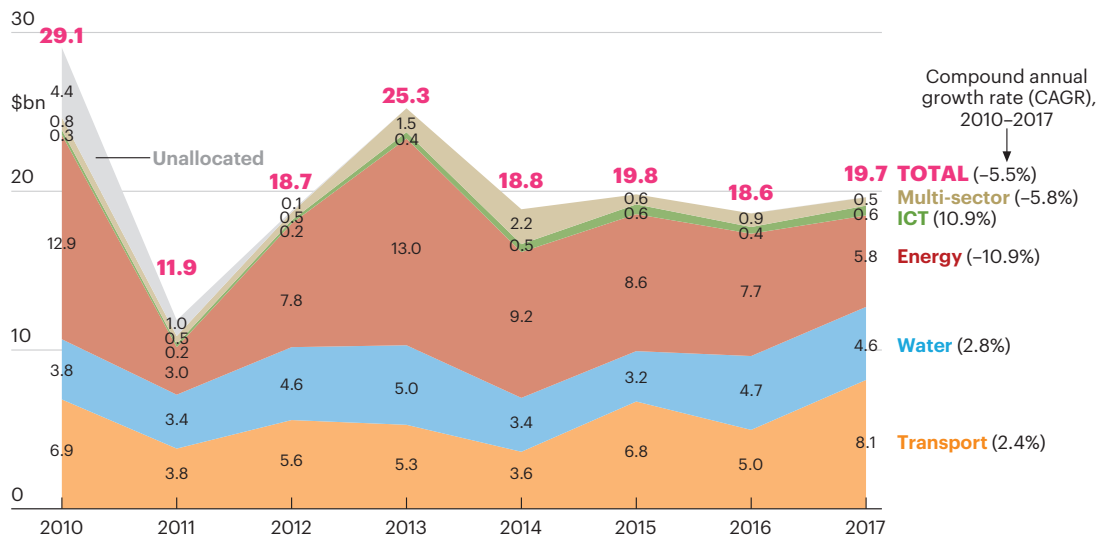


Figure 27
ICA members' commitments by sector (including growth rate), 2010-2017

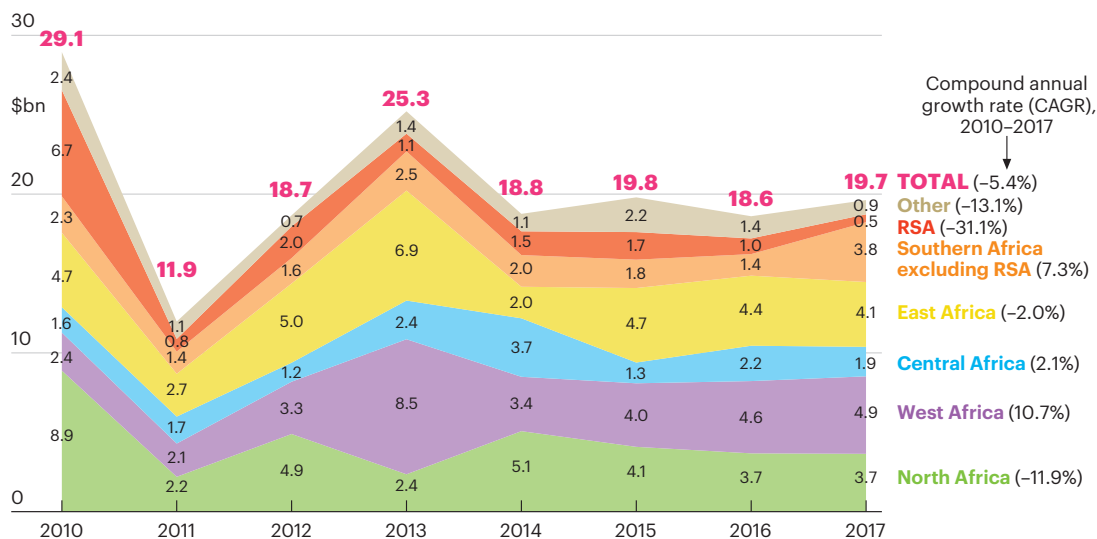


Figure 28
ICA members' commitments by region (including growth rate), 2010-2017

As per previous reports, trends in commitments and disbursements are based largely on aggregated data, reflecting the challenges faced by some ICA members in terms of both collating and disclosing disaggregated financial information.

Commitments

According to data provided by ICA members, commitments towards infrastructure projects in 2017 have remained consistent with the previous year. The most notable changes are a significant increase in commitments to the transport sector, which reached

an eight year-high of \$8.1bn (see Figure 27). The financing of infrastructure projects in Southern Africa also reached a high of \$3.8bn (see Figure 28).

After a slight dip in 2016, total commitments by ICA members rebounded to \$19.7bn in 2017. This is \$190m below 2015's record high (when the exceptional \$7bn Power Africa contribution in 2013 is excluded). During the 2012-17 period, commitments from ICA members ranged between \$18.7bn-\$19.8bn, which contrasts with the \$29bn and \$11.9bn reported in 2010 and 2011, respectively.

The \$620m of commitments to the ICT sector in 2017 slightly exceeded the 2015 high of \$616m, while the \$4.6bn of financing towards water sector projects fell by only 1% compared to 2016. Commitments to multi-sector projects remain at a level lower than the previous four years. Financing of power sector projects also decreased by 25% to \$5.8bn. However commitments to all other sectors are above the eight-year average.

Data provided by ICA members for the period 2010 to 2017 shows that the average level of commitments over the eight year period are: transport

Trends in Commitments & Disbursements

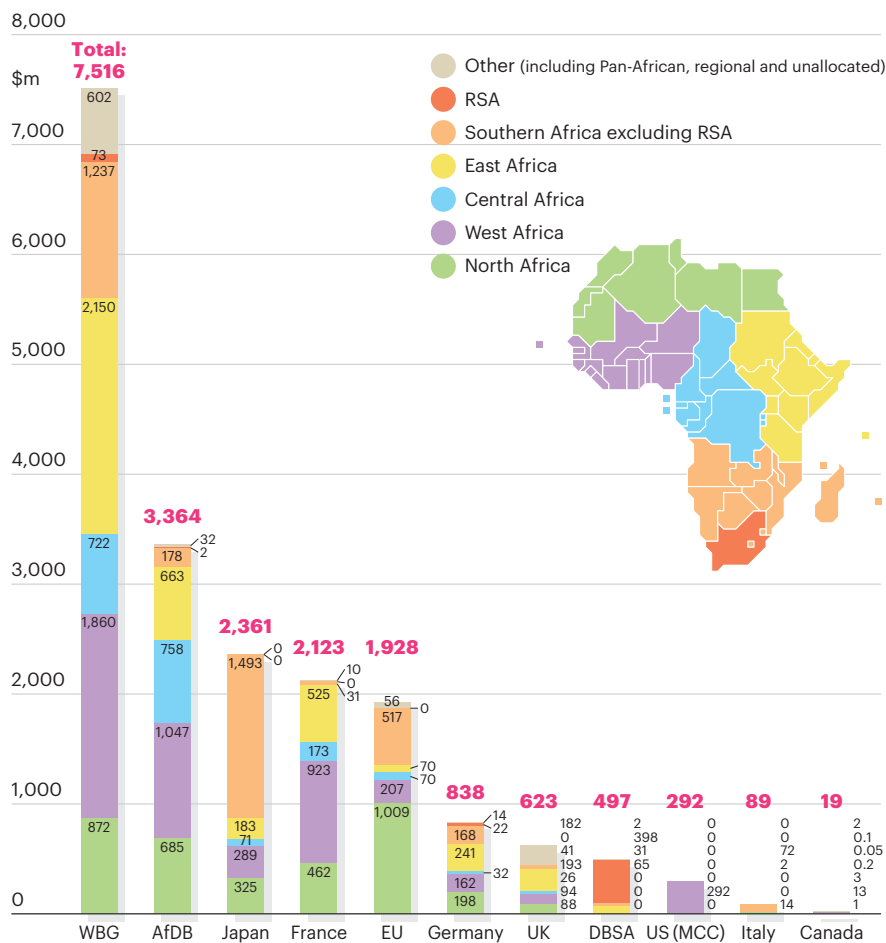


Figure 29
ICA members' 2017 commitments by donor and region

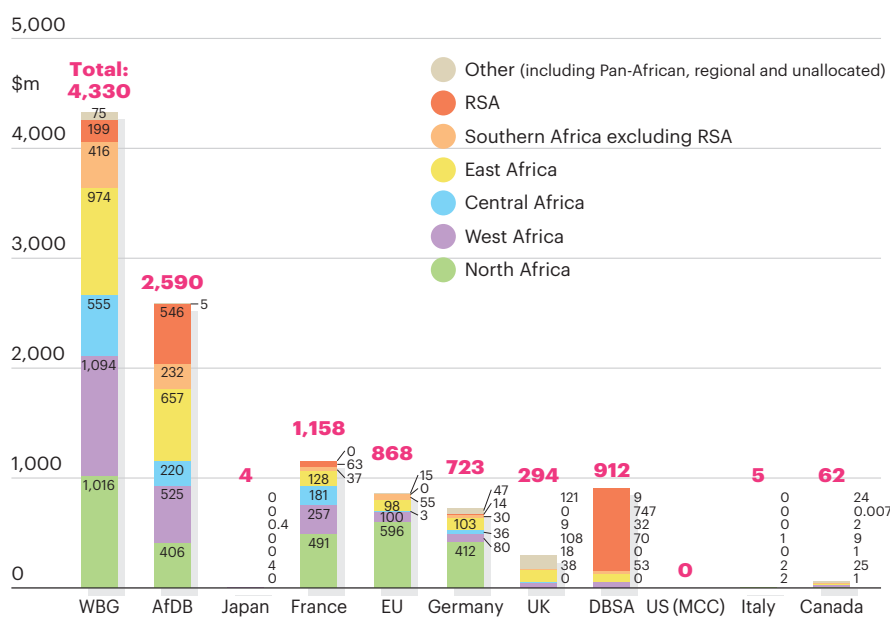


Figure 30
ICA members' 2017 disbursements by donor and region

\$5.6bn, water \$4.1bn, energy \$8.5bn, ICT \$410m, multi-sector \$940m.

Commitments to infrastructure projects in North, West, Central and East Africa in 2017 remained consistent with the previous year. Financing of projects in West Africa rose by \$300m, while commitments in Central and East Africa both fell by \$300m. Since 2014, only minor changes are noticeable in the regional allocations of ICA member commitments to infrastructure (see Figure 29). The financing of projects in West and Southern Africa were above the eight-year average of \$4.2bn and \$2.1bn, respectively. However, commitments to North, Central, East and South Africa were slightly below average.

Disbursements

Total disbursements made by ICA members stood at \$10.9bn in 2017. This represents an 18% decline compared to the 2016 high of \$13.4bn and is below the eight-year average of \$12.2bn.

The change is accounted for mainly by a \$292m (25%) decline by DBSA, a \$242m (17%) drop from France, and a \$645m (47%) reduction from Germany. Disbursements from Germany were particularly high in 2016, therefore such a reduction is not unusual. Disbursements reported by the EU were also down \$363m (30%) in 2017, however this figure only includes EIB (which reported disbursements totalling \$839m) and the EU-Africa Infrastructure Trust Fund (EU-AITF) which reported \$28m. The EC, which reported disbursements totalling more than \$1bn last year, was unable to provide data for 2017.

Disbursements to all sectors excluding ICT declined in 2017 compared with 2016. For example disbursements to transport declined by \$700m, water by \$400m, energy by \$1.3bn, and multi-sector projects by \$200m. Disbursements to ICT projects rose from \$300m in 2016 to

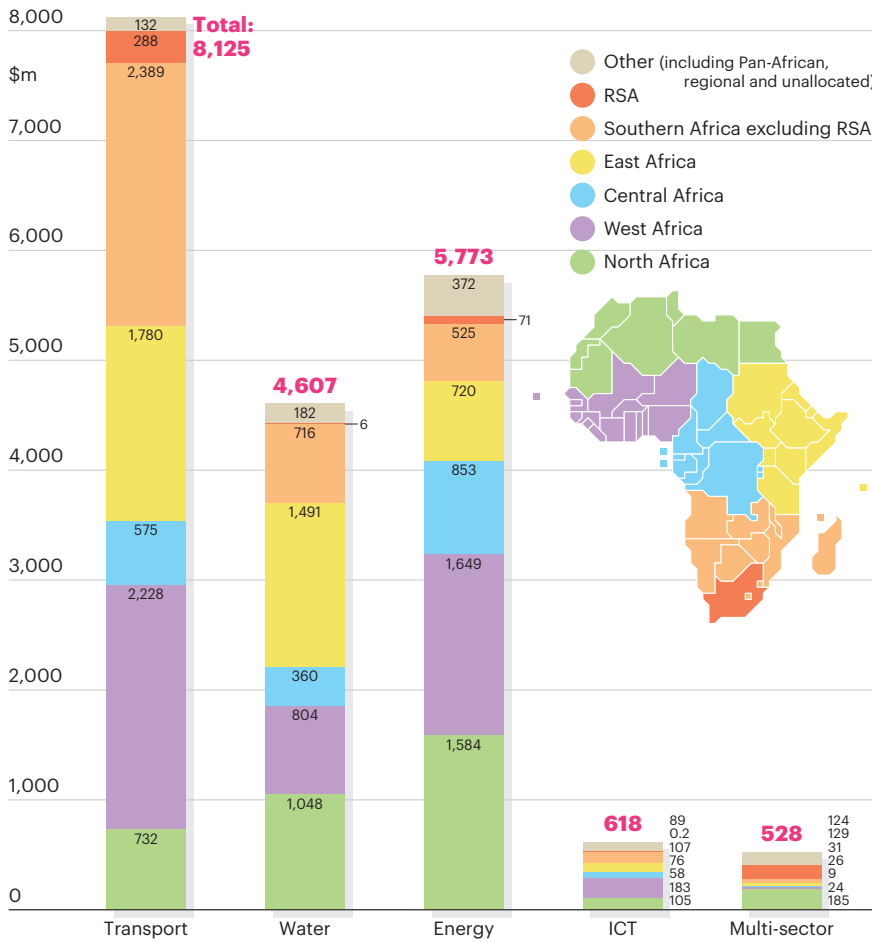


Figure 31
ICA members' 2017 commitments by sector and region

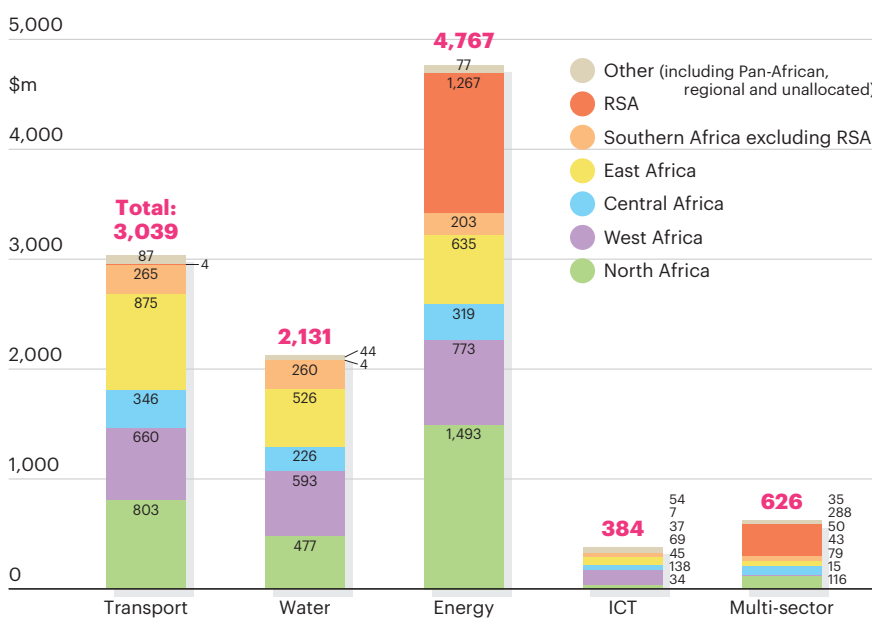


Figure 32
ICA members' 2017 disbursements by sector and region

\$400m in 2017, which is consistent with the levels seen between 2013 and 2015.

As in the past, multilaterals led the way in terms of disbursements in 2017, with 71% (\$7.8bn) of total disbursements coming from WBG, AfDB and EU. Bilaterals accounted for the remaining \$2.2bn. Multilateral disbursements of \$7.8bn for 2017 are below the \$10.6bn reported in 2016. However, it should be noted that the data for 2017 does not include information from the EC.

The WBG's 2017 disbursements of \$4.3bn were the largest reported by any ICA member. This is comparable with its \$4.1bn of disbursements recorded in 2016. It is noteworthy that since 2013, the WBG has been disbursing the highest amount among ICA members every year.

Of the WBG's \$4.3bn disbursements in 2017, \$1.9bn was directed to the energy sector. The transport and

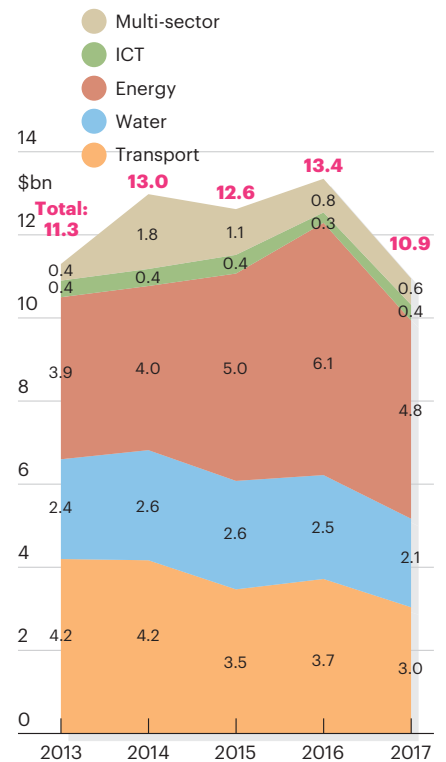


Figure 33
ICA members' disbursements by sector, 2013-2017

Trends in Commitments & Disbursements

water sectors received \$1bn each. The remaining disbursements were directed at ICT (\$281m) and multi-sector (\$65m) projects.

North and East Africa both received disbursements of about \$1bn from WBG. This includes \$648m for energy projects in Egypt, and \$184m for transport projects in Kenya.

Other countries that received substantial disbursements from WBG include Nigeria (\$299m), Ethiopia (\$204m), DRC (\$144m), Morocco (\$185m), Tanzania (\$246m), and South Africa (\$189m).

Disbursements made by AfDB rose

from \$2.4bn in 2016 to \$2.6bn in 2017. The AfDB's disbursements have been rising since 2014. EU disbursements fell from \$1.3bn in 2016 to \$868m in 2017. Although again this 2017 figure does not include EC data, which in 2016 amounted to \$1bn. Of EU disbursements in 2017, the EIB's \$839m was down on the \$1.2bn reported in 2016, while EU-AITF disbursements of \$28m were also down on the \$38m reported the previous year.

The largest disbursements made by bilaterals came from France, with AFD reporting that the country's development institutions and funds disbursed \$1.2bn in 2017, slightly

more than the \$912m disbursed by DBSA.

Disbursements made by bilaterals dropped in 2017. Despite being the largest source of disbursements, France's AFD reported that total disbursements of \$1.2bn made by the country's development institutions and funds declined by 17% compared to 2016. DBSA, which at \$912m was the second largest source of disbursements in 2017, also reported a decline of 24% on the previous year.

Italy's disbursements (\$5.4m) declined by 72%, and Japanese disbursements (\$4.3m) declined by 93%. ■

NEPAD Infrastructure Project Preparation Facility

The NEPAD Infrastructure Project Preparation Facility (NEPAD-IPPF), the multi-donor fund hosted by the AfDB, which supports African countries' preparation of regional infrastructure projects, provided commitments of \$4.8m and disbursements of \$5m in 2017. This compares with commitments provided of \$14.8m and disbursements of \$7.8m in 2016.

The facility provided entirely ODA grant funding. It provided \$2.1m (43%) of commitments to the transport sector; \$1.6m (32%) to water and sanitation operations and \$1.2m to ICT projects. A total of \$2.3m (47%) of commitments targeted

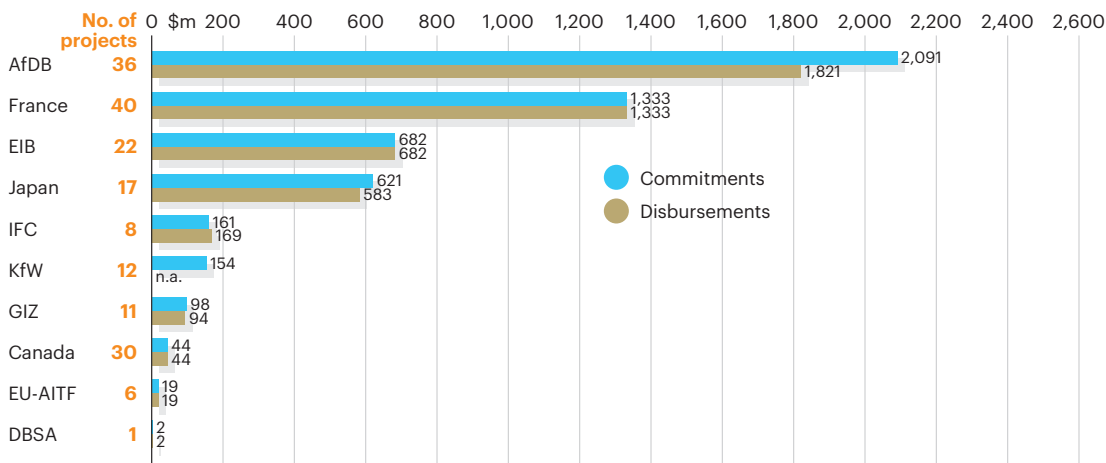
East Africa while \$2.1m (43%) targeted Southern Africa excluding South Africa, which alone received \$500,000 or 10% of total commitments. In 2016, energy projects received commitments of \$8.6m while the transport and water sectors received \$5m and \$1.3m, respectively.

Disbursements of \$4.4m were provided for transport projects while energy projects received \$261,139, water operations \$201,139 and ICT activities \$57,310. In 2016, disbursements of \$4.2m were provided for transport projects while energy projects received \$3.1m and water projects \$473,692.

NEPAD IPPF Commitments, 2017

Project	Region	Commitment (\$m)
Masaka-Mutukula-Kyaka-Bugene-Kasulo-Kumunazi Roads Project	East Africa	2,089
Support Project for the Creation of a Communauté Economique des Etats de l'Afrique Centrale (CEEAC) Cross-border Basin Organisation	Central Africa	1,073
Feasibility Study For Gabon ICT Backbone Project	Central Africa	1,179
Public Private Partnership Advisory Services for the Songwe River Basin Development Programme (SRBDP)	Southern Africa (excluding RSA)	500
Totals		4,841

4.5 Projects Completed



ICA member supported projects completed in 2017:

Figure 34
ICA members' commitments and disbursements for completed projects

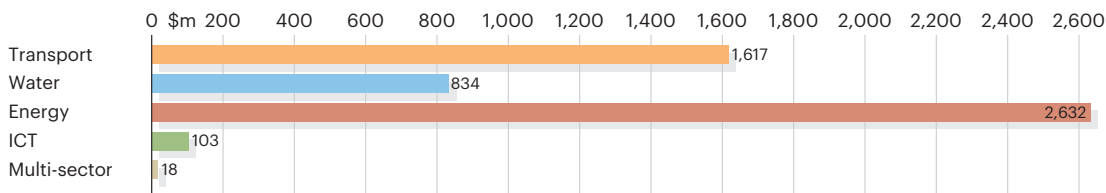


Figure 35
ICA member supported projects completed in 2017, by sector

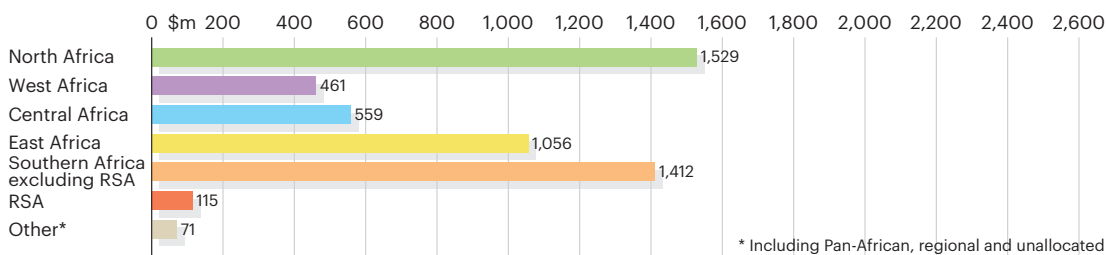


Figure 36
ICA member supported projects completed in 2017, by region

* Including Pan-African, regional and unallocated

Ten ICA members provided financial information on 183 projects completed in 2017, totalling \$5.2bn in commitments and \$4.7bn in disbursements¹ (see Figures 34-36). These projects relate to both investments and technical assistance. The average original commitment year for these projects was 2012. Unlike previous years, none were made before 2000. A single project had its original financial commitment made in 2001 while 122 projects had commitments made this decade.

Transport projects amounting to \$1.6bn were completed in 2017, which is equal to that recorded in the previous year. The 37 energy sector projects completed in 2017 totalled \$2.6bn, accounting for 50% of the value of all completed projects and representing a significant increase on

the \$1.2bn reported in 2016. The value of completed water sector projects fell from \$1.2bn in 2016 to \$834m in 2017, while ICT projects of \$103m were also reported as being completed in 2017.

As in the past, the breakdown by funding type is different from previous years. Loans accounted for 59% of the total funding for completed projects in 2017. While this is significantly more than the 25% reported in 2016, it is below the 75% recorded in 2015.

As in the past, grant funding was the most popular method of financing for projects completed in 2017, which at \$1.7bn was less than loan funding, but more than the \$1.5bn reported for 2016. Only \$127m was reported as having been committed via blended finance instruments in 2017, which is significantly below the \$1.1bn in 2016.

The regional breakdown of completed projects is somewhat different to previous years. Projects completed in North Africa totalled \$1.5bn in 2017, which is almost double the \$858m recorded in 2016. Completed projects in Central Africa also more than doubled, from \$251m in 2016 to \$559m in 2017, while the total for Southern Africa (excluding South Africa) rose from \$508m to \$1.4bn.

In West Africa, the value of completed projects declined to \$461m, while in East Africa it remained at just over \$1bn. South Africa reported only \$115m of completed projects in 2017, which is significantly down from the \$1.1bn reported in 2016. ■

¹ Project level data was not received from DFID or WBG

4.6 Disbursement Rates

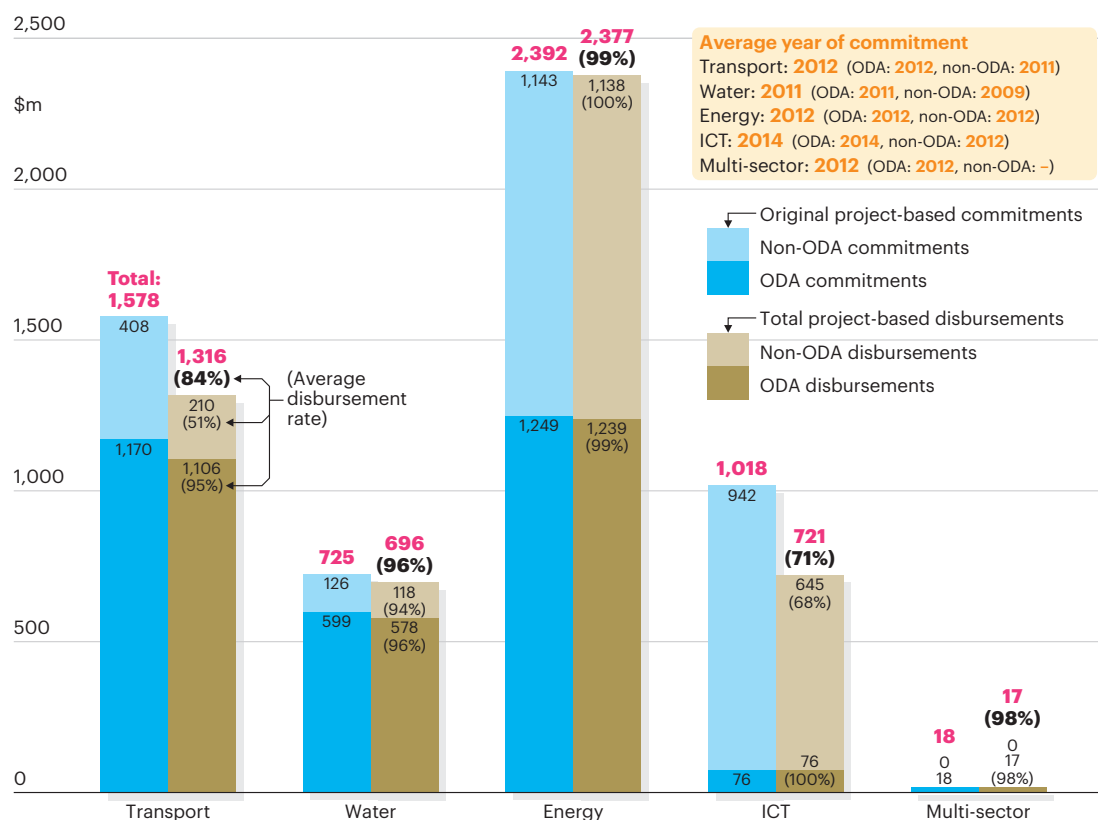


Figure 37
Disbursement rates per sector for selected ICA member projects completed in 2017

The disbursement rate is the percentage of disbursements made to projects completed in 2017 compared with the original amount committed. The disbursement rate is therefore not an attempt to compare ICA members' commitments and disbursements made in 2017.

As with previous years, some of the projects reported as completed by ICA members in 2017 had their original commitments made several years ago. However, the average timeframe between commitment and completion appears to be shrinking, indicating that projects are being completed at a faster rate.

Total disbursements of \$4.7bn represent about 94% of the \$5bn originally committed (some of which dates back to 2001) for projects completed in 2017. This figure is comparable with the 95% reported in 2016, and only 3% lower than the 97% reported in 2015. This trend follows a period of relatively low disbursement

rates of 84% and 77% in 2014 and 2013, respectively.

The disbursement rate to transport sector projects fell to 84% in 2017 from the 95% reported in 2016. Possible reasons include projects being completed at lower costs than initially anticipated due to advances in technology and manufacturing. The cancellation in 2017 of two loans totalling \$90m and \$50m issued, respectively, in 2015 by the AfDB and its Africa Growing Together Fund windows for the Sharm El-Sheikh Airport Project in Egypt, has already contributed to the relatively low disbursement rate in this sector.

The disbursement rate to water projects remained consistent with 2016's figure of 96%, while the disbursement rate for energy projects increased from 93% in 2016 to 99% in 2017. The disbursement rate to ICT sector projects was 100%, equalling that reported in 2016.

After last year's high disbursement rates among non-ODA projects, data

provided by ICA members show that this has fallen back to levels reported in previous years. The non-ODA disbursement rate for transport projects has fallen significantly from 98% in 2016 to 51% in 2017, while the rate of non-ODA disbursements for water projects fell from 100% in 2016 to 94% in 2017. The energy sector however saw the rate of non-ODA disbursements rise from 85% to 100%.

Of the 183 projects completed in 2017, the average date of their financial commitments was 2012. This average of five years is significantly shorter than the nine years reported in 2016.

Transport sector projects, which in 2016 had an average of nine years between a project commitment and its completion, fell to five years. The average time to complete water and sanitation projects fell from seven years to six, while energy projects dropped from seven years to five, and ICT projects from 11 years to three years. ■

4.7 Trends in Regional Infrastructure Portfolios

Since 2010, ICA members' commitments to regional projects have fluctuated significantly. The \$3bn-worth of commitments reported in 2017 is considerably higher than the \$1.9bn recorded in 2016, but is below the \$3.4bn seen in 2015 and way off the record high of \$4.5bn reported in 2012. As a result, it is difficult to ascertain any trends in regional investments.

Of total regional commitments in 2016, over half (\$1.6bn) were directed at transport projects while under \$1bn was committed to energy sector projects. Major investors in regional infrastructure projects in 2017 included AfDB, which at \$1bn more than doubled its total commitments to regional projects in 2016. The WBG

increased investments from \$133m in 2016 to \$622m, while the UK increased its regional spending from \$133m in 2016 to \$199m in 2017.

Japan, which made commitments totalling just \$2m in 2016 reported regional investments of \$1bn in 2017. This was accounted for by a single \$1bn non-ODA loan to finance the construction of the Nacala railway and port infrastructure in Mozambique and Malawi. This \$2.73bn project is a part of the Beira-Nacala Multimodal Corridors PIDA/PAP project and is financed by Japan's Mizuho Bank, AfDB and nine private finance institutions. The railway will connect the Moatize coal mine in Mozambique's western province of Tetê – under development

by Brazilian miner Vale and Japan's Mitsui & Co – to the 22m tonnes per year capacity deep-sea port of Nacala on the country's east coast. This massive investment by Japan, which is dependent on imported coking coal, will help to reduce its fuel supply risks. For Southern Africa, the railway line, which will cross Mozambique and Malawi and possibly be extended to Zambia, will help facilitate intra-African trade through improved regional transport links.

The data provided on project level commitments for 2017 was limited. Notable commitments include the \$12m provided by AfDB to the Economic Community of West African States (ECOWAS) for the promotion of a climate-friendly market. ■

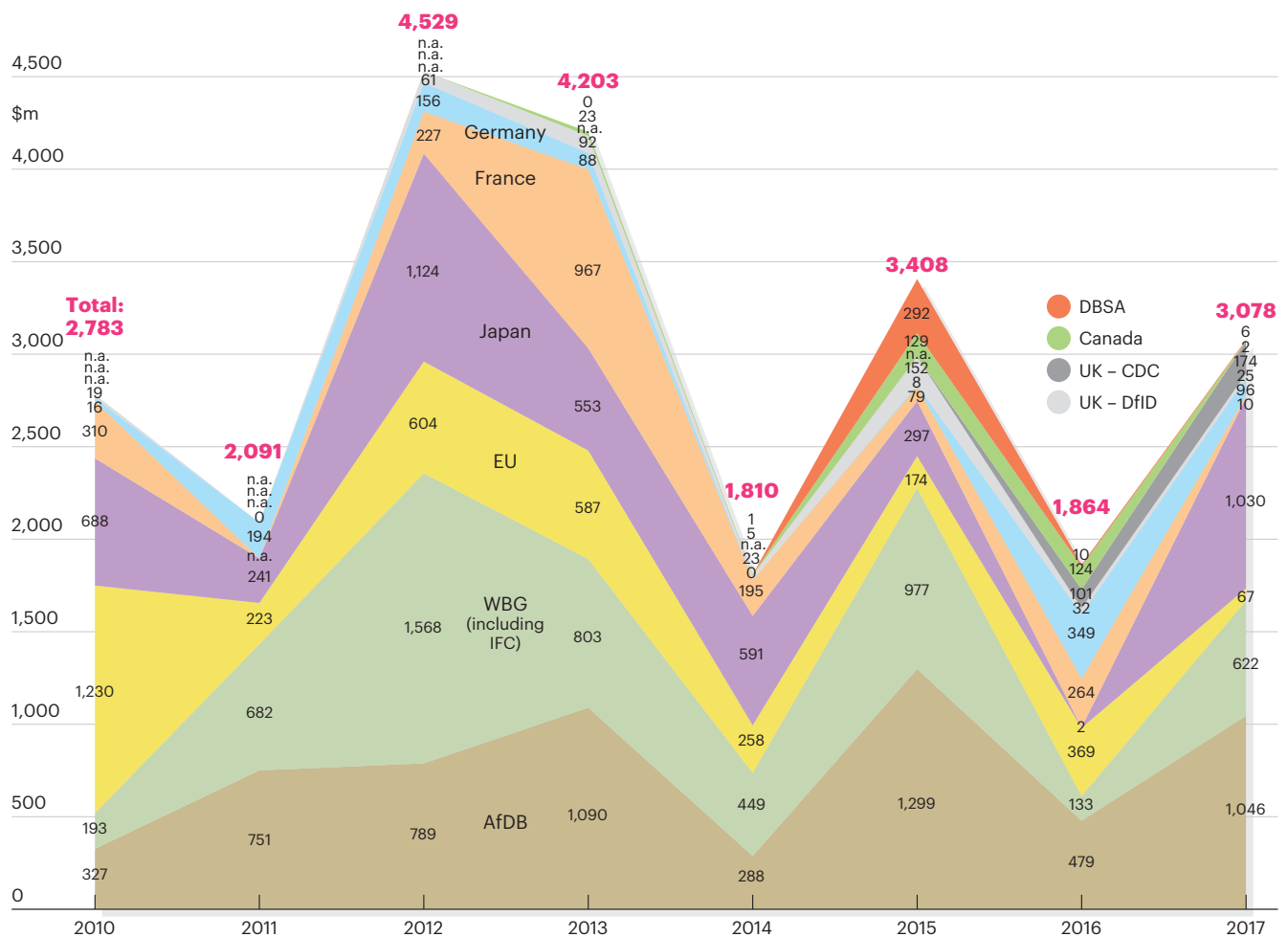


Figure 38 Trends in regional infrastructure portfolios, 2010-2017

4.8 PIDA/PAP Commitments, Disbursement Trends

Commitments from ICA members to Programme for Infrastructure Development in Africa Priority Action Plan projects amounted to \$2.9bn, one-third higher than the \$2.1bn committed to PIDA from all sources in 2016. Total ICA commitments in 2016 amounted to \$447m, while non-ICA members contributed \$1.6bn, which was mainly Chinese funding for two port projects in Kribi, Cameroon and Tema, Ghana.

Transport sector projects for the second year running received most PIDA funding from ICA members, with the Beira-Nacala Multimodal Corridors receiving a commitment of \$1.5bn from Japan. The commitment is one of several efforts made by stakeholders to promote this project. The SADC Secretariat and NEPAD for example have worked with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on this project in the context of the PIDA Acceleration Pilot Programme while Japan in 2015 put \$241m towards the Nacala Port Development Project Phase 2 which is part of this ambitious development.

The entire project comprises the rehabilitation and reconstruction of railway and road links. This will also involve the upgrading of one-stop border posts along the corridors;

improvement of capacity at the ports, capital dredging at Beira Port and natural resource development, including the Moatize Coal Field in the Zambezi Valley that will use the ports as main export gateways.

ICA members are collaborating on several initiatives in PIDA/PAP, which extends to 2020. The collaboration covers 51 programmes and projects divided into 433 projects in the transport, energy, ICT and trans-boundary water sectors.

AFD, AfDB, EU and GIZ support the Commission Internationale du Bassin Congo-Oubangui-Sangha (Congo-Oubangui-Sangha International Commission) which is mandated with the promotion of inland navigation and water resources development in the Congo basin. The basin extends across ten countries, in an area seven times larger than Germany. It is the second largest river basin worldwide just after the Amazon basin.

One important PIDA project in the Congo is the Palambo multi-purpose dam on the border of Democratic Republic of Congo and Central African Republic. The project aims to provide solutions to problems of interruption of navigation on the Oubangui tributary of the Congo River. The project also addresses the issue of regional electricity shortages with the

construction of the Oubangui flow control and power generation dam at the Palambo site, which is about 60km upstream from Bangui.

In the energy sector, AfDB made new commitments in 2017 to the Central African Interconnection and the West Africa Power Transmission Corridor. It also disbursed funds to several transmission projects, including the West Africa Power Transmission Corridor, North-South Power Transmission Corridor, Central African Interconnection and North-South Power Transmission Corridor. In addition, disbursements were made to two major regional power generation projects, Inga III Hydro and Rusumo Falls.

Inga III involves the construction of an 11,050MW hydropower project on the Congo River. The project is seen as the leading clean, affordable development option to address the challenges of energy access in Africa. Moreover, the project aims to create local employment and income generation opportunities and stabilise regional political conditions. Angola, Democratic Republic of Congo and South Africa are expected to benefit from the project. It is expected to generate up to 2,500MW of power.

Pre-feasibility studies for the project were completed in 2017. Commission-

Specified ICA Member Commitments to PIDA Projects (\$m)					
PIDA/PAP No. & Project	AfDB	EU-AITF	Germany	Japan	Total
2. North-South Power Transmission Corridor				12	12
6. Central African Interconnection	298				298
8. West Africa Power Transmission Corridor	238		11		249
12. Ruzizi III		27	16		43
Energy Total	536	27	27	12	602
16. TAH programme				24	24
20. Northern Multimodal Corridor			156	111	267
24. Beira-Nacala Multimodal Corridors				1,501	1,501
26. Southern Africa Hub Port and Rail Programme				401	401
31. West Africa Hub Port and Rail Programme				132	132
Transport Total	0	0	156	2,169	2,325
Total	536	27	183	2,181	2,927

ing of preliminary works is expected by the end of 2018. Project preparation costs are estimated at \$423m while capital costs of \$18bn are anticipated.

In 2017, KfW committed to two PIDA/PAP energy projects, both with a distinctly regional outlook. The West Africa Power Transmission Corridor is a 2,000km line along the coast connecting with the existing Ghana–Nigeria line with a capacity of 1,000MW. Guinea, Guinea-Bissau, Gambia, Sierra Leone, Liberia, Côte d’Ivoire and Ghana are expected to benefit from the project that will aid in the establishment of an integrated West African power market and will ensure lower energy costs and improved energy security. The reduction in the need for reserve capacity in the existing power systems will lead to savings on investment costs.

Ruzizi III involves the construction of a 30-metre high, 120-metre long rockfill dam with a reservoir capacity of 1.9m cubic metres and three Francis-type turbines. It is sponsored by the Energie des Grands Lacs consortium and will be developed on a public-private partnership basis. The power will be bought by Distribution d’Eau et d’Electricité of Burundi (Regideso), Société Nationale

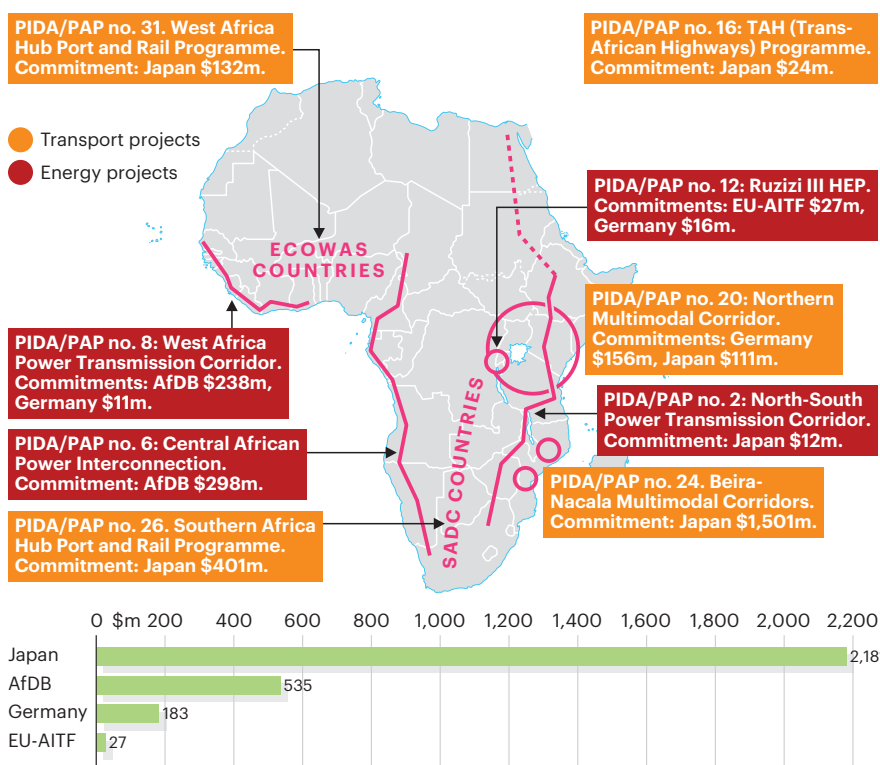


Figure 39 Specified ICA member commitments to PIDA projects

d’Electricité of the Democratic Republic of Congo (Snel), and Energy and Water Sanitation Authority of Rwanda under long-term power purchase agreements. In 2017 the Aga Khan Fund for Economic Development (AKFED)’s Industrial Promotion Services and CDC launched a new power platform to

mobilise funding for projects in sub-Saharan Africa including Ruzizi III.

Key commitments to Ruzizi III – which is supported by several ICA members – in 2017 included a €22m (\$25.4m) project preparation grant from EU-AITF, which committed \$26.7m and disbursed \$9.6m to PIDA/PAP projects in 2017. ■

4.9 Country Allocations

Data provided by AfDB, EIB, EU-AITF, WBG, DBSA, Canada, France, GIZ, KfW, Italy, JICA and Japan Bank for International Cooperation (JBIC), as well as those sourced independently from CDC and the US’s Millennium Challenge Corporation (MCC), show \$16.3bn of commitments made to national projects in 2017.

This figure excludes the \$3.1bn of regional commitments and the \$254m provided by the UK’s Department for International Development (DFID) for

which country allocations were not provided.

The figures show similar country allocations as in 2016. Egypt was the single largest recipient of infrastructure finance in Africa in 2017, with total commitments standing at \$1.7bn. This accounted for the lion’s share of total funding in the region (47%), while Cameroon received 29% of commitments made to Central Africa, slightly less than the 34% of the regional commitments that were directed towards Rwanda.

Kenya, which with 55.8% was the major recipient of ICA member commitments to East Africa in 2016, was in 2017 replaced by Tanzania, which received 34% of the region’s allocations.

Country-level commitments expressed as dollar spend per capita and as a percentage of GDP show interesting distributions, with Indian Ocean islands benefitting from ICA financing in greater terms relative to their continental neighbours. Seychelles received \$195 per capita in

Country Allocations

commitments in 2017 compared to the African average of \$23.9/capita while financial commitments made to Madagascar in 2017 were equal to 7.8% of the country's GDP, significantly greater than the African average of 1.9% (Figure 41, below).

Recipients of significant amounts of funding for transport projects in 2017 were Zambia (\$399m), Tunisia (\$489m), Tanzania (\$810m), South Africa (\$288m), Senegal (\$752m), Madagascar (\$728m), Kenya (\$555m), and Côte d'Ivoire (\$650m).

Of the \$4.5bn committed to the water and sanitation sector, Egypt was the largest recipient (\$584m) followed by Ethiopia (\$470m), Tunisia (\$419m) and Kenya (\$352m). Large countries that received limited funding to the water and sanitation sector include Democratic Republic of Congo (\$2.9m) and Zambia (\$10m).

Egypt received the largest commitments to energy sector projects in 2017, amounting to \$1.1bn. Several countries with low GDPs and populations received relatively high levels of commitments to their energy sectors in 2017, including Mali (\$156m), Senegal (\$153m) and Niger (\$145m).

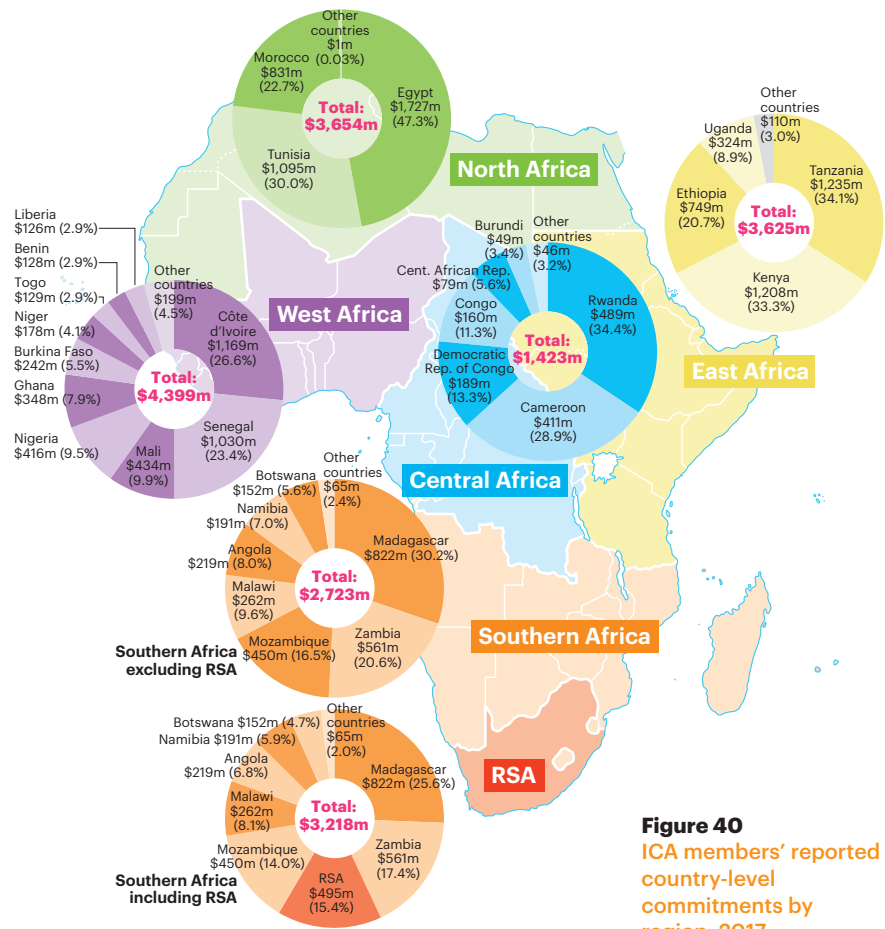


Figure 40
ICA members' reported country-level commitments by region, 2017

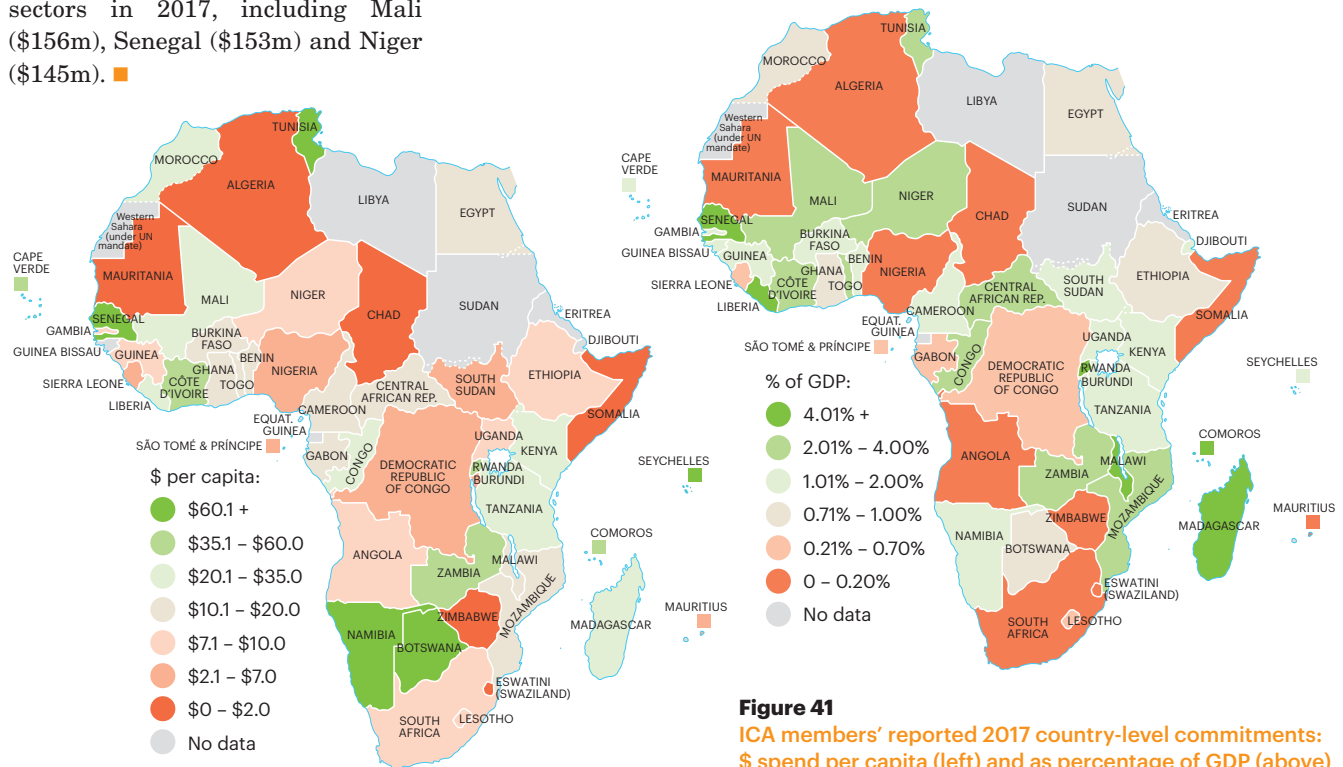


Figure 41
ICA members' reported 2017 country-level commitments: \$ spend per capita (left) and as percentage of GDP (above)

AfDB

Commitments of around \$3.4bn were reported in 2017 by AfDB, lower than the \$4bn reported in 2016, \$4.2bn in 2015 and \$3.6bn in 2014.

The AfDB committed \$1.4bn to transport projects, less than the \$1.7bn reported in 2016 and \$2.4bn in 2015 but on a par with the \$1.4bn committed in 2014. One of the AfDB's largest transport sector commitments went to the Uganda-Kenya Kapchorwa-Suam-Kitale and Eldoret Bypass Roads project. Another large loan supported the Dakar-Diamniadio segment of Senegal's project for an express train link between the capital and its international airport.

Energy commitments in 2017 at \$1.4bn have increased from the \$882m reported by AfDB in the previous year and \$1.1bn in 2015, though less than the \$1.7bn reported in 2014. The AfDB made several commitments and disbursements to PIDA/PAP projects in the energy sector. Projects supported by new commitments included the Central African Interconnection and the West Africa Power Transmission Corridor. It disbursed funds to projects in the West Africa Power Transmission Corridor, North-South Power Transmission Corridor, Central African Interconnection and North-South Power Transmission Corridor. Disbursements were also made to two major regional power generation projects, Inga III Hydro and Rusumo Falls.

ICT commitments for 2017 amounted to \$100m which is less than the commitments of \$119m in 2016 and \$122m in 2015. The AfDB's ICT commitments in 2017 focused on the Central Africa Fibre-Optic Backbone Project (CAB), specifically the Central African Republic component of this major regional project.

Canada

With total commitments of \$19m, Canada focused once more in 2017 on support for energy projects with 72% or \$14m of its commitments going to the sector, more than double the amount committed in 2016. Multi-sector projects attracted \$5m of commitments. ICT projects accounted for \$351,000 and water and sanitation projects for \$312,000 of commitments. All of Canada's support is ODA.

Of its \$140.3m 2016 commitments, Canada committed \$135.4m to energy and \$4.6m to water and sanitation operations and \$312,986 to ICT projects.

In 2017 Canada announced it was creating a development finance institution with an initial capitalisation of C\$300m to be housed within Canada's Export Development Corporation (EDC).

The Development Finance Institute Canada (DFIC) has been built progressively since the 2017 announcement and is now operating as a wholly owned subsidiary of EDC under the FinDev Canada brand.

FinDev Canada's mandate is to support the growth and sustainability of businesses in developing markets. It aims to fill the gap between commercial support and development assistance by supporting private sector activity where it contributes to sustainable development. It aims to be financially sustainable by generating returns on its loans and investments, and to have a favourable economic and social impact in the communities where its clients operate.

In addition, FinDev Canada has a mandate to provide financial services to the private sector in developing countries with the aim of combating poverty through economic growth. Areas of focus will include green growth, agribusiness, and support for small and medium-sized enterprises through local financial institutions

with specific goals to generate economic development by creating jobs, promoting women's economic empowerment, and action to combat climate change.

Global Affairs Canada manages Canada's international development and humanitarian assistance. Canada's priorities for Sub-Saharan Africa are providing development assistance, promoting democracy, promoting peace and security and increasing commercial and economic ties. International development efforts in Sub-Saharan Africa are focused on ten countries: Benin, Burkina Faso, Democratic Republic of Congo, Ethiopia, Ghana, Mali, Mozambique, Senegal, South Sudan and Tanzania. In North Africa, Canada works with Egypt, Tunisia and Morocco.

Canada also works with other African countries where challenges benefit from regional approaches, and with continental institutions such as the African Union and the AfDB, as well as regional economic communities.

DBSA

DBSA committed \$497m to Africa's infrastructure in 2017. The majority of this (\$381m) targeted the transport sector. Multi-sector projects attracted \$81m of commitments while \$28m targeted the energy sector. The ICT and water sectors saw commitments of \$140m and \$5m, respectively. In 2016, energy sector projects received the most commitments (\$544.8m) followed by multi-sector (\$511.5m). DBSA's disbursements in 2017 amounted to \$912m, slightly less than the \$1.2bn reported in each of the previous two years.

DBSA manages the South African government and EU developed Infrastructure Investment Programme for South Africa and SADC's Project Preparation and Development Facility (PPDF) which is funded by Germany (through KfW) and the EU.

The aim of the PPDF is to assist SADC in addressing the implementation of the SADC Regional Infrastructure Development Master Plan, which will promote and contribute to enhancing regional economic integration in the SADC region.

It also manages the New Economic Partnership for Africa's Development Project Preparation and Feasibility Study and was fund manager of the completed and closed DFID Tripartite Trust Account (TTA). The TTA financed priority infrastructure projects through pooled donor and other funds. All remaining funds were returned to DFID in February 2018.

DBSA disbursed \$6.9m to Ravinala Airports which holds the concession to operate airports in Antananarivo, Madagascar's capital and Nosy Be, the country's main tourist destination. Four DFIs have collaborated to support the improvement and expansion of the airports. As well as DBSA, the project is supported by the IFC, Proparco, and OPEC Fund for International Development (OFID). Support has also been forthcoming from the Emerging Africa Infrastructure Fund (EAIF) for the \$245m programme of work. Construction work in the project is underway at the Ivato international airport in Antananarivo and the Fascene international airport in Nosy Be.

DBSA also supports the Kathu Solar Park, a 100MW greenfield Concentrated Solar Power (CSP) project located in the town of Kathu in the Northern Cape Province of South Africa. Shareholders include Engie of France, South Africa's Government Employees Pension Fund and SIOC Community Development Trust, Development Bank of Southern Africa Limited, Investec Bank Limited, Lereko Metier and the Kathu Trust.

European Investment Bank

Amongst several sizeable commitments by EIB in 2017 was a €219m (\$252m) financing for the depollution of the Kitchener Drain, one of the most severely polluted drains in the Egyptian Nile Delta.

The project, which has also received financing from European Bank for Reconstruction and Development (EBRD), comprises: (i) wastewater & sanitation; (ii) solid waste, and (iii) drain infrastructure rehabilitation. The project is expected to enhance health and social conditions in the surrounding areas by improving wastewater and sanitation; solid waste, and drain infrastructure rehabilitation.

The project is expected to be co-financed by EIB and EBRD, with EIB financing focusing on the wastewater and sanitation project components and EBRD financing focusing on the solid waste and drain rehabilitation project components. The EIB and EBRD will be seeking an EU grant contribution from the Neighbourhood Investment Facility for this project.

EIB in 2017 disbursed €75m (\$86m) for the conversion of the existing open cycle gas turbine power plant to a combined cycle gas turbine power plant in El Shabab, Egypt. When completed, the conversion will allow the project promoter, Egyptian Electricity Holding Company, to increase generating capacity at the plant from 1,000MW to 1,500MW. The project employs modern, commercially proven, combined-cycle power generation technology to increase the output and fuel efficiency of an existing power plant project. It is expected to contribute to meeting the increasing electricity demand at a competitive cost, with relatively low environmental impact.

EIB committed €166m (\$190m) for the construction of a 98.9km long two-lane each-way motorway in central

Tunisia between the cities of Sbikha and Jelma.

The project benefits expected include time savings and vehicle operating cost reductions for road users on the corridor, due to enhanced road capacity.

In Madagascar, EIB committed to a €110m (\$122m) loan and EU-AITF a €109m (\$122m) grant for the rehabilitation of several priority road sub-sections in the northern and southern parts of Madagascar, allowing access to ports and unlocking economic growth potential in the region. The project will improve transport connections in the northern and southern parts of the country, which will help the business environment and strengthen and develop the private sector. The modernisation of the road network will increase people's mobility and support the transportation of goods, thereby unlocking growth potential in the areas covered by the project.

EU-Africa Infrastructure Trust Fund/AIP

EU-AITF provided new commitments of \$76.3m in 2017 compared with \$64m in 2016 and \$156m in 2015. The majority (\$66m) of 2016 commitments were directed at energy projects, while transport projects received \$10m.

Disbursements in 2017 amounted to \$28m compared with \$38m in the previous year. The fund reported de-commitments of \$37m, of which \$20m related to transport and \$17m to energy projects.

Around two-thirds of EU-AITF commitments are directed at PIDA/PAP projects (*see p40 on ICA members' participation in PIDA/PAP*).

The Africa Infrastructure Platform, formerly known as the EU-Africa Investment Facility (AfIF), is a new blending mechanism. It started operating in November 2015 and combines grants with other resources

such as loans from DFIs to leverage additional financing for development and increase the impact of EU aid. AIP provides its support through investment grants, technical assistance, risk capital and other risk sharing instruments. It will progressively replace EU-AITF, a process that began in mid-2015.

The fund provides technical assistance for preparatory work, project supervision and targeted capacity building. It provides interest rate subsidies to lower interest rates and reduce the total amount of debt.

Investment grants are also available to finance project components or part of an investment, to increase the concessionality of the financing package. AIP also provides financial support to guarantee cost financing, equity or quasi-equity investments or participation and risk-sharing instruments.

France

France reported commitments and disbursements via AFD, its Proparco subsidiary dedicated to private sector support and Fonds Français pour l'Environnement Mondial (French Fund for the Global Environment).

In 2017, commitments by France totalled \$2.1bn, in line with the \$2.8bn, \$2.5bn and \$2.4bn committed in each of the successive previous years. Commitments were spread across three sectors, with energy projects attracting \$901m or 42% of the total amount committed. Transport projects received \$672m or 32% of commitments while water and sanitation projects attracted \$550m or 26% of the total amount committed by France.

France uses blended funds significantly. Of its 2017 commitments \$272m or 13% comprised blended funds while grant funding accounted for \$49m or 2%.

AFD is investing with CDC in a €600m (\$691m) investment fund. The

agency aims to play a catalytic role in the financing of infrastructure projects, mainly in Africa, through long-term equity investment in energy, transport, telecommunications and digital infrastructure.

The fund aims to facilitate the design and implementation of low-carbon projects. With average investments of between €15m-€50m (\$17m-\$58m), AFD and CDC plan to leverage more than €6bn of investments.

The alliance intends to make use of CDC's relationships with many public banks and institutions and its presence in many countries through shareholdings and subsidiaries.

The AFD network meanwhile, with its 85 agencies as well as geographical departments at its headquarters, will supply CDC with information and analysis and share its expertise on the realities of financing needs and existing stakeholders.

Germany

Germany reported \$838m of commitments via KfW (\$685m), GIZ (\$132m) and Deutsche Investitions- und Entwicklungsgesellschaft (DEG – \$21m). Most 2017 commitments targeted water (\$294m or 35%) followed by transport (\$263m or 31%) and energy (\$240m or 29%) projects.

KfW, the largest German donor to African infrastructure in 2017, committed 38% of its \$685m commitments to projects in the transport sector and 35% to water and sanitation operations. Energy projects attracted 24% of commitments and multi-sector projects 3% of KfW's total commitments.

New commitments in 2017 from KfW focusing on PIDA/PAP projects targeted the Northern Multimodal Corridor in Kenya, the West Africa Power Transmission Corridor and the Ruzizi III hydropower plant.

Of KfW's disbursements, 59% targeted projects in the energy sector while 37%

were directed towards operations in the water and sanitation sector and 4% focused on projects in the transport sector.

KfW makes significant use of blended funds. Of its 2017 commitments \$113m or 17% comprised the loan element of blended funds.

Grant funding however accounted for \$343m or 50% and loans amounted to \$228m or 33% of commitments in the year.

In 2017 GIZ's commitments, which is mostly technical assistance and provided on basis of commission by Germany's Federal Ministry of Economic Cooperation and Development (BMZ), focused mainly on the energy and water and sanitation sectors, with 55% of commitments going to energy and 43% of commitments going to water and sanitation projects. Multi-sector projects attracted 2% of GIZ's commitments.

Of GIZ's disbursements, 61% targeted projects in the water and sanitation sector while 37% were directed towards operations in the energy sector and 6% and 2% focused on projects in the transport sector and multi-sector projects, respectively.

DEG's commitments focused entirely on ICT projects while disbursements were more or less evenly distributed between projects in the ICT and energy sectors.

GIZ continues to provide support to the Programme for Infrastructure Development in Africa (PIDA) with a commitment of €2m (\$2.3m) in 2017.

GIZ also committed in 2017 to the Lake Chad Basin Commission (LCBC) capacity development project. It is investing in the institutional reform of LCBC, the consolidation of planning processes, the setting up of a monitoring and evaluation system and an information system (regional database), and the improvement of internal and external communication.

ICA Member Activities

Disbursements to PIDA/PAP projects included efforts to promote a climate friendly energy pool in West Africa.

International Finance Corporation

In 2017, IFC committed \$523m, of which \$341m or 65% targeted projects in the energy sector. Multi-sector projects attracted \$75m or 14% of commitments and ICT projects \$60m or 12% of commitments. IFC committed \$46m or 9% to projects in the transport sector. This compares with \$413m committed in 2016, \$246m in 2015 and \$621m in 2014.

Total disbursements made by IFC in 2017 amounted to \$212m of which \$86m or 41% went to projects in the transport sector and \$65m or 31% to multi-sector projects. Energy projects received \$41m or 19% and ICT projects \$19m or 9% of disbursements. IFC disbursed \$203m in 2016 compared with \$292m in 2015 and \$747m in 2014.

IFC supported the South African city of Ekurhuleni's capital investment programme through an investment of up to \$50m (South African rand equivalent) in the city's bond issuance of around the equivalent of \$106m. The investment is aimed at capital spending to improve and expand public infrastructure. The city proposed capital expenditure to support investment in up to 67km of new roads and the maintenance of over 1,300km of existing roads; electrical infrastructure including the connection of over 6,000 new households; and water and sanitation infrastructure including the upgrade of existing infrastructure and installation of new water and sewer pipes to expand access to services to 1,200 settlements.

IFC and a consortium of other lenders had by 2017 pledged \$653m to support Egypt's ambitious Benban solar project. The financing will help 13 private companies build and operate

power plants at the site. IFC led a financing package for the Benban project under its Nubian Suns programme, marshalling support from a consortium that included nine international banks. The World Bank also supported reforms to Egypt's electricity sector and provided the country with a \$3.2bn loan. The Multilateral Investment and Guarantee Agency (MIGA) is providing \$210m-worth of political risk insurance to private lenders and investors involved in the solar park.

Italy

Italy has provided support to Mozambique's water and sanitation sector with a 2017 commitment of €60m (\$69m) for a project designed to build and renovate rainwater drainage systems in the city of Maputo. It aims to improve living conditions and the safety of local people. The initiative will enhance hygiene and environmental conditions and reduce the incidence of waterborne illnesses.

This operation confirms the strategic role of Italy's newly established development bank, Cassa Depositi e Prestiti (CDP). It operates as part of Italy's restructured Ministry of Foreign Affairs and International Cooperation (MAECI), which leads Italy's development policy. Established in 2016, CDP provides technical and financial support to the ministry and the Italian Development Cooperation Agency (AICS).

CDP can act as an administrative manager of third-party funds, including Italy's Revolving Fund for Development Cooperation. It can also manage Italian, European and international funds, or funds connected with EU programmes that may involve the private sector.

The Italian agency has adopted a blended finance approach aimed at bringing together various types of funds to provide the most effective

form of development financing. In addition, CDP may intervene on its own initiative, using its own resources, public/private blending, or other Italian public funds.

AICS is in charge of the execution and monitoring of all projects in accordance with the strategic objectives set by the MAECI. The agency is largely autonomous and manages its own budget to provide more operational flexibility.

Japan

Japan reported commitments of \$2.4bn and disbursements of \$4m in 2017. Of Japan's commitments, \$1.9bn or 82% were directed at transport projects, \$394m or 17% at water and sanitation projects and \$30m or 1% at energy projects.

This compares with commitments of \$2.4bn and disbursements of \$58m in 2016. In 2015, Japan committed \$1.8bn compared with \$2bn in 2014. Disbursements in 2015 amounted to \$960m compared with \$1bn in 2014.

Some of Japan's largest 2017 commitments targeted PIDA/PAP projects in the transport sector, including the following:

- Toamasina Port development in Madagascar (part of PIDA/PAP Southern Africa Hub Port and Rail Programme);
- Abidjan Port Cereal Berth construction project in Côte d'Ivoire (part of PIDA/PAP West Africa Hub Port and Rail Programme);
- Mombasa Port Area Road Development Project II in Kenya (part of PIDA/PAP Northern Multimodal Corridor);
- Construction of Bridges on N380 in Cabo Delgado Province in Mozambique (part of PIDA/PAP Beira-Nacala Multimodal Corridors);
- Rehabilitation of port facilities in Dakar, Senegal (part of PIDA/PAP

West Africa Hub Port and Rail Programme);

- Upgrade of South-East Tansoba Boulevard Bypass in Ouagadougou, Burkina Faso (part of PIDA/PAP TAH programme);
- Project finance for the construction of Nacala Railway and Port Infrastructure in Mozambique and Malawi (part of PIDA/PAP Beira-Nacala Multimodal Corridors).

JBIC committed \$1.3bn under a loan agreement in project financing for the construction of Nacala Railway and Port Infrastructure in Mozambique and Malawi, operations in which Japan's Mitsui and Brazilian miner Vale hold an equity stake. Vale announced in March 2017 that it had completed the sale of a stake in Mozambique's Moatize coal project to Mitsui. The railway and port project is internationally co-financed by the AfDB and private financial institutions, including Sumitomo Mitsui Banking Corporation, Mizuho Bank, Standard Chartered Bank, Nippon Life Insurance Company, Bank of Tokyo-Mitsubishi and Sumitomo Mitsui Trust Bank. The syndicated loans bring the total co-financing amount to \$2.7bn.

Expansion of Madagascar's largest commercial port at Toamasina is the aim of one of JICA's largest (\$400m) loans. By expanding the port this project will strengthen Madagascar's ability to meet increasing demand for freight, thereby expanding and improving the efficiency of goods flows and contributing to its economic development. The ODA loan will help finance public works such as breakwater expansion, construction of a container freight berth, dredging work and expansion of the container yard. Part of the loan will be used to pay for consulting services, including detailed design work, bidding assistance and construction supervision.

United Kingdom

In 2017, the UK committed \$623m, of which \$246m or 29% targeted projects in the energy sector. Water and multi-sector projects each accounted for 16% of the UK's contributions with commitments of \$134m and \$137m, respectively. Commitments to transport operations amounted to \$80m or 10% and ICT projects \$26m or 3% of the UK's total contribution. Direct grant funding from DFID and equity investments by CDC totalled \$537m in 2016 and \$288m in 2015.

The UK's 2017 commitments comprise \$280m direct grant funding from DFID and \$344m in equity investments by CDC Group.

In 2017, DFID committed 48% of its funds to water (\$134m) with 29% of funds going to transport (\$80m), 12% to multi-sector (\$34m), 11% to energy (\$33.7m) and 1% to ICT (\$7.7m).

In the same year DFID made disbursements of \$294m, of which 34% went to water (\$101m) with 22% to energy (\$65m), 20% to multi-sector (\$58m), 17% to transport (\$49m), and 7% to ICT (\$21m).

In comparison, in 2016 DFID disbursed \$291m, of which the most went to water (\$109m) followed by transport (\$78m), multi-sector (\$57m), energy (\$41m) and ICT (\$6m).

Of CDC's total commitments of \$344m, \$216m or 63% is directed at energy operations while \$103m or 30% supports multi-sector activities and \$25m or 7% is focused on the ICT sector.

Pan-African commitments accounted for 34% of CDC's investments while 26% targeted North African activities. The UK's DFI committed 7% of investments to Southern Africa.

Data for this year's report were provided by DFID and obtained from the UK's DFI, CDC Group. UK contributions not reported on in this report include commitments to

multilateral institutions, including the AfDB and the EU. DFID reporting does however include commitments to the Private Infrastructure Development Group.

World Bank

The World Bank's 2017 commitments amounted to \$7bn, of which \$2.4bn or 34% targeted projects and programmes in the energy sector. It committed \$2.2bn or 31% to transport and \$2.1bn or 20% to water and sanitation activities. Commitments to ICT amounted to \$260m or 4% of total commitments.

Disbursements by the World Bank in 2017 amounted to \$4.1bn, of which \$1.9bn or 45% were directed towards energy projects. The transport and water sectors received around \$1bn or 24% of the World Bank's disbursements in the year. ICT disbursements amounted to \$260m or 6% of the total disbursed in the year.

Notable commitments in the energy sector included \$325m to the Electricity Transmission and Access Project to contribute to the improvement of the efficiency and reliability of electricity supply and increased access to electricity in Côte d'Ivoire. The Improved Rural Connectivity project in Zambia, which aims to improve rural road accessibility, received a \$200m commitment.

A commitment of \$300m was provided to the Water and Sanitation Development Project to improve water supply and sanitation services in selected coastal and northeastern regions in Kenya. This project involves the rehabilitation and expansion of urban water supply and sanitation services.

In the transport sector the World Bank supported the Dar es Salaam Maritime Gateway Project in Tanzania with a commitment of \$345m to improve the effectiveness and efficiency of the Port of Dar es Salaam. ■

5. Other Public Sources of Financing



5.1 African State Spending on Infrastructure

This chapter looks at identified spending commitments made in 2017 towards Africa's infrastructure by a range of actors that are not ICA members. As a group, Africa's national governments provided the largest block of funding for the continent's infrastructure.

The methodology for collecting and compiling data on state spending for infrastructure has been improved in *Infrastructure Financing Trends in Africa, 2017*. The improved methodology is designed to capture spending not only at a national level but also at a subnational level, where it can be identified that subnational spending has not been accounted for in national or federal budgets. To ensure consistency, this improvement required a restatement of 2016 data to include the same subnational data that are included in this report.

In 2017, total identifiable infrastructure capital expenditure allocations for 47 African national government budgets amounted to \$34.3bn. This compares with a revised \$30.7bn for 49 countries, in 2016. The revised total was reached by increasing the \$26.3bn in the 2016 report by \$4.4bn of newly identified government budget allocations. The revision includes the addition of budget data for Central African Republic, Chad and

Equatorial Guinea, and additional state subnational spending identified for RSA.

To minimise double counting, and to improve the accuracy of the data as much as possible, identifiable external funding was removed. Double counting remains a possibility.

Around 10% of budget commitments were classified as unallocated where it is known that capital expenditure commitments fall into the ICA's definition but it is not possible to allocate to a specific sector.

Transport

As in previous years, transport accounted for the largest proportion of the combined infrastructure budget allocations across Africa, claiming two-thirds of all funds in 2017, and a higher proportion than the 53% of Africa's budgets allocated to transport in the previous year. Spending on the transport sector grew by 23%, accounting for much of the 11% overall growth for infrastructure spending across all sectors.

Despite this large overall growth, changes in individual regions and countries were inconsistent. For example, while transport allocations doubled in East Africa and Southern Africa and increased by one-third in North Africa, there was little change in allocations in West Africa and South

Africa. In Central Africa allocations decreased by 38%. These regional variations are reflected in the following country-level variations: in Tunisia and Gabon transport sector spending grew significantly, while in Chad and Cameroon the allocations decreased.

Water

Allocations to water and sanitation projects amounted to \$5.9bn, accounting for 19% of total allocations, thus making it the sector with the second highest contributions to 2017 total infrastructure spending across all sectors. This is a minor decrease from the water allocations for 2016. Three countries (Burkina Faso, Guinea and Niger) prioritised the water sector. In many countries the transport sector is given top priority.

Some countries allocated their budgets in favour of water-based infrastructure, without prioritising it. For example, RSA allocated 34% of its infrastructure budget.

Regional changes in spending on the water sector vary. This is especially the case with Central Africa where such spending declined by 67% between 2016 and 2017. In West and East Africa the growth in spending on water was significant.

There were notable changes in the allocation of funds for the water sectors in several countries between 2016 and

2017. For example, in Zambia, water spending rose from 0.2% of its infrastructure budget to 8.7%. The significant increase in Zambia is consistent with the government's efforts to achieve national targets for improved access to water and sanitation, of 100% and 90%, respectively by 2030.

Energy

The share of the energy sector in overall infrastructure spending is 18% thus making it slightly lower than the

share of the water sector. Following a 20.8% decline in the energy sector in 2016, budget allocations to energy infrastructure are on the rise and increased by 26% in 2017.

Regional trends indicate growth in energy sector spending in all regions. The exception is Central Africa where spending for the energy sector declined by 39%. In most countries there is steady growth in energy sector spending. Botswana's allocations for the energy sector have increased significantly by 700%. Several of

Botswana's flagship projects have received increased attention. In particular, the allocations for the North-West electricity grid, rural electrification and emergency power supply are notable. The main purpose of the increased attention to the energy sector is to expand the national grid to provide electricity to the 20% of villages that are presently not served adequately by the existing electricity grid. In September 2016, the government of Botswana signalled a new commitment to introduce local renewable energy sources, along with a plan to expand the national grid using green technology.

ICT

ICT projects received the lowest state budget allocations across all sectors with \$600m committed. This amount is somewhat consistent with commitments in previous years. It is however 33% less than the unusually high \$894m of ICT allocations reported in 2016.

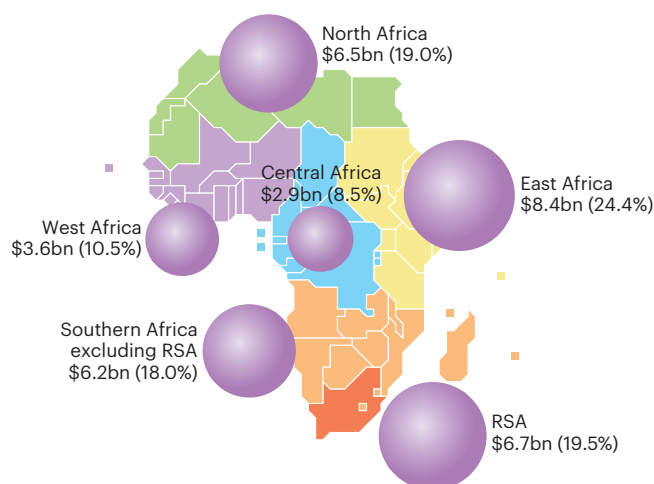
Multi-sector and Unallocated

Multi-sector and unallocated budget allocations have been merged in this year's report to facilitate consistent trend analysis. In 2017 there was a 25.5% drop compared with 2016 in allocations to these categories. ■



Figure 42 (left)
National government budget allocations by sector, 2013-2017

Figure 43 (below, right)
National government budget allocations by region, 2017



Regional State Spending on Infrastructure in 2017 (\$m)

In the the following tables, identifiable state spending on infrastructure by region is presented. The countries where no 2017 data were available are Djibouti, Equatorial Guinea, Eritrea, Guinea Bissau, Gambia, Libya and Sudan. In addition, the tables show, where identifiable, how external financing has been used to supplement state budgets. It should be noted that data given for external financing are mainly indicative. This is because many countries do not separate internal and external funding. In other words, data listed under the heading of internal financing may also include undisclosed external funding.

West Africa	Internal Financing (\$m)	External Financing (\$m)	Internal & External Financing (\$m)
Benin	244.2	156.0	400.2
Burkina Faso	304.1	0.0	304.1
Cape Verde	49.0	0.0	49.0
Cote d'Ivoire	368.4	78.1	446.5
Ghana	243.4	0.0	243.4
Guinea	137.5	0.0	137.5
Liberia	0.2	0.7	0.9
Mali	165.8	0.0	165.8
Niger	8.9	0.0	8.9
Nigeria	1,074.0	0.0	1,074.0
Senegal	769.5	0.0	769.5
Sierra Leone	37.2	64.1	101.3
Togo	218.3	0.0	218.3
Totals	3,620.5	299.0	3,919.5

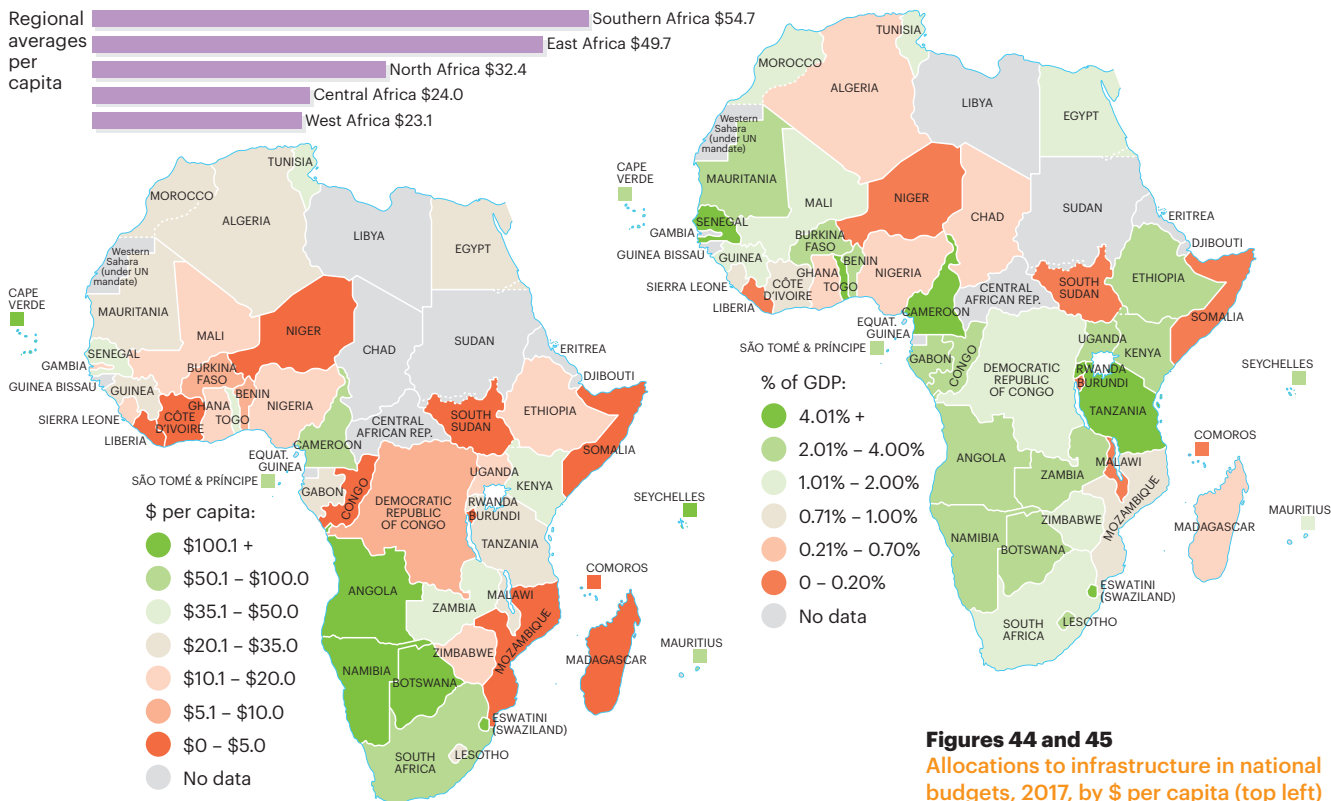
Central Africa	Internal Financing (\$m)	External Financing (\$m)	Internal & External Financing (\$m)
Burundi	2.3	0.0	2.3
Cameroon	1,242.4	0.0	1,242.4
Central African Republic	7.9	35.3	43.1
Chad	46.3	93.7	140.1
Congo-B	303.9	0.0	303.9
DRC	523.8	0.0	523.8
Equatorial Guinea	0.0	0.0	0.0
Gabon	366.3	0.0	366.3
Rwanda	433.2	0.0	433.2
São Tomé and Príncipe	0.0	3.9	3.9
Totals	2,926.1	132.9	3,059.1

South Africa	Internal Financing (\$m)	External Financing (\$m)	Internal & External Financing (\$m)
South Africa	6,698.7	0.0	6,698.7

North Africa	Internal Financing (\$m)	External Financing (\$m)	Internal & External Financing (\$m)
Algeria	817.1	0.0	817.1
Egypt	3,730.3	3,704.3	7,434.6
Mauritania	102.6	0.0	102.6
Morocco	1,134.7	0.0	1,134.7
Tunisia	737.5	0.0	737.5
Totals	6,522.3	3,704.3	10,226.6

East Africa	Internal Financing (\$m)	External Financing (\$m)	Internal & External Financing (\$m)
Ethiopia	2,359.1	0.0	2,359.1
Kenya	1,977.1	2,076.0	4,053.1
Seychelles	51.5	0.0	51.5
Somalia	1.4	0.0	1.4
South Sudan	4.0	0.0	4.0
Tanzania	3,429.2	0.0	3,429.2
Uganda	559.8	569.5	1,129.3
Totals	8,382.1	2,645.4	11,027.5

Southern Africa	Internal Financing (\$m)	External Financing (\$m)	Internal & External Financing (\$m)
Angola	3,545.3	0.0	3,545.3
Botswana	465.7	0.0	465.7
Comoros	0.2	25.4	25.7
Lesotho	94.8	89.6	184.4
Madagascar	36.8	77.2	114.0
Malawi	11.8	166.8	178.6
Mauritius	128.4	0.0	128.4
Mozambique	106.7	470.2	576.9
Namibia	334.0	15.6	349.5
Swaziland	173.7	0.0	173.7
Zambia	990.2	0.0	990.2
Zimbabwe	308.1	0.0	308.1
Totals	6,195.7	844.8	7,040.5



Figures 44 and 45
Allocations to infrastructure in national budgets, 2017, by \$ per capita (top left) and percentage of GDP (top right)

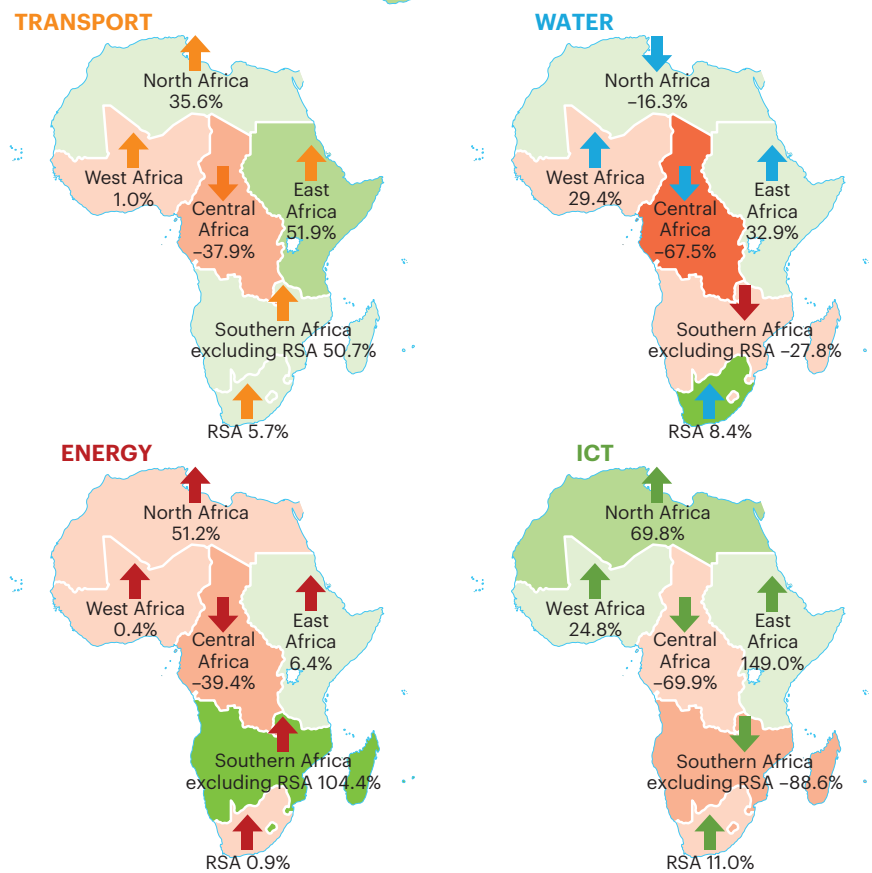


Figure 46
Percentage of infrastructure allocations in national budgets by sector and region for 2017, with year-on-year change indicated (left)

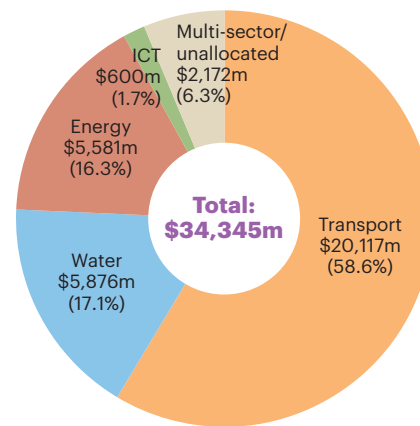
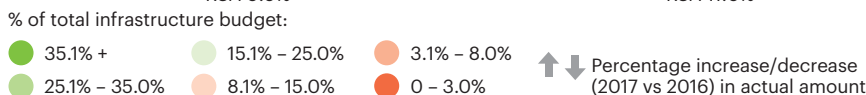


Figure 47
Total identifiable 2017 infrastructure capital expenditure allocations in national government budgets, by sector

Spending per Capita and as a Percentage of GDP

The following tables show the top 20 countries in terms of identifiable internal infrastructure spending as a percentage of GDP and identifiable internal infrastructure spending per capita. As with all the data in this section, figures should be taken as indicative as some state spending identified as internally-financed may benefit from external funding that may have been reported in this or previous editions, or may be reported in future editions of *Infrastructure Financing Trends in Africa*.

As expected, 16 countries feature in both top 20 rankings. The exceptions are Benin, Burkina Faso, Ethiopia and Togo which feature in the top 20 countries in terms of identifiable internal infrastructure spending as a percentage of GDP but not in the top 20 of identifiable internal infrastructure spending per capita. Egypt, Mauritius, South Africa and Tunisia feature in the top 20 countries in terms of

identifiable internal infrastructure spending per capita but are not ranked similarly in terms of identifiable internal infrastructure spending as a percentage of GDP.

Although they do not appear in both lists, the rankings of Benin, Burkina Faso and Egypt are quite close, but the differences in rankings amongst the other countries noted in the previous paragraph are quite pronounced.

The biggest differences are seen with Mauritius, RSA and Tunisia that ranked substantially higher in terms of per capita spending compared with infrastructure spending as a percentage of GDP. Togo and Ethiopia meanwhile rank substantially higher in terms of infrastructure spending as a percentage of GDP compared with per capita spending.

Internally consistent data sets have now been built for six years, and trends are noticeable. Southern Africa, including RSA is the region spending consistently more on infrastructure than other regions on a per capita basis. ■

Identifiable Internal Infrastructure Spending	
Top 20	% of GDP
Tanzania	5.57%
Rwanda	4.86%
Senegal	4.79%
Togo	4.55%
Swaziland	4.31%
Cameroon	4.05%
Congo-B	3.90%
Zambia	3.87%
Lesotho	3.48%
Seychelles	3.48%
Ethiopia	2.96%
Angola	2.86%
São Tomé and Príncipe	2.84%
Cape Verde	2.83%
Botswana	2.78%
Namibia	2.66%
Benin	2.60%
Gabon	2.53%
Kenya	2.52%
Burkina Faso	2.31%

Identifiable Internal Infrastructure Spending	
Top 20	(\$ per capita)
Seychelles	549
Botswana	210
Gabon	207
Namibia	134
South Africa	122
Angola	121
Swaziland	118
Mauritius	95
Cape Verde	87
Tunisia	65
Tanzania	64
Zambia	62
Congo-B	61
São Tomé and Príncipe	53
Senegal	52
Cameroon	50
Lesotho	48
Kenya	42
Egypt	38
Rwanda	36

In several African countries, state spending on infrastructure is substantially made at a state, provincial, municipal, city or local level rather, than at a federal level. Nigeria and South Africa fall into this category.

Nigerian State Funding for Infrastructure

Nigeria's infrastructure demonstrates how in some countries, subnational financing exceeds federal funding. Nigeria's state investments in infrastructure amount to considerably more than the sums allocated to infrastructure in the nation's federal budget, which are reported in *Infrastructure Financing Trends in Africa, 2017*.

Nigeria's infrastructure development is funded at a federal level and by the country's 36 states. On the other hand, Nigeria's 774 local governments are tasked with the construction and maintenance of roads, streets, drains, public transportation and refuse disposal.

Federal funding for infrastructure in Nigeria was eclipsed by state-level funding in 2017, with the 26 of the 36 states for which sufficiently detailed data was available cumulatively allocating more than double the

amount of federal budget allocations to infrastructure expenditure. The 26 state budgets allocated \$2.6bn to infrastructure while the federal budget allocation was \$1.1bn in the year.

The following table shows that state allocations for infrastructure in 2017 were weighted mostly towards the transport sector, which accounted for over 77% of identified infrastructure spending. Water Infrastructure saw the second highest amount of allocations (16%), followed by energy (5%), and finally ICT (3%). ■

Nigerian State Spending on Infrastructure (\$m)

State	Total	Rank based on GDP (as of 2010)	State	Total	Rank based on GDP (as of 2010)
Lagos	401.7	1	Plateau	67.7	20
Rivers	58.8	2	Bauchi	103.2	22
Delta	149.6	3	Kogi	143.0	23
Kano	196.7	6	Adamawa	160.1	24
Edo	7.7	7	Zamfara	66.9	27
Kaduna	111.7	10	Kwara	42.0	28
Abia	77.6	12	Kebbi	71.0	30
Ondo	30.6	13	Nasarawa	22.7	31
Osun	82.3	14	Jigawa	93.5	32
Anambra	205.2	16	Ekiti	37.3	33
Katsina	110.0	17	Ebonyi	135.7	34
Niger	23.2	18	Gombe	43.4	35
Borno	101.7	19	Yobe	53.9	36

South African State Funding for Infrastructure

South Africa's spending is higher due to improved reporting. Whereas previous years recorded only national financing, the South African treasury has now published data that combines infrastructure financed at national, provincial and local government level.

Provinces and municipalities are responsible for providing roads, electricity, water and municipal infrastructure services. They have the autonomy to allocate resources to

meet basic needs and respond to provincial and local priorities, while giving effect to national objectives. This year's data on South Africa's infrastructure includes national, provincial and local governments leading to total infrastructure spending of \$6.6bn.

The budgets of state-owned power utility Eskom and rail, port and pipeline Transnet are also published by South Africa. Their budgets are not, however included in the overall data in *Infrastructure Financing Trends in Africa, 2017* because not all investments by state-utilities are funded from the public purse. For

example, they may be funded by bond issues, commercial loans or profits retained. In this regard, according to data compiled by Bloomberg Eskom issued a total of 3.8bn rand (\$250m) of debt in 2017. Another reason for excluding state utilities from this section is the possibility of double counting. Eskom, for example, in 2010 received a \$3.75bn commitment from the World Bank, which was reported in ICA data for that year. In *Infrastructure Financing Trends in Africa, 2015*, a \$1.5bn loan from China Development Bank to Transnet was reported. ■

5.2 China



Chinese announced investments in Africa bounced back in 2017 to \$19.4bn compared with \$6.4bn in 2016. In 2015 investments by China amounted to \$20.9bn. This brings the seven-year average of Chinese investments in Africa's infrastructure to \$13bn per annum.

Difficulties remain in confirming Chinese investments in Africa's infrastructure. The figure of \$19.4bn for 2017 may be an under-estimate. Chinese companies that play a key role in the design and construction of infrastructure projects in Africa do not consistently report details of financings for those projects.

An exaggeration of the data on Chinese investments is also possible, because some announced investments do not materialise, although this is a valid point that can be made about commitments from all sources of finance. The largest commitment recorded in *Infrastructure Financing Trends in Africa, 2017* may fall into this

category, as it targets the 3,050MW Mambila hydroelectric power plant in Taraba state. This project has seen false starts before and proved problematic for nearly half a century.

The largest Chinese investment announced in 2017 has been excluded from the data in this report because it seems unlikely to progress. Nigeria's coastal railway may yet receive the \$11.1bn of funding announced, but there are clearly several other options under consideration.

There is no doubt China intends to remain a key funder of Africa's infrastructure development. Marking a milestone in Africa-China relations, the China Overseas Infrastructure Development and Investment Corporation (COIDIC) in April 2017 opened its first African headquarters in Johannesburg, South Africa.

With a \$500m capital base, COIDIC focuses on overseas early-stage projects, especially those in Africa, developing projects from concept to bankability and facilitating China's

overseas infrastructure investments. COIDIC aims to establish public-private partnerships (PPPs) and says it will be involved in the planning, designing, financing and construction of infrastructure projects across Africa in the energy, transportation and ICT sectors. This will be in line with China's Belt and Road initiative, which emphasises international cooperation on infrastructure development.

Chinese financings in the transport sector announced in 2017 include loans of \$1.2bn for the construction in Egypt of an electrified railway network linking Cairo to 10th of Ramadan City and the new administrative capital; \$1.8bn for the Abuja mass transit railway in Nigeria and \$153m for the upgrade of Harare International Airport in Zimbabwe.

In the water sector, China said it would provide \$1.5bn for the construction of the Gerbi Dam in Ethiopia to provide water to Addis Ababa and \$290m for a programme in

Equatorial Guinea that includes plans to improve the treatment of drinking water in various parts of the country.

In the energy sector, China has said it would provide \$1.5bn for the Medupi coal power station in South Africa; \$364m for two hydropower dams in Gabon; \$290m for a 120MW wind park in Ethiopia's Somali state and \$70m for

the construction of the 15MW Ruzibazi power plant in Burundi.

China has also said it would provide \$98m for Zimbabwe's state-owned telecommunications utility, TelOne, for it to implement a broadband expansion project to improve ICT access in the country.

Ghana signed a memorandum of

understanding in 2017 with China's Sinohydro for a multi-sector programme that is expected to cost in the region of \$4bn. The programme includes a multipurpose hydro project at Pwalugu, a flood prevention project in Accra as well as other priority infrastructure projects including garbage treatment plants, solar power plants and rail projects. ■

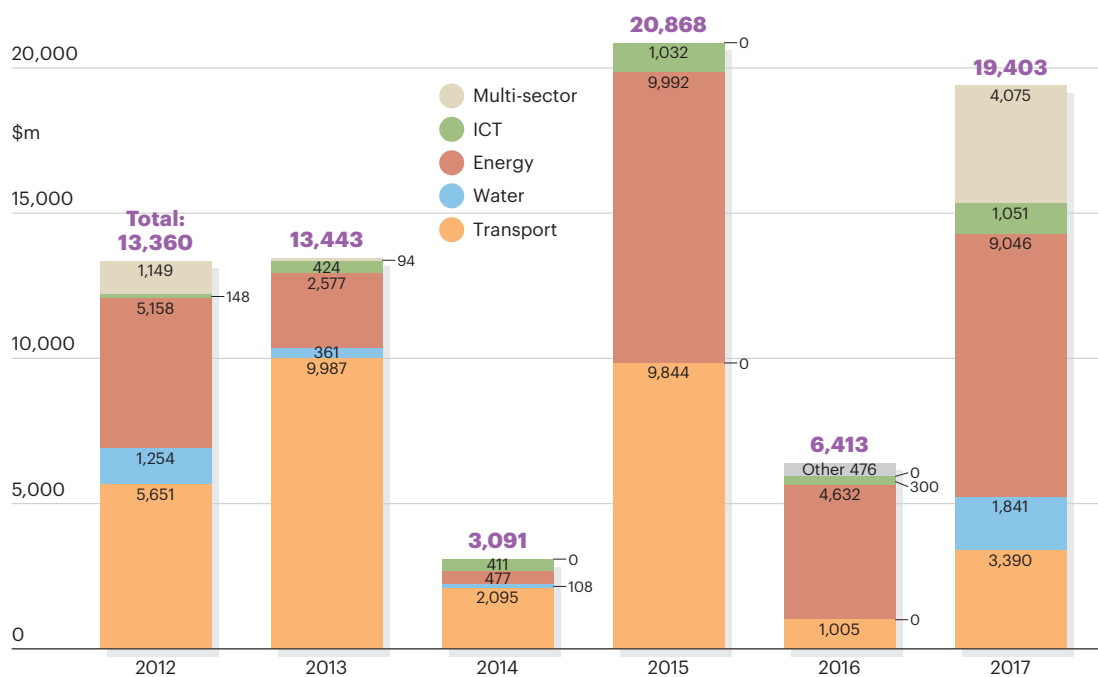


Figure 48
Chinese commitments by sector, 2012-2017

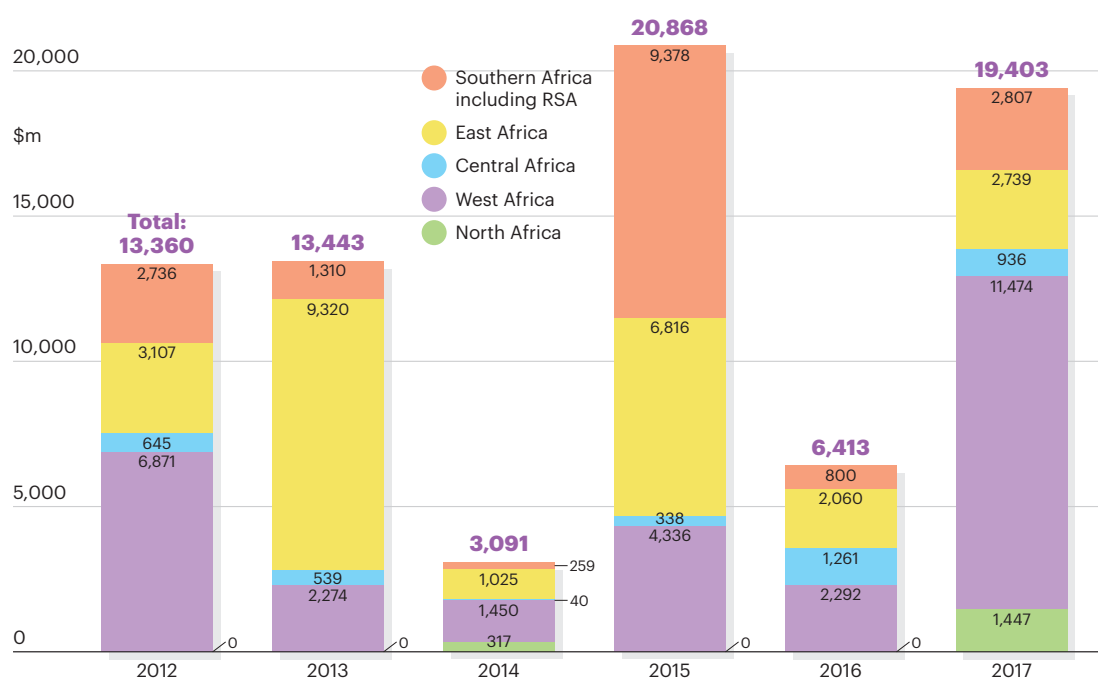


Figure 49
Chinese commitments by region, 2012-2017

5.3 Arab Co-ordination Group

Members of the Arab Co-ordination Group have consistently reported data for the ICA's reports. The data provides clear insights about the group's activities each year, which is appreciated by ICA members.

The ACG committed \$3bn to African infrastructure projects in 2017, compared with \$3.8bn in 2016 and \$4.4m in 2015.

The Islamic Development Bank (IDB) committed \$597m in 2017, significantly lower than its 2016 figure of \$1.1bn. Of the total commitments from all sources, 86.8% was directed towards West Africa. The remaining 13.2% was dedicated to North Africa.

The highest proportion of IDB's commitments targeted energy projects (\$292.3m), accounting for almost half of its investment total (49%). Financings included \$166m towards the construction of the Sirakoro HFO II power plant in Mali, the \$104m

expansion of the Kossodo HFO Diesel Power plant in Burkina Faso and \$22.4m for the Kayes HFO power plant in Mali.

OFID made total commitments of \$180.9m in 2017, compared with \$225.8m in 2016. In 2017, OFID's commitments were spread more evenly across the continent. The greatest proportion of commitments was allocated to North Africa, a region which received no contributions from OFID in 2016.

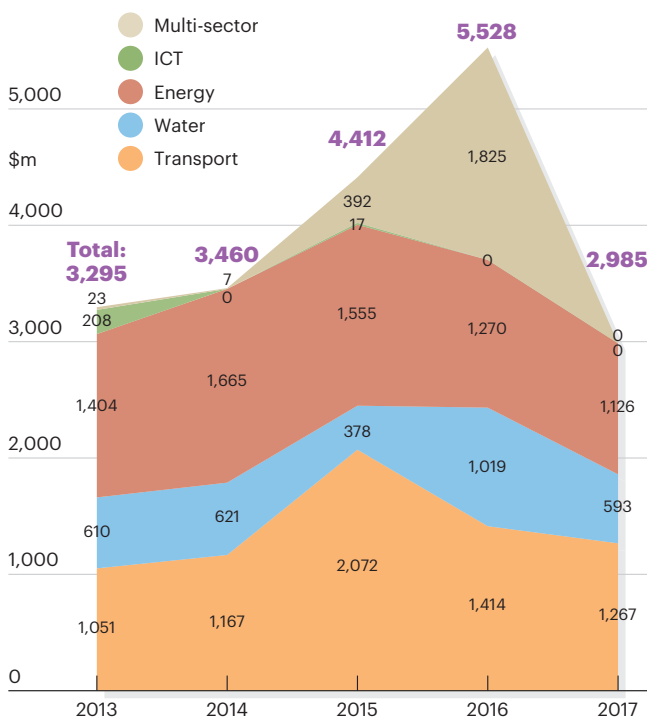
Almost half of OFID's commitments made were directed towards water sector projects (\$87.25m or 48%). Support was provided for the second phase of the rehabilitation of irrigation and drainage pumping stations in Egypt (\$53.2m); the Rwanda Sustainable Water Supply and Sanitation Programme to improve access and provide sanitation services in highly-populated urban areas (\$20m); and the Greater Maseru Water Supply project in Lesotho,

which includes new water infrastructure in peri-urban areas (\$14m).

Commitments by the Saudi Fund for Development (SFD) amounted to \$97m in 2017, compared with \$2.3bn committed in 2016. The largest commitment was made in West Africa, accounting for 91% or \$88m of the fund's total commitment. The remaining 9% was dedicated to North Africa. Of its commitments, the SFD directed 79% to transport, 12% to water and 9% to energy.

The Abu Dhabi Fund for Development (ADFD) committed \$449m in 2017. This amount was significantly higher than its 2016 figure of \$81m. In 2016 the group directed almost half of its commitments toward energy, whereas in 2017, the majority of its commitments were allocated to transport (\$291.1m or 64.8%) with the vast majority directed towards transport projects in Morocco (\$280m or 62% of ADFD's total funding in

BY SECTOR



BY REGION

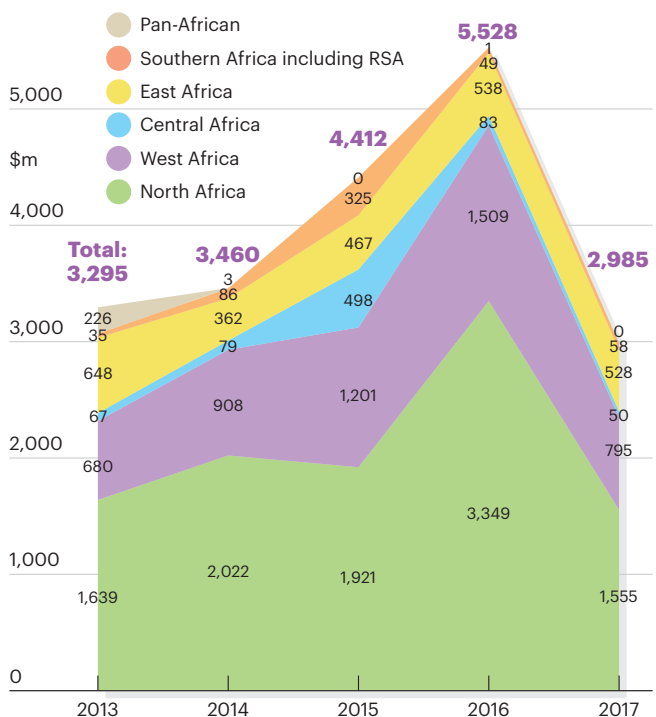


Figure 50
Arab Co-ordination Group (ACG) commitments by sector and region, 2013-2017

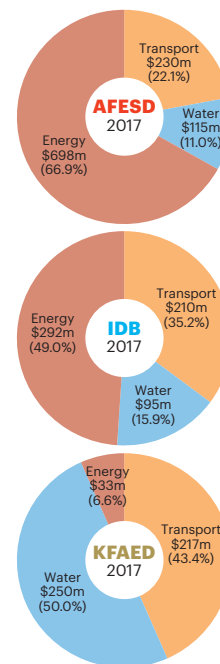
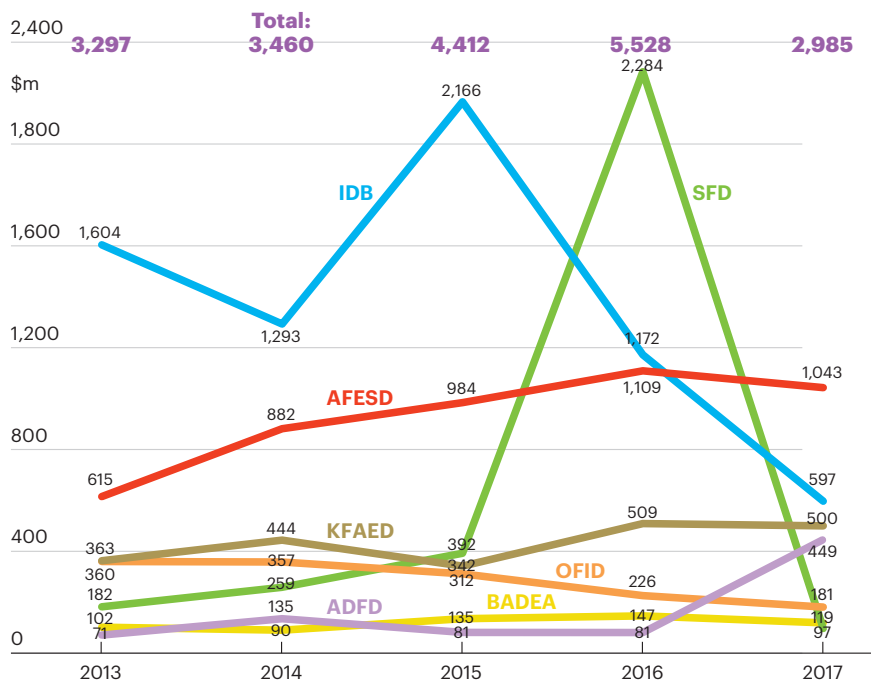


Figure 51
Arab Co-ordination Group (ACG) commitments, by member, 2013-2017

2017). The projects include the rehabilitation and expansion of the old fishing port in Casablanca (\$80m), the development of the Tangier fishing port (\$72m), the construction of a cruise terminal in the Port of Casablanca (\$40m), expansion and rehabilitation of the 30km road between Sidi Allal and Al Maha Forest (\$5m), and a ship repair project in Casablanca (\$83m).

Banque Arabe pour le Développement Economique en Afrique (BADEA – Arab Bank for Economic Development in Africa) committed \$119m in 2017. The largest commitment was made to West Africa, accounting for 61% of the bank’s total commitments. As in 2016, BADEA directed most funding (63%) towards the transport sector with commitments of \$74.5m.

Kuwait Fund for Arab Economic Development (KFAED) committed a total of \$500m, close to its 2016 commitments of \$509m. In line with 2016, the greatest proportion was directed towards North Africa, which accounted for 60% or \$299m of the fund’s total commitment for 2017. KFAED committed \$250m towards water projects, the largest commit-

ment made by the ACG for this sector. The projects included the construction of a seawater desalination plant for Eastern Port Said City in Egypt, which received two loan commitments in 2017 totalling \$176m.

The Arab Fund for Economic and Social Development (AFESD) in 2017 financed \$1bn or 35% of ACG’s commitments to infrastructure projects. Of AFESD’s commitments, \$806m or 77% was directed towards North Africa, and the remaining 23% to East Africa. The highest proportion was committed to energy (67% or \$698m). The projects included developments on Egypt’s electricity transmission grid (\$197.4m) and the construction of the El Bagair Power Generation Plant in Sudan (\$171m).

AFESD’s commitment to energy accounts for 66% of the total ACG commitments for this sector, the largest made by any of its members.

Overall, with the exception of water and multi-sector projects, ACG preferences reflected those of 2016. Transport received \$1.3bn of total commitments in 2017, similar to last year’s commitment of \$1.4bn. Support for the water sector decreased by almost half, from \$1bn in 2016 to \$592.7m in 2017. Energy commitments declined from \$1.3bn in 2016 to \$1.1bn. ICT has never featured prominently in the group’s portfolios and as in 2016, there were no 2017 commitments targeted at this sector 2017. ■

IDB Partners with Chinese Private Equity House

A memorandum of understanding was signed in 2017 between the Islamic Corporation for the Development of the Private Sector (ICD), the private sector arm of Islamic Development Bank Group, and China-Africa Development Fund (CADFund), the Beijing-based private equity firm and subsidiary of the China Development Bank which focuses on Africa. The envisaged cooperation reflects ICD and CADFund’s goal of developing and establishing a strategic framework that focuses on mobilising investment in the African Islamic Infrastructure Financing Fund. ■

5.4 Non ICA European Sources



Commitments to African infrastructure by non-ICA member European development finance institutions totalled \$1.6bn in 2017, a significant increase on 2016 (\$392m). In 2017, energy accounted for more than half of the commitments made (56% or \$894m), a significant increase relative to the 2016 commitment of \$294.2m.

Investments in transport accounted for 31.2% (\$500.7m), a greater share of the total than in 2016 (12.8% or \$50m). Water accounted for 13% or \$208.3m – there were no reported water sector commitments in 2016. Commitments to ICT fell from \$47.3m (12%) in 2016 to \$1m in 2017 (0.06%).

The European Bank for Reconstruction and Development and the Netherlands' FMO again dominated non-ICA European DFI 2017 commitments, accounting for 83% and 12%, respectively, in 2017. In 2016, EBRD contributed 61% and FMO 27% of all commitments from these DFIs.

North Africa accounted for 90.3% (\$1.4bn) of total commitments in 2017. EBRD's mandate for Africa is solely focused on this region, to which it committed \$1.3bn in 2017. Of this \$501m was directed towards transport, \$207m to water and \$620m to energy. This included a commitment of \$322.6m to support the Egyptian National Railways in the acquisition of up to 100 diesel locomotives, technical assistance for the operator's freight reform platform and the upgrade of services.

The bank's transport commitments also included an investment of \$178m to support Tunisian state-owned rail company Société Nationale des Chemins de Fer Tunisiens (SNCFT) with the aim of creating additional capacity on the railway network, addressing overcrowding on trains and improving service reliability. The financing will contribute to the upgrade and realignment of the existing Tunis-Kasserine railway line, improving connections between the North West and Centre West governorates and the capital city Tunis.

EBRD was the only non-ICA European group member to invest in the transport sector. FMO and Austria's Oesterreichische Entwicklungsbank (OeEB) also made commitments in North Africa, accounting for 7% (\$101.6m) and 1% (\$20m), respectively.

Of commitments made by the non-ICA European DFIs in 2017, West Africa

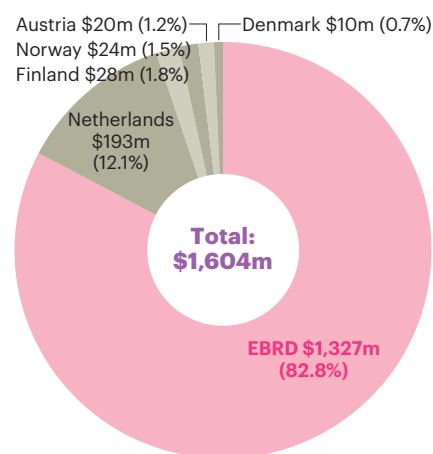


Figure 52
Non-ICA European commitments to infrastructure by source, 2017

accounted \$52.7m (3%), receiving support from FMO and Denmark's Investeringsfonden for Udviklingslande (IFU) for the development of energy generation projects. This included IFU's commitment of \$10.3m to support the development of the Kayes 90MW HFO power plant in Senegal, a project being co-financed by IDB, Banque Ouest Africaine de Développement (BOAD – West African Development Bank), OFID and the EAIF. FMO also directed \$42.2m towards the development of the 50MW Akuo Kita Solar PV project in Mali, \$15.1m towards the development of a 20MW ground-mounted solar photovoltaic (PV) plant in the Louga region of Senegal and \$16.7 for the expansion of the existing Senergy II Bokhol Solar PV plant.

East Africa attracted total commitments of \$50.6m (3%). FMO's commitment accounted for 98% of this total (\$49.6m), supporting the development of two run-of-the-river hydropower projects in Uganda: the 15MW Bugoye and Nyamagasani hydro power projects. Southern Africa accounted for \$15m (1%) of the total commitments made, which included Norfund's investment towards New Africa Power, a joint venture between Norfund, Vineyard and responsAbility Renewable Energy Holdings to develop 65MW portfolio of small scale run-of-the-river hydro power projects in Zambia, with the aim of submitting these as part of Zambia's GET FiT programme. Central Africa received no commitments in 2017.

Total commitments of \$34.6m (2%) were directed towards pan-African initiatives, including support for responsAbility Renewable Energy Holding (rAREH), a company with a focus on small-scale renewable energy projects in East Africa. FinnFund was the only funder to invest in the ICT sector, committing \$1m to finance the mobile money service M-Birr Ethiopia V project, which offers branchless banking networks on mobile platforms.

As with 2016 commitments, investments made in the energy sector featured prominently in a number of the non-ICA member European funders' portfolios. EBRD made the greatest contribution, accounting for 69% (\$620m) of the total. Around one-third of its commitment (\$200m) was directed towards Egyptian Natural Gas Holding Company's (EGAS) energy efficiency programme, which focused on improving the Egyptian transmission network and gas pipeline systems; the programme includes the installation of waste heat recovery technologies, turbo-expanders at natural gas pressure reduction stations, the establishment of a liquefied petroleum gas (LPG) separation plant, carbon dioxide removal from wet gas systems and the provision of metering data systems infrastructure at Amerya, Dahshour and the Western Desert Complex.

The remaining proportion of EBRD's energy commitments were directed at the Egyptian solar FiT (feed-in tariff) programme for the development of 16

solar PV projects in the Benban Solar Park (see page 67).

FMO's commitments were directed solely towards the energy sector, accounting for 22% (\$193m) of the total commitment made to this sector. As with EBRD, more than half of FMO's commitments were directed towards the Egyptian solar FiT programme. FMO also supported M-KOPA Solar, which is also being co-financed by Norfund, to provide pay-as-you-go off-grid solar systems in East Africa.

Commitments to the water sector accounted for 13% (\$208.3m) of total investments made. EBRD made the greatest contribution of any member (\$207m or 99.3%) having committed to support improvements in sanitation infrastructure in the Fayoum area, south of Cairo, which will provide 30,000 jobs for local people. Finnfund invested \$1.3m in the water sector, focusing its commitments towards pan-African Sanergy Inc, which works to provide affordable and accessible sanitation facilities in urban areas. ■

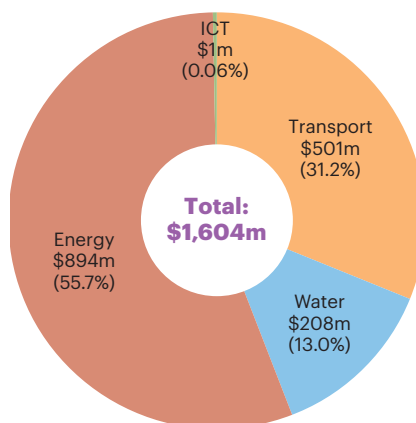


Figure 53
Non-ICA European commitments to infrastructure by sector, 2017

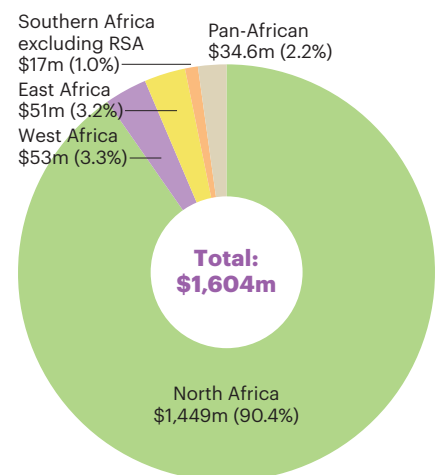


Figure 54
Non-ICA European commitments to infrastructure by region, 2017

5.5 Other Sources of Financing



New Multilateral Funds

New Development Bank

The New Development Bank, the multilateral development bank established by the BRICS states, reported no commitments to Africa in 2017. It reported its first commitment to Africa's infrastructure in 2016 with a \$180m loan to South Africa power utility Eskom to build transmission lines and a substation for the Soweto area to integrate renewable energy projects from independent power producers. The bank said it hoped to lend as much as \$600m more in South Africa in 2018 in an effort to spread funding more evenly across its five member states.

In May 2018, the bank – established by South Africa, Brazil, Russia, India and China – announced a \$200m loan to state-owned transport and logistics utility Transnet to rehabilitate container terminals in Durban. In July, the Bloomberg news agency reported NDB president K V Kamath saying, “our aim is to be equitable among our five members...if you look at the \$4bn we will be doing this year, we should be lending around \$800m [to South Africa]. I hope this year, we will hit that number.” Kamath said two more loans were in the pipeline, one to a bank that will then on-lend the funds for renewable energy

developments while the second will be made available to critical infrastructure. NDB will also begin raising money and lending in South African rand to help protect clients from currency risk, Kamath added. In 2017, the Shanghai-based bank opened its African Regional Centre to assist project identification in South Africa.

Africa 50

Africa50, the infrastructure investment platform established by AfDB, is providing 25% equity to fund construction alongside Scatec Solar and Norfund of six solar projects to be located in the Benban solar park in the Egyptian city of Aswan. Africa50 said it would invest \$8m. Norwegian solar developer Scatec Solar announced in October 2017 that it had secured financing of \$335m from a consortium of DFIs for the development of projects totalling 400MW. The consortium consists of the European Bank for Reconstruction and Development, the United Nations' Green Climate Fund, Dutch development bank FMO, the Islamic Development Bank and Islamic Corporation for the Development of the Private Sector. The six 50MW plants that Scatec will build, own and operate will all be completed during 2019. At a total cost of approximately \$450m. Scatec's

share of equity investments is in the \$50m-\$70m range. It estimates aggregate revenues from the six plants at \$60m per annum over the 25-year contract period (*for more details on the Benban project see page 67*).

At its second annual shareholders meeting in Dakar in September 2017, Africa50 signed a development agreement with Senegalese utility Senelec for competitive selection of a strategic sponsor to develop a 120MW combined cycle thermal power plant at Malicounda. The process resulted in Melec PowerGen becoming the independent power producer and selecting Lebanon's Matelec as engineering, procurement and construction contractor. The plant will initially run on heavy fuel oil, but can be converted to natural gas when this becomes available from recently discovered gas fields. Wärtsilä of Finland signed a contract in March 2018 to engineer, manufacture and deliver the Flexicycle plant, which will comprise seven Wärtsilä 50 engines. A 20-year power purchase agreement is envisaged with a competitive feed-in tariff rate arrived at through a public tender. The electricity generated will be fed into the network through an existing distribution substation. ■

South Korea, India and Turkey

South Korea

The Export-Import Bank of Korea (Korea Eximbank) committed \$10m in 2017 to transport and port infrastructure in Senegal, with \$5m going to projects in each. The projects aim to bring improved refrigerated transportation and storage facilities for small- and medium-sized Senegalese enterprises in the fisheries sector and stimulate opportunities for Korean participation in Senegal's prospective fishing sector.

Korea Eximbank's most notable commitment in Africa in 2017 falls outside the ICA's definition of infrastructure but underlines South Korea's view of Africa as a serious investment location. In June 2017 the bank signed a \$5bn project financing contract for offshore gas field development in Mozambique. The gas field development project is a joint project of Korea Gas Corporation, ExxonMobil of the US, Italian energy company Eni and Empresa Nacional de Hidrocarbonetos (ENH) of Mozambique. Korea Eximbank, the Korea Trade Insurance Corporation and China Exim Bank are provisionally financing the project. According to the contract, Korea Eximbank is responsible for one-fifth of the amount.

India

India committed just over \$700m to infrastructure projects in 2017 compared with the exceptionally high amount of \$1.2bn committed in 2016.

Reflecting a noticeable trend amongst funders, Export-Import Bank of India (Exim Bank India) chose to invest in a business rather than a project when it extended a \$500m line-of-credit to SBM (Mauritius) Infrastructure Company. The credit line will enable the company to invest alongside public sector entities in infrastructure projects in Mauritius. The credit is

Exim Bank India's first financing for SBM, but the bank has previously extended four credit lines to the Mauritian government aggregating \$164.8m.

Exim Bank India committed \$93.5m to Cameroon for the construction of the Nkongsamba-Bafoussam and Yaounde-Abong Mbang transmission line as well as \$110m for the design, supply and assembly of transmission lines from Nouakchott to Nouadhibou in Mauritania.

Turkey

Turkey stepped into the Africa's railway infrastructure sector in a big way in 2017. Turkish construction company Yapi Merkezi in February 2017 won a \$1.22bn contract to build a 205km-long rail line between Dar es Salaam and Morogoro, as part of a collaboration with Portugal-based Mota-Engil Engenharia e Construção Africa. In October, the Turkish construction company secured an additional \$1.92bn contract to extend the high-speed electric Standard Gauge Railway (SGR) line a further 422km from Morogoro to Makutupora, Dodoma. Construction work on both stretches of the Central Railway Line is now under way.

Tanzania has already allocated around \$1.2bn to the Central Railway Line SGR in three successive federal budgets up to the financial year 2018/19, despite reports that the projects would be externally funded.

China Exim Bank reportedly said in 2016 that it would put \$7.6bn into Tanzanian projects, but it was anticipated that Chinese companies would rehabilitate and build the Central Railway Line, a commitment that was noted in *Infrastructure Financing Trends in Africa, 2016* but excluded from the data as it was clear that the parties were finding it increasingly difficult to conclude arrangements.

Tanzanian President John Magufuli terminated a contract awarded to a Chinese construction company due to allegations of corruption. While China Exim Bank was expected to finance the Tanzanian line, it withdrew after the contract was terminated. This saw Tanzania turn to the other BRICS nations seeking for finance, with Magufuli asking South Africa's former president Jacob Zuma for finance.

Turkish financing for the contracts undertaken by Yapi Merkezi was discussed during the January 2017

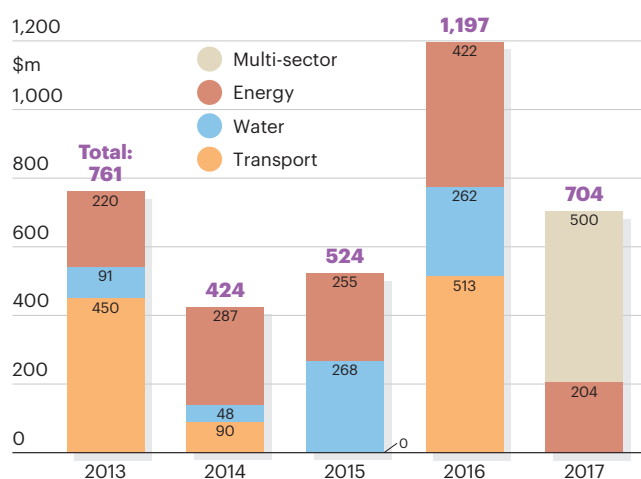


Figure 55
Indian commitments by sector, 2013-2017

Other Sources of Financing



visit of the Turkish president Recep Tayyip Erdogan to Tanzania, when he suggested the Turkish government would support the deal. However, there is no evidence of direct funding of the project by Turk Exim Bank.

The African Development Bank in August 2017 indicated it would step into the railway financing and several other financiers have now come forward.

Trade and Development Bank (TDB) has also allocated funds for the Central Railway Line according to the Mauritius-based regional development bank's president Admassu Tadesse. He said TDB had allocated the \$200m to help Dar es Salaam push forward with its railway and energy infrastructure projects.

It is possible that the contracts are also funded by other external sources, but these may also be reflected in Tanzania's sizeable declarations of

federal funding for its railways, which opens up the potential for double counting data.

Yapi Merkezi is building a total of 950km of railway in Sub-Saharan Africa, which the construction firm said would be instrumental in increasing exports for commodities such as gold and coffee. The company is also building railways, tramways and metro systems in the Middle East and North African (MENA) region.

In July 2018, IFC announced it was providing a \$100m financing package to Yapi Merkezi Holding, the parent company of Turkish construction company Yapi Merkezi Insaat ve Sanayi (YMI), to support its expansion and boost the construction of transport infrastructure in challenging markets.

The three-year term package comprises a \$75m euro and US dollar equivalent loan from IFC's own account, and a \$25m euro equivalent syndicated loan from Akbank AG

under IFC's B-loan structure. The financing will provide YMI with working capital to allow the completion of transport infrastructure projects in Sub-Saharan Africa, MENA, and Turkey, and support the company's expansion in these markets.

The Tanzanian government has said it intends to invest around \$14.2bn over the next five years to construct a 2,561km SGR network, which will connect its Indian Ocean port of Dar es Salaam to the other regions within the country. To finance these ambitious plans, Tanzania may also benefit the March 2017 announcement by WBG president Jim Yong Kim that Tanzania will be able to access up to \$2.4bn in concessional financing over the next three years, an increase of half a billion dollars over previous allocations. The additional resources will come from WBG's International Development Association (IDA) window. ■

5.6 Regional Development Banks

Three non-ICA member regional development banks reported financing data in 2017: Banque Ouest Africaine de Développement, the Trade and Development Bank (formerly PTA Bank) and Ecowas Bank for Investment and Development (EBID).

Finance committed by these banks totalled \$538m, which is significantly lower than the \$924m reported in 2016. West Africa received 86% of finance committed with Southern Africa receiving the remaining 14%. Transport projects received the most with \$271m, energy projects received \$208m, water projects \$34m and multi-sector projects received \$25m. All support was provided through loans.

Benin-based BOAD committed the majority of infrastructure finance in 2017 with \$453m, of which \$261m went to transport projects, \$130m to energy projects and \$34m to water projects. Multi-sector projects accounted for \$25m.

The bank provided \$94m for four projects in Guinea Bissau, \$54m for two energy projects including the

electrification of 14 localities from the 225kV Organisation pour la Mise en Valeur du Fleuve Gambie (OMVG) electricity interconnector that connects the national grids of Gambia, Guinea, Guinea Bissau and Senegal. The bank also provided \$42m for three solar projects; a 20MW installation in Bissau and two 1MW plants in Gabu and Canchungo. It is expected that the projects will provide power for 500,000 people and mitigate 24,100 tons of CO₂ emissions.

BOAD approved a loan of \$25m for a multi-sector project to rehabilitate the Port of Bissau including civil works on the quay, construction of a medium voltage substation and the installation of new IT equipment. An additional loan of \$15m was approved for a road planning and asphaltting project for the Ntunhané-Catiò road.

In Côte d'Ivoire, BOAD approved loans of \$95m for three transport and water projects including a safe water supply project in Abidjan and the rehabilitation of San Pedro airport's runway.

Elsewhere, BOAD approved \$42m for the upgrade of the Lokossa-Deve-

Aplahoué-Togo border road between Benin and Togo. In Senegal, the bank committed \$93m for a road rehabilitation project and electricity distribution project. In Burkina Faso, a total of \$85m was approved for road maintenance, an irrigation and dam feasibility study and the upgrading of the 33kV transmission grid.

Mauritius-based TDB committed a total of \$74m in 2017. The bank approved a \$55m facility co-arranged with the Export Import Bank of India for the 29.4MW Curepipe wind farm in Mauritius. TDB's portion of the facility is \$28.7m. The TDB also provided \$30m as part of a \$123m syndicated loan facility with Standard Bank of South Africa for Zimbabwe Power Company (ZPC). The financing will allow ZPC to secure and optimise capacity, including the rehabilitation of the Kariba South plant.

Lomé, Togo-based EBID committed \$14m towards transport and energy projects in Benin and Côte d'Ivoire, including \$8m to Société Ivoirienne de Manutention et de Transit to modernise its freight handling and transit services. ■

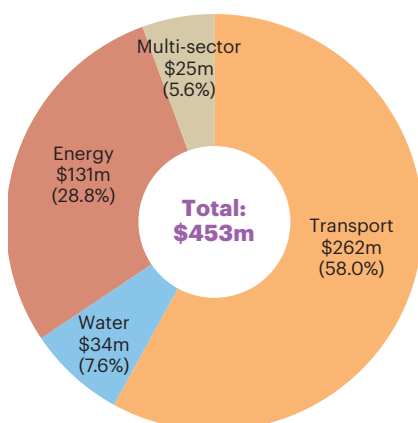


Figure 56
BOAD commitments by sector, 2017

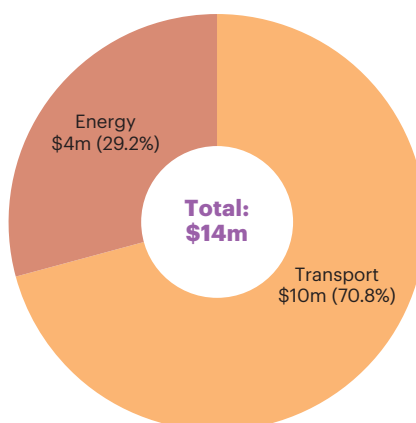


Figure 57
EBID commitments by sector, 2017

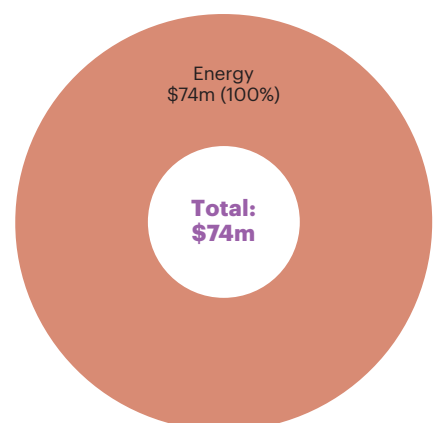


Figure 58
TDB commitments by sector, 2017

6. Private Sector



6.1 Private Sector Engagement with the Public Sector

Private sector financing in African infrastructure is critical given the limited amount of public and governmental support across the continent. However, a number of challenges remain. Developing public-private partnerships, particularly in large infrastructure projects, can attract private financing in emerging and developing markets.

Projects with private sector participation that reached financial

close in 2017 totalled \$5.2bn. Of these, \$2.3bn (44.8%) was privately financed.

This is a significant increase in investment compared to 2016 when total project investment amounted to \$3.6bn, of which \$2.5bn was private capital. The investments in 2017 were lower than the \$8.5bn recorded in 2015 but slightly higher than the \$5.1bn reported in 2014.

The majority of projects – 41 out of 45 – that reached financial close in 2017 were in the energy sector. The

remaining projects include three in the transport sector and one in the water sector. There were no ICT or multi-sector projects involving private sector participation in 2017. The 45 projects in 2017 is a marked increase compared to 2016 where only 12 projects reached financial close.

Private sector financing in energy projects totalled \$1.9bn, transport projects received \$360m and water projects \$19m. The dominance of energy investments is largely due to several Egyptian solar projects,

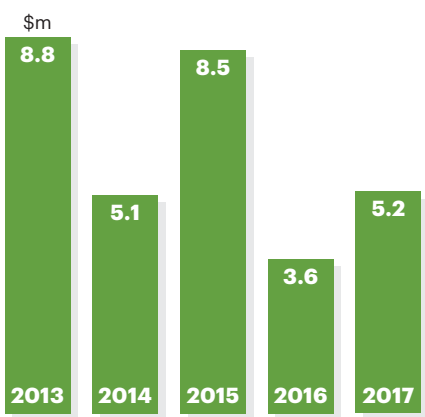


Figure 59
PPI Project Database trends, 2013-2017

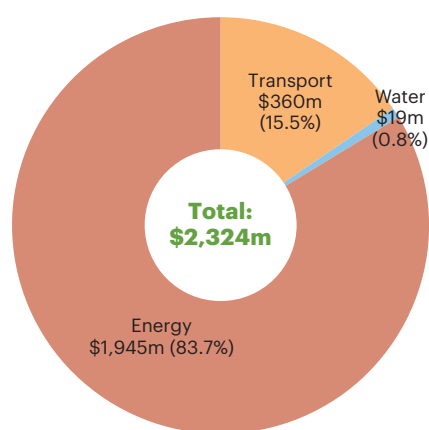


Figure 60
Private sector financing by sector, 2017

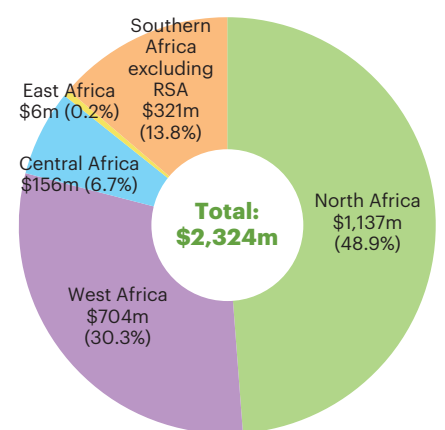


Figure 61
Private sector financing by region, 2017

Sokhna Port Bunker

Located south of the Suez Canal in Egypt, the \$504m Sokhna Port bunkering project reached financial close in May 2017. Financing was provided to Sonker Bunkering Company by the IFC and EBRD through loans of \$150m and \$94m, respectively, as well as a commercial loan from the Commercial International Bank.

Sonker operates a storage and bunkering company in Sokhna Port which has grown and expanded in recent years. With the expansion of the Suez Canal, the installation of a bulk liquids terminal facility to import and store gasoil, LPG and LNG is vital

to ensure Egypt's fuel and energy security. According to the Suez Canal Economic Zone, the facility will be capable of handling 250,000 cubic metres of LPG and gasoil.

EBRD believes the project will promote private ownership in Egypt, as Sonker is one of a few private independent entities operating in the energy storage and bunkering sector. It will also demonstrate efficient operation of hydrocarbon import and storage facilities, and set standards for corporate governance and business conduct. The Egyptian Ministry of Investment and International Cooperation said in May 2017 that the project will provide 2,400 direct jobs. ■

collectively known as Benban, reaching financial close in 2017, and the \$550m Tema liquified natural gas (LNG) import terminal as part of the Tema port expansion in Ghana.

Investments in the energy sector are dominated by solar projects, with 32 reaching financial close. These included the Benban solar park projects in Egypt and the 50MW Afrinergia solar PV plant in Nigeria. The largest solar investment was the \$220m Noor PV I project in Morocco, which attracted \$155m of private investment.

Only one wind project reached financial close in 2017, the 262MW Ras Ghareb wind farm in Egypt, which closed in December 2017 at a total cost of \$400m, of which \$208m is private investment. A consortium arranged by Engie, including Orascom

Construction, Toyota and Suez, led the project. Société Générale and Sumitomo Mitsui Banking Corporation provided private finance. The wind farm is expected to be online by December 2019.

Two hydroelectric power plants reached financial close, the Musanze hydro plant in Rwanda, which closed at \$17m, and the Butama hydro plant in Uganda, valued at \$19.3m.

The \$345m 80MW South Akanyaru peat power plant in Rwanda, led by HQ Power – comprising Turkey's Hakan with Quantum Power and Themis – reached financial close in February 2017. The project will be operated under a 26-year PPA.

One of the largest private investments in the transport sector that closed in 2017 was phase III of

the Sokhna Port Bunkering project in Egypt with a total value of \$504m. Private investment amounted to \$260m. The Tema LNG import terminal in Ghana and the Ivato and Fascene airports in Madagascar were the only other transport projects to reach financial close.

Only one water project reached financial close, the Kigali water supply plant in Rwanda with \$19.4m privately sourced.

North Africa received the largest amount of private investment with \$1.13bn, primarily due to the Benban solar projects. West Africa followed with \$704m, Southern Africa with \$321m, Central Africa received \$156m and East Africa received \$5.6m, solely for the Butama hydro plant in Uganda.

Challenges for Private Sector Investment

Private investment in African infrastructure is still proving a challenge to developers and investors given the myriad business considerations and unforeseen changes that occur.

Speaking under the Chatham House Rule at a recent energy investment conference, a senior African public sector stakeholder outlined how private investors and government agencies should be aligned. "Governments just don't have experience with large, multiple project procurement. So there is a tendency to want to do one large thing

Projects Commissioned in 2017

Adams solar phase II

Italy's Enel Green Power commissioned the second phase of its 82.5MW Adams solar project in February 2017. Located in South Africa's Northern Cape province, the project was selected in the third round of the Renewable Energy Independent Power Producer Procurement (REIPPP) programme in 2014 and reached financial close the same year.

The project cost \$109.6m with financing provided through a Nedbank loan and will sell power to Eskom through a 20-year power purchase agreement (PPA) at a tariff of \$0.86 per kilowatt hour.

Kuwaninga Gas

The 40MW Kuwaninga gas-fired plant in Mozambique was commissioned in November 2017 after almost three years of delays. The \$98m project, developed by a consortium of Venture Partners; Intelligence, Counselling and Research, and Investec Bank, is supplied gas from Sasol's Temane and Pande fields under a 15-year tolling agreement through Mozambique's state-owned electricity utility, Electricidade de Moçambique. Investec Bank, China Export Credit Insurance Corporation, Development Bank of Southern Africa and the Industrial Development Corporation of South Africa provided funding. ■

at a time”. As large projects attract economic, political and social interest, governments find it difficult to develop them in a clear manner. Therefore “private developers with clear objectives are more likely to establish connections along the chain for multiple projects they want to engage with, which has a better economic outcome. You need to come to the government and speak with one voice about how you contribute to the government plan, agree on standards”.

Renewable power developer Lekela has successfully developed a 158.7MW wind project in Senegal. Lekela business development director Julian Horn told the B2B newsletter *African Energy* in October 2018 that the success of its project and other independent power producers (IPPs) is down to Senegal’s stability. “They had a stable government, they had a relatively peaceful handover of power, they had reasonably democratic elections, and they have a president who has really backed renewable energy”.

Best Practices for Private Investors

The following recommendations are drawn from *Infrastructure Financing in Sub-Saharan Africa – Best Practices from Ten Years in the Field*, which was published in May 2017 by The Boston Consulting Group and Africa Finance Corporation.

Ensure strong government support

Government support can make or break a project. An influential politician can either drive a project publicly or derail its progress. South Africa’s REIPPP programme is an example of a government programme that is strongly supported and subsequently attracted a large amount of private investment. The programme has a strong track record and a clear framework in which private investors are expected to work in.

Consider the right partners

Enlisting a diverse and strategic group of investors and partners can spread the burden of responsibility and bring in

expertise, especially in difficult markets.

Often the combination of public and private investors with an aligned mission ensures technical expertise with a long-term developmental approach and the capability to fill funding gaps.

Ensure clear milestones for project implementation

Clear and reliable project management is essential for timely project implementation. Having a structured plan including clear deadlines along with direct access to decision makers will make implementation swifter and smoother. ■

Also in comments to *African Energy*, Fenix Zambia managing director John Foye attributed the success of the company’s solar home system projects in Uganda and Zambia to firstly, knowledge of the markets and secondly to the alignment of project partners. In Uganda, Fenix understood low population density in its key market would introduce logistical issues in product delivery

and marketing. “Everything requires a more entrepreneurial team, a team that plans a bit better”. After Engie’s takeover of Fenix, it was allowed to remain as an independent company with its mission unchanged. “We [Fenix] want to reach millions of SSA households, so does Engie. We want to do it in a decentralised, decarbonised, digital manner, so does Engie”. ■

Interview with Actis

Private investment into African energy markets is becoming easier according to Lucy Heintz, head of renewables at growth market private equity investor, Actis. She points to several successful private energy investments across the continent.

South Africa’s Renewable Energy Independent Power Producer (REIPPP) Programme programme, which completed its fourth bidding round in April – worth an estimated \$4bn – has “convincingly demonstrated, that with an appropriate framework, large-scale programme and multiple rounds of bidding, that it [the private sector] can bring down the cost of power over time and deliver reliable supply”.

Heintz also notes the increasing amount of installed private capacity in Senegal, Ghana, Kenya and Mozambique, where IPP frameworks are well understood.

However, a number of challenges remain that national governments will need to address before the benefits the private sector brings can be fully realised. Although the cost of renewable power is competitive with other fuels, weak power grids and grid investment undermine the ability of the grid to absorb the intermittent nature of renewable power.

Cost reflective tariffs continue to be a sticking point for national utilities and Heintz believes this and the high

amount of budgetary support for the power sector constrains capacity growth, consequently limiting private sector investment.

Actis has five investments in the African energy sector from its two current energy funds – Actis Energy 3 and 4, which raised a cumulative total of \$3.9bn. Investments include, Lekela Power, Cameroon’s power utility Eneo and Azura Power in West Africa.

Actis invests in energy, private equity and real estate in growth markets across Africa, Asia and Latin America. The firm has invested approximately \$7.8bn and realised \$9.3bn from 160 full and partial exits. ■

Benban Solar Park

The Benban Solar Park is one of the most complex energy projects under development on the continent and once completed will be the largest solar installation in the world. The scheme is also an important element of Egypt's target to generate 20% of its electricity from renewable sources. In October 2017, 23 projects reached financial close in the second round of the feed-in-tariff programme, totalling \$1.98bn, of which \$513m was privately sourced. Including projects from the first round, 32 projects comprising 1.5GW are expected to be fully operational between December 2018 and June 2019.

Financing for the projects comes primarily from a syndicate of seven lenders headed by the EBRD, which has committed to a \$500m framework for renewable energy in Egypt and has so far financed 16 solar projects. An additional nine-member group led by the IFC finalised a \$653m debt package for 13 of the projects. Lenders are a mix of commercial and development financiers. While no project went ahead without development finance, obtaining private capital was a necessity for all projects.

The IFC has said the complex is expected to mitigate 2 million tonnes of greenhouse gases a year and employ 10,000 people during construction and 4,000 once fully operational. ■

Selected Benban Solar Park Project Financings

EBRD-led financing (\$m)					
Project sponsor and key stats	Access Power/Total Eren	ACWA Power-led consortium	Alfanar Group	Scatec Solar-led consortium	EDF Energies Nouvelles/ El-Sewedy Electric
Capacity and PPA	100MW, 25yr PPA	120MW, 25yr PPA	50MW, 25yr PPA	300MW, 25yr PPA	100MW, 25yr PPA
Feed-in tariff	\$0.084/kWh	\$0.084/kWh	\$0.084/kWh	\$0.084/kWh	\$0.084/kWh
Equity	38.6	44.6	17	154.98	
EBRD	58	70.3	29	114	54
Green Climate Fund				48	
ICD				25.02	
FMO				54	
Proparco	58				
ICBC		72.8			
IDB			28	75	
Other financing					90
Total	154.6	143.1	74	471	144

Nubian Suns: IFC-led financing (\$m)					
Project sponsor and key stats	Acciona Energia-led consortium	Alcazar Energy-led consortium	Enneray-led consortium	Shapoorji Pallonji Infrastructure Capital	Taq Arabia
Capacity and PPA	150MW, 25yr PPA	200MW, 25yr PPA	90MW, 25 yr PPA	50MW, 25yr PPA	50MW, 25yr PPA
Feed-in tariff	\$0.084/kWh	\$0.084/kWh	\$0.084/kWh	\$0.084/kWh	\$0.084/kWh
Equity (\$m)	30	71.4	31	18	15
IFC	137	60	44	19	20
IFC syndication		84.6	48		21
AiIB	57	38	47	19	19
AfDB				19	
Total	224	254	170	75	75

7. Sectoral Analysis



7.1 Overview

Of commitments totalling \$81.6bn made in 2017, the transport sector was the largest beneficiary by a significant margin. Financing of transport infrastructure of \$34bn was equal to 41.7% of all funding. The energy sector, which recorded \$24.8bn worth of financing in 2017, accounted for 30.4% of the total. Beyond this, the water sector accounted for \$13.2bn (16.2%), followed by multi-sector investments, which registered \$5.1bn (6.3%).

The remaining \$2.2bn not attributed to any sector includes national government multi-sector spending which is only partly attributed to ICA-defined sectors.

Transport

Transport sector financing saw a considerable jump in 2017, rising to \$34bn compared to the \$26.2bn recorded in 2016 and above the \$32bn five-year average. There was also a continuation of the trend seen in recent years by which the transport sector attracted more investment than any other sector.

Of this total, African national governments provided the majority of the funding with \$20.1bn of investment – considerably more than

the second highest recorded figure of the last five years (\$17.64bn recorded in 2014). ICA members were responsible for the second largest amount of investment into the sector, with \$8.1bn (23.9%) representing a significant increase on the \$5bn reported in 2016.

Regionally, East Africa accumulated the largest amount of investment in the transport sector at \$8.1bn, or 23.7% of all sectoral commitments. This was slightly ahead of North Africa's \$7.5bn (21.9%), despite the region witnessing a significant increase on the previous year. West Africa, which recorded the highest sectoral investments in 2016, closely followed with commitments of \$7bn (20.5%) in 2017. Southern Africa saw a more than doubling in commitments from the previous year to \$5.8bn (16.9%), up from \$2.3bn recorded in 2016. South Africa and Central Africa registered \$4bn and \$1.6bn, respectively.

Water

Total commitments into the water and sanitation sector increased in 2017, rising to \$13.2bn from the \$12.2bn recorded the previous year. This was mainly due to a significant increase in

Chinese financing, with investment from other financiers seeing mostly small variations.

ICA member financing to the sector recorded a slight decrease of 1.2% compared to 2016, slipping from \$4.7bn to \$4.6bn. Egypt was the largest beneficiary of ICA member financing to the water sector with \$584m of commitments. Ethiopia (\$471m) was the second most popular destination, followed by Tunisia (\$419m). African national government spending on water and sanitation projects also fell slightly, which at \$5.9bn was slightly lower than the \$6.1bn recorded in 2016, but still accounted for 44.6% of total financing of the sector in 2017.

East Africa accounted for the largest share of investment regionally, which at \$4.1bn accounted for 30.7% of all sectoral spending, and displacing North Africa, which was the most popular destination for the financing of water projects in both 2015 and 2016. RSA benefitted from \$2.3bn (17.6%) in commitments while Southern Africa received \$1.6bn (12.2%).

Energy

Commitments to Africa's energy sector saw a considerable increase in

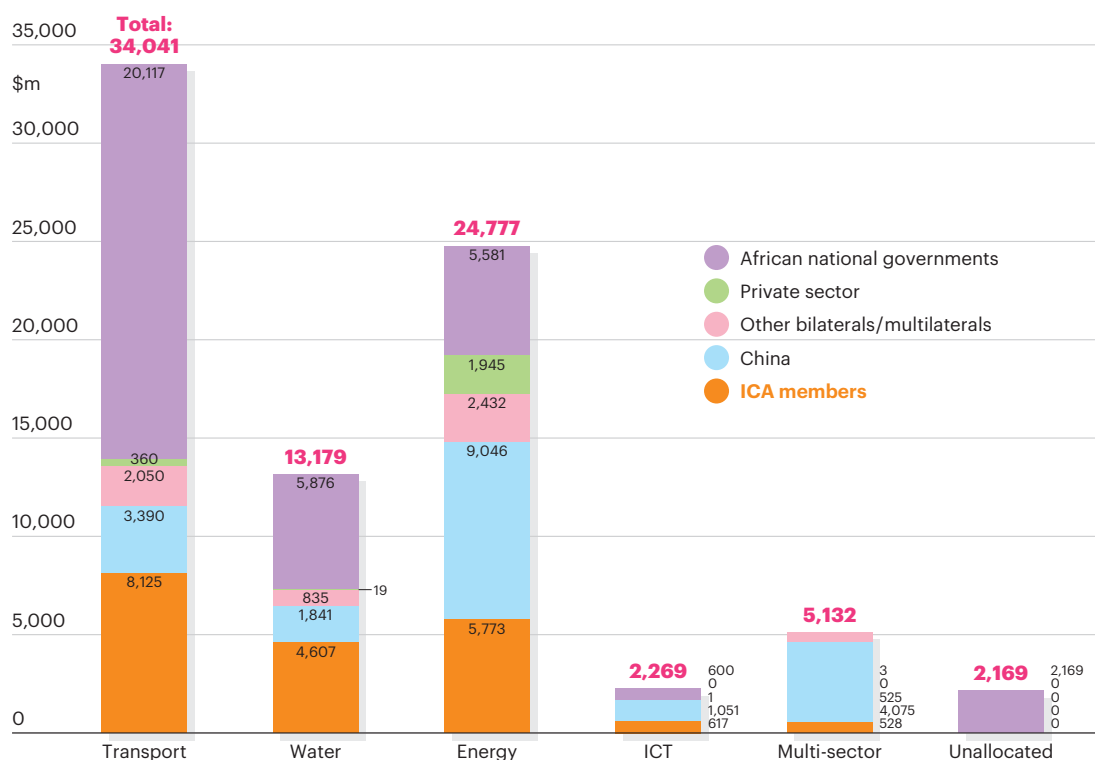


Figure 62
Total financing by sector and source, 2017

2017, rising from \$20.6bn in 2016 to \$24.7bn in 2017. Increases reported in financing from China, African national governments and private investors offset varying levels of decline in commitments made by other sources.

The most dramatic rise in the financing of energy projects came from China, whose total commitments in 2017 of \$9.1bn represented almost double the \$4.6bn invested the previous year. Despite ICA member commitments falling slightly compared with the previous year, the \$5.8bn of investments accounted for 23.3% of all sectoral financing, making ICA members the second largest financier of energy projects in 2017. WBG and AfDB were the most substantial investors among ICA members, accounting for \$2.7bn and \$1.4bn, respectively. African national government contributions rose to \$5.6bn from \$4.4bn in 2016, with Angola and South Africa investing the most in energy projects.

West Africa was the most popular destination of financial commitments

in 2017, accounting for 34.2% of the total. Second was North Africa, which received 19.8% of all sectoral spending. With commitments totalling \$5.2bn, Nigeria was the largest beneficiary of energy spending in 2017 by a substantial margin. Egypt came second having received \$3.5bn.

ICT

The financing of ICT projects rose substantially in 2017, which at \$2.3bn was the highest figure recorded over last five years. This amount was significantly more than the \$1.7bn figure recorded in 2016 and represents a 37% increase. The increase is primarily due to an increased level of commitments from ICA members and China.

ICA member commitments rose to \$618m in 2017, the highest figure recorded over the previous five years. Of this, WBG accounted for a massive 75.1% of total ICA member financing in the ICT sector. Chinese financing also skyrocketed, which having risen to \$1.1bn was almost treble the \$300m recorded in 2016. Conversely,

African national government spending to the sector decreased in 2017 to \$600m.

The most popular destinations for ICT financing was West Africa (41%), followed by Southern Africa (23.4%) and North Africa (12.3%).

Multi-sector

Multi-sector commitments rose to \$5.1bn in 2017, a significant increase on the \$2.8bn recorded the previous year. This was due almost entirely to the \$4.1bn of commitments made by China, which did not register a single multi-sector commitment in the previous three years. ICA member commitments fell from \$863m in 2016 to \$528m in 2018. Commitments from other financiers changed marginally in comparison.

At \$4bn, West Africa received the most multi-sector financing. Southern Africa (\$566m) was the second most popular destination followed by North Africa (\$224m). ■

7.2 Transport



In 2017, commitments to the transport sector totalled \$34bn, accounting for 42% of all infrastructure financing. This was a substantial increase on the \$26.2bn reported in the previous year, helped in part by a 63% rise in commitments made by ICA members.

In 2017, ICA members made \$8.1bn of financial commitments accounting for 24% of the total committed to the transport sector. This was a \$3.1bn increase from the \$5bn pledged in 2016. Of 2017 commitments, Tanzania was the largest beneficiary of ICA member financing, accounting for \$810m. The second most popular destination was Madagascar (\$728m) followed by Côte d'Ivoire (\$650m).

The financing of transport infrastructure by African states also made notable gains in 2017. The commitments rose to \$20.1bn, the highest amount recorded in the previous five years. The contributions made by African states accounted for 59% of total infrastructure financing in the transport sector.

In addition, Chinese commitments increased from \$1bn in 2016 to \$3.9bn in 2017. This represents an increase of 390%. Chinese funding accounted for

10% of overall transport financing in 2017. However, this funding is considerably below its five-year average of \$5.3bn. In 2013, Chinese funding for transport peaked at \$10bn.

Funding by the ACG declined slightly, from \$1.4bn in 2016 to \$1.3bn in 2017. Major commitments by the ACG to the African transport sector in 2017 include \$210m from the IDB to Guinea for the construction of two regional integration roads projects: the Dabola-Kouroussa road, and the Guekedou-Kissoudougou-Kondemradou road.

Regionally, East Africa saw both the largest total contribution of transport sector financing and the biggest increase from the previous year. In 2017, commitments rose to \$8.1bn (24% of total transport commitments) from \$5.3bn in 2016. The majority of financing for infrastructure projects in East Africa was directed towards Kenya, Tanzania and Ethiopia, when counting both state funding and external financing.

Transport financing for Southern Africa rose by a substantial 148% from \$2.3bn in 2016 to \$5.8bn in 2017. The region accounted for 17% of the total investment into the sector.

Commitments to the transport sector in West Africa increased by 5% from \$6.6bn in 2016 to \$7bn in 2017. This region accounted for 21% of transport sector financing in the past year. Only 5% of transport commitments went to Central Africa. In 2017, commitments to the region fell to \$1.6bn from \$3.7bn the year before.

With a total investment of \$2.2bn, the WBG was the largest ICA member contributor to the transport sector in 2017. Japan provided the second largest investment, amounting to a total of \$1.9bn, followed by AfDB. ■

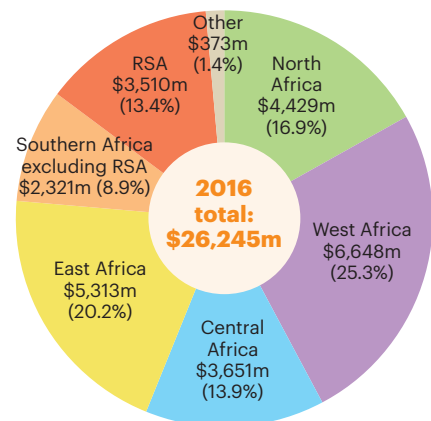


Figure 64
Total transport sector financing by region, 2016

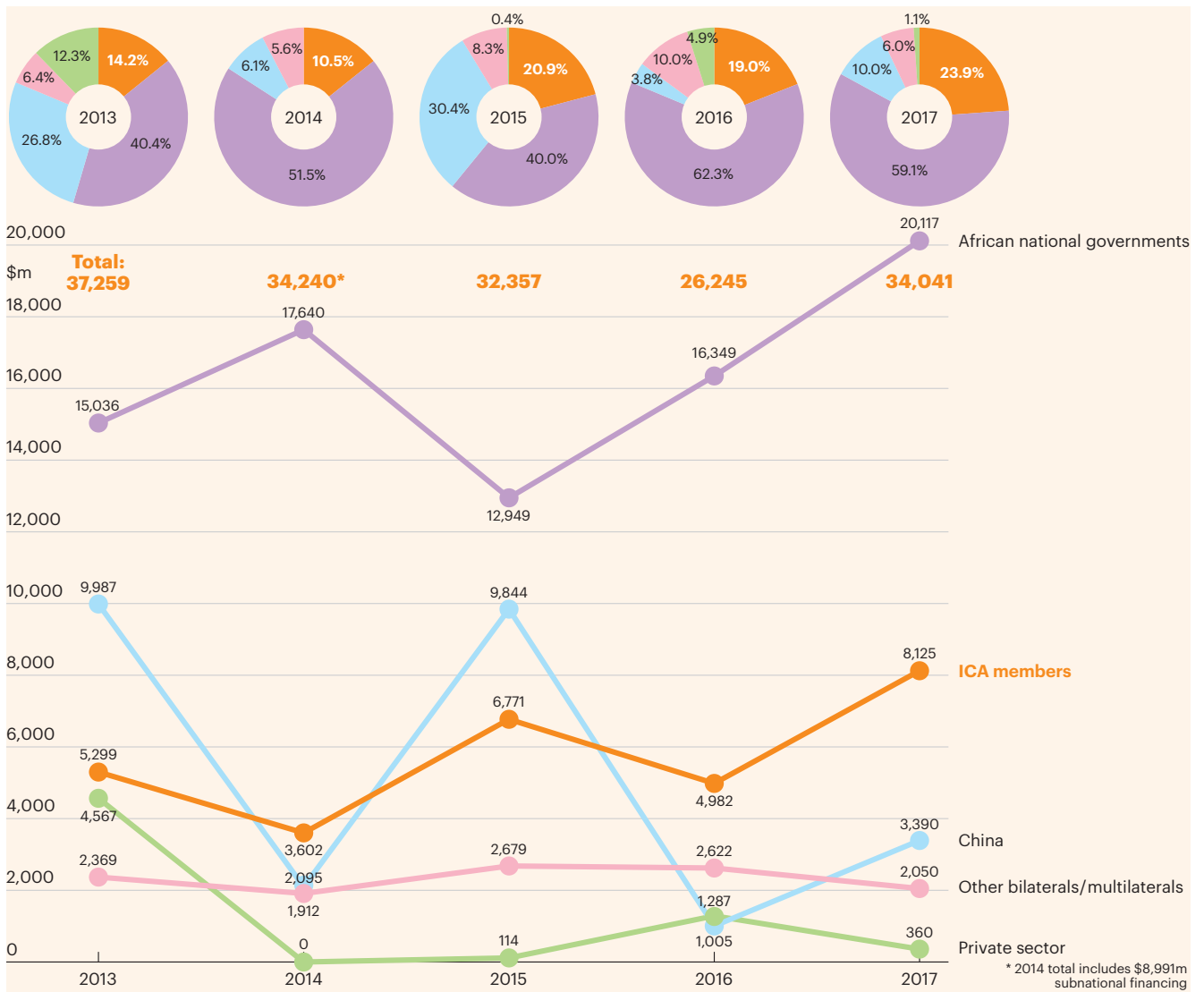


Figure 63
Total transport sector financing by source, 2013-2017

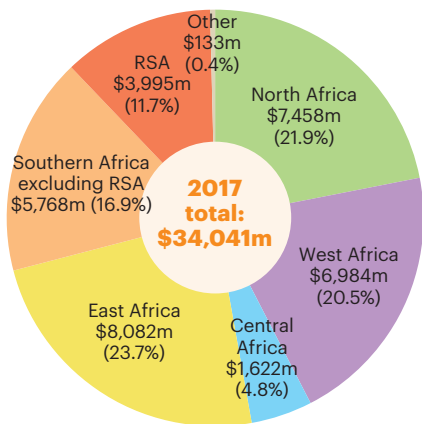


Figure 65
Total transport sector financing by region, 2017

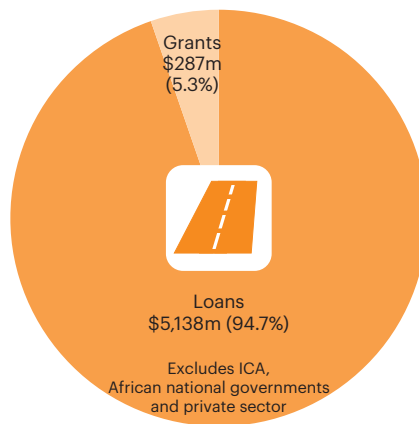


Figure 66
Transport sector financing by type of funding, 2017

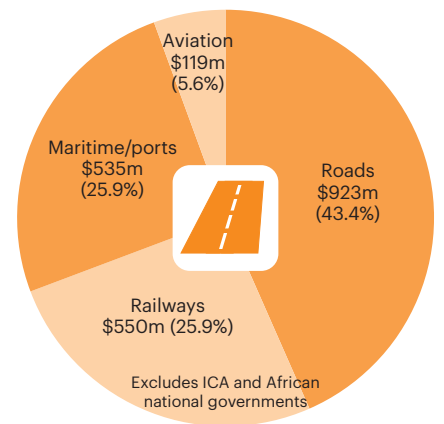


Figure 67
Transport financing by sub-sector, 2017

7.3 Water and Sanitation



Commitments to the water and sanitation sector increased from \$12.2bn in 2016 to \$13.2bn in 2017. The main source of the increase was the return of Chinese financing. Commitments from other financiers experienced marginal fluctuations.

The \$1.8bn of Chinese commitments represented a notable change as in 2015 and 2016, there was no Chinese funding in the sector at all. ICA member commitments slightly decreased (by 1.2%) from \$4.7bn in 2016 to \$4.6bn in 2017. Nevertheless, these commitments remain higher than the \$3.2bn recorded in 2015. ICA members accounted for about 35% of total financing to the water sector, thus making these commitments higher than all other sources of finance except African state funding.

State funding shows a similar trend. It fell slightly from \$6.1bn in 2016 to \$5.9bn in 2017. This, however, was higher than the \$3.6bn recorded in 2015. State financing accounted for 45% of total financing for the water sector. Of these, South Africa was the strongest investor. Its \$2.3bn commitment accounted for 39% of state funding in the sector. The second highest investment was made in Egypt, which registered \$800m. This was followed by Kenya (\$483m) and Angola (\$478m).

In 2016, ACG committed \$1bn and this declined to \$593m in 2017. Regional development bank (RDB) commitments, however, increased from \$9.4m in 2016 to \$34m in 2017. The private sector financing in 2017 amounted to \$19.4m up from zero the year before.

China's \$1.8bn contribution included loans to three projects in Ethiopia, Equatorial Guinea and Cameroon. The \$1.5bn loan for Ethiopia's Gerbi dam which is designed to provide water for Addis Ababa is the largest of the three projects. Partly due to this, East Africa accounted for the largest share of investment across Africa, which at \$4bn is equal to 31% of all commitments to the water sector on the continent in 2017. In this regard, East Africa displaced North Africa, which was the most popular financing destination in both 2015 and 2016. Investments in South Africa (\$2.3bn) accounted for 18% of financing of Africa's water sector, while Southern Africa (\$1.6bn) accounted for 12%.

Egypt, which received \$584m in 2017 was the largest recipient of ICA member financing. Ethiopia was the second most popular recipient of ICA commitments with financing totalling \$471m. This was followed by Tunisia, which received \$419m in 2017. Notable commitments include the AfDB's

\$156m support for the Sustainable Water Supply and Sanitation Programme in Rwanda. This programme focuses on water supply infrastructure and improvement of services, sanitation infrastructure, and institutional support.

Important water and sanitation projects that were completed in 2017 with ICA member financing include the Moroccan sewage system development project. This project benefited from a commitment of \$44.8m from JICA and its objective is to improve sewage treatment facilities in regional cities in the country. ■

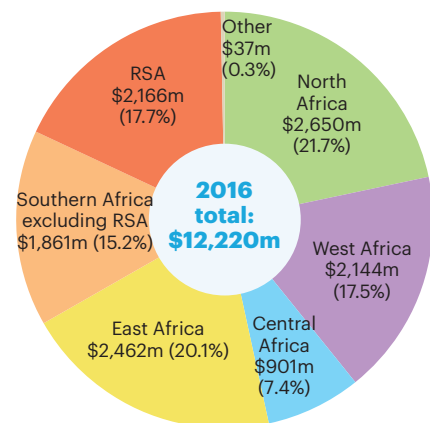


Figure 69
Total water sector financing by region, 2016

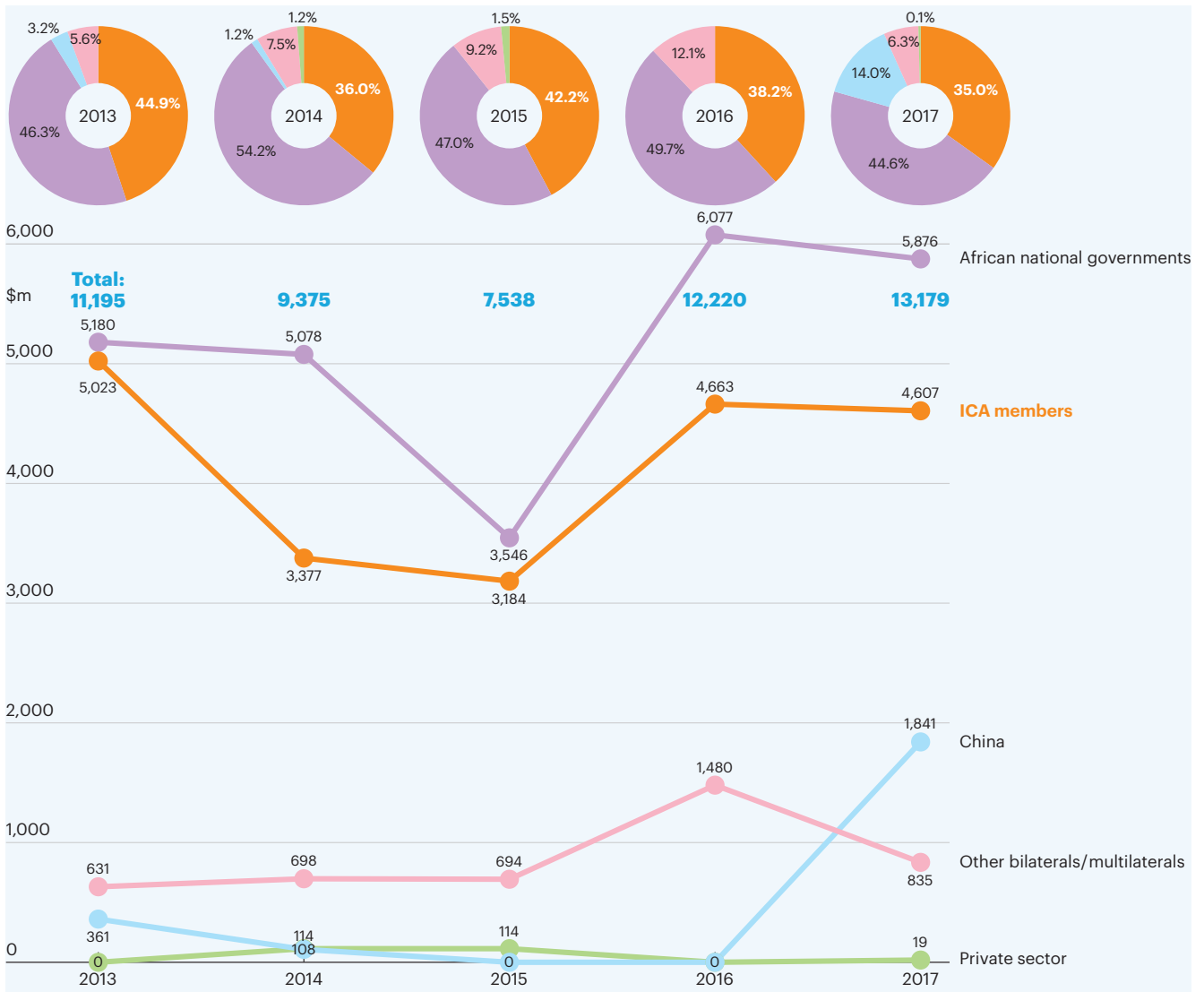


Figure 68
Total water sector financing by source, 2013-2017

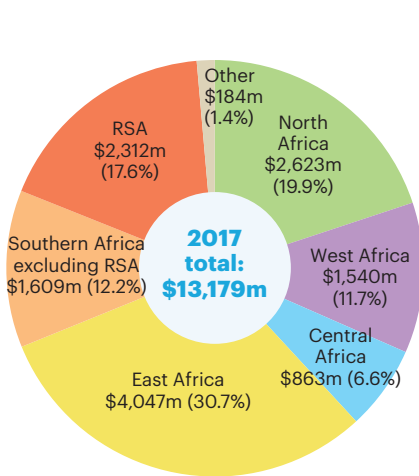


Figure 70
Total water sector financing by region, 2017

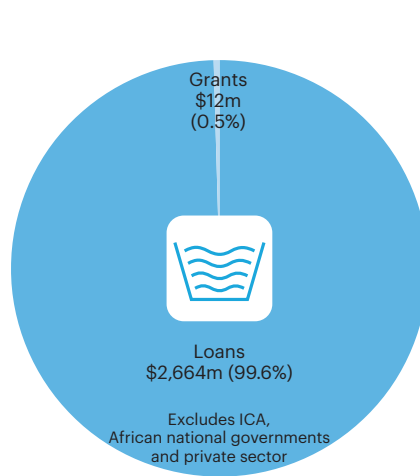


Figure 71
Water sector financing by type of funding, 2017

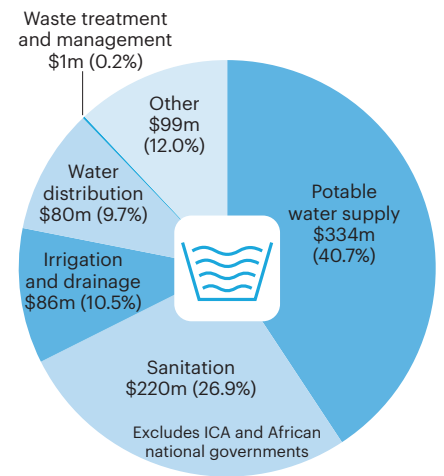


Figure 72
Water financing by sub-sector, 2017

7.4 Energy



Total commitments to the energy sector in 2017 reached \$24.7bn, a significant increase from 2016 when they totalled \$20.6bn. Increased financing from China, African state funding and private investors offset a reduction in financing from ICA members, the ACG and the RDBs.

The biggest increase in the financing of Africa's energy projects in 2017 came from China. Its commitments rose by 95% from \$4.6bn in 2016 to \$9.1bn in 2017. Chinese commitments in 2017 were substantially more than the five-year average of \$5.3bn. Its financing to the energy sector in 2017 comprised of loans (97%) and equity investments (3%).

ICA member commitments of \$5.7bn in 2017 were lower than the commitments in 2016 and below the five-year average. However, ICA financing remained the second largest investment, accounting for 23% of the total investment in the energy sector in 2017. Among the ICA members, the WBG contributed the highest amount, at \$2.7bn. The AfDB was the second highest contributor with commitments of \$1.4bn. In 2017, Egypt received \$1.1bn of ICA member

commitments. Morocco (\$445m) was the second most popular destination for ICA member commitments, followed by Côte d'Ivoire (\$406m).

State funding also increased from \$4.4bn in 2016 to \$5.6bn in 2017. This accounted for 23% of the total financing of the sector. At \$1.7bn, Angola invested the most in the energy sector by a significant margin, equal to 31% of all state funded energy projects. South Africa (\$607m) was the second largest spender on energy projects in 2017 followed by Tanzania (\$504m).

ACG financing for the sector stood at \$1.1bn in 2017, somewhat less than the \$1.3bn recorded in 2016. It is also clear that the financing for 2017 was below the five-year average of \$1.4bn.

Regional development banks committed \$209m, of which \$135m was destined for West Africa, including a \$42m BOAD loan for grid strengthening and redevelopment in the Dakar, Thiès, Kaolack, Fatick, Saint-Louis and Tambacounda areas of Senegal.

When considering financing from all sources in 2017, West Africa was the

most popular destination, with commitments of \$8.5bn representing 34% of the total. This is significantly higher than the commitments for all other regions. For example, North Africa received \$4.9bn or 19.7% of the total, Southern Africa received \$3.8bn (15%), East Africa \$3bn (12%), South Africa \$2.2bn (9%), and Central Africa \$2.1bn (8%). Nigeria was the largest recipient of energy sector commitments in 2017, having received financing totalling \$5.2bn. Egypt received \$3.5bn. ■

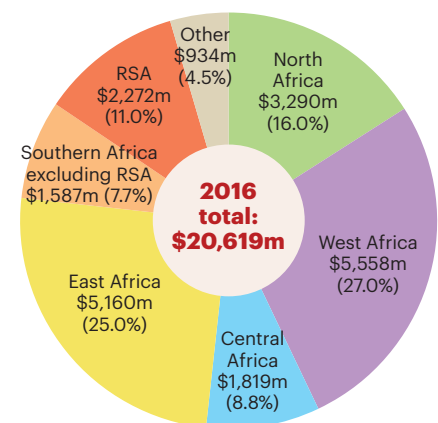


Figure 74
Total energy sector financing by region, 2016

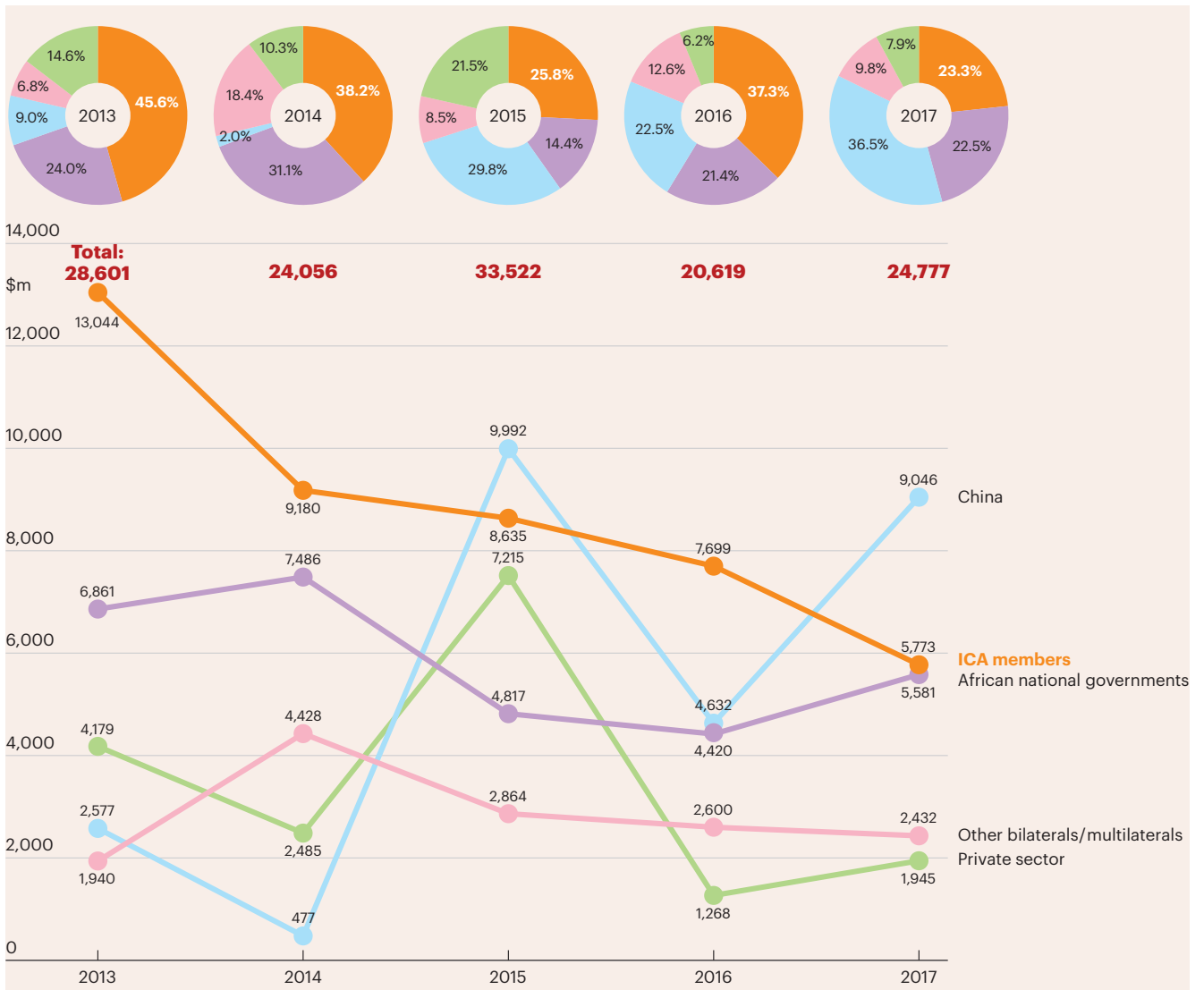


Figure 73
Total energy sector financing by source, 2013-2017

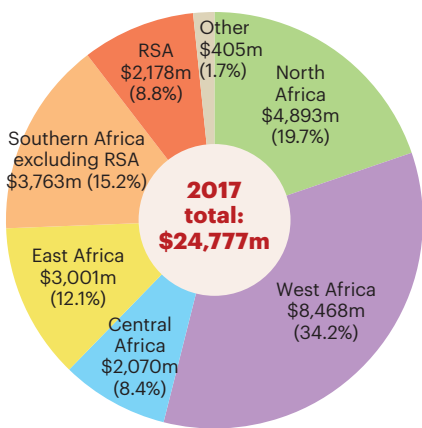


Figure 75
Total energy sector financing by region, 2017

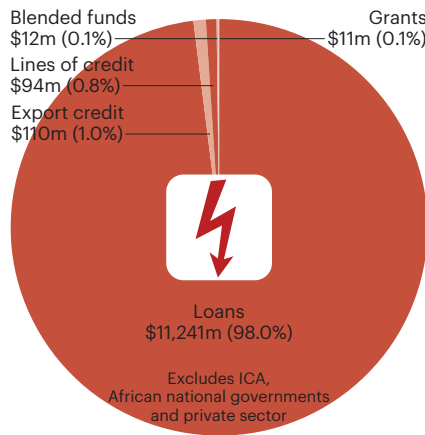


Figure 76
Energy sector financing by type of funding, 2017

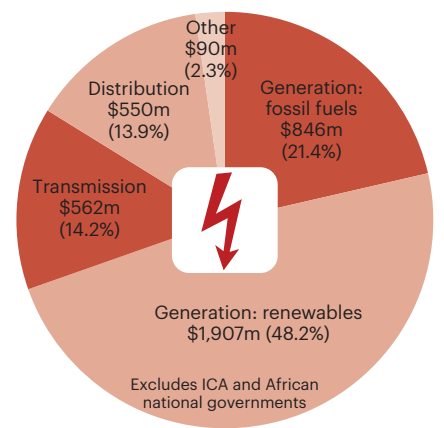


Figure 77
Energy financing by sub-sector, 2017



Commitments to ICT infrastructure increased by 36.9% from \$1.7bn in 2016 to \$2.3bn in 2017. This has brought investments in the sector back to the highs recorded in 2014-2015. Both ICA members and China made major contributions accounting for 27% and 46% of the overall financing, respectively.

Chinese commitments increased markedly in 2017 to \$1.05bn from the \$300m recorded in 2016. This signifies the largest amount invested by China over the last five years, eclipsing the previous high of \$1.03bn seen in 2015. It is also significantly above the five-year average of \$643m.

ICA member contributions also recorded a substantial increase, rising from \$417m in 2016 to \$618m in 2017. This is the highest recorded over the past five years. Tunisia was the largest beneficiary of ICA member investment in the ICT sector with commitments totalling \$82m, followed by Malawi (\$72m) and Ghana (\$50m).

State funding accounted for 26% of the total investment into the ICT

sector in 2017. However, total state spending of \$600m in 2017 was lower than the \$894m recorded in 2016. Non-ICA member European financial institutions contributed \$1m, equal to less than 1% of the total. Similarly, in 2016 no financial commitments were made to the ICT sector by the ACG, India, South Korea, the RDBs or private sector investors.

Regionally, West Africa was the most popular destination for ICT infrastructure financing in 2017, displacing Southern Africa which had received the most investment the previous year. West Africa accounted for 41% of the total, with commitments totalling \$933m. This represents a significant increase from the \$149m reported in 2016. Southern Africa received \$531m in 2017, down from the \$715m committed the previous year. Nevertheless, it accounted for 23% of total funding of the sector. North Africa's \$278m-worth of commitments accounted for 12%. Commitments to South Africa, East Africa, Central Africa, and multi-regional projects each accounted for less than 10% of the total.

Of ICA member commitments, the WBG provided the highest amount of ICT sector financing (\$464m), which is equal to 75% of all member financing into the sector. This includes commitments of \$72m in Malawi, \$50m in Ghana and \$34m in Niger.

The AfDB was the second largest ICA member financier of Africa's ICT sector in 2017, with total commitments of \$101m. Tunisia received the majority of these commitments. ■

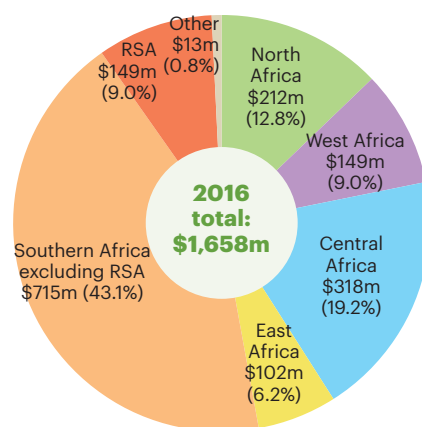


Figure 79
ICT energy sector financing by region, 2016

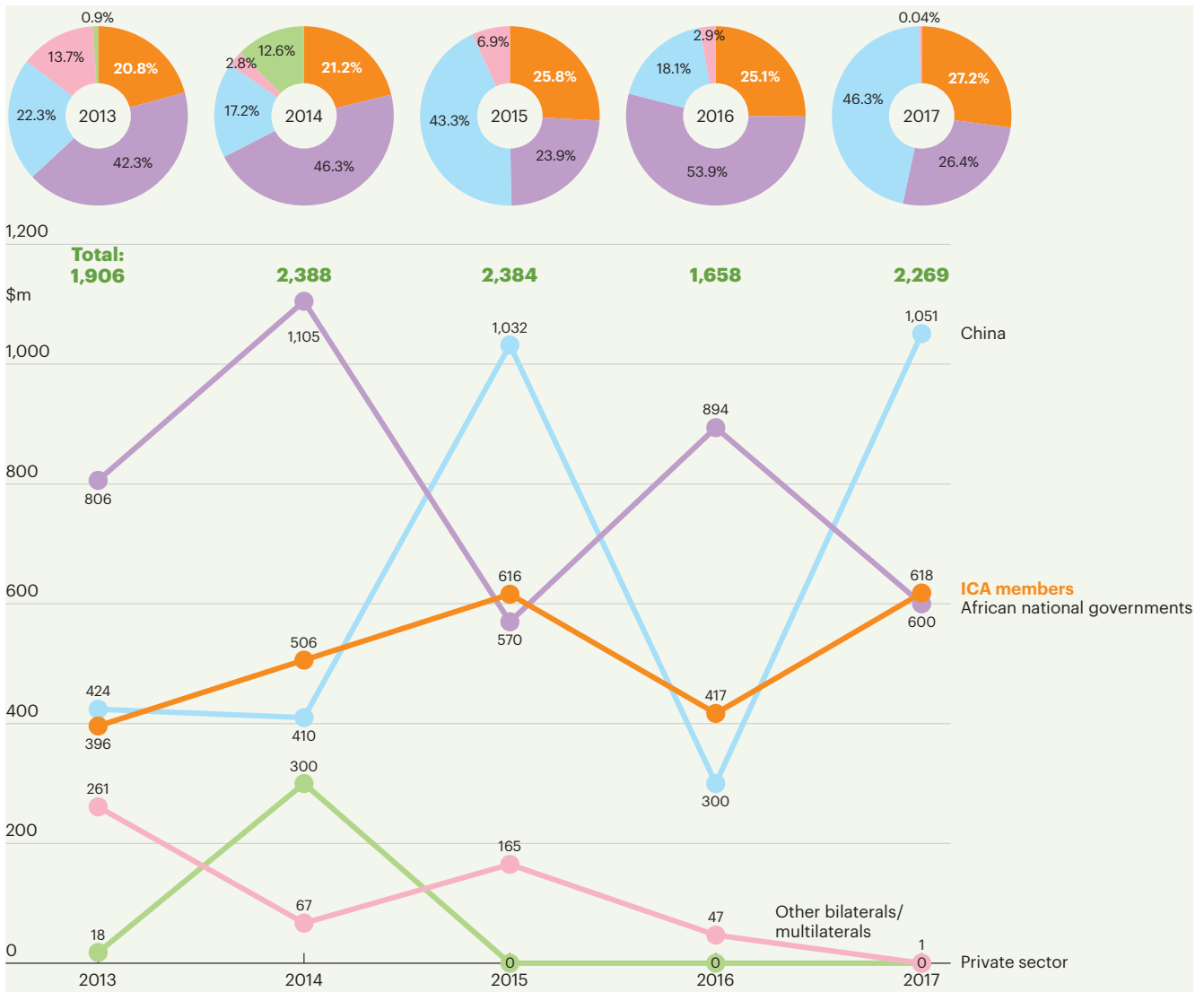


Figure 78
Total ICT sector financing by source, 2013-2017

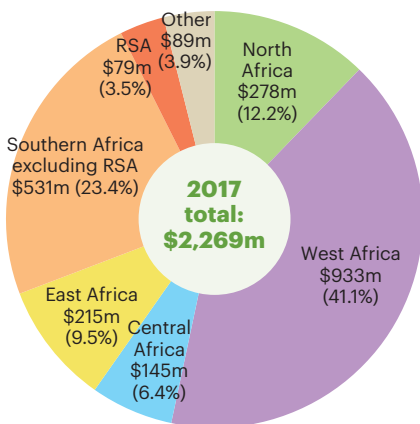


Figure 80
Total ICT sector financing by region, 2017

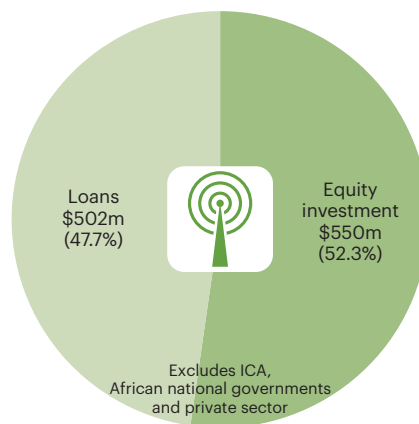


Figure 81
ICT sector financing by type of funding, 2017

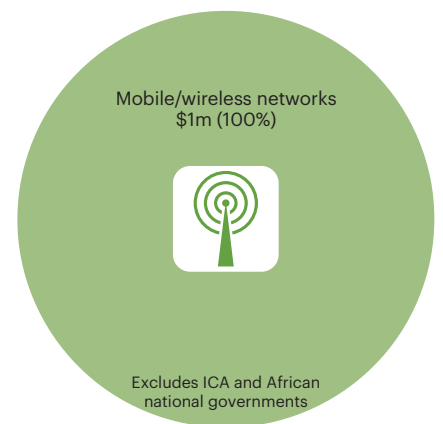


Figure 82
ICT financing by sub-sector, 2017

8.0 Regions

In 2017, investment continued its 2016 trend with West Africa again receiving the largest total investments, worth \$22bn. Investments in North Africa, East Africa, Southern African and the Republic of South Africa all increased in 2017 compared to 2016. Contributions to Pan-African and Central African projects declined slightly.

8.1 North Africa

In 2017, total investment for infrastructure projects in North Africa amounted to \$15.9bn. The contributions of African state funding, ICA members and bilateral or multilateral agencies were \$6.5bn, \$3.7bn, and \$3.1bn, respectively. Overall, investment to the region reached its highest level since 2014.

The transport sector received the most total commitments from all sources in 2017 (\$7.5bn) followed by energy (\$4.9bn), water (\$2.6bn), ICT (\$277m) and multi-sector projects (\$224m). Egypt received \$9.7bn of total commitments followed by Morocco (\$2.5bn) and Tunisia (\$2.3bn).

African state funders continued the drive for infrastructure development by committing \$6.5bn for projects, primarily in the transport sector (\$4.2bn) followed by water (\$969m), energy (\$777m) and ICT (\$173m). External project financing reported by national governments was dominated by investments in Egypt's energy sector (\$3.5bn). The Egyptian government invested \$3.7bn in its domestic infrastructure followed by the governments of Morocco (\$1.1bn), Algeria (\$817m), Tunisia (\$737m) and Mauritania (\$103m).

Disbursements from ICA members in 2017 totalled \$3bn with energy projects receiving the most funds (\$1.5bn). The focus of commitments was in the energy sector (\$1.6bn) followed by water (\$1bn) and transport (\$732m) projects. The commitments by EU-AITF amounted to \$1bn, the largest amount from ICA

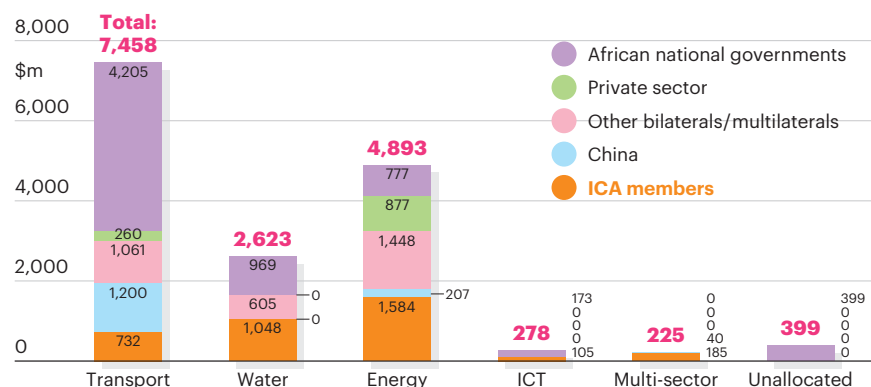


Figure 83
Total financing to North Africa by sector and source, 2017

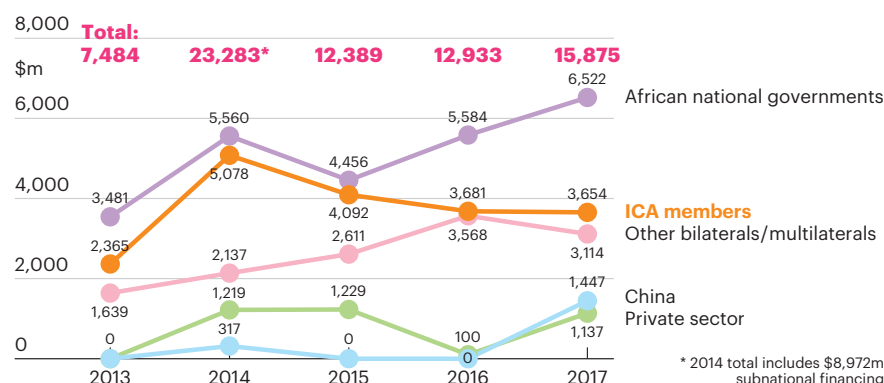


Figure 84
Trends in North Africa financing by source, 2013-2017

members in 2017, followed by the World Bank (\$872m) and AfDB (\$684m). The AfDB provided \$82m for Tunisia's Digital 2020 strategic plan that aims to improve the quality of ICT services and e-governance.

Chinese investment in North Africa in 2017 totalled \$1.4bn, the highest since 2014. Major contributions include \$207m provided by the Industrial and Commercial Bank of China for the 752MW Benban Nubian Suns solar financing programme. The 13 solar plants in the IFC-led programme reached financial close in December 2017 and are expected to begin commercial operations the first quarter of 2019.

Private investment resurged in 2017 to \$1.1bn from \$100m recorded in 2016. Private sector investment in the energy

sector totalled \$877m and transport projects received \$260m.

Egypt was the main recipient of investment with \$982m for energy and transport projects. Private investment provided 36% of the total financing required for public-private projects.

ACG and non-ICA European government contributions were \$1.6bn and \$1.4bn, respectively. ACG investments focused on transport (\$560m) and energy (\$597m) projects, while loans (\$1.3bn) were the preferred type of finance.

AFESD provided a \$197m grant for a road expansion project in Morocco while EBRD provided a \$200m loan for the EGAS energy efficiency project in Egypt and \$374m for 16 solar power projects at the Benban solar park. ■

Infrastructure investments in 2017 for West African projects totalled \$22bn, a significant increase on 2016. This is largely attributed to Chinese investments showing a marked increase with financing of \$11.5bn, followed by ICA members (\$4.9bn) and African national governments (\$3.6bn). Investments in 2017 were at their highest level since 2013 with energy projects receiving the most financing (\$8.5bn).

Investments in transport projects amounted to \$5.2bn. Multi-sector and water projects received \$4bn and \$1.5bn, respectively. ICT projects received \$933m. Nigeria (\$7bn) and Ghana (\$5.1bn) received the most funding across West Africa. The focus in Nigeria was on energy projects (\$5.2bn) while in Ghana it was multi-sector projects (\$4bn).

China's investment in West African projects was dominated by two projects in Nigeria and Ghana representing a total investment of \$11.5bn. The Export Import Bank of China provided a \$4.9bn loan for the 3GW Mambilla hydro plant in Nigeria while a \$4bn loan was provided for a multi-sector project in Ghana. The project includes the construction of a multipurpose hydro project in Pwalugu, a transportation project in Lake Volta, flood protection in Accra, waste treatment, solar power plants and a rail project. The Export Import Bank of China and state-owned aerospace company China Great Wall Industry Corporation agreed to purchase two satellites (worth \$550m) on behalf of the Nigerian government through an equity investment in a Nigerian company. The equipment will be used by Nigerian Communications Satellite.

ICA members continued their support for West Africa in 2017 by committing \$4.9bn. The majority of commitments targeted the transport sector (\$2.2bn) followed by energy (\$1.6bn), water (\$804m), ICT (\$183m) and multi-sector (\$24m) projects. Côte d'Ivoire

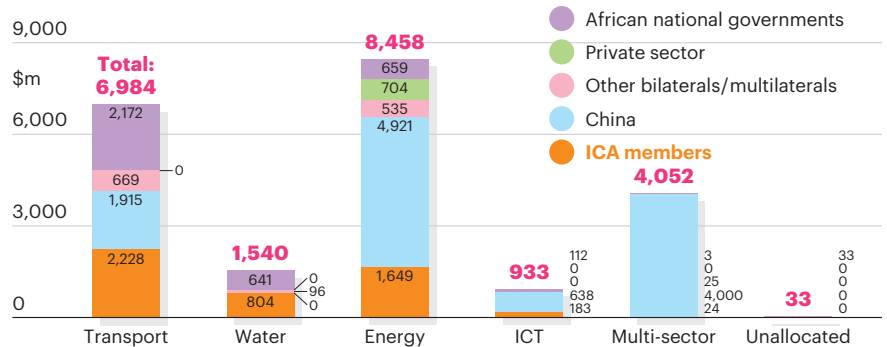


Figure 85
Total financing to West Africa by sector and source, 2017

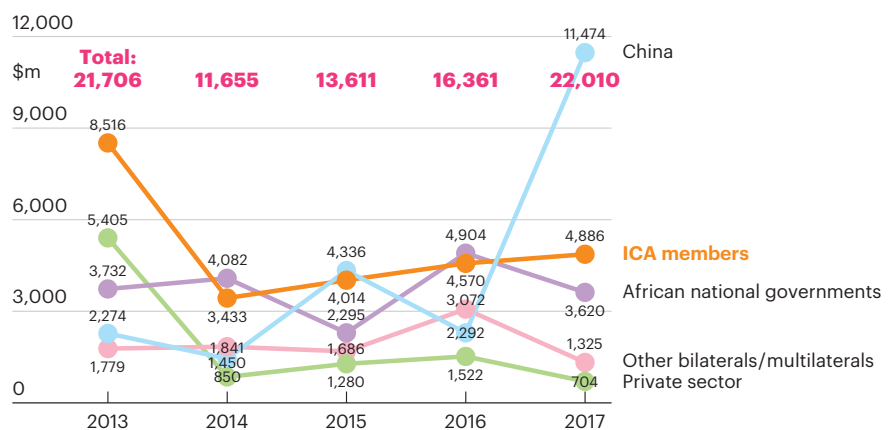


Figure 86
Trends in West Africa financing by source, 2013-2017

(\$1.2bn) and Senegal (\$1bn) received the majority of investments from ICA members. The World Bank and AfDB committed \$1.9bn and \$1bn, respectively, to West African projects. Notable financings include a \$204m AfDB loan for the Dakar–Blaise Diagne International Airport railway project. Additionally, AfDB committed a \$155m grant as part of a blended finance agreement for the Nigeria–Niger–Burkina Faso–Benin power interconnection project.

Identified state funding decreased significantly in 2017 to \$3.6bn from \$4.9bn in 2016. However, there was still significant investment in Nigeria (\$1.1bn). The focus of national budgets remained on transport projects (\$2.2bn), followed by energy (\$659m),

water (\$641m), ICT (\$112m) and multi-sector projects (\$3m).

ACG financing in 2017 totalled \$795m, with the focus of investment on transport (\$386m) and energy (\$347m) projects. IDB provided a \$210m loan to Guinea for construction of two regional roads, Dabola–Kouroussa and Guekedou–Kissoudougou–Kondemradou.

Commitments by regional development banks decreased to \$467m compared to \$601m in 2016, with the majority of funding (\$273m) allocated to transport projects.

Private sector investments recorded \$704m, compared to \$1.5bn in 2016. Ghana's Tema LNG Terminal accounted for \$550m. ■

8.3 Central Africa

Investments from all sources for Central Africa's infrastructure totalled \$6bn in 2017 with leading contributions from African national governments (\$2.9bn), ICA members (\$1.9bn) and China (\$936m).

Investment from all sources declined in 2017 compared with 2016 (\$7.9bn).

Energy projects were the focus in Central Africa with \$2.1bn-worth of investments, transport followed with \$1.6bn while \$1.3bn went towards unallocated projects, \$863m for water, \$145m for ICT and \$9.5m for multi-sector projects.

Cameroon received the majority of financing with investments totalling \$2bn, followed by Rwanda (\$1.1bn) and Gabon (\$761m).

Funding from African national governments, although down on 2016, made significant contributions towards infrastructure. Of Cameroon's \$2bn total received commitments, \$1.2bn was provided via the national budget. The focus of governments was on transport (\$1bn), followed by energy (\$427m) and water (\$123m) projects.

Commitments by ICA members declined in 2017 to \$1.9bn from the \$2.2bn recorded in 2016.

Energy projects received the most commitments (\$853m) with transport and water projects receiving \$545m and \$360m, respectively.

In the energy sector, AfDB committed \$298m for the Cameroon and Chad interconnection project as part of a PIDA blended finance arrangement.

In Rwanda, the AfDB financed a \$116m sustainable water supply and sanitation project.

Chinese investment in 2017 across Central Africa was focused on energy projects (\$560m) followed by water (\$341m) and ICT (\$35m).

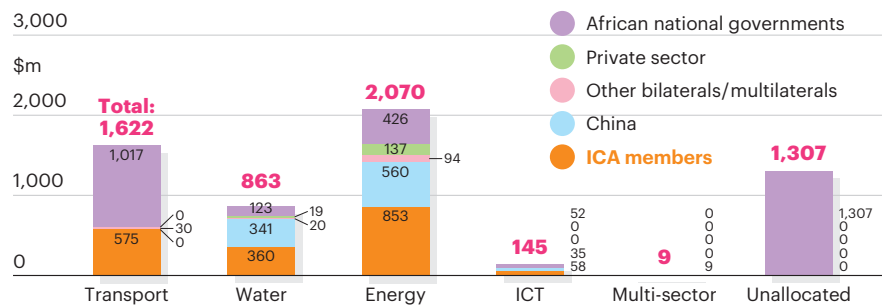


Figure 87
Total financing to Central Africa by sector and source, 2017

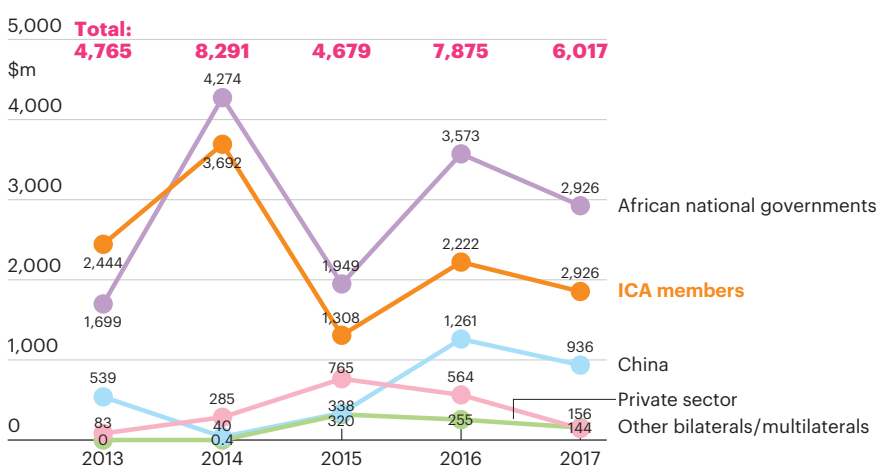


Figure 88
Trends in Central Africa financing by source, 2013-2017

Significant contributions included a \$364m loan from the Export Import Bank of China for two hydropower dams in Gabon, the 88MW Imperatrice and 36MW FE2. China's Gezhouba Group will build both dams.

In Equatorial Guinea, a \$290m loan will be used for a water treatment project and the second phase of an electrification project in Bata.

Private investment dropped significantly in 2017 to \$156m compared to \$255m in 2016, the lowest contribution to Central Africa since 2014.

All of the recorded privately financed projects were in Rwanda and comprised two energy projects worth \$362m, of which \$137m was privately

financed, and one water supply project in Kigali, which received \$19m of private finance out of the total \$60m project cost.

Contributions from the India, South Korea and the Arab Coordination Group totalled \$94m and \$50m, respectively.

In the energy sector, India opened a \$94m line of credit with Cameroon for the construction of the 225kV Nkongsamba-Bafoussam and Yaounde-Akong Mbanga transmission line.

OFID provided a \$20m loan for a sustainable water project in Rwanda and a \$15m loan for the Bururi to Gakuba road project in Burundi. ■

Infrastructure investments in East Africa totalled \$15.8bn in 2017 with leading contributions from identified state funding (\$8.4bn), ICA members (\$4.1bn) and China (\$2.7bn).

Commitments were at the highest since 2015 with the majority of financing (\$9.9bn) being provided for transport projects. This was followed by water (\$4bn), energy (\$3bn), unallocated projects (\$426m), ICT (\$215m) and multi-sector projects (\$26m). Ethiopia received the most investment (\$5.8bn) across East Africa, followed by Tanzania (\$4.7bn) and Kenya (\$3.3bn).

In 2017, financing from China and African national budgets increased. The Tanzanian government allocated \$3.4bn towards domestic infrastructure, primarily towards the transport sector (\$2.5bn). This trend was seen across the region where transport projects received a total of \$5.9bn, which represented a 51% increase compared to 2016 (\$3.9bn).

China increased its investments in 2017 to \$2.7bn compared with \$2.1bn in 2016 with contributions primarily made in the water sector (\$1.5bn), followed by energy (\$1.1bn) and transport (\$122m) projects. The commitments included a \$1.5bn loan from the Export Import Bank of China for the construction of the Gerbi dam in Ethiopia to provide water for Addis Ababa. In the energy sector, a \$500m concessional loan was provided to the Ethiopian Electric Utility to rehabilitate distribution lines in 54 towns and construct 17 distribution centres.

ICA member support in 2017 included total contributions of \$4.1bn and a focus on transport (\$1.8bn) and water (\$1.5bn) projects, followed by energy (\$705m), ICT (\$76m) and multi-sector (\$26m) projects. Tanzania (\$1.2bn) and Kenya (\$1.2bn) received the majority of commitments from ICA members, followed by Ethiopia (\$749m) and Uganda (\$324m).

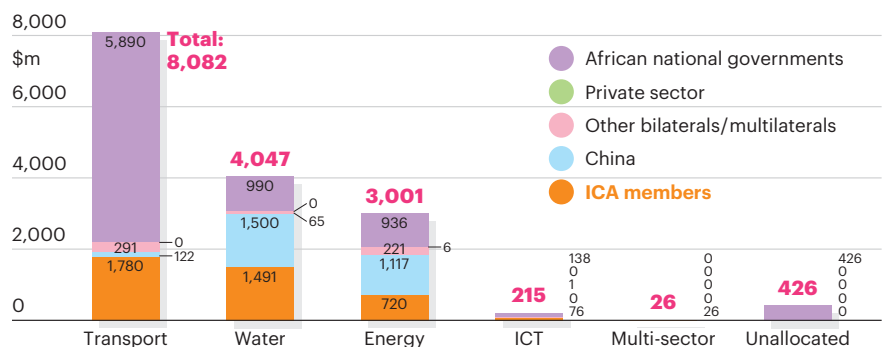


Figure 89
Total financing to East Africa by sector and source, 2017

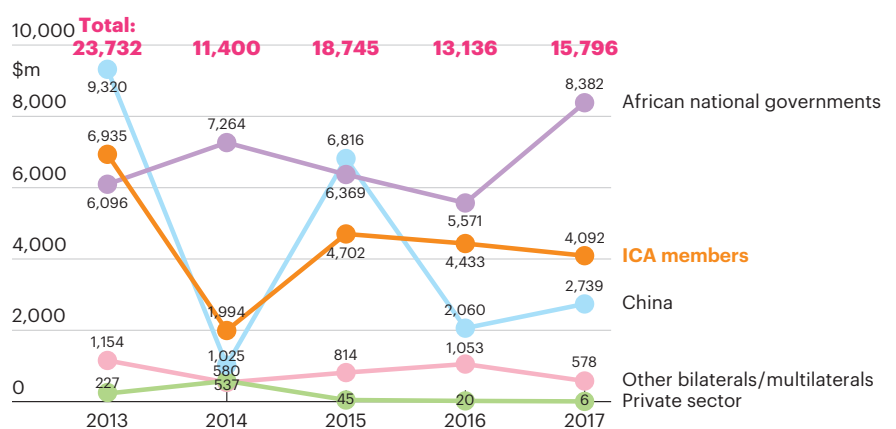


Figure 90
Trends in East Africa financing by source, 2013-2017

The World Bank provided the majority of finance with \$2.2bn in commitments with a focus on water projects (\$1.5bn). The AfDB provided a \$105m loan for debt restructuring for the Bujagali hydro plant in Uganda and a \$157m loan for the expansion of Jomo Kenyatta International Airport in Kenya.

ACG members continued a steady trend of investment with a total of \$528m. This was directed towards transport (\$291m), energy (\$171m) and water (\$66m) projects. The Kuwait Fund for Arab Economic Development provided most financing with \$183m for two transport projects: the Tadjoura-Balho road in Djibouti and the Nyahua-Chaya road in Tanzania. In the energy sector, the Arab Fund for Economic and Social

Development provided a \$66m loan to construct the El Bagair oil power station in Sudan and \$90m loan to rehabilitate the drinking water distribution network in Djibouti.

Private sector and non-ICA European government investments in 2017 dropped to their lowest levels since 2013, with totals of \$6m and \$51m, respectively. Only one project received private finance. The \$19m Butama hydro plant in Uganda was privately financed with \$6m along with bilateral contributions from the US Overseas Private Investment Corporation. Non-ICA member European contributions came solely from the Netherlands and were invested in energy projects in Uganda and Kenya. ■

8.5 Southern Africa

Investments across Southern Africa in 2017 totalled \$12.2bn representing a significant increase compared to 2016 (\$6.5bn). Transport projects received \$5.8bn, followed by energy (\$3.8bn), water (\$1.6bn), multi-sector (\$566m) and ICT (\$531m) projects.

Angola received the most investment with \$3.8bn, followed by Zambia (\$1.9bn) and Madagascar (\$959m) while Malawi received the most investment when excluding state funding (\$929m).

All sources of finance increased in 2017 with a significant contribution coming from state funding (\$6.2bn), which increased by 31% compared to 2016 to reach its highest level since 2014. Angola's government budgeted \$3.5bn for domestic infrastructure, primarily in the energy (\$1.7bn) and transport (\$1.4bn) sectors. Transport and energy project budgets across Southern Africa increased by 51% and 104%, respectively.

China continues to provide significant investment in Southern Africa. Although it has not reached the record level achieved in 2015 (\$7.1bn), it did increase its contribution in 2017 to \$1.3bn compared with \$300m in 2016. Investments were made in energy (\$741m), ICT (\$378m), transport (\$153m) and multi-sector (\$35m) projects. In the energy sector, a \$44m loan was provided for the Gwanda solar project in Zimbabwe and an additional \$30m was provided to build an 88kV transmission line from the Insukamini solar plant to Lupane. In the ICT sector, China invested \$280m to construct 1,009 telecom towers in Zambia along with \$98m for a broadband project in Zimbabwe.

ICA members contributed a total of \$3.8bn into Southern Africa in 2017, with the commitments focused on transport projects, which attracted \$2.4bn. Madagascar received the most investment (\$822m) followed by

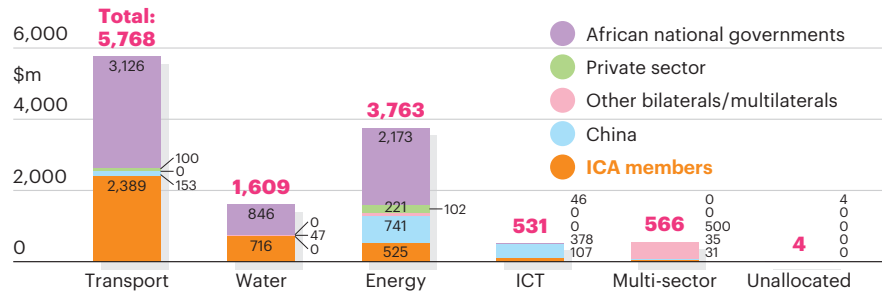


Figure 91
Total financing to Southern Africa by sector and source, 2017

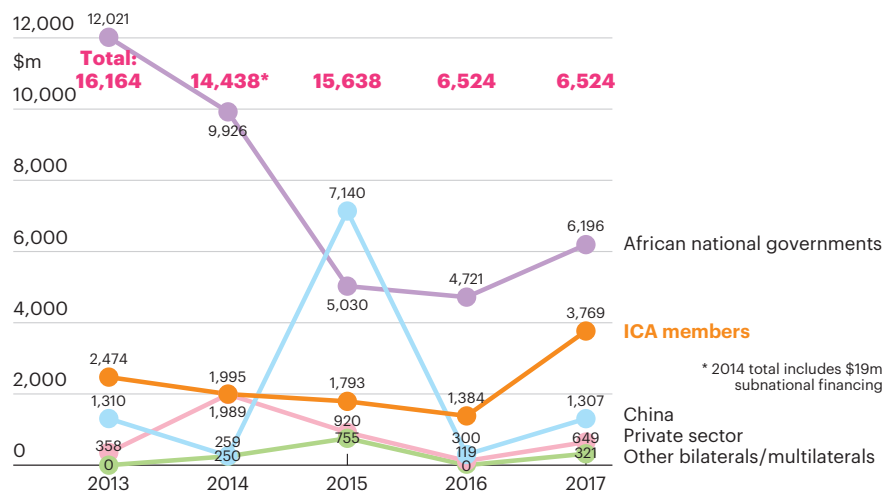


Figure 92
Trends in Southern Africa financing by source, 2013-2017

Zambia (\$561m) and Mozambique (\$450m). Japanese financing constituted the majority of investment with \$1.5bn committed. The AfDB committed \$143m towards a transportation improvement project in Namibia that will upgrade railways between Walvis Bay and Kranzberg to speed up passenger and freight traffic. The road from Windhoek to the international airport will also be upgraded. The project will be implemented over a three-year period.

India invested in Southern Africa with a \$500m line of credit for the SBM Infrastructure Company in Mauritius to help public sector entities finance and implement domestic infrastructure projects

Private investment returned to Southern Africa in 2017 after its

absence in 2016, with commitments of \$321m, led by the energy (\$221m) and transport (\$100m) sectors. The Central Termica de Ressano Garcia gas plant in Mozambique received \$130m in private finance alongside multilateral commitments from the IFC, Miga and AFD. Meanwhile, Investec Bank provided a \$25m loan for the Ejuva I solar plant in Namibia.

Regional development banks and ACG members contributed \$74m and \$58m, respectively, both increasing their commitments compared to 2016. Notable investments included the Kuwait Fund for Arab Economic Development's \$20m loan for an irrigation project in Zimbabwe and the Trade and Development Bank's \$30m loan to the Zimbabwe Power Company. ■

8.6 Republic of South Africa

In 2017, commitments to the Republic of South Africa totalled \$8.7bn, largely unchanged from 2016 (\$8.6bn). However, the commitments did not reach the \$11.7bn recorded in 2015.

While the majority of funding sources maintained or increased their commitments, there was a noticeable absence of private investment in RSA.

The absence is likely to be attributed partly to delays in the Renewable Energy Independent Power Producer Procurement (REIPPP) programme.

Transport projects received the most amount of investment in South Africa attracting a total of \$4bn.

Water projects followed with \$2.3bn. Energy projects received \$2.2bn, multi-sector projects received \$129m and \$79m was invested in ICT projects.

Chinese investment increased considerably in 2017 to \$1.5bn – a sole commitment from China Development Bank for the 4.7GW Medupi coal power station – compared to \$500m in 2016.

ICA member commitments dropped to the lowest level since 2013. In 2017 commitments amounted to \$495m, a significant drop from the \$966m committed in 2016 and the \$1.7bn committed in 2015. DBSA committed the majority of ICA members' investment with \$398m.

Commitments for transport projects increased in 2017, reversing the declining trend of the past few years. Transport projects received the bulk of ICA commitments with \$288m, of which \$224m was provided by the DBSA. This is higher than the ICA members' 2016 transport commitments when a total of \$3m was provided.

In the water sector, ICA contributions continued their decline with \$5.9m, an

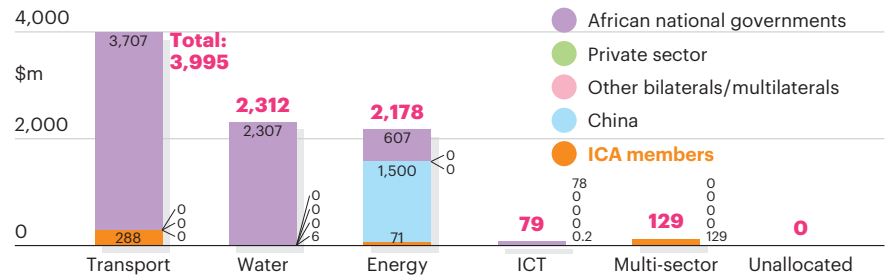


Figure 93
Total financing to RSA by sector and source, 2017

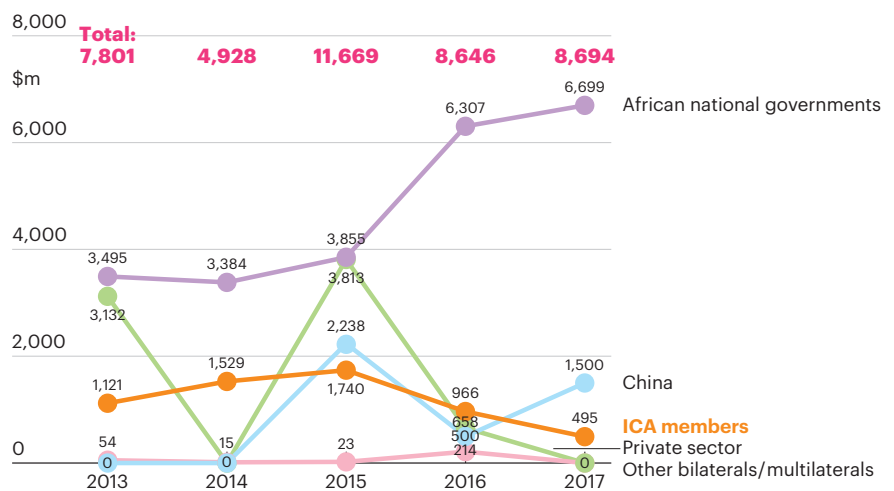


Figure 94
Trends in RSA financing by source, 2013-2017

84% decrease compared to the \$37m recorded in 2016.

The most noticeable decrease in investment was for energy projects, with \$71m committed in 2017 compared to \$298m in 2016. Notable contributions include DBSA's \$18m loan for the replacement of power lines in Polokwane and GIZ's \$11m for the South African-Germany Energy Programme, which aims to improve public and private investment in renewable energy and energy efficiency.

Multi-sector projects received \$129m, a 76% decrease compared to 2016 (\$549m).

Contributions included a \$50m loan from the IFC to Ekurhuleni

Municipality and a \$45m loan from DBSA for Dannhauser municipality's capital expenditure programme.

In addition to the absence of private investment, there were no contributions from ACG members or non-ICA European governments. ■

1. General Remarks

ICA member commitments and disbursements should be viewed in perspective given the very different strategies and purposes of each member and no two members' financings are directly comparable in terms of the amounts or type of funding they commit or disburse.

It should also be noted that some bilateral members provide considerable support to multilaterals, which is not attributed to them in this report. For example, ICA members including Canada, France, Germany, Japan, the UK and the US contribute to the AfDB's African Development Fund (ADF) and the World Bank's International Development Association (IDA).

As in 2016, this year's report covers data from the AfDB, DBSA, CDC, EU-AITF, EIB, Canada (MFA / CDP), France (AFD, Proparco and FFEM), Germany (KfW, GIZ and DEG), Italy, IFC (which together with the World Bank is described as the World Bank Group (WBG)), Japan (JBIC and JICA), UK (DfID and CDC), the US (MCC and Power Africa interagency of USAID) and the World Bank.

No data was made available by the EC in time for this report. Data from the EC has featured in previous reports.

Four Regional Economic Communities (RECs) and Regional Power Pools (RPPs) responded to a request to submit data to inform this report. Data was provided by Central African Economic and Monetary Community (CEMAC), East African Community (EAC), Southern African Development Community (SADC) and Southern African Power Pool (SAPP).

2. Data Revision

Due to the availability of new data, the 2016 commitments figure has been restated as \$66.9bn in

Infrastructure Financing Trends in Africa, 2017 from the \$62.5bn reported in *Infrastructure Financing Trends in Africa, 2016*. (See below, *African State Spending – Budget Allocations, for details*).

3. Exchange Rates

Exchange rates used for conversions into US Dollars are the averages of the respective currencies for 2017 as reported in publicly available African Development Bank Financial Information. (www.afdb.org/en/documents/financial-information/exchange-rates).

For ICA members the following exchange rates were used:

\$1 = 0.7253345454 AfDB Unit of Account (UA)

\$1 = 0.8986864796 Euro (€)

\$1 = 0.7829140194 British Pound (£)

\$1 = 1.306971855 Canadian dollar (C\$)

\$1 = 13.35293147 South African Rand (ZAR)

\$1 = 112.7079821 Japanese Yen (¥)

4. Soft Infrastructure

Finance is allocated to soft infrastructure in many ways, thus making it hard to capture this type of funding in a granular way. For some ICA members, the distinction between hard and soft infrastructure is sometimes difficult to make and might therefore not be fully accurate. Also, the judgement of whether a part of the project is dedicated to, for example, capacity building or project preparation can sometimes be a challenge.

5. African State Spending – Budget Allocations

Data on national government spending was collected from 47

countries in 2017 compared with a revised 49 in the previous year due to the publication of sufficiently detailed budget information from three countries becoming available after the publications of last report. This year's data also includes some subnational data from South Africa.

For these reasons a revised figure for African state spending in 2016 of \$30.7bn has been used to enable true comparison of data from 2016 with 2017. The revised total was reached by increasing the \$26.3bn in the 2016 report by \$4.4bn of newly identified government budget allocations. The revision includes the addition of budget data for the Central African Republic, Chad and Equatorial Guinea and additional state subnational spending identified for South Africa.

Data is drawn from budget statements and speeches, expenditure frameworks, or other official government documents. The data reflects approved budget allocations for either the 2017 calendar year, or a country's budgetary year of which the majority falls within 2017. For the purposes of expediency as well as consistency, commitments made via approved budget allocations are captured rather than actual spending. Wherever possible, only capital expenditure has been captured. ■

Annex 2 – Transport Sector Map

SINGLE AFRICAN AIR TRANSPORT MARKET

SAATM is a flagship project of the AU's Agenda 2063 and aims to create a single unified air transport market in Africa, liberalise civil aviation and act as an impetus to the continent's economic integration agenda. Officially launched in January 2018 with 23 countries as starting participants.

AFRICAN HIGH-SPEED RAIL

The African Union signed an agreement with China in October 2016 for a five-year action plan for an integrated high-speed railway network.

MOROCCO HIGH-SPEED RAIL

The first tranche of Africa's first high-speed line will link Tangier with Kénitra in one and a half hours from late 2018, and is planned to continue to Rabat and Casablanca.

ALGERIA'S EAST-WEST HIGHWAY (A1)

A six-lane 1,200km road running from the Moroccan border to the Tunisian border built by Chinese (west and central sections) and Japanese (east) consortia.

EGYPT'S NEW CAPITAL CITY

A 700 km² development 45km east of Cairo with an international airport is planned to accommodate 5m and become Egypt's new administrative capital; developed by the government and the military.

NEW EGYPTIAN AIRPORTS

The construction of five new airports was announced in 2017: Sphinx International Airport in Giza, New Capital Airport, Bredwell Airport in Sinai, South Red Sea Airport and Ras Sidr Airport. Japan is funding a new passenger terminal at Alexandria's Borg El Arab International Airport.

KHARTOUM NEW INTERNATIONAL AIRPORT

KNIA is planned to replace the existing airport, with a capacity of approximately 7.5m passengers/yr.

ADDIS ABABA AIRPORTS

Bole International Airport is being expanded to triple its capacity. A new airport is planned with four runways and a passenger capacity up to 80m passengers/yr.

ETHIOPIA-DJIBOUTI RAILWAY

Africa's second electric railway began operations in 2016, linking Addis Ababa with Djibouti's new Doraleh Multipurpose Port.

DJIBOUTI

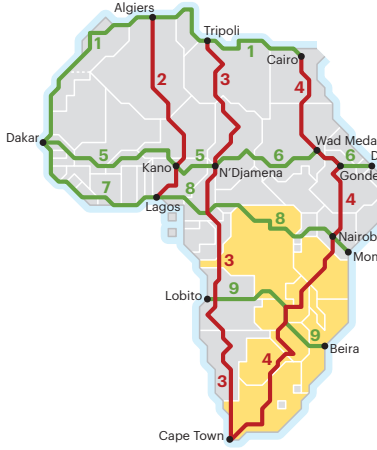
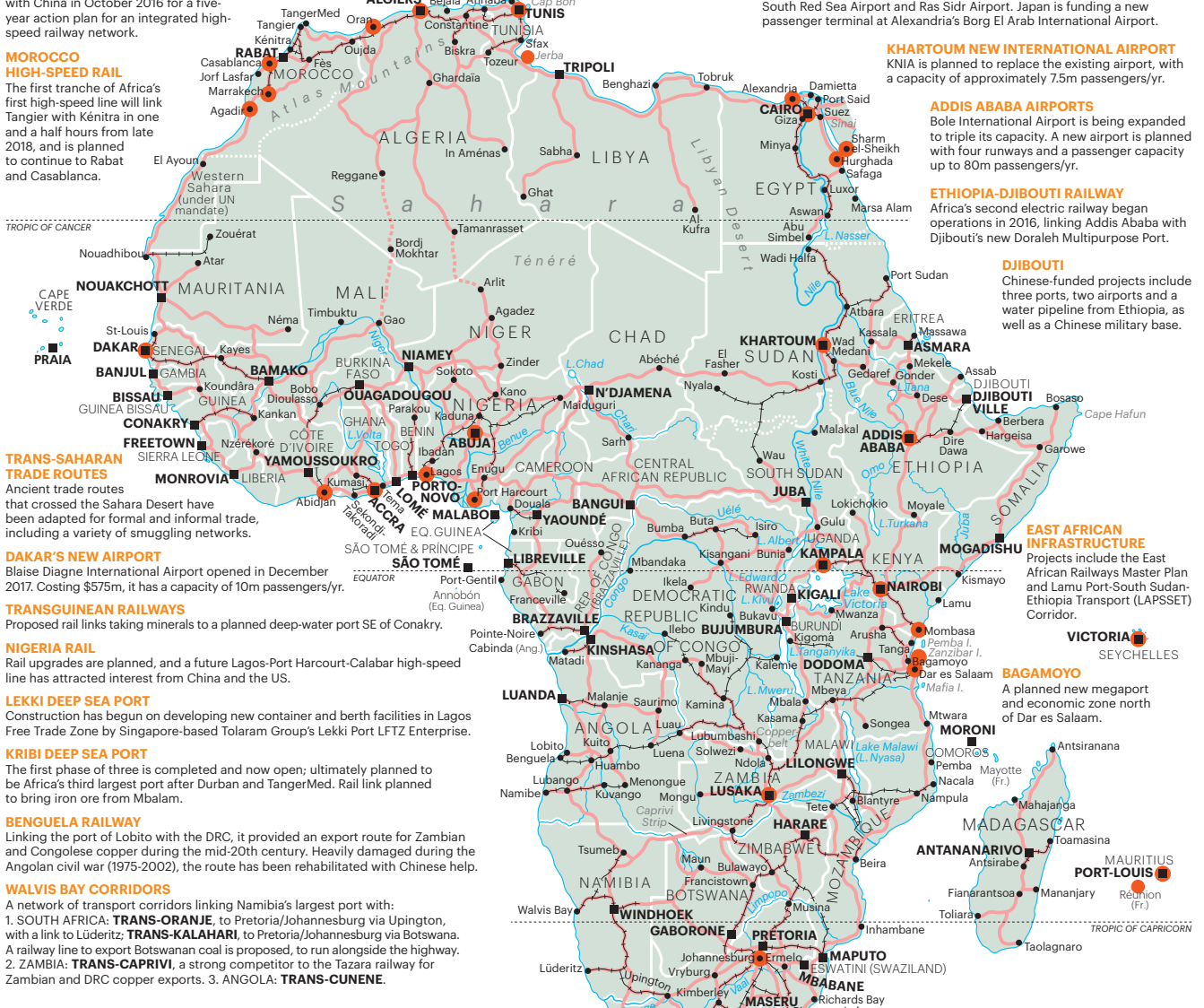
Chinese-funded projects include three ports, two airports and a water pipeline from Ethiopia, as well as a Chinese military base.

EAST AFRICAN INFRASTRUCTURE

Projects include the East African Railways Master Plan and Lamu Port-South Sudan-Ethiopia Transport (LAPSSET) Corridor.

BAGAMOYO

A planned new megaport and economic zone north of Dar es Salaam.



GREAT EQUATORIAL LAND BRIDGE

A project to link the east and west coasts by road, rail and oil pipeline, from Douala in Cameroon to Lamu in Kenya via Bangui and Juba.

NORTH-SOUTH CORRIDOR

A Comesa initiative comprising a road and rail network of over 10,000km, linking eight countries in Southern and Central Africa () with the aim of strengthening cross-border trade and tourism.

TRANS-AFRICAN HIGHWAYS

An international programme to develop a transcontinental road network.

NORTH-SOUTH ROUTES:

TAH-2: Algiers-Agades-Lagos (Trans-Sahara)

TAH-3: Tripoli-N'Djamena-Kinshasa-Windhoek-Cape Town

TAH-4: Cairo-Khartoum-Addis Ababa-Nairobi-Lusaka-Gaborone-Cape Town

EAST-WEST ROUTES:

TAH-1: Cairo-Tripoli-Algiers-Rabat-Dakar

TAH-5: Dakar-Bamako-N'Djamena

TAH-6: N'Djamena-Djibouti

TAH-7: Dakar-Freetown-Abidjan-Lagos

TAH-8: Lagos-Yaounde-Bangui-Kisangani-Nairobi-Mombasa

TAH-9: Lobito-Lubumbashi-Harare-Beira

TAZARA RAILWAY

Built with Chinese assistance in the 1970s to link Zambia with Dar es Salaam, avoiding Zimbabwe and South Africa.

MOZAMBIQUE'S CORRIDORS

NACALA CORRIDOR: Linking Malawi to the sea and the new Nacala-a-Velha port, the outlet for Moatize coal exports.

BEIRA CORRIDOR: An important gateway for landlocked countries to the west of Mozambique.

MAPUTO CORRIDOR: Linking South Africa's industrial heartland with the deepwater ports of Maputo and Matola.

A port at Techobanine, south of Maputo, has been proposed to export coal from Botswana.

