

Review of Infrastructure Funding

Amadi Cisse and Alix Landais

February, 2014

This report has been produced by IMC Worldwide for Evidence on Demand with the assistance of the UK Department for International Development (DFID) contracted through the Climate, Environment, Infrastructure and Livelihoods Professional Evidence and Applied Knowledge Services (CEIL PEAKS) programme, jointly managed by HTSPE Limited and IMC Worldwide Limited.

The views expressed in the report are entirely those of the author and do not necessarily represent DFID's own views or policies, or those of Evidence on Demand. Comments and discussion on items related to content and opinion should be addressed to the author, via enquiries@evidenceondemand.org

Your feedback helps us ensure the quality and usefulness of all knowledge products. Please email <a href="mailto:enquiries@evidenceondemand.org">enquiries@evidenceondemand.org</a> and let us know whether or not you have found this material useful; in what ways it has helped build your knowledge base and informed your work; or how it could be improved.

DOI: http://dx.doi.org/10.12774/eod\_hd.february2014.cisse\_landais



# **Contents**

Methodology	1
Report summary	2
Bibliography	ç



# Methodology

This study was prepared primarily through a review of key documents, data and analyses. Limited time and resources were available for this broad and far-reaching topic. Therefore this is not an exhaustive review but rather an overview to identify salient trends that have emerged, based on available evidence.

The study draws on data published by the OECD DAC database, which collects information on Official Development Assistance and other capital flows from donor to recipient countries. It should be noted that the OECD makes an effort to ensure, but does not guarantee, the accuracy or completeness of the data it makes available. The datasets gathered from the DAC website were cross-analysed with annual reports from bilateral and multilateral donor agencies and other publications by the OECD. Donor websites also hold a wealth of information on donor priorities in infrastructure investment, including historical reports that served as references for policy shifts over time.

No primary data was collected for this study, nor were any interviews held with officials representing any donor institutions. Where quantitative data was needed, existing research was consulted and adjusted with relevant additional data. Where possible the quantitative analysis of flows and funding to the infrastructure sector were separated into grants and nongrant instruments, and ODA and non-ODA. Funds were broken down by continent, sector, income group, as well as fragile and conflict-affected states.

Detailed information on China's development assistance programmes and the level of funding given to specific countries is not published by the OECD and is not made available to the public by Chinese government agencies. Therefore, reports from other sources were used to assess the nature of China's development assistance programmes and Chinese bilateral investment in infrastructure in developing countries. The conclusions that have been reached in this study would benefit from further research and could help donor organisations identify areas where more effort is needed to close the infrastructure funding gap.

The following organisations were selected for comparison and Aid Benchmarking: Bilateral donors: Australia, Canada, China, Germany, France, Japan, Netherlands, Norway, Sweden, United Kingdom, United States. Multilateral donors: The World Bank, the African Development Bank, the Asian Development Bank, the European Commission, the European Investment Bank, the International Finance Corporation, and CDC.



# Report summary

Evidence on Demand was requested to undertake a rapid desk based study to provide a summary of qualitative and quantitative analyses of DFID's work in the infrastructure sector in comparison with other established donors, and to present a global overview of bilateral and multilateral agencies' investment strategies in the infrastructure sector. This report summarises data from the study completed.

Aspirations for sustainable economic and social development are fuelling the demand for infrastructure across developing countries. Availability and reliability of infrastructure services is critical to economic growth and the establishment of firms that are competitive in domestic and international markets. For example, better transport infrastructure improves access to critical services like healthcare, education and provides access to markets for agricultural and industrial producers. Moreover, in recent time, public spending on infrastructure has proven to be a powerful countercyclical instrument to withstand recessions as shown during the 2008 global crisis.

Despite the wide range of benefits from investing in infrastructure, the sector remains severely underfunded in developing countries, especially those classified by the OECD as least developed or fragile states. The current infrastructure gap is estimated at \$1 trillion in low- and middle-income countries and the demand for infrastructure continues to increase as growth and economic development requires expansion of physical infrastructure and services to facilitate increased output and absorb more people (Bhattacharya *et al.* 2012, p.5-p.10-p.19).

At present, approximately two thirds of infrastructure investment across emerging markets and low-income countries is financed by domestic government budgets, 20 - 30% by the private sector and the remaining 8 - 12% by ODA, mainly from Multilateral Development Banks (Bhattacharya *et al.* 2012). Aid continues to play an important role in providing capital finance for sectors for which private finance cannot be mobilised, and in mobilising other sources of finance from both the private and public sectors.

ODA, Sectoral Breakdown, All donors, 2008-2012 ■ IV. Multi-Sector / Cross-160,000.00 Cutting 140.000.00 ■III. Production Sectors 120,000.00 100,000.00 ■II. Economic Infrastructure 80,000.00 & Services 60,000.00 40,000.00 ■I. Social Infrastructure & Services 20,000.00 ■III. Production Sectors 2008 2012

Figure 1 ODA Sectoral Breakdown, All donors (Bilateral & Multilateral), 2008 & 2012

Source: OECD DAC Database, 2013

# 1. UK's Bilateral Assistance in Infrastructure: Investment Strategy & Perspective DFID plays a key role in investing in infrastructure that is critical to providing poor people with access to services, creating jobs and underpinning growth that will lead to poverty reduction (DFID, 2012, p1). According to the OECD DAC Database on Aid Statistics<sup>1</sup>, the UK's bilateral disbursements in infrastructure have grown steadily since 2008 from 4% of total spend to 10% by 2012, embodying the emphasis on infrastructure as a core area for

According to the 2013 DFID report "Connecting People, Creating Wealth: Infrastructure for economic development and poverty reduction", DFID's infrastructure investment strategy is focused on:

- 1. Implementing regional connectivity programmes to promote trade and economic development in Africa and Asia;
- 2. Supporting urban infrastructure to enable cities to become sustainable centres of growth;
- 3. Supporting sustainable service delivery in water and sanitation, roads, energy and water resources;
- 4. Developing infrastructure in fragile and conflict-affected states to promote stability;
- 5. Mobilising finance for the development of low carbon infrastructure.

the country's bilateral aid strategy (OECD DAC Database 2013).

DFID works with the private sector to increase private investment in infrastructure and engages with multilaterals to ensure the highest development impact from UK taxpayers' money (DFID, 2012, p1). Currently, around 50% of DFID's infrastructure spend is channelled through multilateral institutions (DFID, 2013, p2). Results from these contributions over the period 2010-2012 include (DFID, 2013a, p 38):

- AfDB: People with improved access to transport 34 M (10% DFID contribution)
- AfDB: People benefiting from new or improved electricity connections 8 M (10% DFID contribution)
- ADB: Number of new households connected to electricity 174,000 (5% DFID contribution)
- ADB: Beneficiaries of road projects 128 M (5% DFID contribution)
- IDA: Roads constructed and rehabilitated 34,000 km (11% DFID contribution)
- PIDG: People with improved power supply 13 M (51% DFID contribution)

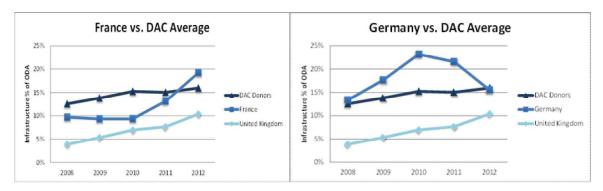
According to the OECD DAC Creditor Reporting System, DFID disburses a relatively small proportion of its total aid budget on infrastructure compared to other donors. For example, Germany and France disburse 16% and 19% of their aid budgets on infrastructure respectively. Looking to development partners outside of the EU, Japan, disburses nearly eight-times (51% of its aid budget) the amount of assistance to infrastructure sectors as the UK, which designates them as the leading bilateral donor for infrastructure.

<sup>&</sup>lt;sup>1</sup> The OECD makes an effort to ensure, but does not guarantee, the accuracy or completeness of the data it makes available.



3

Figure 2 Infrastructure investments as % of Total ODA, UK compared with France & Germany, 2008-2012



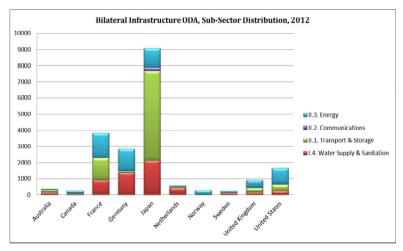
Source: OECD DAC Database 2013

Source: OECD DAC Database 2013

## 2. Bilateral Donors' Assistance in Infrastructure : Global Overview

Many bilateral donors place a strong emphasis on MDGs, which do not have a strong economic infrastructure orientation. The infrastructure sectors included in the MDGs are water and sanitation and schools.

Figure 3 Sectoral Breakdown of Bilateral Donors' Assistance in Infrastructure (USD Millions, 2012)

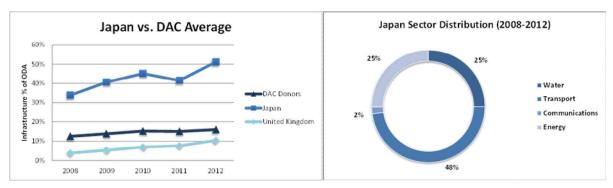


Source: OECD DAC Database 2013

The review of bilateral strategies showed that Japan has led ODA in infrastructure by a wide margin over the past few years, and emphasises infrastructure as a pillar of economic development, from a philosophy that is strongly tied into Japan's own development path.



Figure 4 Japan's Bilateral Assistance in Infrastructure (USD Millions, 2008-2012)

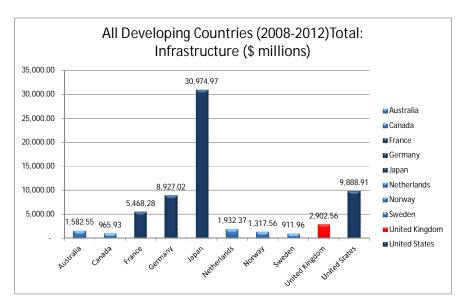


Source: OECD DAC Database 2013

Source: OECD DAC Database 2013

China has become a major infrastructure donor in Africa. In 2011, infrastructure development was intended for 40% of China's pledged funds (Rand, 2013, xiv). However, more data is needed to understand China's assistance within the aid context or as state-led investment.

Figure 5 Bilateral Donors' Assistance in Infrastructure (USD Millions, Cumulative 2008-2012)



Source: OECD DAC Database 2013

All of the top recipients of economic infrastructure ODA from both bilateral and multilateral donors in 2011-2012 were Lower-Middle Income Countries (LMICs) and Upper-Middle Income Countries (UMICs). On aggregate, India, Vietnam and Afghanistan were allocated 32 % of the total Aid to Economic Infrastructure in 2012.

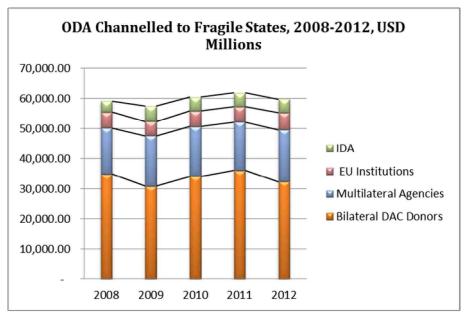
In contrast, the majority of infrastructure ODA from the UK goes to LDCs. Half of the UK's total aid is allocated to LDCs and this share has been on the rise over the past decade, while LMICs form the second group of UK's infrastructure ODA recipients (31%).

The UK, along with most other donors has made a commitment to assisting Fragile and Conflict-Affected States (FCAS). Between 2000 and 2010, per capita ODA from all donors to



fragile states grew by over 10% a year on average and represented USD 50 billion, this is to say 38% of total ODA to all recipient countries, in 2010.

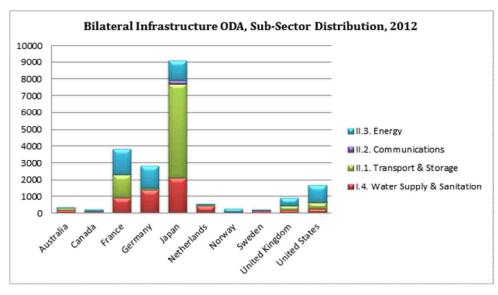
Figure 6 ODA Channelled to Fragile States by Bilateral and Multilateral Donors (USD Millions, 2008-2012)



Source: OECD DAC Database 2013

According to OECD DAC data, Japan, France and the United States notably, are the top three donors for economic infrastructure development in Fragile States in dollar terms, with Japan and the US dedicating the largest share of their Infrastructure ODA to Transport with a second priority given to Water Supply and Sanitation, while France mostly contributes to Energy infrastructure development.

Figure 7 Infrastructure Bilateral ODA to FCAS 2012



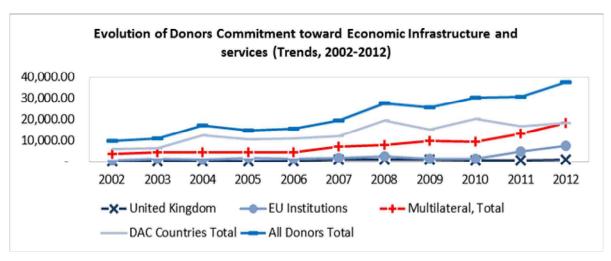
Source: OECD DAC Database 2013



### 3. Multilateral Donors

Infrastructure funding from Multilateral Institutions has increased significantly over the past decade.

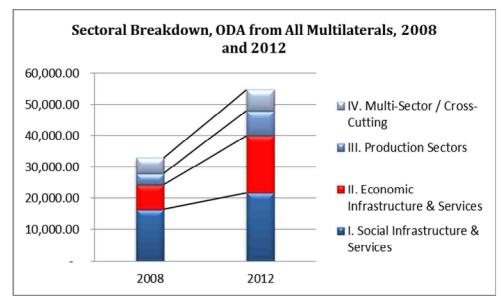
Figure 8 Bilateral and Multilateral Donors Commitment toward Economic Infrastructure (USD Millions, 2008-2012)



Source: OECD DAC Database 2013

However, according to OECD DAC data, the economic infrastructure flows from Multilateral Institutions in 2012 (1.940 USD Millions) still represented only 1/3 of the size of social infrastructure investments (5.958 USD Million). These figures must be treated with caution as different countries use different classifications of economic and social infrastructure.

Figure 9 Sectoral Breakdown of Multilateral ODA in Economic Infrastructure (USD Millions, 2008-2012)



Source: OECD DAC Database 2013

5/2

In 2010, the World Bank Group provided a record level support of \$28 billion for infrastructure and emerged, as a result, as the largest multilateral development financier in infrastructure for both LICs and MICs. Infrastructure now accounts for about 40 percent of the World Bank Group commitments (World Bank 2012a, p.4).

On average, Multilateral Institutions' investments in economic infrastructure have continued to increase and most of them mentioned it as a key priority area, for the years to come, in their 2012 – 2013 Annual Reports.



# **Bibliography**

AfDB (2013), 2013 Investors Presentation, Abidjan, Ivory Coast

AfDB (2013), At the Center of Africa's transformation, Strategy for 2013-2022, Abidjan, Ivory Coast

AfDB (2012), The 2012 NEPAD annual report infrastructure project preparation facility, Abidjan, Ivory Coast

AusAid (2013) *Annual Report 2012-13*, Canberra: <a href="http://aid.dfat.gov.au/AnnualReports/Documents/rep13/ausaid-annual-report-2012-13.pdf">http://aid.dfat.gov.au/AnnualReports/Documents/rep13/ausaid-annual-report-2012-13.pdf</a>

Bhattacharya, A., Romani, M. and Stern, N. (2012) Infrastructure for Development: Meeting the Challenge, London School of Economics and Political Science and Intergovernmental Group of 24 (G24)

Benjamin, Xochitl (2012), Review 10, Review of donors' infrastructure strategies, London: Evidence on Demand

CDC's Investments strategy and annual report: <a href="http://www.cdcgroup.com/How-we-do-it/Investment\_strategy/">http://www.cdcgroup.com/How-we-do-it/Investment\_strategy/</a>

CIDA (2013) Report to Parliament on The Government of Canada's Official Development Assistance, Ottawa: Available at:

https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CC0QFjAA&url=http%3A%2F%2Fwww.acdi-

cida.gc.ca%2Freports&ei=MLf4UpKJLMmw7AbCqYEo&usg=AFQjCNHzLLpX7KxpY7EuZ80 0uB8V2hnf9Q&sig2=LIEBq-sHAK-bDFiPNhu7QQ&bvm=bv.60983673,d.ZGU

DFID (2013) Connecting people, creating wealth: Infrastructure for economic development and poverty reduction, London: DFID. Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/243802/130918\_Infrastructure\_Postition\_Paper\_FNL.pdf

DFID (2013a) Annual Report and Accounts 2012-2013. London. Available online: <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/208445/annual-report-accounts2013-13.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/208445/annual-report-accounts2013-13.pdf</a>

DFID, 'Bilateral Aid Review results: Country, 1 March 2011, online at <a href="http://www.dfid.gov.uk/Documents/MAR/BAR-MAR-country-summaries-web.pdf">http://www.dfid.gov.uk/Documents/MAR/BAR-MAR-country-summaries-web.pdf</a>

DFID, 'Bilateral Aid Review: Technical Report', 1 March 2011, online at <a href="http://www.dfid.gov.uk/Documents/MAR/FINAL\_BAR%20TECHNICAL%20REPORT.pdf">http://www.dfid.gov.uk/Documents/MAR/FINAL\_BAR%20TECHNICAL%20REPORT.pdf</a>

DFID, 'Multilateral Aid Review', 1 March 2011, online at http://www.dfid.gov.uk/About-

E. Bosch, S. Steensen (2012), DAC Report on Multilateral Aid, Paris, France: OECD-DAC

European Investment Bank (2013), Operations Plan 2013-2015, Luxembourg



European Investment Bank (2012), Report on results of EIB operations outside the EU, Luxembourg

European Commission (2012), Annual Report 2012 on the European Union's development and external assistance policies and their implementation in 2011

Geethanjali Nataraj (2007), Role of Multilateral Institutions in Supporting Infrastructure Development in the Region and Alternate Forms of Financing Infrastructure, Tokyo, Japan: ADB Institute Discussion paper no.2

http://www.adbi.org/discussion-

paper/2007/09/27/2364.infrastructure.challenges.south.asia/role.of.multilateral.institutions.in.supporting.infrastructure.development.in.the.region.and.alternate.forms.of.financing.infrastructure

GIZ (2013) Annual Report 2012, Berlin: Available at: http://www.giz.de/

Haddad, Lawrence, 'Six things we learned from DFID's Aid Review' (1 March 2011). Blog entry at <a href="http://www.developmenthorizons.com/2011/03/six-things-we-learned-from-dfids-aid.html">http://www.developmenthorizons.com/2011/03/six-things-we-learned-from-dfids-aid.html</a>

JICA (2012) Annual Report 2012

MFA Netherlands (2013) A World to Gain a New Agenda for Aid, Trade and Investment, The Hague: Available at: www.rijksoverheid.nl

OECD (2013), Development at a glance, Statistics by regions, Edition 2013 Interactive charts

http://webnet.oecd.org/dcdgraphs/CPA\_donor/

OECD (2013a) Development Cooperation Peer Review: Australia 2013, Paris: OECD: www.oecd.org/dac/peerreviews

OECD (2013b) Development Cooperation Peer Review: France 2013, Paris: OECD: www.oecd.org/dac/peerreviews

OECD (2013c) Development Cooperation Peer Review: Norway 2013, Paris: OECD: www.oecd.org/dac/peerreviews

OECD (2013d) Development Cooperation Peer Review: Sweden 2013, Paris: OECD: www.oecd.org/dac/peerreviews

OECD (2012) Development Cooperation Peer Review: Canada 2013, Paris: OECD: www.oecd.org/dac/peerreviews

OECD (2011a) *Development Cooperation Peer Review: Netherlands 2013*, Paris: OECD: <a href="https://www.oecd.org/dac/peerreviews">www.oecd.org/dac/peerreviews</a>

OECD (2011b) *Development Cooperation Peer Review: United States 2013*, Paris: OECD: <a href="https://www.oecd.org/dac/peerreviews">www.oecd.org/dac/peerreviews</a>

OECD (2010a) Development Cooperation Peer Review: Germany 2013, Paris: OECD: <a href="https://www.oecd.org/dac/peerreviews">www.oecd.org/dac/peerreviews</a>

OECD (2010b) *Development Cooperation Peer Review: Japan 2013*, Paris: OECD: www.oecd.org/dac/peerreviews

OECD (2006), Infrastructure to 2030, Telecom, Land Transport, Water & Electricity, 2006 <a href="http://www.keepeek.com/Digital-Asset">http://www.keepeek.com/Digital-Asset</a> <a href="Management/oecd/economics/infrastructure-to-2030">Management/oecd/economics/infrastructure-to-2030</a> <a href="9789264023994-en#page1">9789264023994-en#page1</a>

PIDG (2012), 2012 Annual Report: <a href="http://www.pidg.org/">http://www.pidg.org/</a> Annual Report: <a href="http://www.pidg.org/">http://www.pidg.org/</a> resource-library/key-documents/annual

S. Steensen, P. Tortora (2013) The DAC Multilateral Aid Report in 2013-14, Paris, France: OECD-DAC



USAID, State Department (2010) Leading Through Civilian Power: The First Quadrennial Diplomacy and Development Review, Washington D.C.

Wang, X., Warner, E., Wolf, C. (2013) *China's Foreign Aid and Government-Sponsored Investment Activities Scale, Content, Destinations, and Implications*. Santa Monica: http://www.rand.org/

World Bank (2013), Infrastructure Action Plan 12-15, 'Transformation through Infrastructure', Washington DC, USA

World Bank (2012), Annual Report 2012, Washington DC, USA

The World Bank Group, *Transformation through Infrastructure, Issues and Concept Note,* World Bank Group Strategy Update, 2012a, p.4

# **Data and Statistics**

OECD, Development Assistance Committee (DAC) Aid Statistics <a href="http://www.oecd.org/dac/stats/">http://www.oecd.org/dac/stats/</a>
<a href="http://stats.oecd.org/qwids/">http://stats.oecd.org/qwids/</a>

World Bank aid statistics <a href="http://data.worldbank.org/topic/infrastructure">http://data.worldbank.org/topic/infrastructure</a>

# Data on DFID's ODA distribution by sector:

https://www.gov.uk/government/publications/statistics-on-international-development-2013-tables

### AfDB Statistics & Data Portal

http://www.afdb.org/en/documents/publications/compendium-of-statistics-on-afdb-group-operations/

http://www.afdb.org/en/knowledge/statistics/data-portal/http://dataportal.afdb.org/ResourceCenter/Default.aspx

# World Bank Infrastructure Portfolio & Data

 $\frac{\text{http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTINFRA/0,,contentMDK:2314024}}{4 \sim \text{menuPK:8497212} \sim \text{pagePK:64168445} \sim \text{piPK:64168309} \sim \text{theSitePK:8430730,00.html}}$ 

### WB & IDA all Financial Data & Investments 2012

http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/EXTANNREP/EXTANNREP2 012/0,,contentMDK:23274272~pagePK:64168445~piPK:64168309~theSitePK:8784409,00.html

http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/0,,menuPK:476823~pagePK:64165236~piPK:64165141~theSitePK:469372,00.html

http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTINFRA/0,,contentMDK:2311798 0~pagePK:64168445~piPK:64168309~theSitePK:8430730,00.html

AsDB, Key Data, Reports & Excel Sheets (AsDB, Annual Report 2012 | AsDB, Grants and Investments by sector, 2012 | AsDB, Evaluation Results for Sovereign Operations, by sector, 2012 http://www.adb.org/documents/adb-annual-report-2012

Infrastructure Data base: Under process http://www.adb.org/projects/47299-001/details

IFC (2012), Results and Financial Summary, Washington DC, USA

http://www.ifc.org/wps/wcm/connect/Industry\_EXT\_Content/IFC\_External\_Corporate\_Site/Industries/Infrastructure/Overview/





IFC's Development Impact in the field of infrastructure:

http://www.ifc.org/wps/wcm/connect/Industry\_EXT\_Content/IFC\_External\_Corporate\_Site/Industries/Infrastructure/Infrastructure\_Development\_Impact/

EIB Database, Europeaid, European Development Cooperation in Infrastructure – A review of the past ten years: Transport, Water, Energy and Urban Development, 2008 <a href="http://ec.europa.eu/europeaid/index\_en.htm">http://ec.europa.eu/europeaid/index\_en.htm</a>

Annual action programmes, by sector

http://ec.europa.eu/europeaid/work/ap/aap/2013\_en.htm#theme

CRIS Database | EU's ROM (Results Oriented Monitoring)

http://ec.europa.eu/europeaid/infopoint/publications/europeaid/282a\_en.htm

