

INFRASTRUCTURE FINANCING TRENDS IN AFRICA – 2015





© 2016 The Infrastructure Consortium for Africa Secretariat c/o African Development Bank
01 BP 1387, Abidjan 01, Côte d'Ivoire

Disclaimer

This report was written by the ICA Secretariat in collaboration with a consultant. While care has been taken to ensure the accuracy of the information provided in this report, the authors make no representation, warranty or covenant with respect to its accuracy or validity.

No responsibility or liability will be accepted by the ICA Secretariat, its employees, associates and/or consultants for reliance placed upon information contained in this document by any third party.

| | |
|---|-----------|
| Foreword | 4 |
| About the ICA | 5 |
| Definitions and Acronyms | 6 |
| List of Graphics and Maps | 8 |
| 1. The Big Picture 2015 | 9 |
| 1.1 Key Messages and Findings | 10 |
| 2. Financing Trends | 12 |
| 2.1 Who is Financing Africa's Infrastructure | 12 |
| 2.2 Financing Trends by Sector | 14 |
| 2.3 Financing Trends by Region | 16 |
| 3. General Trends | 18 |
| 3.1 Climate Resilient Infrastructure | 18 |
| 3.2 Quality Infrastructure | 20 |
| 3.3 Strategic Analysis | 22 |
| 4. ICA Member Financing | 24 |
| 4.1 Overview | 24 |
| 4.2 Types of Funding | 26 |
| 4.3 Trends in Commitments and Disbursements | 28 |
| 4.4 ICA Member Activities | 34 |
| 5. Other Public Sources of Financing | 38 |
| 5.1 African National Budgets for Infrastructure | 38 |
| 5.2 Subnational Financing | 42 |
| 5.3 China | 44 |
| 5.4 Arab Co-ordination Group | 46 |
| 5.5 Non-ICA European Sources | 48 |
| 5.6 Regional Development Banks | 50 |
| 5.7 Brazil, India, South Korea | 51 |
| 6. Private Sector | 52 |
| 6.1 Private Sector Engagement with the Public Sector | 52 |
| 6.2 Private Sector Survey | 55 |
| 7. Sectoral Analysis | 58 |
| 7.1 Overview | 58 |
| 7.2 Transport | 60 |
| 7.3 Water and Sanitation | 64 |
| 7.4 Energy | 68 |
| 7.5 ICT | 72 |
| 7.6 Multi-sector | 76 |
| 8. Regional Analysis | 78 |
| 8.1 Support for Regional and PIDA Projects | 78 |
| 8.2 North Africa | 80 |
| 8.3 West Africa | 81 |
| 8.4 Central Africa | 82 |
| 8.5 East Africa | 83 |
| 8.6 Southern Africa, Excluding Republic of South Africa | 84 |
| 8.7 Republic of South Africa | 85 |
| Annexes | 86 |

Foreword



It is a pleasure to present to you the seventh edition of the ICA annual report, *Infrastructure Financing Trends in Africa – 2015*. The report presents trends in a consistent manner, identifying how resources are being mobilised to make an impact on Africa's infrastructure development.

Innovations in this year's report include more detailed analysis of the processes and dynamics that drive or restrain the continent's infrastructure financing trends. The report includes views from a wide range of stakeholders on these forces and how strategies are emerging and developing to address the challenges of infrastructure financing in Africa. As well as perspectives from ICA members, the report includes views from private sector stakeholders in Africa's infrastructure development, including private equity investors, debt financiers, developers and major contractors.

Infrastructure Financing Trends in Africa – 2015 shows total commitments from all sources analysed of \$83.4bn compared with \$74.5bn in 2014. This 12% increase is encouraging, though some sources of funds differ markedly. China announced \$20.9bn of investments in infrastructure in 2015 compared with \$3.1bn in 2014. Identified budget allocations from 44 African governments were limited to \$28.4bn in 2015, compared with \$34.5bn from 42 countries in the previous year. There was no exceptional item of funding such as the \$8.4bn raised in 2014 by Egyptian citizens for the expansion of the Suez Canal. The Arab Co-ordination Group committed \$4.4bn to infrastructure projects across the continent.

ICA members reported infrastructure financing commitments of \$19.8bn in 2015. Comparing data on a broadly like-for-like basis, excluding exceptional contributions, commitments have remained quite constant over the four years to 2015 at between \$18.3bn and \$19.8bn.

Data from the UK's development finance institution CDC is included for the first time in the ICA members' data. Additional data from the US' Power Africa initiative is provided in this year's report too.

ICA members are consistently mobilising their resources. Disbursements totalled \$12.6bn in 2015 compared with \$13bn in 2014. Over recent years, they have remained reasonably constant, amounting to \$11.4bn in 2013 and \$12.7bn in 2012.

The European Bank of Reconstruction and Development has emerged as a major infrastructure funder in North Africa with commitments of \$638m.

Blended finance and a greater use of development capital are amongst the innovative finance mechanisms deployed to leverage public and private funds for infrastructure development. Support from ICA members able to catalyse

these financings may well be critical in this emerging paradigm. Development partners are also looking beyond projects, investing in people through training and skills development initiatives and schemes to mobilise African people and businesses to create and maintain the continent's infrastructure.

The role of the Programme for Infrastructure Development in Africa (PIDA) and its Priority Action Plan (PAP) is examined against a backdrop of increased commitments to some of its larger programmes. Commitments to PIDA/PAP projects are substantially up in 2015, exceeding \$1.3bn and accounting for 7.2% of overall commitments, 4.8% of country commitments and 16.2% of regional commitments.

At the other end of the scale, *Infrastructure Financing Trends in Africa – 2015* looks at the challenges of financing smaller scale developments such as the increasing range of renewable energy opportunities.

Climate change considerations rose to the fore in 2015 in the wake of the UN Climate Change Conference (COP 21) that led to the Paris Agreement in which 195 countries adopted the first-ever universal, legally binding global climate deal. The report describes how ICA members have risen to the challenge of focusing even more on developing climate resilient infrastructure. We hope that the 2016 edition will cover this in more in detail.

All ICA members focus on mechanisms for improving and assessing the effectiveness of their work. This year's report focuses on Quality Infrastructure, an emerging approach in infrastructure development circles that incorporates elements of economic efficiency, social inclusion, safety and resilience and environmental sustainability.

Infrastructure Financing Trends in Africa – 2015 looks at development partner support for centres of training excellence to bridge the human resource capacity gap in the energy sector and on private sector investments that are creating skills development opportunities in the ICT sector and new manufacturing facilities in the railway sub-sector.

The ICA plans in the 2016 edition of *Infrastructure Financing Trends in Africa* to specifically monitor and analyse resource flows to important Renewable Energy and Climate Change initiatives. This is in line with the ICA vision that all Africans should have access to sustainable and reliable infrastructure services, including energy, transport, water and ICT. We are sure this report will inform and assist the mobilisation of resources needed to achieve that vision.

MOHAMED H HASSAN

Co-ordinator, ICA Secretariat

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

African institutions such as the African Union, the New Partnership for Africa's Development (NEPAD) and the Regional Economic Communities 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, the Republic of 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, recognizing 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 practice.

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, private and public and private sources;
- Facilitate greater cooperation between members of ICA and other important sources of finance e.g. China, India, Arab Funds and the private sector;
- Highlight and help remove policy and technical blockages and progress;
- Increase knowledge of the sector and through monitoring and reporting on the key trends and development.

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. ■

Urban Transportation

The Diagnostic Study and Project Development/Investment Pipeline for Urban Transportation in Sub-Saharan Africa was commissioned by the ICA, with funds from EIB and the EC, and support from AfDB.

The study was set in the context of a Sub-Saharan African urban population set to grow from 40% to over 56% by 2050. The continent is rapidly transforming into a predominantly urban continent. Urban proliferation can drive significant and inclusive economic growth. But challenges remain. Several cities will almost double in size over the next 30 years.

The objective was to identify specific opportunities and develop a project development and investment pipeline of urban transportation projects in Sub-Saharan Africa.

Stage one of the study diagnosed and assessed 16 of Africa's fastest growing and largest cities based on earlier studies by the Sub-Saharan Africa Transport Programme (SSATP) on Mobility and Accessibility in Urban Areas of Africa. The aim was to identify five potential cities or urban areas in which investable projects could be developed. The study looked at each location's needs for urban mobility, transport or accessibility projects and services as well as each urban area's preparedness to host investable urban transport projects.

Stage two comprised field surveys of cities – Accra, Addis Ababa, Dakar, Dar es Salaam and Lagos – and identified and assessed five projects that could be considered for investment or other financing by ICA members including proposals for candidate PPP projects. Opportunities for investment in sustainable urban transport mobility were then identified.

The ICA then arranged an investors' conference to present and discuss the study's recommendations and to share the investment opportunities identified in the studies. ■

IWA/ICA Nexus Report

The "nexus" is the place where water, energy and agricultural security systems intersect. All rely on water infrastructure. A major study commissioned by the International Water Association on behalf of the ICA and published in 2015 looks at how to address the water, agriculture and energy security "nexus" in Africa. The International Union for Conservation Nature was also a partner in development of the study.

Nexus Trade-offs and Strategies for Addressing the Water, Agriculture and Energy Security Nexus in Africa outlines a roadmap towards solutions in a typical African transboundary river basin. It identifies possible regional solutions to local problems and an understanding of the institutional capacity required and the gaps that need to be filled. This

indicates where investment can be focused.

The study applied a structured analytical process to Africa's Volta and Lake Victoria basins and used this analysis to provide an overview of regional challenges and opportunities for multipurpose water infrastructure. It set out to design a framework for assessing how current and upcoming infrastructure projects deal with nexus challenges.

Central to the nexus concept is an understanding of the interdependencies between the three systems. The nexus concept involves a process for allocating and using resources to ensure water, energy and food security for growing populations at a time of climate change, land use transformation and economic diversification. ■

Definitions, 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, G8 countries, 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.

Acronyms

ADF – African Development Fund

ADFD – Abu Dhabi Fund for Development

AFC – Africa Finance Corporation

AFD – Agence Française de Développement (France)

AfDB – African Development Bank

AfDB-OITC – Transport & ICT Department

AfDB-ONEC – Energy, Environment and Climate Change Department

AfDB-OPSD – Private Sector Department

AfDB-OWAS – Water & Sanitation Department

AfDB-OWAS UA

AFESD – Arab Fund for Economic and Social Development

AMCOW – African Ministers Council on Water

ACG – Arab Co-ordination Group

AU – African Union

AUC – African Union Commission

AWF – African Water Facility

BADEA – Arab Bank for Economic Development in Africa

BDEAC – Banque de Développement des Etats de l'Afrique Centrale

BIDC – Banque d'Investissement et de Développement de la CEDEAO (EBID)

bn – 1 billion = 1,000,000,000

BIO – Belgian Investment Company for

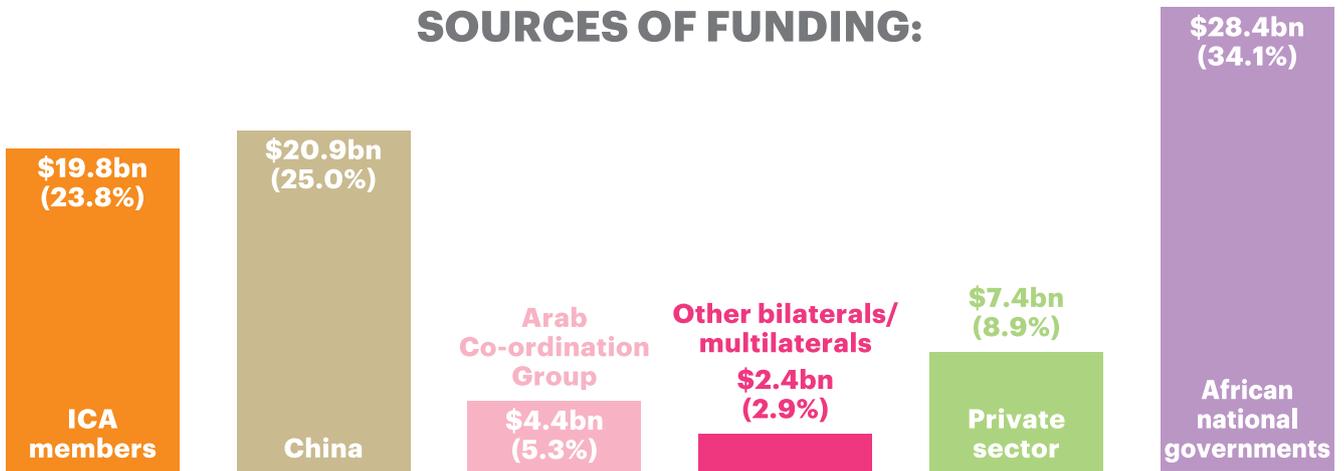
| | | |
|--|--|---|
| Developing Countries | GIF – Global Infrastructure Facility | PIDA – Programme for Infrastructure Development in Africa |
| BOAD – Banque Ouest Africaine de Développement | GIZ – Deutsche Gesellschaft für Internationale Zusammenarbeit | PIDA/PAP – PIDA Priority Action Programme |
| BOOT – build-own-operate-transfer | IBRD – International Bank for Reconstruction and Development | PPA – power purchase agreement |
| BNDS – Banco Nacional de Desenvolvimento | ICA – Infrastructure Consortium for Africa | PPDU – ECOWAS’ Project Preparation and Development Unit |
| C2Ds – Debt Reduction-Development Contracts | ICT – Information and Communications Technology | PPFN – Project Preparation Facilities Network |
| CADF – China-Africa Development Fund | IDA – International Development Association (World Bank Group) | PPIAF – Public-Private Infrastructure Advisory Facility |
| CAGR – compound annual growth rate | IDB – Islamic Development Bank | PPIU – COMESA’s Project Preparation and Implementation Unit |
| CAR – Central African Republic | IDC – Industrial Development Corporation of South Africa Ltd | PPP – public-private partnership |
| CASDB – Central African States Development Bank | IFC – International Finance Corporation | Proparco – AFD’s private sector arm |
| CIF – Climate Investment Fund | IPO – initial public offering | PTA Bank – Preferential Trade Area Bank |
| COFIDES – Spanish Development Funding Company | IPP – independent power producer/project | PV – photovoltaic |
| COMESA – Common Market for Eastern and Southern Africa | IPPF – Infrastructure Project Preparation Facility | RDB – regional development bank |
| CSP – concentrated solar power | ITF – Infrastructure Trust Fund | RECs – Regional Economic Communities |
| DBSA – Development Bank of Southern Africa | JBIC – The Japan Bank for International Co-operation | RSA – Republic of South Africa |
| DEG – Deutsche Investitions- und Entwicklungsgesellschaft (KfW Group) | JICA – Japan International Co-operation Agency | SADC – Southern African Development Community |
| DFI – development finance institution | KFAED – Kuwait Fund for Arab Economic Development | SEFA – Sustainable Energy Fund for Africa |
| DFID – Department for International Development (UK) | KfW – KfW Development Bank (Germany) | SFD – Saudi Fund for Development |
| DRC – Democratic Republic of Congo | LIC – low-income country | SME – small- and medium-size enterprise |
| EAC – East African Community | m – 1 million = 1,000,000 | SSA – Sub-Saharan Africa |
| EADB – East Africa Development Bank | MD – Moroccan dirham | SWF – sovereign wealth fund |
| EAIF – Emerging Africa Infrastructure Fund | MCC – Millennium Challenge Corporation | TA – technical assistance |
| EAPP – Eastern African Power Pool | MDB – Multilateral development banks | TSF – Transition Support Facility |
| EBID – ECOWAS Bank for Investment and Development | MIC Fund – Middle Income Countries Fund | UEMOA – West African Economic and Monetary Union |
| EC – European Commission | MIGA – Multilateral Investment Guarantee Agency (WBG) | UNECA – United Nations Economic Commission for Africa |
| ECA – export credit agency | MoU – memorandum of understanding | UAE – United Arab Emirates |
| ECOWAS – Economic Community Of West African States | MW – megawatt | UK – United Kingdom of Great Britain and Northern Ireland |
| EDF – European Development Fund | NEPAD – New Partnership for Africa’s Development | US – United States |
| EDFI – European DFIs | NTF – Nigeria Trust Fund | \$ – US dollar |
| EIB – European Investment Bank | Norfund – Norwegian Investment Development Fund for Developing Countries | USAID – United States Agency for International Development |
| EPC – engineering, procurement and construction | NPCA – NEPAD Planning and Coordinating Agency | USTDA – US Trade and Development Agency |
| EU-AITF – European Union-Africa Infrastructure Trust Fund | O&M – operations and maintenance | WACDEP – Water, Climate & Development Programme |
| EXIM Bank – The Export-Import Bank of the United States | OCGT – open cycle gas turbine | WAPP – West African Power Pool |
| FMO – Netherlands’ Development Finance Company | ODA – official development assistance | WBG – World Bank Group |
| G8 – Group of Eight (Canada, France, Germany, Italy, Japan, Russia, UK, US) | OeEB – Development Bank of Austria | WSP – Water and Sanitation Programme |
| G20 – Group of 20 (Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, South Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, UK, US and the EU) | OFID – Organisation of the Petroleum Exporting Countries [OPEC] Fund for International Development | ZAR – South African rand |
| | OPIC – Overseas Private Investment Corporation (US) | |
| | % – per cent | |

List of Graphics and Maps

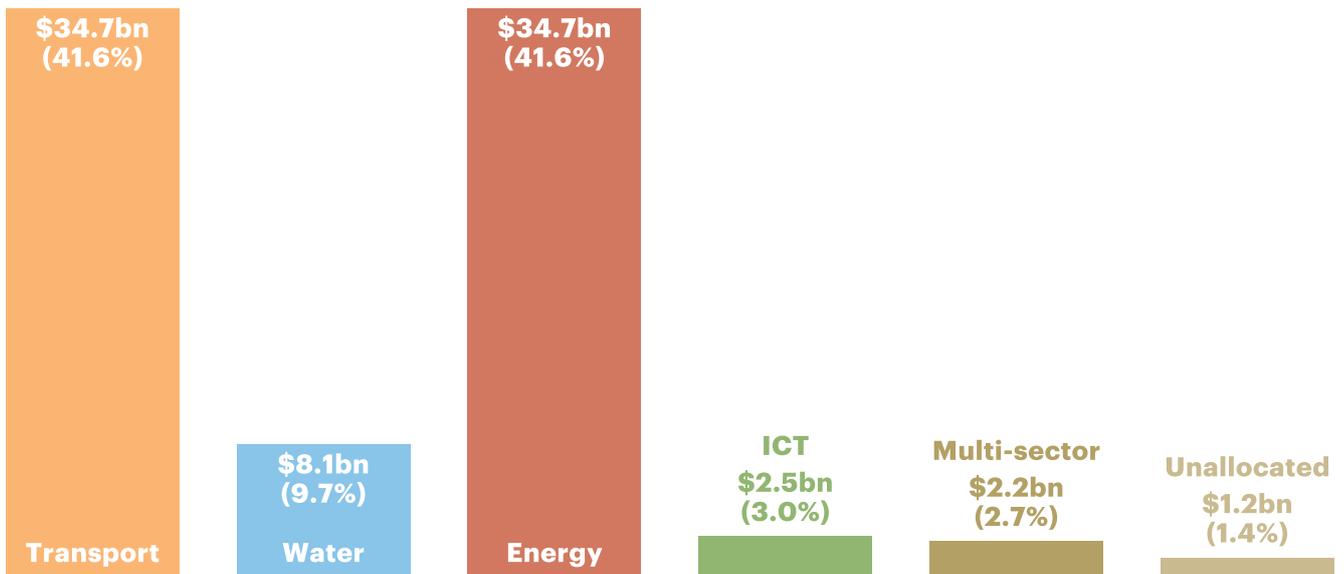
| | | | |
|---|----|--|----|
| Figure 1: ICA members' commitments & disbursements, 2010-15 | 10 | Figure 49: Subnational financing – average sources of funds | 42 |
| Figure 2: Total infrastructure financing, 2010-2015 | 10 | Figure 50: Subnational financing – average spend per sector | 42 |
| Figure 3: Total infrastructure financing in 2015 by sector | 11 | Figure 51: Chinese commitments by sector 2011-2015 | 44 |
| Figure 4: Total infrastructure financing in 2015 by region | 11 | Figure 52: Chinese commitments by region 2011-2015 | 45 |
| Figure 5: Total infrastructure financing in 2015 by source | 11 | Figure 53: ACG commitments by sector & region, 2013-2015 | 46 |
| Figure 6: Financing flows into Africa's infrastructure, 2015 | 12 | Figure 54: ACG commitments, by institution 2010-2015 | 47 |
| Figure 7: Sources of finance 2015, public external and private | 13 | Figure 55: European commitments by sector, 2015 | 48 |
| Figure 8: Total infrastructure commitments by sector & region | 13 | Figure 56: European commitments by region by %, 2015 | 48 |
| Figure 9: Total infrastructure commitments by sector & source | 14 | Figure 57: European commitments by country and EBRD, 2015 | 49 |
| Figure 10: Total infrastructure commitments by sector, 2014-15 | 14 | Figure 58: DBSA commitments by sector, 2015 | 50 |
| Figure 11: Trends in ICA member commitments, 2010-2015 | 15 | Figure 59: BOAD commitments by sector, 2015 | 50 |
| Figure 12: Total infrastructure commitments by region & source | 16 | Figure 60: India commitments 2012-2015 | 51 |
| Figure 13: Total commitments by region, 2014- 2015 | 16 | Figure 61: PPI Project Database trends 2010-2015 | 52 |
| Figure 14: Total ICA member commitments by region, 2011-2015 | 17 | Figure 62: Private sector projects reaching financial close, 2015 | 53 |
| Figure 15: Total ACG commitments by region, 2011-2015 | 17 | Figure 63: Private sector financing by region, 2015 | 53 |
| Figure 16: ICA member & ACG commitments by region, 2011-15 | 17 | Figure 64: Private sector financing trends by sector, 2010-2015 | 53 |
| Figure 17: Average ICA & ACG commitments by region, 2011-15 | 17 | Figure 65: Private sector survey: respondents' role | 55 |
| Figure 18: ICA members' 2015 commitments by sector | 24 | Figure 66: Sectors where respondents are active | 55 |
| Figure 19: ICA members' 2015 commitments by region | 24 | Figure 67: Investment destinations – top 10 attractive countries | 56 |
| Figure 20: ICA members' 2015 commitments by type of funding | 26 | Figure 68: Investment destinations – top three first choices | 56 |
| Figure 21: ICA members' 2015 hard/soft/project preparation infrastructure commitments | 27 | Figure 69: African portfolio intentions, next two years | 57 |
| Figure 22: ICA members' 2015 hard and soft infrastructure disbursements | 27 | Figure 70: Greatest challenges facing the private sector | 57 |
| Figure 23: ICA members' commitments by sector, 2010-2015 | 28 | Figure 71: Delays experienced by the private sector | 57 |
| Figure 24: ICA members' commitments by region, 2010-2015 | 28 | Figure 72: Total financing by sector and source, 2015 | 59 |
| Figure 25: ICA members' 2015 commitments, donor and region | 29 | Figure 73: ICA member commitments to transport, 2011-2015 | 61 |
| Figure 26: ICA members' 2015 disbursements, donor and region | 29 | Figure 74: Total commitments to transport, 2014 & 2015 | 61 |
| Figure 27: ICA members' 2015 commitments, sector and region | 30 | Figure 75: Transport sector map with selected projects | 63 |
| Figure 28: ICA members' 2015 disbursements, sector and region | 30 | Figure 76: Total transport sector commitments by region, 2015 | 63 |
| Figure 29: ICA members' disbursements by sector, 2012-2015 | 30 | Figure 77: ICA member commitments to water, 2011-2015 | 65 |
| Figure 30: Disbursement rates per sector for selected ICA member projects completed in 2015 | 31 | Figure 78: Total commitments to water, 2014 & 2015 | 65 |
| Figure 31: Trends in regional infrastructure portfolios, 2010-2015 | 32 | Figure 79: Water sector map with selected projects | 67 |
| Figure 32: Country vs. regional commitments per sector incl PIDA/PAP shares | 33 | Figure 80: Total water sector commitments by region, 2015 | 67 |
| Figure 33: Country vs. regional disbursements per sector incl PIDA/PAP shares | 33 | Figure 81: ICA member commitments to energy, 2011-2015 | 69 |
| Figure 34: National government budget allocations control group (larger economies) \$bn, 2013-2015 | 39 | Figure 82: Total commitments to energy, 2014 and 2015 | 69 |
| Figure 35: National government budget allocations control group (smaller economies), 2013-2015 | 39 | Figure 83: Energy sector map with selected projects | 71 |
| Figure 36: National government budget allocations by sector | 39 | Figure 84: Total energy sector commitments by region, 2015 | 71 |
| Figure 37: National government budget allocations by region | 39 | Figure 85: ICA member commitments to ICT, 2011-2015 | 73 |
| Figure 38: Identifiable national budget allocations, South Africa | 40 | Figure 86: Total commitments to ICT, 2014 and 2015 | 73 |
| Figure 39: Identifiable national budget allocations, Egypt | 40 | Figure 87: ICA member multi-sector commitments, 2011-2015 | 77 |
| Figure 40: Identifiable national budget allocations, Angola | 40 | Figure 88: Total multi-sector commitments, 2014 and 2015 | 77 |
| Figure 41: Identifiable national budget allocations, Ethiopia | 40 | Figure 89: Total commitments to North Africa, sector & source | 80 |
| Figure 42: Identifiable national budget allocations, Cameroon | 40 | Figure 90: ICA members' commitments to North Africa, 2011-15 | 80 |
| Figure 43: Identifiable national budget allocations, Nigeria | 40 | Figure 91: Total commitments to West Africa, sector & source | 81 |
| Figure 44: Infrastructure in national budgets, 2015, \$ per capita | 41 | Figure 92: ICA members' commitments to West Africa, 2011-15 | 81 |
| Figure 45: Infrastructure in national budgets, 2015, % of GDP | 41 | Figure 93: Total commitments to Central Africa, sector & source | 82 |
| Figure 46: Percentage of infrastructure allocations by sector | 41 | Figure 94: ICA members' commitments to Central Africa, 2011-15 | 82 |
| Figure 47: Sources of finance for sample cities & municipalities | 42 | Figure 95: Total commitments to East Africa, sector & source | 83 |
| Figure 48: Spend by sector for sample cities & municipalities | 42 | Figure 96: ICA members' commitments to East Africa, 2011-15 | 83 |
| | | Figure 97: Total commitments, Southern Africa, sector & source | 84 |
| | | Figure 98: ICA members' commitments, Southern Africa, 2012-15 | 84 |
| | | Figure 99: Total commitments to South Africa, sector & source | 85 |
| | | Figure 100: ICA members' commitments, South Africa, 2012-15 | 85 |
| | | Figure 101: ICT sector map with selected projects | 89 |
| | | Figure 102: Total ICT sector commitments by region, 2015 | 89 |

TOTAL FUNDING IN 2015: \$83.5bn

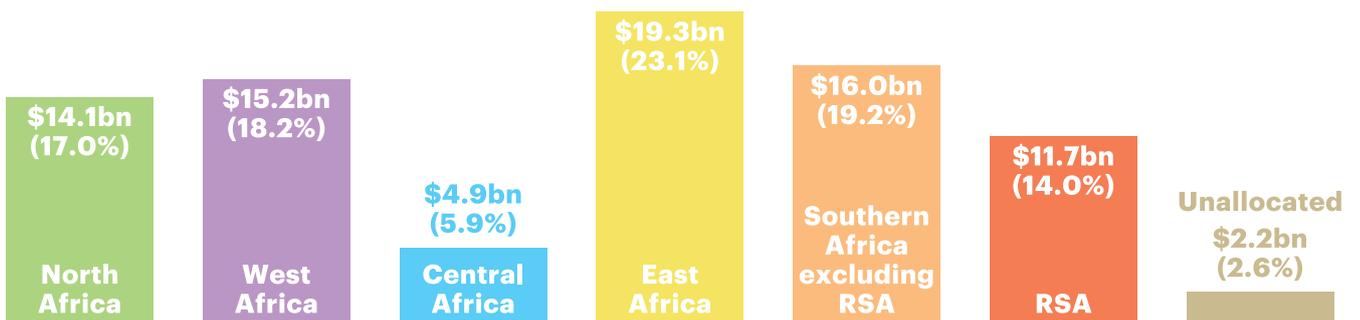
SOURCES OF FUNDING:



FUNDING TO EACH SECTOR:



FUNDING TO EACH REGION:



1.1 Key Messages and Findings

A total of \$83.4bn was committed to Africa's infrastructure development in 2015 compared with \$74.5bn in 2014. This comprised nearly \$28.4bn of identified African national budget allocations, commitments from ICA members of \$19.8bn, identifiable private sector investment of \$7.4bn and \$27.7bn from non-ICA bilateral and multilateral financiers.

Of the \$27.7bn of non-ICA bilateral and multilateral finance, \$20.9bn is from announcements of funding from China. This compares with just \$3bn in the previous year while the average of announced investments from China over the five years to 2015 is \$12.3bn. Wide year-on-year fluctuations and lack of official data make it difficult to verify figures regarding China's investments in Africa.

In contrast, **2015 saw reduced identifiable infrastructure allocations of \$28.4bn by 44 African national governments** compared with \$34.5bn based on 42 countries in 2014. The reduction in allocations was most marked in oil producing economies.

Private sector commitments increased by \$4.6bn in 2015 to \$7.4bn, of which \$7.2bn went to the

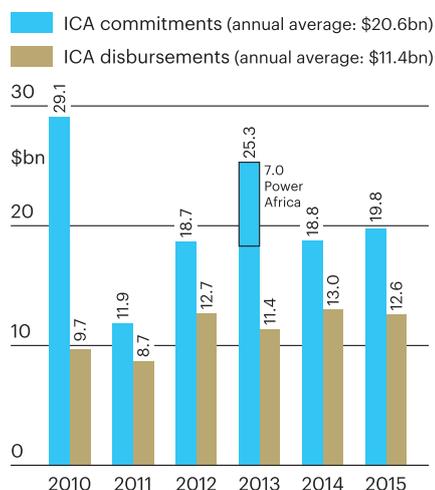


Figure 1
ICA members' commitments and disbursements, 2010-2015

energy sector, with South Africa the main beneficiary with investments of \$3.8bn.

Even though the total amount of commitments is 12% up in 2015 compared with 2014, there are causes for concern due to steep declines in one sector, water, and one region, Central Africa.

Water sector commitments show a trend of significantly declining commitments since 2013. In that year, ICA commitments alone to the sector were nearly \$6bn but by 2015, total funding from all sources amounted to \$8.1bn. Of this amount, ICA members alongside other development partners provided 44% while national governments provided around 51%. The private sector provided just 1.4%, while China rarely invests in water projects.

Central Africa saw a substantial \$3.4bn or 41% fall in anticipated infrastructure spending from \$8.3bn in 2014 to \$4.9bn in 2015, due to African national government budget allocations declining from \$4.3bn to \$2.2bn and ICA members' commitments declining from \$3.7bn to \$1.3bn. Arab Co-ordination Group (ACG) members' commitments are up from a relatively low base of \$79m in 2014 to \$498m in 2015.

South Africa saw the biggest increase in commitments from \$4.9bn in 2014 to \$11.7bn in 2015, substantially due to Chinese and private capital in its transport and energy sectors.

Energy sector commitments appear to have seen a sustained but not entirely even increase over the last five-years, attracting increasing amounts of both public and private capital. But the increase is centred on North Africa and Southern Africa.

There are substantially more commitments to the transport sector from several sources. ICA

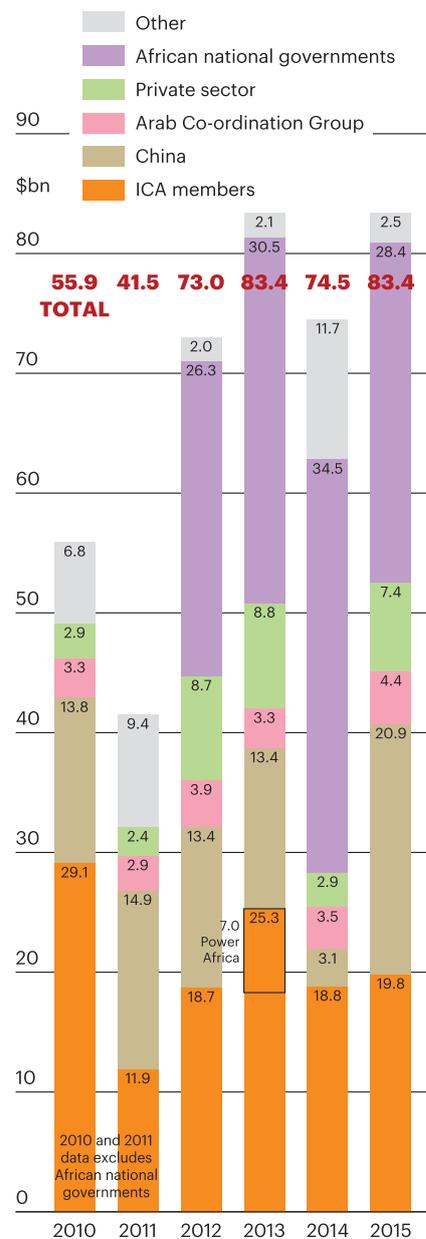


Figure 2
Total infrastructure financing, 2010-2015

member commitments increased from \$3.7bn in 2014 to \$6.8bn in 2015 while ACG commitments over the same period increased from \$1.2bn to \$2.1bn. Overall commitments to the transport sector remained broadly the same in 2015 at \$34.7bn compared with \$34.3bn in the previous year, although the 2014 data included the exceptional \$8.4bn Suez Canal funding.

Whereas there are several indications of stronger investment flows into the energy sector it is too soon to tell whether increased flows to transport operations from some sources marks the beginning of an upward trend.

ICA members reported infrastructure financing commitments of \$19.8bn in 2015. This is 5.6% or \$1bn more than the \$18.8bn reported in 2014 but includes additional data from the US (Power Africa, \$307m) and the UK (CDC, \$139m).

Disbursements in 2015 totalled \$12.6bn, a small decline of 2.9% compared with the \$13bn reported in 2014.

Disbursements over recent years have remained reasonably constant, amounting to \$11.4bn in 2013 and \$12.7bn in 2012.

Commitments to PIDA/PAP projects exceeded \$1.2bn in 2015, a very substantial increase over the \$161m reported in 2014. The \$1.2bn of PIDA commitments reported in 2015 represent 7.2% of overall commitments, 4.8% of country commitments and 16.2% of regional commitments.

The EBRD in 2015 emerged as major contributor to Africa's infrastructure with commitments of more than \$638m.

Of members who have reported in the previous four years Germany's DEG provided no data. Data submitted by

USAID, which did not report in 2014, comprises information from the Power Africa interagency, including OPIC, EXIM Bank, USTDA and others. EXIM Bank, OPIC and MCC did not provide data directly.

Data for CDC, the wholly-UK government owned DFI that manages capital provided entirely by DFID is provided for the first time. Russia's Prognoz responded to the ICA's request for data for the first time and reported that it had made no commitments in 2015 to Africa's infrastructure.

DBSA's regional funding portfolio looks set on a growth path. In 2015 it made regional commitments of \$292m. New commitments from DBSA's international operations were made in respect of initiatives in Congo, DRC, Kenya, Nigeria, Tanzania, Uganda and Zambia.

DBSA, acting as fund manager on behalf of the SADC Project Preparation and Development Facility, obtained approval for the first allocation of preparation funding, with \$3.5m for the development of the Mozambique-Zimbabwe-South Africa regional power interconnector.

The EC has launched the Africa Investment Facility (AfIF), a new blending mechanism that started operating in November 2015 and combines grants with other resources such as loans from DFIs to leverage additional financing for development

and to increase the impact of EU aid. The facility will progressively substitute EU-AITF.

Blending mechanisms – albeit with different definitions of what constitutes blended funding – are much talked about among some ICA members and attracted \$1.4bn in commitments during 2015 compared with \$1.3bn in 2013.

'Quality Infrastructure' is emerging as a new approach in infrastructure development circles. It incorporates elements of economic efficiency, social inclusion, safety and resilience, environmental sustainability as well as the convenience and comfort seen as vital for sustainable development.

Private sector interest in infrastructure is certainly robust in some areas, notably in Nigeria's ICT sector and South Africa's renewables market and growing in others, including Morocco's water sector and East Africa's ports.

In the fourth annual African Infrastructure Investment Survey, South Africa ranked top in the choice of investment location. In 2014 it shared the top spot with Kenya, which has dropped back to second place in the rankings. Ghana has taken third position from Nigeria, which is now in fourth place. Morocco, which did not feature in the top ten investment locations at all in 2014, ranked fifth in the 2015 survey. ■

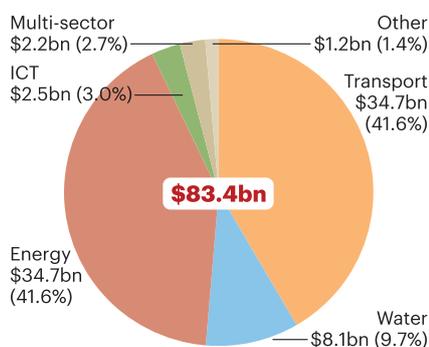


Figure 3
Total infrastructure financing in 2015 by sector

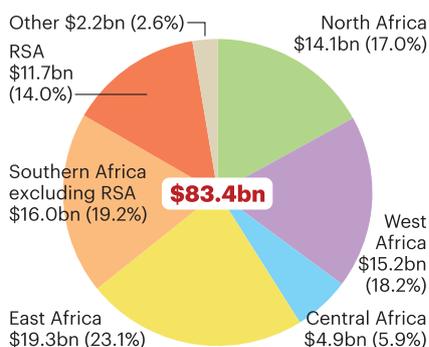


Figure 4
Total infrastructure financing in 2015 by region

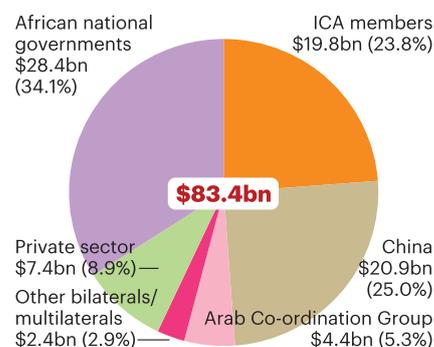


Figure 5
Total infrastructure financing in 2015 by source

2. Financing Trends

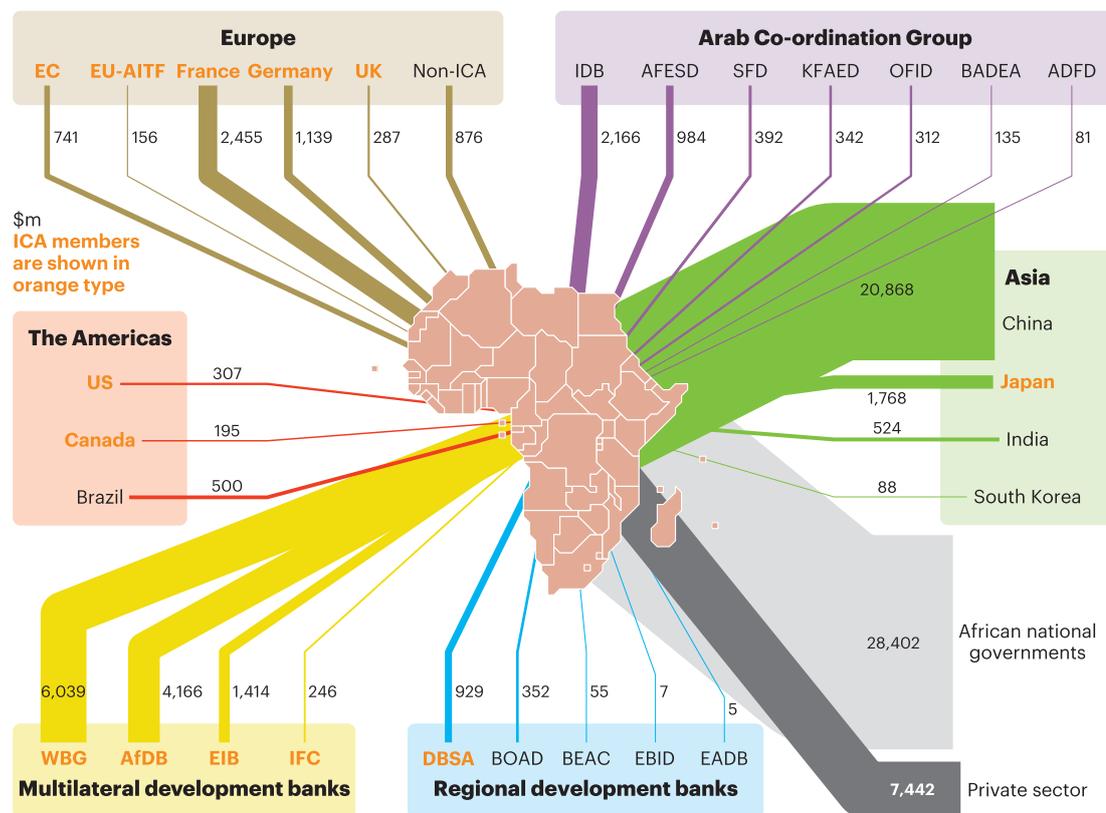


Figure 6
Reported and identified financing flows into Africa's infrastructure, 2015

2.1 Who Is Financing Africa's Infrastructure

A total of \$83.4bn was committed to Africa's infrastructure development compared with \$74.5bn in 2014. But there has been a substantial shift in the sources of funds committing to infrastructure spending.

Announcements of Chinese funding are up to nearly \$21bn in 2015 compared with just \$3bn in the previous year. In 2013, announced investments from China were \$9.1bn while the average over the five years to 2015 is \$12.3bn. But the wide year-on-year fluctuations and lack of official data render it very difficult to predict future trends with any accuracy.

The apparent increase in funding from China in 2015 is offset by pressure from low oil and commodity prices on African governments to allocate fewer budget resources to infrastructure development. The ICA's

analysis of identifiable infrastructure allocations across 44 African national governments revealed that \$28.4bn was allocated in 2015 compared with \$34.5bn based on 42 countries in 2014.

Contributions from non-ICA bilaterals and multilaterals apart from China increased from around \$6bn in 2014 to \$6.8bn in 2015, largely as a result of ACG commitments increasing from \$3.5bn in 2014 to a record \$4.4bn in 2015, surpassing the group's previously highest commitments of \$3.9bn in 2012. Overall commitments in 2015 were bolstered by \$500m from Brazil, \$524m from India and \$88m from South Korea.

Commitments from non-ICA European DFIs and multilaterals reduced from \$1.3bn to \$876m, most of which was provided by the EBRD, with approvals of \$638m.

Africa's regional development banks

(excluding DBSA) committed \$418m in 2015, a decrease on the \$583m committed in 2014.

ICA members committed \$19.8bn in 2015, up from \$18.8bn in 2014. Excluding the exceptional Power Africa contribution of \$7bn to 2013 figures, ICA member commitments have remained quite constant over the past four years at between \$18.3bn and \$19.8bn.

A notable aspect of this year's report is that there are no reported exceptional single-item fundings. The 2014 report recorded the \$8.4bn Suez Canal expansion funding by public subscription to investment certificates, while the \$7bn Power Africa contribution was reported in 2013.

However, China's \$21bn of reported investments could be considered 2015's exceptional circumstance. ■

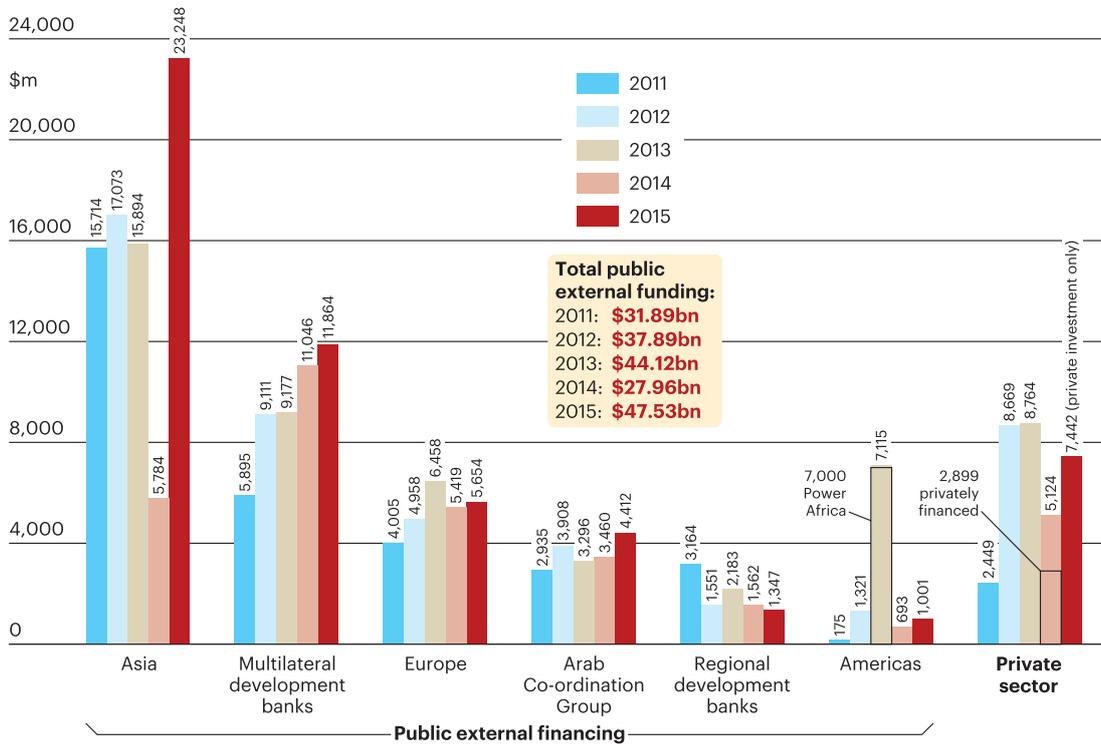


Figure 7
Sources of finance 2015, public external and private

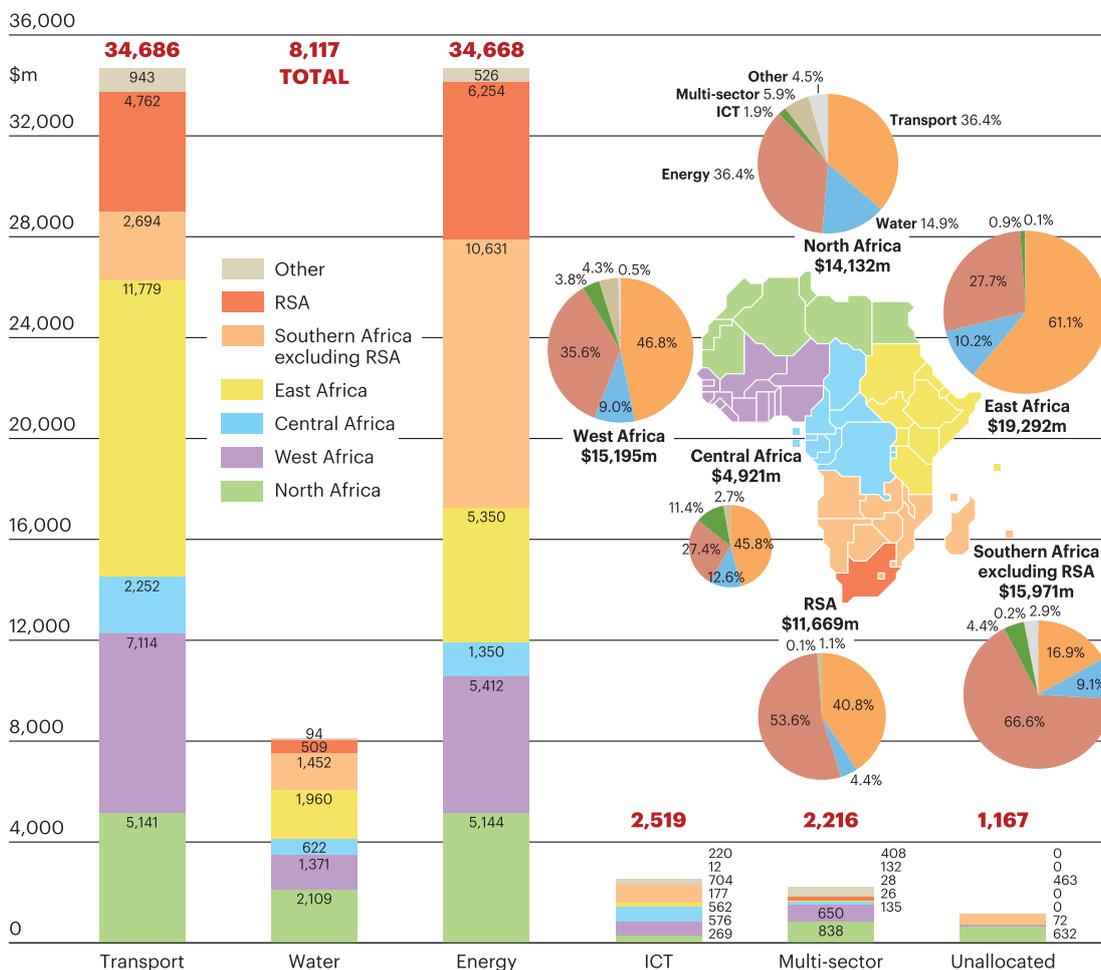
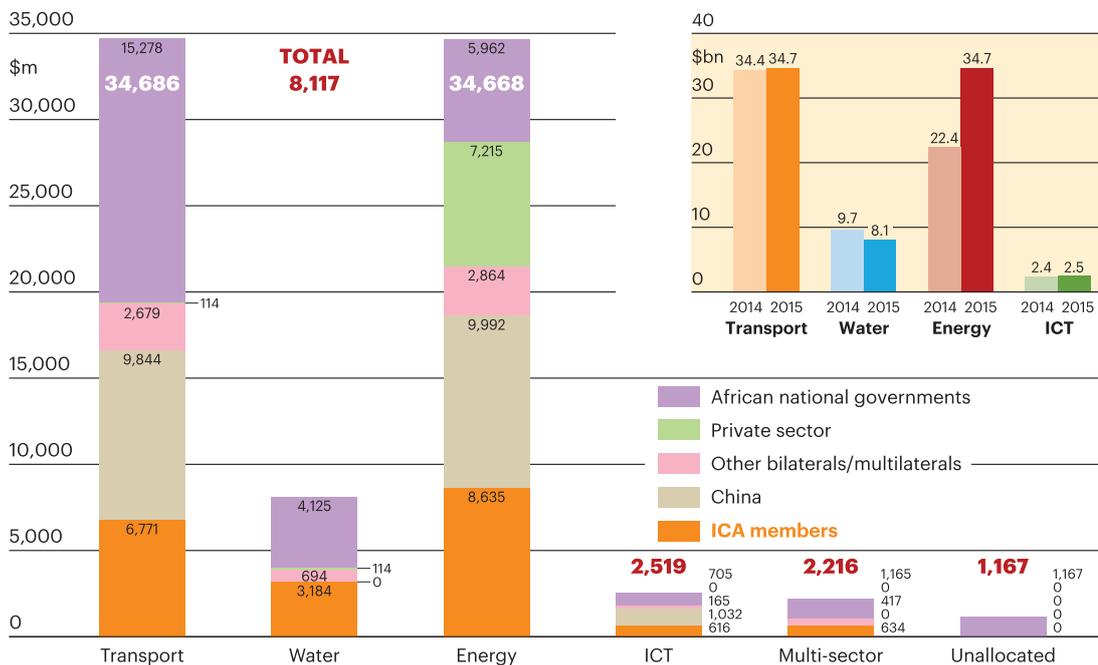


Figure 8
Total 2015 infrastructure commitments by sector and region

2.2 Financing Trends By Sector



Figures 9 and 10
Total 2015 infrastructure commitments by sector and source (left); Total infrastructure commitments by sector, 2014-2015 (above right)

Of the \$83.4bn total financing commitments made in 2015, total commitments to the African transport sector stood at \$34.7bn, broadly similar to the \$34.4bn recorded the previous year. This is despite substantial Chinese investments and a significant increase in ICA funding, offset by declining budget allocations from African national governments, traditionally the largest group of funders in the transport sector.

Commitments to the water sector stood at \$8.1bn in 2015, a decline from the \$9.7bn recorded in 2014. African national governments allocated \$4.1bn or 50.8% while ICA members reported \$3.2bn or 39.2% of all water commitments.

The energy sector received commitments of \$34.7bn in 2015, a significant rise on the \$22.4bn invested the previous year due to announcements of very large Chinese investments, strong commitments from DFIs and successful efforts to attract private investment in South Africa's renewable sector.

Total commitments to the African ICT

sector stood at \$2.5bn in 2015, slightly more than the \$2.3bn recorded the previous year.

Analysis of consistent ICA and ACG member data provides a clear picture of how trends are shaping up in different sectors. Figure 11 shows investments in all sectors by ICA and ACG members since 2010.

Transport

Transport commitments dipped in 2011-14 but returned to \$6.8bn in 2015, just as was reported in 2010. Commitments from ACG members rose quite sharply to \$2.1bn in 2015, and have now overtaken energy allocations making transport the most invested in sector by that group.

But commitments to the transport sector can be subject to spikes – in terms of public and private sectors – if a few big projects are committed to in one year, as happened with two big port projects featuring in the PPI Database in 2013 for example.

It remains to be seen whether this year's encouraging increase in transport sector commitments is a spike or the beginnings of a trend, but

Data Note

Discerning trends by sector requires several years' analysis of funding from a consistent set of sources. Data in this report to describe total infrastructure commitments contains only two years of reasonably consistent data on African national government budget allocations. Meaningful trends based on this wider range of sources will emerge in the future. A two-year picture is nevertheless useful. ■

sources canvassed for this year's report suggested substantial amounts of investment were coming into East Africa because several projects in the region, which is also attracting Chinese investment to its transport sector, are underpinned by substantial political will and improved regional cohesion.

Water

In the four years to 2014, commitments to the water and transport sectors from ICA and ACG members broadly tracked each other but whereas transport allocations increased in 2015, they declined in the water sector.

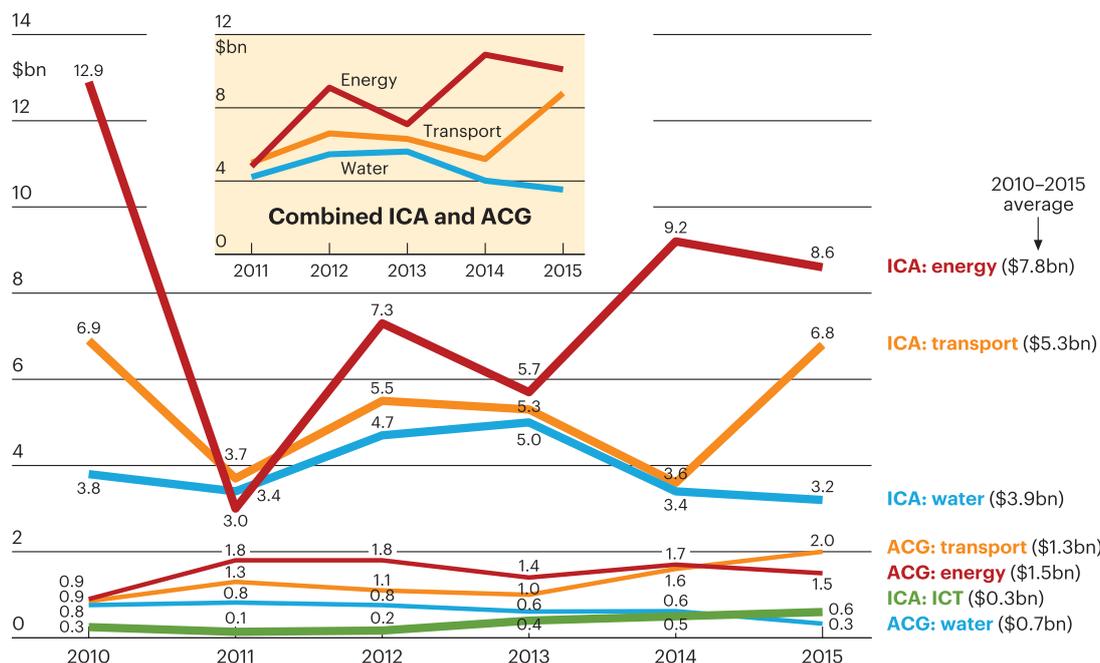


Figure 11
Trends in ICA member commitments, 2010-2015 and combined ICA and ACG financing, 2011-2015

ICA members are very substantial players in the water sector, and reported 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 and below the average of \$3.9bn over the six-year period. Commitments to the water sector from ACG members appear to have been in decline since 2011 too.

The apparent decline in water sector commitments may provide cause for concern, especially since this is a sector that has not stimulated so much interest from either China or the private sector.

Energy

Figure 11 shows that the most striking feature in financing trends in the six years to 2015 is the very high level of energy commitments in 2010. Without having the project level detail to confirm an actual figure, ICA members' energy commitments in that year were substantially due to large North African energy projects and the Eskom Investment Support Project for South Africa. Taking this into account, it may be discerned that

there is an underlying trend in the energy sector of steadily increasing investment. ACG data reveal a sharp increase in energy commitments in 2011 and then levelling out at around an average of \$1.4bn since then.

Energy projects have also done very well in terms of private sector investments, attracting 97% of private capital reported in the PPI database in 2015. These are predominantly investments in South Africa and Morocco, perhaps underlining very strongly the benefits of robust enabling environments to attract private capital.

ICT

Total commitments to the ICT sector from sources of finance usually monitored in analysis of infrastructure investments in Africa stood at \$2.5bn in 2015, slightly more than the \$2.3bn recorded the previous year. ICA member data show an increase over the last two years in commitments while the PPI database, which in 2010 and 2011 contained substantial amounts of ICT funding, now contains very little.

ICA members' ICT commitments, which averaged under \$200m in 2010-

12 seem to be increasing, growing to \$396m and \$506m in the following two years and reaching \$616m in 2015. ACG's ICT commitments are negligible.

But these ICT datasets present only a partial picture, and a different set of metrics may well be needed to take into account some of the now very large amounts of private investments by telecommunications companies operating in Africa. Nigeria for example has received some \$6bn of foreign direct investment flowing into ICT in the three years up to 2015. Total investment in the sector has now reached in excess of \$38bn by some estimates (see page 74).

Other dynamics in the ICT sector include increased market penetration and investment by Chinese telecommunications firms, notably Huawei alongside others, and an apparently very investable telecommunications tower sector that is attracting finance from both the private sector and development partners. ■

2.3 Financing Trends By Region

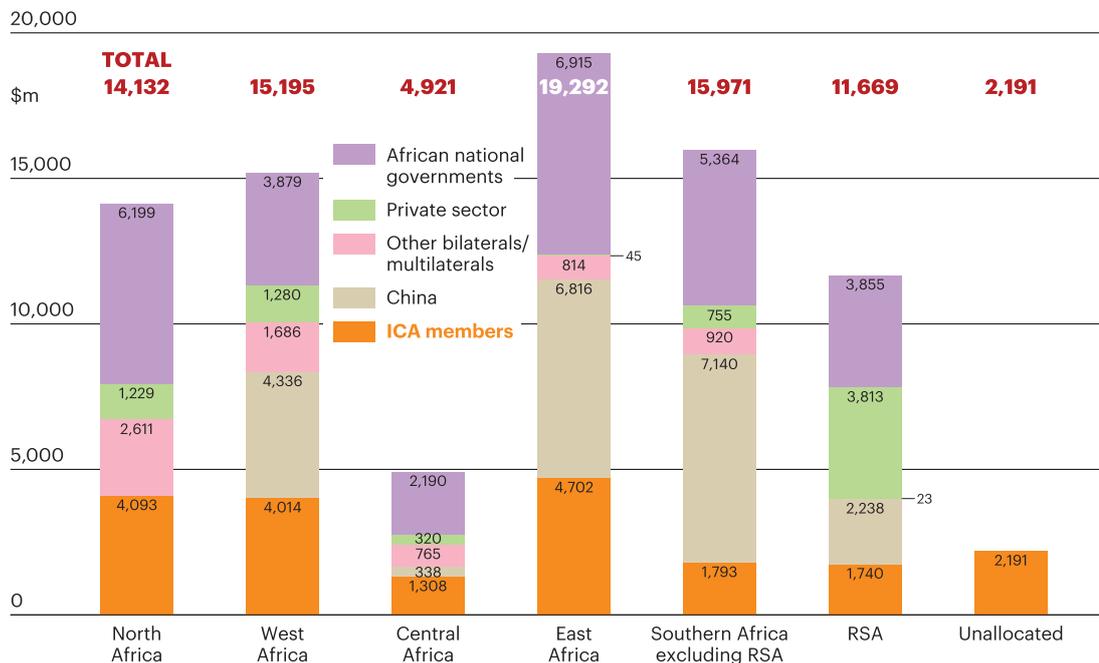


Figure 12
Total 2015 infrastructure commitments by region and source

Of the \$83.4bn total financing commitments made in 2015, North Africa accounted for \$14.1bn, West Africa \$15.2bn, Central Africa \$4.9bn, East Africa \$19.3bn, Southern Africa \$16bn, and RSA \$11.7bn. Intraregional and pan-African commitments amounted to \$2.2bn.

Commitments to Central Africa fell \$3.4bn or 41% from \$8.3bn in 2014 to \$4.9bn in 2015 (Figure 13, below), due to African national government budget allocations declining from \$4.3bn to \$2.2bn and ICA members' commitments declining from \$3.7bn to \$1.3bn. ACG member commitments to Central Africa increased to \$498m in 2015 from \$79m in 2014.

A \$9.3bn reduction in commitments to North Africa is substantially because the 2014 data include the exceptional \$8.4bn of investment certificates bought by Egyptian citizens to fund the Suez Canal expansion. There were also fewer commitments from ACG members and lower budget allocations to infrastructure by North African governments in 2015 compared with the previous year.

A very substantial increase in commitments to South Africa from \$4.9bn to \$11.7bn is partly explained by a successful bidding round in 2015 in the country's REIPPP programme, which attracted significant private sector investment, including \$3.8bn recorded in the PPI Database. South

Data Note

Analysing trends by region requires several years' analysis of funding from a consistent set of sources. Data in this report to describe total infrastructure commitments contains only two years' reasonably consistent data on African national government budget allocations so meaningful trends based on this wider range of sources will yield trends in the future. A two-year picture is nevertheless useful. ■

Africa also stands to benefit from \$2.2bn of announced investments from China, which include around \$1.9bn in favour of Transnet for railway projects as well as a China Development Bank loan of \$500m for power utility Eskom's infrastructure construction programme.

Commitments to Southern Africa increased by some \$4bn, despite falling African national government budget allocations, largely due to newly announced Chinese investments. These included \$4.5bn for the 2,172MW Caculo Cabaça hydroelectric project and \$840m for the 750MW Soyo gas power project, both in Angola, and \$1.2bn for the

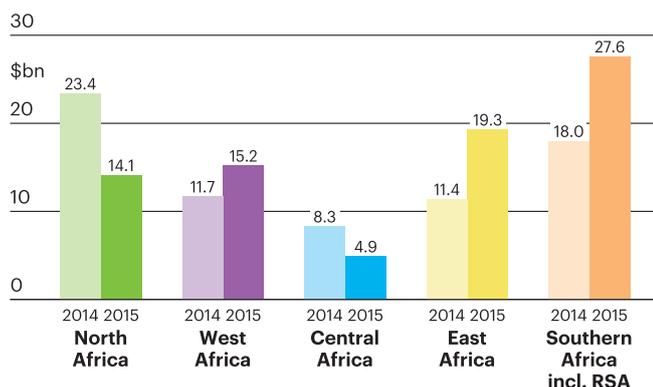


Figure 13
Total commitments by region, 2014-2015

Hwange coal power plant in Zimbabwe. Brazil committed \$500m to the Lauca hydropower project.

Analysis of broadly consistent ICA member data (excluding the exceptional 2013 Power Africa contribution) could provide a better picture of how trends are shaping up in different regions over recent years.

Figure 14 shows investments in all regions by ICA members since 2011.

There are few discernible trends here. In every region except Southern Africa, the highest commitment in a single year is more than double the lowest annual commitment during the period analysed. The lowest commitments for most regions were reported in 2011, except for East Africa with \$2bn in 2014 and Central Africa with just \$1.3bn in 2015.

A steady trend over recent years has been the broadening focus of ACG members across the continent. Commitments to Sub-Saharan Africa exceeded those to North Africa in 2015 for the first time since 2011. The group's expansion across the continent has been particularly noticeable in West Africa, where commitments have increased steadily each year from \$219m in 2011 to \$1.2bn in 2015.

The trend of combined ICA and ACG members' total commitments appears to show that after a lean year in 2011, allocations to infrastructure returned to what appears to be becoming a normality for this group of an average \$21bn a year in the period 2012-15. Figure 17 shows average annual ICA and ACG member commitments to each region.

While more research is needed, per capita spending on infrastructure appears to be highest in Southern Africa (including South Africa) at about double the amount spent in North Africa. On a regional basis, per capita spending is perhaps lowest in East and West Africa. ■

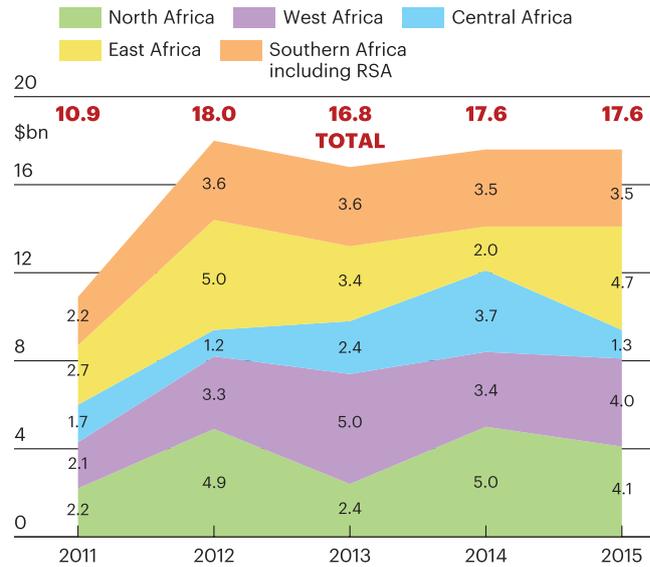


Figure 14
Total ICA member commitments by region, 2011-2015

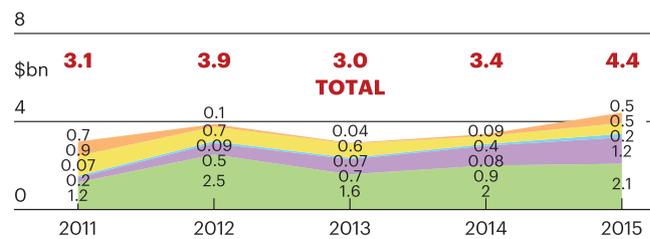


Figure 15
Total ACG commitments by region, 2011-2015

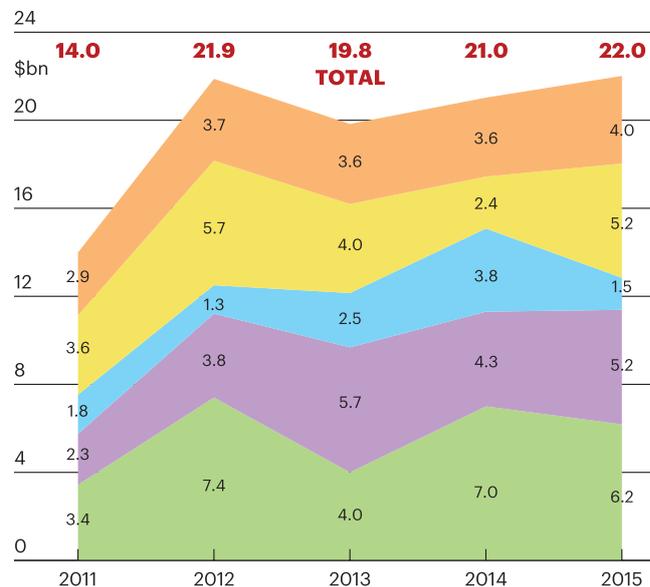


Figure 16
Average annual combined ICA and ACG commitments by region, 2011-2015

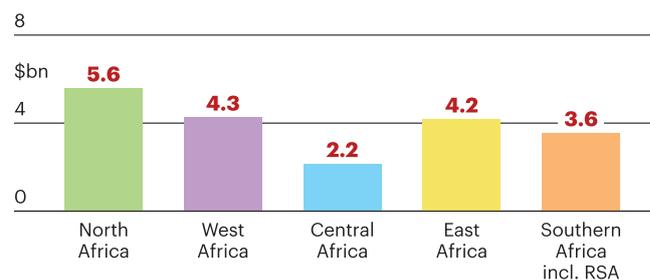


Figure 17
Average annual ICA and ACG member commitments by region, 2011-2015

3. General Trends



Olkaria II geothermal power plant – iStock, Byelikova Oksana

3.1 Climate Resilient Infrastructure

ICA members participating in the first Africa Climate Resilient Infrastructure Summit in Addis Ababa in April 2015 sent some very clear messages.

A senior regional advisor to the World Bank called for climate change and infrastructure development programmes to be at the heart of Africa's development agenda, while an EIB loan officer underscored the bank's role in efforts to achieve sustainable development and poverty reduction by highlighting that it had set aside €19bn (\$21bn) for climate action.

Later in the year, a very substantial force for developing climate resilient infrastructure emerged with the UN Climate Change Conference (COP 21). It led to the Paris Agreement in which 195 countries adopted the first-ever universal, legally binding global climate deal. The agreement, due to enter into force in 2020, sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C.

COP21 and the pursuant nationally determined contributions (NDCs), alongside the new Sustainable Development Goals (SDGs), were perhaps the two very big deals to emerge in terms of Africa's infrastructure development during 2015. As a result, ICA members are increasing efforts to promote climate resilience, some of which build upon existing activities.

AfDB and the IFC are active participants in the Pilot Programme for Climate Resilience (PPCR), the first programme developed and operational under the Strategic Climate Fund (SCF), one of two funds (alongside the Clean Technology Fund) in the framework of the Climate Investment Funds (CIF).

As a part of the PPCR, a national Strategy Programme for Climate Resilience (SPCR) is currently being implemented in several African countries. In Uganda, the AfDB is leading the implementation of a national SPCR – supported by IFC, the World Bank and the CIF – that aims to create and enable resilience to climate change.

The SPCR will review climate change vulnerability assessment and risk activities so as to identify key hotspots, and assess institutional capacity for climate resilience co-ordination. This includes mainstreaming climate change development plans, designing climate change adaptation and mitigation strategies and establishing the national climate change Information Management System. Similar projects are underway in Ethiopia, Malawi, Mozambique and Niger.

The World Bank is implementing the Lake Chad Development and Climate Resilience Action Plan. This project, set to run from 2016-2025, incorporates aspects of the Lake Chad Basin Commission five-year (2013-2017) investment plan. Ultimately, this plan aims to turn Lake Chad into a sustainable regional hub for development.

In 2015, EIB provided a €8m (\$9m) loan to Omnicane, Mauritius' largest sugar company. Work has been underway over several years on initiatives to convert waste products from the sugar refining process into

ICA members' Respond to Focus on Climate Change

ICA members canvassed for Infrastructure Financing Trends in Africa – 2015 described their responses to the increased focus on climate change.

Climate change considerations are incorporated in JICA's projects and programmes in various sectors. Measures against climate change are largely divided into mitigation and adaptation measures. Mitigation measures are designed to reduce greenhouse gas (GHG) emissions or increase GHG removal from the atmosphere in several sectors, including energy, transport, solid waste management and forestry, with the aim of promoting low-carbon societies.

Adaptation measures may be built into sectors including transport, water and sanitation, and agriculture to make societies more resilient to climate change impacts.

At WBG, climate change was a big consideration prior to COP21 and the bank is putting much effort into COP22 during which a sharp focus on Africa is expected. Two months before COP21, WBG President Jim Yong Kim announced a major increase in the group's financing to help countries combat climate change by building low carbon and resilient developments. To date, about 21% of WBG's global funding is climate related. Under new plans, that could rise to 28%, a percentage that the group's infrastructure funding already way exceeds.

Already, WBG has announced plans to help developing countries add 30GW of renewable energy – enough to power 150m homes – to the world's energy capacity, bring early warning systems to 100m people and develop climate-smart agriculture investment plans for at least 40 countries – all by 2020. These are among a number of ambitious targets laid out in the group's new Climate

Change Action Plan, which aims to accelerate efforts to tackle climate change over the next five years and help developing countries deliver on their NDCs.

IFC aims to expand its climate investments from the current \$2.2bn a year to a goal of \$3.5bn a year, and lead on leveraging an additional \$13bn a year in private sector financing by 2020. As well as its own financing, the World Bank also intends to mobilise \$25bn in commercial financing for clean energy over the next five years.

Other members have already demonstrated a clear commitment to climate resilient endeavours. One significant initiative in this respect is the Geothermal Risk Mitigation Facility for Eastern Africa, involving the AU on the one side and the German Federal Ministry for Economic Co-operation and Development (BMZ), DFID and the EU-AITF via KfW.

Climate resilience is a significant issue from a policy point of view for KfW, and it has responded in practice. In 2015 it provided the funding to support South Africa's strategy to increase the efficiency and capacity of its freight transport sector, thereby achieving a modal shift from road to rail. This will reduce CO₂ emissions and make an important contribution to protecting the climate.

With France hosting COP21, AFD organised or participated in around 40 events in Paris. Following the pledges made at COP21, the AFD Group, which along with Proparco has already mobilised \$18bn for projects that will have a positive impact on climate change, is actively helping to boost synergies between lenders and to standardise practices and climate related financing tools. AFD is in the process of updating climate strategy based on need to ensure that 30% of

support for Africa contributes to climate adaptation or mitigation. While COP21 did not change AFD's pre-existing focus on climate change, the NDCs provide tangible targets for support.

As the world's largest provider of climate finance, EIB's outlook will be influenced by COP21 and the bank will now play a key part in mobilising the additional resources needed, much of it from the private sector. It has committed to invest at least 25% of its lending portfolio in low-carbon and climate-resilient growth.

AfDB has committed to triple its climate change finance to about \$5bn per year and to provide \$12bn in renewable energy investments by 2020. The bank's energy unit, while remaining technology agnostic, has upped its estimate on climate resilient financing as countries increasingly shift towards renewables and the bank expects to support more renewable projects.

Several ICA members and other stakeholders forged new partnerships at COP21 in Paris. DFID said it would collaborate with the US' Power Africa initiative to expand and leverage investments in cleaner energy; support power pools and other interventions to increase cleaner energy power generation and access to power through regional integration. Specifically Power Africa would collaborate in the DFID-led Energy Africa access campaign, which focuses on how to rapidly accelerate growth in the African household solar industry. This partnership will also support efforts to advance the full participation of women in the energy sector; support the regional development of the geothermal sector, and strengthen donor coordination in the sector by maximising impact of interventions. ■

products such as ethanol and carbon dioxide. As a result, Mauritius' sugar industry has become increasingly efficient and sustainable, while creating local jobs, with 50 created in 2015 alone. Omnicané's 2015 loan is intended for a 'carbon burn-out'

facility, set to be completed in late 2016.

The UK supports the Building Resilience and Adaptation to Climate Extremes and Disasters Programme (BRACED), which provides funding

for NGOs to increase the resilience of people to extreme climate events in selected countries in the Sahel and sub-Saharan Africa. BRACED has a focus on creating resilient cities and infrastructure and ensuring access to clean water, alongside its aims to

reduce poverty and hunger, secure livelihoods and promote peace.

Through AFD, France has developed the SUNREF (Sustainable Use of Natural Resources and Energy Finance) initiative in order to promote investments in energy and environmental services in developing countries. In 2015, AFD made 12 commitments totalling \$59m to SUNREF projects in Tunisia.

This initiative also benefits from an EU-AITF grant in the form of

technical assistance to help renewable energy and energy efficiency project developers in the Indian Ocean region create bankable projects.

In 2015, GIZ disbursed \$14.2m to transboundary water management in the Southern African Development Community (SADC). Through this programme, human, institutional and organisational capacities have been strengthened in the SADC water sector and basin-wide integrated water resources management plans have been developed. The programme

also provides a basis for dealing successfully with the impacts of climate change and water scarcity.

Through JICA, and utilising its experiences, achievements and technologies, Japan says it will promote measures according to three guiding principles: climate compatible sustainable development, comprehensive assistance to meet diverse needs in developing countries, and collaboration with development and climate partners. ■

3.2 Quality Infrastructure

The concept of Quality Infrastructure incorporates elements of economic efficiency, social inclusion, safety and resilience, environmental sustainability as well as the convenience and comfort seen as vital for sustainable development.

It aims to confront the challenge of building infrastructure based on smarter decisions, better design and construction, innovative financing and incorporating the private sector as part of the solution.

With limited financial resources in parts of Africa, but mindful of the necessity for inclusive and sustainable development, it also addresses the challenge of developing infrastructure investments that offer the best value for money.

Longevity, safety and operational costs over the full project lifecycle are all taken into account, as is an investment's contribution to local human resource development.

Quality Infrastructure recognises the important challenge of climate change should be taken into account by using environmentally friendly technologies that emit the least greenhouse gases.

The government of Japan announced the *Principles for Promoting Quality Infrastructure Investment* at the G7 Ise-Shima Summit in May 2016.

Three months later, at TICAD VI, Japan announced its intention to promote investments that align with the principles and that it would implement Quality Infrastructure investments of around \$10bn from a mixture of private and public sources.

The World Bank for example aligns with the nexus approach and the holistic thinking surrounding the concept of Quality Infrastructure. The bank does not think in terms of sectors because projects very rarely benefit only a single sector – for example, an urban development programme could involve initiatives in multiple sectors. Similarly, priorities are not sectors or projects, but outcomes such as impact on climate change or on fragile states.

A holistic but practical approach has led to the bank working with other development partners on the possibility of setting up a facility embracing the Quality Infrastructure approach that would examine and address the roadblocks to infrastructure management. These

include the design and management of projects, best practice in the building and maintenance of infrastructure and what, beyond environmental and social impact assessments, constitutes a good DFI intervention in the project preparation process.

Kenya's Mombasa Port Development Project bears several of the hallmarks of a Quality Infrastructure approach. Here, a Japanese ODA loan was decided upon to catalyse private sector investment so that a commercial port operator would

SDG Goal 9

“Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation,” is Goal 9 of the new 17 Sustainable Development Goals (SDGs).

There appears to be a growing understanding that in its reference to infrastructure, the goal is more meaningful than it first appears. Infrastructure is about more than physical assets, it is about sustainable solutions for the delivery of reliable mobility, energy, clean water and logistics. Moreover, infrastructure advances the poverty reduction outcomes envisioned in the post-2015 development agenda. ■

manage the project's berths and other new facilities. AfDB, DBSA, DFID, WBG and USAID have all shown an interest in supporting aspects of the project.

DFID's TradeMark East Africa for example supports the rehabilitation of some port facilities and work to improve institutional capacity and cargo handling processes with the aim of promoting intra-regional trade.

In terms of the environment, measures have been built into the project to reduce water turbidity at the port while CO₂ emissions are kept low through the use of environmentally friendly port cranes.

Longevity and reduced maintenance costs are anticipated by, for example, the application of anticorrosion materials on pilings at the new berths. Around 1,700 Kenyans are expected to work on the project's construction during which skills transfers are also anticipated. ■

Defining Quality Infrastructure

Quality Infrastructure can be seen as infrastructure which addresses five critical elements:

Economic Efficiency: achieving value for money over the full project lifecycle by supporting procurement processes; adopting lifecycle costs as an evaluation cost; scenarios/options with rated criteria where non-price attributes are assessed with merit points and available to stakeholders; better management of infrastructure projects and service delivery; enhanced flexibility; design for multi-use purposes; better planning and co-ordination leading to economies of scale, proper mobilisation, channelling and management of PPPs.

Resilience against Natural Disasters: resilience against natural disasters through appropriate infrastructure design as well as adequate systems for disaster preparation and response.

Safety: physical and operational safety and durability through improved construction standards, use of management information systems and smart design.

Environmental and Social Sustainability: minimise harmful environmental impacts; improved welfare for all groups in society, attention to needs of traditionally excluded groups; gender considerations; accessibility (particularly for elderly and disabled citizens); citizen engagement in planning, and robust risk assessment framework.

Economic and Social Contribution: conducive to small and medium enterprise development; facilitates job creation and productivity growth through efficient trade logistics; supports enhanced competitiveness through technology transfer and human capital development.

Source: International Conference on Sustainable Development through Quality Infrastructure Investments (20-21 January 2016), Staff of the Tokyo Development Learning Center (TDLC) Programme of the World Bank's Social, Urban, Rural and Resilience Global Practice (GSURR). ■

Private Sector Views on Quality Infrastructure

As part of the private sector-focused African Infrastructure Investment Survey, respondents were asked to define and characterise Quality Infrastructure. What follows is a selection of respondents' answers:

- *Commercially viable without subsidy, and long life.*
- *Well constructed affordable economic infrastructure that makes a real difference to the lives of Africans*
- *Fit for purpose for the region in which it is developed and that it addresses the local communities' needs and provides for the long term economic development of the region.*
- *Strong local sponsor with thorough understanding of the local/political landscape with an experienced developer with Africa expertise. Ability to construct on budget delivering a*

product that benefits a broader good to an economy. A lender group that doesn't only include DFIs but local/regional banks as well.

- *Infrastructure built for the long term, not necessarily for the cheapest price, and not where future maintenance costs will outweigh the benefits of such infrastructure development*
- *A necessary platform to establish, implement and develop the countries*
- *Having catalytic effect on wider development; where quality/price trade-offs are properly understood by all; transparent oversight, where risk of non-performance is clearly assigned to relevant parties so can be remedied.*
- *Fit for purpose; durable; built and maintained to adequate standards.*
- *Infrastructure that meets a specific purpose for which it was developed.*

That specific purpose having been thoroughly researched and well-defined. international best practice.

- *Customer satisfaction combined with owners who wish to keep investing in similar projects.*
- *Reliable and cost efficient infrastructure that delivers win-win for users and developers*
- *Fitness for purpose. So much is ill defined and does not meet modern needs, especially in the ports sector.*
- *Quality and experienced sponsors, stable regulatory regime, clear government support to the project, strong EPC contractor and operator with local market knowledge.*
- *Developments that will have a measurable and lasting positive impact on quality of life of the inhabitants of the host country.*

3.3 Strategic Analysis

ICA members and private sector stakeholders, including private equity investors, debt financiers, developers and major contractors share their views on the progress of Africa's infrastructure development.

Positive Trends in Infrastructure Financing

Public and private sector stakeholders appeared very positive about prospects for Africa's infrastructure development, with most seeing increased attention from multinationals and private equity investors and suggesting that there is plenty of money looking for bankable opportunities.

"The substantial build up of international donor interest means there are very substantial funds available in the energy sector. There is also greater private investor appetite, apparent for increased private equity and nascent interest – which is likely to grow – from pension funds, family offices and other new classes of actor," according to a DFI programme specialist.

A Kenya-based equity investor said he was encouraged by the greater number of countries looking to implement IPPs and PPPs and a greater sensitivity among most classes of investors to the whole-life investment approach. Firms and funds are more willing to invest in Africa, and this is creating more interest and vibrancy so that the good ideas are able to get financed, another private sector investor said.

These positive processes appear to be the result of a diverse range of forces. The head of debt finance at an African specialist insurer says international

willingness to commit capital and African governments strengthening institutional frameworks and capacity are encouraging infrastructure development.

A senior official in a Ghanaian state utility also said he was seeing gradual improvements in political stability, good governance and institutional effectiveness. This, the official said, "made financing infrastructure projects make business sense considering the resources – material and human – on the continent."

The managing director of a Nigerian equity investment house is encouraged by deregulation and regulatory reforms across West Africa to support private sector participation investment with incentives including tax holidays, reduced tariffs and free trade zones. Regional integration strategies are helping too he says, specifically in his case the West Africa Power Pool, the Côte d'Ivoire – Liberia – Sierra Leone – Guinée (CLSG) interconnection, developments in domestic gas-to-power as well as opportunities in clean and renewable energy markets.

Equity investors, many of whom appear to be in competition for good projects to back, are also very encouraged by the arrival of what one described as

"empowered and well funded developers." A Tanzanian advisor highlighted as a positive force the emergence of more sophisticated developers with development capital who are realising the need to invest in quality local partners. A senior investment officer for a European debt fund sees infrastructure development increasingly driven by improving level of expertise and body of experience in governments and African institutions. More countries issuing competitive tenders is also encouraging according to a project developer with substantial assets across the continent.

According to an export and investment advisor for a European government, there is a realisation by some African governments that projects are fighting for global capital and hence some are becoming more realistic on how to position projects.

Several stakeholders said they were increasingly inclined to look at early stage projects given the shortage of bankable ones. Typically, a Uganda-based project sponsor said he was seeing an "increasing degree of interest from private equity and venture capital investors and the willingness of more financiers to enter projects earlier, pre-completion of bank feasibility study. ■

China's Role

China's now very large role in Africa's infrastructure development is evident in initiatives such as the \$2bn AfDB and People's Bank of China Africa co-financed Growing Together Fund.

Some private sector project sponsors and developers are positive about Chinese engagement in Africa. A Uganda-based project sponsor said he saw the influx of Chinese investment as the most positive of all trends in infrastructure financing in Africa while a Nigeria based project sponsor said he was seeing opportunities in major Chinese financings for local partners. A US-based project sponsor also welcomed Chinese interest, saying that in some instances China's approach

meant more straightforward access to reliable lines of financing.

Migration

Awareness is high that legislation and border controls will not solve Africa's migration crisis, while investment in infrastructure has a key role in resolving many of the issues driving migrants to flee their home countries. These investments would stimulate employment in the construction, maintenance, and development of projects even before the social and economic benefits of new infrastructure are realised.

More than 1.3m people applied for asylum in Europe during 2015 according to

Eurostat. Although the vast majority are from Afghanistan, followed by Syria and Iraq, tens of thousands of Eritreans and Nigerians have also sought refuge in Europe, while North Africa, notably Libya, is on one of the main migrant routes.

Compounding the problems of migration out of Africa is the rapid internal migration of the continent's population, which creates direct challenges for infrastructure development. In urban areas, annual population growth rates averaging 3.6% are presenting tough challenges for infrastructure service providers. Rural-urban migration accounts for one-quarter of that growth according to the World Bank.

Lower Commodity Prices

Stakeholders in Africa's infrastructure development canvassed for this report said that in 2015 there was more negative sentiment than in the previous year due to the African economic outlook.

Resource rich countries faced with much lower global commodity prices have been particularly hit, with a resultant negative impact on growth. It is also deterring investors who are reckoning on higher returns being available in other locations. Low oil prices also reduce the advantages of renewable energy options.

Economic conditions also make it increasingly difficult for some ICA members to work on a loan basis because of poor credit ratings, particularly in countries suffering from the global downturn in commodities. This has led to some members providing grants rather than loans to resource-reliant countries. Low prices have also severely limited some African national governments' budget allocations to infrastructure.

While resource producers are strapped for cash, some African countries that rely on imported resources have seen benefits from lower prices.

A Shortage of Finance, Projects or People?

Reforming utilities is a challenge in attempts to facilitate the flow of infrastructure developments. AfDB has responded by supporting centres of training excellence to meet the urgent need for Africa to address the human resource capacity gap in the energy sector, especially in view of the massive investments planned in the coming few years.

AfDB is providing €9.7m (\$10.8m) and AFD €3m (\$3.3m) to the Association of Power Utilities of Africa (APUA) to structure a network of four centres of excellence and to train roughly 9,700 technical and managerial staff for power utilities, one third of whom are to be women. An innovative networking approach with centres of excellence in Algeria, Morocco, South Africa and Zambia aims to improve performance and quality of services in the sector. Project outcomes anticipated include the application of skills to facilitate, inter alia, financial close being reached for more PIDA Priority Action Plan (PIDA-PAP) energy projects, a reduction in transmission and distribution losses and improved financial performance at state utilities.

Views on PIDA

The PIDA-PAP has an investment portfolio amounting to \$68bn programmed over the period 2012 to 2020 comprising 51 programmes and projects in energy, transport, ICT and trans-boundary water. According to NEPAD, the 51 programmes and projects are composed of 433 projects.

Several ICA members said they sometimes found it a challenge determining what is and what is not a PIDA project.

The challenge of data collection and provision has been addressed. Based on an agreed upon PIDA Monitoring and Evaluation system, the NEPAD Agency has delivered the first PIDA Progress Report 2015 with information on implementation status of PIDA Projects. With the support of GIZ, the NEPAD Agency is currently enhancing the PIDA Information Management System, notably the Virtual PIDA Information Centre.

The SADC Secretariat and NEPAD have worked with GIZ on the PIDA Acceleration Pilot Programme on the Beira and North South Development Corridors. GIZ is also playing an active role in the Abidjan to Lagos Highway Corridor. It has been selected to be the pilot project of the PIDA Service Delivery Mechanism to receive technical assistance for early-stage project preparation to advance the project to feasibility.

One member said that while they support the idea of an African-designed strategy, they have no specific focus on PIDA. It does however consider a substantial amount of its work to be 'PIDA compliant'. In this context there is increased focus on work to improve regional development and integration in work associated with, for example, improved border crossings and compatible regulations for regional trade and investment.

Progressing Infrastructure

Reasons for project delays remain stubbornly familiar, from general to more specific issues. Financial or structural difficulties in the sector or country sometimes need remedying prior to receipt of DFI or other support, or to boost equity investor confidence.

Legal difficulties include a lack of international arbitration deterring lenders or insurers. Sometimes delays are caused by lack of progress in establishing other infrastructure required to feed or support a project.

A portfolio director at a DFI who says he routinely encounters delays of more than a year said the main reasons for these delays were obtaining government letters of support and awaiting re-written legislation to cover private sector investments, while a project sponsor and developer said delays were principally down to a lack of experience on the part of important stakeholders. He also cited as contributory factors, "the time to organise finance, the inflexibility of the project finance model, regulatory issues and reluctance of public sector actors to accept conditions necessary to accommodate private sector investment."

Corruption remains an issue for the private sector. "Governments need to curb bureaucratic delays and fast track crackdowns on corruption," according to one US project sponsor and developer.

"Governments could also look at removing opportunities for corruption in projects and that all activities are undertaken in a transparent basis," he said. Another investor suggested, "make all engagements public, nothing private and secretive."

A power developer with several facilities across Sub-Saharan Africa maintains that, "bogus competition signing MOUs and issuing press releases for mythical or highly optimistic projects confuses the market and government decision makers alike. Corruption results in bad decisions being made - these do not halt a project, but they do delay everyone else," he said.

For projects to progress, both public and private sector players need to address key issues, according to a Nigerian equity manager. He also called for a clear understanding of the mutually beneficial nature of projects as well as transparent, clear and consistent government. Private sector investors should also be aware of and make provisions for the development considerations of the government such as local employment and capacity building, and the development of related industries by sourcing and developing local production inputs.

For the public sector, maintaining policies that are favourable for private sector investment is critical. Clear and consistent policies related to foreign exchange, privatisation and deregulation will also enable investment, he suggested. ■

4. ICA Member Financing



iStock, Gilles Paire

4.1 Overview

In 2015, ICA members reported infrastructure financing commitments of \$19.8bn. This is 5.4% or \$1bn more than the \$18.8bn reported in 2014 but includes additional data from the US (Power Africa, \$307m) and the UK (CDC, \$139m).

Disbursements totalled \$12.6bn, a small decline of 2.6% compared with the \$13bn reported in 2014. Disbursements over recent years have remained reasonably constant, amounting to \$11.4bn in 2013 and \$12.7bn in 2012.

Although they can never be compared directly, the gap between commitments and disbursements is partly due to contributions to funds.

Multilaterals and Bilaterals

Multilaterals made \$13.7bn or 69% of total ICA commitments in 2015 while bilaterals committed \$6.1bn or 31%.

Bilateral ICA members make financial contributions to multilateral development banks, including AfDB, EIB and WBG.

Some members also make contributions to the European Bank for Reconstruction and Development (EBRD), which in 2015 emerged as a major contributor to Africa's infrastructure with commitments of \$638m. ■

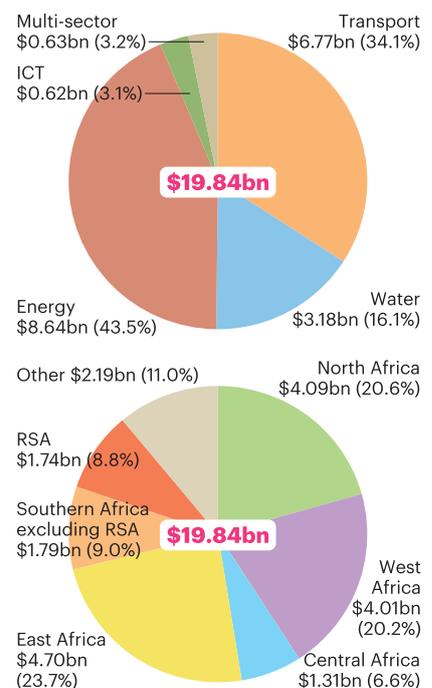
While commitments to funds are reported, disbursements tend not to be under the current data collection methodology. Other reasons for the gap include project delays and decommitments.

Commitments of \$29.1bn in 2010 remain the largest total since ICA records began. While a lack of project level detail means an actual figure cannot be confirmed, this high was substantially accounted for by large North African commitments and the Eskom Investment Support Project for South Africa, the latter being a \$10.75bn project, though that was not the sum of ICA members' commitments to it in 2010.

Excluding the exceptional \$7bn contribution from Power Africa in 2013, total commitments have remained quite constant over the four years to 2015 ranging from \$18.3bn to \$19.8bn.

Transport commitments in 2015 were up very substantially to \$6.8bn, or 88% over those reported in 2014. Commitments of \$3.2bn to water and \$8.6bn to energy were both 6% down on those reported in 2014. ICT commitments increased by 22% to \$616m but multi-sector commitments declined by 71% to \$634m.

Commitments to East Africa



Figures 18 and 19
ICA members' 2015 commitments by sector (top), ICA members' 2015 commitments by region (bottom)

increased by 136% to \$4.7bn. Allocations to West Africa increased by 17% to \$4bn and to RSA by 16% to \$1.7bn. Commitments to Southern Africa fell by 10% to \$1.8bn while those allocated to North Africa declined by 19% to \$4bn. Commitments to Central Africa declined by 65% to just \$1.3bn. ■

ICA Members' 2015 Commitments Matrix (\$m)

| | Transport | Water | Energy | ICT | Multi-sector | Total Commitments |
|--------------------------|--------------|--------------|--------------|------------|--------------|-------------------|
| North Africa | 1,187 | 1,066 | 1,692 | 146 | 2 | 4,093 |
| West Africa | 1,016 | 584 | 2,261 | 107 | 46 | 4,014 |
| Central Africa | 687 | 185 | 378 | 43 | 16 | 1,308 |
| East Africa | 2,210 | 868 | 1,564 | 37 | 24 | 4,702 |
| Southern Africa | 728 | 377 | 618 | 63 | 6 | 1,793 |
| RSA | 0 | 11 | 1,597 | 0 | 132 | 1,740 |
| Other | 943 | 94 | 526 | 220 | 408 | 2,191 |
| Total Commitments | 6,771 | 3,184 | 8,635 | 616 | 634 | 19,841 |

ICA Members' 2015 Disbursements Matrix (\$m)

| | Transport | Water | Energy | ICT | Multi-sector | Total Disbursements |
|----------------------------|--------------|--------------|--------------|------------|--------------|---------------------|
| North Africa | 388 | 789 | 1,129 | 145 | 51 | 2,502 |
| West Africa | 819 | 645 | 798 | 25 | 102 | 2,391 |
| Central Africa | 484 | 225 | 367 | 49 | 48 | 1,171 |
| East Africa | 1,143 | 532 | 666 | 83 | 88 | 2,512 |
| Southern Africa | 417 | 313 | 541 | 11 | 14 | 1,296 |
| RSA | 123 | 52 | 1,370 | 0 | 433 | 1,978 |
| Other | 91 | 53 | 119 | 134 | 365 | 762 |
| Total Disbursements | 3,465 | 2,608 | 4,990 | 447 | 1,102 | 12,613 |

Reporting Differences

Of members who have reported in the previous four years, Germany's DEG provided no data. Data submitted by USAID, which did not report in 2014, comprises information from the Power Africa interagency, including OPIC, EXIM Bank, USTDA and others.

EXIM Bank, OPIC and MCC did not provide data directly.

Data for CDC, the wholly-UK government owned DFI that manages capital provided entirely by DFID, is provided for the first time.

Russia's Prognoz responded to the ICA's request for data for the first time and reported that it had made no commitments in 2015 to Africa's infrastructure. ■

4.2 Types of Funding

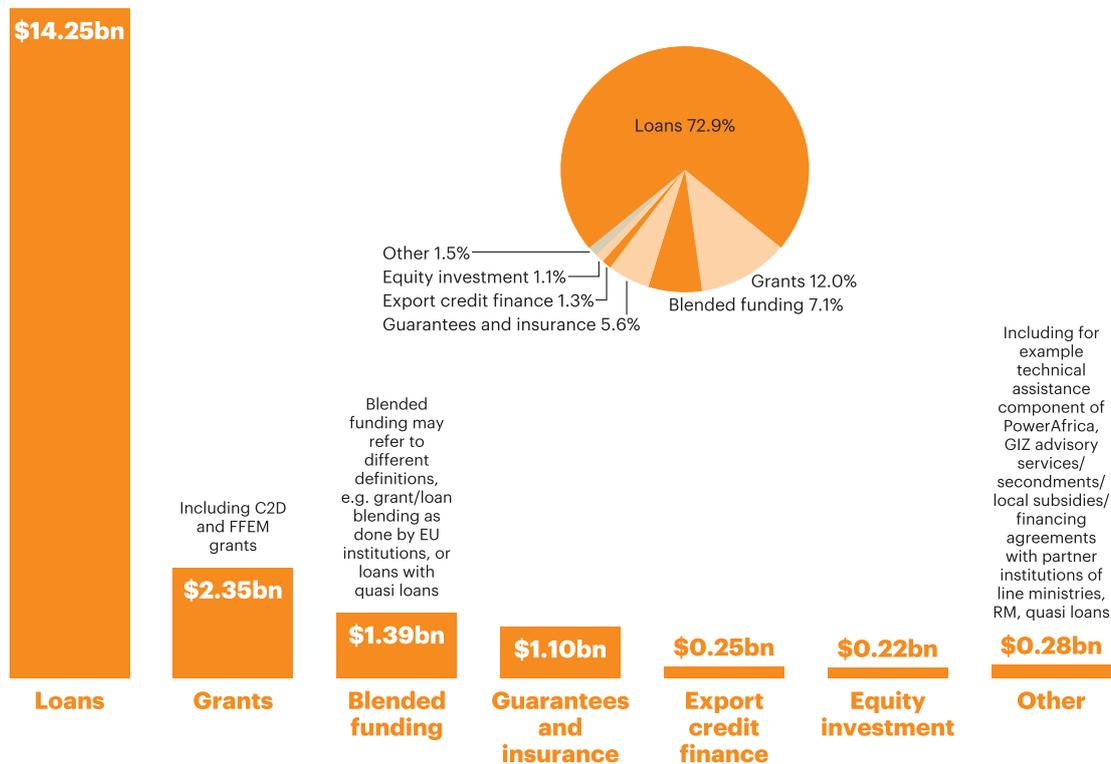


Figure 20
ICA members' 2015 commitments by type of funding

Loans and grants remain the financial instruments most frequently employed in ICA members' commitments, but there are indications that other types of funding are gaining traction.

Loans accounted for 75% of funding in 2014 falling to 73% in 2015, while grants accounted for 14% of funding in 2014, declining to 12% in 2015. The proportion of blended funding is rather lower in 2015 at 6% of total funding compared with 7% in 2014.

The blended funding category combines different definitions of this type of funding, for example grant and loan blending as practised by EU institutions or the blending of loans with quasi loan funding.

AfDB used blended funds in three transport projects: Sharm El-Sheikh airport expansion, the Bamako-Zantiebougou-San Pedro corridor and a road modernisation project in Tunisia. Blended funds specifically reported as committed in 2015 were applied by KfW to Tunisia's water sector as well as Namibia's transport

and energy sectors, while IFC provided commitments to energy sector projects in Nigeria and South Africa.

France, via AFD, used its ARIZ (l'Accompagnement du Risque de financement de l'investissement privé en Zone d'intervention de l'AFD) mechanism to guarantee 19 infrastructure related investments aimed at micro-enterprises and SMEs in the transport sectors of Cameroon, Côte d'Ivoire, Mali and Senegal. Two grant commitments and one disbursement were made by AFD under its Debt Reduction-Development Contracts (C2Ds) programme – again, all in the transport sector – to beneficiaries in Côte d'Ivoire and Congo.

Equity investment increased from \$118m in 2014 to \$219m in 2015, while guarantees and insurance increased from \$435m to \$1.1bn. No members reported export credit finance commitments in 2014 whereas in 2015 they totalled \$248m, representing around 1% of total funding.

'Other' funding falling beyond the standard categories discussed here includes, for example, the technical assistance component of the US' Power Africa initiative as well as some ICA member advisory services, secondments, local subsidies and financing agreements with partner institutions as well as quasi loans. ■

ODA and non-ODA

ODA and non-ODA commitments were evenly split in 2015 at \$9.8bn or 49.5% and \$10bn or 50.5%, respectively. Disbursements on the other hand were 70% ODA at \$8.9bn compared with 30% or \$3.7bn non-ODA.

Canada, EC, EU-AITF and Germany provided 100% ODA funding in their commitments. Conversely, IFC provided entirely non-ODA funding. DBSA provides 100% non-ODA but reports ODA for funds managed by the bank for IIPSA and SADC PPDF. Other members with majority non-ODA commitments included AfDB (74%), EIB (73%) and France (AFD, 67%). Some 86% of Japan's commitments were ODA, as were 55% of the World Bank's and 52% of the UK's. ■

Hard and Soft Infrastructure

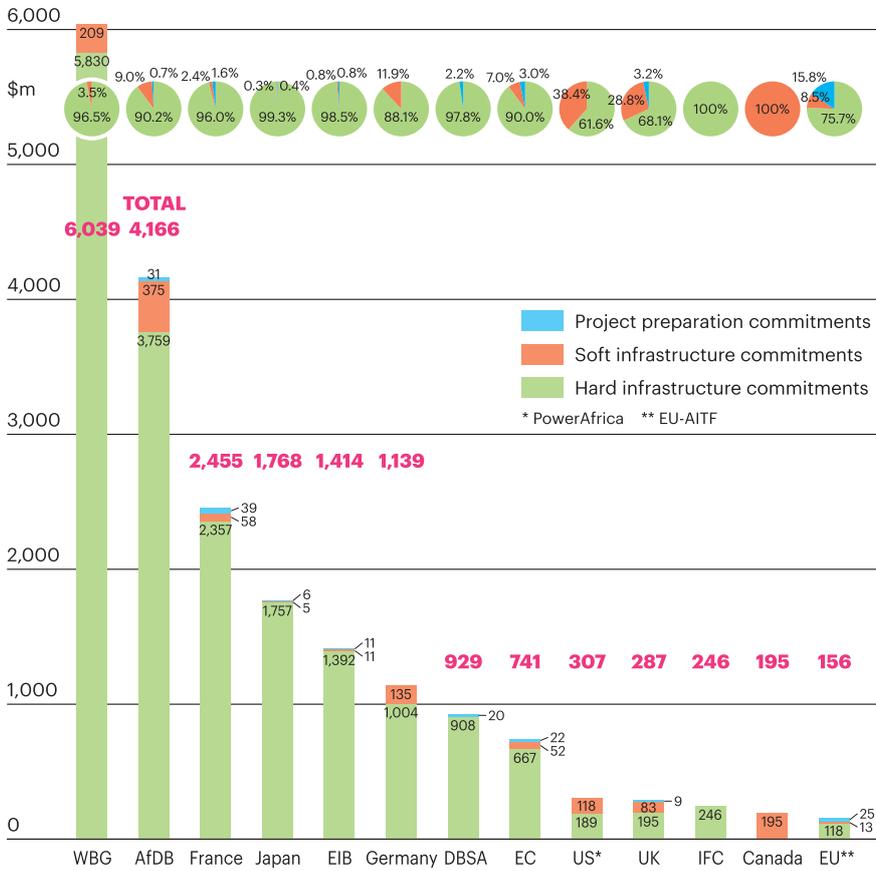


Figure 21
ICA members' 2015 hard/soft/project preparation infrastructure commitments

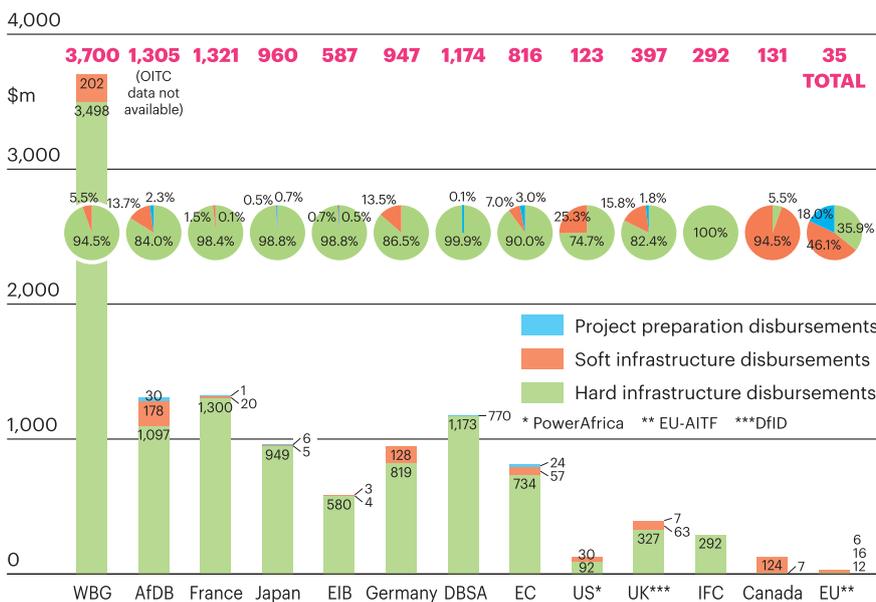


Figure 22
ICA members' 2015 hard and soft infrastructure disbursements

Soft infrastructure commitments of \$1.3bn (6.6% of total commitments) were reported by ICA members in 2015, substantially below the \$2.3bn and \$1.8bn reported in 2014 and 2013 respectively.

Soft infrastructure disbursements of \$829m were reported in 2015 compared with the very substantial \$3.1bn disbursed in the previous year, but returning to a level similar to the \$777m reported in 2013.

Project preparation commitments of \$165m and disbursements of \$79m each represented about 1% of the totals committed or disbursed. These figures were included in the global soft infrastructure figure in previous years' reports (See Annex 1, page 86).

Among the different ways ICA members deploy soft infrastructure, DBSA-managed project preparation funding supports the procurement of advisors to undertake feasibility studies, structuring and other developmental activities related to project bankability.

The EC's soft infrastructure support consists mainly of studies in the project preparation process, capacity building and action to reinforce good governance across various sectors. Alongside other members, the amount the EC commits to soft infrastructure has been estimated at 10% of the total amount directed towards infrastructure development. Generally, hard and soft components are mixed in individual specific EU commitments.

The EC estimates soft infrastructure funding is split at around 30% project preparation and 50% capacity building with the remaining 20% directed towards a variety of measures, including studies and master plans. DFID also provides estimated figures. It focuses soft infrastructure support on capacity building, research and evaluation.

Continued bottom of page 28

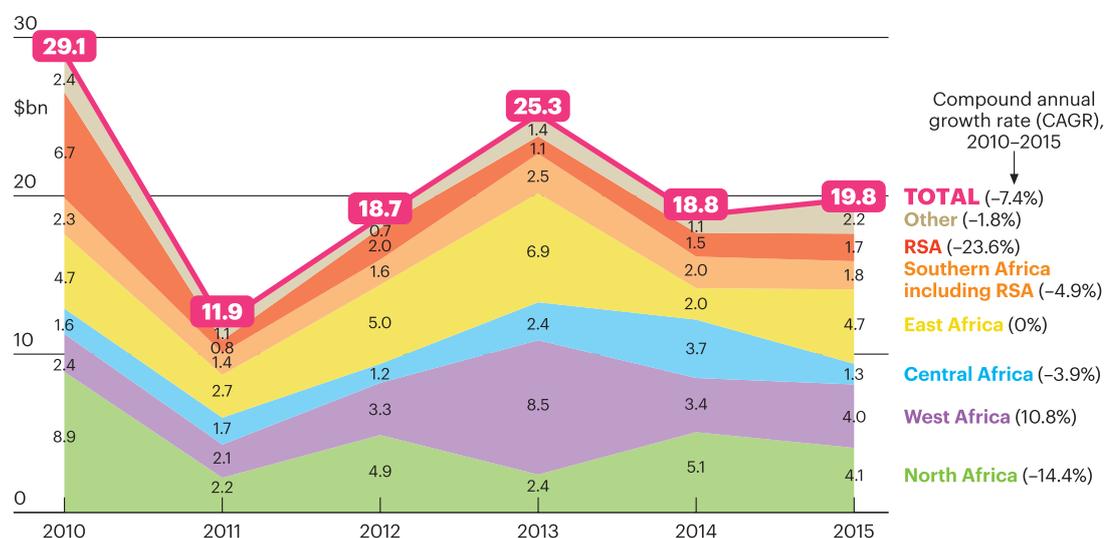
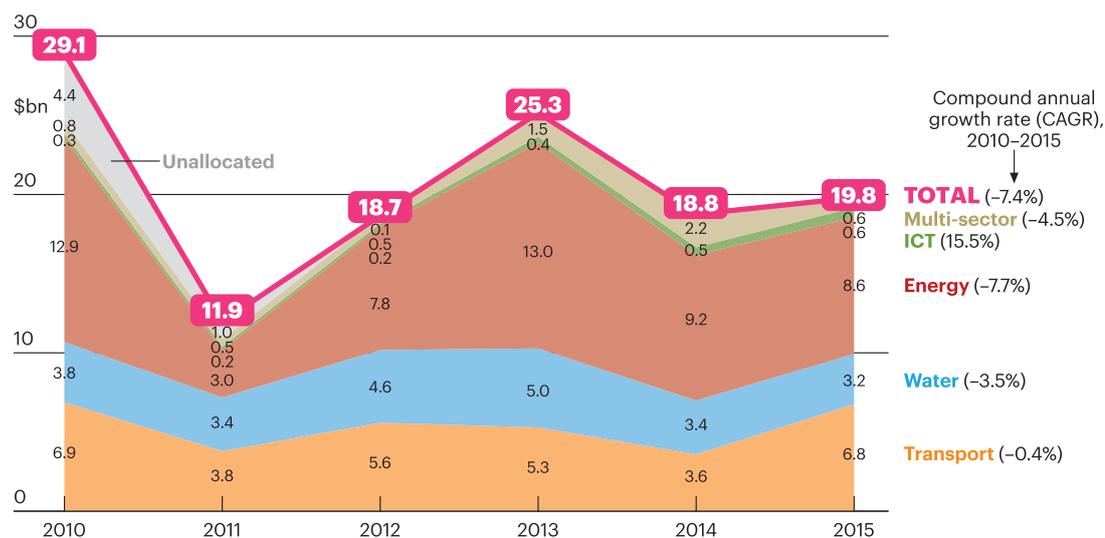
4.3 Trends in Commitments and Disbursements

The trends reported in both commitments and disbursements in this section are based partly on aggregated data, reflecting technical difficulties experienced by some ICA members in terms of disclosing disaggregated financial

information from grouped data sets and evolving financial reporting systems.

The tone of Infrastructure Financing Trends in Africa – 2015 is generally positive in terms of ICA members’

funding, with some encouraging signals such as transport commitments up a very substantial 88% over those reported in 2014 at \$6.8bn (see Figure 23) and regional commitments to East Africa up 136% to \$4.7bn (see Figure 24).



Figures 23 and 24
ICA members' commitments by sector, 2010-2015 (top), ICA members' commitments by region, 2010-2015 (bottom)

Soft infrastructure funding deployed by EIB supports project implementation and feasibility studies while France, via AFD, supports capacity building, knowledge management, studies and project management. GIZ provides mainly advisory services to partner countries on behalf of the Federal German Ministry of Economic Co-operation and Development (BMZ).

This comprises the secondment of international experts and the recruitment of national or regional staff, of which a small number support the conclusion of financing agreements with partner organisations and ministries. For WB, soft infrastructure commitments are projects that tackle public administration in a sector or sector reform.

EU-AITF's recent soft infrastructure support has included capacity reinforcement and project implementation measures to ensure, health, security, environment and quality management standards are met. The fund also supports power network analysis of interconnected grids and capacity building in the rural electricity sector. ■

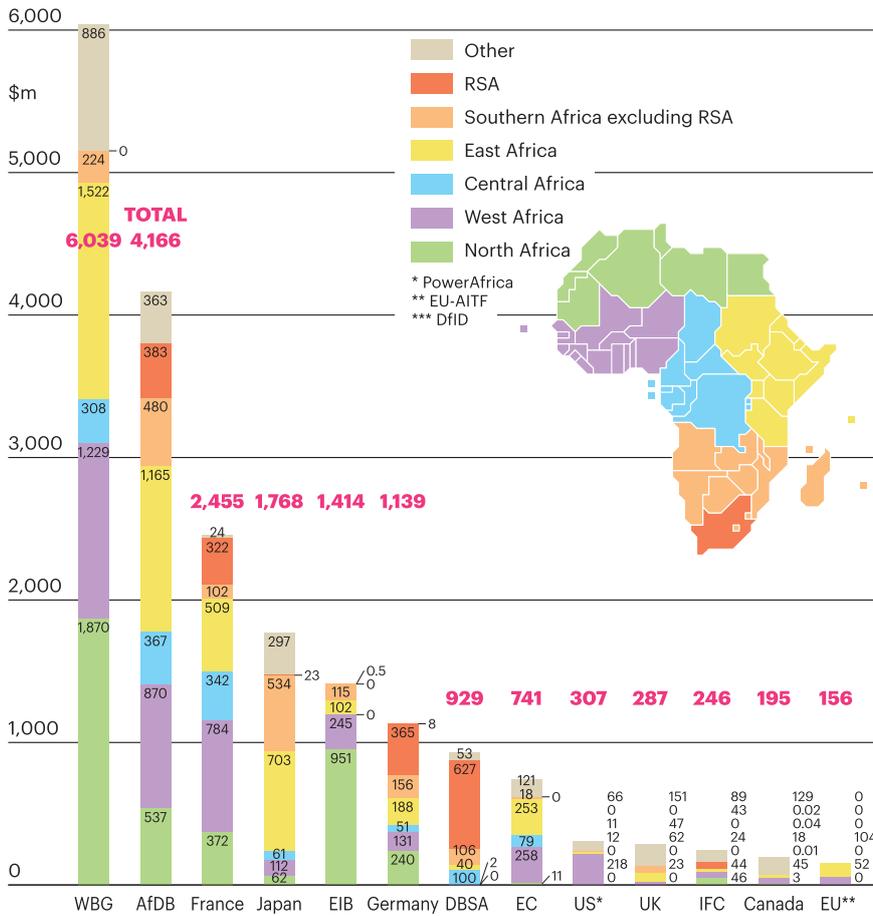


Figure 25
ICA members' 2015 commitments by donor and region

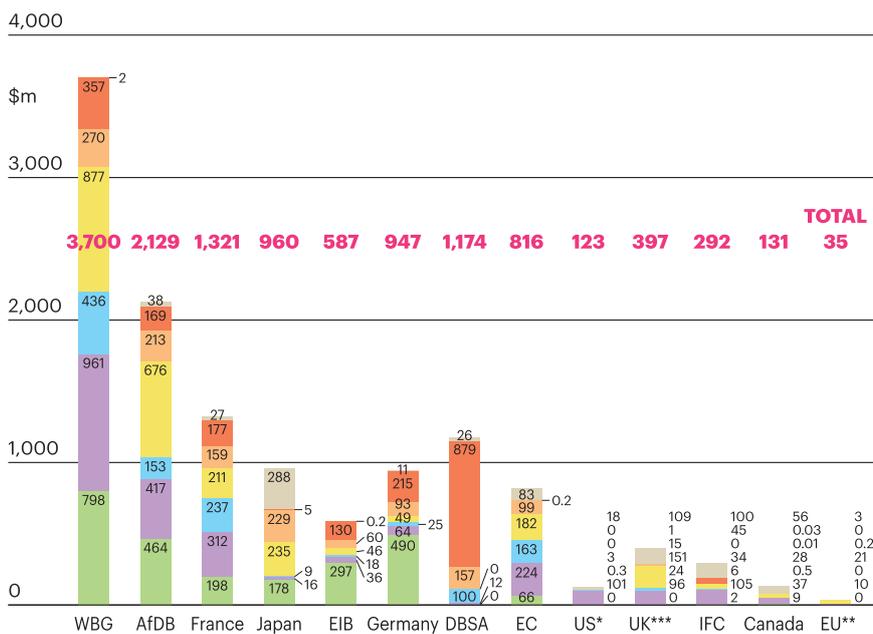


Figure 26
ICA members' 2015 disbursements by donor and region

But there are less encouraging trends, notably a sharp decline in 2015 in funding for Central Africa and dwindling commitments to the water sector over the last two years.

In 2014, commitments to Central Africa reached a peak of \$3.7bn, while allocations of \$2.4bn were reported in 2013. Reported commitments in 2015 were \$1.3bn, of which \$687m was allocated to transport operations, \$378m to energy projects and \$185m to the water sector.

The transport sector witnessed a big increase in commitments from \$3.6bn in 2014 to \$6.8bn in 2015. East Africa's \$2.2bn constituted the largest proportion of the 2015 total, followed by North Africa (\$1.2bn) and West Africa (\$1bn), which both showed big increases on 2014. Only commitments to Central Africa and RSA fell in the year to 2015.

Overall water sector commitments fell for a second year in a row, declining to \$3.2bn in 2015, compared with \$3.4bn in 2014 and \$5bn in 2013. A substantial \$1.1bn of 2015 commitments was allocated to North Africa, a further \$868m to East Africa and \$584m to West Africa. Some \$377m was committed to Southern Africa while Central Africa received only \$185m and RSA just \$11m.

Another discernible feature of 2015's data is the falling away of commitments to multi-sector projects. ICA members' commitments were around \$500m in both 2011 and 2012 before rising to \$1.5bn in 2013 and reaching \$2.2bn in 2014. Multi-sector commitments of \$634m were reported in 2015.

A fall in disbursements to transport activities from \$4.2bn in 2014 to \$3.5bn in 2015 was reported. This compares with an average of \$4.2bn annual disbursements over 2012-2014. Disbursements to the water sector appear more consistent, with \$2.6bn disbursed in 2015 compared

Trends in Commitments and Disbursements

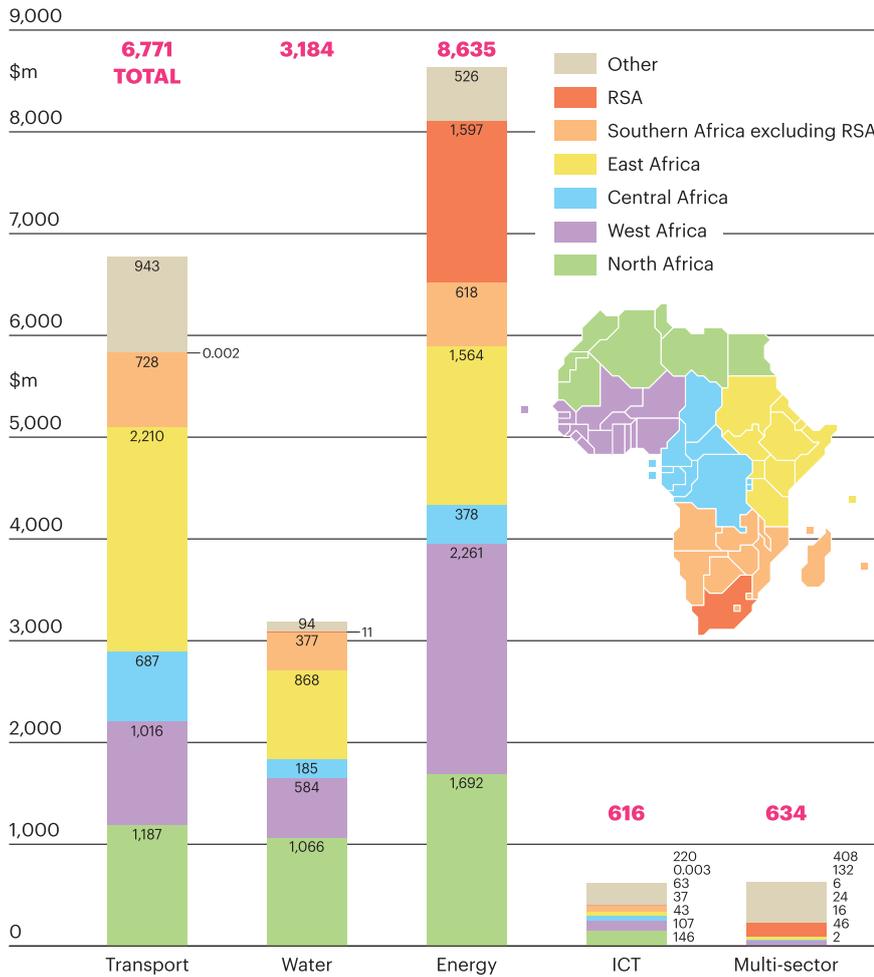


Figure 27
ICA members' 2015 commitments by sector and region

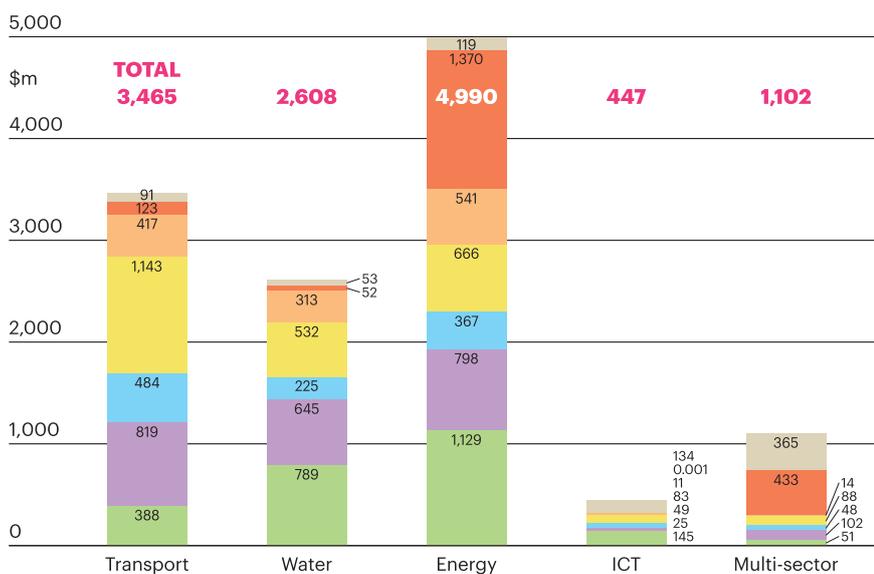


Figure 28
ICA members' 2015 disbursements by sector and region

with an average \$2.5bn over the previous three years. Multi-sector disbursements amounted to just \$1.1bn in 2015, less than the \$1.8bn disbursed in the previous year, but around double what they were in the two years prior to that.

Disbursements to ICT projects are slightly more at \$447m in 2015 compared with \$411m in 2014.

The most funds were disbursed to energy projects, which received very nearly \$5bn or 40% of all disbursements in 2015. This is a distinct improvement on disbursements of around \$3.9bn in the previous two years and a recovery to just over the \$4.8bn reported in 2012. ■

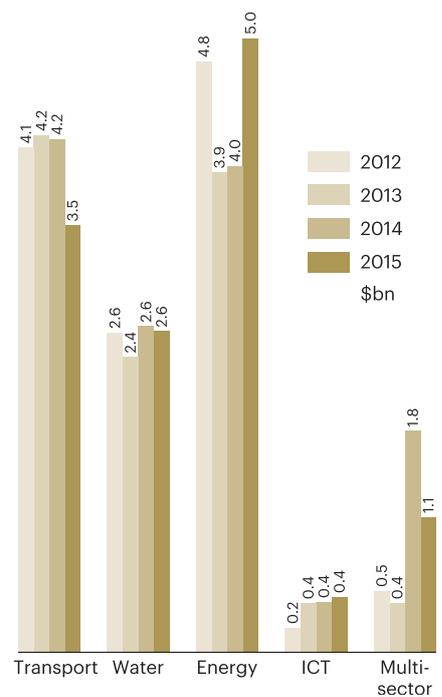


Figure 29
ICA members' disbursements by sector, 2012-2015

Disbursement Rates

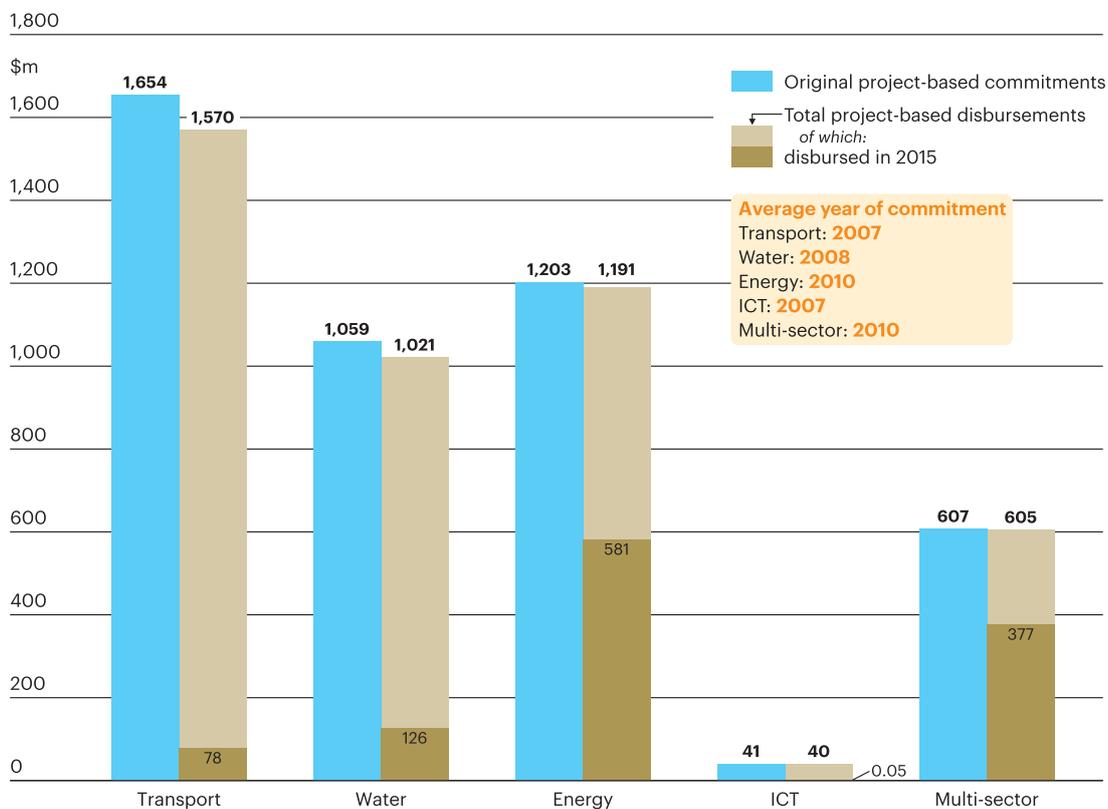


Figure 30
Disbursement rates per sector for selected ICA member projects completed in 2015

Average disbursement rates are based on projects completed in 2015, some of which were committed to several years ago. The disbursement rate is therefore not an attempt to draw direct comparisons between commitments and disbursements in any single year.

Disbursement rates are higher in 2015 with an all-sector rate of 97% compared with 84% in the previous year. Improvements are particularly noticeable in the transport sector, with a disbursement rate of 95% compared with 84% in 2014. With an average year of commitment date of 2007, however, it is clear that the gap between commitments and disbursements in transport projects, some of which are large or cross-

border projects, remains wider than in most other sectors. Average years of commitment dates are 2007 for ICT, 2008 for water and 2010 for both energy and multi-sector projects. The apparently long gap between commitments and disbursements in the ICT sector is a result of several older projects reaching completion in 2015 and may not be a normal indication of the length of time it takes to disburse commitments in this sector.

Disbursement rates remain, as in previous years, higher for non-ODA than ODA operations. ODA disbursement rates range from 94% for the transport sector to 99% for multi-sector projects. All non-ODA disbursement rates are 100% except for ICT operations where the rate is

101%. Two projects, both of which reported original commitments in the 1990s, reported disbursements in excess of 100%. Average disbursement rates per funding type are 93% for grants, 96% for loans and 98% for blended funds, while for both equity and other types of funding the disbursement rate is 100%. ■

Disbursement Rates

Overall average rate (ODA & non-ODA)

| | |
|-------------|------|
| Transport: | 95% |
| Water | 96% |
| Energy | 99% |
| ICT | 99% |
| Multisector | 100% |

Trends in Regional Infrastructure Portfolios

ICA members' 2015 regional infrastructure commitments generally followed the pattern of overall commitments up until 2012. Since then trends in regional and overall commitments have diverged.

Annual regional commitments fell to their lowest level in six years at \$1.8bn in 2014 and while they increased in 2015 to reach \$3.4bn, they still have not reached the levels of \$4.5bn and \$4.2bn achieved in 2012 and 2013, respectively.

One reason regional commitments may fluctuate more than overall commitments is the relatively large size of the financial allocations. AfDB's

regional commitments for 2015 comprise largely of a handful of projects in the \$90m-\$205m bracket, the sum of which goes some way towards the \$1.3bn of regional commitments reported by the bank in 2015.

All members have reported regional commitments at least four times as high as the lowest during the six-year period analysed. This analysis ignored any year in which a zero regional allocation was reported. Among members that have reported regional commitments of more than \$300m over the past six years, the highest commitments are on average nine times higher than the lowest.

In 2015, members reporting the most

regional commitments were AfDB (\$1.3bn), WBG (\$977m), Japan (\$297m) and DBSA (\$292m). The DBSA figure is noteworthy because this is the first year the bank has made substantial commitments to regional infrastructure.

Major regional projects supported by multilaterals with the greatest commitments to regional projects include the Ruzizi III hydro project, the OMVG energy project, the Tanzania-Kenya power interconnection and the Lamu Gateway Development. Sufficient port capacity will be created at Lamu to serve markets in Kenya, South Sudan, Ethiopia, Uganda, Rwanda and Burundi. ■

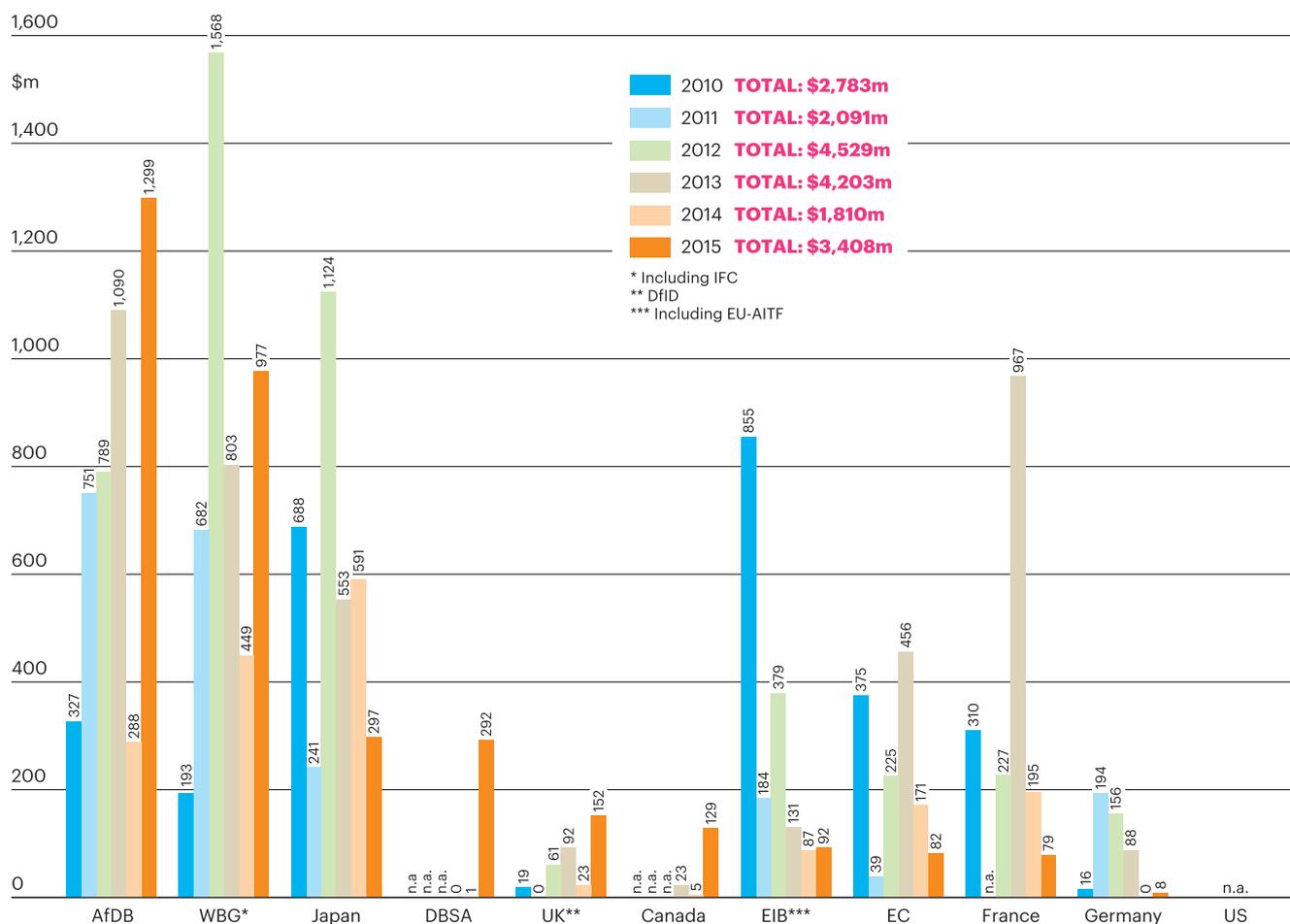


Figure 31
Trends in regional infrastructure portfolios, 2010-2015

Country vs Regional and PIDA/PAP Commitments

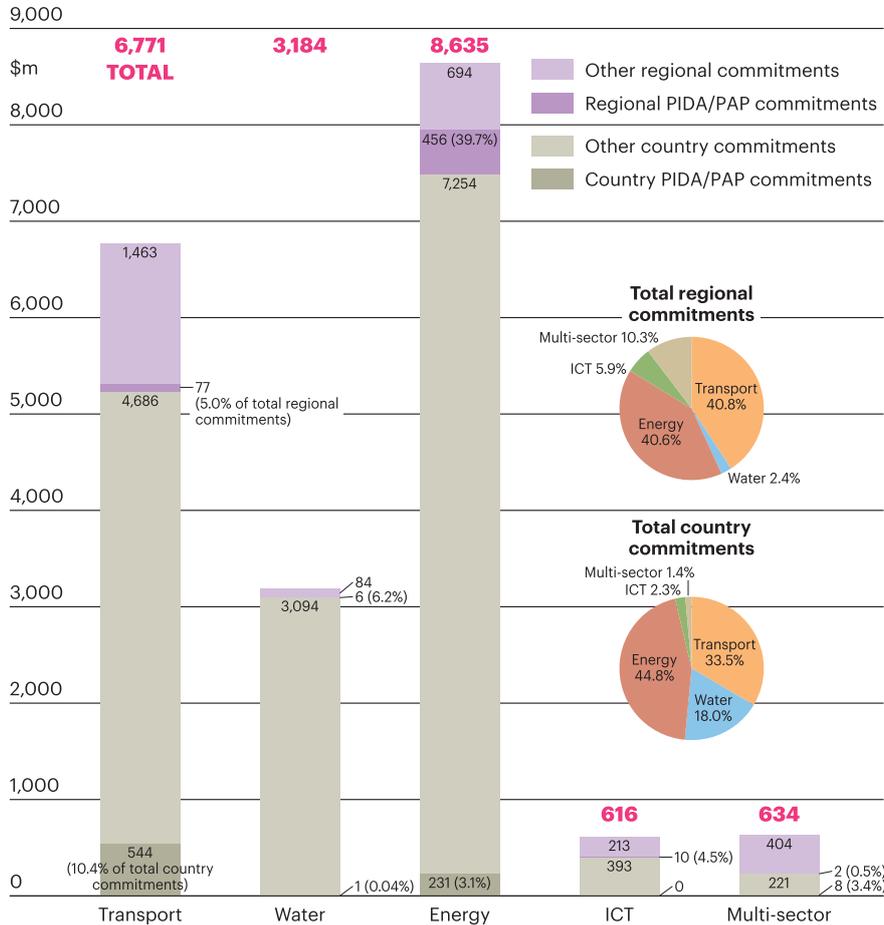


Figure 32
Country vs. regional commitments per sector incl PIDA/PAP shares

Of the total \$18.6bn of ICA member commitments that can be defined as either country or regional, some \$15.7bn or 85% are allocated at a country level while \$2.9bn of commitments are to regional projects.

Commitments to PIDA/PAP projects reached over \$1.2bn in 2015, a very substantial increase over the \$161m reported in 2014. PIDA commitments reported in 2015 represent 7.2% of overall commitments, 4.8% of country commitments and 16.2% of regional commitments.

PIDA projects focused on the energy sector that received commitments from ICA members in 2015 included the Ruzizi III Hydropower Plant (\$150m) and Zambia-Tanzania-Kenya Power Interconnection (\$144m) in East Africa, the OMVG Energy Project (\$136m) in West Africa and the and Central African Power Interconnection (\$195m).

In the transport sector PIDA projects receiving commitments from ICA members included the Northern Multimodal Transport Corridor in East Africa (\$459m) and the Abidjan-Lagos Coastal Transport Corridor (\$26m). ■

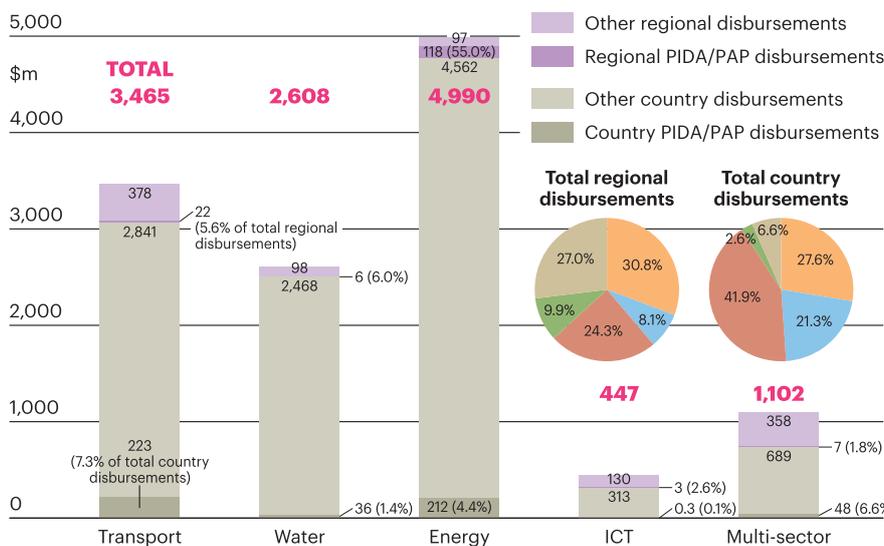


Figure 33
Country vs. regional disbursements per sector incl PIDA/PAP shares

4.4 ICA Member Activities

While ICA members highlighted a wide and diverse range of activities in 2015, some larger projects involving partnerships of several members as well as other African and global partners stood out.

Often seen as the missing link in the Organisation pour la Mise en Valeur du Fleuve Gambie (OMVG – the Gambia River Basin Development Organisation) region's power sector, one of largest combined project commitments by ICA members in 2015 was to the OMVG Interconnection Project. A priority of the West African Electricity Exchange System, this is a large-scale coastal line project comprising a 925km high voltage (225kV) transmission network that

will interconnect the power grids of the four OMVG member countries – Senegal, Guinea, Gambia and Guinea-Bissau. Finance is arranged with AFD, AfDB, BOAD, EIB, IDB, Kuwait Fund, Germany through KfW and the World Bank. Additionally, the four African governments will provide approximately \$16m to finance interest during the construction phase for the total project cost of \$711m. Another energy project attracting significant interest from members, including AFD, AfDB, EIB, EU-AITF, WBG and Germany through KfW, is the Ruzizi III hydropower project, while in other sectors, the Northern Multimodal Corridor is attracting substantial interest from members. ■

African Development Bank

Overall commitments by AfDB are significantly up at \$4.2bn compared with \$3.6bn in 2014. This is largely due to an extra \$1bn of transport commitments, totalling \$2.4bn in 2015 compared with \$1.4bn in 2014. Energy commitments however declined from \$1.7bn in 2014 to a still substantial \$1.1bn in 2015. Allocations to water operations increased to \$519m in 2015 compared with \$443m in the previous year. There were no ICT commitments in 2014 whereas in 2015 these amounted to \$122m. No multi-sector commitments have been reported in the last two years.

Disbursements made by AfDB increased slightly from \$2bn in 2014 to \$2.1bn in 2015. The most disbursements in 2015, were made in the energy sector with \$824m disbursed compared with \$626m in the previous year. The transport sector saw the most disbursements in 2014 (\$972m), but fell back to \$840m in 2015. The water sector received disbursements of \$427m, while multi-sector operations received \$38m, and the ICT sector received \$305,355.

Major regional commitments in 2015 from AfDB included support for the Ruzizi III hydropower project in Burundi, Rwanda and DRC, the OMVG Interconnection project in Gambia, Guinea, Guinea Bissau and Senegal, and the Tanzania–Kenya Power Interconnection, all of which are PIDA/PAP projects.

Alongside the well-known large projects, AfDB's energy department is looking at gas-to-power opportunities, including some floating gas facilities, in East and Southern Africa, Egypt and Côte d'Ivoire. Another focus is the development of micro- and mini-grids in Kenya. It is also increasingly reaching out to support project preparation and

market development and assessing the availability of funds suitable for smaller scale, mainly renewable, energy projects which increasingly feature in Africa's power sector.

Canada

Canada's 2015 commitments of \$195m were substantially targeted at the water sector, which was allocated \$87m. Energy, multi-sector and transport sector commitments were \$37m, \$34m and \$33m, respectively, while allocations to ICT activities amounted to more than \$4m.

Disbursements amounted to \$131m, of which \$47m went to the water sector. Multi-sector disbursements amounted to \$37m, while the transport and energy sectors received \$25m and \$20m, respectively. ICT initiatives received just under \$2m.

Two-thirds of Canada's commitments and 42% of disbursements are regional as opposed to country-focused. All funding takes the form of ODA grants and targets soft infrastructure.

Development Bank of Southern Africa

DBSA's regional funding portfolio looks set on a growth path. It committed to \$1.2m of regional projects in 2014, while in 2015 it made regional commitments of \$292m. New commitments from DBSA's international operations were made in respect of initiatives in Congo, DRC, Kenya, Nigeria, Tanzania, Uganda and Zambia.

Commitments by DBSA in 2015 amounted to \$929m, of which \$725m was destined for energy operations. Multi-sector activities received commitments of \$132m, while allocations to ICT projects amounted to

\$50m. The transport and water sectors each received commitments of \$10.8m.

Disbursements from DBSA in 2015 amounted to \$1.2bn, of which \$620m was destined for energy operations. Multi-sector activities received \$439m. The transport and water sectors received disbursements of \$81m and \$14m respectively while ICT operations received \$20m.

DBSA manages the Southern African Development Community's (SADC) Project Preparation and Development Facility (PPDF) which approved in 2015 its first allocation of preparation funding, providing \$3.5m towards the development of the multi-country Regional Interconnector Project to connect Mozambique, Zimbabwe and South Africa (MoZiSA).

The PPDF finances the preparation of infrastructure projects based in at least one SADC member state or those with a direct and positive impact on another member state. The facility is funded both by the German government (BMZ), financed through KfW, as well as the EU through its regional office in Gaborone.

The MoZiSA project comprises the development, construction and operation of 860km of high-voltage (400kV) transmission infrastructure, including transmission lines and associated substations through South Africa, Zimbabwe and Mozambique. It aims to strengthen Southern Africa's existing north-south transmission interconnection corridor.

DBSA is now managing DFID grant funds to the Tripartite Trust Account (TTA), where it has provided \$7m to the Copperbelt Energy Corporation (CEC) for the Second DRC–Zambia Interconnector. The project will cost \$3m to develop with construction costs

of \$12m. DBSA disbursed \$5m in May 2015 towards the construction. The TTA provided grants to Zambia's National Road Fund Agency, for road improvements between Chirundu and Lusaka, and the New Kafue Weighbridge. Completion is anticipated during 2016.

European Commission

Commitments by the EC in 2015 amounted to \$741m, substantially up on the \$326m reported in 2014. Of total 2015 commitments, \$320m was destined for transport and \$318m for energy operations. The water sector received commitments of \$103m while no commitments were allocated to multi-sector or ICT activities.

Disbursements from the EC in 2015 amounted to \$816m, of which \$499m was destined for transport operations. The water sector received disbursements of \$195m while energy operations received \$112m, with \$10m going to the ICT sector.

Commitments were relatively low in 2014 due to the ending of one, and the beginning of a new multi-year cycle. During that year it took some time for fund flows to steadily increase, a process that continued through 2015. Even freer flowing funds are anticipated from 2016.

The next few years will see the EC switching from its traditional 100% direct grant approach to a blending approach where the Commission will develop and create mechanisms for using grant funding to leverage additional finance from other financial institutions for target projects. This process is still ramping up and fits with the August 2015 launch of the EC's Africa Investment Facility (AfIF).

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. AfIF provides its support through investment grants, technical assistance, risk capital and other risk sharing instruments. It will progressively substitute EU-AITF, a process that began in mid-2015. AfIF operations in 2015 included a €20m (\$22m) commitment to the Kenyan transport and energy sectors designed to fit with Kenya's Vision 2030, which has infrastructure as one of the

foundations. Commitments from AfIF are expected to scale up during 2016.

The EC is also increasingly focusing on private sector blending of funds in the agricultural and energy sectors. The Electrifi project for example supports renewable energy investments of a total budget above €500,000 (\$557,000). At early project stages or during the pilot phase, the grant beneficiary is expected to put up 50% of capital. As a project scales up, the beneficiary's own capital is expected to be around 15% with a senior debt financing around 60%. The maximum term of funding will be seven years.

Apart from the move towards blended funding, another dynamic at the EC, which funds small, high impact projects as well major transport corridor projects, is a move towards a nexus approach targeting, for example, projects that involve water, energy and agriculture operations.

European Investment Bank

Commitments from EIB in 2015 amounted to \$1.4bn, substantially up on the \$935m and \$880m reported in 2014 and 2013, respectively. Of total 2015 commitments, \$868m was destined for energy and \$360m for transport operations. The water sector received commitments of \$164m while \$23m is allocated to ICT activities.

Disbursements from EIB in 2015 amounted to \$588m, of which \$453m was destined for energy operations. The water sector received disbursements of \$110m while \$22m flowed to multi-sector activities. Disbursements to the transport sector amounted to \$1.8m while the amount destined for the ICT sector was \$111,000.

While EIB customarily supports the continent's largest landmark projects such as the OMVG Interconnector project and developments at Mombasa port, and makes large commitments such as the 2015 allocation of \$600m to Egypt's Damanhour power plant, it is also involved in smaller, high impact projects.

In this context, EIB supported the Senegal River Valley Rice project, which provides an interesting example of a project with positive environmental impacts and partnership with the private sector. Privately owned Compagnie Agricole de Saint-Louis du Sénégal will develop the project to transform the use

of marginal and degraded arable and pastureland through irrigation. EIB has committed €15m (\$16.7m). AfDB has also now supported the project with a commitment in 2016 of €15.7m (\$17.5m).

EU-AITF

Commitments from EU-AITF in 2015 are directed exclusively at the energy and transport sectors. Of the total \$156m total commitments in the form of grants – nearly double the \$80m reported in 2014 – some \$82m was directed towards energy and \$74m at transport operations.

In 2015, EU-AITF made \$34m of disbursements across all sectors. The majority, \$28m, went to projects in the energy sector, while the water, transport and ICT projects received \$2.8m, \$2.6m and \$1.2m, respectively. Disbursements to multi-sector projects amounted to \$284,179.

The EU-AITF Regional Envelope is closely aligned to the objectives of PIDA and promotes infrastructure projects with a cross-border dimension or demonstrable regional impact, especially PIDA/PAP projects.

Since its creation in 2007, 49 out of the 104 approved EU-AITF grant operations have supported PIDA objectives, with 35 projects being backed. Nearly all of these grants (48 out of the 49) are under the Regional Envelope, although projects in line with PIDA's objectives in the energy sector may also be eligible for the SE4All Envelope introduced in 2013.

France

Commitments from France via AFD in 2015 amounted to \$2.5bn, slightly up on the \$2.4bn reported in 2014. Of total 2015 commitments, \$1.4bn was destined for energy and \$684m for transport operations. The water sector received commitments of \$282m while \$72m is allocated to multi-sector activities. Commitments to the ICT sector amounted to \$23m.

Disbursements from AFD in 2015 amounted to \$1.3bn, of which \$504m was destined for transport and \$405m for energy operations. The water sector received disbursements of \$241m while \$135m flowed to multi-sector activities. Disbursements to the ICT sector amounted to \$35m.

During 2015, AFD provided substantial

support for Côte d'Ivoire's transport sector, while in the energy sector substantial support is aimed at several downstream operations, including Kenya's last mile project and Nigeria's electricity distribution network. AFD also signed in 2015 a \$167m credit facility agreement that will go towards financing state utility Eskom's distribution projects in South Africa. AFD has a three-part core strategy in respect of energy: renewable energy, energy access (particularly in rural areas), and the security of national and regional power systems.

In the transport sector, which accounted for more than a quarter of its 2015 commitments, France via AFD has a particular focus on urban transport. It is also looking at urban water projects.

As a financial institution, AFD provides 90% of support through sovereign and non-sovereign loans and, because it needs to be repaid, identifying bankable projects is a key task. In regional projects, AFD makes different loans to different countries. Creditworthiness of recipients is paramount, which means lending to utilities with no financial capacity cannot take place

Germany

While Germany's focus for commitments fell on North Africa in 2014, it fell on South Africa in 2015, which received nearly one-third of all commitments. North Africa still benefitted from 21% of commitments while East, Southern, West and Central Africa were allocated 17%, 14%, 12% and 5%, respectively.

German commitments in 2015 totalled \$1.1bn. More than half of this (\$682m) went to the energy sector. Allocations to the water sector amounted to \$379m while \$76m was committed to transport operations and \$2m to multi-sector projects.

Disbursements amounted to \$947m, of which operations in the energy sector received \$535m while activities in water and sanitation received \$376m. Disbursements to transport sector projects amounted to \$35m while \$2m went to multi-sector activities.

In South Africa, KfW signed a \$219m loan agreement with freight operator Transnet to fund the acquisition of 240 electric locomotives it has ordered as part of its programme to acquire 1,064 locomotives from four suppliers. The loan matures in 15 years, with a five-year

interest-only grace period. The agreement was negotiated in rand terms and thus has no currency risk for Transnet.

KfW also provided a loan to South Africa's power utility, Eskom, totalling just under R4bn (\$320m). The financing is to help connect solar and wind power plants in particular and will also make a substantial contribution to modernising and strengthening the interconnected grid in South Africa. The network integration of renewable energy sources allows for annual CO₂ savings of up to 5.5m tonnes.

Working with the private sector in Uganda's GetFIT Premium Payment Mechanism, KfW is fast tracking a portfolio of about 20 to 25 small-scale renewable energy projects (total of 170MW) promoted by private developers. The initiative aims to increase clean generation capacity, help to strengthen regional grids and result in emissions reductions of 11m tons of CO₂. It is also supported by the UK, Norway, World Bank and EU-AITF.

GIZ supports five fields of action by providing technical assistance. These include the PIDA Monitoring and Evaluation system, which allows for the compilation of an annual progress report providing project implementation status on the ground. In terms of information, communications and marketing, a Virtual PIDA Information Centre (VPIC) was designed as a 'one-stop-shop' for all PIDA related inquiries.

GIZ also provides support for PIDA project preparation. To tackle the bottleneck caused by lack of expertise in the project preparation process, NEPAD with the support of GIZ launched the PIDA Service Delivery Mechanism, which provides project sponsors with the capabilities needed for early-stage project preparation activities. In terms of capacity building, GIZ supports organisational development to sustainably strengthen NEPAD's and AUC's infrastructure divisions and organises peer-to-peer learning activities for key PIDA stakeholders at continental and regional levels.

Since its launch, PIDA has been important to Germany as a policy reference for project selection with partner institutions and countries. Technical support is provided by GIZ while KfW provides financial support.

In its work with PIDA, GIZ works to

conceptualise and develop instruments to facilitate infrastructure development. GIZ also works to facilitate the political dialogue needed to facilitate PIDA's cross-border project portfolio.

International Finance Corporation

IFC's commitments in 2015 totalled \$246m compared with \$621m in 2014. These comprised allocations of \$92m to energy, \$86m to ICT and \$68m to transport activities.

Disbursements in 2015 were \$292m compared with \$447m in 2014. These included \$115m to energy and \$111.5m to ICT projects. Transport operations received \$19m while \$7m was disbursed to multi-sector projects.

All IFC funding is non-ODA with 51% of 2015 commitments provided through loans while 26% is equity investment and 23% is blended funding.

Alongside other development partners, IFC is supporting Abengoa of Spain's debt raising for its Xina Solar One concentrated solar power (CSP) project in South Africa's Renewable Energy Independent Power Producer Procurement (REIPPP) programme. AfDB, DBSA, Industrial Development Corporation, and local investment banks such as ABSA (Barclays Africa), Nedbank, and Rand Merchant Bank also support Abengoa's ventures in South Africa's solar sector.

Investments in the ICT sector feature mobile tower developers, Helios, Eaton Towers and IHS, as well as telecommunications company Africell, which operates in DRC, Congo, Gambia, Uganda and Sierra Leone.

Japan

Japan's commitments to Africa's infrastructure in 2015 reached \$1.8bn compared with \$2bn in 2014, during which Japanese commitments to the energy sector were reported at \$1.5bn. In 2015, Japan committed \$471m to energy and \$909m to transport operations, the latter being a very substantial increase on the \$117m committed in 2014. Whereas in 2014 Japan reported no commitments to ICT or multi-sector projects, Japanese commitments to these sectors in 2015 stood at \$2m and \$297m, respectively.

Disbursements in 2015 amounted to \$960m compared with \$1.05bn in 2014,

which was 20% higher than the amount reported in 2013. Energy projects received the greatest level of disbursements (\$388m), followed by disbursements to multi-sector, transport, water and ICT, which received \$288m, \$185m, \$97m and \$2m, respectively.

JICA signed an ODA loan agreement with Government of the Republic of Mozambique in Maputo to provide up to ¥29.235bn (\$242m) for the Nacala Port Development Project Phase II. Nacala Port is currently ranked third in terms of cargo and container handling behind the Mozambican ports at Maputo and Beira, but with a natural depth of 14 metres, it has the best natural harbour in south-eastern Africa with very high potential.

Japan, through JBIC, is supporting Japanese firms as they increase their presence on the continent, including in Ghana, Morocco, Tanzania and South Africa. Support has been provided for private sector activities in the energy and water sectors.

Japan's strategic focus is on renewable energy generation, power pools, operation and maintenance capacity building, and international corridors. The PIDA initiative is very important to Japan. The country maintains a strategic relationship with NEPAD and endeavours to align its efforts with PIDA. Some funding aligns with PIDA objectives even if they are not officially listed in the continental blueprint for infrastructure development.

United Kingdom

UK data for 2015 does not include any direct payments or commitments to EU-AITF and IPPF. For the first time, the data does include commitments from the wholly UK government-owned CDC, a DFI that provides capital for African infrastructure activities. CDC manages capital entirely provided by DFID.

Direct grant funding of \$148m from DFID and \$139m of equity investments from CDC to African infrastructure in 2015 reached \$288m, of which \$52m went to transport, \$49m to energy, \$86m to ICT and \$97m to multi-sector operations. Disbursements amounted to \$397m, with \$134m going to multi-sector, \$105m to water and sanitation, \$78m to transport, \$68m to energy and \$10m to ICT operations.

In 2015, the UK, through DFID, sharpened its focus on energy, and

renewables in particular, with the launch of its Energy Africa campaign. It aims to accelerate the development of the emerging solar market in Africa.

CDC is becoming increasingly important in the UK's international development efforts. It is not the UK's development bank. Rather, its job is to provide scarce and patient capital to private sector entrepreneurs in the poorer developing countries.

CDC made investments of \$139m in 2015, two in the ICT sector and one to a pan-African investment fund. It put £26.4m (\$40.4m) into IHS Zambia Limited, for the development of telecommunications towers to improve accessibility and reliability of coverage and £13.3m (\$20.7m) into INT Towers, Nigeria for the development of telecommunications towers to improve coverage, including in the northern region. An investment of £50.9m (\$77.9m) was put into the Pembani Remgro Infrastructure Fund I, which focuses on investment in the ICA-defined infrastructure sectors.

With a brief to deliver development impact alongside financial returns, it now invests directly as well as through funds. However, CDC is not expected to tackle the entire challenge of deploying development capital on its own. DFID will work with other partners selected on the basis of their expertise, development track record and fit with DFID's objectives, to develop complementary, needs-responsive investments.

More ODA from the UK is likely to become available from a broader range of government departments. In November 2015, the UK announced the creation of a Cross-Government Prosperity Fund, the secretariat of which is hosted by the Foreign and Commonwealth Office (FCO). It is currently involved in a scoping study for a new Africa infrastructure project preparation facility aimed at improving the flow of bankable projects. As well as DFID and FCO, other UK departments likely to become more involved in international development activities are the Department for International Trade and UK Export Finance.

Another likely driver of change in the UK is its decision to leave the EU, although the impacts of this move have yet to fully emerge. Amidst new ministers and new directions, possibly the only factor that

most observers seem to be agreed upon is that there will be more cross-departmental working.

World Bank

All of the World Bank projects are multi-sector in nature, driven by what suits each country based on their requirements. The bank takes a multidimensional approach tailored to each country. It does not have a priority list of projects. Rather, it adopts a decentralised approach where countries decide on priorities. However, for the needs of this report, the World Bank allocates its commitments and disbursements according to sectors.

The World Bank reported a small increase in commitments for Africa's infrastructure to just over \$6bn compared with \$5.9bn in 2014, which was a substantial 42% increase over 2013 commitments of \$4.1bn. For the second year running, disbursements increased significantly, reaching \$3.7bn in 2015 compared with \$2.3bn in 2014 and \$1.8bn in 2013.

Transport commitments strengthened still further in 2015 reaching \$1.8bn after more than doubling in 2014 to reach \$1.55bn (from \$703m in 2013). Water commitments fell back from \$1.9bn in 2014 to \$1.5bn in 2015 while \$2.5bn was committed to energy operations, up from \$2bn in 2014. ICT commitments also increased substantially to reach \$220m in 2015 compared with \$136m in 2014.

The World Bank's soft infrastructure funding has a focus on initiatives to tackle public administration in a sector or sector reform. In this context, the bank made some of the largest commitments to the water sector in 2015, including the Sustainable Rural Sanitation Services Programme for Results Project in Egypt. This aims to strengthen institutions, systems and policies for increased access and improved rural sanitation services in three Egyptian governorates. The programme aims to improve sanitation access and the operational systems and practices of water and sanitation utilities. The project also aims to strengthen the national sector framework and supports the Egyptian government's efforts to decentralise management and operations in the water sector. ■

5. Other Public Sources of Financing



iStock, PG Images

5.1 African National Budgets for Infrastructure

The total amount of identifiable infrastructure allocations across 44 African national government budgets totalled \$28.4bn in 2015, compared with \$34.5bn based on 42 countries in 2014. Additional countries for which 2015 data have been captured are Comoros, Malawi and Somalia, while the data sources that identified infrastructure allocations in the Republic of Congo's 2014 budget indicated no 2015 allocations.

Smaller allocations to infrastructure were very noticeable in economies affected by low oil prices, which appear to have had a substantial negative impact on government spending in some of the continent's largest economies.

Identifiable external funding accounted for \$4.5bn of the \$28.4bn total 2015 budget allocations. External funding is reported in only 15 of the 44 data sources consulted, so there is a possibility of double

counting in respect of a significant amount of the data. Analysis of the budgets in which allocations to external and internal funding were clearly specified indicates a near 50:50 split between internally and externally funded budget allocations of \$4.7bn and \$4.5bn respectively.

An average ratio of external and internal funding should not be applied to the continent as a whole because countries report a very wide variation of proportions of external and internal funding. Countries such as Burundi, Comoros and Côte d'Ivoire report relatively high levels of external compared with internal funding, while Chad, Ethiopia and Guinea Bissau report relatively high levels of internal compared with external funding.

In 2015, transport accounted for 54% of total infrastructure spending, maintaining the dominant position of that sector compared with 2014 when it accounted for 51% of infrastructure

spending. Out of the 44 countries analysed, 21 allocated the highest amounts to transport projects. The total amount allocated to the transport sector was \$15.3bn, around 13% less than the \$17.6bn reported in 2014.

Allocations to the water sector amounted to \$4.1bn (14.5% of all allocations) with Botswana, Burkina Faso, Cape Verde, Gabon and Mozambique making this sector their budget priority.

Methodology

- 44 countries analysed
- Overall, more detail reported by several countries
- Majority of figures were sourced from ministries of finance
- Three years' worth of data for 30 countries
- Two years' worth of data for nine countries

Reflecting 2014 priorities again, energy projects attracted the second largest amount of infrastructure allocations, accounting for \$6bn or 21% of allocations compared with \$7.5bn or 21.7% in 2014. Five countries – Algeria, Angola, Côte d’Ivoire, Rwanda and Zimbabwe – made energy their infrastructure spending priority.

In contrast to ICA members that reported much lower multi-sector investments in 2015 (\$555m) compared with 2014 (\$2.1bn), African national governments reported an increase in multi-sector budget allocations from \$444m in 2014 to \$1.2bn in 2015. Around \$705m of allocations were made in African state budgets to the ICT sector compared with \$1.1bn in 2014.

Africa’s commodity-based economies, particularly those reliant on oil exports, suffered negative impacts as prices declined sharply in 2015 – although it should be noted that economies reliant on imported fuel benefitted from depressed oil prices. While several countries, including Egypt, Kenya and Botswana reported smaller budget allocations to infrastructure in 2015 compared with the previous two years, Angola alone reported a \$5bn reduction to \$2.6bn. Taking into account all countries except Angola, overall budget allocations in 2015 amounted to \$25.8bn, just 4% less compared with the \$26.9bn allocated in 2014.

Reported budget allocations do not necessarily accurately reflect a country’s infrastructure spending, with some states looking to alternate sources of finance. Through finance raised by sovereign bond issues, Kenya is expanding its ports while Rwanda has embarked on a hydro power plant and Ethiopia is expanding its energy sector. Ghana, Nigeria, Zambia, Seychelles and Côte d’Ivoire are also among the 14 African countries that have issued sovereign bonds in recent years. ■

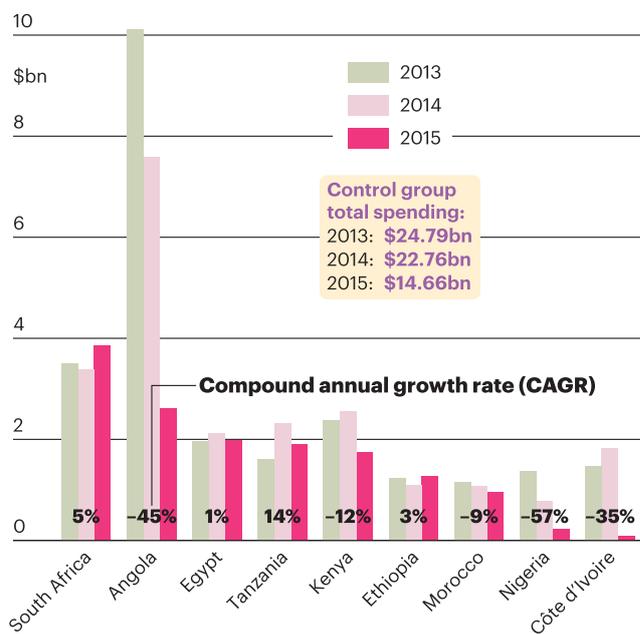


Figure 34
National government budget allocations control group (larger economies) \$bn, 2013-2015

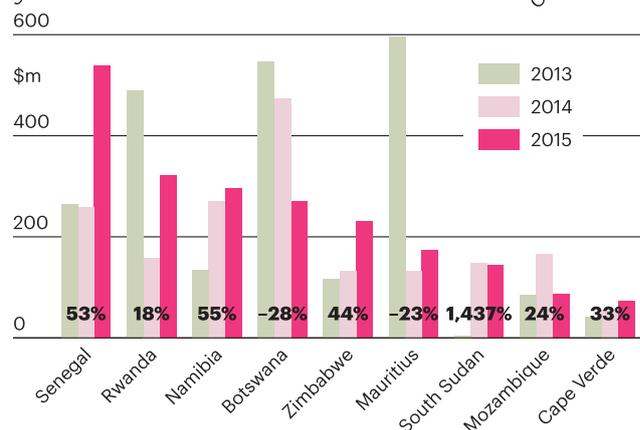


Figure 35
National government budget allocations control group (smaller economies), 2013-2015

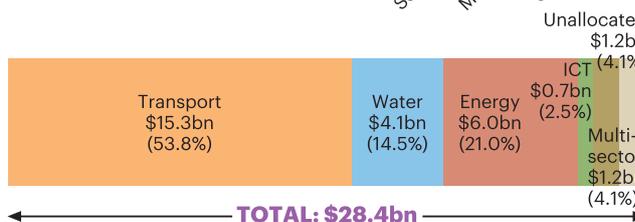


Figure 36
National government budget allocations by sector (\$bn)

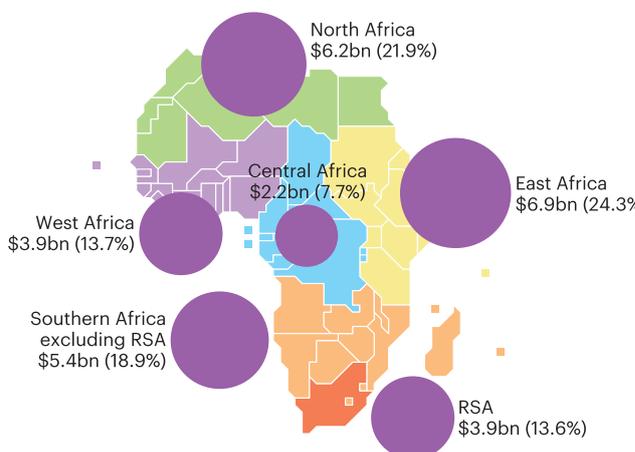


Figure 37
National government budget allocations by region (\$bn)

Identifiable African National Budget Allocations in 2015 (\$m)

The countries where no 2015 data was available are: Central African Republic, Congo, Djibouti, Equatorial Guinea, Eritrea, Libya, Mayotte, Niger, Reunion, Saint Helena, São Tomé and Príncipe (STP), Seychelles, Sudan.

North Africa

| | |
|------------|-------|
| Algeria | 990 |
| Egypt | 3,669 |
| Mauritania | 122 |
| Morocco | 963 |
| Tunisia | 454 |

Southern Africa

| | |
|--------------|-------|
| Angola | 2,616 |
| Botswana | 271 |
| Comoros | 28 |
| Lesotho | 198 |
| Madagascar | 105 |
| Malawi | 232 |
| Mauritius | 174 |
| Mozambique | 299 |
| Namibia | 296 |
| South Africa | 3,855 |
| Swaziland | 102 |
| Zambia | 810 |
| Zimbabwe | 231 |

East Africa

| | |
|-------------|-------|
| Ethiopia | 1,826 |
| Kenya | 1,744 |
| Somalia | 2 |
| South Sudan | 143 |
| Tanzania | 1,909 |
| Uganda | 1,290 |

Central Africa

| | |
|----------|-------|
| Burundi | 124 |
| Cameroon | 1,035 |
| Chad | 525 |
| DRC | 35 |
| Gabon | 149 |
| Rwanda | 322 |

West Africa

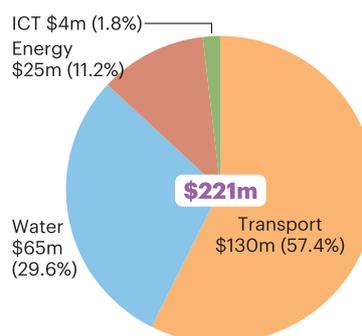
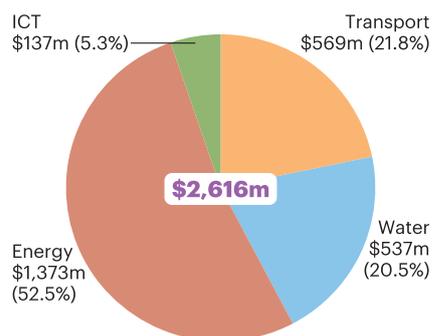
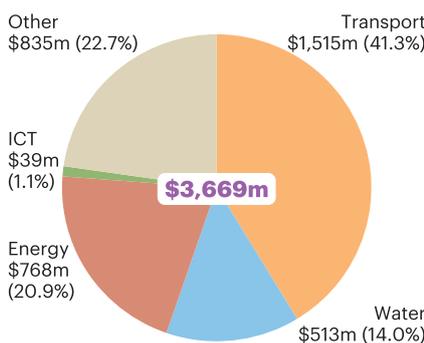
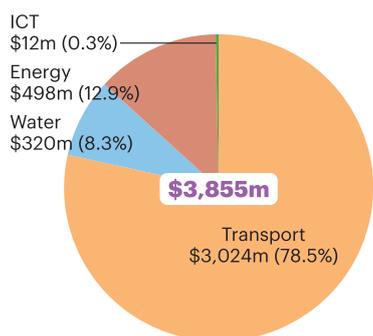
| | |
|---------------|-----|
| Benin | 227 |
| Burkina Faso | 203 |
| Cape Verde | 73 |
| Gambia | 37 |
| Ghana | 694 |
| Guinea | 522 |
| Guinea Bissau | 18 |
| Côte d'Ivoire | 568 |
| Liberia | 5 |
| Mali | 393 |
| Nigeria | 221 |
| Senegal | 539 |
| Sierra Leone | 183 |
| Togo | 197 |

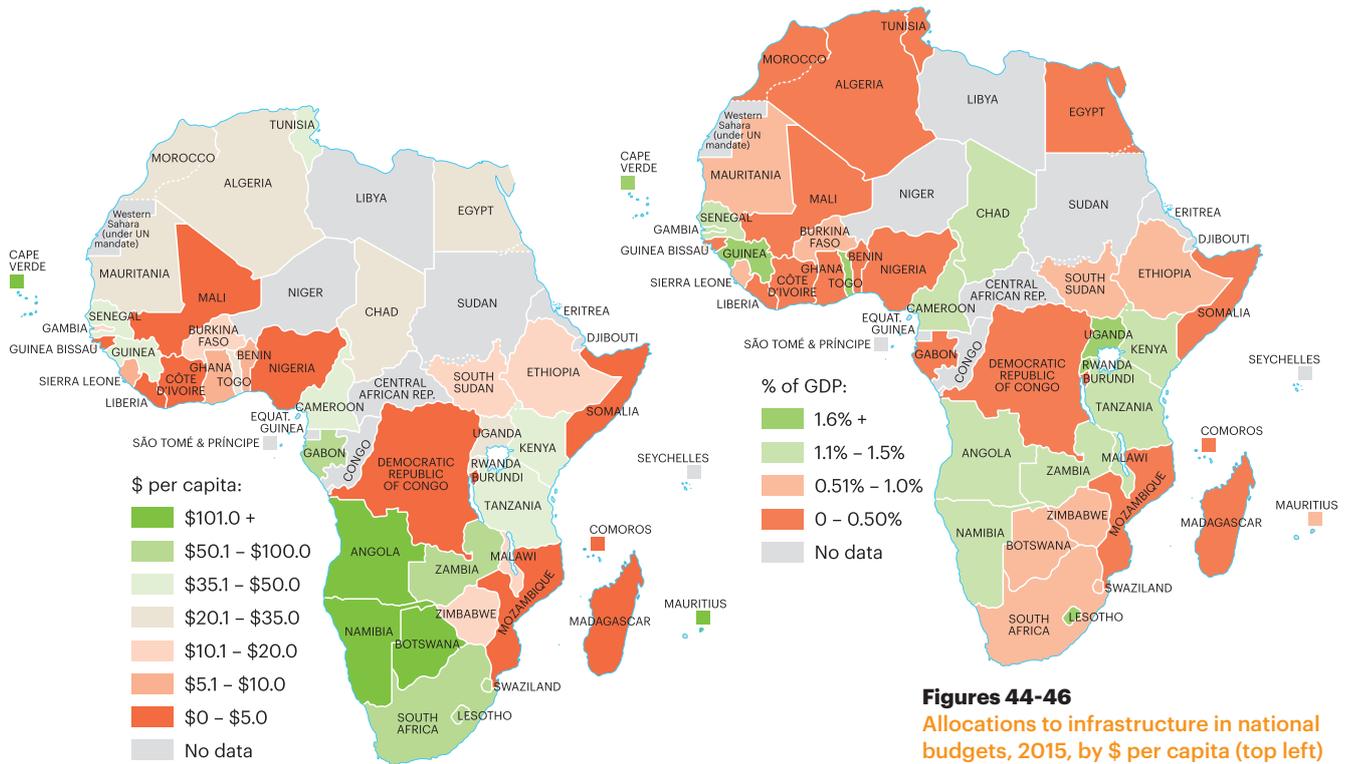
Figure 38-40 (top row pies, left to right)

Identifiable African National Budget Allocations in 2015 by sector for South Africa; Egypt; Angola

Figure 41-43 (bottom row pies, left to right)

Identifiable African National Budget Allocations in 2015 by sector for Ethiopia; Cameroon; Nigeria





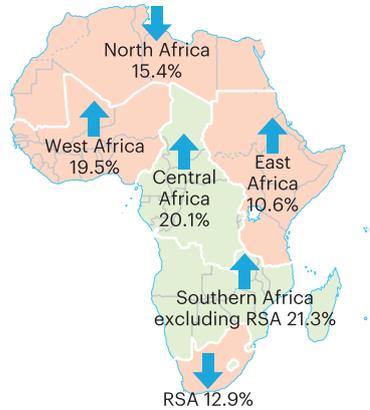
Figures 44-46

Allocations to infrastructure in national budgets, 2015, by \$ per capita (top left) and percentage of GDP (top right); Percentage of infrastructure allocations by sector, 2015 (below)

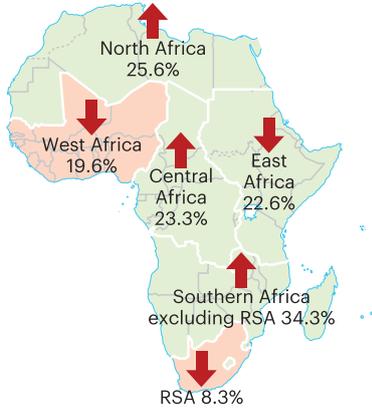
TRANSPORT



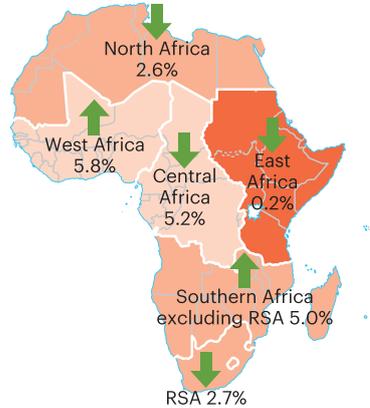
WATER



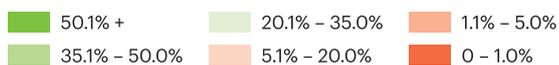
ENERGY



ICT



% of total infrastructure budget:



↑ ↓ Increase/decrease in percentage share since 2014

Overall capital expenditure allocations vary significantly between Africa's largest and smallest economies. For this reason, approximate national government budget allocations for infrastructure are shown on an allocation per capita basis and as a percentage of GDP to indicate the relative amounts national governments allocate to infrastructure as a proportion of their population and economy.

South Africa, for example, makes modest national budget allocations to infrastructure on a per capita basis and as a proportion of GDP based on national government data, but this ignores most of the country's total public spending on infrastructure at the subnational level, which is discussed in the following section.

In most scenarios, the public sector will be the principle financier of infrastructure development, and private sector participation is likely to remain limited in some sectors. So scaling up infrastructure in Africa will depend on a thorough evaluation of how fiscal resources are allocated and financed as well as how these resources will be mobilised.

5.2 Subnational Financing

Africa's subnational infrastructure needs and financing options have been subject to relatively little scrutiny and analysis compared with research conducted at the national, regional and continental level. Yet the fast growth of Africa's cities and the emergence of smaller scale off-grid renewable energy solutions are perhaps two indicators pointing to a growing importance of decentralised solutions, in terms of both infrastructure needs and financing.

Some estimates suggest that by 2035, one-half of Africans will live in urban areas, while one-third of the sub-Saharan African population will live in 36 cities, each with more than one million inhabitants. Meanwhile, small-scale off-grid power solutions may have a big impact on Africa's rural areas.

To some extent the practicalities of decentralised infrastructure developments are being addressed, both in countries such as Nigeria and South Africa where subnational financing at both local and utility level are well established, and countries such as Morocco which has, since 2011, pursued an active programme to move infrastructure decision-making and spending from the national to the local level.

Several ICA members offer subnational finance programmes providing creditworthy local governments and selective state owned entities the opportunity to finance public infrastructure projects without taking sovereign guarantees.

The Brookings Institute¹ has concluded that African efforts to devolve responsibility for services and decentralisation of fiscal authority "seriously lag behind other regions of the world." In Sub-Saharan Africa, South Africa is the most decentralised, with 60% of public expenditures managed by local

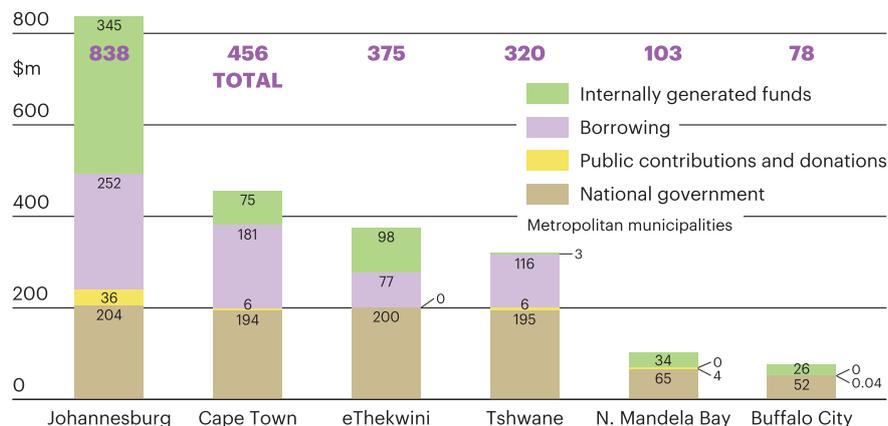


Figure 47
Sources of finance (\$m) for six sample cities and municipalities

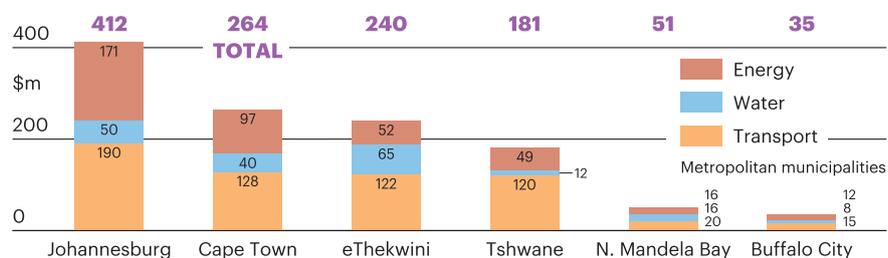


Figure 48
Infrastructure spend by sector (\$m) for six sample cities and municipalities

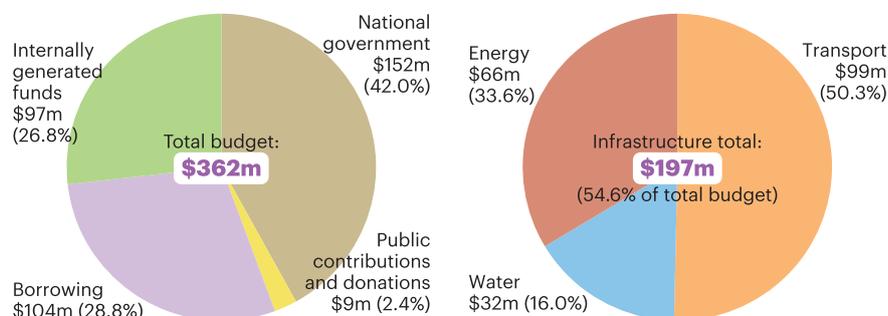


Figure 49
Subnational financing – average sources of funds

Figure 50
Subnational financing – average spend per sector, 2015

governments. The institute reckons Ethiopia and Uganda are at around 30%, while Kenya is at the other extreme with just 5% of public expenditures managed by local governments.

South Africa provides an indication as to how devolved financing for Africa can work. *Figure 47* shows the amounts six South African cities and municipalities budgeted for infrastructure, while *Figure 46* shows sources of funding for their entire

budgets, including non-infrastructure spending.

Critically, the South African system allows for local planning. City of Buffalo's Comprehensive Plan, for example, specifically contemplates infrastructure both in terms of the city's own facilities, such as roads and sewerage works, and the regional transportation system, which is owned,

¹ www.brookings.edu/wp-content/uploads/2016/07/AGIFinancingAfricanInfrastructure_FinalWebv2.pdf

managed, and operated by a great number and variety of public and private entities. The city also works closely with the Greater Buffalo Niagara Regional Transportation Council, the co-operative association of area governments that conducts regional transportation planning.

The range of local infrastructure needs addressed is wide and varied. Nelson Mandela Bay Municipality recently pumped R50m (\$4m) into the Missionvale area for the implementation and improvement of bulk stormwater, sanitation and civil services. The area has suffered a perennial problem of flooding which

has damaged houses and led to poor sanitation and roads as well as stormwater challenges.

While funds are mainly focused on the challenges of maintaining existing infrastructure within tightly squeezed budgets, some new local developments are eagerly anticipated. GO!Durban, an environmentally friendly integrated transport system, will see minibuses transport people along dedicated public transport lanes. Some R20bn (\$1.6bn) has been set aside for transformation of Durban's public transport system, which, by 2027, aims to connect 600,000 commuters across the city along nine public transport corridors.

Figure 49 shows how, on average, the six local governments raise funds. While some localities rely heavily on central government support, others are able to utilise their own funds. Johannesburg for example, budgeted income of \$345m from internally generated sources. The city generates income from power, water and sewerage tariffs as well as business and property taxes.

Figure 50 shows how the six sample cities and municipalities, on average, prioritise spending in the transport, energy and water sectors. ■

Other National Financing

State utilities, sometimes under popular or political pressure to keep tariffs low, face challenges generating internal funds for reinvestment, leaving even the largest of them reliant on external, often non-commercial funding. There are exceptions. Commercial financing options are opening up for Ethiopian Airlines, which recently closed a \$107m pre-delivery payment (PDP) financing with ING Capital in respect of Airbus A350-900 aircraft.

Unusually in the African context, Ethiopia's government provides no subsidies and allows the airline to reinvest all its profits. In the year to June 2015, Ethiopian Airlines recorded a net profit of 3.15bn birr (\$148m), compared with 2bn birr (\$96m) in the same period a year earlier. However, while there are no formal subsidies, the airline's success may be significantly credited to the carrier's benevolent government owner, which does not demand dividends and helps keep down labour and financing costs.

The airline, which also produces economic benefits from generating hard currency earnings and providing a boost for Ethiopia's growing horticultural sector, also benefits from access to non-commercial borrowings from its owner and development finance providers. AFD is providing a €50m (\$56m) loan to finance the building.

Other utilities using a mix of commercial and non-commercial funding include South Africa's Transnet. In 2015/16, the company raised R40.9bn (\$3.2bn), without government guarantees, through various sources, including:

- R8.3bn (\$660m) from development finance institutions;
- R8.5bn (\$675m) of commercial paper and call loans;
- R19.1bn (\$1.5bn) of domestic bank and club loans, and
- R4.6bn (\$365m) of domestic bond issues.

Very nearly 80% or R32.2bn (\$2.6bn) of this funding for spending in Africa's infrastructure is from sources of finance not recorded in this report, although it is unclear how much of it was capital as opposed to revenue spending. Transnet

reported capital investment at R29.6bn (\$2.3bn) as opposed to external funds obtained of R40.5bn (\$3.2bn). Internally generated income for the year was R27.7bn (\$2.2bn).

Transnet raises money in the debt capital markets on the strength of its financial position, and has maintained an investment grade credit rating, confirming its stand-alone credit profile.

The benefits of state utilities funding investments from internally generated funds have to be judged against the negative impact a requirement to do so may have. For example, a power utility that relies on generating income through tariffs, if required to raise its own funds for capital expenditure, would have to increase charges to customers. Increased tariffs could have a negative impact commercially by dampening demand and impede progress towards improving access to electricity.

So it is likely that many of Africa's state utilities should and will implement capital expenditure programmes funded from a variety of sources.

Kenya Power's financings for ongoing distribution projects provide an example of such a mix of funding sources. Its Kenya Electricity Expansion Project (KEEP) project is World Bank funded. In 2015, the company progressed various KEEP projects including construction of 24 distribution substations and associated lines at a cost of \$77m. In addition, 604km of distribution lines are currently under construction at a cost of \$19.1m. Work also progressed on substations and distribution line projects financed by IFC and the Kenyan government at a cost of \$20m and \$13.57m respectively. The Kenyan government obtained a \$132m loan facility from Eximbank China to implement several power projects aimed at enhancing power supply quality within Nairobi's Central Business District.

Internally generated funds were used to implement ongoing substation upgrade and reinforcement projects in different parts of the country at a cost of \$62m. Work to install capacitor banks and reactors in major transmission substations required \$26.6m of funding provided by the company. ■

5.3 China

Investments announced by China reached a record level of \$20.9bn in 2015, compensating for the very low level of announcements of \$3.1bn in 2014. Over the five years to 2015, the average annual level of Chinese investments is \$13.1bn, while the previous highest annual total of investments of \$15bn was reported in 2011.

Data for China should be treated with some caution since it is based largely on open media reports thought to be credible and records announcements not commitments. Some projects may be delayed or will not go ahead.

Unusually, Eximbank China included limited information on African financing but not related to specific projects. Referring to the December 2015 Chinese delegation visit to Zimbabwe and South Africa led by Chairman Hu Xiaolian, the bank said that on the sidelines of the Johannesburg Summit of the Forum on China-Africa Co-operation, a number of co-operation agreements on infrastructure were signed with government representatives of Kenya,

Senegal and Gabon. With a total value of CNY19.68bn (\$3.2bn), the bank said that through these projects, it will be able to provide more diversified services to expand and improve China-Africa co-operation on industrial capacity, infrastructure connectivity and finance.

Based on open media reports, energy appears to have become a new priority for China, which announced investments of \$10bn in this sector in 2015, double the previous record of \$5.2bn recorded in 2012, and for the first time topping Chinese investments in transport.

Over the five years to 2015, transport has been the sector most invested in by China, which announced plans for \$40bn of spending during that period compared with a total of \$20bn of spending on energy in the same period.

China's single largest investment announced in 2015 was in support of the new Caculo Cabaça hydro project in Angola. A consortium led by China Gezhouba Group Company (CGGC) will spend as much as \$4.53bn, with construction expected to take 80

months. CGGC, a listed construction and engineering company based in China's Hubei province, holds a 60% stake in the consortium, according to a company statement.

Private firm Boreal Investments has a 37.5% stake, while a joint venture formed by CGGC and Portuguese firm Niara Holdings holds the rest. Portuguese news agency Lusa reported that the Angolan government would negotiate a loan with the Industrial and Commercial Bank of China for the project.

Major announcements in the transport sector focused on the East African rail network (some of which must now meet new conditions imposed by the Chinese lenders since the announcement) and the Dakar-Kidira railway in Senegal, where Chinese investment is also promised for two motorways: Blaise to Diagne and Ila to Touba.

South Africa's state-owned freight transport and logistics company, Transnet, announced a \$1.5bn loan facility agreed with China Development Bank (CDB) in June 2015, with an option to increase the

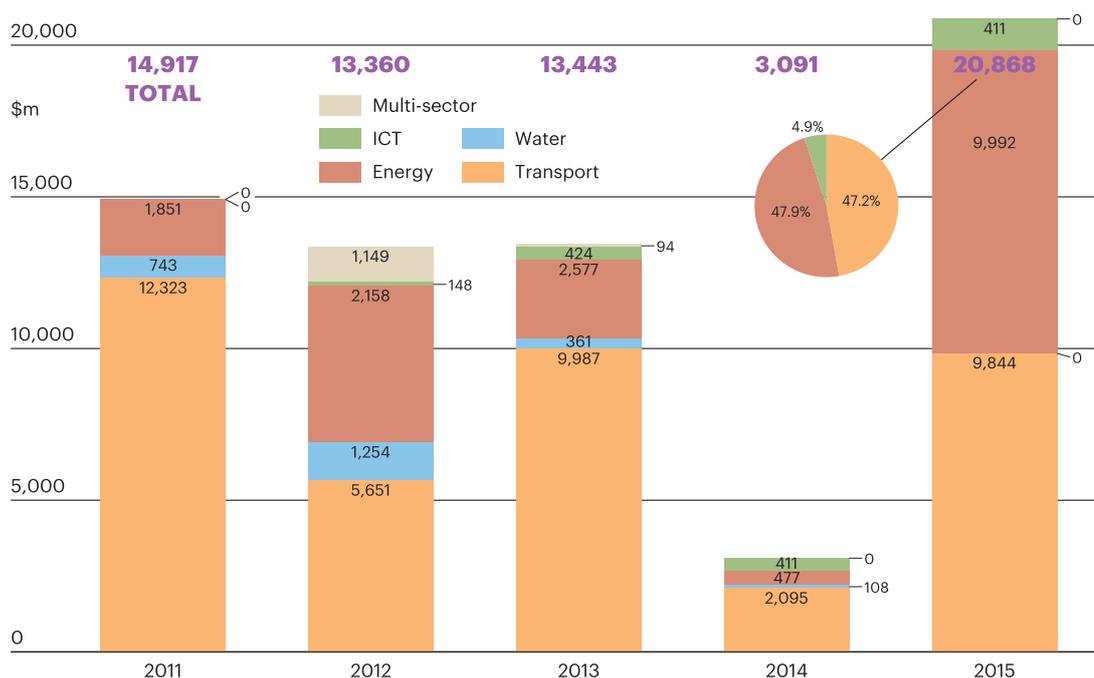


Figure 51
Chinese commitments by sector 2011-2015

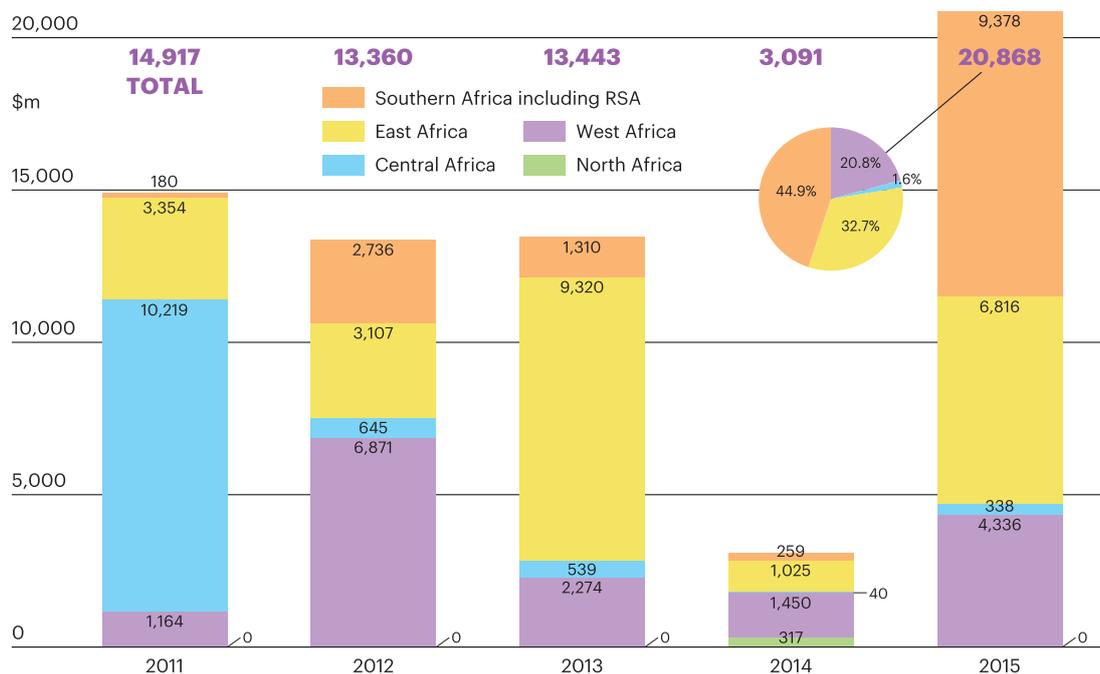


Figure 52
Chinese commitments by region 2011-2015

facility to \$2.5bn. In the same year, the company signed a R12bn (\$952m) club loan with five major financial institutions. The company will use the proceeds of the loan to fund its locomotive fleet acquisition programme.

Participants in the club loan, which was concluded with each funder separately but on the same commercial terms, are:

- Absa, R3bn (\$238m)
- Nedbank, R3bn (\$238m)
- Bank of China, R3bn (\$238m)
- Futuregrowth Asset Managers, R1.5bn (\$119m)
- Old Mutual Specialised Finance, R1.5bn (\$119m)

Including the club loan, Transnet raised the majority of the required funding for the locomotive fleet acquisition programme:

- China Development Bank, \$1.5bn
- Export Development Canada, R6.992bn (\$555m)
- KfW, R2.76bn (\$219m)

- US Exim guaranteed loan of R6bn (\$476m) financed by Absa, Standard Bank and Old Mutual Specialised Finance
- Club loan, R12bn (\$952m)

In March 2014, Transnet awarded a contract for the building of 1,064 diesel and electric locomotives to two Chinese manufacturers, China South Rail Zhuzhou Electric Locomotive (CSR-ZEL) and CNR Rolling Stock, as well as two global companies, Bombardier Transportation and General Electric Technologies. All the locomotives except 70 will be built at Transnet Engineering's plants in Koedoespoort, Pretoria, and Durban.

China appears to be increasingly focused on sustainable infrastructure investments in Africa, transferring skills to the continent and investing in training. Transnet employees received formal training at CSR ZEL's facility in the Hunan province of south-eastern China, in preparation for the domestic assembly of locomotives at Transnet's Koedoespoort.

Now the world's largest manufacturer of telecommunications equipment, Huawei employs about 10,000 people

across its Africa operations, and emphasises the importance of local staff trained in Africa and China. It has several training centres in South Africa, Egypt, Tunisia and Angola among others, focused on technology development.

Huawei is to construct the second stage of the National Telecommunications Broadband Network project in Cameroon for CamTel while the government of Togo has revealed plans to connect over 500 of its public buildings to fibre optics in a contract awarded to the Chinese telecommunications company.

China's largest financing in the ICT sector goes to Zimbabwe's Econet, which has stated that the \$300m capital from China Development Bank and China's ICT focused ZTE Corporation will be used for market consolidation and new services.

China announced no new investments in water projects in 2015. Chinese commitments amount to \$2.5bn in this sector over the last five years. ■

5.4 Arab Co-ordination Group

Members of the Arab Co-ordination Group (ACG) have consistently reported data for the ICA's reports, notably the Islamic Development Bank (IDB), OPEC Fund for International Development (OFID) and the Saudi Fund for Development (SFD). The data, which provides clear insights about the group's activities each year, is a rich addition and is gratefully received by ICA members.

The group committed a record \$4.4bn to African infrastructure projects in 2015, surpassing the previously highest commitments of \$3.9bn in 2012. This was substantially due to a near doubling of commitments by IDB, the group's largest financier of Africa's infrastructure. It provided \$2.2bn or 49% of ACG's commitments by value compared with \$1.3bn or 34% in 2014. In 2012, the IDB's commitments amounted to some 31% of the group's total, and in 2013, this figure was around 49% (see Figure 53).

IDB appears to be broadening its

African reach, with commitments in Central, East and Southern Africa in 2015, whereas in the previous year it committed only to projects in West and North Africa. Some 40% of the bank's commitments went to West Africa and 31% to North Africa, the latter largely due to a Saudi-Egyptian transmission project and work on the Sharm el-Sheikh International Airport project.

The Arab Fund for Economic and Social Development (AFESD) provided nearly \$1bn or 22% of the ACG's commitments. Its focus remains on North Africa, which accounted for \$864.5m or 87.8% of its total commitments in 2015. AFESD's largest commitments to North Africa were both of \$199m, made to the 650MW Cairo West Power project in Egypt and the Nador West Med port in Morocco.

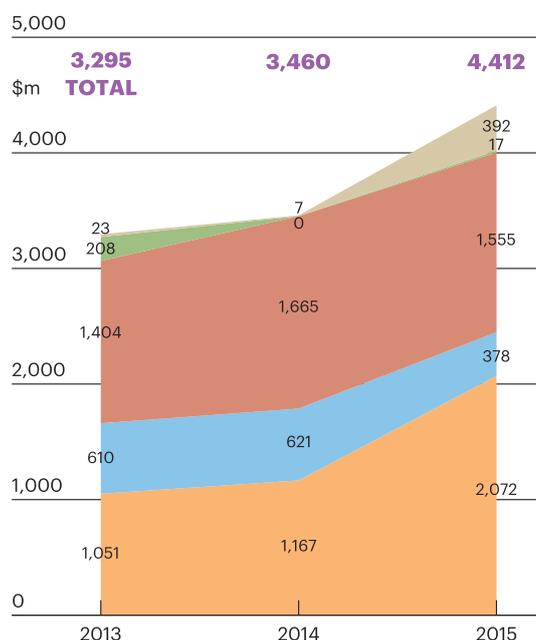
SFD made total commitments of \$392.3m in 2015 (8.9% of the ACG total) compared to \$259m in 2014, with the energy sector accounting for \$209.5m of its 2015 total.

OFID made commitments of \$311.5m or 7.1% of total ACG commitments in 2015. Most of its focus, in terms of the number of projects committed to, fell on East and West Africa. OFID's largest commitment in 2015, and the only commitment it made to North Africa, was \$70m for a rural electrification project in Morocco.

OFID is also showing an interest in financing smaller scale renewable energy initiatives. It is supporting the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) in its efforts to emulate across Africa successful mini-grid experiences in Senegal, Mali and Cape Verde. OFID will co-finance four of the 20 selected projects in Benin, Cape Verde, Senegal and Sierra Leone, within which more than 4,250 people in 850 households will directly benefit, as well as 123 commercial clients and small enterprises and 57 public buildings and services. OFID also committed in 2015 to rural electricity projects in Côte d'Ivoire, Ghana, Guinea Bissau and Burundi.

BY SECTOR

Transport Water Energy ICT
Multi-sector



BY REGION

North Africa West Africa Central Africa
East Africa Southern Africa including RSA Unallocated

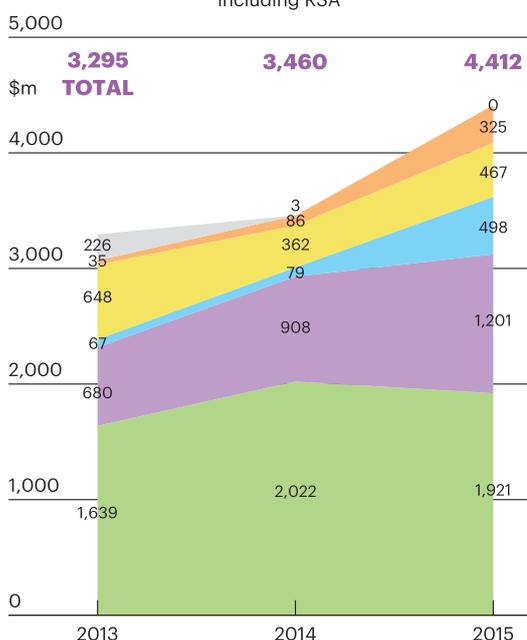


Figure 53
Arab Co-ordination Group commitments by sector and region, 2013-2015

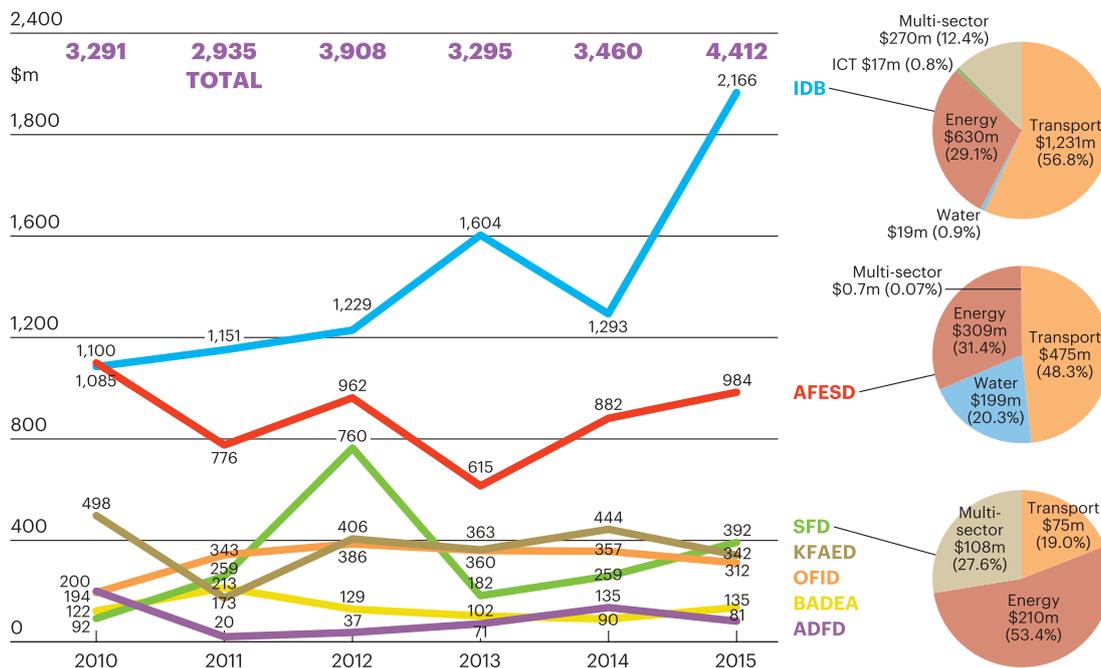


Figure 54
Arab Co-ordination Group commitments, by institution 2010-2015

Apparently reflecting the emirate’s enthusiasm for renewables – Abu Dhabi hosts the International Renewable Energy Agency – four out of the Abu Dhabi Fund for Development’s (ADFD’s) seven 2015 commitments went to solar projects, one each in Burkina Faso, Cape Verde, Mali and Senegal.

Kuwait Fund For Arab Economic Development’s (KFAED’s) made commitments totalling \$341.9m in 2015, the largest of which was \$100m for a project to provide a power interconnection between Egypt and Saudi Arabia. This funding targets the Egyptian section of the interconnection which aims to enable energy exchange between the Egyptian and Saudi grids during normal operating times, especially at peak time and during emergency conditions. The project also aims to reduce operating costs and reinforce the stability of both grids.

In 2014 Tunisia presented infrastructure and development projects worth around \$1.26bn to various ACG funds during a meeting of Arab ministers in Tunis. Among the

projects was a 600MW gas-fired power plant in Mornaguia, near the capital Tunis. In 2015, SFD committed \$181m to this project, which is also now supported by IDB.

Reflecting the ACG’s broadening of focus from traditional areas of Africa, La Banque Arabe pour le Développement Economique en Afrique (BADEA – Arab Bank for Economic Development in Africa) committed \$36.1m support for water projects across the continent in 2015. These include a feasibility study for water supply and sanitation in Guinea and two initiatives in Senegal, both for sewerage projects in the towns of Thiès, Kaffrine and Sédhiou and the city of Dakar.

In Togo, BADEA announced it would fund the services of an expert to support the ministry of water and in Mozambique it will finance the preparation of techno-economic feasibility studies for water supply in Inahmbane Province. In Mali the bank will provide support to the Northern Agency for Water, while in Cape Verde it supports a water supply and sewerage project in the city of

Praia and in Côte d’Ivoire a water supply project in the city of Abengourou and surrounding villages.

BADEA also made transport sector commitments totalling \$61.4m across West, Central, East and Southern Africa. ■

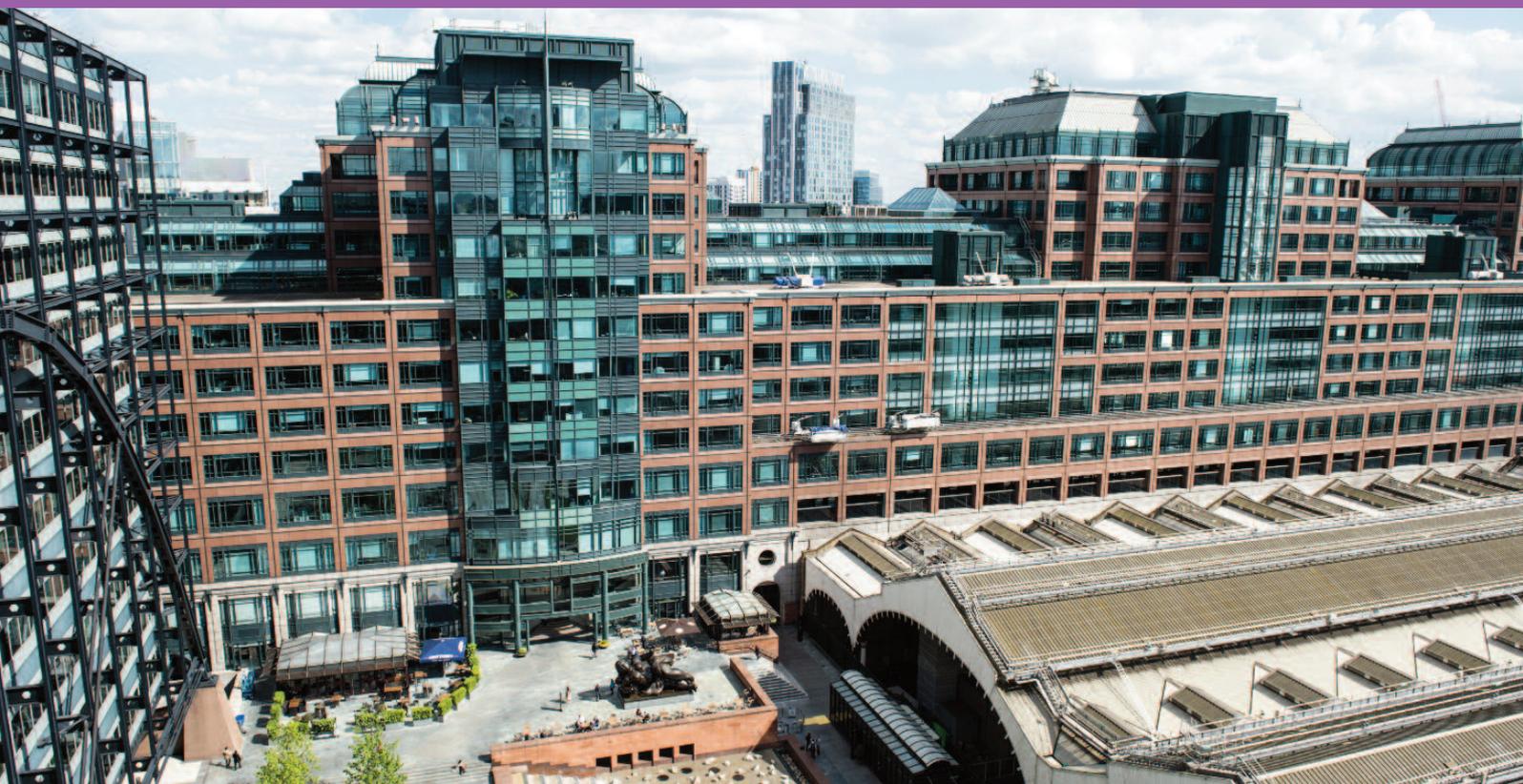
ACG Trends

There was a shift in 2015 from the ACG’s overall focus on regions, with funding for North Africa unusually falling substantially below the 50% mark, while the group appears to be focusing significantly more (albeit from a relatively low base) on Central and Southern Africa.

In 2014 it was noticeable that the ACG’s funding focus was beginning to expand beyond the countries with which it has cultural and linguistic ties to East and West Africa, this year’s data seem to underline that trend.

A shift in sectoral emphasis is also noticeable. While energy was the prime focus in the three years to 2014, there has been a steady increase in interest in the transport sector over the last four years to the extent that in 2015 transport commitments surpassed those made to energy by \$517m to top \$2bn, the most committed by the group to any sector in the past four years. ■

5.5 Non-ICA European Sources



EBRD Headquarters, London – EBRD/Dermot Doorly

Commitments to African infrastructure by bilateral DFIs that reported commitments in 2014 decreased in 2015 but this was compensated by the substantially increased participation of the European Bank of Reconstruction and Development (EBRD) in the continent's infrastructure development.

In 2014 there were significant energy sector commitments, notably the

\$286m investment in power developer Globeq by Norfund, alongside commitments in the \$20-50m range by several DFIs to power projects including Lake Turkana Wind Farm in Kenya, Tobene in Senegal and Azura in Nigeria.

In 2015, the largest commitments were from Norway, with Norfund's \$52.9m and \$22m cost sharing agreements with independent solar energy provider Scatec Solar in support of energy projects in Egypt

and South Africa respectively, followed by the Netherlands' FMO's commitments of \$25m for telecommunications infrastructure in DRC. FMO also committed \$15m to Kenya Tea Development Agency (KTDA) to develop hydropower for several of its tea factories, with any excess to be sold to Kenya Power and Lighting Company (KPLC); \$13.2m to a project providing mobile telephone towers in Chad and \$11.1m in support of Togo's Lomé Container Terminal. There were no other single commitments from bilateral DFIs in excess of \$10m.

Commitments of \$72.5m to ICT were completely dominated by finance for telecommunications towers. Four commitments from FMO and one from Belgium's BIO were to projects for Helios Towers Africa or its subsidiaries to install two towers in DRC and one each in Chad, Congo and Tanzania.

Renewables feature strongly in non-ICA European funders' portfolios.

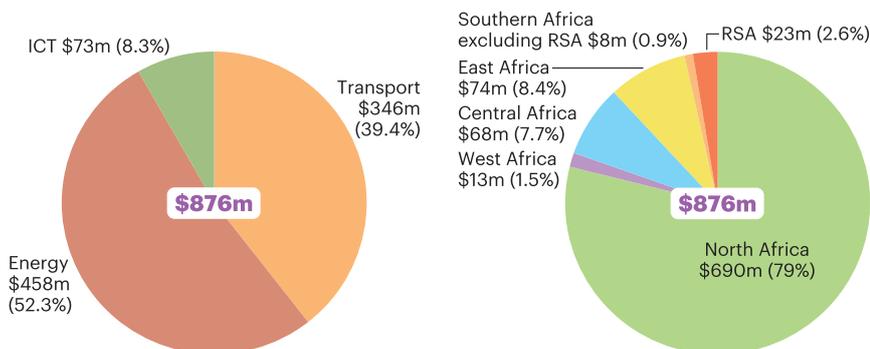


Figure 55
European commitments to infrastructure by sector, 2015

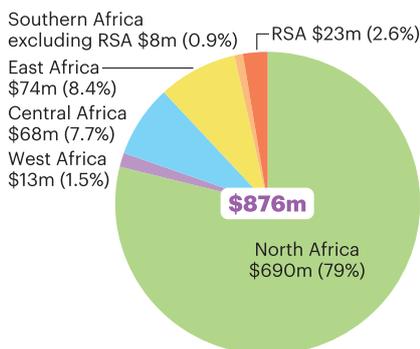


Figure 56
European commitments to infrastructure by region, 2015

Between them, BIO, FMO and Spain's Cofides supported a total of 13 small hydro plants. These include seven FMO supported run-of-the river small-hydropower plants (SHPs) with a total installed capacity of 16MW for KTDA. FMO and BIO both supported the Rwimi small hydro project in Uganda. Norfund continues to plan the roll out of new solar in partnership with developer, Scatec Solar.

In the transport sector, FMO joined a consortium of DFIs, including AfDB, DEG, OFID and Proparco to finance the construction of the Lomé Container Terminal in Togo. The IFC arranged a \$300m debt package for the port development, Togo's largest-ever direct foreign private investment and IFC's largest port investment in Africa. FMO also supported Rift Valley Railways' efforts to deal with environmental degradation at several sites.

At \$239m in 2015, non-ICA member DFI commitments were around one-quarter of those made by the same group in 2014. This reduction was substantially offset however by the establishment of the EBRD as a significant funder of Africa's infrastructure as per the definitions used by the ICA.

EBRD has supported North African countries since 2012 in its southern and eastern Mediterranean (SEMED) operations. It is the latest region in



Figure 57
European commitments to infrastructure by country and EBRD, 2015

| EBRD Projects in 2015 | Country | Sector | Amount (\$m) |
|---|---------|-----------|--------------|
| Combined cycle gas turbine (CCGT) 1.8GW power plant near Damanhour | Egypt | Energy | 200 |
| 13 air-conditioned trains (8 wagons per train) to be operated on Cairo Metros Line II; and (ii) a portion of the long-term outsourced maintenance contract for Line II's entire fleet | Egypt | Transport | 111.4 |
| Rehabilitation of 11 hydropower plants and 3 dams | Morocco | Energy | 45.9 |
| Infrastructure development at the new Nador West Med Port | Morocco | Transport | 222.9 |
| 120MW Khalladi Wind Farm located near Tangiers | Morocco | Energy | 57.4 |
| Total Commitments | | | 637.6 |

which the bank is working to boost economic growth and democratic change. EBRD has been investing in Egypt, Morocco and Tunisia as well as Jordan as a result of the different ways each country emerged from the Arab uprising events in 2011 with different political systems and a new determination to reform their economies.

In previous years the bank announced it was considering providing \$190m to fund the conversion of the 500MW Damietta West and 1,000MW El Shabab power plants in Egypt to combined cycle gas turbine and \$113m to be on-lent to Egyptian National Railways to improve the quality of train services between Cairo and Alexandria. These projects were announced in 2013, while the following year EBRD said it would consider providing \$61m co-financing alongside EIB's \$86m and the EU's Neighbourhood Investment Facility \$12m for the Wastewater Expansion Programme in the Egyptian governorate of Kafr El-Sheikh. In 2012 the bank said it would consider providing \$67m to finance rural

electrification and smart metering in Morocco and \$72m to fund drinking water supply to three medium sized cities and 260 rural communities.

In 2015 the bank said it was considering \$638m of loans to two transport and three energy sector projects in Morocco and Egypt.

In Egypt EBRD focuses on municipal and infrastructure projects, while upgrading transport and telecommunications services, as well as modernising the financial sector and developing agribusiness.

In Tunisia the bank concentrates on supporting energy efficiency and developing a sustainable energy sector and facilitating non-sovereign financing for infrastructure development, as well as restructuring and strengthening the financial sector and financing private enterprises.

In Morocco EBRD focuses on supporting sustainable energy, direct and indirect financing of private enterprises and promoting infrastructure reform and facilitating non-sovereign financing. ■

5.6 Regional Development Banks

Regional Development Banks (RDBs) are playing a part, alongside ICA and ACG members and national governments, in developing projects with a regional impact.

Banque des États de l'Afrique Centrale (BEAC – Bank of Central African States) for example committed \$55m in Cameroon for the Lena-Tibati road part of the development of the Batchenga-Lena-Tibati-N'Gaoundere Corridor. As well as opening up and developing local areas the project will also contribute to regional integration by encouraging trade exchange between Cameroon, Chad and CAR. AfDB, AFD, IDB, JICA and the government of Cameroon also financed the project. BOAD (West African Development Bank) meanwhile committed an initial \$17m to the \$700m Gambia River Basin Organisation (OMVG) Power System Development Project, with funds directed towards Guinea-Bissau and Senegal. The project is also being supported by WBG (\$200m), AfDB (\$135m), EIB (\$106m), IDB (\$94m), AFD (\$52m), Germany through KfW (\$32m) and the Kuwait Fund (\$24m). The project is expected online in 2019.

One of BOAD's four strategic areas is the acceleration of regional integration through sustained infrastructure financing. The bank prioritises regional projects and programmes and supporting regional growth of power transmission

networks. Under its 2015-2019 Strategic Plan, BOAD expects to increase funding for infrastructure projects to 50% of its medium and long-term commitments, compared with an average of 31% over the five years prior to the plan.

Its infrastructure priorities are to support regional transport, energy and telecommunication infrastructure projects. In terms of transport, the bank will support the development and interconnection of roads, railways, sea and airport facilities. BOAD's priority in the energy sector will be given to the development of power generation poles with a regional focus as well as interconnection of electric power transmission grids. In this context, private power generation will be supported, particularly those based on renewable energies.

In the ICT sector, the bank will support the development of regional integrated information technology infrastructure networks and broadband communications, regional mobile telephony projects and investments in digital radio and television migration.

In 2015, BOAD provided nearly one-third of commitments to transport projects while energy and ICT commitments were 26% and 22% respectively. The bank committed 14% and 7% of funds in 2015 to water and multi-sector projects respectively.

Benin will benefit from more than one-third of BOAD's commitments

while Mali will receive nearly one-quarter of funds committed by the bank in 2015 to infrastructure.

The bank's largest loan to Benin was to provide nearly \$60m for the country's digital transition process. Benin's government mandated BOAD to raise this amount for the implementation of international recommendations for the conversion of all radio and TV stations from analogue to digital format. Local banks participating in the project included BOA Benin, ECOBANK Benin, Banque Atlantique Benin, and BGFI BANK Benin.

ECOWAS Bank for Investment and Development (EBID) committed \$5.1m for the construction of 60km of road running from Katchamba to Sadori in Togo as well as a further \$1.8m for rehabilitation work along the same stretch of road. In Benin, EBID committed \$5.9m for the 120MW thermal power plant at Maria Gleta to which IDB contributed \$158m and BOAD \$50m.

Collaboration between BOAD and IDB began more than 30 years ago. Cumulatively, co-financing has targeted 29 projects worth \$3.5bn in seven common West African member countries, with the IDB and BOAD contributing \$800m and \$400m respectively. Cofinancing has primarily targeted power generation, including hydropower, and transport sector projects.

ICA member DBSA provided the most commitments of all RDBs. The energy sector received more than \$725m or 78% while multi-sector projects received \$132m or 14% of its \$929m total commitments. While the transport and water sectors received just 1% of commitments each, DBSA directed \$50m towards ICT projects. As well as South Africa, DBSA targeted commitments across all sectors at DRC, Republic of Congo, Ghana, Kenya, Nigeria, Uganda, Zambia and Zimbabwe. ■

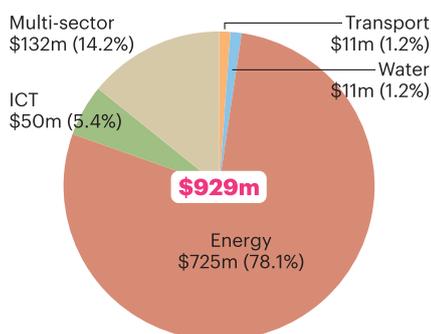


Figure 58
DBSA commitments by sector, 2015

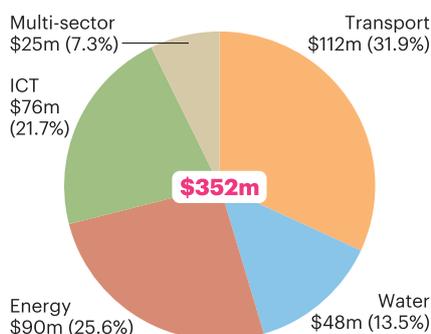


Figure 59
BOAD commitments by sector, 2015

5.7 Brazil, India, South Korea

Brazil

Brazil made just one, but very substantial commitment of \$500m to the 2,067MW Lauca Hydro project in Angola. The Lauca project is located on a section of the Kwanza River between the existing Cambambe and Capanda complexes, and is part of a continuing effort by the government to increase the country's hydroelectric capacity.

The Lauca project continues a trend for Brazil's development bank to support Angola's hydropower sector. Banco Nacional de Desenvolvimento Econômico e Social (BNDES) made disbursements in 2015 of undisclosed amounts of its \$464m of prior commitments for the expansion from 180MW to 960MW of the Cambambe dam. The funding financed work carried out by the Brazilian conglomerate Odebrecht, which has had a substantial position in the Angolan construction market for very many years.

Also in Angola, BNDES made disbursements in 2015 to the Capanda Agro-Industrial Pole project, which provides services for agriculture – including irrigation – construction and renovation of social infrastructure.

In Mozambique BNDES made disbursements in the Moamba-Major hydro project on the Incomati River. It will produce 15MW of electricity to add to the national energy grid and have the capacity to store 760m cubic metres of water for irrigation in the river valley. Construction of the dam is expected to involve restoration of railways and new road building. In the transport sector BNDES made disbursements in the project to rehabilitate Nacala airport. Odebrecht is also the contractor.

While BNDES has historically tended to fund projects in Africa's Lusophone countries, the Brazilian bank has also been active in Ghana where it made its first disbursement of official funds in

2013 in relation to the construction of a 3,700m² state-of-the-art hangar, and 1,000m² of office and workshops at the Accra Air Force Base by Contracta, a Brazilian company. In 2015 it made disbursements against work to improve the N2 Eastern Corridor road.

India

India committed \$524m to African infrastructure projects in 2015, up from \$424m in 2014 but still short of the \$761m committed in 2013.

Of its 2015 commitments, \$255m targeted the energy sector and \$268m was directed at water operations. Export-Import Bank of India made all commitments reported here, the largest of which was for the extension of the Lake Victoria pipeline to Tabora, Igunga and Nzega in Tanzania. The area is poorly served by current infrastructure, providing for example only 60% access to water in Igunga township. On completion, the project will provide the township 100% access to water. The extension is expected to benefit 89 villages in a 12km radius of the pipeline.

In the energy sector India is to finance two projects in DRC: a power distribution facility in Bandundu province and a transmission and distribution project in Kasai province. In Zimbabwe, India is supporting the renovation of Bulawayo thermal plant. India has also said it will provide finance for an electricity interconnection project between Côte d'Ivoire and Mali.

South Korea

Export-Import Bank of Korea reported one commitment of \$88.19m in 2015 to Senegal's Maritime Infrastructure Establishment Project II, the final part of which was completed with the opening of the Ndakhonga harbour terminal supported by the Economic Development Co-operation Fund (EDCF) which is implemented by Eximbank Korea and provides long-term, low-interest credit.

The Ndakhonga harbour terminal development is the last phase of the project to create a harbour that connects by river the central Ndakhonga region in Senegal with the sea. Critically, it provides maritime access between Dakar and central Senegal. Referring to the Korean consortium of Samsung and Dongil Shipyard that executed the project, chairman of Eximbank Korea, Lee Duk-hoon said the bank will continue to actively support this form of partnership between Korean companies and Senegal.

During 2015, Eximbank Korea held an Africa Regional Strategy Conference in Dakar, which examined infrastructure market trends in Africa and discussed strategies to support Korean businesses. This was Eximbank Korea's first regional strategy conference in Africa where it also opened representative offices in Tanzania, Mozambique, and Ghana. The bank has said it aims to expand its networks in Africa, which it sees as a fast growing emerging market. ■

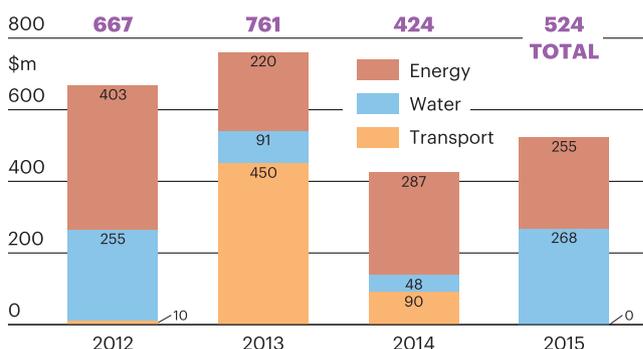


Figure 60
India
commitments
2012-2015

6. Private Sector



KfW Photo Archive, Jens Steingässer

Private capital flows are measured and mobilised by several public sector catalysts. The Private Participation in Infrastructure (PPI) Project Database remains a benchmark for measuring trends in private investments in the continent's infrastructure development. According to the database, projects achieving financial close reached \$8.5bn in 2015, substantially more than the \$5.1bn reported in 2014.

Since 2002, members of the Private Infrastructure Development Group (PIDG) have been leveraging private sector capital, reckoning that for every dollar PIDG members contribute, \$25 is expected to be mobilised from non-PIDG

sources. In 2015, DevCo's Niger Dry Port project reached financial close. The transaction mobilised \$77m in private investment.

The AfDB's Private Sector Department meanwhile is catalysing private capital. The department made \$1.7bn of commitments to develop private sector participation in the continent's infrastructure development. It has made substantial commitments for aspects of the Nacala Rail and Port Project, and to a diverse range of projects to improve air travel for Ghana, access to water in Rwanda, and power supply and satellite communications across Africa. ■

6.1 Private Sector Engagement with the Public Sector

PPI Projects Database

Projects with private sector participation reaching financial close in 2015 as recorded in the Private Participation in Infrastructure (PPI) Project Database, a joint product of the World Bank's Infrastructure Economics and the PPI Advisory Facility (PPIAF), reached \$8.5bn, of which \$7.4bn was private capital. This was substantially more than the \$5.1bn reported in 2014 and nearly as much as the \$8.8bn and \$8.7bn recorded in 2013 and 2012, respectively. The amount provided by the private sector in these projects is significantly up, at \$7.4bn in 2015 compared with just \$2.9bn in 2014.

The dip in project value in 2014 is largely attributable to the postponement in that year until 2015 of the Renewable Energy Independent Power Producer Procurement (REIPPP) programme's fourth bidding round.

The largest of the fourth round REIPPP projects is the \$688.4m Karoshoek Solar One Project, the shareholders of which are Emvelo (15% - Lead Developer/ Project Manager/ BEE partner); Industrial Development Corporation (20%); ACS Cobra Energia (20% - EPC and O&M Contractor); Public Investment Corporation (20%); Investec (10%) and the Karoshoek Community Trust (15%). Commercial lenders include Nedbank, ABSA and Investec and two DFIs, IDC and DBSA.

The database also includes substantial investments in Morocco's solar power sector. These include the NOORo II parabolic CSP, in which ACWA Power of Saudi Arabia has a 70% stake backed by an EIB loan of \$110m, an AfDB loan



Figure 61
PPI Project Database trends 2010-2015

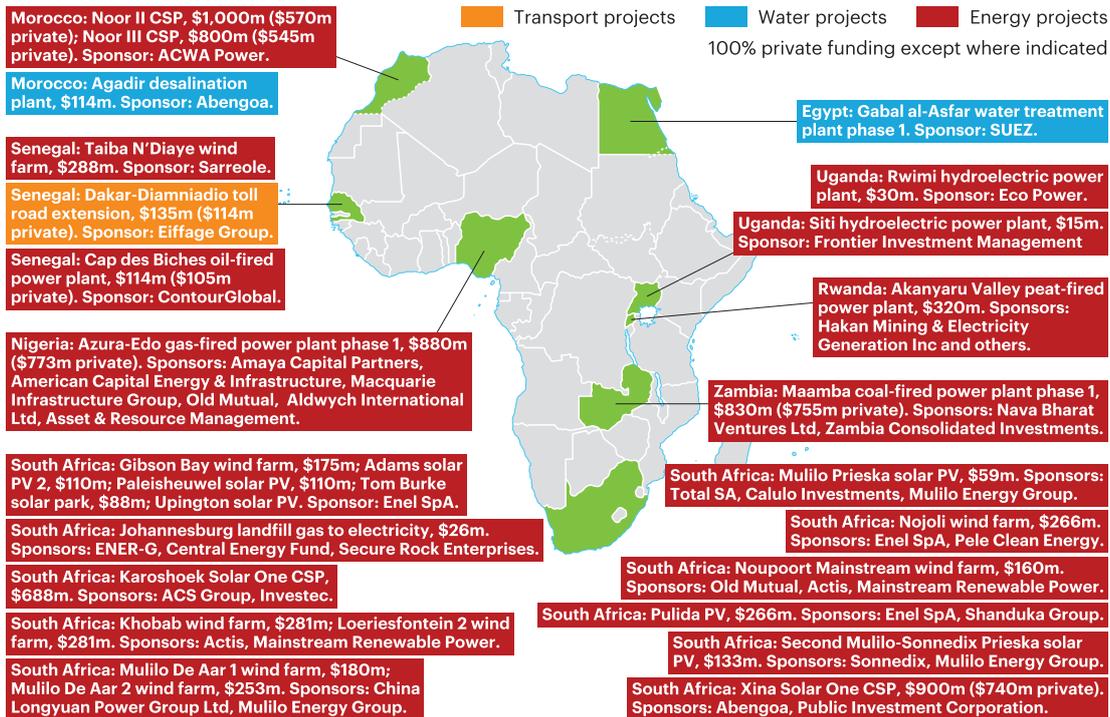
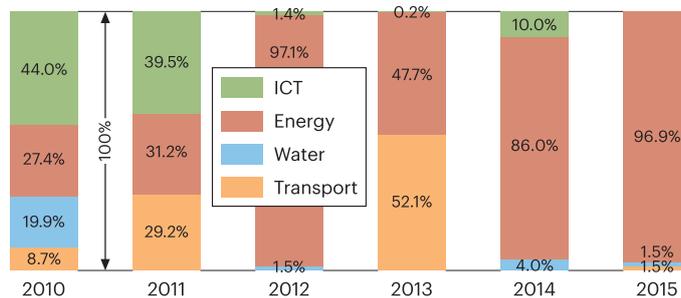
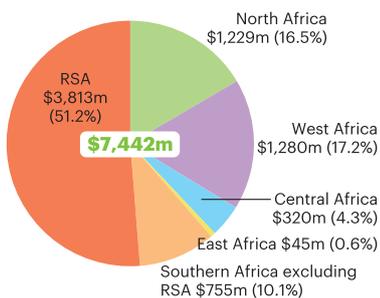


Figure 62
Private sector projects reaching financial close in 2015



Figures 63-64
Private sector financing by region, 2015 (left); Private sector financing trends by sector, 2010-2015 (right)

of \$70m and an IBRD loan of \$250m. Also included is NOORo III tower CSP, in which ACWA Power of Saudi Arabia has a 70% stake backed by an EIB loan of \$55m, an AfDB loan of \$50m and an IBRD loan of \$150m.

NOORo is the largest concentrated solar power complex in Africa and substantially increases the share of renewable energy in electricity generation in Morocco. Located at the Ouarzazate solar complex, Noor (meaning light in Arabic) aims to produce at least 2,000MW of electric power from solar energy by 2020 and is part of Morocco's new 2010-2030 energy strategy.

While the energy sectors of South Africa and Morocco as reported in the

PPI database have benefitted from private investment, there is very little interest elsewhere, either in terms of sectors or locations – a trend that has remained constant over recent years except for 2013, which saw two large investments in Nigerian ports.

The energy sector in 2015 attracted 97% of combined public-private investment and 85% of private sector investments while South Africa attracted 47% and Morocco 23% of all investments. Africa's transport and water projects attracted just 1.3% of funding per sector.

Apart from South Africa there was just one investment in Southern Africa, in Zambia's Maamba coal-fired power plant. Bank of China and the

NOORo's Targets

- Reducing energy dependency through additional production of 160MW expected by the end of 2015 for NOORo I and 350MW by the end of 2018 for NOORo II and III
- Reducing 762,000 tons per year of CO₂ emissions, or 19m tons over 25 years through NOORo I, II and III
- Achieving the national target of 42% of renewable energy in the country's energy mix by 2020 and developing local renewable energy industry.
- Creating 250 permanent jobs and 2,400 temporary jobs during the construction of Noor I, and additional jobs expected through the construction of Noor II and III.

Source: AfDB

Private-Public Sector Engagement

Industrial and Commercial Bank of China will provide \$300m of the total funding, with \$150m provided by the Industrial Development Corporation of South Africa and the DBSA. A further \$65m was provided by a group of western banks including Standard Chartered and Barclays.

Outside Morocco, there was just one investment in North Africa, in Egypt's Gabal al Asfar water treatment plant. Suez Environnement won a four-year contract worth a total of €84m (\$94m) to operate and maintain wastewater treatment plants in a consortium with three Egyptian companies.

There were no investments in ICT recorded in the PPI database but the private sector is putting cash aside for investments in telecommunications towers. Eaton Towers for example announced in 2015 that it has raised \$350m in new equity resources from existing and new shareholders, to fund expansion and acquisitions across Africa.

There was just one investment in the transport sector, in Senegal's Dakar-Diamniadio toll road extension. Eiffage of France, via its Eiffage Sénégal and

Eiffage TP subsidiaries, won the contract for the design and build, financing, operation and maintenance until 2039, of the extension. This new four-lane motorway section, extending 16.5km, will link the centre of Dakar with the new airport.

Private Infrastructure Development Group (PIDG)

Members of the Private Infrastructure Development Group (PIDG) have, since 2002 and across all sectors and territories, committed \$1.2bn to the PIDG facilities and leveraged over \$20bn in private sector investment and over \$9bn from other IFIs and DFIs. Overall, for every dollar of PIDG member contributions channelled to projects, \$25 is expected to be mobilised from non-PIDG sources, \$17 of which will be from private commercial financing.

In 2015, four PIDG facilities reached commercial close, all involving IFC-managed DevCo, which advises poorer developing country governments on structuring transactions to facilitate sustainable private sector participation in infrastructure. (see *Annex 3, page 90*)

DevCo's Niger Dry Port project reached financial close in 2015. The project aims to increase efficiency of trade in Niger. The transaction mobilised \$77m in private investment and the government of Niger will receive fees of over \$48m during the concession lifespan. The original PIDG investment in the project, which started in 2009 and reached commercial close in 2014, was \$800,000.

AfDB Private Sector Department (OPSD)

AfDB recognises private sector development as one of its fundamental areas of focus to reduce poverty and support sustainable growth in Africa. Its vision for the development of this sector uses a number of approaches, including: improving the business environment, support for private companies, strengthening institutions and financial systems, the promotion of regional integration and trade, and the creation of a demonstrative effect that attracts resources from other donors. In 2015, the department made \$1.7bn of commitments (see *Annex 3*). ■

Public-Private Sector Participation

The private sector is apparently looking to the public sector to facilitate more dialogue and partnerships between the two sectors according to commercial operators.

Greater co-operation is needed through structured and collaborative interaction, which will need to be headed up by public sector governing bodies, according to a business development officer at one of the world's largest EPC companies. A South African investor meanwhile said the sectors would work better together with a greater willingness on the part of governments to recognise the value and expertise that the private sector brings to major capital projects.

Several private and public sector stakeholders are still hopeful that private public partnerships (PPPs) will flourish, but they want to see regulations modernised to fast track infrastructure

growth. "A well defined PPP strategy supported by a robust legal environment would help the private sector to work with the public sector," one investor said. Governments should recognise that regulatory frameworks need to be created to ensure that PPP projects can have certainty on long-term stability, according to a portfolio director at a DFI, who also wants to see greater understanding of PPPs and established, serviceable PPP frameworks.

There seem to be mixed views on project preparation initiatives. A business development manager in the renewables sector singled out the IFC's Scaling Solar programme. He suggested the initiative in Zambia had attracted several large-scale multinational developers and financial backers due to the clarity and structure that it has provided. A South African investment advisor commented that the standard

documentation in the programme had been very useful.

But a programme specialist at a DFI called for public sector partners to better align their resources to benefit more from their comparative advantages. "For example, there's a dozen PPFs that essentially function in the same capacity," he said.

He also suggested more focus on bringing late-stage, large-scale projects to the finish line. "These projects seem to languish for months and months, sometimes years, without moving into the construction phase," the specialist said. Elevating the status of these kinds of projects would help he suggested, and added that removing obstacles to their completion would be beneficial too. Several public and private sector stakeholders noted that greater dialogue is needed for both sides to understand each other better. ■

6.2 Private Sector Survey

This is the fourth ICA African Infrastructure Investment Survey. It seeks to gauge the views of the private sector towards investing in African infrastructure projects. A total of 90 respondents participated in the survey including project sponsors, developers, equity investors, debt managers, institutional investors and infrastructure concessionaires.

Respondents were asked fewer direct questions this year to avoid duplication of previous years' findings, while several more open questions allowed participants to express their views and opinions on matters concerning African infrastructure. Some of these views and opinions may be found in the Strategic Analysis section of Chapter 3 of this report (*see page 22*). Respondents were also asked what drove some of their decisions, for example their choice of investment destination and what they understood by the term 'quality infrastructure'.

Investment Destinations

Survey respondents were asked to rank the five countries they considered to be attractive investment locations in order, one to five. Each country was then weighted to give it a score. The total number of people who considered a country as their first choice was multiplied by five, second choice by four and so on down to last choice by one. The score for each country was then totalled to provide an overall rating, and then listed in order.

South Africa ranked top in respondents' choice of investment location. In 2014 it shared the top spot with Kenya, which has dropped back to second place in the rankings. Ghana has taken third position from Nigeria, which is now in fourth place.

Morocco, which did not feature in the top ten investment locations at all in

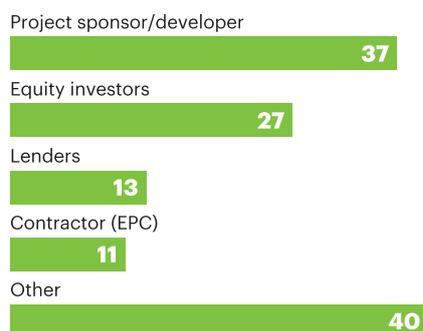


Figure 65
Private sector survey: respondents' role in infrastructure

2014, ranked fifth in the 2015 survey. Conversely, Mozambique, which ranked fourth in 2014, has been eased out of the top ten in 2015.

Egypt is the only other new entrant while the other country falling outside the top rankings in 2015 that featured in the previous year's survey is Ethiopia.

Rwanda, Senegal and Zambia as well as the two countries that dropped out of rankings in 2015, Mozambique and Ethiopia, all scored close to the countries at the foot of the top ten table with 32-36 points. The next group of countries, which included Cameroon, Namibia, Angola, DRC and Algeria scored between 17 and 19 points.

Investment Locations

Reasons for choosing an investment location included the clarity of regulatory framework, strength of investor protection (including rule of law), an ability to demonstrate that there are private sector led initiatives that have reached financial close, a demonstrable track record of government support of the private sector (typically by guaranteeing PPAs), and strong fiscal regimes to support infrastructure.

Political stability featured many times as an investment precondition,

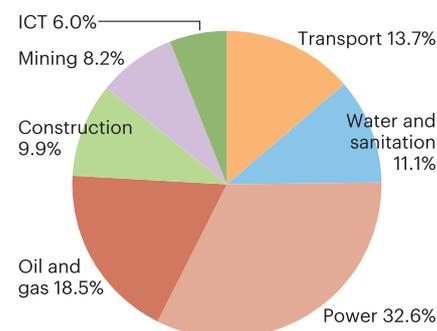


Figure 66
Sectors where respondents are active

including the strength of democratic processes, lack of corruption and transparency as well as governments' ability to provide a stable environment for long-term investment.

Other reasons included the size of markets, a mature business community with industry knowledge, availability of local capital, resource availability and sufficient levels of training and education.

Several respondents had their own company, sector, or region specific reasons for their choices of investment location. One respondent said his firm invested in North African countries, and his three top choices reflect those countries where his firm sees opportunities. Interestingly, this investor said that while it is not in his remit to invest in Sub-Saharan Africa, he nevertheless considers many countries there represent interesting and exciting equity investment opportunities and listed two of those in his five choices.

Another respondent said his choices were motivated by the firm's geographic strategy rather than based on financial attractiveness. The firm's strategy focuses on the provision of renewable energy and energy efficiency services to SMEs in a region with a common currency, language and business law.

Some investors only look at domestic markets. One respondent who said he invested only in Nigeria and another only in Sierra Leone each selected those countries as their first choice.

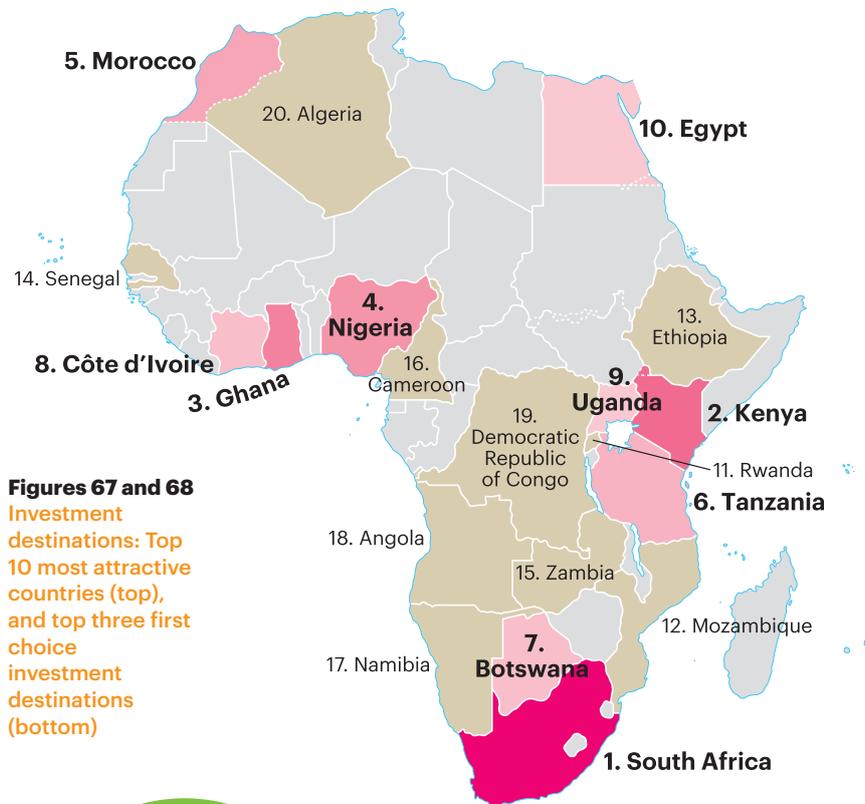
A developer in energy sector said she looks for a combination of power demand/supply balance, renewable resource availability, power prices, regulatory climate, political stability and resolve as well as business culture.

One investor described the actual process of choosing an investment location as a trade-off between the size of market, quality of institutions and investment framework. Another qualified her choices by saying her focus is project driven, not country driven so the focus can quickly change to a different country based on project focus.

Several respondents said they chose countries where they had experienced or anticipate success or were looking at locations that have demonstrated their attractiveness:

“Morocco and South Africa have succeed in launching major renewables projects and privately-financed road schemes, Botswana is well governed and has projects within its means, Côte d’Ivoire and Djibouti both have interesting privately-financed schemes, including ports, bridges and (in Côte d’Ivoire) several IPPs,” one investor in the transport sector said.

An energy sector investor said, “Morocco and South Africa have proven track records with energy infrastructure investments involving foreign investors and financiers. Kenya has a robust business environment and approach and a track record. Botswana is a low risk investment destination while Mozambique has a significant future investment potential based not least on large-scale gas opportunities but



also an emerging track record from private IPP developments.”

A port operator explained that Nigerian and West African ports currently have inadequate port facilities to service the needs of 200m Nigerians and a West African population of 400m. “A regional transshipment facility in Equatorial Guinea would solve a lot of draft related problems, as West Africa ports are generally too shallow to take the latest generation of super-container ships,” he said.

A power developer said he believed the IPP programme in South Africa is

well developed and has been successful to date. Namibia, Botswana and Zambia need access to power and there are government programmes in place. Kenya has a few wind, coal and geothermal projects in the pipeline and is well positioned to feed power to other East African countries, he added.

Some respondents provided specific reasons for their choices. “Angola is still wealthy, East Africa is where the real growth will happen, Ghana is promising, Senegal could be amazing. Nigeria...there are still opportunities - I’d put them sixth!” ■

Sector Prospects

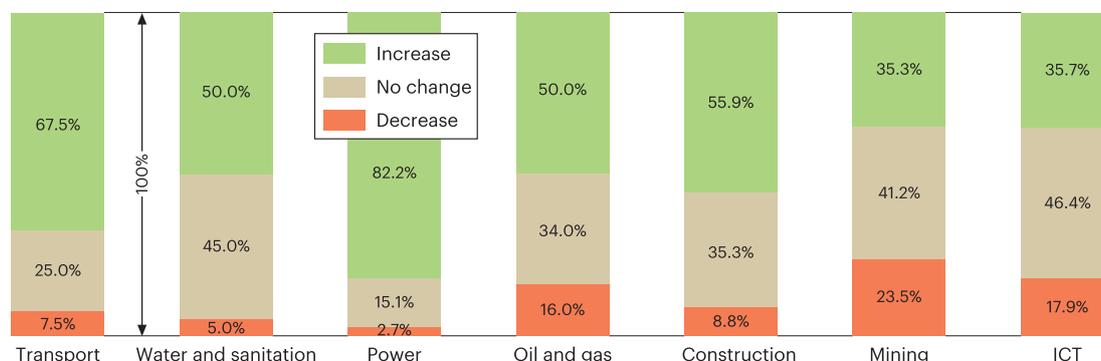


Figure 69
African portfolio intentions over the next two years

Respondents were asked whether they intend to increase, decrease or keep the same amount of investments or developments in their investment, project or operations portfolios over the next two years.

While there is clearly significant stakeholder interest in deepening investments or operations in African

infrastructure, notably in the energy and transport sectors, lower levels of optimism are apparent in the 2015 survey compared with the one in 2014.

Respondents who said they would increase their stakes in the energy sector fell from 89% in 2014 to 82% in 2015. Similarly, in other sectors the percentage fell from 75% to 68% in the transport sector and from 64% to 50%

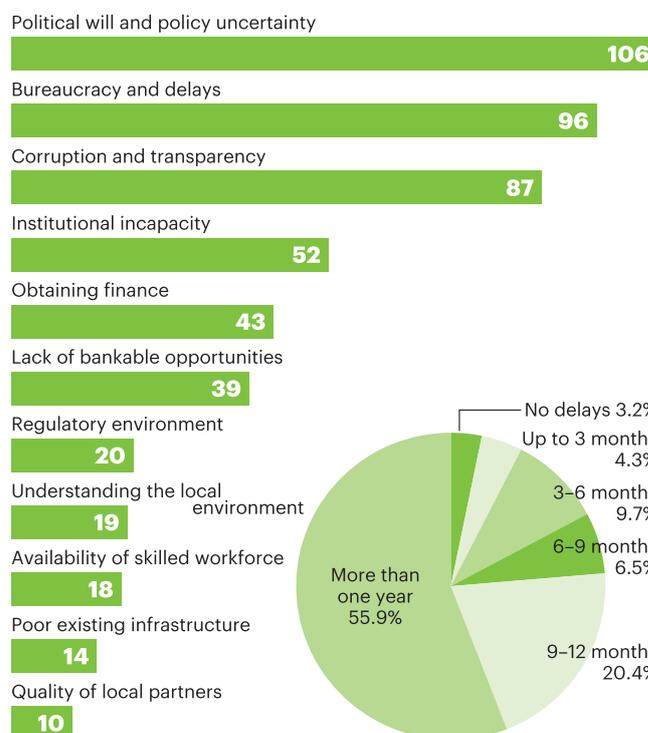
in the water sector and from 50% to just 36% in the ICT sector. The sector with the largest percentage (24%) of stakeholders expecting a decline in investments or operations is the mining sector. The only sector in which stakeholders expected their portfolio to expand was the construction sector, with a larger percentage of 56% in 2015 compared with 54% in 2014. ■

Project Delays and Challenges

Respondents to the 2015 ICA African Infrastructure Investment Survey reported longer delays than those reported in the previous survey. Whereas just less than half of the 2014 respondents reported delays of more than 12 months, the latest survey found that 64% had experienced delays of a year or more.

The causes of project delays are well known and the challenges respondents to the survey said they faced are familiar to stakeholders in Africa's infrastructure development. The survey asked respondents about the challenges they faced, to gain an idea as to how great each of those challenges were. Participants were asked to identify and rank the three biggest challenges they faced. A weighted score was then calculated, with challenges ranked first attracting a score of three, second rankings were scored two and third choices scored one. The scores against each respondent's chosen challenges were then totalled and the scores ranked in order.

Political will and policy followed by bureaucracy and delays and then corruption and transparency were seen as the three greatest challenges. This matches the top three challenges reported in the 2014 survey, both in terms of rankings and each challenge's score, none of which has moved significantly since the previous survey. ■



Figures 70 and 71

Greatest challenges facing the private sector (left); Delays experienced by the private sector (right).

7. Sectoral Analysis



Addis Ababa, iStock

7.1 Overview

Of the \$83.4bn total financing commitments made in 2015, the transport and energy sectors both stood at \$34.7bn, with each sector representing 41.6% of total commitments. The water sector received \$8.1bn or 9.7% of commitments, while ICT with \$2.5bn and multi-sector projects with \$2.2bn received 3% and 2.7% of commitments, respectively. The remaining \$1.2bn of commitments not classified under any sector comprised capital allocations in government budgets to ministries with a remit to invest in two or more sectors.

Transport

African national governments have historically allocated the largest

proportion of their infrastructure budgets to transport operations and did so again in 2015. They allocated \$15.3bn or 44% of total transport commitments recorded in this report for 2015. China announced \$9.8bn of investments in the sector in 2015 while ICA members committed \$6.8bn, representing 28% and 20% of total commitments respectively.

East Africa received \$11.8bn of transport sector commitments in 2015, representing more than one-third of such commitments to the continent in that year. West, North and South Africa received commitments of \$7.1bn, \$5.1bn and \$4.8bn respectively while Southern and Central Africa received \$2.7bn and \$2.3bn respectively.

Water

African national governments provided more than any other funding source to the water sector in 2015, allocating \$4.1bn or 51% of total commitments recorded in this report. ICA members reported \$3.2bn or 39% of total commitments. China announced no investments in water operations while commitments from all other public and private sector sources amounted to \$808m.

North Africa with \$2.1bn and East Africa with \$2bn accounted for very nearly one-half of all commitments to the continent's water sector. West Africa with \$1.4bn and Southern Africa with \$1.5bn accounted for 17% and 18% of total commitments respectively. Commitments to Central

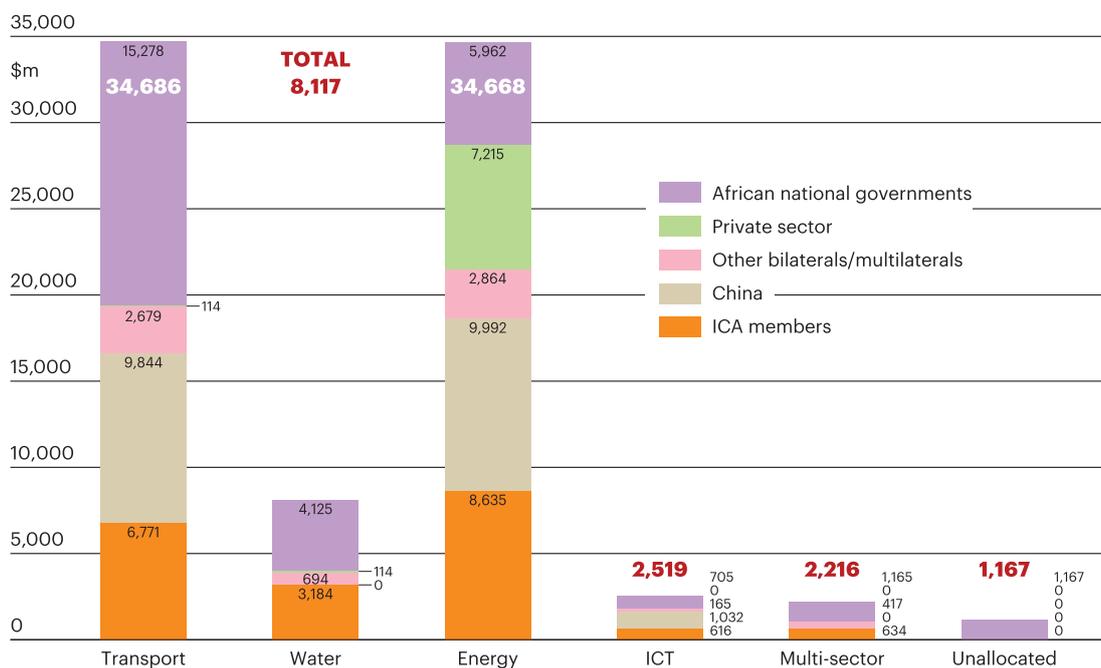


Figure 72
Total financing by sector and source, 2015

Africa were \$622m (7.7%) and to South Africa were \$509m (6.3%).

Energy

China announced more investments in the energy sector than any other source of finance reported in 2015, with announcements of investments totalling \$10bn or 29% of total commitments for the year. ICA members committed \$8.6bn and African governments allocated \$6bn to the sector, representing 25% and 17% of total commitments respectively.

Of the \$10bn announced Chinese investments, some \$6.7bn were directed to Southern Africa, namely the Gwanda solar project and the Hwange thermal power station, both in Zimbabwe as well as the Soyo power project and the Caculo Cabaça hydro facility, both in Angola.

These announced investments clearly place Southern Africa as the region with the most energy commitments. South African energy commitments of \$6.3bn meanwhile reflect the

continuing ability of the country to attract private capital to its renewable energy market.

North, West and East Africa all received commitments in the range of \$5.1bn-\$5.4bn, representing some 15-16% of total energy investments recorded in this report. Central Africa however saw just \$1.4bn of commitments, representing less than 4% of total commitments.

ICT

China announced investments of more than \$1bn in ICT in 2015, representing 41% of commitments to the sector in the year. China's announced investments focused on fibre optic linkages and investments in projects sponsored by state-owned telecommunications utilities. African governments allocated \$705m to the sector and ICA members committed \$616m, representing 28% and 24% of total commitments respectively.

West, Central and Southern Africa saw the highest levels of ICT commitments, with each region

benefitting from around one-quarter of total commitments recorded in this report. ICT commitments to West Africa were \$576m while Central Africa received \$562m and Southern Africa \$704m.

Multi-sector

African national governments provided more than any other funding source to multi-sector projects in 2015, allocating \$1.2bn or 53% of total commitments recorded in this report to the sector. ICA members reported \$634m or 29%, while ACG members committed \$392m or 18% of total commitments to multi-sector projects.

North Africa with \$838m and West Africa with \$650m, were the regions with the most multi-sector commitments, representing 38% and 29% of total commitments from all funding sources. Multi-sector commitments to Central Africa of \$135m and South Africa of \$132m each represented around 6% of total commitments, while Southern and East Africa received just \$28m and \$26m respectively. ■

7.2 Transport

Total commitments to the African transport sector stood at \$34.7bn in 2015, slightly above the \$34.4bn recorded the previous year. A significant decline in investments made by African national governments was compensated for by increased commitments from ICA members, up almost twofold from \$3.6bn in 2014 to \$6.8bn in 2015, while non-ICA member multilateral and bilaterals also significantly increased their financing of African transport infrastructure, to \$12.7bn.

The underlying investment trends in African transport infrastructure appear positive: 2015 saw a \$8.7bn year-on-year increase when excluding Egypt's \$8.4bn subnational financing of the Suez Canal in 2014.

East Africa was the largest recipient of funding during 2015. Of the \$11.8bn invested, ICA members committed some \$2.2bn with a further \$5.3bn provided by non-ICA development partners. North and West Africa received \$1.19bn and \$1bn from ICA members respectively, while Southern Africa including RSA saw \$728m committed during 2015. Pan-African transport projects also saw significant financial commitments from ICA members during 2015 of \$934m.

\$34.4bn

2014

\$34.7bn

2015

Total Commitments to the Transport Sector

Commitments made by the WBG (\$1.8bn) and AfDB (\$2.4bn) were significantly up on the \$1.6bn and \$1.4bn respectively committed the previous year. Of bilateral development partners, Japan was the biggest single financier having seen its commitments increase substantially to \$909m, of which \$515m was invested in East Africa. Commitments made by JBIC and JICA included ¥32.1bn (\$265m) towards the PIDA PAP Mombasa Port Development Phase 2 in Kenya and ¥29.2bn (\$241m) towards the Nacala Port Development Project Phase 2 in Mozambique.

France's AFD also saw a considerable rise in commitments from \$204m in 2014 to \$684m in 2015. Central Africa was the largest recipient of French funding for transport infrastructure which included commitments of €70m (\$78m) to the Sanaga bridge in Cameroon and a €93m (\$104m) loan for the Trans-Gabon Railway.

EIB (\$359.7m), EC (\$320m), EU-AITF (\$73.7m), Canada (\$32.7m), Germany (\$76.3m) and the UK (\$51.6m) also increased their commitments to transport in 2015, while DBSA financing reduced to \$10.9m.

The considerable spike in non-ICA member donor financing was largely accounted for by the \$9.8bn of financial commitments made by China, which again featured as the largest investor in the sector. Chinese investments were aimed predominantly at East and West Africa (\$4.8bn and \$3.3bn respectively) while some \$1.7bn was committed to RSA.

Arab funds' \$2bn and non-ICA member European DFIs' \$346m of investments focused primarily on North Africa during 2015. A combined \$334m committed by non-ICA European DFIs and multilaterals in the region included \$223m from

Abidjan-Lagos Corridor

The Abidjan-Lagos coastal corridor is the most travelled West African corridor on the African Regional Transport Infrastructure Network and its modernisation is considered a priority project for PIDA in order to not only speed up regional integration, but also to provide a model to facilitate further integration across Africa through infrastructure development.

The under construction 1,028km road connects West Africa's largest cities of Abidjan, Accra, Lomé, Cotonou and Lagos, which between them account for some 75% of trade in the ECOWAS region. The corridor will link seaports to landlocked countries, facilitating intra- and inter-African trade, providing new opportunities to participate in global trade. In 2014, the presidents of Benin, Côte d'Ivoire, Ghana, Nigeria and Togo approved the project, each pledging \$50m for preparatory activities.

Some sections of this programme are already being carried out as national projects and the countries concerned are rolling out one-stop border posts as part of an ongoing trade and transport facilitation project.

However, multilateral support is growing. In 2015 the corridor was selected as the pilot project for the PIDA Service Delivery Mechanism and will receive technical assistance for early stage project preparation to advance the project to feasibility. The AfDB is considering a \$16m loan for the project while the World Bank approved \$90m of financing for the corridor in 2012.

Transport corridors are being promoted by multilaterals as a way of stimulating social and economic development in areas surrounding such routes. Corridors help create industry and social facilities, develop rural and border areas, increase the earning potential of low-income groups, and create employment. ■

EBRD for infrastructure development at the Nador West Med Port in Morocco and \$11m from FMO for the Lomé Container Terminal in Togo.

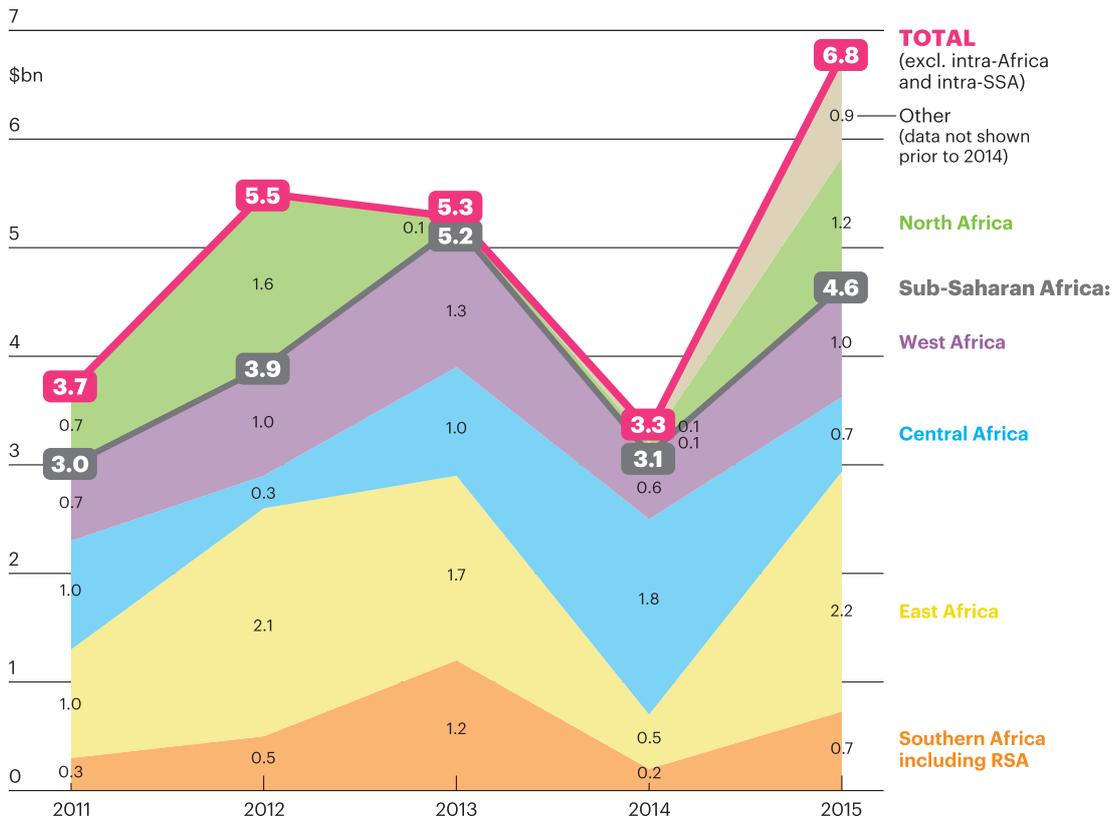


Figure 73
ICA member commitments to the transport sector 2011-2015

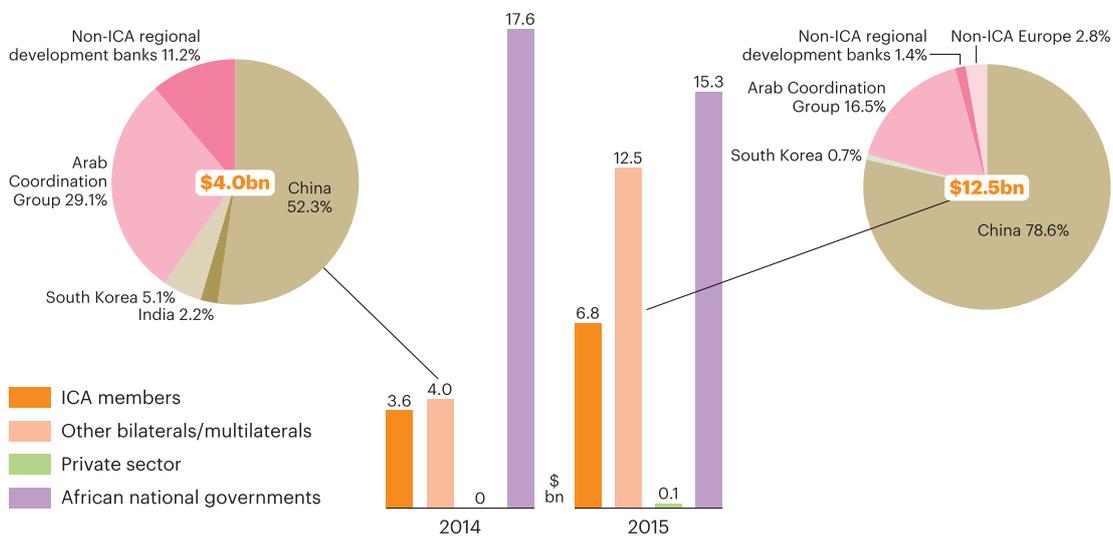


Figure 74
Total commitments to the transport sector 2014 and 2015

Meanwhile, Arab Funds' \$950m commitments to North Africa during 2015 included a \$457m investment by IDB in the first and second phase of the Sharm El-Sheikh International Airport project while the Arab Fund for Economic and Social Development provided a \$166m loan for the

development of a classified road network and rural roads in Tunisia.

The private sector again played a limited role in financing transport infrastructure projects. Only a single privately-financed project reached financial close during 2015 according to the World Bank's Private

Participation in Infrastructure database. The \$134.5m Dakar-Diamniadio Toll Road Extension project being developed by Eiffage Group was backed by an IFC loan of \$7m and an AfDB loan of a further \$7m, with the remaining financed privately. ■

Accelerating Transport Projects

National governments have long played the leading role in developing transport sector infrastructure throughout Africa while DFIs and the private sector often have to search hard to find suitable investments and cite similar problems when it comes to project preparation.

Several representatives of DFIs and private sector investors have pointed to the challenges of recruiting the right people in terms of legal and financial capabilities with sufficient negotiating skills. Delays and project cancellations have also been caused by a lack of preparation by key stakeholders, sometimes even when that same stakeholder is the project sponsor.

Another challenge is financing early stage project preparation and development. One solution suggested by a private equity investor was that a higher rate of return would attract investors to projects that are some way from becoming bankable, but others disagree with this view. “It would be like asking them [investors] to throw darts at a dart board. Most investors don’t primarily want a high rate of return, they want a predictable one...it’s not a matter of return, it’s a matter of willingness and capabilities,” said one African investment manager.

There are some calls for governments to take on more responsibility for early stage development work from private sector investors, who have historically steered clear of this stage of development, particularly in more complex projects involving cross-border integration. For the larger more complex projects with a regional dimension, one of the key reasons for delays or failures in the project preparation process is given to a lack of leadership or political will. Conversely, one DFI investor

suggested strong leadership in several Kenyan ministries has substantially driven progress in the ambitious Lamu corridor (LAPSSET) project with its integrated plans for ports, pipelines, roads and railways.

There appear to be contradictory perspectives on early stage project preparation when comparing the views of the private sector with those of African governments, with both constituencies expecting the other to take on more responsibility and risk in early stage project preparation. This appears to be a tricky conundrum, but one that DFIs could help to solve, for example, by developing soft initiatives to seek to modify perceptions on both sides or by developing more risk mitigation instruments for early stage project preparation.

Public-private partnerships (PPPs) have been seen as a preferred method for investing in transport infrastructure, with some arguing that the model works well because early stage risk is shared between the public and private sector partners. But the reason PPPs have not taken off in Africa as they have in emerging markets in Asia, for example, is because a number of the preconditions required have not been met. For the PPP model to work effectively, it relies substantially on there being sufficient institutional capacity in the public sector partner and a thorough understanding of Africa and African governments from the private sector investor, as well as several other factors. “Organisational effectiveness with a common appreciation of the risks is perhaps even more important than the regulatory environment”, one infrastructure investment advisor said.

Private operators working with African partners – as operators, concessionaires and in PPPs – suggest several areas where improvements to

the project preparation process could be made. More transparency in the tendering process is called for, and several concessionaires and operators bidding say they have experienced bid documents or selection criteria apparently drawn up with a particular bidder in mind. This can cause delays, even to the extent of a project being put on hold.

Other difficulties encountered by the private sector include terms of reference stated on bid documents that are changed at the draft contract stage and a fast turnover of senior staff in the utilities they are negotiating or working with.

Several investors highlighted insufficient experience amongst state utility officials of working with the private sector and, in the case of PPPs, there is an assumption that only a few days training is needed for this kind of partnership, whereas in reality a more in-depth knowledge of PPPs is required from all the partners. This sometimes results in PPPs proposed by governments that nowhere near meet or match the investment criteria demanded by private sector partners.

Other institutional issues can make PPPs challenging. The CEO of a private equity company said that without the support of a president, a finance minister, or a powerful provincial or city leader or mayor a PPP project “simply won’t work”, while also adding that some public sector actors do not view a PPP as a business. While involving the public sector may help smooth project development, it is also possible that difficulties can be brought about by political interference.

Despite the challenges, PPPs are the model commonly adopted to involve private sector participation in a sector where purely private-funded projects are rare. ■

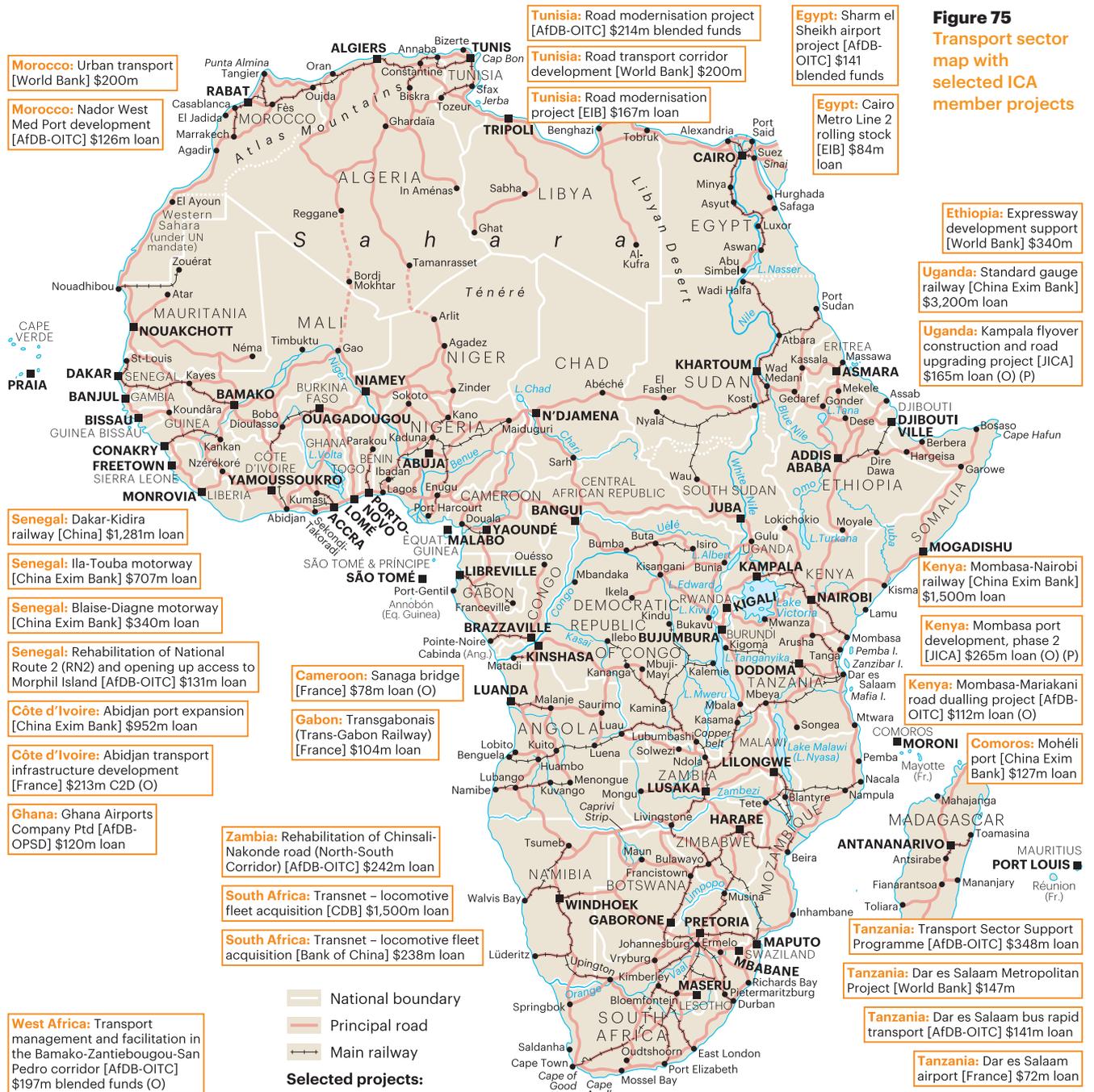


Figure 75
Transport sector map with selected ICA member projects

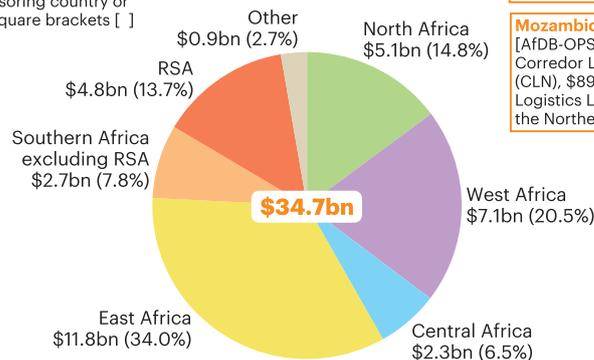


Figure 76
Total transport sector commitments by region, 2015

7.3 Water and Sanitation



KfW Photo Archive, Kirsten Milhahn

Total financial commitments to the water sector stood at \$8.1bn in 2015, a decline from the \$9.7bn recorded in 2014. African national governments' identified spending fell from \$5.1bn in 2014 to \$4.1bn in 2015. ICA member commitments fell from \$3.4bn to \$3.2bn while those from the ACG fell from \$621m to \$378m. Regional development banks' commitments fell from \$95m to \$48m while no Chinese investments in the sector were reported in 2015.

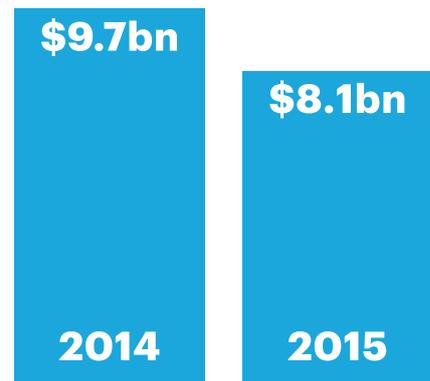
North Africa witnessed the greatest investment in water projects at \$2.1bn, half of which was provided by ICA members, while East and Southern Africa (including RSA) both received \$1.96bn of financing. West Africa saw increasing commitments from ICA members since 2011, reaching a high of \$1.5bn in both 2013 and 2014, however financial commitments in 2015 fell to just \$584m.

The World Bank Group's \$1.5bn of commitments to the water and sanitation sector accounted for almost a half of the total ICA member

financing during 2015, although this was slightly down on the \$1.8bn committed the previous year. AfDB's commitments of \$518m was an increase on the \$443m provided the previous year, with major commitments including a \$10.4m loan to the Kigali Bulk Water Supply Project in Rwanda. Germany's commitments increased substantially from the previous year to \$379m, which saw it become the largest financier of ICA-member bilaterals.

Financing from the EC rose from \$133,371 in 2014 to \$103m in 2015, while commitments of \$164m from EIB matched the previous years' spending. Canada (\$86m), Japan (\$89.5m) and the UK (\$3m) all saw a decline in commitments, although the UK's DfID disbursed some \$105m.

Commitments from France's AFD fell from \$421m to \$282m, which included a €60m (\$67m) loan for the clean-up of coastal zones in Tunisia, a €50m (\$67m) loan to Senegal's Pikine Irrégulier Sud-Dakar, and €30.5m (\$34m) of contract debt relief and development (C2D) for the building of a drinking water network in Abidjan,



Total Commitments to the Water Sector

Côte d'Ivoire. Some €216m (\$241m) disbursed by AFD included a further €31m (\$35m) for Côte d'Ivoire's C2D drinking water programme and a €16m (\$18m) loan for drainage in Douala, Cameroon.

Having made no financial commitments to Africa's water sector in 2014, DBSA committed \$10.8m in 2015, which included a ZAR30m (\$2.4m) grant to the Ekurhuleni Metropolitan Municipality study for water demand and conservation.

East Africa was the single largest recipient of financial commitments from non-ICA member development

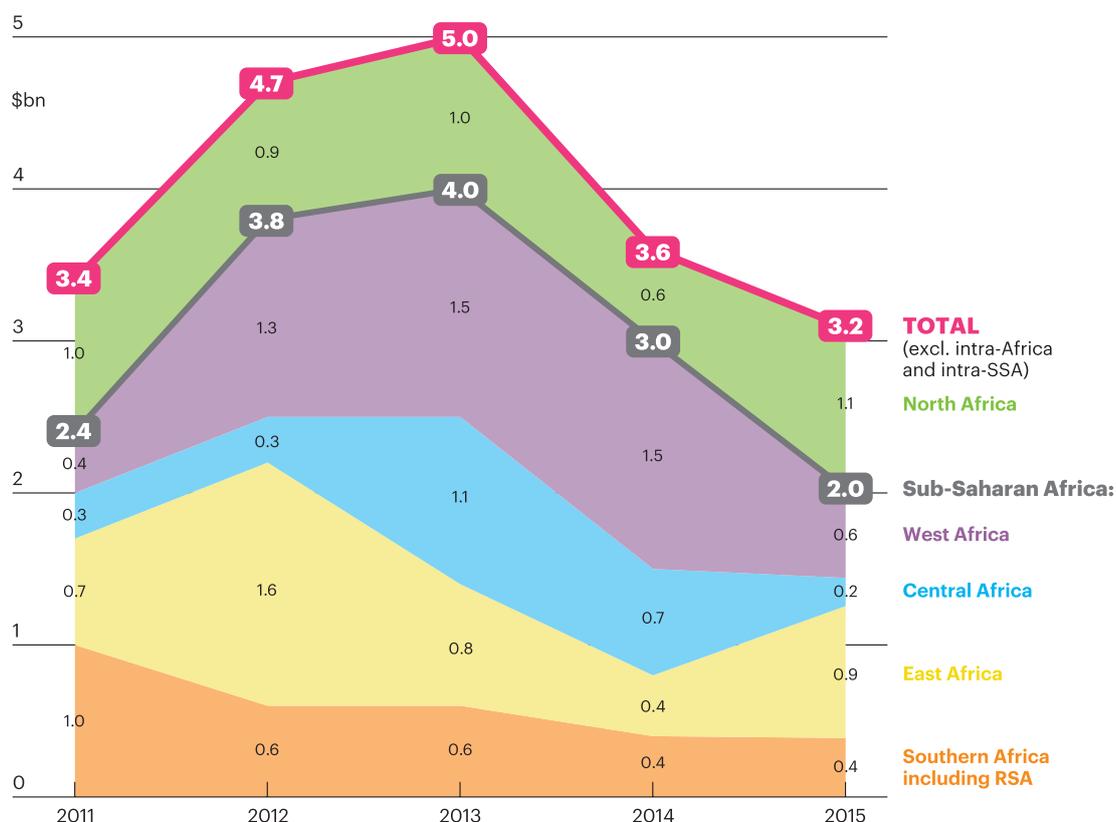


Figure 77
ICA member commitments to the water sector 2011-2015

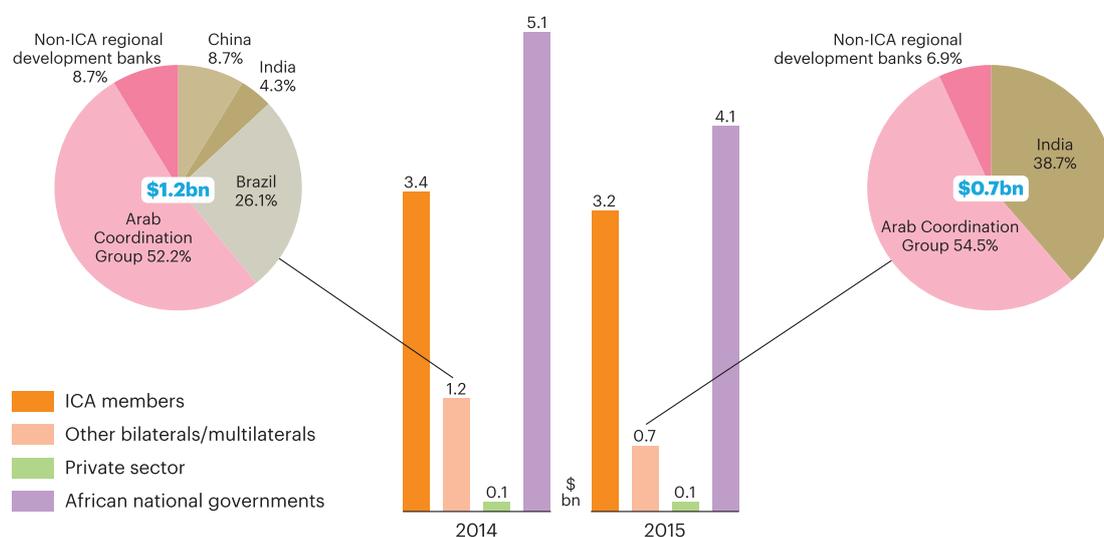


Figure 78
Total commitments to the water sector 2014 and 2015

partners to the water and sanitation sector in 2015, owing to India's \$268m financing of the extension of the Lake Victoria pipeline to Tabora, Igunga and Nzega in Tanzania.

No financial commitments were made by non-ICA European DFIs or China in 2015, while Arab funds once again took the lead of non-ICA donors in

financing water projects in Africa by committing \$378m, although this was less than the \$600m committed the previous year.

Among financial commitments made by Arab funds were an \$18.5m loan from IDB to provide drinking water to Burkina Faso's capital, Ouagadougou, a \$150m loan from AFESD for

wastewater facilities in areas neighbouring the Al Rahawi drainage canal in Egypt, and a \$21m loan from ADFD to build the Metolong Dam in Lesotho.

Regional development banks (excluding ICA member DBSA) also committed \$48m to the sector in 2015, the entirety of which was provided by

Landmark Water Projects

BOAD which funded the upgrading of the safe drinking water supply system in Parakou and surrounding communities in Benin (\$13.6m), the Lake Bam restoration (\$17m), and a sanitation programme in ten towns in Senegal (\$17m).

The \$694m of financial commitments

made by non-ICA donors was however down almost 40% compared with the \$1.15bn committed the previous year.

Private sector investment stood at \$114m according to the World Bank's PPI database, with just a single project, Abengoa's desalination plant outside Agadir, Morocco, reaching

financial close. However, this project was previously announced by the World Bank as having reached financial close in 2014 and highlights the fact that water and sanitation projects involving private sector participation are still a rarity in Africa. ■

Morocco Looks to PPPs to Ease Water Supply Crunch

Water shortages are becoming an increasing issue in North Africa where population growth and climate change mean water supply per capita is expected to reach half of its 2008 baseline by 2050 according to the World Bank. Morocco is particularly affected due to the increasing limitations of the supply capacity of dams and wastage through poor infrastructure.

Spain's Abengoa reached financial close in 2015 on a seawater desalination plant at Agadir, a city feeling the effect of water shortages more than most due to its booming tourism industry.

The \$114m project, which is supported by investment fund InfraMaroc alongside a consortium of local banks led by Banque Marocaine du Commerce Extérieur is the first PPP model implemented in the Moroccan water and sanitation utility Office National de l'Electricité et de l'Eau Potable (ONEE).

Once complete, the under construction plant is expected to provide 800,000 people with 100,000m³ of safe drinking water per day, making it the largest desalination plant in the region. With rainfall levels expected to decline in the coming decades, the

Agadir desalination plant will also play a crucial role in the development of the region's economy, helping boost tourism and agriculture.

"The Agadir desalination project is part of a strategic plan to solve water supply problems in those parts of the world most affected by water shortages", said Abengoa. The trend-setting project may help play a role in paving the way for future private sector-led investments in the water sector, not only in Morocco but elsewhere in the region. ■

Lesotho's Metolong Dam

The threat of acute water shortages in Lesotho has been averted following the opening of the Metolong Dam by King Letsie III in December 2015. Some two-thirds of the country's population now enjoy access to clean water provided by the dam while approximately 500,000 are benefitting from the water supply programme.

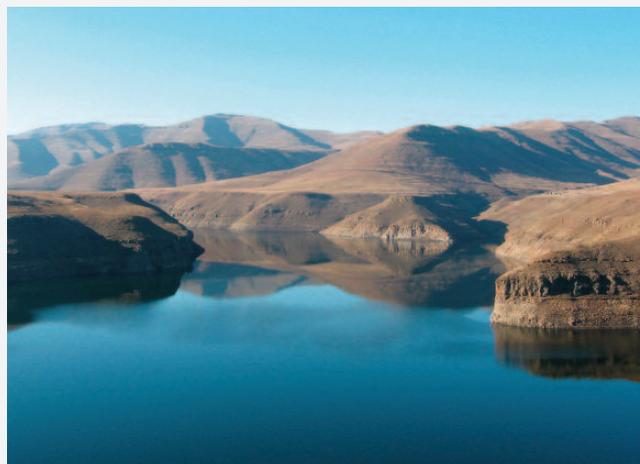
The programme has created additional employment opportunities in the textile industry which will help the country become economically self-reliant, while three hundred local Basotho people affected by the dam construction and living in the project area were provided capacity building and skills development along with compensation.

Some 3,000 Basothos employed to work on the project will have gained skills that will stand the country in good stead and will help them to gain employment on future projects within the country and abroad, King Letsie III announced at the dam's unveiling. In addition, the water supply project is also electrifying 75 villages previously without electricity and providing healthcare and HIV/AIDS community support programmes to some 15,000 people.

The construction of the \$450m 83-metre high Metolong dam was started in 2013 and now provides treated water to communities in five areas including the capital of Maseru and

the surrounding towns of Teyateyaneng, Morija, Mazenod and Roma. Financing was provided by WBG (\$20m), EIB (€140m - 2010), SDF (\$39m), OPEC Fund (\$6m), KFAED (\$13.6), BADEA (\$5.5m -2007), ADFD (\$21m), Millennium Challenge Corporation (\$86.8m), the government of Lesotho (\$32.8m) and the African Renaissance and International Co-operation Fund of the Republic of South Africa.

The dam brings Lesotho's installed power generation capacity up to a level that should meet demand until 2025. ■



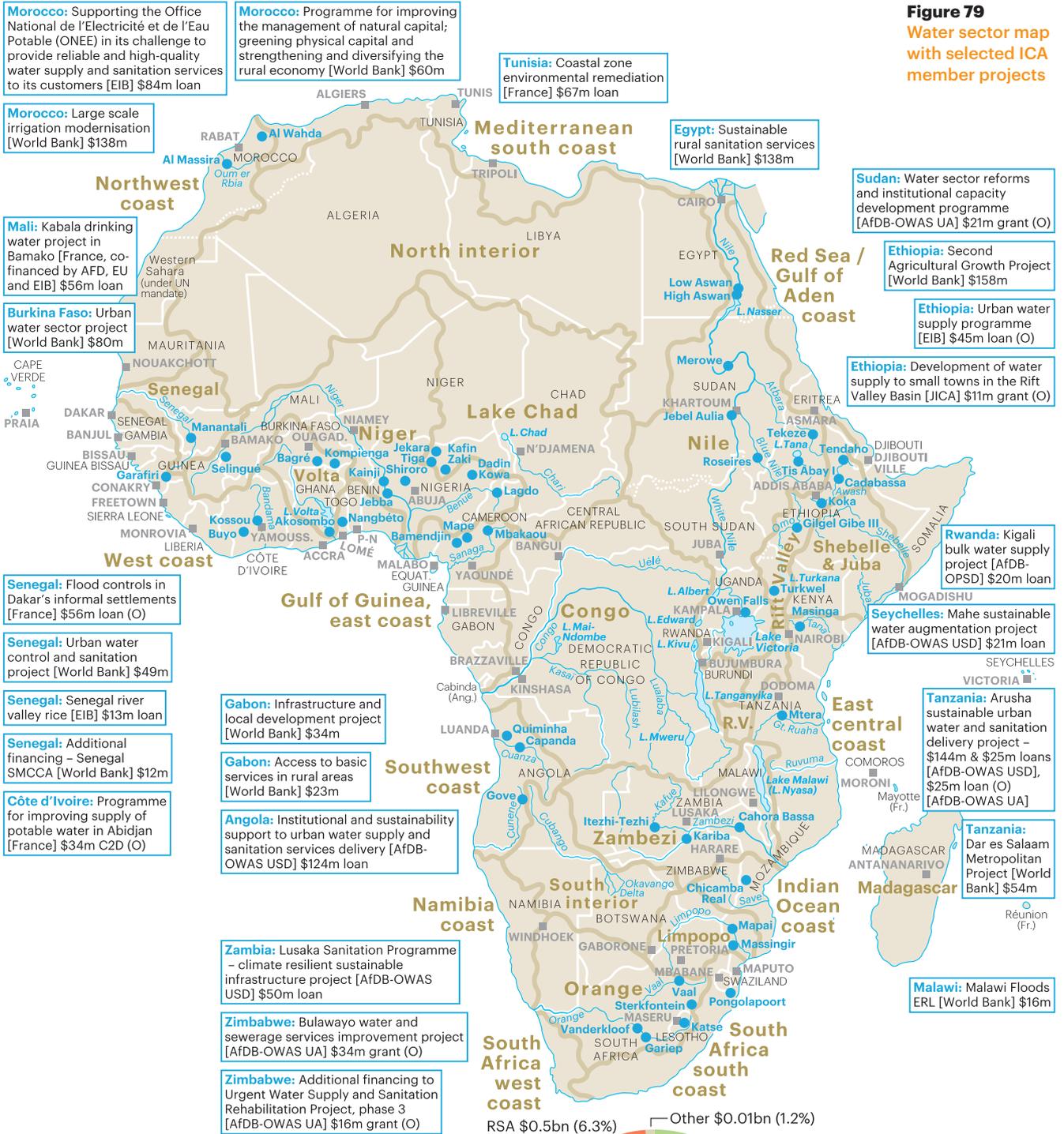


Figure 79
Water sector map with selected ICA member projects

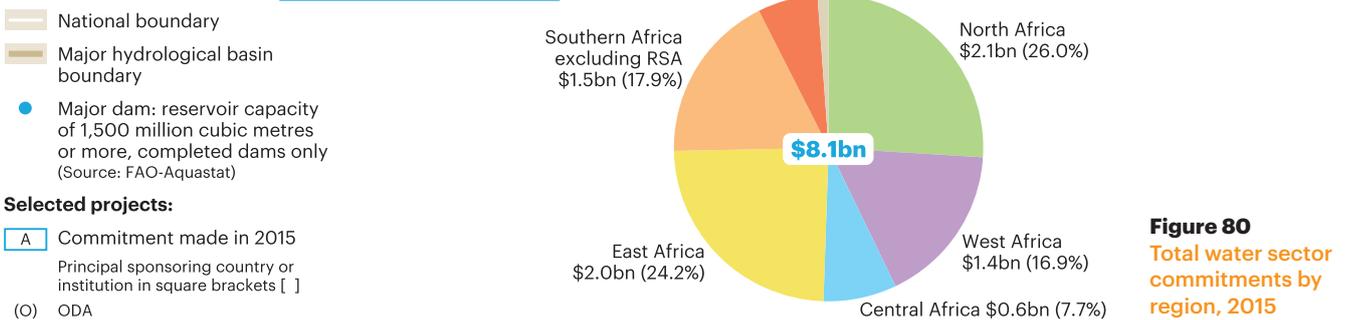


Figure 80
Total water sector commitments by region, 2015

7.4 Energy

The energy sector has attracted increased attention from development partners and the private sector in recent years as Africa continues to struggle with poor access to electricity and insufficient generation capacity. These problems have been particularly acute in the Sub-Saharan region but are now increasingly felt in North Africa as demand escalates and political disruption in recent years has led to a slowdown in investment.

In 2015, the energy sector became the largest recipient of total financing with \$34.7bn committed, a significant rise on the \$22.4bn invested the previous year.

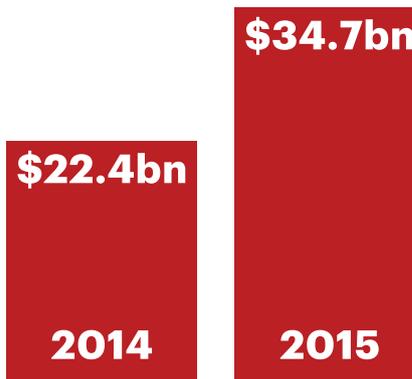
African national government spending of \$6bn, bettered only by states' investments in the transport sector, was boosted by \$8.6bn of commitments by ICA members, \$12.9bn from non-ICA member bilateral and multilaterals (\$10bn of which was from China), and a further \$7.2bn in private sector financial closures during 2015.

ICA member commitments were down by \$545m on the previous year's reported figure, however this still represents one of the largest yearly investments in the energy sector once the exceptional \$7bn multi-year pledge by the US' Power Africa is discounted from the 2013 total.

The fluctuating trends in ICA commitments by region continued into 2015. With almost half of total commitments in 2014 directed at North Africa, financing of energy projects in the region this year fell to \$1.69bn, behind West Africa (\$2.26bn) and Southern Africa including RSA (\$2.22bn). Commitments by ICA members to East Africa increased by 50% to \$1.56bn while Central African funding fell to just \$378m.

In 2015, WBG provided \$2.5bn in commitments, a slight increase on the \$2.38bn committed the previous year, while France, via AFD, also continued to be a major financier of the energy sector with \$1.39bn in commitments. AFD commitments during the year included a €165m (\$184m) ODA loan to South Africa's Eskom, a series of financings totalling €163m (\$182m) for Nigeria's privatised distribution companies, and a €90m (\$100m) loan for Kenya's Last Mile Connectivity Project which aims to support government initiatives to ensure increased electricity access to Kenyans.

AfDB commitments to the energy sector in 2015 were \$1.1bn compared with \$1.7bn in 2014, while Japan committed \$470m in 2015 compared with \$1.5bn in the previous year. DBSA commitments increased substantially from \$189m to \$725m while the EC (\$317m), Canada



Total Commitments to the Energy Sector

(\$36.6m), EIB (\$868m) and EU-AITF (\$82.2m) all reported increased commitments.

Some 50% of total energy sector financing during 2015 was directed towards Southern Africa and RSA, largely due to substantial non-ICA member funding. The majority came from China's \$7.24bn of funding while \$1.99bn came from national governments and BNDES provided a

Azura-Edo Sets Important Milestone for Nigeria

The private sector has for long watched Nigeria's electricity supply industry keenly, but often shied away from investing in Africa's now largest economy as politics, security, fuel availability, regulatory uncertainty and a complicated privatisation process made the country appear high-risk, despite the vast potential and opportunities on offer.

With the help of the Netherlands' FMO, US' OPIC and Power Africa initiative, and MIGA political risk insurance provided by the World Bank, private sector players including the Amaya Capital and American Capital Energy & Infrastructure Fund SPV, Azura West Africa, AIIM, Nigeria's Asset and Resource Managers Ltd and the UK's Aldwych International, reached a landmark moment with the financial closure of the 450MW Azura-Edo gas-fired power plant in December 2015.

A project some eight years in the making, Azura-Edo will have taken

much of the pain out of developing future power projects. The project sponsors and federal government worked together to develop the legal and regulatory frameworks necessary for an independent power producer to operate in Nigeria. They established important precedents and templates for future investors, from a gas sales and supply agreement with London- and Lagos-listed firm Seplat, to a power purchase agreement with the Nigerian Bulk Electricity Trading oftaker.

Nigeria's need for electricity has long been evident, and has stunted economic growth considerably. It is hoped that the progress of the now under construction Azura-Edo power plant, due for completion in July 2018, will provide the country with its first successful international private sector-led power project, giving renewed optimism for the vast number of projects in the pipeline which have so far struggled to attract private sector investment. ■

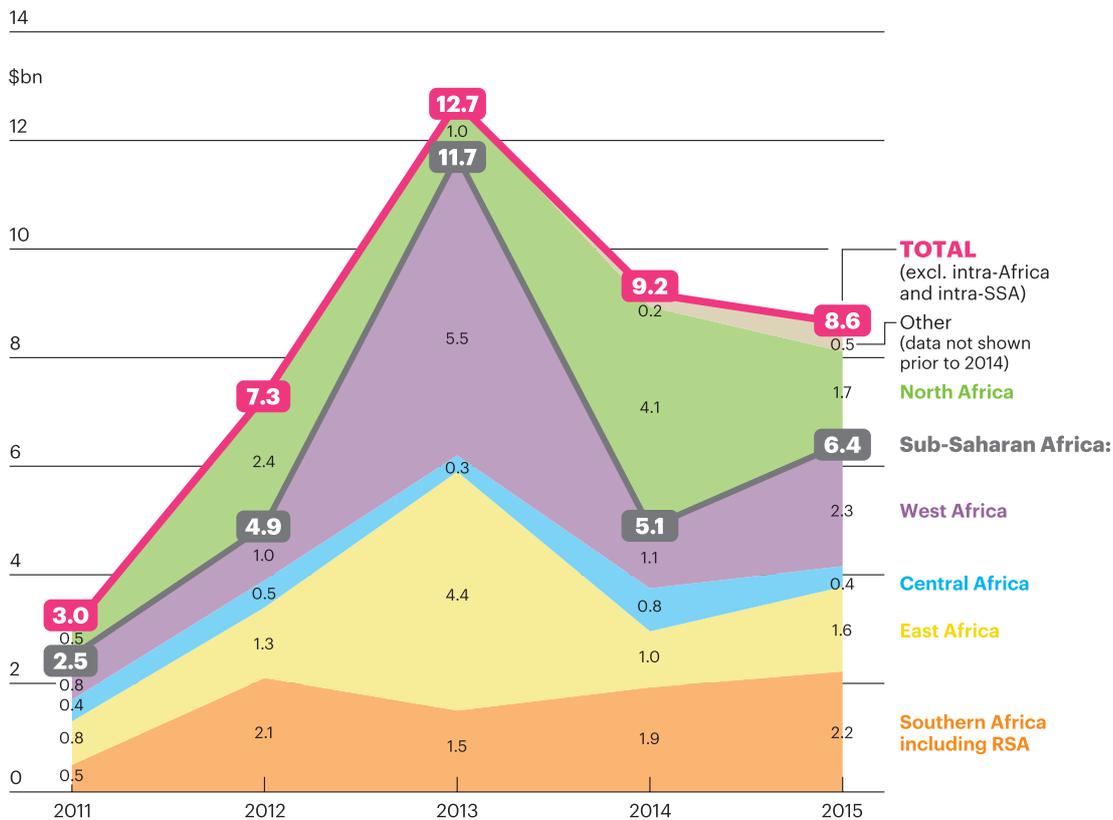


Figure 81
ICA member commitments to the energy sector 2011-2015

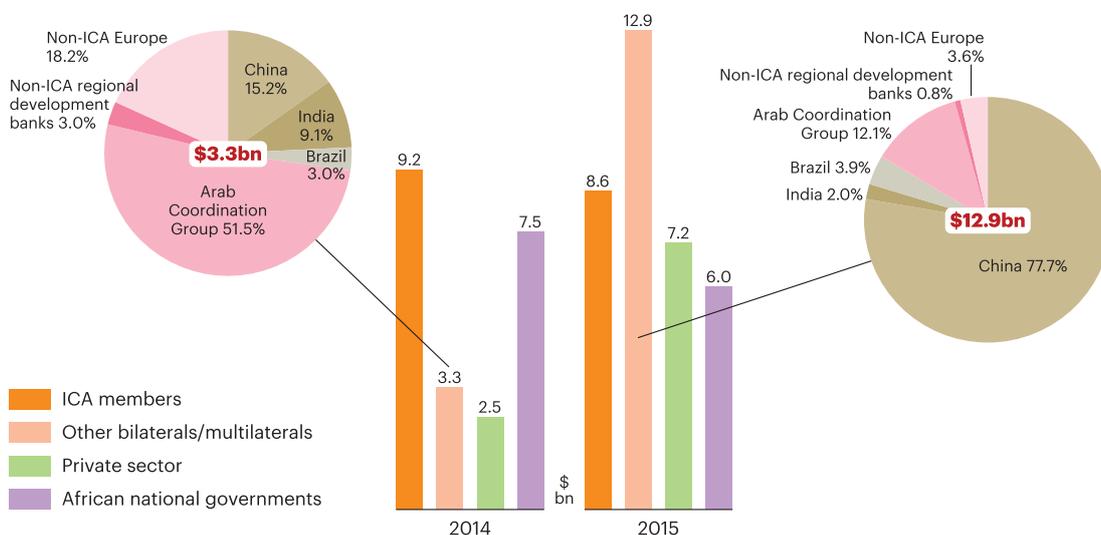


Figure 82
Total commitments to the energy sector 2014 and 2015

\$500m loan to Angola's 2,070MW Lauca Hydropower plant. All of this was boosted by \$4.57bn of private sector investments, the majority of which was accounted for by a number of financial closures of wind and solar projects in South Africa which will bring online 1.5GW of new generation in projects at a combined value of

\$3.8bn. South African renewables projects which reached financial close during 2015 included the 100MW Karoshoek Solar One concentrated solar power (CSP) and the 100MW Xina Solar One CSP plants.

At \$5.4bn, West Africa received the second largest combined financing in

2015 thanks largely to \$2.3bn of ICA member funding and \$1.3bn of non-ICA donor commitments. East Africa received \$5.4bn and North Africa \$5.1bn. Although total financial commitments to Central Africa increased during 2015 to \$1.4bn this represented only 4% of total spending across the continent. ■

Promoting Energy Security Through Cross-border Interconnections

With vast numbers of rural communities spread out over such large expanses, the cost of building and operating electricity grids is high, while the technical challenges of delivering electricity from sources of generation to consumers is often a barrier to private sector investment. As a result, countries have often turned to forms of electricity production with the lowest capital expenditure costs, such as polluting diesel-power, the widespread use of which heightens energy insecurity throughout Africa.

To take on this challenge, development finance institutions, multilateral development banks and the AUC and NEPAD via the PIDA programme are promoting the interconnection of national grids in order to achieve greater energy security. Cross-border interconnections allow countries to take advantage of significant hydroelectric potential in neighbouring countries, while also allowing the exporting of more expensive forms of generation to balance system costs – an important approach for countries where political pressures prevent the setting of cost-reflective tariffs which puts power utilities under huge financial strain.

With large hydroelectric projects in development such as Ethiopia's 6GW Grand Renaissance dam and the Inga III, a PIDA-PAP project that could eventually generate 50GW, the benefits of regional interconnections are greater than ever. Little has come online in recent years, but a number of projects are progressing rapidly.

The AfDB, EU, KfW, JICA, the Netherlands' government and Swedish International Development Agency have provided \$415m,

including \$50m in funding from benefitting countries to build high voltage interconnections between Kenya, Uganda, Rwanda, Burundi and DRC. The new transmission lines are under construction and are expected online during 2016 and 2019.

The AfDB and AFD-funded 500kV line connecting Kenya and Ethiopia is moving forward after Kenya Electric Transmission Company signed a \$230m contract with a consortium of Germany's Siemens and Spain's Isolux Ingenieria for the construction of a critical sub-station, funded by the World Bank, due online in December 2017.

Meanwhile the PIDA priority project Côte d'Ivoire – Liberia – Sierra Leone – Guinea (CLSG) transmission programme is one of several which will see West Africa fully interconnected. The \$407m project will connect with the existing Côte d'Ivoire – Benin – Togo – Nigeria interconnection and has been revived

as a West African Power Pool (WAPP) priority project. The project has been funded with contributions from EU-AITF (\$30m) and African Development Fund (\$3.4m) and is expected to be commissioned in 2018. Project financing comprises AfDB (\$133m) EIB (€75m/\$83m), KfW (\$41m) and World Bank (\$176m), with the remainder financed by the participating governments.

Once completed, the CLSG network will interlink with the completed WAPP Coastal Transmission Backbone Interconnection Project and the in-development Senegal River Basin Organisation (OMVS) transmission grid and the \$700m Gambia River Basin Organisation (OMVG) Power System Development Project. Financing for the OMVG project is being provided by the WBG (\$200m), AfDB (\$135m), EIB (\$106m), IDB (\$94m), BOAD (\$54m), AFD (\$52m), KfW (\$32m) and the Kuwait Fund (\$24m). The OMVG is expected online in 2019. ■



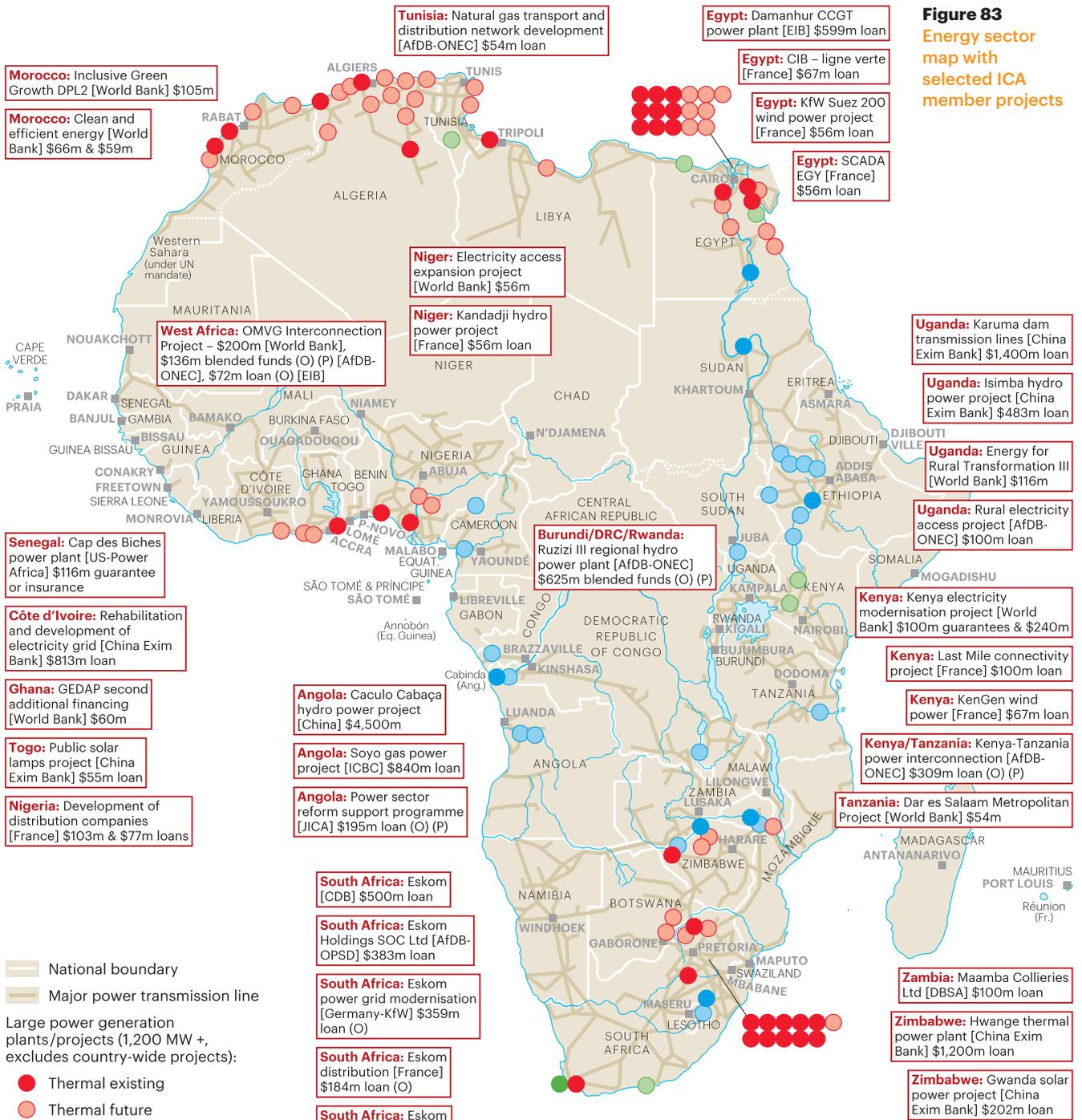


Figure 83
Energy sector map with selected ICA member projects

National boundary
 Major power transmission line
 Large power generation plants/projects (1,200 MW +, excludes country-wide projects):
 Thermal existing
 Thermal future
 Hydroelectric (HEP) existing
 Hydroelectric (HEP) future
 Other existing (wind, solar, geothermal, nuclear)
 Other future

(Sources: Cbl African Power Projects Monitoring Database; African Energy Atlas 2016-17)

Selected projects:

- A** Commitment made in 2015
- Principal sponsoring country or institution in square brackets []
- (O) ODA
- (P) PIDA-PAP

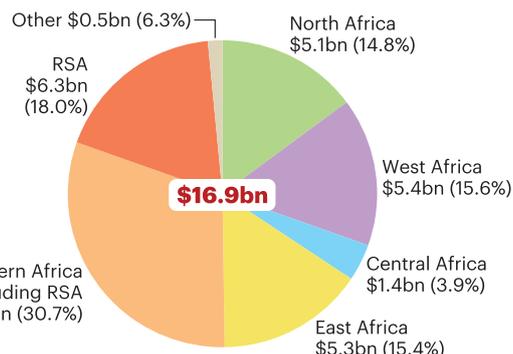


Figure 84
Total energy sector commitments by region, 2015

Total commitments to the African ICT sector stood at \$2.5bn in 2015, slightly more than the \$2.4bn recorded the previous year. Budget allocations made by African national governments decreased to \$705m in the year, though this was compensated by increased commitments from China, which announced slightly more than \$1bn or 41% of the total of all ICT investments. ICA members committed \$616m, up around 22% compared with the previous year and around 24% of all commitments to Africa's ICT sector in 2015.

ICA member commitments to ICT have increased each year since 2011, with 41% of funds committed in 2015 going to sub-Saharan Africa. In 2014, ICA members committed \$288m to ICT operations in sub-Saharan Africa compared with \$250m in 2015.

Taking account of all sources of finance, Southern Africa (including RSA) received the largest (28.4%) share of ICT commitments, followed by West (22.9%), Central (22.3%), North (10.7%) and East (7%). Pan-African projects accounted for 8.7% of ICT commitments.

Cell Phone Towers & 4G

Public and private sector finance is being mobilised for the construction of cell phone towers, a process that has received a boost by the trend for mobile operators agreeing to share facilities. Tower developers benefit by generating income from two or more customers while mobile operators benefit from reduced initial investments and ongoing costs. Shared facilities also help avoid costly duplication and can also promote access by enabling operators to use facilities that would otherwise be unaffordable.

African telecoms company Eaton Towers has raised \$350m in funds to support its expansion across the continent. Eaton, which builds and

operates masts for mobile phone networks, has also signed a deal with Mobinil in Egypt, an arm of Orange, to buy 2,000 towers. The company installs telecom networks and persuades rival mobile phone operators to share the same tower, thereby cutting costs.

Investors in the latest round of financing for the company included Capital Group Private Markets, the firm's controlling shareholder, plus a consortium led by Ethos Private Equity, a leading South African fund manager, and Standard Chartered Private Equity. AFD and IFC made commitments in 2015 to Eaton projects in Niger and Uganda respectively. IFC also provided funding for mobile towers through IHS and Helios as well as emerging market communications company, Millicom.

Another IFC investee is Afrimax, which in 2014 formed a strategic framework agreement with Vodafone for Sub-Saharan Africa. It raised \$120m in 2015 to accelerate the rollout of LTE services (Long-Term Evolution, commonly marketed as 4G LTE) across the region. Investment company Mitsui & Co led the funding round, which also included Spanish private investment firm Torreal and existing shareholders Four G Capital, IFC, and the IFC African, Latin American and Caribbean Fund.

Afrimax, which aims to be one of the largest 4G wireless voice and data communications providers across Sub-Saharan Africa, is headquartered in the Netherlands and started in 2010. In 2013 it secured \$56m in equity funding from IFC in support of its aim to create Sub-Saharan Africa's largest 4G wireless data network with the greatest spectrum allocation. IFC also supported mobile operator Africell in 2015. It operates in Gambia and Sierra Leone and, more recently, expanded into DRC and Uganda.

The UK's CDC has entered into the African ICT market with two investments in 2015. It put £26.4m (\$40.4m) into IHS Zambia Limited, for the development of telecommunications towers to improve accessibility and reliability of coverage and £13.3m (\$20.7m) into INT Towers, Nigeria, for the development of telecommunications towers to improve coverage, including in the northern region.

Cross-cutting Interventions

Investments in ICT are making a difference in many areas, from healthcare to financial inclusion and climate change. In Burkina Faso, AFD disbursed €474,500 (\$528,750) to Mobisan, a community-based service to improve the effectiveness of mother and child health interventions via mobile phone. A three-year pilot project will provide a continuous health monitoring service and include regular health visits alongside the transmission of information via mobile communications to quickly detect diseases.

Promoting financial inclusion via mobile financial services was the focus for an EIB commitment of €20m (\$22.3m) for the TV Cabo Angola network to provide ultra-high speed data transmission for corporate markets and individual customers. In particular, the new fast growing cities of Lubango, Cabinda, Huambo and Soyo are expected to benefit.

AFD said it would support a €5m (\$5.7m) programme implemented by France's l'Institut national de l'information géographique et forestière français (French National Institute of Geographic and Forest Information) aimed at making satellite images available to analyse territories in the Central and Western African Forests Spatial Observation project (OSFACO). Understanding these territories' dynamics is a major focus area in addressing climate change challenges.

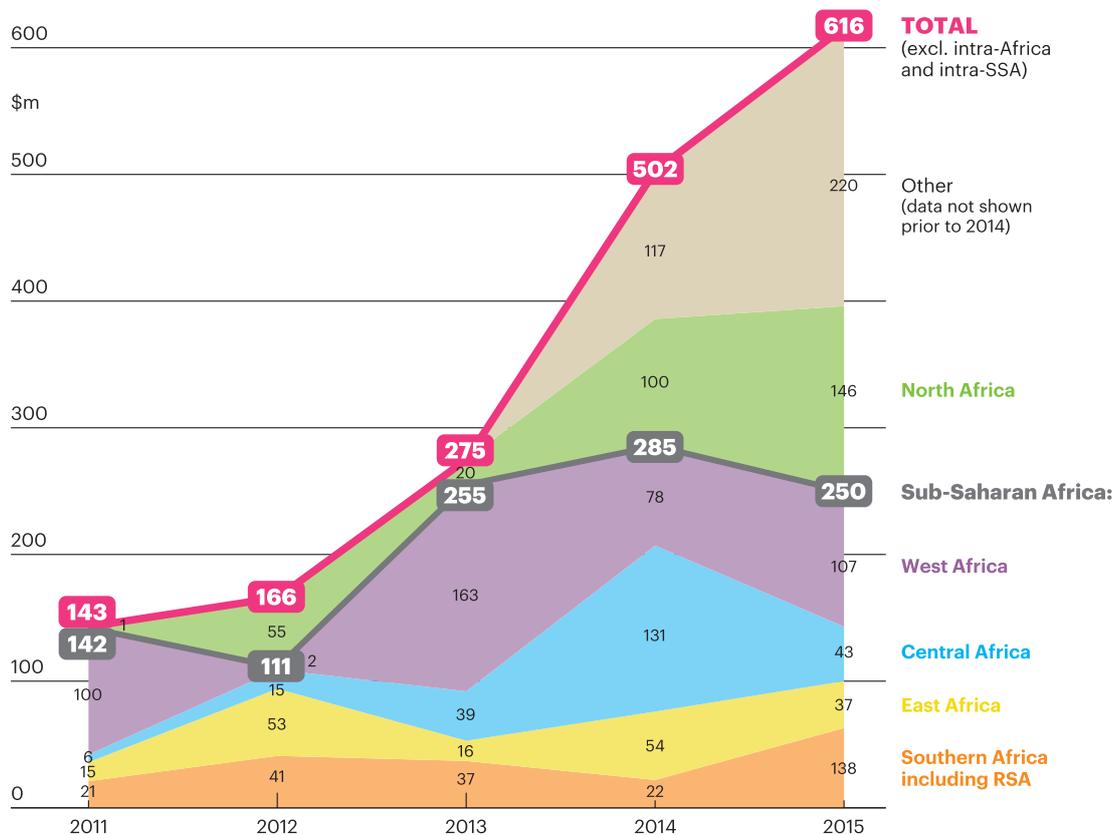


Figure 85
ICA member commitments to the ICT sector 2011-2015

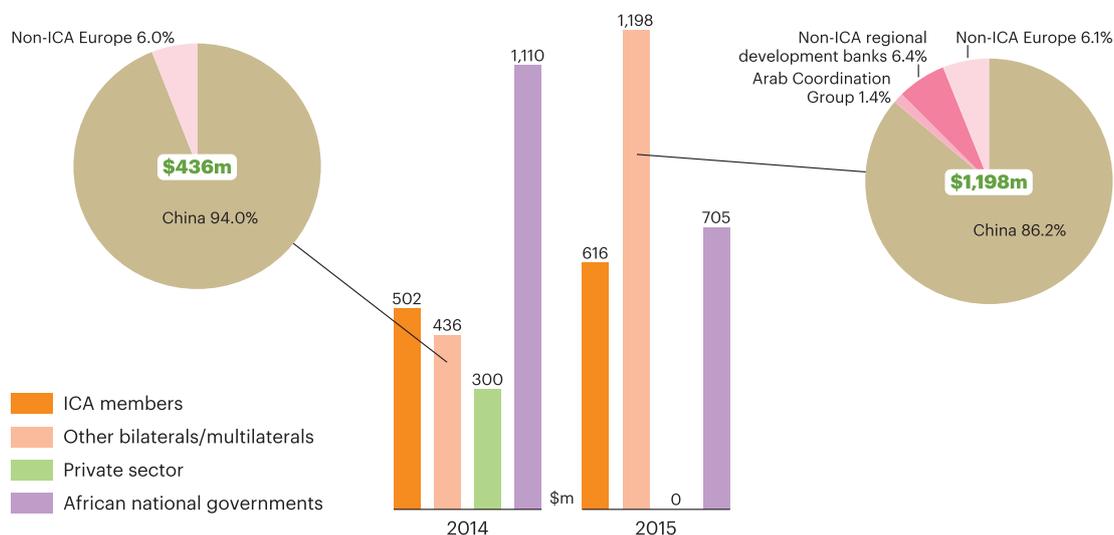


Figure 86
Total commitments to the ICT sector 2014 and 2015

China and Africa's ICT Sector

The year 2015 saw the value of reported Chinese investments in Africa's ICT infrastructure surpass \$1bn for the first time, not least due to the activities of what is now one of the world's largest telecommunications equipment manufacturers, Huawei.

Several financings involving Huawei

were announced in 2015 and are included in the data in this report. Eximbank of China agreed a preferential loan agreement worth \$338m to finance the second stage of the National Telecommunications Broadband Network project in Cameroon, where the Chinese telecoms giant is very active. The fibre optic network, to be implemented by

mobile operator Camtel, aims to substantially improve access to high-speed Internet as well as services such as high-definition television and telephone. Huawei Technologies will carry out the construction work.

China is also providing \$107m towards the implementation of phase two of the National Optic Fibre Backbone Infrastructure Extension

Project (NOFBI) in Kenya. It will provide 1,600km of fibre linking all 47 counties and an additional 500km dedicated to military use. Phase two adds to the existing 4,300km of cable completed in 2009, which connects 58 towns in 35 counties. Huawei is the project contractor.

In Zimbabwe, TelOne signed a \$98m loan facility with Eximbank of China during the visit by Chinese President Xi Jinping in December. The loan will finance its network modernisation programme. Again, Huawei is the project contractor. In Togo, 500 administrative buildings will be connected by a \$22m fibre optic network built by Huawei and funded by China Eximbank. The bank has also provided a \$99m preferential loan for the establishment of a fibre optic backbone in Niger and another preferential loan for Benin's telecommunications sector, part of which will be used to develop the country's broadband network.

Huawei employs around 10,000 people across its African operations, with an

emphasis on local staff trained on the continent and in China. It has several training centres focused on technology development in Africa, including in South Africa, Egypt, Tunisia and Angola.

The company's influence on connectivity in Africa is already substantial. The continent has the world's fastest growing rate of mobile subscriptions while Huawei is evidently committed to rolling out broadband capacity across Africa. Smartphone sales in Africa are expected to rise to 120m annually by 2020. In 2015, Huawei shipped more than 108m smartphones worldwide, obtaining a 7.5% share of the global market.

One of the most significant announcements of 2015 in terms of Africa's ICT infrastructure is not recorded in the data gathered by this report due to conflicting accounts of its financing. The Cameroon-Brazil Cable System (CBCS) is a planned submarine communications cable in the South Atlantic Ocean linking

Kribi, Cameroon with Fortaleza, Brazil. International traffic from Africa to America is currently routed via Western Europe first before going to America. CBCS will provide a direct route from Africa to America, providing Cameroon, Brazil and their neighbouring countries with improved performance.

Construction costs are estimated at around \$130m, and there are reports that Exim Bank of China may put up \$81m while Cameroon's state-owned Camtel, China Unicom and Spain's Telefónica may also support the project. CBCS will be the fourth submarine cable to land in Cameroon after the West Africa Cable System linking South Africa and the UK, the African Coast to Europe cable system between France and South Africa, and the South Atlantic Telecommunications 3/West African Submarine Cable (SAT3/WASC) linking Portugal and Spain to South Africa, all via and with connections to several West African countries along the route. ■

Nigeria: Private Sector ICT Financing Reaps Economic and Democratic Dividends

The Nigerian government's much lauded and highly successful opening up of its ICT sector to private investors in the 2000s has led to huge growth in the industry in recent years. With some \$6bn of foreign direct investment flowing into ICT in the three years up to 2015, the total investment profile of the sector has now reached in excess of \$38bn.

Such significant financial inflows have led to Nigeria's telecoms industry becoming one of the fastest growing in the world. The sector's share of Nigeria's GDP has risen from 0.5% in 2001 to 11% in 2015 and is

expected to soon displace the oil industry as the third largest contributor to GDP.

A number of high profile players have helped boost the quality and delivery of telecommunications in the country, including South African mobile network giant MTN and the UAE's Etisalat, while local firm ntel is looking to challenge the more established names after launching its 4G LTE service in Lagos and Abuja in early 2016 and seeks to attract over \$1bn in investments by 2020.

Much of the sector's success can be credited to the private sector's pace at

building ICT infrastructure across the country. In June 2016 Pan-African ICT infrastructure developer Helios Towers, one of the pioneers of private-sector funded mobile phone towers in Nigeria and backed by the IFC and the UK's CDC, closed the sale of the whole of its Nigerian assets to IHS Holding, one of the largest mobile telecommunications infrastructure providers in Africa, Europe and the Middle East, in what is the first mobile infrastructure in-market consolidation in Africa. Following the sale, in which IHS acquired 1,211 diversified tower sites across the country, the company is planning to



iStock, Klaas Lingbeek-van Kranen

spend \$1bn on upgrading power systems across the continent between 2016 and 2017.

The boom in Nigeria's telecoms industry, which now provides an estimated 80m people with Internet access (including broadband) and services almost 150m active mobile phone subscriptions has proved a transformative development, not only for businesses and personal lifestyles, but also at a political level.

In 2015, Nigeria witnessed a ground-breaking presidential election in which an incumbent was democratically unseated for the first time in the country's history in a vote considered fair and transparent thanks to the implementation of electronic voter ID cards. Mobile technology, smartphones, and increased Internet access were also credited for playing influential roles engaging people in the democratic process, particularly young voters through the campaign team's use of social media.

Reducing Capital Costs

A decline in the proportion of financial commitments from DFIs and the growing presence of private sector participation underlines the success of Nigeria's ICT sector, and sends a signal to the rest of the continent.

But challenges remain, particularly concerning the high costs of building infrastructure at a time when average revenues per user are flattening out and mobile phone operators are looking to reduce capital costs. Issues such as multiple taxation, difficulties in obtaining the necessary permits to lay fibre-optic cables and damage to existing infrastructure are frequently cited as major obstacles to private sector developers.

However, the federal government has plans in the pipeline to restructure ICT sector taxation, along with other proposals to help develop a sector in which the combined efforts of stakeholders to encourage participation is positively impacting on the image of Nigeria, according to Minister for Communications, Adebayo Shittu. The ministry is drafting a bill to unbundle ICT infrastructure to enable it to contribute more to the economy, while also encouraging more private sector participation, including government support to local start-ups and small firms. The government has set ambitious targets for 2018: 50% Internet penetration, 30% broadband penetration, 100% mobile phone penetration, and 30% contribution to GDP from the ICT sector.

Increasing Demand and Multi-sector Development

The number of mobile Internet subscriptions tripled between 2012 and 2015, and increased by 13.6% in the first half of 2016 according to the Nigerian Communication Commission, although this began to slide in the final quarter of the year following a clamp down on unregistered sim cards.

Telecommunications also play key roles helping other infrastructure sectors through digital transactions. In northern Nigeria, off-grid solar specialist Nova-Lumos has teamed up with MTN to provide residential solar power systems under a pay-as-you-go model, allowing consumers to pay for power via text messaging. In 2016, the Solar Nigeria Programme, an initiative of the UK's DFID provided a \$218,745 grant to Nova-Lumos to accelerate its operations in northern Nigeria, while in 2015, OPIC's \$15m of debt financing is to date the largest of its investments in the off-grid power sector in Africa.

Mobile phone and Internet access will also pave the way for an expected boom in e-commerce. A 2015 study by Ipsos on behalf of Paypal showed that 89% of Nigerian Internet users shop online or are expected to do so, giving the country a larger client base than both South Africa and Kenya.

In order to keep pace with increasing demand, former minister of communications technology Omobola Johnson announced in 2014 that some \$50bn of investment in Nigeria's ICT infrastructure will be needed in the next five to 10 years, half of which will need to be funded by foreign direct investment, a feat that seems quite achievable given the recent rate of developments in the industry. ■

7.6 Multi-sector



iStock, Chris Van Lennep

A trend of increased multi-sector commitments, including the financing of funds and equity investments in companies with a focus on African infrastructure, reversed during 2015 as commitments fell by almost a quarter to \$2.2bn.

While African national governments increased their spending on multi-sector projects substantially from \$444m in 2014 to \$1.2bn, as did non-ICA member donors, from \$299m to \$417m, ICA member commitments fell by 71% to \$634m from the \$2.16bn reported in 2014.

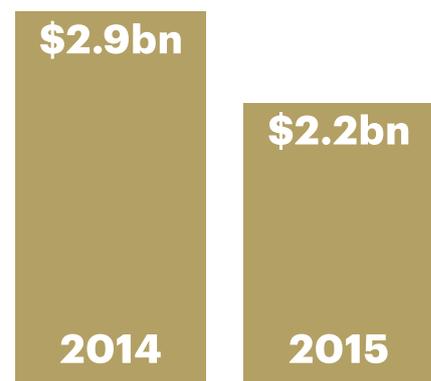
Non-ICA member European multilaterals and bilaterals reported no financial commitments to multi-sector projects in 2015 after having provided 86% of total non-ICA donor financing the previous year.

WBG, the single largest financier of multi-sector projects in Africa during 2014, reported no commitments during 2015, while EU-AITF also reported no commitments. France's AFD also reported lower financial commitments compared with the

previous year, falling from \$478.5m to \$72.5m. Japan's JICA and JBIC however reported a substantial rise, and accounted for 47% of ICA member financing in 2015 with \$297m towards multi-sector projects.

More than 60% of ICA member commitments during 2015 were made to Pan-African projects. The largest commitment was the ¥35.9bn (\$297m) loan provided by JICA for the 6th Private Sector Assistance Loan (PSAL), signed with the AfDB in September. The loan takes Japanese financing of the joint JICA-AfDB Enhanced Private Sector Assistance (EPSA) for Africa initiative to \$1.2bn since its inception in 2007. The PSALs are one of three components comprising the EPSA Initiative, the other two being the Accelerated Co-financing Facility (ACFA) for public sector co-financing with JICA, and the Fund for African Private Sector Assistance (FAPA), a multi-donor thematic trust fund administered by the AfDB.

DBSA financing reduced from \$695.5m in 2014 to \$131.5m in 2015, however disbursements included a



Total Multi-sector Commitments

number of equity investments such as \$2.59m in the African Infrastructure Investment Fund – a fund established in 2004 by Africa Infrastructure Investment Managers (AIIM) with investments in a diversified portfolio of infrastructure assets across Africa – \$2m in the US-based Pan-African focused private equity firm Emerging Capital Partners, and a further \$1m in the Harith-managed, 15-year Pan African Infrastructure Development Fund (PAIDF). The PAIDF seeks to invest in Public Private Partnerships (PPPs) across the African continent and reached its first close in

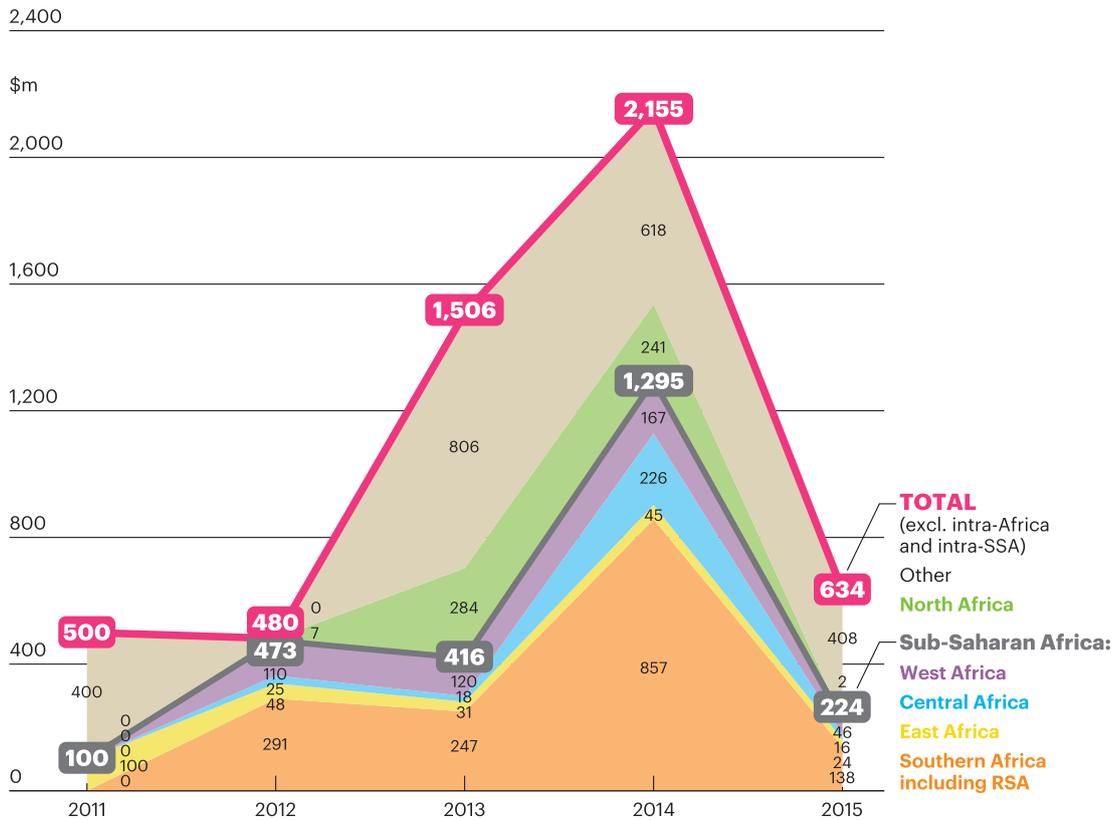


Figure 87
ICA member multi-sector commitments 2011-2015

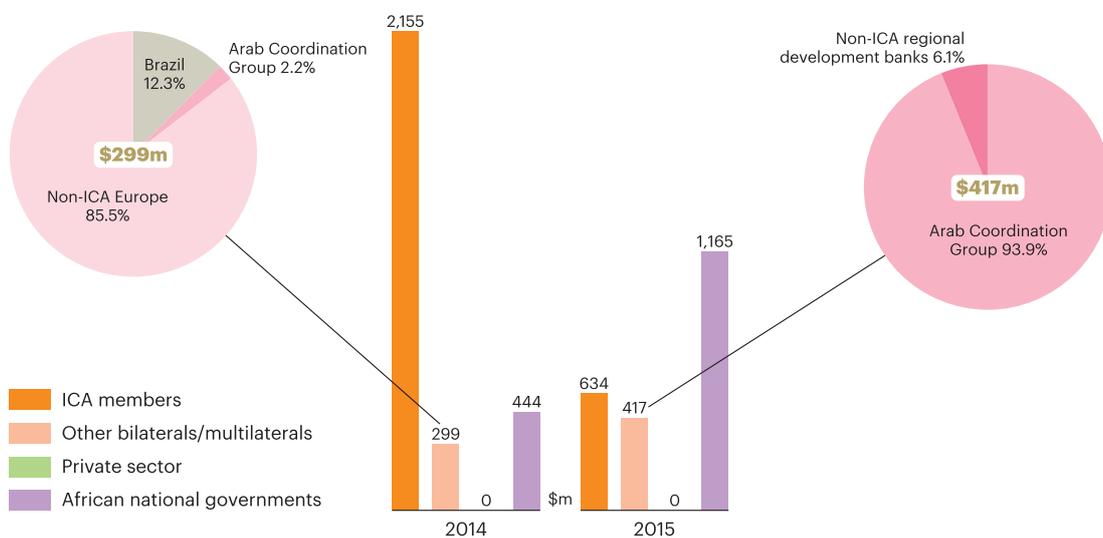


Figure 88
Total multi-sector commitments 2014 and 2015

September 2007, while its second close was concluded in March 2009.

PAIDF has ten African investor participants comprising state pension funds, top investments banks and financial institutions as well as leading development finance institutions.

Despite limited commitments from ICA members (\$2.2m) and Arab funds (\$664,501), North Africa was the

largest recipient of multi-sector infrastructure financing during 2015 (40%) thanks to \$834.6m of budget allocations by national governments.

West Africa received the greatest attention from non-ICA member bilaterals and multilaterals, with \$308m invested by Arab funds (\$282.6m) and BOAD. Along with \$296m invested by national

governments and \$46m by ICA members, total financing of multi-sector projects in West Africa stood at \$650m.

The Saudi Fund for Development committed a \$108m loan to help finance a number of projects in the Central African Republic as part of the war-torn country's reconstruction programme. ■

8. Regional Analysis



Dar es Salaam, iStock

8.1 Support for Regional and PIDA Projects

Disbursements to regional projects by ICA members in 2015 amounted to \$1.2bn compared with \$1.8bn in 2014 and \$1.9bn in 2013. The transport sector received the most regional disbursements with \$401m or 33%, while energy projects received \$216m or 18% of all regional disbursements.

But while regional projects received 12% of all disbursements in the transport sector, regional projects represented just 4% of all disbursements in the energy sector, with the project level detail provided by most members suggesting that except for interconnections, power projects remain country-centred.

There were disbursements to regional multi-sector projects of \$364m, representing 33% of total disbursements to that sector. Similarly, the \$133m disbursed to regional ICT projects represented 30% of disbursements to that sector.

Overall regional commitments by ICA members rebounded somewhat in 2015 to \$3.4bn, up on the \$1.8bn reported in 2014 but short of the \$4.2bn and \$4.5bn recorded in 2013 and 2012, respectively. The average annual value of regional commitments over the six-year period to 2015 is \$3.1bn, up on a value of \$3bn in the five years to 2014.

Commitment patterns match disbursement trends to the extent that regional commitments in 2015 form a greater proportion of total

multi-sector (59%) and ICT (40%) commitments. Again consistent with disbursement trends, transport operations received the most regional commitments (45%) followed by the energy sector (34%).

ICA members reported commitments to the Programme for Infrastructure Development in Africa Priority Action Programme (PIDA/PAP) are up significantly in 2015 at \$1.2bn compared with just \$161m in 2014. This sees a return to a level similar to

PIDA Priority Infrastructure Projects

1. Ruzizi III hydropower
2. Dar es Salaam port expansion
3. Serenge-Nakonde road (T2)
4. Nigeria-Algeria gas pipeline
5. Modernisation of Dakar-Bamako rail line
6. Sambangalou hydropower
7. Abidjan-Lagos coastal corridor
8. Lusaka-Lilongwe ICT terrestrial fibre optic
9. Zambia-Tanzania-Kenya transmission
10. North Africa transmission corridor
11. Abidjan Ouagadougou road-rail
12. Douala Bangui Ndjamen corridor road-rail
13. Kampala Jinja road upgrading
14. Juba Torit Kapoeta Nadopal Eldoret road
15. Batoka Gorge hydropower
16. Brazzaville Kinshasa road rail bridge and the Kinshasa Illebo railways

the \$1.3bn reported in 2013, but less than the \$3.5bn committed in 2012.

Levels of disbursements to PIDA projects are significantly lower than commitments, amounting to \$387m in 2015. Over the four years to 2015, a total of \$1.7bn of ICA members' funds have reportedly been disbursed to PIDA/PAP projects.

The actual level of 2015 commitments from ICA members is certainly higher than reported since some projects are not identified as PIDA/PAP projects. Some members' projects are part of larger PIDA projects and members reported some confusion determining what is and what is not a PIDA project, particularly where funding is for a sub-project within a larger project or where a member's financing only partially supports the programme. On the other hand, some members determined that soft infrastructure in support of the key institutions and ministries responsible for implementing PIDA projects is funding for the programme, even if this support is not a 'named' PIDA project.

The \$7bn of commitments reported over the past four years by ICA members for PIDA projects now appear to be increasingly joined by some substantial investments from China, all of which contribute to the aim of PIDA/PAP projects attracting \$68bn by 2020.

Export-Import Bank of China is involved in the OMVG Interconnection project for example, but a lack of clarity over the certainty of some investments by non-ICA members in PIDA projects makes assessing overall progress challenging. Billions of US dollars of investments, mainly from China with some from Oman, are reportedly earmarked for East African port and railway projects, but there are doubts over whether some of these projects will proceed. Announcements of Chinese investments in 2015 – including \$952m for Abidjan Port and \$1.3bn for the Dakar-Kidira railway –

appear to be part of the PIDA project portfolio or associated projects.

Backed from the outset by DFIs, PIDA has benefitted from strong initial support from several members, including AfDB and Germany. Initiatives such as Japan's One-stop Border Post and DFID's TradeMark programmes predate but clearly dovetail with PIDA's aim of regional integration. Wider European support for PIDA is certainly building. According to some members already closely aligned with PIDA, there are more partners coming on board.

Some member commitments in 2015 targeted the 16 priority infrastructure projects identified under the PIDA initiative that were selected and announced at the Dakar Financing Summit in June 2014.

Some of the substantial ICA member commitments to PIDA projects in the energy sector are AfDB's \$138m to the Ruzizi III hydropower plant, \$136m to the OMVG Interconnection project and \$144m to the Tanzania-Kenya power interconnection.

In the transport sector, Japan made a ¥32.12bn (\$265m) commitment to the Mombasa Port Development phase 2 and ¥19.99bn (\$165m) to the Kampala Flyover Construction and Road Upgrading Project.

EU-AITF support for PIDA projects continued in 2015, with nearly €72m (\$80m) approved during the year for a total of seven PIDA-related grant operations. The majority (six) of these grant operations are under the Regional Envelope, for PIDA projects in the transport sector; one is in the energy sector, under the SE4ALL envelope.

Several members are actively involved in big PIDA/PAP projects. EIB is working on Inga III and the Ruzizi III Hydro Power Plant. Germany also supports the Ruzizi project, alongside the West Africa Power Transmission Corridor and the Northern

EU-AITF Grants

The EU-AITF Regional Envelope closely aligns to the objectives of PIDA and promotes infrastructure projects with a cross-border dimension or demonstrable regional impact, especially PIDA/PAP projects. *

Since the creation of the Trust Fund in 2007, 49 out of the 104 approved EU-AITF grant operations have supported PIDA objectives, with 35 projects being backed. Nearly all of these grants (48 out of the 49) are under the Regional Envelope, although projects in line with PIDA's objectives in the energy sector may also be eligible for the SE4ALL Envelope introduced in 2013.

More than half (57%) of all grants approved under the Regional Envelope are directly supporting PIDA projects, representing just over 64% in terms of amount (€292m/\$325m). The majority of these are in the transport and energy sectors.

This support has enabled progress on transformational infrastructure, such as electricity interconnections that promote regional integration. The North-South Power Transmission Corridor and the West Africa Power Transmission Corridor (WAPTC), for example, are two PIDA priorities in the energy sector that the EU-AITF has supported.

The EU-AITF has assisted the West African Power Pool (WAPP) in updating its masterplan and supported feasibility studies for the Côte d'Ivoire – Liberia – Sierra Leone – Guinea (CLSG) transmission line. EU-AITF support for this line on the WAPTC continues with technical assistance for preparation studies, as well as environmental and social impact assessments through to procurement and implementation with financing of Owner's Engineer and an interest rate subsidy.

WAPP also provides a good example of the EU-AITF's role in facilitating collaboration between project financiers. ■

* See the EU-AITF Annual Report 2015 www.eu-africa-infrastructure-tf.net

Multimodal Corridor. WBG is actively involved in the OMVG Interconnection and the Lamu Port Gateway projects. ■

8.2 North Africa

Investments in North Africa's infrastructure reached \$14.1bn in 2015. More than 38% of this was provided by a combination of ACG (\$1.9bn), WBG (\$1.9bn), EIB (\$951m) and EBRD (\$638m). National governments committed \$6.2bn with the majority (\$2.7bn) going to the transport sector.

The energy sector attracted the most commitments (\$5.143bn) with nearly as much (\$5.141bn) committed to transport. Commitments to water and multi-sector projects amounted to \$2.1bn and \$838m respectively.

WBG also backed projects in the region under the Inclusive Green Growth programme that supports reforms pursuing three development objectives: improving the management of natural capital, greening physical capital, and strengthening and diversifying the rural economy by leveraging human capital.

The programme of reforms continues to be strongly in line with government priorities and WBG's country partnership strategy for Morocco. Commitments in 2015 included \$105m for the energy sector and \$60m for water projects.

North Africa remains a key region for ACG members. Major commitments in 2015 included IDB's \$220m support for a 3,000MW AC/DC transformer substation in the Cairo suburbs and \$457m to Sharm el-Sheikh International Airport project, building on the \$227m committed in 2014.

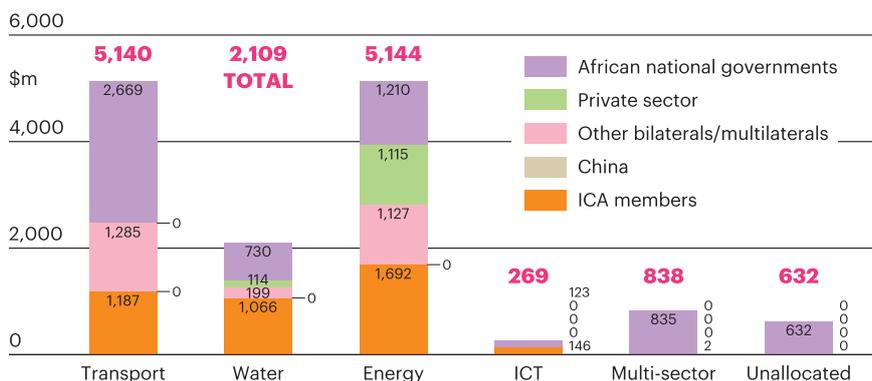


Figure 89
Total 2015 commitments to North Africa by sector and source

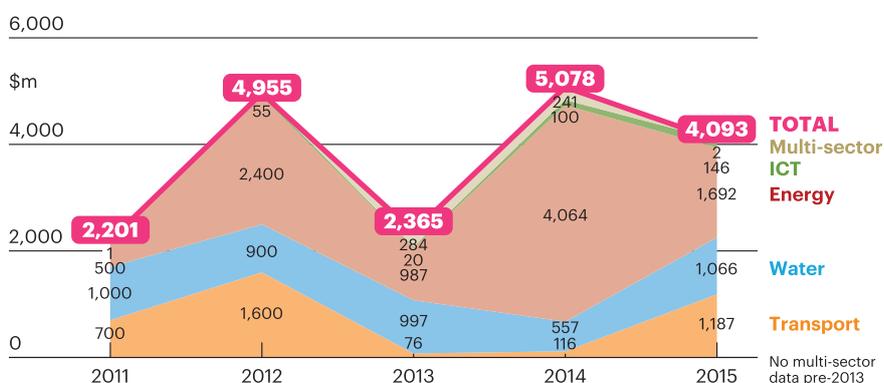


Figure 90
ICA members' commitments to North Africa by sector, 2011-2015

AFESD support included a \$200m loan to the 650MW Cairo West Power Generating Station and a \$150m loan for wastewater facilities in areas neighbouring the Al Rahawi drainage canal. In Morocco, AFESD provided a \$200m loan for Nador West Med Port and a \$100m supplementary loan for the El Jadida-Safi Motorway.

In Tunisia AFESD committed to a \$166m loan for the development of classified and rural road networks,

while SFD committed \$181m for the Mornaguia Power Station.

WBG agreed a \$440m loan for sanitation and wastewater facilities in Egypt, and also supported Morocco's urban transport development plan that aims to strengthen the capacity of local authorities to plan and monitor public transport, centrally and locally. Under this WBG Programme-for-Results financing, funds will only be disbursed when agreed milestones are reached. ■

Damanhour CCGT

EIB is committed to a €548m (\$600m) loan for Egyptian Electricity Holding Company (EEHC)'s 1,800MW Damanhour combined-cycle gas turbine power plant. This represents about 44.5% of the estimated \$1.34bn total cost of the project. EBRD said it would provide a \$200m loan to EEHC and its West Delta Electricity Production

Company subsidiary. The project is also supported by AfDB, AFESD and the Africa Growing Together Fund (AGTF), which pools AfDB and Chinese funds. AfDB will invest \$60m and the AGTF \$20m to finance the supply and installation of pumps, drives, piping and valves, power transformers and other electrical equipment.

The project consists of two 900MW

modules. About 2bcm/yr of natural gas will be required and will be supplied by Egyptian Natural Gas Company (Gasco).

The plant will be connected to the 500kV national grid via two new transmission lines: a 14km connection to the existing Abu Qir/Kafr El-Zayat 500kV line, and a 60km double-circuit 500kV line to connect Damanhour with the Abo El-Matamir 500/220kV substation. ■

Some \$15.2bn was committed to West Africa in 2015, from China (\$4.3bn), ICA members (\$4bn), national budgets (\$3.9bn) and ACG members (1.2bn). The private sector made investments in energy (\$1.2bn), and \$114m to transport.

China announced investments of \$3.4bn in the region's transport sector, \$868m in energy projects and \$190m in the ICT sector. Transport investments included the Blaise-Diagne (\$340m) and Ila-Touba (\$707m) motorways and the Dakar-Kidira railway (\$1.3bn), all in Senegal as well as the expansion of Abidjan Port in Côte d'Ivoire. In the energy sector China supported rehabilitation and development work on Côte d'Ivoire's electricity grid (\$813m) and a project to develop solar-powered public lighting in Togo (\$55m). In the ICT sector, China's announced investments of \$190m went to projects in Togo, Benin and Niger.

ICA members committed the most (\$2.3bn) to the region's energy projects followed by commitments to the transport (\$1bn), water (\$584m) and ICT (\$107m) sectors, as well as \$46m to multi-sector projects.

Amongst West African transport sector projects supported by ICA members, JICA committed ¥5bn (\$42m) for the construction of an interchange in Abidjan on Boulevard Valéry Giscard d'Estaing.

The AfDB's private sector department approved a \$120m loan to support Ghana Airports Company Limited's (GACL) capital investment programme. It entails the construction of a new terminal at Kotoka International Airport (KIA) in Accra, and the rehabilitation of other GACL managed airports. The programme supports Ghana's ambition to become a regional aviation hub.

In the water sector, the World Bank committed \$80m to improve access to

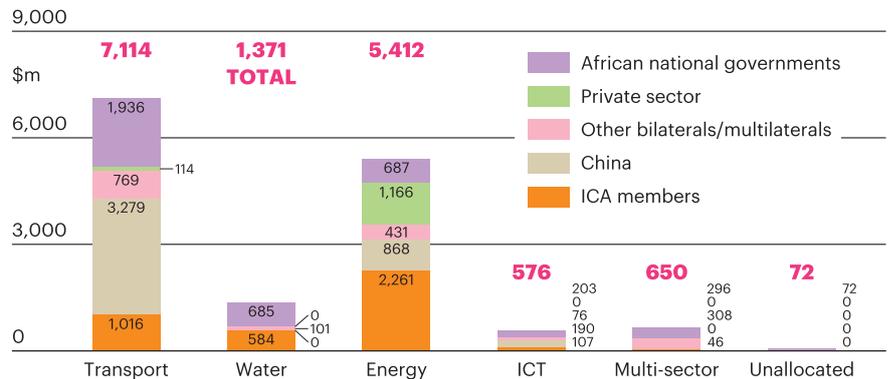


Figure 91
Total 2015 commitments to West Africa by sector and source

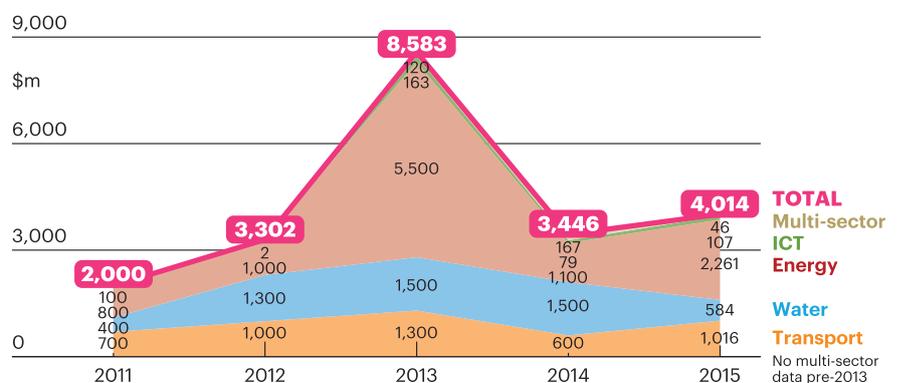


Figure 92
ICA members' commitments to West Africa by sector, 2011-2015

sustainable water and sanitation services in selected urban areas in Burkina Faso, including its capital city, Ouagadougou. The commitment is additional financing and reinforces positive outcomes achieved in an existing project.

In the energy sector, World Bank committed \$700m to Ghana's Sankofa gas project. Gas from Sankofa is being developed specifically for domestic energy production in Ghana. The Sankofa project aims to add 1,000MW to Ghana's current 3,215MW of capacity. Elsewhere in the region's energy sector, France's AFD committed \$131m for electricity grid upgrading and energy efficiency work.

In the ICT sector, IFC made several investments, for example in 4G wireless voice and data communications provider Afrimax and mobile operator Africell, which operates in Gambia and Sierra Leone,

as well as countries outside the region, including DRC and Uganda.

Of ACG's total commitments of \$1.2bn, \$551m is for transport, \$314m is for energy and \$54m is for water sector projects, while \$283m is committed to multi-sector projects.

With total commitments of \$869m, IDB was the group's main provider of commitments to West Africa, with \$442m going to the transport sector, \$270m to multi-sector projects, \$140m to the energy sector and \$19m to the water sector.

Notable private sector investments reported in 2015 include Nigeria's 880MW Azura-Edo gas-fired power plant, as well as the 114.15MW Cap des Biches oil-fired power plant and the 288MW Taiba N'Diaye Wind Farm, both in Senegal. Private capital was also invested in Senegal's transport sector, in the Dakar-Diamniadio toll road extension. ■

8.4 Central Africa

Total funding for Central Africa in 2015 was \$4.9bn. The majority, 45% or \$2.2bn, of this was made up of African national government allocations. ICA member commitments of \$1.3bn made up 27% of the region's funding. Other bilateral and multilateral funders provided 22% or \$1.1bn of funding, with the majority of this coming from the ACG (45%) and China (31%).

China's contribution comprises just one announcement of funding, for Cameroon's state-owned CamTel, by way of an Eximbank China preferential loan agreement worth \$338m, to finance the second stage of the National Broadband Network (NBN) project.

ACG commitments focused entirely on the transport sector with the exception of SFD's completion of a number of reconstruction projects in post civil war CAR. SFD also supports a programme in CAR to increase electricity access, lighting up 10km of roads in the capital and the rehabilitation of roads from the city to Bangui Airport as well as its runway.

Just one private operation on the PPI database reached financial close in 2015 in Central Africa. A \$320m financing will be used for the development of the 80MW greenfield peat-fired power plant in the Akanyaru Valley, Rwanda.

ICA members' commitments to Central Africa were substantially down in 2015 at \$1.3bn, the lowest level in five years and a substantial decline on reported 2014 commitments of \$3.7bn. Commitments to the transport sector were particularly high in 2014 at \$1.8bn, of which WBG provided \$1.2bn.

One of the larger Central African projects featuring in ICA members' 2015 activities are parts of the \$440m project to pave 598km of road between the central region of Cameroon (Batschenga–Yoko–Ntui–Lena) and Adamaoua, in the northern part of the country (Tibati–Ngaoundéré), with

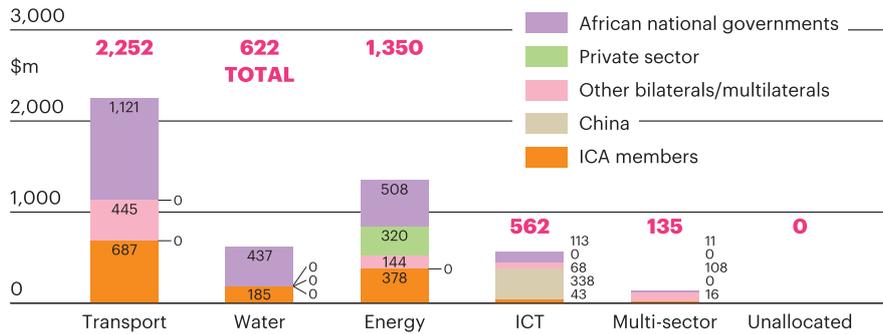


Figure 93
Total 2015 commitments to Central Africa by sector and source

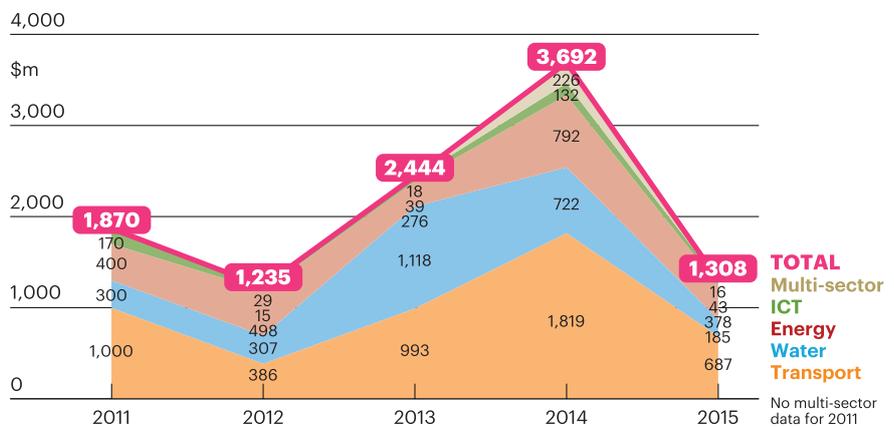


Figure 94
ICA members' commitments to Central Africa by sector, 2011-2015

funding from AFD, AfDB, BDEAC, JICA and the government of Cameroon.

In DRC, the Goma Airport Safety Improvement Project, funded by a \$52m WBG grant in support of the government's drive for the re-establishment of safe and secure operations at Goma International Airport, aims to break the isolation of this region of the DRC.

One of Central Africa's largest projects is the Ruzizi III Hydropower Plant Project, which also received one of the largest commitments to the region in 2015 with AfDB's December announcement that it had formally approved \$138m of loans and grants to finance the project. At a total cost of \$625.2m, in addition to AfDB's public sector window contributing \$138.9m, the private sector window will contribute \$50.22m of the costs.

The regional project involving Burundi, DRC and Rwanda will result in a run-of-river dam straddling the Ruzizi River between the DRC and Rwanda, as well as a 147MW power plant and distribution station.

Project implementation has been facilitated by a NEPAD Infrastructure Project Preparation Facility (NEPAD-IPPF) to finance transaction advisory services for the project. A \$1.4m grant helped provide key expertise for the project's development.

NEPAD-IPPF is a multi-donor Special Fund hosted by the AfDB to facilitate the preparation of regional or cross-border infrastructure projects to make them bankable. Grants are used to carry out pre-feasibility, feasibility, technical and engineering designs as well as transaction advisory services. NEPAD-IPPF is supported by Canada, Germany, UK, Spain Denmark and Norway. ■

East Africa saw more than \$19bn committed to infrastructure projects in 2015. The majority of commitments came from three sources; government budgets (\$6.92bn), China (\$6.82bn), and ICA members (\$4.70bn). Investment was largely destined for transport projects (\$11.78bn), with energy the other significant recipient of funds (\$5.35bn).

Transport was a particular priority in national budgets and for funding from non-ICA bilateral and multilateral sources including ACG and China. ICA member funding also favoured transport, which received 47% of commitments while 33% was committed to energy and 18% to water. Of disbursements by ICA members, 47% went to transport, 26% to energy, and 21% to water projects.

WBG (\$1.55bn), AfDB (\$1.16bn), Japan (\$703m) and France's AFD (\$509m) made some of the largest commitments to infrastructure in East Africa in 2015. Commitments from WBG included \$450m to the Electricity Modernisation Project in Kenya, including guarantees worth \$200m. The project has three broad aims: to increase access to electricity, improve the reliability of supply, and strengthen the financial position of Kenya Power. The bank also allocated \$270m to the Expressway Development Support Project in Ethiopia. This project aims to support the movement of goods and people along the Batu-Arsi section of the Modjo-Hawassa development corridor, as well as strengthen the capacity of the Ethiopian Roads Authority to manage the country's roads.

AfDB committed substantial funds to Tanzanian infrastructure. The Transport Sector Support Programme – for which the bank allocated \$348m – will upgrade a 342.9km section of road between Tabora, Koga and

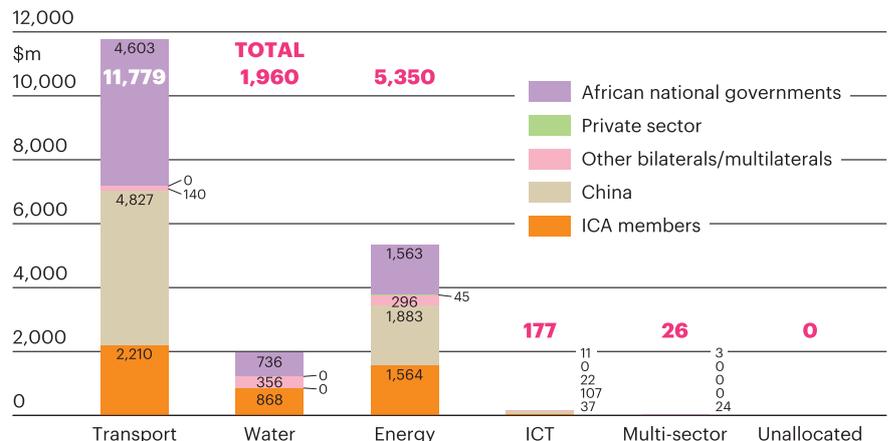


Figure 95
Total 2015 commitments to East Africa by sector and source

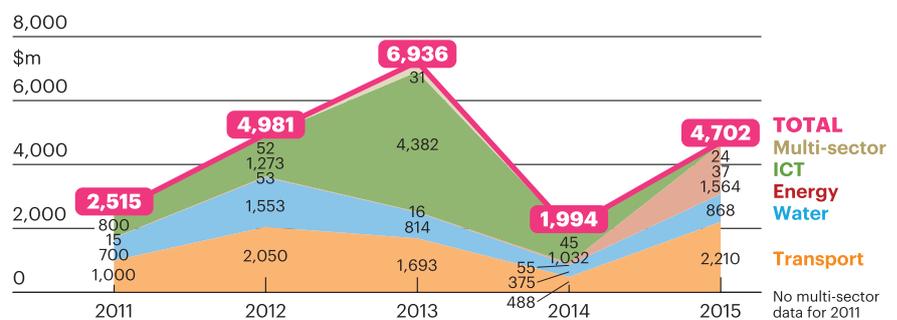


Figure 96
ICA members' commitments to East Africa by sector, 2011-2015

Mpanda and a 67km stretch between Mbinga and Mbamba Bay. AfDB also committed \$144m to the Arusha Sustainable Urban Water and Sanitation Delivery Project in the country, which will rehabilitate and build new water sources and transmission and distribution pipelines. Japan committed \$265m to phase II of the Mombasa Port Development in Kenya which will expand the port's container terminal, and \$165m for the Kampala Flyover Construction and Road Upgrading Project in Uganda. This will see flyovers built and roads expanded in the Ugandan capital to ease traffic congestion.

China announced huge investments in East African transport infrastructure in 2015, most notably

China Eximbank loans for a standard gauge railway in Uganda (\$3.2bn), \$1.5bn for the Mombasa-Nairobi railway in Kenya and \$126m for Comoros' Port De Mohéli. The bank's \$3.2bn loan to Uganda is conditional and has not yet been signed, and other railway projects may take priority. China's commitment to the country remains firm in the energy sector, with a \$1.4bn loan for transmission lines from the 600MW Karuma dam, a project that is also receiving Chinese funding, and \$483m for the 183MW Isimba dam. There have been challenges at both projects after the quality of the work of the contractor and supervisor Energy Infratech was questioned, leading to an investigation and suspension of both project co-ordinators. ■

8.6 Southern Africa, Excluding Republic of South Africa

Some \$16bn was committed to Southern Africa in 2016, from China (\$7.1bn), national budgets (\$5.4bn) and ICA members (\$1.8bn). The private sector made notable investments in energy (\$755m), but very little in other sectors.

The challenge of providing sufficient energy led to 67% or \$10.6bn pledged for operations in that sector, compared with 17% or \$2.7bn for transport and 9% or \$1.5bn for water projects. The sizeable energy figure is the result of announcements of huge investments in the sector by China, amounting to \$6.8bn for the year. Chinese officials announced \$4.5bn for the 2,172MW Caculo Cabaça hydroelectric project and \$840m for the 750MW Soyo gas power project, both in Angola, and \$1.2bn for the Hwange coal power plant in Zimbabwe. It is not clear whether the latter project, in particular, will go ahead.

National budget allocations were more evenly spread across sectors with \$1.9bn allocated to transport (36%), \$1.7bn to energy (31%), \$1bn to water (19%) and \$242m to ICT (5%).

Botswana, however, allocated 29% of its development budget to energy and 15% to transport and communications. Allocations included \$14m for the Tonota-Francistown road project, \$10m for the Kazungula Bridge, and \$29m for broadband and ICT backbone infrastructure. The largest single transport commitment was a cash injection into Air Botswana of \$31m. Similarly, \$142m of the \$337m development budget allocation for energy was to support the day-to-day operations of the national utility, the Botswana Power Corporation.

Across the region, ICA members also targeted transport with \$728m or 41% of commitments, although energy with \$618m or 34% and water with \$377m or 21% also received substantial support. Amongst ICA members with substantial commitments to Southern

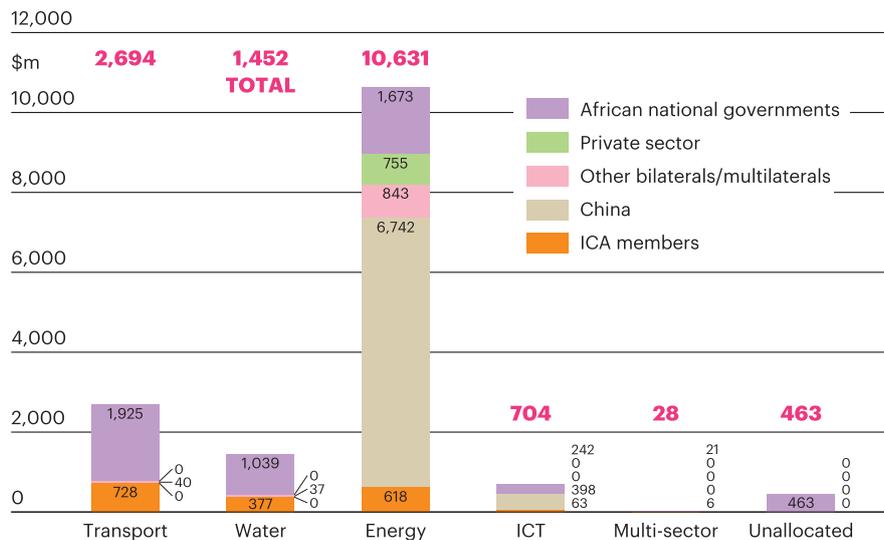


Figure 97
Total 2015 commitments to Southern Africa excluding RSA by sector and source

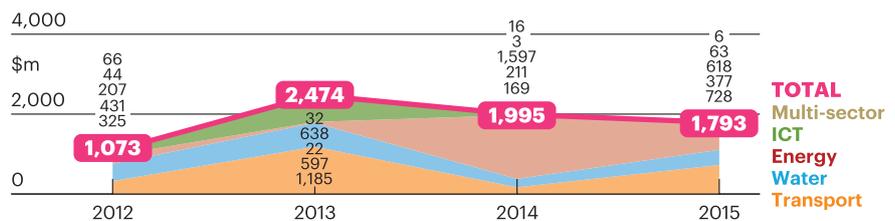


Figure 98
ICA members' commitments to Southern Africa excluding RSA by sector, 2012-2015

Africa were Japan (\$534m) and the AfDB (\$480m). However, many ICA members had a significant presence in the region, with a large number of medium-sized projects perhaps suggesting a focus on local priority projects likely to have a significant development impact.

Japan committed \$242m to the second phase of the Nacala Port Development Project in Mozambique. The project will upgrade facilities at the port in order to improve cargo handling and specifically targets the Nacala Development Corridor, which covers Mozambique, Malawi and Zambia. JICA also agreed to provide \$195m for the Power Sector Reform Support Programme in Angola, which is being co-financed by the AfDB. This will support the reform and restructuring of the power sector as well as trying to improve the environment for private sector investment and enhance

transparency in the management of public finances.

WBG approved a loan of \$73.6m for the third additional financing of phase II of the Roads and Bridges Management and Maintenance Programme in Mozambique in March 2015. The additional funding covers a financing gap for restoring roads following damaging floods in 2013. In July, AfDB approved \$242m for the Chinsali-Nakonde Road Rehabilitation project in Zambia. This will rehabilitate 210km of the Chinsali to Nakonde road, as well as 50km of feeder roads.

In the water sector, AfDB committed \$124m for the Institutional and Sustainability Support to the Urban Water Supply and Sanitation Service Delivery Project in Angola, which aims to assist water and sanitation utilities in the provinces and develop sector infrastructure. ■

8.7 Republic of South Africa

South Africa saw total commitments of \$11.7bn in 2015, some \$4.3bn less than the rest of Southern Africa combined. Infrastructure funding flows into the country have been dominated by the challenges of providing sufficient electricity. Alongside private and DFI investment into renewable energy independent power producer procurement (REIPPP) projects, substantial funds have been lent to the national power utility, Eskom.

In 2015, ICA members committed \$1.6bn to the country's energy sector. An impressive \$3.81bn was invested in energy by the private sector during the year. With Eskom responsible for state investment in energy infrastructure, government budget spending focused on transport with \$3.02bn committed for the year. Around \$1.6bn of this was allocated to spending on road transportation and \$1.3bn to rail transport.

DBSA committed the most funds to South Africa of ICA members, with \$627m. The most significant portion of this funding went to projects selected during the third round of the government's REIPPP programme, such as the 138MW Loeriesfontein (\$74m), 138MW Khobab (\$89m) and 79MW Noupoort (\$33m) wind power projects and the 100MW Xina concentrated solar power project. \$79m was also approved for the Eskom Energy Infrastructure project.

AfDB allocated \$383m to energy in South Africa. This went to the Eskom II Power Project to support the state utility. \$91m was also disbursed to Eskom for its 4,764MW Medupi coal power project and \$4.8m to the utility's 100MW Sere wind farm, which began operating in March 2015. France's AFD signed a \$184m credit facility with Eskom in November 2015, part of its total commitment of \$322m.

South Africa is both receiving power from gas plants in Mozambique and is

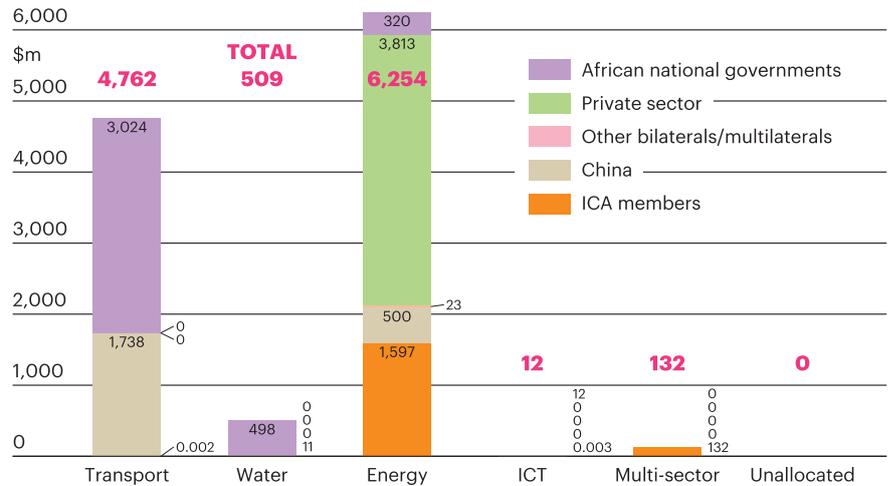


Figure 99
Total 2015 commitments to Republic of South Africa by sector and source

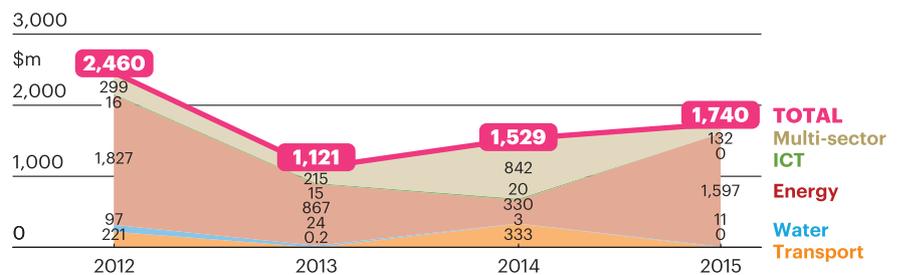


Figure 100
ICA members' commitments to Republic of South Africa by sector, 2012-2015

involved in plans to build pipelines from major gas finds in the Rovuma Basin to South African power stations and its residential market. Plans are also advancing to import LNG into South Africa.

Disbursements by DBSA in 2015 included more than R200m (\$16m) to Tshwane Rapid Transit (TRT), which required a total of R786m (\$63m) to procure 171 buses and the driver training required for the first phase of the A Re Yeng Bus Rapid Transit (BRT) project. TRT signed an 11-year (including grace periods) and R488m (\$39m) loan agreement with DBSA in November 2014 to fund the purchase of 40 compressed natural gas buses as well as the local content of 131 diesel buses.

TRT is one of 12 BRT projects in the country that will receive the DBSA's support as the country moves towards

an improved quality integrated Mass Rapid Public Transport Network, which includes rail, taxi and bus services. Rapid transit systems have been identified by the national government as one of the most viable transportation options.

Tshwane's project aims to have a significant impact on the socio-economic and economic development of the city and its inhabitants as well as Gauteng province as a whole. It is expected to improve economic prospects with an estimated 1,614 additional employment opportunities, of which 275 will be for unskilled workers. In 2010, at the launch of the project, the city's mayor, Kgosietso Ramokgopa, expected over 10,000 jobs to be created during the construction phase and about 1,000 sustainable jobs once the system is fully operational. ■

1. General Remarks

ICA member commitments and disbursements should be viewed in perspective given the very different strategies and purposes of each member. While some members provide between 90-100%, non-ODA loan based funding, Canada, the EC, the EU-AITF, and the UK are pure ODA grant funders, which means that their funding volumes are naturally much lower.

In describing the way ICA members deploy funds the distinction should be made between donor support that is attributed to them in this report and the considerable support bilaterals provide to multilaterals, which is not attributed to them in this report. For example, ICA Members such as UK, Canada, France, Germany, Japan and the US contribute to the AfDB's African Development Fund (ADF) and the World Bank's International Development Association (IDA).

As in 2014, this year's report covers data from the AfDB, DBSA, EU-AITF, EC, EIB, France, Germany, IFC (which together with the World Bank is described as the World Bank Group (WBG), Japan, UK, and WB.

Additional data for the 2015 report was submitted by USAID, which did not report in 2014, and comprises information from the Power Africa interagency and by CDC, the wholly-UK government owned DFI that manages capital provided entirely by DFID.

Russia's Prognoz responded to the ICA's request for data for the first time and reported that it had made no commitments in 2015 to Africa's infrastructure.

2. Exchange Rates

The exchange rates used for conversions into US Dollars when contemplating 2015 data are the averages of the respective currency of the year 2015 as reported in

the publicly available African Development Bank Financial Information.

(<http://www.afdb.org/en/documents/financial-information/exchange-rates/>).

For ICA members the following exchange rates were used:

\$1 = 0.71343 AfDB Unit of Account (UA)

\$1 = 0.89742 Euro (€)

\$1 = 0.65305 British Pound (£)

\$1 = 1.27037 Canadian dollar (C\$)

\$1 = 12.60178 South African Rand (ZAR)

\$1 = 120.96619 Japanese Yen (¥)

3. 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.

4. Project Specific Information

Information on projects completed in 2015 was provided by the AfDB, Canada, DBSA, the EC, the EIB, the EU-AITF, France, Germany, the IFC, and Japan.

Project-level information about commitments and disbursements in 2015 was provided by the AfDB, Canada, DBSA, the EIB, the EU-AITF, France, Germany, the IFC and Japan while WB provided project-level information about commitments.

5. Strategic Analysis

The stakeholder perspectives provided specifically in Chapter 3.3, Strategic Analysis, and elsewhere throughout the report are based on interviews with selected ICA members as well as private sector stakeholders, including private equity investors, debt financiers, developers and major contractors.

6. Other Specific ICA Member Data Notes

AfDB

Overall AfDB data consists of data gathered from the Energy, Environment and Climate Change Department (ONEC), the Transport & ICT Department (OITC), the Private Sector Department (OPSD) and the Water & Sanitation Department (OWAS).

ONEC data reported included African Development Bank (AfDB) own resources, African Development Fund (ADF), the Transition Support Facility (TSF), the Nigeria Trust Fund (NTF), and the Sustainable Energy Fund for Africa (SEFA).

OWAS data includes African Development Fund (ADF), Nigeria Trust Fund (NTF), Fragile States Facility (FSF) and the Middle Income Countries (MIC) Fund.

OPSD data includes the Clean Technology Fund.

DBSA

DBSA data includes South African operations and International Finance, including data from the Infrastructure Investment Programme for South Africa (IIPSA), Project Preparation Feasibility Study (PPFS) Fund, Project Preparation and Development Facility (PPDF) and the Tripartite Trust Alliance (TTA).

Annex 2 – Credits and Acknowledgements

EC

EC data consists of data from the European Development Fund (EDF, for sub-Saharan Africa countries) and from the Development Cooperation Instrument (for Northern Africa countries). The EC also reports the contribution of the EDF to the EU-Africa Infrastructure Trust Fund (EU-AITF) and the Africa Investment Facility (AfIF) but does not reflect projects approved and implemented with a contribution from the EU-AITF and/or AfIF.

France

French data consists of data from AFD,

Germany

For 2015, German data was reported KfW and GIZ whereas in 2014 only KfW reported data. In the 2013 report data was also provided by DEG, which reported no data for 2014 or 2015.

Japan

Japan reported data from Japan International Cooperation Agency (JICA – ODA-portion) and Japan

Bank for International Cooperation (JBIC – non-ODA portion)

UK

Data for the UK was provided by DFID and in 2015, for the first time by CDC, the wholly-UK government owned DFI that manages capital provided entirely by DFID.

US

US data was provided by USAID, which did not report in 2014, and comprises information from the Power Africa interagency, including OPIC, EXIM Bank, USTDA and others. EXIM Bank, OPIC and MCC did not provide data directly.

WBG

Overall WBG data consists of data gathered from the WB and IFC.

7. African National Government Budget Allocations

Data used for the 2015 budget allocations by 44 African countries is substantially drawn from official

budget statements or expenditure frameworks or other official government documents.

The data reflect budget allocations not outturns so the figures represent intended rather than actual spending on infrastructure. The choice of allocations rather than outturns is partly a matter of expediency given the relative lack of availability of outturn figures for 2014 and partly because budget allocations are essentially commitments and treated as such in this report.

There is significant potential for double counting in the data for budget allocations by African countries due to levels of support from sources whose commitments are reported elsewhere in this report.

Wherever possible, only capital expenditure has been captured and recurrent expenditure has not been included in the data. ■

Annex 2 – Credits and Acknowledgements

Data Analysis, Text and Layout

Cross-border Information
www.crossborderinformation.com

Graphics and Maps

David Burles

Photos

Cover: iStock/Getty Images.

Page 5: Eastern Cape Province - iStock/Getty Images.

Page 18: Olkaria II geothermal power plant – iStock/Getty Images, Byelikova Oksana.

Page 24: iStock/Getty Images, Gilles Paire.

Page 38: iStock/Getty Images, PG Images.

Page 48: EBRD Headquarters, London – EBRD/Dermot Doorly.

Page 52: KfW Photo Archive, Jens Steingässer.

Page 58: Addis Ababa, /Getty Images.

Page 64: KfW Photo Archive, Kirsten Milhahn.

Page 67: iStock/Getty Images.

Page 71: iStock/Getty Images.

Page 75: Abuja – iStock/Getty Images, Klaas Lingbeek-van Kranen.

Page 76: iStock, Chris Van Lennep.

Page 79: Dar es Salaam – iStock/Getty Images.

Annex 3 – Data Tables

| Total 2015 Commitments by Sector and Region (\$m) | | | | | | | |
|---|-----------------|----------------|-----------------|----------------|----------------|----------------|-------------------|
| | Transport | Water | Energy | ICT | Multi-sector | Other | Total Commitments |
| North Africa | 5,140.7 | 2,108.9 | 5,143.8 | 269.2 | 837.5 | 631.6 | 14,131.7 |
| West Africa | 7,114.2 | 1,371.0 | 5,412.2 | 575.8 | 649.5 | 72.4 | 15,195.0 |
| Central Africa | 2,252.4 | 621.8 | 1,350.4 | 562.1 | 134.6 | - | 4,921.2 |
| East Africa | 11,779.4 | 1,960.3 | 5,350.0 | 176.6 | 26.3 | - | 19,292.5 |
| Southern Africa | 2,693.5 | 1,452.1 | 10,631.0 | 703.5 | 27.7 | 463.3 | 15,971.2 |
| RSA | 4,762.5 | 509.0 | 6,253.9 | 12.0 | 132.0 | - | 11,669.3 |
| Other | 943.1 | 93.8 | 526.3 | 219.6 | 408.5 | - | 2,191.3 |
| Total Commitments | 34,685.8 | 8,116.8 | 34,667.5 | 2,518.8 | 2,216.1 | 1,167.3 | 83,372.3 |

| Total 2015 Commitments by Source and Region (\$m) | | | | | | | | |
|---|-----------------|----------------|--------------|------------------|------------------|-------------------|----------------|-------------------|
| | ICA | ACG | RDBs | China and Others | Non-ICA European | African Nat Govts | Private Sector | Total Commitments |
| North Africa | 4,092.7 | 1,920.8 | - | - | 690.5 | 6,198.8 | 1,229.0 | 14,131.7 |
| West Africa | 4,013.9 | 1,201.3 | 358.5 | 4,448.6 | 13.5 | 3,879.4 | 1,279.7 | 15,195.0 |
| Central Africa | 1,308.2 | 498.1 | 54.7 | 482.3 | 67.5 | 2,190.4 | 320.0 | 4,921.2 |
| East Africa | 4,701.9 | 467.0 | 5.0 | 7,084.1 | 73.7 | 6,915.4 | 45.4 | 19,292.5 |
| Southern Africa | 1,792.5 | 325.2 | - | 7,727.0 | 7.9 | 5,363.6 | 755.0 | 15,971.2 |
| RSA | 1,740.1 | - | - | 2,238.1 | 23.1 | 3,854.8 | 3,813.3 | 11,669.3 |
| Other | 2,191.3 | - | - | - | - | - | - | 2,191.3 |
| Total Commitments | 19,840.7 | 4,412.4 | 418.2 | 21,980.1 | 876.2 | 28,402.3 | 7,442.3 | 83,372.3 |

| Total 2015 Commitments by Sector and Source (\$m) | | | | | | | |
|---|-----------------|----------------|-----------------|----------------|----------------|----------------|-------------------|
| | Transport | Water | Energy | ICT | Multi-sector | Other | Total Commitments |
| ICA Members | 6,770.9 | 3,184.3 | 8,635.0 | 616.0 | 634.4 | - | 19,840.7 |
| ACG | 2,071.7 | 377.8 | 1,554.9 | 16.5 | 391.5 | - | 4,412.4 |
| RDBs | 173.7 | 47.6 | 95.0 | 76.4 | 25.5 | - | 418.2 |
| China and Others | 9,932.2 | 268.4 | 10,747.5 | 1,032.1 | - | - | 21,980.1 |
| Non-ICA Europeans | 345.5 | - | 458.2 | 72.5 | - | - | 876.2 |
| African National Governments | 15,278.3 | 4,124.8 | 5,962.0 | 705.2 | 1,164.7 | 1,167.3 | 28,402.3 |
| Private Sector | 113.5 | 114.0 | 7,214.8 | - | - | - | 7,442.3 |
| Total Commitments | 34,685.8 | 8,116.8 | 34,667.5 | 2,518.8 | 2,216.1 | 1,167.3 | 83,372.3 |

Data Tables – Private Sector

| AfDB Private Sector Department, 2015 Commitments | | |
|---|-------------------------|--------------|
| Recipient | Location | (\$m) |
| CEC Africa Limited Convertible Debt | Pan-African | 2 |
| CEC Africa Limited Equity Investment | Pan-African | 16 |
| Ghana Airports Company Ltd. | Ghana | 92 |
| Sendou Power Project - Restructuring and Supplementary Loan | Senegal | 11 |
| O3B Satellite Project Supplementary Loan | Pan-African | 43 |
| Kigali Bulk Water Supply Project | Rwanda | 242 |
| Eskom Holdings SOC Limited | RSA | 126 |
| Kribi Expansion Power Project | Cameroon | 141 |
| Nacala Rail and Port Project (CEAR) | Central and East Africa | 68 |
| Nacala Rail and Port Project (CDN) | Central and East Africa | 206 |
| Nacala Rail and Port Project (CLN) | Central and East Africa | 214 |
| Nacala Rail and Port Project (VLL) | Central and East Africa | 348 |
| CECASL Heavy Fuel Oil Power Project | Sierra Leone | 197 |
| Total Commitments | | 1,708 |

| South Africa Renewable Projects, PPI database 2015 | | |
|--|----------------|-----------|
| Project name | Cost (\$m) | % Private |
| Adams Solar PV 2 | 109.6 | 100 |
| Gibson Bay Wind Farm | 173.9 | 100 |
| Johannesburg Landfill Gas to Electricity | 26.0 | 100 |
| Karoshhoek Solar One CSP | 688.4 | 80 |
| Khobab Wind Farm | 281.0 | 100 |
| Loeriesfontein 2 Wind Farm | 281.0 | 100 |
| Mulilo De Aar 1 Wind Farm | 180.0 | 100 |
| Mulilo De Aar 2 Wind Farm | 252.5 | 100 |
| Mulilo Prieska Solar PV Plant | 58.8 | 85 |
| Nojoli Wind Farm | 265.9 | 100 |
| Noupoort Mainstream Wind | 160.0 | 100 |
| Paleisheuwel Solar PV | 109.6 | 100 |
| Pulida Solar PV Plant | 265.9 | 100 |
| Second Mulilo-Sonnedix Prieska Solar PV Plant | 133.0 | 100 |
| Tom Burke Solar Park | 87.7 | 100 |
| Uppington Solar PV | | 100 |
| Xina Solar One CSP | 900 | 80 |
| Total Commitments | 3,973.3 | |

| PIDG Facilities Reaching Commercial Close in 2015 | | | |
|---|----------|-----------------------|------------------------|
| Project Name | Facility | PIDG Investment (\$m) | Total Investment (\$m) |
| Ghana Electricity Distribution, Ghana - Phase I | DevCo | 0.54 | 23.7 |
| Guinea Power PPP, Guinea | DevCo | 0.6 | 132 |
| Kampala Waste Management PPP, Uganda | DevCo | 1.13 | N/A |
| Kigali Bulk Water Supply Project, Rwanda | DevCo | 1.0 | N/A |

Data Tables – ICT Map

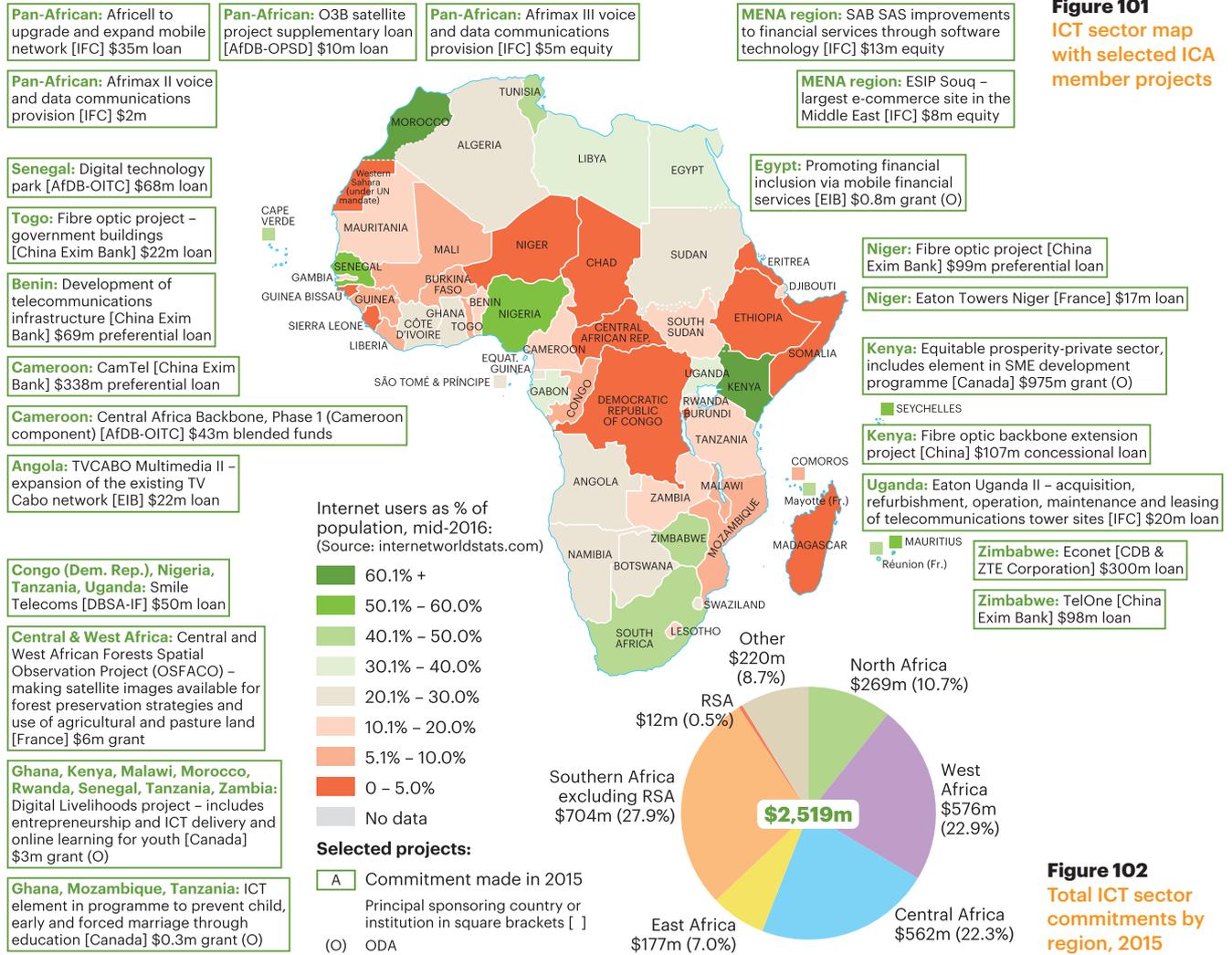


Figure 101
ICT sector map with selected ICA member projects

Figure 102
Total ICT sector commitments by region, 2015

